Confidential Design-Build Agreement

DESIGN-BUILD AGREEMENT

New Surrey Hospital and BC Cancer Centre Project

FRASER HEALTH AUTHORITY

and

ELLISDON DESIGN BUILD INC.

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DESIGN-BUILD AGREEMENT

THIS AGREEMENT dated for reference as of September 1, 2023 (the "Effective Date") is entered into:

BETWEEN:

FRASER HEALTH AUTHORITY

(the "Authority")

AND:

ELLISDON DESIGN BUILD INC.

(the "Design-Builder")

WHEREAS:

- A. The Authority has selected the Design-Builder to perform all Work for the Project referred to as the "New Surrey Hospital and BC Cancer Centre", 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 covenants and agreements of the parties contained in this Agreement and other good and valuable consideration, the receipt and sufficiency of which are hereby expressly acknowledged by each of the parties hereto, the parties hereto covenant and 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 7 [Apprenticeship Policy];
 - "Approved Energy Modeller" has the meaning set out in Schedule 5 [Energy Guarantee];
 - "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 Having Jurisdiction" or "AHJ" means any federal, provincial, territorial, regional, municipal or local governmental authority, quasi-governmental authority, court,

government or self-regulatory organization, commission, board, tribunal, or any regulatory, administrative or other agency, or any political or other subdivision, department or branch of any of the foregoing, having jurisdiction in any way over or in respect of any aspect of the performance of this Agreement or the Project;

"Authority's Consultant" means IBI Group Architects (Canada) Inc. unless replaced in accordance with Section 6.2;

"Authority's Representative" has the meaning set out in Section 5.1;

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

"**Bond**" has the meaning set out in Section 61.1;

"Building Energy Modeling Professional" or "BEMP" has the meaning set out in Schedule 5 [Energy Guarantee];

"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;

"Child Care Centre" means the child care centre including associated external playgrounds and outside spaces generally described in Appendix 1S [Child Care Centre Requirements] of Schedule 1 [Statement of Requirements];

"Commissioning Plan" has the meaning set out in Section 3.9 and Appendix 9 [Commissioning Plan Requirements] of Schedule 4 [Management Systems and Plans];

"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;

"Construction Management Plan" has the meaning set out in Schedule 4 [Management Systems and Plans];

"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;

"Contemplated Change Notice" means a written instruction referenced as a "Contemplated Change Notice";

"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 Schedule 5 [Energy Guarantee];

"COVID-19 Pandemic" means the novel coronavirus COVID-19 pandemic declared March 11, 2020 by the World Health Organization until such time as the World Health Organization designates or declares the COVID-19 post-pandemic phase;

"**Deficiency Management Plan**" has the meaning set out in Schedule 4 [Management Systems and Plans];

"**Design**" means the design for the Project;

"Design and Construction Management Plan" and all applicable appendices have the meaning set out in Schedule 4 [Management and Systems Plans];

"Design and Construction Schedule" means the general schedule for timing of the Work as set out in Appendix 1 to Schedule 11 [Design and Construction Schedule] and as updated pursuant to the provisions of Section 11 and Schedule 11 [Design and Construction Schedule];

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

"**Design-Builder's Consultant**" means ZGF Architects Inc. and Parkin Architects Western 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 Design, 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, before 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;

"Dispute Resolution Procedure" has the meaning set out in Section 64.1;

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

"Electricity Consumption" has the meaning set out in Schedule 5 [Energy Guarantee];

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

"**Energy**" has the meaning set out in Schedule 5 [Energy Guarantee];

"**Energy Costs**" has the meaning set out in Schedule 5 [Energy Guarantee];

"Energy Consumption" has the meaning set out in Schedule 5 [Energy Guarantee];

"Energy Dashboard" has the meaning set out in Schedule 5 [Energy Guarantee];

"Energy Guarantee" has the meaning set out in Schedule 5 [Energy Guarantee];

"Energy Management Plan" has the meaning set out in Schedule 4 [Management Systems and Plans];

"Energy Model" has the meaning set out in Schedule 5 [Energy Guarantee];

"**Energy Model Assumptions**" has the meaning set out in Schedule 5 [Energy Guarantee];

"Energy Modelling Summary Report" has the meaning set out in Schedule 5 [Energy Guarantee];

"**Energy Modeller**" has the meaning set out in Schedule 5 [Energy Guarantee];

"**Energy Target**" has the meaning set out in Schedule 5 [Energy Guarantee];

"**Energy Utility**" has the meaning set out in Schedule 5 [Energy Guarantee];

"Enhanced Room Data Sheets" or "ERDS" has the meaning set out in Schedule 1 [Statement of Requirements] Section 2.5.9.2(15) and Section 2.5.9.2(24);

"Environmental Credit" has the meaning set out in Schedule 5 [Energy Guarantee];

"Environmental Laws" has the meaning set out in Schedule 5 [Energy Guarantee];

"Environmental Reports" means the:

(i) 2021-11-03 NSHBCCC Spill Containment and Response Plan Version 2;

- (ii) 2022-04-11 NSHBCCC Phase 1 Environmental Assessment;
- (iii) 2022-08-08 NSHBCCC Sensitive Ecosystem Development Variance Permit Report; and
- (iv) 2023-03-15 NSHBCCC SSI Report Groundwater Quality;

"**Epidemic**" means an epidemic or pandemic of infectious disease of humans, including one that is either declared by the World Health Organization or that is a "regional event" as defined in the *Public Health Act* (British Columbia) for which the Provincial Health Officer gives notice under Section 52 of that Act, and including the COVID-19 Pandemic;

"**Epidemic Change in Law**" means a change to applicable Laws or Standards which in respect of an Epidemic imposes, modifies or removes measures to minimize or mitigate the spread of, and human health effects from, relevant infectious disease;

"**Epidemic Event**" means an event, other than an Epidemic Change in Law, arising after the Financial Submission Date and caused by an Epidemic;

"Estimate" means a detailed breakdown, estimate and other information attributable to a Contemplated Change Notice prepared by the Design-Builder in accordance with and meeting the requirements of Section 48;

"EWA" has the meaning set out in Section 4.2(a);

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

"Facility Operation Variances" has the meaning set out in Schedule 5 [Energy Guarantee];

"Financial Submission Date" means June 15, 2023;

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

"Force Majeure" means Epidemic Events, labour disputes, strikes, lock-outs, fires, tornadoes, overland floods, earthquakes, hurricanes, 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) labour disputes, strikes or lock-outs of the personnel of the Design-Builder or the Subcontractors (excluding industry-wide labour disputes, strikes or lock-outs);
- (v) delays resulting from adverse weather conditions, unless and to the extent that such adverse weather conditions directly give rise to a declaration of a state of emergency by the Province of British Columbia pursuant to section 9 of the *Emergency Program Act* (British Columbia); and
- (vi) unsuitable or unanticipated Site conditions, including subsurface conditions (but excluding any abandoned utilities that were not known to the Design-Builder at the Effective Date);

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

"Heating Degree Days" has the meaning set out in Schedule 5 [Energy Guarantee];

"Hot Water Energy Consumption" has the meaning set out in Schedule 5 [Energy Guarantee];

"IEC Functions" has the meaning set out in Schedule 5 [Energy Guarantee];

"Indemnified Parties" has the meaning set out in Section 59.1;

"Independent Certifier" has the meaning set out in Section 7.1;

"Independent Energy Consultant" has the meaning set out in Schedule 5 [Energy Guarantee];

"**Insurance Conditions**" means the terms and conditions set out in Schedule 6 [Insurance Conditions];

"**Key Individuals**" means the persons identified in Schedule 9 [Key Individuals];

"Land" means the lands legally described as follows:

Parcel Identifier: 032-037-180

Legal Description: LOT 1 SECTION 5 TOWNSHIP 8 NEW WESTMINSTER DISTRICT PLAN EPP118214

"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 44.1.

"LEED Certifier" means the Canada Green Building Council or other organization authorized by the Canada Green Building Council to administer and award LEED Gold Certification;

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

"LEED Rating System" means LEED v4 for Building Design + Construction (BD+C); Healthcare;

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

"Management Systems and Plans" has the meaning set out in Schedule 4 [Management Systems and Plans];

"Material Supplier" has the meaning set out in Section 41.15(a);

"Materials Subject to a Deposit" has the meaning set out in Section 41.17;

"M&V" has the meaning set out in Schedule 5 [Energy Guarantee];

"Modelled Floor Area" or "MFA" has the meaning set out in Schedule 5 [Energy Guarantee];

"Measurement and Verification Plan" has the meaning set out in Schedule 5 [Energy Guarantee];

"Megawatt hour" or "MWh" has the meaning set out in Schedule 5 [Energy Guarantee];

"Monthly Project Report" has the meaning set out in Schedule 4 [Management Systems and Plans];

"Notice of Dispute" has the meaning set out in Section 64.2;

"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 44.1;

"Permits Requiring Advance Payment" has the meaning set out in Section 41.17;

"**Permitted Transferee**" has the meaning set out in Section 70.1;

"Portfolio Manager" has the meaning set out in Schedule 5 [Energy Guarantee];

"Predicted Energy Consumption" has the meaning set out in Schedule 5 [Energy Guarantee];

"**Priced Options**" has the meaning set out in Schedule 10 [Schedule of Prices];

"Process Load" has the meaning set out in Schedule 5 [Energy Guarantee];

"**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 16.1;

"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;

"Proposal Extracts" means Schedule 13 [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" has the meaning set out in Schedule 4 [Management Systems and Plans];

"Record Documentation" includes the as-built drawings, specifications, maintenance manuals, AutoCad files, BIM model and other documentation that record the completed Facility prepared in accordance with Section 2.5.3.13 of the Statement of Requirements;

"**Responsible Ministry**" has the meaning set out in Schedule 7 [Apprenticeship Policy] Section 3.2:

"Review Procedure" means Schedule 2 [Review Procedure];

"Reviewed Drawings and Specifications" has the meaning set out in Schedule 2 [Review Procedure];

"Schedule Information" has the meaning set out in Schedule 11 [Design and Construction Schedule];

"Schedule of Values" means the schedule to be provided by the Design-Builder pursuant to Section 41.4 and reviewed by the Authority under the Review Procedure that allocates the Contract Price set out in Schedule 10 [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;

"Senior Management Representatives" has the meaning set out in Section 64.4;

"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 29.1;

"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 1F Work Area Diagram;

"Site Reports" means the:

- (i) 2019-08-26 NSHBCCC Archaeological Review;
- (ii) 2020-11-02 NSHBCCC Noise and Vibration Baseline;
- (iii) 2021-11-08 NSHBCCC Tree Evaluation Report;
- (iv) 2021-11-12 NSHBCCC Geotechnical Comments on Proposed Box Culvert;
- (v) 2021-12-02 NSHBCCC Offsite Geotechnical Investigation Report;
- (vi) 2021-12-08 NSHBCCC Geotechnical Comments on Proposed Generator Enclosure;
- (vii) 2022-06-21 NSHBCCC Preliminary Stormwater Management Report;
- (viii) 2023-03-03 NSHBCCC Survey Plan; and
- (ix) 2022-10-14 NSHBCCC Preliminary Geotechnical Report;

"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 the Statement of Requirements), 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 Schedule 2 [Review Procedure];

"Substantial Completion" has the meaning set out in Section 45.2;

"Substantial Completion Certificate" means the certificate issued to the Design-Builder by the Independent Certifier 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, subject to adjustment of such date in accordance with this Agreement;

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

"Test Period" has the meaning set out in Schedule 5 [Energy Guarantee];

"**Total Completion**" has the meaning set out in Section 45.14;

"Total Completion Certificate" means the certificate issued to the Design-Builder by the Independent Certifier 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;

"**Transfer**" has the meaning set out in Section 70.1;

"**Transferor**" has the meaning set out in Section 70.1;

"True PDF" has the meaning set out in Schedule 2 [Review Procedure];

"Updated Design and Construction Schedule" has the meaning set out in Schedule 11 [Design and Construction Schedule];

"User Consultation Groups" has the meaning set out in Schedule 2 [Review Procedure];

"VanIAC" means the Vancouver International Arbitration Centre;

"VanIAC Rules" has the meaning set out in Section 64.1;

"Warranty Holdback" has the meaning set out in Section 44.1;

"Warranty Period" means the period defined in Section 39.1 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 Schedule 5 [Energy Guarantee];

"Work" means everything to be undertaken by the Design-Builder under this Agreement;

"Working Session" has the meaning set out in Schedule 2 [Review Procedure] Section 4.6;

"Work Plan" has the meaning set out in Section 29.1; and

"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 [Not Used];
 - (d) Schedule 4 [Management Systems and Plans];
 - (e) Schedule 5 [Energy Guarantee];
 - (f) Schedule 6 [Insurance Conditions];
 - (g) Schedule 7 [Apprenticeship Policy];
 - (h) Schedule 8 [Independent Certifier Agreement];
 - (i) Schedule 9 [Key Individuals];
 - (i) Schedule 10 [Schedule of Prices];
 - (k) Schedule 11 [Design and Construction Schedule];
 - (l) Schedule 12 [Independent Energy Consultant Agreement];
 - (m) Schedule 13 [Proposal Extracts]; and
 - (n) Schedule 14 [KKS Procurement Opportunities].
- 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 this 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, including "they", "them" and "their", which may import the plural include the singular and vice versa;
- (j) words which may import gender are interpreted as gender neutral;
- (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 (in this paragraph, the "Payor") to pay any amount to the other party (in this paragraph, 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;
- (t) this Agreement 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 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 either of the parties, 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;
- (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:
- (ee) the words "herein", "hereof", "hereto" and "hereunder" refer to this Agreement as a whole and not to a particular Section or Schedule in which such word may be used; and
- (ff) a reference to a person includes an individual, legal personal representative, corporation, body corporate, legal entity, firm, partnership, trust, trustee, syndicate, joint venture, limited liability company, association, unincorporated organization, union or governmental authority.
- 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 individuals executing this Agreement on behalf of the parties;
 - (ii) the schedules (including appendices, sub-schedules and attachments to the schedules), except Schedule 13 [Proposal Extracts], in the order in which they are listed in Section 1.2; and
 - (iii) Schedule 13 [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;
 - (f) later dated documents will govern over earlier dated documents of the same type.

Upon discovery by the Authority or the Design-Builder of any conflict, ambiguity or discrepancy between any documents comprising this Agreement, such party will promptly notify the other party's representative and resolve all such conflicts, ambiguity or discrepancy through mutual consultation and the application of the order of priority for such documents specified herein. If such conflict, ambiguity or discrepancy is not resolved through mutual consultation and the application of such order of priority, or in the event of any other dispute over the meaning of any part of this Agreement, including whether any work is part of the Work, then the determination of the Authority governs and the Design-Builder will diligently proceed as the Authority directs, subject to the Design-Builder's rights to dispute the Authority's determination in accordance with Part K - Dispute Resolution.

PART B – PRICE, TIME, TERM

2 CONTRACT PRICE

- 2.1 The Authority will pay the total Contract Price of \$2,124,263,495.00 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 Authority and the Design-Builder acknowledge the Contract Price includes 18,000 data drops. The Authority may at its option require more or fewer data drops, in which case the Contract Price will be adjusted as set out in Appendix 1 [Data Drop Definitions and Unit Pricing] to Schedule 10 [Schedule of Prices].

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 October 12, 2029 (the "Target Substantial Completion Date") and Total Completion on or before a reasonable date to be determined by the parties, which date shall be no later than 120 days following Substantial Completion.
- 3.2 The Design-Builder will perform the Work in compliance with the Design and Construction Schedule, as may be modified in accordance with the terms of this Agreement, including Schedule 11 [Design and Construction Schedule].
- 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 Design and Construction 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 Design and Construction 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 45.15; and
 - (c) the Design-Builder has fulfilled all of its obligations pursuant to Section 39.
- 4.2 The Authority and the Design-Builder acknowledge and agree that:
 - (a) the Authority and the Design-Builder entered into an agreement titled "Early Works Agreement" dated as of August 4, 2023 (for purposes of this Section 4.2, defined as the "EWA") and that the EWA is terminated as of the Effective Date; and
 - (b) all Early Works (as defined in the EWA) undertaken under the EWA in advance of the Effective Date are deemed to have been undertaken by the Design-Builder pursuant to this Agreement (except for the provision of insurance under the EWA)

and the Design-Builder accepts and assumes full risk, responsibility and liability for the Early Works.

5 REPRESENTATIVES

- 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 individual, 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 individual designated as such in Schedule 9 [Key Individuals], unless otherwise agreed by the Authority. The Design-Builder's Representative may by written notice and with the approval of the Authority, acting reasonably, delegate any or all of the functions of the Design-Builder's Representative to any other individual, 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.

6 **AUTHORITY'S CONSULTANT**

- 6.1 The Authority will engage the Authority's Consultant to provide, without limitation, the following services, duties and responsibilities:
 - (a) without limiting either party's right to commence the Dispute Resolution Procedure at any time, interpreting, in the first instance, the requirements of this Agreement and the making of findings in writing 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;
 - (b) assisting the Authority with advisory team services, including assisting with review of the Design;
 - (c) recommending to reject Work which does not conform to the requirements of this Agreement;
 - (d) recommending testing and inspection of the Construction, whether or not such Construction has been fabricated, installed, or completed;

- (e) 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
- (f) such other work that may be required by the Authority from time to time and that is acceptable to the Authority's Consultant.
- 6.2 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.

7 INDEPENDENT CERTIFIER

- 7.1 The parties will cooperate to jointly appoint a Person (the "Independent Certifier"), who is:
 - (a) qualified and experienced with respect to the design and construction of projects in British Columbia similar to the Project, and
 - (b) independent from both the Authority and the Design-Builder (and who will be impartial to the parties),

to provide certification services for the benefit of the parties. The parties will enter into an agreement with the Independent Certifier on the terms generally as set out in Schedule 8 [Independent Certifier Agreement].

- 7.2 If within 20 Business Days of the Effective Date the Independent Certifier has not been appointed, or if for any reason the Independent Certifier is unable or unwilling to continue to perform the Independent Certifier services or if the Independent Certifier's appointment has been terminated by the Authority and the Design-Builder, then:
 - (a) within 5 Business Days of the date that is 20 Business Days after the Effective Date (or within 5 Business Days of the date of termination of the Independent Certifier's appointment, if applicable), the Design-Builder will provide the names of 3 candidates acceptable to the Design-Builder for consideration by the Authority;
 - (b) within 10 Business Days of receiving the candidate names, the Authority will notify the Design-Builder of the candidates acceptable to the Authority, and the parties will cooperate to enter into a contract with an acceptable candidate generally in the form set out in Schedule 8 [Independent Certifier Agreement]; and
 - (c) if none of the candidates are acceptable to the Authority, acting reasonably, or if for any reason an Independent Certifier is not appointed within 40 Business Days of the Effective Date (or within 20 Business Days of the date of termination of the Independent Certifier's appointment, if applicable), then either party may immediately apply to the Vancouver International Arbitration Centre for the

selection of an Independent Certifier, providing the other party the opportunity to participate in the selection and appointment process.

- 7.3 The parties will require the Independent Certifier to:
 - (a) consult with the Authority, the Design-Builder and others involved in the Design;
 - (b) conduct monthly inspections of the Construction;
 - (c) raise any quality concerns and investigate those identified by Design-Builder and/or the Authority,

as the Independent Certifier determines is required for purposes of the Independent Certifier's functions under this Agreement and, no later than the 10th day of each month, prepare and deliver to the Authority and Design-Builder a monthly written report containing a description of:

- (d) the Work completed in the previous month; and
- (e) the progress of the Work relative to the Design and Construction Schedule, with an overview analysis of variances and investigations of quality concerns.
- 7.4 The Independent Certifier will:
 - (a) determine amounts owing to the Design-Builder based on the Independent Certifier's observations and evaluations of the Design-Builder's applications for payment;
 - (b) issue certificates of payment;
 - (c) determine the dates of Substantial Completion and Total Completion and the issuing of certificates for same;
 - (d) for purposes of the *Builders Lien Act* (British Columbia), determining the date of substantial performance and acting as payment certifier for this Agreement and for progressive release of portions of the Lien Holdbacks in respect of Subcontracts;
 - (e) determine the holdback for any defects or deficiencies in the Work at Substantial Completion;
 - (f) verify the Design-Builder's applications for release of the Performance Holdbacks;
 - (g) assess the scope of any holdbacks to be made at any time; and
 - (h) perform such other functions as are set out in this Agreement.
- 7.5 The Design-Builder will give the Independent Certifier access to the Design and Construction work as the Independent Certifier reasonably requests in order to be fully informed as to the progress of the Design and Construction including:

- (a) access to drawings, specifications, schedules, records, and other documents or data relating to the Design and Construction, including such information that is being produced by or in the possession of the Design-Builder or others; and
- (b) access to the Site,

and the Design-Builder will:

- (c) permit the Independent Certifier to attend all Design and Construction meetings except to the extent the Design-Builder and the Authority expressly otherwise agree; and
- (d) keep the Independent Certifier fully informed as to the progress of the Construction, including giving notice of any part of the Work before it becomes covered up and unavailable for inspection.
- 7.6 Nothing in this Agreement or in the parties' agreement with the Independent Certifier will be interpreted as giving the Independent Certifier any responsibility or authority for any aspect of the Design or the Construction, or as relieving the Design-Builder of its responsibility for the Design and Construction as set out in this Agreement, and neither the Design-Builder nor any Subcontractor will be entitled to rely on any review, acceptance, approval or confirmation that the Independent Certifier may give with respect to Design or Construction.

8 KEY INDIVIDUALS

- 8.1 Attached as Schedule 9 [Key Individuals] is a list of Key Individuals that the Design-Builder will utilize in undertaking the Design and Construction. Unless agreed to by the Authority, no individual will hold more than one position set out in Schedule 9 [Key Individuals].
- 8.2 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 duties described in this Agreement, including Schedule 9 [Key Individuals]; and
 - (b) if for any reason a Key Individual resigns or is otherwise unavailable to perform the duties described in this Agreement, including Schedule 9 [Key Individuals], then the Design-Builder will use all reasonable efforts to retain a replacement with equal or better 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.
- 8.3 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.
- 8.4 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.
- 8.5 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.
- 8.6 The Design-Builder acknowledges that if any of the Key Individuals are not available and are not replaced as required by this Agreement, the Authority will not obtain 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.
- 8.7 If either (i) the position of any Key Individual remains unfilled for more than 20 Business Days after the applicable 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 8.5 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 50.2(b).

8.8 At the Authority's written request, acting reasonably and with such request to be accompanied by the Authority's reason for such request, the Design-Builder will remove and replace any Key Individual, provided that in the event the Design-Builder objects to such request within 10 Business Days of receipt of same, senior management of each of the parties will, at the request of the Design-Builder, meet within a reasonable period after notice of such objection is provided, to discuss the proposed removal and replacement of such Key Individual and reasons for the Design-Builder's objection thereto.

PART C – THE WORK

9 GENERAL

- 9.1 The Design-Builder will perform the Work in accordance with the requirements of this Agreement, including the Statement of Requirements.
- 9.2 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.

10 MANAGEMENT SYSTEMS AND PLANS

10.1 The Design-Builder will comply with the requirements of Schedule 4 [Management Systems and Plans].

11 DESIGN AND CONSTRUCTION SCHEDULE

- 11.1 The Design-Builder will comply with the requirements of Schedule 11 [Design and Construction Schedule]. Attached as Appendix 1 to Schedule 11 [Design and Construction Schedule] is the initial schedule for the Project, which the parties have relied upon in entering into this Agreement.
- 11.2 The Design-Builder will ensure that the Design and Construction 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 the Statement of Requirements and Schedule 11 [Design and Construction Schedule].

12 CONTROL AND SUPERVISION OF THE WORK

- 12.1 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 27.2, with work of Other Contractors,

- in accordance with generally accepted management and supervisory practices in British Columbia
- 12.2 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.
- 12.3 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 Design and Construction Schedule.
- 12.4 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 Management Systems and Plans, Work Plan, Site Plan and the Design and Construction Schedule
- 12.5 The Design-Builder will employ a competent construction manager, and necessary assistants, at the Site at all times during the progress of the Work.
- 12.6 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.
- 12.7 The Design-Builder will at all times maintain good order and discipline among its employees engaged on the Work.
- 12.8 Before commencing the Work and as a condition of all payments under this Agreement, the Design-Builder will:
 - (a) purchase and deliver the Bond as set out in Section Part J to the Authority; and
 - (b) file with the Authority certificates of all insurance policies and necessary endorsements to comply with the Insurance Conditions.
- 12.9 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.
- 12.10 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.

12.11 The Design-Builder will comply with the provisions of Schedule 7 [Apprenticeship Policy].

13 QUALITY MANAGEMENT

- 13.1 The requirements of this Section 13 are in addition to the requirements of Schedule 4 [Management Systems and Plans] and the Management Systems and Plans.
- 13.2 The Authority, the Authority's Consultant, the Independent Certifier 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.
- 13.3 If any of the Work requires tests, inspections or approvals by this Agreement, or by the written instructions of the Authority, the Authority's Consultant or the Independent Certifier, 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 give the Authority reasonable notice of the date and time of inspections by any governmental authorities.
- 13.4 The Design-Builder will furnish promptly to the Authority, on request, a copy of certificates and inspection reports relating to the Work.
- 13.5 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.
- 13.6 Subject to Section 13.5, 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.
- 13.7 If the results of any inspection or testing discloses 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.
- 13.8 If the Independent Certifier, the Authority's Consultant or other representatives of the Authority make 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 Independent Certifier, the Authority's Consultant and other representatives.

13.9 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.

14 LEED GOLD CERTIFICATION

- 14.1 The Design-Builder will obtain LEED Gold Certification of the Facility in accordance with the following:
 - (a) The Design-Builder acknowledges that the Authority has registered the Facility with the LEED Certifier for purposes of LEED Gold Certification under the LEED Rating System and for:
 - (i) EApc95 Alternative Energy Performance Metric;
 - (ii) IPpc98 Assessment and Planning for Resilience;
 - (iii) IPpc99 Design for Enhanced Resilience;
 - (iv) IPpc100 Passive Survivability and Back-up Power During Disruptions;
 - (v) WEpc115 Whole Project Water Use Reduction; and
 - (vi) MRpc132 Procurement of Low Carbon Construction Materials.
 - (b) The Design-Builder will utilize the two-stage LEED review process (design stage and construction stage) for LEED certification.
 - (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 achieve all necessary prerequisites, credits and points under the LEED Rating System required to achieve the LEED Gold Certification and, except as set out in this Section 14.1, may in its discretion determine which of the credits and points to pursue.
 - (e) The Design-Builder will not include any prerequisites, points or credits which require any action by or on behalf of the Authority without the Authority's prior written consent. If the Authority consents to the inclusion of prerequisites, points or credits which require any action by the Authority, the Authority will take reasonable steps, consistent with the nature of the Facility and the Authority's operations and maintenance, to cooperate with the Design-Builder in respect of its achievement of such prerequisites, points and credits; provided however that such cooperation will not require the Authority to obtain such prerequisites, points or credits or to incur any liability, cost or expense.

- (f) The Design-Builder will use the standards and guidelines listed in Schedule 1 [Statement of Requirements] as references in undertaking the sustainable Design and Construction initiatives. The selection of LEED credits outlined in Sections 14.1(g), 14.1(h), 14.1(i), and 14.1(j) incorporates feedback from the Authority's Energy and Environmental Sustainability Low Carbon Resilience and Environmental Sustainability (LCRES) Guidelines for Health-care New Construction, which has been listed in Schedule 1 [Statement of Requirements] for reference purposes only.
- (g) The Design-Builder will achieve the following LEED credits:
 - (i) Integrative Process;
 - (ii) Green Vehicles;
 - (iii) Places of Respite;
 - (iv) Light Pollution Reduction;
 - (v) Water Metering;
 - (vi) Enhanced Commissioning (4 points);
 - (vii) Advanced Energy Metering;
 - (viii) Advanced Refrigerant Management;
 - (ix) Building Life-Cycle Impact Reduction (1 point);
 - (x) Building Product Disclosure & Optimization: Environmental Product Declarations (at least 1 point);
 - (xi) PBT Source Reduction Mercury;
 - (xii) PBT Source Reduction: Lead, Cadmium, Copper;
 - (xiii) Construction and Demolition Waste Management (2 points);
 - (xiv) Enhanced Indoor Air Quality Strategies (at least 1 point);
 - (xv) Low-Emitting Materials (3 points);
 - (xvi) Construction Indoor Air Quality Management Plan; and
 - (xvii) Indoor Air Quality Assessment (at least 1 point).

If for any reason the Design-Builder fails to achieve all of the required points and credits set out in this Section 14.1(g) within 36 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 14.1 immediately pay to the Authority \$25,000 per required point that has not been achieved.

- (h) To support the Design-Builder to achieve LEED Pilot Credit IPpc98: Assessment and Planning for Resilience, the Authority has completed preliminary documentation for the Pilot Credit IPpc98 with emphasis on extreme heat, wildfire and earthquake as high priority hazards. If for any reason the Design-Builder fails to achieve all of the required points and credits set out in this Section 14.1(h) within 36 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 14.1 immediately pay to the Authority \$25,000 per required point that has not been achieved.
- (i) The Design-Builder will achieve at least 15 points from at least 10 of the following LEED credits:
 - (i) Site Assessment;
 - (ii) Site Development Protect or Restore Habitat;
 - (iii) Open Space;
 - (iv) Rainwater Management;
 - (v) Outdoor Water Use Reduction;
 - (vi) Indoor Water Use Reduction;
 - (vii) Cooling Tower Water Use;
 - (viii) Building Life-Cycle Impact Reduction (2 points);
 - (ix) Building Product Disclosure and Optimization Sourcing of Raw Materials:
 - (x) Building Product Disclosure and Optimization Material Ingredients;
 - (xi) Design for Flexibility;
 - (xii) Thermal Comfort;
 - (xiii) Interior Lighting;
 - (xiv) Daylight;
 - (xv) Quality Views;
 - (xvi) Acoustic Performance;

- (xvii) Pilot Credit Design for Enhanced Resilience; and
- (xviii) Pilot Credit Passive Survivability and Back-up Power During Disruption.

Additional points from Regional Priority credits associated with the LEED credit do not count towards the required point total in this requirement. If for any reason the Design-Builder fails to achieve all of the required points and credits set out in this Section 14.1(i) within 36 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 14.1 immediately pay to the Authority \$25,000 per required point that has not been achieved.

- (j) The following LEED credit points are not permitted for the Project:
 - (i) Energy and Atmosphere Credit Green Power and Carbon Offsets.
- (k) The Design-Builder will compile and submit the required documents for certification.
- (l) If for any reason the Design-Builder fails to obtain LEED Gold Certification for the Facility within 36 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 14.1 immediately pay to the Authority \$1,000,000.
- (m) Upon payment of amounts, if any, owing under this Section 14.1 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.
- (n) The Authority and the Design-Builder expressly agree that the amounts payable from the Design-Builder in this Section 14.1 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 14.1 and LEED Gold Certification and both parties expressly agree that such amounts are not a penalty.
- 14.2 As a condition of Substantial Completion, the Design-Builder will deliver to the Authority:
 - (a) a LEED project checklist, generally in accordance with the LEED Certifier's requirements, together with a written confirmation that, in the Design-Builder's judgment:
 - (i) the LEED credits/points required by this Section 14.1 will be achieved for the Facility; and

- (ii) LEED Gold Certification will be achieved for the Facility; and
- (b) a written opinion from a LEED accredited professional supporting the confirmation described in Section 14.2(a) above.
- 14.3 The parties acknowledge that LEED Gold Certification is not required for the Child Care Centre.

15 ENERGY

15.1 The parties will comply with the provisions of Schedule 5 [Energy Guarantee].

16 PROJECT BINDER

- 16.1 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").
- 16.2 The Project Binder will include the following:
 - (a) Commissioning reports satisfactory to the Authority;
 - (b) All inspections, certifications, guarantees and warranties;
 - (c) Record Documentation, 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 the Design Build Agreement;
 - (f) Copies of all warranties and guarantees from Subcontractors;
 - (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;
 - (h) Any other requirements from Appendix 1U; and
 - (i) Any other requirements from Appendix 1V.
- 16.3 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 two copies of the Project Binder, and will include three USB memory keys, each one with an electronic copy in True PDF, unless directed to use a different format by the Authority, acting reasonably.
- 16.4 Throughout the Construction, the Design-Builder will update the Reviewed Drawings and Specifications, including all final shop drawings, Room Data Sheets and Enhanced Room Data Sheets, so as to produce accurate and complete Record Documentation for the Facility.

- 16.5 Within 60 days after achieving Substantial Completion, the Design-Builder will provide to the Authority the following:
 - (a) Two complete sets of paper print of the as-built drawings, by the Design-Builder's Consultant, showing the as-built Work and identified in bold letters with the words "FINAL AS-BUILT DRAWINGS"; and
 - (b) Three USB memory keys each one with a complete copy of the Record Documentation in both BIM (Building Information Modelling) and True PDF unless directed to use a different format by the Authority, acting reasonably.

17 PROTECTION OF WORK, SITE AND PROPERTY

17.1 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 17.1 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.

18 EQUIPMENT AND FURNISHINGS

18.1 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.

19 REVIEW PROCEDURE

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

20 GENERAL DESIGN REQUIREMENTS

- 20.1 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 Management Systems and Plans and the Design and Construction Schedule.
- 20.2 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.

20.3 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 Reviewed Drawings and Specifications implement and otherwise conform to the Statement of Requirements;
 - (ii) the Reviewed Drawings and Specifications implement and otherwise conform to the Proposal Extracts;
 - (iii) the Reviewed 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 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 conformity with the requirements of this Agreement (including the Statement of Requirements), the Reviewed 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.
- 20.4 The Design-Builder will only issue drawings and specifications for construction purposes based on Reviewed Drawings and Specifications.
- 20.5 The Design-Builder will perform the Construction in strict conformity with the Reviewed Drawings and Specifications, as may be modified and amended from time to time in accordance with the terms of this Agreement, and this obligation will be in addition to all other obligations of the Design-Builder under this Agreement.
- 20.6 During the Construction, the Design-Builder will submit all amendments or additions to the Reviewed Drawings and Specifications to the Authority's Representative for review

- under the Review Procedure. Any Changes during the Construction will be subject to the terms of Part E of this Agreement.
- 20.7 Nothing in this Section 20, or otherwise in or under this Agreement, makes the Authority, the Independent Certifier, 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 Reviewed 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 20 or other act of the Authority, remain solely liable and responsible for compliance of the Reviewed Drawings and Specifications with the Statement of Requirements and all Standards.
- 20.8 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, Reviewed Drawings and Specifications, all Standards and all terms of this Agreement;
 - (f) liaising with the Authority and 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 Authorities Having Jurisdiction respecting conformance of the Design with all Standards and as may be required for the issuance of or compliance with any permits, licenses or approvals.
- 20.9 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 and engaged directly or indirectly by the Design-Builder 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.
- 20.10 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.

21 [NOT USED]

22 RECORDS OF ADDS/OMITS

22.1 The parties wish to create a single record of adjustments to the Design and Construction that are reflected in the Reviewed Drawings and Specifications, but which do not constitute Changes for which there are adjustments to the Contract Price or the Contract Time. The adjustments include all inconsistencies with or differences from the Statement of Requirements and any other parts of this Agreement. The Design-Builder will maintain a list of all such adjustments, to be referred to as "Adds/Omits" or other name agreed to by the parties. The Design-Builder will provide a copy of such list, and proposed updates to the list, to the Authority at each of the phases of Design set out in the Statement of Requirements and will modify the list for reasonable comments made by the Authority. The parties intend to agree on documentation to reflect such adjustments and may for convenience set out such adjustments in a Change Order. Unless otherwise agreed, at least 90 days prior to the Substantial Completion Date, the Design-Builder will provide the Authority with a draft Estimate, without adjustments to the Contract Price or to the Target Substantial Completion Date, setting out such adjustments, and the parties will seek to agree on final documentation within 30 days after the Substantial Completion Date. For convenience in preparing and maintaining a record of adjustments, the parties will also seek to agree on such documentation on a preliminary basis at two reasonable times prior to Substantial Completion. This Section 22 will not limit the Design-Builder's responsibilities to provide the Project Binder and Record Documentation.

23 OWNERSHIP OF DOCUMENTS

- 23.1 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.
- 23.2 Copyright for the Design and drawings belongs to the Design-Builder, the Design-Builder's Consultant or other consultants who prepared them.
- 23.3 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.

- 23.4 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.
- 23.5 The Authority may retain copies, including reproducible copies, of all plans, sketches, drawings, computer-generated models, graphic representations and specifications and other material including the Record Documentation. 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.
- 23.6 Physical models and renderings furnished by the Design-Builder are the property of the Authority.

24 ERRORS IN DESIGN

- 24.1 The Design-Builder is responsible for the Design, including all errors, omissions or deficiencies in the Design.
- 24.2 The Design-Builder will give written notice to the Authority immediately upon becoming aware of any error, omission or deficiency in the Design.
- 24.3 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.

25 LABOUR AND PRODUCTS

- 25.1 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.
- 25.2 All products, materials, equipment and machinery provided will be new unless otherwise expressly specified in this Agreement.

26 SUBCONTRACTS

- 26.1 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.
- 26.2 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.
- 26.3 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.
- Nothing contained in this Agreement will create any contractual relationship between the Authority and any Subcontractors or their officers, agents, employees or workers.
- 26.5 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.
- 26.6 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.

27 OTHER CONTRACTORS

27.1 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.

27.2 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 Design and Construction Schedule so that Other Contractors are not delayed in their work.
- 27.3 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.
- 27.5 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).
- 27.6 The Design-Builder acknowledges that other individuals 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 such a labour disruption.
- 27.7 The Authority will assure, where possible, that Other Contractors are bound to equivalent terms as those found in this Section 27.
- 27.8 Claims, disputes and other matters in question between the Design-Builder and Other Contractors will be dealt with as provided in Section 64 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 64.

28 ACCESS TO AND USE OF SITE

- 28.1 Subject to the Site Plan, Design and Construction Management Plan and Work Plan and any limitations in this Agreement, the Authority will provide access to the Site and 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.
- 28.2 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.
- 28.3 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 34 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.
- 28.4 The Design-Builder will obtain and comply with any permissions required by the Authority for access to the Site and carrying out the Work, including with respect to hot works and shutdowns. The Design-Builder will not carry out any Work that is the subject of any such permission until such permission has been obtained from the Authority.

28.5 The Design-Builder will:

- (a) limit its activities to the areas within the Site which are identified in the Site Plan, Construction 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, Construction Management Plan or Work Plan, without the prior written permission of the Authority; and
- (c) obtain any construction easements, permits and crane overswing and other airswing agreements that may be required for construction of the Project. When requested to do so by the Design-Builder, the Authority will provide 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.

28.6 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 expressly permitted to do so under this Agreement 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 precondition survey as described in the Statement of Requirements.
- 28.7 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 fronting private businesses or residences 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.

28.8 The Design-Builder will:

- (a) comply with the reviewed Design and Construction Management Plan;
- (b) construct the Facility within the area of the Site indicated in the Site Plan;
- (c) install at least an eight foot high fence around the perimeter of the area in which it is performing the Work and such hoarding and lighting as may be required by the Authority including any hoarding required to protect the Authority and the public;
- (d) provide a monitored motion system that would send a signal to responders if the Site perimeter is breached after hours;
- (e) provide video surveillance on all sides of the Site and that provides a full view of the Site perimeter;
- (f) perform all Construction activities within the areas of the Site provided in the Site Plan and Construction Management Plan, except as approved by the Authority for any work required in other areas of the Site;
- (g) perform all Construction activities without blocking or disrupting vehicle, delivery or pedestrian access, except as may be permitted pursuant to the Construction Management Plan;
- (h) 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 Construction Management Plan, unless otherwise approved by the Authority;
- (i) not use any explosives without the Authority's consent;
- (j) take reasonable steps to ensure that Construction workers or suppliers do not smoke on any portion of the Site, other than in designated smoking areas; and
- (k) before commencing any Construction on any part of the Site, prepare and implement or update 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.
- 28.9 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.
- 28.10 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.
- 28.11 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, Construction Management Plan or Work Plan or under any applicable Laws, and will not unreasonably encumber the Site or other activities on the Site.

- 28.12 The Design-Builder will comply with the Authority's policies, procedures and instructions, including regarding parking, safety, harassment, fires, smoking, signs and advertisements.
- 28.13 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.
- 28.14 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.
- 28.15 Nothing in this Section 28 limits the requirements of Schedule 4 [Management Systems and Plans] Appendix 8A [Construction Protocols Requirements].

29 WORK PLAN

- 29.1 Without limiting the other requirements of this Agreement, the Design-Builder will:
 - (a) provide to the Authority for review a construction plan that includes:
 - (i) restricting vehicular and machinery traffic to only those vehicles and machinery that are essential to, and actively engaged in, performing Work; and
 - (ii) compliance with safety requirements;

prior to performing any Work in or around the Site that is not indicated in the Site Plan or Construction Management Plan, deliver to the Authority and obtain the Authority's approval of a work plan (the "Work Plan") clearly identifying:

- (iii) any requirements or restrictions set out in the Statement of Requirements in relation to the Site; and
- (iv) 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.

30 CONDITIONS AT SITE/DISCLOSED DATA

- 30.1 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 30.1(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 30.4, 31 and 32, 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.
- 30.2 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 30.1(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.
- 30.3 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 30.2 if it has failed to obtain

- sufficient geotechnical information necessary to prepare a Design that reasonably anticipates the soils conditions actually encountered.
- 30.4 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 52. 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 Price will be agreed upon or determined in accordance with Section 48 [Valuation and Certification of Changes].

31 ARCHAEOLOGICAL ITEMS

- 31.1 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).
- 31.2 If the Design-Builder is delayed in performing the Work taking steps required under Section 31.1, the Design-Builder's entitlement to an extension of the Contract Time and reimbursement of costs will be determined in accordance with Section 52. If the Design-Builder is not delayed in performing the Work but incurs additional costs as a result of taking steps required under Section 31.1, adjustment in the Contract Price will be agreed upon or determined in accordance with Section 48 (Valuation and Certification of Changes).

32 CONTAMINANTS AND ENVIRONMENTAL MANAGEMENT

- 32.1 The Design-Builder acknowledges and agrees:
 - (a) it has received and reviewed a copy of the Environmental Reports;
 - (b) it has had the opportunity to undertake examinations and investigations of the Site, including existing buildings and facilities, 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.
- 32.2 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 individual 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.
- 32.3 If the Design-Builder is delayed in performing the Work due to the Contaminants referred to in Section 32.4 or due to the discovery of Contaminants, other than those disclosed in or reasonably inferred from the Environmental Reports, by taking steps required under Section 32.2, the Design-Builder's entitlement to an extension of the Contract Time and reimbursement of costs will, subject to Section 32.4, be determined in accordance with Section 52. 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 Price will, subject to Section 32.4, be agreed upon or determined in accordance with Section 48 [Valuation and Certification of Changes].
- 32.4 The Authority acknowledges that naturally occurring Contaminants arsenic, chromium, nickel and vanadium are present at the Site in concentrations above allowable limits under the *Environmental Management Act* (British Columbia) and regulations and that disposal of soil with such Contaminants requires disposal at a location that is legally capable of accepting such Contaminants. The Design-Builder is entitled to reimbursement of haulage and disposal costs at the following all-inclusive unit rates, plus the applicable mark-up set out below:
 - (a) Haul and Dispose Contaminated Material (RL+) unit rate of is calculated as Unit rate of per cubic meter (m³) less Haul and Dispose Clean Material (RL-) Unit rate of per cubic meter (m³); or
 - (b) Haul and Dispose Contaminated Material (IL+) unit rate of is calculated as Unit rate of per cubic meter (m³) less Haul and Dispose Clean Material (RL-) Unit rate of per cubic meter (m³).

The above all-inclusive unit rates are based on the Pinchin Final Soil Characterization Assessment, 5510 18th Street, Surrey, British Columbia dated September 1, 2023, are valid for 12 months from the Effective Date and for greater certainty are inclusive of all the direct costs associated with hauling and disposal (including means and methods on site, including

stockpile management, reloading, hog fuel supply (lining truck boxes), stockpile containment areas (lock blocks), removal of lock block containment, traffic control, administrative Costs etc.) but are exclusive of other costs such as Phase 2 environmental studies, additional soils testing, environmental consulting services and excavation oversight, qualified environmental professionals (QEPs).

Any other adjustments to the Contract Time and Contract Price as a result of the Contaminants referred to in this Section 32.4 will be made on the basis described in Section 32.3 and the Sections referred to in Section 32.3.

The parties agree that the mark-up chargeable by the applicable Subcontractor on the unit rate is reduced from and that the mark-up chargeable by the Design-Builder on the charge from the Subcontractor remains

The Design-Builder will not proceed with the disposal until authorized by a Change Directive or Change Order.

33 SITE SAFETY

- 33.1 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".
- 33.2 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 WorkSafeBC. 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 WorkSafeBC, or both.
- 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 33.2.
- 33.4 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.

34 DUST, NOISE, VIBRATION AND OTHER DISRUPTIVE ACTIVITIES

- 34.1 The Design-Builder will carry out its Construction to minimize dust, noise, vibration, noxious odours and fumes.
- 34.2 Without limiting Section 34.1, the Design-Builder will discuss with the Authority any expected vibration disruption from the Construction activities, will plan operations to minimize disruption to the Authority's activities, and will carry out its Construction activities, so that dust, noise, vibration, noxious odours, fumes or other disruptive activities do not unreasonably and adversely affect the Authority's activities or use of properties in the vicinity of the Site.

35 DOCUMENTS AT THE SITE

- 35.1 The Design-Builder will keep at least 2 copies 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 Reviewed Drawings and Specifications, including any shop drawings prepared or obtained in respect of the Work;
 - (d) the Design and Construction Schedule; and
 - (e) the Management Systems and Plans.

36 CLEANUP AND FINAL CLEANING OF WORK

- 36.1 The Design-Builder will, to the standards required by the Authority, acting reasonably, 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.
- 36.2 The Design-Builder will promptly remove all surplus products, tools, construction machinery and equipment, and any waste and debris.
- 36.3 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 standards of cleanliness required by the Agreement.
- 36.4 The Design-Builder will, by the Substantial Completion Date and to the standards required by the Authority, leave the Site clean and suitable for occupancy and use by the Agreement.
- 36.5 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.

37 REMEDIAL WORK

- 37.1 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.
- 37.2 The Design-Builder will coordinate the Design and Construction Schedule for the Work to ensure that the requirement under Section 37.1 is kept to a minimum.
- 37.3 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.

38 REJECTED WORK

- 38.1 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.
- 38.2 If the Design-Builder does not remove such defective Work within the time fixed by written notice by the Authority, acting reasonably, 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.

39 WARRANTY

- 39.1 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").
- 39.2 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.
- 39.3 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 or deficiency 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.
- 39.4 If the Authority carries out or has others carry out the rectification work pursuant to Section 39.3 the Design-Builder remains responsible for the Work (including the rectification work).
- 39.5 The Design-Builder will provide to the Authority extended warranties from Subcontractors where required by Appendix 1X Table 1 of the Statement of Requirements, the Proposal Extracts or other provisions of this Agreement and any other extended warranties provided by Subcontractors.
- 39.6 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 39.1.
- 39.7 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 39.

40 TITLE AND RISK

- 40.1 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.
- 40.2 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.
- 40.3 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

41 APPLICATIONS FOR PAYMENT

41.1 The Design-Builder will make applications for payment in accordance with this Section 41.

- 41.2 Applications for payment will be:
 - (a) submitted to the Independent Certifier, with a copy 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, Off-Site Materials in accordance with Section 41.15, and Materials Subject to a Deposit or Permits Requiring Advance Payment in accordance with Section 41.17 to and at the date of submission; and
 - (d) submitted no more than once per month during the performance of the Work.
- 41.3 If the Design-Builder is permitted under this Agreement to proceed with a Change pending determination of the final cost of any Change, the undisputed value of the Work performed as a result of a Change is eligible to be included with payment applications.
- 41.4 The Design-Builder will submit to the Independent Certifier, with a copy 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 10 [Schedule of Prices] and made out in such form and supported by such evidence as to its correctness as the Independent Certifier may reasonably require. The Independent Certifier will provide comments to the Design-Builder on the Schedule of Values, and the Design-Builder will revise the Schedule of Values to address the comments, and so on, until such time as the Independent Certifier 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 Independent Certifier's directions. If the Schedule of Values is not finalized prior to an application for payment, the Independent Certifier may consider the applications for payment on the basis of the Schedule of Values under review and the Independent Certifier's comments on such Schedule of Values or such other basis as determined by the Independent Certifier.
- The Design-Builder's application for payment will be 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 Independent Certifier may reasonably require to establish the value and their delivery.
- 41.6 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 or approved as stored off-Site in a storage facility in Canada;

- (c) the value of any amounts deducted under Table 1 of Schedule 4 [Management Systems and Plans] for non-compliance with reviewed Management Systems and Plans;
- (d) payment amounts in respect of any Changes to which the Design-Builder is entitled under this Agreement, including under Section 41.3;
- (e) any adjustments to the Contract Price under this Agreement;
- (f) the balance of the Contract Price to complete the Work;
- (g) the amount of Lien Holdback;
- (h) the amount of Performance Holdbacks;
- (i) the amount of any withholding or amount to be released under Section 41.8;
- (j) 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;
- (k) 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;
- (l) a clearance letter from WorkSafeBC indicating that all current assessments due from the Design-Builder and all Subcontractors with subcontracts larger than \$50,000 in value have been paid; and
- (m) a title search performed by the Design-Builder indicating that the title is free and clear of 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.
- 41.7 Applications for release of the Lien Holdback will be made under Section 43 (Lien Holdback) and applications for any payment at Substantial Completion or Total Completion will be made under Section 45 (Substantial Completion and Total Completion).
- 41.8 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) Design and Construction Schedule;
 - (b) Project Binder; and

(c) in accordance with Schedule 4 [Management Systems and Plans] and Schedule 5 [Energy Guarantee], an updated Energy Model prepared by the Energy Modeller that demonstrates that the Facility will meet the Energy Guarantee.

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 41.8(c) 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.

In relation to Management Systems and Plans if the Independent Certifier considers that the Design-Builder has not demonstrated that the Work to which the Management Systems and Plans relate was satisfactorily performed in accordance with the Management Systems and Plans then the Independent Certifier may in accordance with Section 41.12 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 Management Systems and Plans.

- 41.9 If the Design-Builder does not deliver any and all mock-ups in accordance with the requirements of the Statement of Requirements and by the date set out in the Submittal Schedule, the Authority may withhold from payment the amount of 5% of the total application for payment for each mock up that was not delivered in accordance with the Submittal Schedule and the applicable requirements. This withholding will apply to each month for which such mock-up is not delivered in accordance with the requirements. The applicable withholding will be released with the next monthly payment when the mock-up is completed in accordance with the requirements.
- 41.10 If the Design-Builder does not complete:
 - (a) the Campus Perimeter Pathway System;
 - (b) the DAS system; or
 - (c) the Communications Rooms

in accordance with and by the date(s) set in Section 2.9 of Schedule 1 [Statement of Requirements], the Authority may, for each of the items described in 41.10 (a), (b) or (c) that was not delivered by such date(s) in accordance with Section 2.9 Schedule 1 [Statement of Requirements], withhold from payment the amount of 5% of the total application for payment. This withholding will apply to each month for which any such item is not delivered in accordance with the applicable requirements. Each applicable withholding will be released with the next monthly payment when the Design-Builder has met the relevant requirements for such item.

- 41.11 Notwithstanding the actual progress, the following will apply:
 - (a) it is a condition of the Authority's obligation to make payment under this Agreement that the Design-Builder complies with Section 12.8 in respect of the delivery of the Bond and insurance;
 - (b) payment of the cost of the Bond 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
 - 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 as determined by the Independent Certifier, construction equipment is on the Site and construction has commenced.
- 41.12 The Independent Certifier, 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 Independent Certifier's estimate of Work satisfactorily performed as of the date of the application for payment.

For greater certainty, there will be no payment for any Work unless and until such Work is included in Reviewed Drawings and Specifications and there will be no payment for any Work not carried out in compliance with such Reviewed Drawings and Specifications and such failure will be included as Work not satisfactorily performed for the purposes of an adjustment to the amount of payment in accordance with paragraph 41.12(b) above.

If the Independent Certifier amends the application for payment, the Independent Certifier will promptly notify the Design-Builder in writing and give reasons for the amendment.

- 41.13 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 Independent Certifier approving or adjusting the Design-Builder's application for payment in accordance with Section 41.12 and the Schedule of Values.
- 41.14 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.
- 41.15 Upon notice from the Design-Builder, the parties will make appropriate arrangements to facilitate advance payment for material and equipment that has not been delivered to Site

but will have been delivered to an off-Site storage facility within Canada ("Off-Site Materials"). As a condition to payment for Off-Site Materials, the Authority will require:

- (a) the entity that has a contract with the Design-Builder to supply Off-Site Materials ("Material Supplier") has entered into a direct agreement with the Authority and the Design-Builder (in a form satisfactory to the Authority and the Design-Builder acting reasonably) pursuant to which the Authority has the right to step into the agreement in the place of the Design-Builder in the event of termination of this Agreement for any reason;
- (b) if the Design-Builder or Material Supplier is the owner of the off-Site storage facility, evidence (in a form satisfactory to the Authority) confirming such ownership;
- (c) if the Design-Builder or Material Supplier lease or are otherwise not the owner of the off-Site storage facility at which the Off-Site Materials are to be stored, a waiver (in a form satisfactory to the Authority, acting reasonably) from the landlord or owner of the off-Site storage facility disclaiming any right to seize the Off-Site Materials in exercising its distress right.
- 41.16 In the event the Design-Builder provides such notice the following will apply:
 - (a) Off-Site Materials will be stored in conditions that are to the reasonable satisfaction of the Authority and the Independent Certifier;
 - (b) Off-Site Materials will be adequately insured, noting the interests of the Authority;
 - storage will be secure and safe and the Off-Site Materials will be held apart, singly and solely for the purposes of the Project, in a facility that can maintain the correct temperature for such Off-Site Materials and fully protected from the weather;
 - (d) Off-Site Materials will be clearly labelled as "The Property of Fraser Health Authority" and such labelling of the material and equipment will not damage, permanently deface or harm the Off-Site Materials any way;
 - (e) Off-Site Materials will be assigned and labelled with a unique identifier code such that the Independent Certifier will be able to identify the Off-Site Materials in the Design-Builder's application for payment;
 - (f) the Design-Builder will provide a written summary of any Off-Site Materials stored off-Site, and the Design-Builder will provide this summary to the Independent Certifier prior to applying for payment for Off-Site Materials;
 - (g) the Design-Builder will facilitate reasonable access for the Authority and the Independent Certifier to the location where the Off-Site Materials are stored and will pay any additional costs incurred by the Independent Certifier in visiting such location;

- (h) payment for Off-Site Materials does not imply or infer that the Off-Site Materials have been inspected, verified, or accepted in any way, and the Design-Builder will retain the entire responsibility and expense for securing and protecting any Off-Site Materials that have not been delivered to the Site and for ultimately transporting them to Site, irrespective of whether or not the Authority has made any payment in respect of the Off-Site Materials; and
- (i) within two Business Days of a written request by the Authority or the Independent Certifier, the Design-Builder will provide the Authority with written confirmation that the storage location and conditions meet the requirements of Section 41.15 and this Section 41.16.
- 41.17 Upon request from the Design-Builder, the parties will make appropriate arrangements to facilitate advance payment for materials and equipment that requires a deposit ("Materials Subject to a Deposit") or for permits the Design-Builder is required to obtain in accordance with Section 65.2 ("Permits Requiring Advance Payment") As a condition to payment for Materials Subject to a Deposit or Permits Requiring Advance Payment, the Authority will require:
 - in the event of termination of this Agreement for any reason, the Authority will have the right (but not be required) to have the contract between the Design-Builder and the entity supplying Materials Subject to a Deposit assigned to it and have the Design-Builder facilitate the transfer of Permits Requiring Advance Payment to either the Authority or such other entity the Authority directs.

It is further agreed that after receipt of the advance payment(s), on the request of the Authority, the Design-Builder will provide evidence that it has made all the payments to the entity that has a contract with the Design-Builder to supply Materials Subject to a Deposit or the entity that is issuing the Permits Subject to Advance Payment.

- 41.18 In the event the Design-Builder provides such request the following will apply:
 - (a) the Design-Builder will facilitate reasonable access for the Authority and the Independent Certifier to the location where the Materials Subject to a Deposit are being manufactured or stored and will pay any additional costs incurred by the Independent Certifier in visiting such location; and
 - (b) the Authority will not be required to re-pay any amounts it has advanced in accordance with Section 41.17 for any replacement for such Materials Subject to a Deposit if for any reason they are not delivered to the Site or if the Permits Requiring Advance Payment are not issued for any reason.

42 TAXES AND DUTIES

42.1 The Contract Price is inclusive of all applicable customs duties and taxes (including PST), other than GST, in effect at the Effective Date.

- 42.2 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 59 (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.
- 42.3 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.
- 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.
- Refunds that are properly due to the Authority and have been recovered by the Design-Builder will be promptly refunded to the Authority.

43 LIEN HOLDBACK

- 43.1 The Authority will retain and release the Lien Holdback in accordance with the provisions of the *Builders Lien Act* (British Columbia).
- 43.2 For purposes of the *Builders Lien Act* (British Columbia), the Independent Certifier will be the payment certifier for this Agreement.
- 43.3 For purposes of progressive release of portions of the Lien Holdback in respect of Subcontracts, the Independent Certifier will be the payment certifier under the *Builders Lien Act* (British Columbia).
- 43.4 The Design-Builder will make application to the Independent Certifier 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 Independent Certifier with all information required by the Independent Certifier.
- 43.5 Without limiting Section 59, 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. If the Authority 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 43.5 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.

44 PERFORMANCE HOLDBACKS

- 44.1 In addition to the Lien Holdback and any amount retained under this Agreement (including for deficiencies under Section 45.4), the Authority will retain:
 - (a) a holdback of 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 Design and Construction Schedule in accordance with this Agreement, such other date established for the Target Substantial Completion Date), the Independent Certifier 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 Design and Construction Schedule in accordance with this Agreement, such other date established for the Target Substantial Completion Date);
 - (b) a holdback of (the "LEED Holdback"); and
 - (c) a holdback of (the "Warranty Holdback")

(collectively, the "Performance Holdbacks").

- 44.2 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 44.1(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.
- 44.3 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.
- 44.4 The Authority will release the LEED Holdback, less liquidated damages payable by the Design-Builder under Section 14, upon the achievement of the points, credits or LEED Gold Certification, as applicable.
- 44.5 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 39.
- 44.6 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.

- 44.7 The Design-Builder will apply for payment of the applicable Performance Holdback and payment will be made in accordance with Section 41.
- 44.8 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.
- 44.9 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.

45 SUBSTANTIAL COMPLETION AND TOTAL COMPLETION

- 45.1 The Design-Builder may make application to the Independent Certifier for the Substantial Completion Certificate at any time after it believes it has achieved Substantial Completion, as described in this Section 45, and has provided to the Independent Certifier the items as required in Section 45.2(b).
- 45.2 "Substantial Completion" means that all of the following have been achieved:
 - (a) the Independent Certifier 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) subject to Section 45.2(b)(ii), all equipment, mechanical and other systems (including medical gas systems) are in place, commissioned, received required certifications, and are fully operational;
 - (ii) the demonstration period as set out in Section 2.7.6.2 of Schedule 1 [Statement of Requirements] is complete;
 - (iii) the vendor acceptance testing as set out in Section 5.6.21.1 of Schedule 1 [Statement of Requirements] is complete;
 - (iv) a complete Project Binder, provided that the inspections, certificates, guarantees and warranties, and certifications may exclude only the items of Work that remain to be completed;
 - (v) up to date and current Reviewed Drawings and Specifications;
 - (vi) maintenance and operating tools, replacement parts or products as specified in the Statement of Requirements;

- (vii) a clearance letter from WorkSafeBC indicating that all current assessments due from the Design-Builder and all Subcontractors have been paid as required by and in accordance with Section 33.2;
- (viii) 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;
- (ix) all approvals necessary for the Project from Authorities Having Jurisdiction;
- (x) an occupancy permit for the Facility, including an occupancy permit for the Child Care Centre as required from Authorities Having Jurisdiction;
- (xi) 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;
- (xii) demonstration and training of all mechanical and electrically operated devices and clinical operational systems to the Authority's operating and maintenance staff:
- (xiii) all training required by the Statement of Requirements;
- (xiv) all requirements of Appendix 1U [BIM Requirements] and Appendix 1V [Asset Management Requirements] are met;
- (xv) the LEED Project Checklist and written opinion as required by and in accordance with Section 14.2;
- (xvi) the BC Hydro energy modelling compliance checklist, as required by and in accordance with Section 6.4 of Schedule 5 [Energy];
- (xvii) the requirements of Section 36 (Cleanup and Final Cleaning of Work) have been fulfilled to the extent required by the Substantial Completion Date;
- (xviii) an updated Energy Model prepared by the Energy Modeller that demonstrates that the Facility will meet the Energy Guarantee as required by Schedule 5 [Energy Guarantee];
- (xix) the requirements of the Commissioning Plan applicable to Substantial Completion have been met; and
- (xx) any other conditions specified in this Agreement with respect to achieving Substantial Completion;

- (c) a comprehensive and detailed deficiency list, including an estimated value for each item, has been submitted to the Independent Certifier, with a copy to the Authority's Consultant, by the Design-Builder which will be supplemented by the Independent Certifier and by the Authority's Consultant, acting reasonably; and
- (d) a schedule for completion of all remaining Work has been submitted to the Independent Certifier, with a copy to the Authority's Consultant, by the Design-Builder.
- 45.3 The Independent Certifier, with input from the Authority's Consultant and 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 45.2. The Independent Certifier will, not later than 7 days after the review, notify the Authority and 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 Independent Certifier 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 Independent Certifier determines that Substantial Completion has been achieved. When the Independent Certifier determines that Substantial Completion has been achieved, the Independent Certifier will issue the Substantial Completion Certificate. Following the issuance of the Substantial Completion Certificate, the Independent Certifier, with input from the Design-Builder, will establish a schedule for Work still to be satisfactorily performed or replaced as specified in the list of deficiencies and for Total Completion. Following establishment of such schedule, the Design-Builder will update the Design and Construction Schedule in accordance with the requirements of Schedule 11 [Design and Construction Schedule]. The Design-Builder will be responsible for all costs of any additional reviews by the Independent Certifier 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 45.2 have not been corrected or completed in a manner satisfactory to the Independent Certifier. Such costs will be deducted from any monies then due to the Design-Builder. The Design-Builder will involve the Authority's staff in any deficiency walkthroughs and final inspections.
- 45.4 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;
 - (b) an amount determined by the Independent Certifier to be equal to two times the estimated value of the Work as determined by the Independent Certifier 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 43.5.

- 45.5 No payment will be made to the Design-Builder from amounts withheld under Section 45.4(b) until:
 - (a) the completion or rectification or replacement of all the deficiencies and incomplete work specified in the deficiency list; and
 - (b) the Design-Builder has satisfied Section 16.5 of this Agreement.
- 45.6 The Design-Builder will perform the work specified in the list of deficiencies in accordance with the Deficiency Management Plan and at times and in a manner which causes as little inconvenience to the occupants of the Facility and the Authority's operations.
- 45.7 Prior to performing any work specified in the list of deficiencies, the Design-Builder will deliver to the Authority and obtain the Authority's approval of a Work Plan clearly identifying:
 - (a) any activity that may interfere with the Authority's operations on and adjacent to the Site, including a description of the nature, timing and extent of interference;
 - (b) the steps the Design-Builder intends to take to minimize the extent of such interference;
 - (c) the temporary measures that the Authority will be required to take to accommodate the interference;
 - (d) any specific reporting relationships between the Design-Builder and the staff desirable or required to coordinate the interference; and
 - (e) 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.

- 45.8 Prior to delivering a Work Plan for any work specified in the list of deficiencies, 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 with the Authority's operations. The Design-Builder will not proceed with any work specified in the list of deficiencies without:
 - (a) the Authority's prior written approval of a Work Plan under this Section 45, 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.
- 45.9 The Design-Builder will keep the Authority fully advised of all activity and progress in implementing all Work Plans for work specified in the list of deficiencies and meeting the Design and Construction Schedule.

- 45.10 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 Independent Certifier in Section 45.3 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.
- 45.11 If the Authority carries out or has others carry out the work pursuant to Section 45.10, the Design-Builder remains responsible for the work.
- 45.12 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.
- 45.13 The Design-Builder may make application to the Independent Certifier for the Total Completion Certificate at any time it believes it has achieved Total Completion as described in Section 45.14 and has provided to the Independent Certifier the items as required in Section 45.14(d).
- 45.14 "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 39;
 - (ii) achievement of the LEED credits/points and LEED Gold Certification from the LEED Certifier under Section 14; and
 - (iii) any Work relating to the Predicted Energy Consumption Certificate and the monitoring of Energy Consumption during the Test Period in accordance with Schedule 5 [Energy Guarantee];
 - (b) all deficiencies specified in the deficiency list(s) have been rectified or completed as verified by the Independent Certifier and the Authority's Consultant and to the Authority's satisfaction;
 - (c) the requirements of Section 36 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 Documentation;
- (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;
- (v) a clearance letter from WorkSafeBC indicating that all current assessments due from the Design-Builder and all Subcontractors have been paid as required by and in accordance with Section 33.2; 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.
- 45.15 Upon receipt by the Independent Certifier of the Design-Builder's application for the Total Completion Certificate:
 - (a) The Independent Certifier will, subject to the conditions contained in Section 45.14, 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 45.14.
 - (b) The Independent Certifier will, and not later than 7 days after the review contemplated in Section 45.15(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 Independent Certifier 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 Independent Certifier determines that Total Completion has been achieved.
 - (c) The Design-Builder will be responsible for all costs of additional reviews required for by Section 45.15(b), such costs to be deducted from the monies due to the Design-Builder, where any additional review undertaken by the Independent

Certifier pursuant to this Section reveals that previously identified deficiencies have not been corrected in a manner satisfactory to the Independent Certifier.

When the Independent Certifier determines that Total Completion has been achieved, the Independent Certifier 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 43.5 or any amount set-off in accordance with this Agreement. The date of Total Completion will be as stated in the Total Completion Certificate.

- 45.16 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.
- 45.17 By issuing any certificate, the Authority and the Authority's Consultant and the Independent Certifier 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, the Authority's Consultant or the Independent Certifier 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.
- 45.18 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.
- 45.19 In the event of conflict between the provisions of this Section 45 and any other Section of this Agreement, the provisions of this Section 45 govern.
- 45.20 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.

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 50.2(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 30.4, 31.2 and 32.3.

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 agreement on a lump sum by the Design-Builder and the Authority following the process set out in Section 49; or

(b) by unit prices or fee rates agreed upon (and which may include a maximum upset price) by the Design-Builder and the Authority following the process set out in Section 49.

49 PROCESS FOR CHANGES

- 49.1 If the Authority wishes to propose a Change it will deliver to the Design-Builder a Contemplated Change Notice. The Contemplated Change Notice will describe the proposed Change with sufficient detail to enable the Design-Builder to prepare an Estimate.
- 49.2 If the Authority would be required by applicable Laws or interprovincial agreements to require the Design-Builder to competitively tender any contract in relation to the proposed Change, then the Authority may include in the Contemplated Change Notice a requirement that the Design-Builder seek and evaluate competitive tenders for the proposed Change in preparing the Estimate.
- 49.3 As soon as practicable and in any event not more than 10 Business Days after receipt of a Contemplated Change Notice, or such longer period as the parties acting reasonably mutually agree, the Design-Builder will deliver to the Authority an Estimate prepared in accordance with and meeting the requirements of Sections 49.5 and 49.6.
- 49.4 If the Change is reasonably anticipated to be greater than \$100,000 or involves design work greater than \$25,000, the Design-Builder will notify the Authority within 5 Business Days of the anticipated preparation time, an estimate for the cost of preparing an Estimate, and an approximate estimate for the Contemplated Change Notice. Based on the approximate estimate, the Authority will advise the Design-Builder to proceed or the Authority may modify or withdraw the Contemplated Change Notice. The Design-Builder will use best efforts in advising the Authority of approximate costs but will not be accountable for an inaccurate approximate estimate.
- 49.5 The Estimate will include such of the following information as is applicable, sufficient to demonstrate to the Authority's reasonable satisfaction:
 - (a) the steps the Design-Builder will take to implement the Change, in such detail as is reasonable and appropriate in all the circumstances;
 - (b) any impact on the Substantial Completion Target Date and any impact on the Design and Construction Schedule (failure to provide this information with the Estimate will disallow the Design-Builder from claiming compensation from the Authority for delays to Substantial Completion resulting from the Change);
 - (c) any impact on the Energy Guarantee;
 - (d) any design work and related cost;
 - (e) any Subcontractors required;
 - (f) a full breakdown of labour, material and other cost information;

- (g) any permits that are required to be obtained or amended attributable to the Change, and the estimated time for obtaining or amending same;
- (h) proposed updates to the Submittal Schedule required by the Change; and
- (i) any other impact of the Change,
 - in each case, together with such supporting information and justification as is reasonably required.
- 49.6 In preparing an Estimate, the Design-Builder will include sufficient information to demonstrate that:
 - (a) the Design-Builder has used commercially reasonable efforts, including the use of competitive tenders if appropriate or required, to oblige its Subcontractors to minimize any increase in costs and to maximize any reduction in costs;
 - (b) the full amount of any and all expenditures that have been reduced or avoided have been taken into account and applied in total to reduce the amount of all Change costs;
 - (c) the Design-Builder has mitigated or will mitigate the impact of the Change, including on the Design and Construction Schedule for completion of the Work;
 - (d) the Design-Builder will perform all Work associated with a Change in accordance with the times allowed for access to the Site;
 - (e) the Design-Builder is and will be in compliance with all applicable Laws or interprovincial agreements with respect to quotations and competitive tenders; and
 - (f) the Design-Builder will use commercially reasonable efforts to obtain the best value for money when procuring any work, services, supplies, materials or equipment required by the Change and will use commercially reasonable efforts to comply with good industry practice in relation to any such procurement to a standard no less than the Design-Builder would apply if all costs incurred were to its own account.
- 49.7 As soon as practicable, and in any event not more than 10 Business Days after the Authority receives an Estimate or such longer period as the parties acting reasonably mutually agree, including any consequential changes to the Estimate resulting from a modification thereof or an addition of a requirement to seek competitive tenders, the Design-Builder and the Authority will discuss and seek to agree on the Estimate and, if applicable, an adjustment to the Contract Time. 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.

- 49.8 The Authority may modify a Contemplated Change Notice in writing, at any time prior to the agreement between the parties referred to in Section 49.7, in which case the Design-Builder will, as soon as reasonably practicable and in any event not more than 10 Business Days after receipt of such modification or such longer period as the parties acting reasonably mutually agree, notify the Authority in writing of any consequential changes to the Estimate and, if applicable, to an adjustment to the Contract Time.
- 49.9 In the case of Changes agreed by the Authority and the Design-Builder under Section 49.7, 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.
- 49.10 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 64 by determining the cost of the Change in accordance with Section 50 (other than Sections 50.1 and 50.4) and by determining the adjustment of the Contract Time as a reasonable time taking into account the critical path.
- 49.11 As soon as practicable, and in any event not more than 15 days (unless an extension is agreed to by the Design-Builder, acting reasonably) after the date the Estimate was agreed to, and if applicable, an adjustment to the Contract Time, was agreed to, the Authority will either:
 - (a) issue an approved Change Order; or
 - (b) withdraw the Contemplated Change Notice by written notice to the Design-Builder.
- 49.12 If the Authority does not issue an approved Change Order within 15 Business Days (or such extended period as may have been agreed to) after the date the Estimate and, if applicable, an adjustment to the Contract Time, were agreed to then the Contemplated Change Notice will be deemed to have been withdrawn.
- 49.13 If the Authority has required the Design-Builder within the Contemplated Change Notice to seek and evaluate competitive tenders in relation to the Change and the Authority either withdraws or is deemed to have withdrawn the Contemplated Change Notice, the actual costs necessarily and properly incurred by the Design-Builder directly attributable to the competitive procurement process, as the parties acting reasonably mutually agree, will be invoiced by the Design-Builder in a form satisfactory to the Authority and will be paid by the Authority.
- 49.14 Upon the approved Change Order being issued:

- (a) the parties will as soon as practicable thereafter do all acts and execute all documents necessary to implement the Change;
- (b) the value of the Work performed as the result of a Change Order and in the amount set out in the Estimate will be included in payment applications; and
- (c) the Design-Builder will as soon as practicable thereafter implement the Change as provided for in the approved Change Order.
- 49.15 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 49.

50 DETERMINATION OF COST

- 50.1 Subject to Section 50.2, 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 following the Change process as set out in Section 49.
- 50.2 If the Design-Builder and the Authority cannot agree as to the cost of the Change as contemplated in Section 50.1, 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 the 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 50.3; plus
 - (b) to cover other costs, including overhead and profit, the following applicable markup on the amounts charged pursuant to Section 50.2(a):
 - (i) 5%, when the expenditure is a payment to a Subcontractor pursuant to Section 50.3(a); or
 - (ii) 10% when the Design-Builder performed the Change.
- 50.3 Classes of expenditure that are allowable (all without additional markups except as otherwise noted in Section 50) for the purposes of Section 50.2 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 living and 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.
- 50.4 If the Design-Builder and the Authority cannot agree as to the cost of labour, equipment or material as contemplated in Section 50.1, 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.
- 50.5 The applicable markup set out in this Section 50 will apply to any credit to the Authority for reductions in the costs relating to a Change. For greater certainty, the amount of any credit to the Authority will be calculated as such reduction in costs relating to a Change plus the applicable markup. Where both increases and reductions in costs relate to a Change, the applicable markup will apply to the net increase or reduction in costs.

51 CHANGE DIRECTIVE

- 51.1 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.
- 51.2 The Authority may issue Change Directives at any time, including whether or not the Authority has issued a Contemplated Change Notice, where the Design-Builder fails to provide an Estimate, where an Estimate is not promptly agreed upon by the parties 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

52 DELAYS

- 52.1 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, a breach by the Authority of the terms of this Agreement or by an order issued by any court or 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 30.4, 31.2 or 32.3, then:
 - 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 50; or
 - (b) if the Authority, acting reasonably, 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 50.2(b) incurred by it as a result of undertaking such acceleration efforts
- 52.2 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 50.2(b) incurred by it as a result of undertaking such acceleration efforts.
 - Except as provided in Section 52.2(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.
- 52.3 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 52 or if the Design-Builder does not perform the Work substantially in accordance with the Design and Construction 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.

- 52.4 The Design-Builder is not entitled to any extension of time or any reimbursement of costs for delay under this Section 52 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. The 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 but only to the extent that the amount thereof was increased or the ability to mitigate was adversely affected as a result of such delay in providing such notice or updates.
- 52.5 In the case of any delay under Section 52.1 or Section 52.2 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 Design and Construction Schedule is maintained and that acceleration efforts, if requested by the Authority, are minimized.

PART G – SUSPENSION AND TERMINATION

53 NON-DEFAULT SUSPENSION/TERMINATION

- 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.
- 53.2 Without limiting Section 53.1, 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 50 as determined to be necessary.

- 53.3 The Authority will within 2 Business Days after a Change under Section 53.2(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.
- 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.
- 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.
- 53.6 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 50 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.
- 53.7 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 50.
- 53.8 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.
- 53.9 If this Agreement is terminated pursuant to this Section 53:
 - (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 50, less any costs already paid to the Design-Builder pursuant to Section 53.6; and
- (b) the Authority will be entitled to:
 - (i) take possession of the Work or any part of the Work;
 - (ii) take possession of 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.
- 53.10 The Design-Builder's obligations as to quality, correction and warranty of any portion of the Work performed prior to termination continue in force after termination under this Section 53.
- 53.11 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 Authority Having Jurisdiction through no act or fault of the Design-Builder, its Subcontractors or anyone for whose acts the Design-Builder may be liable.

54 DEFAULT AND TERMINATION OF AGREEMENT

- 54.1 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.

- 54.2 If a default referred to in Section 54.1 occurs, other than a default referred to in Section 54.1(a) or 54.1(b), the Design-Builder will remedy the default within a 7 day rectification period after the notice given under Section 54.1, or such other period agreed to by the parties. 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.
- 54.3 If a default referred to in Section 54.1(a) or 54.1(b) occurs or if the Design-Builder fails to remedy any other default within the rectification period described in Section 54.2 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.
- 54.4 If the Authority terminates the right to continue with all or part of the Work or terminates this Agreement pursuant to Section 54.3, the Authority will be entitled to:
 - (a) take possession of the Work or any part of the Work;
 - (b) take possession of 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 39 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 39 exceeds the allowance provided for such corrections, or reimburse the Design-Builder with the portion of the allowance unspent on the cost of corrections to the Work under Section 39 as applicable.
- 54.5 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.

54.6 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.

55 TERMINATION BY THE DESIGN-BUILDER

- 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 41.12 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 90 days following the Site Occupation Date; or
 - (c) substantially all of the Work is stopped by an order of any court or 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.
- 55.2 If a default referred to in Section 55.1 occurs, the Authority will remedy the default within a 21 day rectification period after the notice given under Section 55.1 or within such extension thereof established by the Design-Builder.
- 55.3 If the Authority fails to remedy the default within the rectification period described in Section 55.2 or any extension thereof established in accordance with that Section, the Design-Builder may exercise any or all of the following:
 - (a) waive the default;
 - (b) further extend the rectification period;
 - (c) suspend the Work; and
 - (d) terminate this Agreement.
- 55.4 If the Design-Builder terminates this Agreement in accordance with Section 55.3(d), the Design-Builder is entitled to be paid:
 - 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

56 REPRESENTATIONS AND WARRANTIES

- 56.1 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 56.1(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 30.1 in respect of the accuracy of objective geotechnical data identified in Section 30.1(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.
- 56.2 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

57 PROTECTION OF WORK AND PROPERTY

- 57.1 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.
- 57.2 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 57.1, 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.
- 57.3 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 57.1, 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 50.

58 EXCLUSIONS OF LIABILITY

- 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 58.1 will not limit any liability the Design-Builder may have under this Agreement to pay liquidated damages.
- 58.2 Subject to Section 58.3 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:
 - 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 6 [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 58.2(a) above, 40% of the Contract Price.

If this Agreement is terminated, the reference in this Section 58.2 to the "Contract Price" will be deemed only for purposes of this Section 58.2 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.

- 58.3 Section 58.2 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 58 will be construed to limit the liability of an insurer under the insurance required to be maintained under this Agreement.

59 INDEMNIFICATION

- 59.1 The Design-Builder will indemnify and save harmless the Authority and its officers, employees, representatives 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 Subcontractor, excepting only liability to the extent arising out of the independent acts of the Indemnified Parties.
- 59.2 The obligations of the Design-Builder under Section 59 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.
- 59.3 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.

60 DESIGN-BUILDER'S DISCHARGE OF LIABILITY

- 60.1 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.
- 60.2 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.
- 60.3 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.
- With the exception of any claim of builder's lien, builder's liens or certificates of pending litigation that arise due to an 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

61 THE BOND

- Before commencing the Work, the Design-Builder will purchase and deliver to the Authority an executed performance bond (the "Bond"). The form of the Bond will be in accordance with the latest edition of the CCDC approved bond form or in substantially equivalent form acceptable to the Authority.
- 61.2 The Bond 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.
- 61.3 [Not Used]
- 61.4 The Design-Builder will pay for and maintain the Bond in force during the Term.
- 61.5 If the surety notifies either party that the Bond is or is going to be terminated or cancelled for any reason whatsoever, the Design-Builder will obtain and provide the Authority with a valid Bond effective from the date of termination or cancellation of the original bond that comply with the bonding requirements of this Agreement.

- 61.6 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.
- 61.7 For greater certainty, the amount of the Bond and any claim under the Bond 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 this Agreement in accordance with its terms and conditions.

62 INSURANCE

- 62.1 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.
- 62.2 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.

63 RECORDS AND AUDIT

- 63.1 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 and the Independent Certifier to inspect and copy any or all such records, reports and other documentation.

63.2 Without limiting the other provisions of this Agreement, the Design-Builder will provide to the Authority and its consultants and representatives and the Independent Certifier 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.

- 63.3 The Authority and its consultants and representatives and the Independent Certifier 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.
- 63.4 The Design-Builder will fully cooperate with the Authority to conduct an audit pursuant to this Section 63.

PART K – DISPUTE RESOLUTION

64 DISPUTE RESOLUTION

- All Disputes will be resolved in accordance with the Dispute resolution procedure set out in this Section 64 (the "**Dispute Resolution Procedure**").
- 64.2 Either party may commence the Dispute Resolution Procedure by giving written notice of a Dispute to the other party briefly setting out the nature of the Dispute, the remedy or relief sought, and a request that the Dispute Resolution Procedure pursuant to this Section 64 be commenced (a "**Notice of Dispute**").
- 64.3 Following the submission of a Notice of Dispute, the parties agree to use a two-step process to resolve any Dispute, which will be taken in the following order:
 - (a) first, by referring the Dispute to negotiations among the parties' senior management representatives, pursuant to Section 64.4 below; and
 - (b) second, by referring the Dispute to arbitration pursuant to Section 64.5 below.
- 64.4 Upon the submission of a Notice of Dispute pursuant to Section 64.2 above, each of the parties will refer the Dispute to a designated senior management representative with the authority to negotiate and settle the Dispute (the "Senior Management Representatives"). The Senior Management Representatives of the parties will then attempt to resolve the Dispute within thirty (30) days after the date of the Notice of Dispute, or such longer period as the Senior Management Representatives may otherwise agree in writing. If the Senior Management Representatives agree upon a resolution of the Dispute, such resolution will be memorialized in a written settlement agreement mutually acceptable to and signed by both of the parties.
- 64.5 If a Dispute is not resolved by the Senior Management Representatives within thirty (30) days after the Notice of Dispute (or such longer period as the Senior Management Representatives may otherwise agree in writing) pursuant to Section 64.4 above for any reason whatsoever, the Dispute will at the initiation of either party be resolved by binding arbitration administered by the Vancouver International Arbitration Centre ("VanIAC") under its applicable Rules (the "VanIAC Rules"), except to the extent of conflicts between the VanIAC Rules and the provisions of this Agreement, in which event the provisions of this Agreement will prevail. The following provisions will apply to an arbitration commenced pursuant to this clause:

- (a) The number of arbitrators will be one, who will be appointed in accordance with the VanIAC Rules.
- (b) The legal seat of the arbitration will be Vancouver, British Columbia, Canada.
- (c) The language to be used in all aspects of the arbitration will be English.
- (d) Any award issued by the arbitral tribunal will be final and binding on the parties, may be filed in any court of competent jurisdiction, and may be enforced by a party as a final judgment in such court. The parties expressly waive, to the maximum extent permitted by law, any right of appeal of any award, including appeals based on questions of law, questions of fact, questions of mixed law and fact, or otherwise.
- (e) The parties will request that the arbitral tribunal render a final award as soon as reasonably practicable after the commencement of an arbitration, taking into consideration the size, nature and complexity of the applicable Dispute and the parties' intent to achieve a just, timely and cost effective determination of the matters in dispute.
- (f) Any award for monetary damages will be made and payable in Canadian dollars, and may include interest from the date of any breach or violation of this Agreement until paid in full at the rate determined by the arbitrator.
- (g) The parties agree that any arbitration carried out hereunder will be kept strictly private and confidential, and that the existence of the proceedings and any element of it (including but not limited to all awards, the identity of the parties and all witnesses and experts, all materials created for the purposes of the arbitration, all testimony or other oral submissions, all documents disclosed in arbitration and all documents produced by a party that were not already in the possession of the other party) will be kept strictly private and confidential, except (i) with the consent of the parties, (ii) to the extent disclosure may be lawfully required in bona fide judicial proceedings relating to the arbitration, (iii) where disclosure is lawfully required by a legal duty, and (iv) where such information is already in the public domain other than as a result of a breach of this clause. The parties will request that the arbitral tribunal and VanIAC keep any arbitration carried out hereunder strictly private and confidential, including but not limited to all of the foregoing items, and will request that the arbitral tribunal and VanIAC refrain from publishing or disclosing any such items. The parties also agree not to use any information disclosed to them during the arbitration for any purpose other than in connection with the arbitration.
- 64.6 The parties agree that while an arbitration is pending pursuant to Section 64.5, the parties will continue to perform their obligations under this Agreement, provided that such performance will be without prejudice to the rights and remedies of the parties and will not be read or construed as a waiver of a party's right to claim for recovery of any losses suffered as a result of the continued performance of this Agreement.

- 64.7 Except as otherwise specifically permitted by this Agreement, no undisputed payment due or payable by a party will be withheld on account of a pending arbitration pursuant to this clause.
- 64.8 Any limitation period imposed by this Agreement or by law in respect of a Dispute shall be tolled upon the delivery of a Notice of Dispute pursuant to Section 64.2 above until such time as the Dispute Resolution Procedure under this Section 64 has concluded.

PART L – GENERAL PROVISIONS

65 LAWS, NOTICE, PERMITS AND FEES

- 65.1 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.
- 65.2 The Design-Builder will apply for, pay for and obtain 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. This Section does not limit the Authority's obligation to make advance payments necessary for Permits Requiring Advance Payment.

The Design-Builder acknowledges that it has reviewed Short Form Servicing Agreement No. 7821-0139-00 in effect as of July 7, 2022 (the "Servicing Agreement"), and in accordance with Section 12.2 of the Servicing Agreement the City may withhold issuance of building permits or granting of an occupancy permit until all of the "Works" and "Services" have been completed as evidenced by the "Letter of Completion" (as those terms are used in the Servicing Agreement) and that the Design-Builder will comply with, observe and perform the Servicing Agreement to the extent required to obtain the building permit and occupancy permit.

Without limiting the foregoing, the Design-Builder will comply with, perform and be liable for any and all obligations, liabilities and other terms and conditions set out in the Servicing Agreement to the same extent as if the Design-Builder were the "Owner" and "Developer" of the "Lands", as those terms are used in the Servicing Agreement, and bound by the Servicing Agreement and the Design-Builder assumes all risks arising therefrom.

The Authority may without restriction modify the Servicing Agreement, provided that any modifications will not limit the Design-Builder's entitlements under the Servicing Agreement if such modification results in a Change.

Notwithstanding the foregoing, the Design-Builder's obligations to comply with, perform and be liable for any and all obligations, liabilities and other terms and conditions set out in the Servicing Agreement are subject to:

- (a) the Design-Builder being legally capable of performing such obligations, liabilities and other terms and conditions for or on behalf of the Authority; and
- (b) the Design-Builder being relieved of the obligations, liabilities and terms and conditions in relation to the creation of the Lands as a separate legal parcel in Section 4.7, the insurance obligations in Section 8, the letter of credit obligations under Sections 9.1, 9.2, 9.3, 9.4 and 9.5, the latecomer charges cost recovery under Sections 9.8 and 9.9 and the obligations in relation to the subdivision plan and taxes under Section 9.14 of the Servicing Agreement.

For greater certainty, the Design-Builder is responsible for the payments set out in Sections 9.10 and 9.11 of the Servicing Agreement.

The Design-Builder acknowledges that, as described in Sections 2.2 and 2.3 and the definition of "Amending Agreement" in the Servicing Agreement, the Servicing Agreement will be amended or replaced by such "Amending Agreement". Upon amendment of the Servicing Agreement, all references in this Agreement to the "Servicing Agreement" will be deemed to be references to the Servicing Agreement as amended or replaced by such "Amending Agreement".

- 65.3 All applicable Laws in force in British Columbia, as amended from time to time, govern the Work.
- 65.4 Except as otherwise provided in this Agreement, if after:
 - (a) the Financial Submission Date an Epidemic Change in Law comes into effect; or
 - (b) the Effective Date a change to applicable Laws or Standards comes into effect,

either party will be entitled to make a claim for an adjustment in the Contract Price or the Contract Time as a Change, provided that, except in relation to an Epidemic Change in Law, the Design-Builder will not be allowed any adjustment in the Contract Price or the Contract Time for:

- (c) any lawful requirements of any governmental authority (unless resulting from a new Law or Standard or modification (including repeal) of any Law or Standard existing on the Effective Date);
- (d) any change in the interpretation of any legislation other than a judgment of a relevant Court which changes binding precedent in British Columbia; or
- (e) any new Law or modification arising from or in any way connected to or having substantially the same effect as any Law which as of the Effective Date:
 - (i) had been introduced as a Bill in the Legislative Assembly of British Columbia or the Parliament of Canada or in a draft statutory instrument published or issued by a governmental authority; or

(ii) had been published in the Canada Gazette or in a draft bill as part of a governmental authority discussion or consultation paper.

65.5 The parties:

- (a) anticipate that:
 - (i) after the Effective Date, the BCBC/BC Building Code, the BC Plumbing Code and the BC Fire Code (as referenced in the Statement of Requirements) (collectively, the "BC Codes") will be updated by adopting the applicable National Building Code of Canada 2020, the National Plumbing Code of Canada 2020 and the National Fire Code of Canada 2020 (collectively, the "2020 National Codes"); and
 - (ii) the Design-Builder will apply for one or more permits after the date the 2020 National Codes are adopted and as a result the Design-Builder will be required by applicable Laws and Standards and this Agreement to comply with the 2020 National Codes as adopted by the BC Codes.
- (b) agree that:
 - (i) in addition to the requirements to meet applicable Laws and Standards, including the BC Codes in effect as of the Effective Date (the "Current BC Codes"), the Design-Builder will Design the Facility to meet the requirements of the 2020 National Codes and in the event of conflict between a requirement of the 2020 National Codes and a requirement of the Current BC Codes the Design Builder will Design the Facility to meet the more stringent requirement;
 - (ii) an entitlement of either party under this Section 65.5 for an adjustment in the Contract Price or the Contract Time as a result of changes to the applicable BC Codes will only be to the extent the Design-Builder is required to make any Changes from the requirements of the 2020 National Codes or the Current BC Codes under paragraph (b)(i); and
 - (iii) until such time as the 2020 National Codes are adopted, all references in this Agreement (including the Statement of Requirements), other than in this Section 65.5, to the BCBC/BC Building Code, BC Plumbing Code and BC Fire Code and similar references are deemed to be references to the applicable requirements of the 2020 National Codes or the Current BC Codes under paragraph (b)(i), and after the adoption of the 2020 National Codes such references will revert to their meaning without the effect of this paragraph (b)(iii).

66 INTELLECTUAL PROPERTY FEES

66.1 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 59, 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.

67 CONFIDENTIALITY AND COMMUNICATIONS

- 67.1 Subject to Section 67.2, each party will hold in confidence any Confidential Information received from the other party, except that this Section 67 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;
- 67.2 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 23.5 and any Confidential Information that the Authority is entitled to receive from the Design-Builder pursuant to this Agreement.

- 67.3 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 67.1 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 67.1 subject, in the case of a claim for any such remedy against the Authority, to the provisions of the *Crown Proceeding Act* (British Columbia).
- 67.4 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).
- 67.5 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.
- 67.6 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.

68 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 electronic transmission to the address or electronic mail address of each party set out below:
 - (a) if to the Authority:

FRASER HEALTH AUTHORITY New Surrey Hospital and BC Cancer Centre $400 - 13450\ 102$ nd Ave Surrey, BC V3T 0H1

Attention: Ken Mah

Email: ken.mah@fraserhealth.ca

(b) if to the Design-Builder:

ELLISDON DESIGN BUILD INC. Suit 350 13775 Commerce Parkway

Richmond, BC V6V 2V4

<u>Attention</u>: Craig Enns, SVP & Area Manager – Pacific Region Email: cenns@ellisdon.com

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

- 68.2 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; and
 - (b) 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 or by hand delivery, 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.
- 68.3 Delivery by mail will not be considered timely notice under this Agreement.
- 68.4 In the event of an emergency or urgent matter, in addition to the notice required by this Section 68, 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.

69 LEGAL RELATIONSHIP

- 69.1 The Design-Builder is an independent contractor and not the servant, employee, partner or agent of the Authority.
- 69.2 The Design-Builder will not commit the Authority to the payment of any money to any person.
- 69.3 No partnership, joint venture or agency involving the Authority is created by this Agreement or under this Agreement.
- 69.4 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.

70 ASSIGNMENT

- 70.1 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 (in this Section 70.1, a "Transfer"). Notwithstanding the foregoing, the Design-Builder (in this Section 70.1, the "Transferor") may, without the consent of the Authority, effect a Transfer to EllisDon Corporation (in this Section 70.1, the "Permitted Transferee") provided that:
 - (a) the Transferor notifies the Authority in writing of the intended Transfer at least 14 days in advance of the Transfer;
 - (b) the Transfer is effective no later than December 15, 2023, unless otherwise agreed by the Authority;
 - (c) the Transferor and the Permitted Transferee execute, prior to the Transfer being made, an assignment and assumption agreement with the Authority, in a form acceptable to the Authority, that includes:
 - (i) the agreement of the Transferor to assign, and the agreement of the Permitted Transferee to assume and to be bound by, all terms of this Agreement;
 - (ii) the agreement of the Transferor to remain liable after the Transfer, on a joint and several basis, for all obligations of the Design-Builder under this Agreement, including any obligations under any Change Orders, Change Directives or amendments to this Agreement with or without notice of same to the Transferor;
 - (d) the Transfer is not a waiver of the requirement for consent to subsequent assignments, directly, or indirectly; and
 - (e) the Transferor concurrently assigns on substantially the same terms and conditions, to the Permitted Transferee the Enhanced Inclusion & Development Agreement between the Design-Builder and Fraser Health Authority dated as of the Effective Date.
- 70.2 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 23.5, 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.

71 INTEREST

71.1 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.

72 WAIVER

- 72.1 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.
- No waiver of any right or obligation is a waiver of any other right or obligation under this Agreement.
- 72.3 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.
- 72.4 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.

73 ASSUMPTION OF RISK

73.1 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.

74 GENERAL DUTY TO MITIGATE

74.1 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 74.

75 OTHER PROVISIONS

75.1 The exclusions, waivers and limitations of liability, representations and warranties and indemnities in this Agreement, the provisions of Sections 63, 64, 66, 67 and rights accrued prior to completion or termination of this Agreement will survive the completion or termination of this Agreement.

- 75.2 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.
- 75.3 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.
- 75.4 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.
- 75.5 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.
- 75.6 The parties must do everything reasonably necessary to give effect to the intent of this Agreement, including execution of further instruments.
- 75.7 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.
- 75.8 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.
- 75.9 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.
- 75.10 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.
- 75.11 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.
- 75.12 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.

- 75.13 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.
- 75.14 Time is of the essence of this Agreement.
- 75.15 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.
- 75.16 A party may deliver an executed copy of this Agreement by electronic means but that party will upon request immediately deliver to the other party an originally executed copy of this Agreement.

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

FRASER HEALTH AUTHORITY

Per

Sharat Chandra

Vice President, Strategic Capital

Investments and Facilities

ELLISDON DESIGN BUILD INC.

Craig Enns

SVP & Area Manager - Pacific Region

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 Design and Construction Schedule that is set out in Schedule 11 [Design and Construction Schedule], and that the Submittal Schedule will conform to the requirements of this 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, reasonably taking into account both the resources necessary to be available to the Authority to conduct such review and any user group consultations.
- 1.2 The Submittal Schedule will allow:
 - (a) for the Authority's review of Submittals submitted for the Design phases:
 - (i) 10 Business Days for the 30% phase;
 - (ii) 20 Business Days for the 50% phase;
 - (iii) 25 Business Days for the 70% phase;
 - (iv) 20 Business Days for the 90% phase; and
 - (v) 15 Business Days for the 100% phase;
 - (b) 15 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; and
 - (c) The review periods noted in Section 1.2(a) above will only start once the complete set of all drawings, specifications and other documents for the Design phase have been received by the Authority.
- 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, to the Design and to the Construction that may be required if comments are received on the Submittals.
- 1.4 If the Design-Builder proposes a change to the Submittal Schedule and a material 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, reasonably 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 Design and Construction Schedule.

- 1.5 The Design-Builder will submit the Submittal Schedule, including amendments, on a monthly basis until Substantial Completion is achieved. If the Submittal Schedule has not been amended, then the Design-Builder may provide confirmation on a monthly basis that the Submittal Schedule has not been amended.
- 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 most 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 'True' PDF format (where True PDF is understood to be a digitally created file using software or via the "print" function within a software application – scans of documents are not considered True PDF) along with the design authoring models used to generate the submittal or other format agreed by the parties acting reasonably. The Design-Builder will include with each Submittal a certification by the Design-Builder's Consultant that the Work set out in or proposed by the Submittal meets the requirements of this Agreement, including the Statement of Requirements. 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 for the Issued for Construction (IFC) - 100% complete Design phase and for Record Documentation 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 and 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 individuals 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 individual or individuals that the Work proposed by the Submittal meets the requirements of this 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 the 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;
- 2.7 All Submittals will 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.
- 2.8 The Design-Builder will only submit the next Submittal when the previous Submittal has been granted "REVIEWED" status.

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.

- 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 not less than 10 Business Days 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, are incomplete or otherwise insufficient for the purposes of a Design review, are received by the Authority before the date scheduled in the Submittal Schedule, 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 this Agreement (including the Statement of Requirements) that the Submittal fails to satisfy or as otherwise indicated in this Schedule 2 [Review Procedure].
- 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 64 (Dispute Resolution) of this 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.
- 3.12 The following Submittals will be deemed to be "Reviewed Drawings and Specifications":
 - (a) Submittals which the Authority has marked as "REVIEWED" under Section 3.3 of this Schedule;
 - (b) portions of Submittals that the Design-Builder may proceed with under Section 3.4 of this Schedule;
 - (c) Submittals which have been deemed "REVIEWED" by the Authority under Section 3.7 of this Schedule.

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. 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, Indigenous groups' 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 The Design-Build Facilities Maintenance Lead will be fully integrated into the design team to ensure that the most sustainable design decisions are informed not only as they relate to the initial capital costs but also to the operational efficiencies and effectiveness of the systems for the whole life costs of the Facility.
- 4.6 For the purposes of the requirements indicated in this Schedule and its appendices, a "Working Session" is a full day meeting or series of full day meetings in which the Design-Builder will present the information of the Submittal, informal comments related to the Submittal will be discussed, and, as applicable, comments related to the review of previous Submittals will be discussed. The intent of the Working Session is for a collaborative and interactive effort to minimize misinterpretation or confusion related to the informal comments or formal comments, as applicable, and to satisfactorily address them or to discuss potential solutions that will be further developed and included in the formal Submittal. The Working Session is separate from and in addition to any special topic meetings, or any other meetings or consultations, with the User Consultation Groups.
- 4.7 Unless otherwise agreed, Submittals for the Design phases will be provided and reviewed in accordance with the following process with a pre-Submittal leading to a Submittal:
 - (a) Pre-Submittal:
 - (i) The Design-Builder will provide a pre-Submittal as indicated on the Submittal Schedule that includes all relevant material that should be reviewed by the Authority and the User Consultation Groups, with the material provided as soon as possible no later than 5 Business Days in advance.
 - (ii) The Authority is not required to provide comments under Section 3 to a pre-Submittal.
 - (iii) All changes from a previous Submittal will be clearly indicated in accordance with Section 8 of this Schedule and Schedule 1 [Statement of Requirements].
 - (b) Informal Comments from the Authority:
 - (i) The Authority may provide informal comments to the Pre-Submittal through to the Design-Builder as soon as possible no later than 2 Business Days before the Working Session.
 - (c) Presentation at Working Session:
 - (i) No later than 5 Business Days following the receipt of the pre-Submittal, the Design-Builder will present the relevant material at the Working Session with the relevant User Consultation Group(s);
 - (ii) The Design-Builder will schedule the Working Session with the intent to cover all relevant disciplines;

- (iii) Working Sessions may be virtual if agreed to or directed by the Authority;
- (iv) The Working Session will be attended in person by the Architect or, if the Authority agrees, the Design-Builder's Key Individuals and other individuals as required based on content being discussed;
- (v) During the Working Session, a representative of the Design-Builder will take "live minutes" so that all parties can consider 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 and formally resubmit the minutes;
- (vi) The minutes will be required to identify and summarize any deviation from the requirements of this Agreement triggered by any comment or changes resulting from the User Consultation Process;
- (vii) The minutes will be concise and clearly identify action items, responsibilities, and due dates;
- (viii) The time required to cover the Working Sessions (one or more days) will not be part of the Submittals' review periods as indicated in Section 1.2 but in addition to those review periods.

(d) Submittal:

- (i) After considering any comments on the pre-Submittal, the Design-Builder will make the formal Submittal as scheduled within Design-Builder's Submittal Schedule;
- (ii) If the Submittal does not address the Authority's informal comments and the comments provided at the Working Session, the Design-Builder will with the Submittal provide a commentary letter on the reasons for not addressing the comments. If the commentary letter is not provided with the Submittal or the Authority does not deem the reasons for not addressing the feedback satisfactory the Submittal will be automatically deemed to be assigned a "REJECTED" status.
- (e) Formal Response from the Authority:
 - (i) The Authority will respond to the Submittal in accordance with Section 8 of this Schedule.

- (f) Process continues until "REVIEWED" status
 - (i) If the Authority's response or deemed response is "CORRECT DEFICIENCIES" or "REJECTED", the Design-Builder will repeat the process set out in Sections (a) to (e) above until a "REVIEWED" response is achieved.
- 4.8 The process set out in this Section 4 will be set out in the Submittal Schedule. The Submittal Schedule will be required to clearly identify timelines related to the all steps set out in Section 4.7.
- 4.9 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.
- 4.10 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.
- 4.11 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.
- 4.12 The User Consultation Group meetings and Working Sessions will be held in Surrey, B.C. or another location designated by the Authority, at a space made available by the Authority, or, if directed by the Authority, virtually by use of an interface approved 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

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 In relation to review of Submittals, 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 electronic versions or print media versions of Submittals will be clearly identified by way of clouds or colour coding.
- 8.4 The Design-Builder will keep all Reviewed Drawings and Specifications current. If any Reviewed Drawings and Specifications are revised as part of a Submittal, all other Reviewed Drawings and Specifications relying on or based on those Reviewed 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 this 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

NOT USED

SCHEDULE 4

MANAGEMENT SYSTEMS AND PLANS

SCHEDULE 4 –

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

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SCHEDULE 4 APPENDICES

Appendix #	Appendix Title
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Appendix 8H	Waste Management Plan Requirements
Appendix 9	Commissioning Plan Requirements
Appendix 10	Asset Management Plan Requirements
Appendix 11	Deficiency Management Plan Requirements

1. GENERAL

1.1 Definitions

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

- "Asset Management Plan" has the meaning set out in Section 3.10 and Schedule 4 [Management Systems and Plans] Appendix 10 [Asset Management Plan Requirements].
- "Asset Management Plan Handover Plan" has the meaning set out in Schedule 4 [Management Systems and Plans] Appendix 10 [Asset Management Plan].
- "Asset Management Plan Submittal Coordination Plan" has the meaning set out in Schedule 4 [Management Systems and Plans] Appendix 10 [Asset Management Plan Requirements].
- **"BIM Execution Plan"** or **"BEP"** has the meaning set out in Schedule 1 [Statement of Requirements] Appendix 1U [BIM Requirements].
- "Commissioning Authority" has the meaning set out in Schedule 1 [Statement of Requirements] Appendix 1L [Commissioning Roles and Responsibilities].
- "Commissioning Provider" has the meaning set out in Schedule 1 [Statement of Requirements] Appendix 1L [Commissioning Roles and Responsibilities].
- "Commissioning Plan" has the meaning set out in Section 3.9 and Appendix 9 [Commissioning Plan Requirements].
- "Communications Plan" has the meaning set out in Section 3.1 and Schedule 4 [Management Systems and Plans] Appendix 1 [Communications Plan Requirements].
- "Communications Strategy" has the meaning set out in Section 3.1 and Schedule 4 [Management Systems and Plans] Appendix 1A [Communications Strategy Requirements].
- "Communications and Community Engagement Plan" has the meaning set out in Section 3.1 and Schedule 4 [Management Systems and Plans] Attachment 1 Appendix 1 [Communications Plan Requirements].
- "Construction Completion Plan" has the meaning set out in Appendix 8E [Construction Completion Plan Requirements].
- "Construction Protocols" has the meaning set out in Schedule 4 [Management Systems and Plans] Appendix 8A [Construction Protocols Requirements].
- **"Deficiency Management Plan"** has the meaning set out in Section 3.11 and as set out in Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], and Schedule 4 [Management Systems and Plans] Appendix 11 [Deficiency Management Plan] including appendices.

- **"Deficiency Management Plan Period"** has the meaning set out in Schedule 4 [Management Systems and Plans] Appendix 11 [Deficiency Management Plan].
- **"Deficiency Management Process"** has the meaning set out in Section 3.11 and set out in Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], and Schedule 4 [Management Systems and Plans] Appendix 11 [Deficiency Management Plan] including appendices.
- **"Deficiency Management Report"** has the meaning set out in Schedule 4 [Management Systems and Plans] Appendix 2 [Monthly Reporting Requirements] and Appendix 11 [Deficiency Management Plan].
- **"Design and Construction Management Plan"** means the Design-Builder's plan described in Section 3.8 and as set out in Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], and Schedule 4 [Management Systems and Plans] including appendices.
- "Design-Build Deficiency Manager" has the meaning set out in Schedule 4 [Management Plans and Systems] Appendix 11 [Deficiency Management Plan].
- "Design-Build Quality Manager" has the meaning set out in Schedule 4 [Management Plans and Systems] Appendix 3 [Quality Management Plan].
- "Design-Builder's Project Team Org Chart, Roles and Responsibilities" has the meaning set out in Schedule 4 [Management Systems and Plans] Attachment 1 Appendix 8 [Design and Construction Management Plan and Requirements].
- **"Dust, Noxious Odour and Noise Control"** has the meaning set out in Schedule 4 [Management Systems and Plans] Appendix 8C [Dust, Noxious Odour and Noise Control Requirements].
- **"Energy Management Plan"** has the meaning set out in Section 3.4 and Appendix 5 [Energy Management Plan Requirements].
- **"Final Construction Cleaning"** means cleaning to a state of cleanliness at the end of the Project that allows for effective Terminal Cleaning of the Site (e.g. removal of drywall dust in cupboard spaces, etc.).
- **"Furniture and Equipment Logistics Plan"** has the meaning set out in Schedule 1 [Statement of Requirements] Appendix 1H [Equipment and Furniture] and Schedule 4 [Management Systems and Plans] Appendix 8D [Furniture and Equipment Logistics Plan Requirements].
- "Hazardous Waste Management Plan" has the meaning set out in Schedule 4 [Management Systems and Plans] Appendix 8H [Waste Management Plan Requirements].
- "Health and Safety Plan" has the meaning set out in Schedule 4 [Management Systems and Plans] Appendix 8B [Health and Safety Plan Requirements].

- "Hospital Technology Systems Integration Plan" has the meaning set out in Section 3.7 and Appendix 7 [Hospital Technology Integration Requirements].
- "Incident Complaint Response Communications" has the meaning set out in Section 3.1 and Schedule 4 [Management Systems and Plans] Attachment 2 Appendix 1 [Communications Plan Requirements].
- "Infection Prevention and Control Plan" has the meaning set out in Section 3.6 and Appendix 6 [Infection Prevention and Control Plan Requirements].
- "Information Delivery Plan" has the meaning set out in Schedule 1 [Statement of Requirements] Appendix 1U [BIM Requirements].
- "Management Systems and Plans" means all Design and Construction Management Plans the Design-Builder will develop and implement to complete the Project.
- "Master Information Delivery Plan (MIDP)" has the meaning set out in Schedule 1 [Statement of Requirements] Appendix 1U [BIM Requirements]
- "Monthly Project Report" has the meaning set out in Section 3.2 and in Appendix 2 [Monthly Reporting Plan Requirements].
- "Monthly Reporting Plan" has the meaning set out in Section 3.2 and in Appendix 2 [Monthly Reporting Plan Requirements].
- "Quality Assurance" has the meaning set out in Section 3.3 and Appendix 3 [Quality Management Plan Requirements].
- "Quality Assurance Plan" has the meaning set out in Section 3.3 and Appendix 3 [Quality Management Plan Requirements].
- "Quality Control" has the meaning set out in Section 3.3 and Appendix 3 [Quality Management Plan Requirements].
- "Quality Management Plan" has the meaning set out in Section 3.3 and Appendix 3 [Quality Management Plan Requirements].
- "Quality Management System" has the meaning set out in Section 3.3 and Appendix 3 [Quality Management Plan Requirements].
- "Reviewed" has the meaning set out in Schedule 2 [Review Procedure] for a submittal reviewed status.
- "Risk Register" has the meaning set out in Schedule 4 [Management Systems and Plans] Appendix 8 [Design and Construction Management Plan].
- "Settlement and Vibration Control" has the meaning set out in Schedule 4 [Management Systems and Plans] Appendix 8F [Settlement and Vibration Control Requirements].

- **"Solution Assessment Process"** has been described in the Schedule 1 [Statement of Requirements] Section 7.8.2. An overview of the Solution Assessment Process is provided as inclusion in the Data Room.
- **"Task Information Delivery Plan"** has the meaning set out in Schedule 1 [Statement of Requirements] Appendix 1U [BIM Requirements].
- "Terminal Cleaning" means the thorough cleaning of clinical spaces following construction and before the space is used for patient care, medical equipment, or storage of clean or sterile supplies, in order to remove contaminating micro-organisms that could be acquired by subsequent occupants or staff.
- **"Traffic Management Plan"** has the meaning set out in Schedule 4 [Management Systems and Plans] Appendix 8G [Traffic Management Plan].
- "Traffic Management Consultant" has the meaning set out in Schedule 4 [Management Systems and Plans] Appendix 8G [Traffic Management Plan Requirements].
- **"Waste Management Plan"** has the meaning set out in Schedule 4 [Management Systems and Plans] Appendix 8H [Waste Management Plan Requirements].

1.2 Overview

- (a) The Design-Builder's Design and Construction management will be supported by a set of systems and plans (the "Management Systems and Plans") identified in, but not limited to, this Design-Build Agreement Schedule 4 [Management Systems and Plans].
- (a) The systems and plans will outline the Design and Construction management planning, design, executing, monitoring, controlling and close-out activities. They are a coordinated iterative set of documents that will be prepared and updated and augmented by the Design-Builder as the Project's parameters evolve during the Design and Construction phases.

2. REQUIREMENTS

Notwithstanding any requirements of this Agreement, the following general requirements are applicable to all Management Systems and Plans listed below unless indicated otherwise.

2.1 Content of Plans

The content of the Management Systems and Plans will be in addition drafts of certain Management Systems and Plans attached to this Schedule and to any Proposal Extracts.

This Schedule is to be read as supplementary to cross-reference the requirements of this Agreement including Schedule 1 [Statement of Requirements] and in accordance with all procedures set out in the Agreement and any attached draft Management Systems and Plans and any Proposal Extracts.

- (a) At a minimum, the Management Systems and Plans will be comprised of the requirements identified in the following plans:
 - (i) Appendix 1 [Communications Plan] and Appendices
 - (A) Appendix 1A [Communications Strategy Requirements]
 - (ii) Appendix 2 [Monthly Reporting Plan]
 - (iii) Appendix 3 [Quality Management Plan]
 - (iv) Appendix 4 [BIM Execution Plan]
 - (v) Appendix 5 [Energy Management Plan]
 - (vi) Appendix 6 [Infection Prevention and Control Plan]
 - (vii) Appendix 7 [Hospital Technology Systems Integration Plan]

- (viii) Appendix 8 [Design and Construction Management Plan]
 - (A) Appendix 8A [Construction Protocols]
 - (B) Appendix 8B [Health and Safety Plan]
 - (C) Appendix 8C [Dust, Noxious Odour and Noise Control Plan]
 - (D) Appendix 8D [Furniture & Equipment Logistics Plan]
 - (E) Appendix 8E [Construction Completion Plan]
 - (F) Appendix 8F [Settlement and Vibration Control Plan]
 - (G) Appendix 8G [Traffic Management Plan]
 - (H) Appendix 8H [Waste Management Plan]
- (ix) Appendix 9 [Commissioning Plan]
- (x) Appendix 10 [Asset Management Plan]
- (xi) Appendix 11 [Deficiency Management Plan]
- (xii) Other: Additional plans may be added as required by the Design-Builder.
- (b) The Design-Builder will coordinate and integrate all Management Systems and Plans. The information provided will be clear, precise, concise, objective, relevant, coordinated, and up to date.
- (c) The goal is to create plans that clearly outline the process to ensure the Project is delivered on time, on budget, and in compliance with requirements of the Agreement.

2.2 Development and Implementation

- (a) The Management Systems and Plans will address efforts and requirements related to scope, schedule, cost, risk, and resources, as well as stakeholder, communication, and information management integrated with a logical sequence of Design, approval, Construction and handover activities, milestones and phase gates.
- (b) Prior to implementation, the Design-Builder will submit the Management Systems and Plans for the Authority's review and approval in compliance with the minimum standards, requirements, and expectations set out in the Agreement.

2.3 Authority and User Engagement Review Process

(a) The Authority will be consulted and actively engaged in the content development of all Management Systems and Plan prior to the delivery of the First Draft; subsequent Drafts and Final Plan.

(b) User engagement in developing and in reviewing each Management System and Plan will be in accordance with Schedule 2 [Review Procedure].

2.4 Timelines

(a) All Management Systems and Plans are to be developed and updated at a minimum as indicated in Table 1.

2.5 Cost Implications

- (a) Management Systems and Plans are a key element in the success of the Work and the Authority has assigned a monetary value related to the development and execution of the Management Systems and Plans in accordance with the final Reviewed version.
- (b) Payment for completing the plans and holdbacks are listed in the table below and will be applied in accordance with Schedule 10 [Schedule of Prices].

Table 1: Integrated Management Plans' Timelines, Holdbacks and Deductions

			First Draft of Detailed Plan Reviewed Status as per Schedule 2			Holdbacks		Non-Compliance Deductions							
Plan ID #	Name of Plan	Business Days	After Effective Date	Before Substantial Completion	Business Days	After Submission of First Draft	After Submission of First Draft and prior to Construction	Before Substantial Completion	Holdbacks to Submission of First Draft of Detailed Plan	Holdbacks to Receipt of Final Plan with Reviewed Status as per Schedule 2	Severe	Significant	Minor	Repeat	Reporting Notes (unless otherwise noted in this table)
2	Monthly Report	10	х		15	х									Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by Schedule 1 [Statement of Requirements] and Schedule 2 [Review Procedure].
8	Design and Construction Management Plan	20	x		20		x								Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendices, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].
8A	Construction Protocols	40	x		40		x								Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].
8B	Health and Safety Plan	40	х		40		x								Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].

			st Draf ailed P		Revi		Status as	s per	Holdi	packs	Non-Compliance Deductions			ons	
Plan ID#	Name of Plan	Business Days	After Effective Date	Before Substantial Completion	Business Days	After Submission of First Draft	After Submission of First Draft and prior to Construction	Before Substantial Completion	Holdbacks to Submission of First Draft of Detailed Plan	Holdbacks to Receipt of Final Plan with Reviewed Status as per Schedule 2	Severe	Significant	Minor	Repeat	Reporting Notes (unless otherwise noted in this table)
8C	Dust, Noxious Odour and Noise Control Plan	40	х		40		х								Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].
8F	Settlement and Vibration Control Plan	40	x		40		x								Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].
8G	Traffic Management Plan	40	X		40		x								Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].
8H	Waste Management Plan	40	X		40		x								Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].
6	Infection Prevention and Control Plan	40	х		40	х									Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].

			First Draft of Detailed Plan				Reviewed Status as per Schedule 2			packs	Non	-Complian	ce Deductio	ons	
Plan ID #	Name of Plan	Business Days	After Effective Date	Before Substantial Completion	Business Days	After Submission of First Draft	After Submission of First Draft and prior to Construction	Before Substantial Completion	Holdbacks to Submission of First Draft of Detailed Plan	Holdbacks to Receipt of Final Plan with Reviewed Status as per Schedule 2	Severe	Significant	Minor	Repeat	Reporting Notes (unless otherwise noted in this table)
3	Quality Management Plan	20	x		20		x								Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].
1	Communications Plan	20	Х		40		x								Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].
4	BIM Execution Plan	20	х		40	Х									Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].
8D	Furniture & Equipment Logistics Plan	60	х		60	Х									Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].

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Plan ID #	Name of Plan	Business Days	After Effective Date	Before Substantial Completion	Business Days	After Submission of First Draft	After Submission of First Draft and prior to Construction	Before Substantial Completion	Holdbacks to Submission of First Draft of Detailed Plan	Holdbacks to Receipt of Final Plan with Reviewed Status as per Schedule 2	Severe	Significant	Minor	Repeat	Reporting Notes (unless otherwise noted in this table)
9	Commissioning Plan	As per Schedule 1 with the 30% Design Phase Submittal Per Schedule 2 [Review Procedure] requirements									Submission of updated plans required as outlined in: 1) Schedule 1 [Statement of Requirements], 2) Schedule 1 Appendix L [Commissioning Roles & Responsibilities], 3) Schedule 2 [Review Procedure], and 4) Schedule 4 Appendix 9 [Commissioning Management Plan Requirements]				
5	Energy Management Plan	1 v Des	er Sche with 30 ign Ph ubmitte)% ase			ule 2 [Re requiren								Submission of updated plans required as outlined in: 1) Schedule 1 [Statement of Requirements], 2) Schedule 2 [Review Procedure], 3) Schedule 4 Appendix 5 [Energy Management Plan Requirements], and 4) Schedule 5 [Energy Guarantee]
11	Deficiency Management Plan	1 v Des	er Sche with 30 ign Ph ubmitte	l% ase			ule 2 [Re requiren								Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure], and Schedule 4 [Management Systems and Plans Appendix 3 [Quality Management Plan].

			st Draf ailed F		Revi		Status a edule 2	s per	Holdi	backs	Non	-Complian	ce Deducti	ons	
Plan ID#	Name of Plan	Business Days	After Effective Date	Before Substantial Completion	Business Days	After Submission of First Draft	After Submission of First Draft and prior to Construction	Before Substantial Completion	Holdbacks to Submission of First Draft of Detailed Plan	Holdbacks to Receipt of Final Plan with Reviewed Status as per Schedule 2	Severe	Significant	Minor	Repeat	Reporting Notes (unless otherwise noted in this table)
7	Hospital Technology Systems Integration Plan	1 v Des	er Sche with 30 sign Ph ubmitta)% ase			ule 2 [Re requiren								Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].
10	Asset Management Plan	1 v Des	er Sche with 30 sign Ph ubmitte	l% ase			ule 2 [Re requiren								Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendices, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].
10A	Asset Management - Submittal Coordination Plan	1 v Des	er Sche with 30 sign Ph ubmitte)% ase			ule 2 [Re requiren								Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].
10B	Asset Management - Handover Plan	180		X	90			х							Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], and Schedule 2 [Review Procedure].
8E	Construction Completion Plan	180		x	90			x							Monthly reporting as per Appendix 2 [Monthly Reporting Plan Requirements] and as required by its corresponding Appendix, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], and Schedule 4 [Management Systems and Plans] Appendix 11 [Deficiency Management Plan Requirements].

For purposes of applying the monetary amounts in Table 1, the Authority will in its discretion, acting reasonably, use the following guidelines:

- (a) The value assigned above to submission of the First Draft of the applicable detailed Management System and Plan will be withheld from payment until the Management System and Plan is submitted as per the content requirements described in this Schedule;
- (b) The value assigned for receipt of the final Management System and Plan with "Reviewed" status will be withheld from payment until the Management System and Plan achieved "Reviewed" status in accordance with the provisions of Schedule 2 [Review Procedure]; and
- (c) The value deducted from a payment for non-compliance with Management System and Plan requirements will be determined by the Authority based on the severity of the non-compliance as described below:
 - (i) Severe could potentially increase risk and cause injury, project delay, or cost to the Authority if not rectified;
 - (ii) Significant could potentially cause a minor delay, additional user engagement, or inconvenience, and include failure to achieve Reviewed status after the required dates as indicated in Table 1;
 - (iii) Minor not material as a standalone incident but indicative of a lack of care, poor supervision or diligence in delivering a high-quality project; and
 - (iv) Repeat same or similar incident reported in sequential months or an incident unresolved in a subsequent month. Also includes failure to achieve Reviewed status after the required dates as indicated in Table 1. Note that the value of a repeat non-compliance is not related to level of severity.

Each incident of non-compliance will be assigned an amount as indicated in Table 1 and the total number of incidents for the month will be multiplied by the assigned amount for each incident and be deducted from the payment for the month when the non-compliance is noted and communicated to the Design-Builder in writing. If the non-compliance is rectified to the satisfaction of the Authority before the payment invoice is submitted, the amounts related to the corrected non-compliance will not be deducted.

2.6 Amending Plans

(a) All Management System and Plans can be amended with the Authority's approval through the sequential review process described in Schedule 2 [Review Procedure] and in accordance with this Agreement or, if it is determined that a plan cannot be followed for justifiable reasons acceptable to the Authority and it is necessary to make amendments outside the normal usual Review Procedure, the Design-Builder may request consideration of an amendment with supporting reasons.

(b) Until the Authority indicates that the proposed amendment is acceptable, all provisions of this Schedule, including deductions, will apply.

3. PLAN DETAILS

3.1 Communications Plan Requirements

- (a) The Authority and the Design-Builder will share responsibilities developing and implementing the Project's communication standards and procedures (the "Communications Plan") in accordance with the Agreement.
- (b) The purpose and content of the Communications Plan will include: communications planning, community engagement, construction notifications, signage, media relations, construction related events and tours, filming and photographic records, stakeholder consultation, and emergency communications.
- (c) Prior to implementation, the Design-Builder will develop and submit the Communications Plan for the Authority's review and approval following the procedures outlined in Section 2 Requirements Table 1, and Schedule 2 [Review Procedure].
- (d) The minimum detailed requirements for the development and implementation of the Design-Builder's Communications Plan are included in the following Schedules and Appendices:
 - (i) Schedule 4 [Management Systems and Plans]:
 - (A) Appendix 1 [Communications Plan Requirements] and Attachments:
 - (1) Attachment 1 [Community Engagement Plan]
 - (2) Attachment 2 [Incident Complaint Response Communications Plan]
 - (B) Appendix 1A [Communications Strategy Requirements]

3.2 Monthly Reporting Plan Requirements

- (a) In consultation with the Authority, the Design-Builder will establish reporting procedures and standards for regular reporting to the Authority (the "Monthly Reporting Plan") in accordance with the Agreement.
- (b) The purpose and content of the Monthly Reporting Plan will include all Project monthly reporting requirements.
- (c) Prior to implementation, the Design-Builder will develop and submit the Monthly Reporting Plan for the Authority's review and approval following the procedures outlined in Section 2 Requirements Table 1, and Schedule 2 [Review Procedure].

- (d) The minimum detailed requirements for the development and implementation of the Design-Builder's Monthly Reporting Plan, are included in the following Schedules and Appendices:
 - (i) Schedule 1 [Statement of Requirements] and
 - (ii) Schedule 4 [Management Systems and Plans] Appendix 2 [Reporting Plan Requirements].

3.3 Quality Management Plan Requirements

- (a) In consultation with the Authority, the Design-Builder will appoint a qualified expert in quality management (the "Design-Build Quality Manager") who will develop, implement, oversee, and control a quality management program (the "Quality Management System (QMS)") in accordance with the Agreement.
- (b) The purpose and content of the Quality Management Plan will include quality assurance and control plans, standards, measures as well as implementation, monitoring and evaluation protocols and processes.
- (c) Prior to implementation, the Design-Builder will develop and submit the Quality Management Plan for the Authority's review and approval following the procedures outlined in Section 2 Requirements Table 1, and Schedule 2 [Review Procedure].
- (d) The minimum detailed requirements for the development and implementation of the Design-Builder's Quality Management Plan, are included in the following Schedules and Appendices:
 - (i) Schedule 1 [Statement of Requirements],
 - (ii) Schedule 4 [Management Systems and Plans] Appendix 3 [Quality Management Plan Requirements] and
 - (iii) Schedule 4 [Management Systems and Plans] Appendix 11 [Deficiency Management Plan Requirements].

3.4 Building Information Modeling (BIM) Execution Plan (BEP) Requirements

- (a) In consultation with the Authority, the Design-Builder will develop and implement a Project specific building information modeling project implementation plan (the "Building Information Modeling (BIM) Execution Plan (BEP)") in accordance with the Agreement.
- (b) The purpose and content of the Building Information Modeling (BIM) Execution Plan (BEP) will include how the Design-Builder will use BIM as a tool per the terms and requirements set out in Schedule 1 [Statement of Requirements] Appendix 1U [BIM Requirements].

- (c) Prior to implementation, the Design-Builder will develop and submit the BEP for the Authority's review and approval following the procedures outlined in Section 2 Requirements Table 1, and Schedule 2 [Review Procedure].
- (d) The minimum detailed requirements for the development and implementation of the Design-Builder's BIM Execution Plan, are included in the following Schedules and Appendices:
 - (i) Schedule 1 [Statement of Requirements] and Appendix 1U [BIM Requirements]; and
 - (ii) Schedule 4 [Management Systems and Plans] Appendix 4 [BIM Execution Plan Requirements].

3.5 Energy Management Plan Requirements

- (a) In consultation with the Authority, the Design-Builder will develop and implement an energy management strategy (the "Energy Management Plan") in accordance with the Agreement.
- (b) The purpose and content of the Energy Management Plan will include details regarding energy management targets, strategies and requirements as set out in Schedule 5 [Energy Guarantee].
- (c) Prior to implementation, the Design-Builder will develop and submit the Energy Management Plan for the Authority's review and approval following the procedures outlined in Section 2 Requirements Table 1, and Schedule 2 [Review Procedure].
- (d) The minimum detailed requirements for the development and implementation of the Design-Builder's Energy Management Plan, are included in the following Schedules and Appendices:
 - (i) Schedule 1 [Statement of Requirements];
 - (ii) Schedule 4 [Management Systems and Plans] Appendix 5 [Energy Management Plan Requirements]; and
 - (iii) Schedule 5 [Energy Guarantee].

3.6 Infection Prevention and Control Plan Requirements

- (a) In consultation with the Authority, the Design-Builder, in consultation with the Authority's infection control subject matter experts, will develop and implement a Project specific infection prevention and control strategy (the "Infection Prevention and Control Plan") in accordance with the Agreement
- (b) The purpose and content of the Infection Prevention and Control Plan will include how the Design-Builder will address and implement infection prevention and control requirements.

- (c) Prior to implementation, the Design-Builder will develop and submit the Infection Prevention and Control Plan for the Authority's review and approval following the procedures outlined in Section 2 Requirements Table 1, and Schedule 2 [Review Procedure].
- (d) The minimum detailed requirements for the development and implementation of the Design-Builder's Infection Prevention and Control Plan, are included in the following Schedules and Appendices:
 - (i) Schedule 1 [Statement of Requirements] and
 - (ii) Schedule 4 [Management Systems and Plans] Appendix 6 [Infection Prevention and Control Plan Requirements].

3.7 Hospital Technology Systems Integration Plan Requirements

- (a) In consultation with the Authority, the Design-Builder will develop and implement a Project specific technology integration strategy (the "Hospital Technology Systems Integration Plan") in accordance with the Agreement.
- (b) The purpose and content of the Hospital Technology Systems Integration Plan will include how the Design-Builder will ensure that the hospital technology systems are designed, procured, installed, integrated, and tested in compliance with and supported by the Authority's Substantial and Total Completion requirements.
- (c) The Authority will be consulted and actively engaged in the content development of the Hospital Technology Systems Integration Plan prior to the delivery of the First Draft and between the First Draft and Final Plan.
- (d) Prior to implementation, the Design-Builder will develop and submit the Hospital Technology Systems Integration Plan for the Authority's review and approval following the procedures outlined in Section 2 Requirements Table 1, and Schedule 2 [Review Procedure].
- (e) The minimum detailed requirements for the development and implementation of the Design-Builder's Hospital Technology Systems Integration Plan, are included in the following Schedules and Appendices:
 - (i) Schedule 1 [Statement of Requirements] and
 - (ii) Schedule 4 [Management Systems and Plans] Appendix 7 [Hospital Technology Systems Integration Plan Requirements].

3.8 Design and Construction Management Plan Requirements

(a) In consultation with the Authority, the Design-Builder will develop and implement a plan that outlines the design and construction planning process (the "Design and Construction Management Plan") in accordance with the Agreement.

- (b) The purpose and content of the Design and Construction Management Plan will include how the Design-Builder will carry out planning, execution, monitoring, controlling and close-out processes, activities, resources, protocols, as well as measures, standards, controls, and validation mechanisms to deliver the Project. At a minimum, the Design-Builder will submit an updated Design and Construction Management Plan monthly with each Monthly Project Report. The Design and Construction Management initiatives, and requirements related to scope, schedule, cost, risk and resources.
- (c) Prior to implementation, the Design-Builder will develop and submit the Design and Construction Management Plan for the Authority's review and approval following the procedures outlined in Section 2 Requirements Table 1, and Schedule 2 [Review Procedure].
- (d) The minimum detailed requirements for the development and implementation of the Design-Builder's Design and Construction Management Plan, are included in the following Schedules and Appendices:
 - (i) Schedule 1 [Statement of Requirements];
 - (ii) Schedule 4 [Management Systems and Plans]:
 - (A) Appendix 8 [Design and Construction Plan Requirements];
 - (B) Appendix 8A [Construction Protocols Requirements];
 - (C) Appendix 8B [Health and Safety Plan Requirements];
 - (D) Appendix 8C [Dust, Odour and Noise Control Plan Requirements];
 - (E) Appendix 8D [Furniture & Equipment Logistics Plan Requirements];
 - (F) Appendix 8E [Construction Completion Plan Requirements];
 - (G) Appendix 8F [Settlement and Vibration Control Plan Requirements];
 - (H) Appendix 8G [Traffic Management Plan Requirements];
 - (I) Appendix 8H [Waste Management Plan Requirements];

3.9 Commissioning Plan Requirements

- (a) In consultation with the Authority, the Design-Builder will develop and implement a Commissioning Plan in compliance with requirements set out in the Agreement.
- (b) The purpose and content of the Commissioning Plan will include: how the Design-Builder will meet and implement the requirements outlined in Schedule 1

[Statement of Requirements] Appendix 1L [Commissioning Roles and Responsibilities], including, but not limited to, the Commissioning team members, contact information, roles and responsibilities, processes, logs and timelines for Commissioning, warranty reviews and testing, System Commissioning Outlook matrix, etc.

- (c) Prior to implementation, the Design-Builder will develop and submit the Commissioning Plan for the Authority's review and approval following the procedures outlined in Section 2 Requirements Table 1, and Schedule 2 [Review Procedure].
- (d) The minimum detailed requirements for the development and implementation of the Design-Builder's Commissioning Plan, are included in the following Schedules and Appendices:
 - (i) Schedule 1 [Statement of Requirements] and Appendix 1L [Commissioning Roles and Responsibilities]
 - (ii) Schedule 4 [Management Systems and Plans] Appendix 9 [Commissioning Plan Requirements].

3.10 Asset Management Plan Requirements

- (a) In consultation with the Authority, the Design-Builder will develop and implement an Asset Management Plan
- (b) The purpose and content of the Asset Management Plan will include:
 - (i) Submittal Coordination Plan; and
 - (ii) Handover Plan.
- (c) Prior to implementation, the Design-Builder will develop and submit the Asset Management Plan for the Authority's review and approval following the procedures outlined in Section 2 Requirements Table 1, and Schedule 2 [Review Procedure].
- (d) The minimum detailed requirements for the development and implementation of the Design-Builder's Asset Management Plan, are included in the following Schedules and Appendices:
 - (i) Schedule 1 [Statement of Requirements] and Appendix 1V [Asset Management Requirements]
 - (ii) Schedule 4 [Management Systems and Plans] Appendix 10 [Asset Management Plan Requirements].

3.11 Deficiency Management Plan Requirements

- (a) The Design-Builder will appoint a qualified expert in the management and completion of deficiencies (the "Deficiency Manager").
- (b) In consultation with the Authority, the Design-Builder's appointed Deficiency Manager will develop and implement processes, procedures, and standards for the management of deficiencies (the "Deficiency Management Plan") in accordance with the Agreement.
- (c) The purpose and content of the Deficiency Management Plan will include: the timely identification, management, reporting and close-out of deficiencies, including the use of deficiency management software the Design-Builder will utilize before, during and post occupancy.
- (d) Prior to implementation, the Design-Builder will develop and submit the Deficiency Management Plan for the Authority's review and approval following the procedures outlined in Section 2 Requirements Table 1, and Schedule 2 [Review Procedure].
- (e) The minimum detailed requirements for the development and implementation of the Design-Builder's Deficiency Management Plan, are included in the following Schedules and Appendices:
 - (i) Schedule 1 [Statement of Requirements] and
 - (ii) Schedule 4 [Management Systems and Plans] Appendix 11 [Deficiency Management Plan].

END OF SCHEDULE 4

REFER TO SCHEDULE 4 APPENDICES 1-11

SCHEDULE 4 – MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 1 COMMUNICATIONS PLAN REQUIREMENTS

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1. GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Communications Management Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure] and Schedule 4 [Management Systems and Plans].

2. CONTENT

For the areas where the Design-Builder is the lead, the Design-Builder will provide a Communications Plan outlining how they will lead, develop, and disseminate or share communications.

The plan will include the content and key categories of communications outlined in Appendix 1A [Communications Strategy].

END OF APPENDIX 1





SCHEDULE 4 – MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 1A COMMUNICATIONS STRATEGY

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APPENDIX 1A: COMMUNICATIONS STRATEGY

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 Schedule 4 [Management Systems and Plans]. Provincial Health Services Authority (PHSA), through BC Cancer, will contribute to supplemental communication and engagement activities related to the Cancer Centre and cancer specific audiences, under the lead/support responsibilities of the Authority as outlined in Section 6.0 of this Appendix.

The Authority has developed a Communications and Community Engagement Plan, and an Incident and Complaint Response Communications Plan for the project which encompass communications with external stakeholders including Provincial departments, the media, interested parties, the City, neighbours, the local and surrounding communities and individuals; and with internal stakeholders such as Authority leaders, staff, physicians, and volunteers.

1. GENERAL REQUIREMENTS

Refer to Schedule 4 [Management Systems and Plans], Section 3.1 and Attachments to this Appendix:

- (a) Attachment 1 [Communications and Community Engagement Plan Requirements]
- (b) Attachment 2 [Incident and Complaint Response Communications Plan]
- 1.2 The Design-Builder will be guided by the Authority's best practices regarding communications.
- 1.3 The Design-Builder will consult and cooperate with the Authority regarding communications and engagement activities relating to the Project.
- 1.4 The desired outcome of communications and engagement 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.
- 1.5 Communications and engagement 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 Appendix.
- 1.6 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 and that the City and the Provincial government may be required to review and approve communications) to consider communications strategies, plans, and communications 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.
- 1.7 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.

- 1.8 This Appendix is a guideline and may be amended by mutual agreement.
- 1.9 No communication regarding the subject matter of a Dispute, including one resolved under Section 64 [Dispute Resolution] of the Design-Build 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.
- 1.10 The Design-Builder acknowledges that the Freedom of Information and Protection of Privacy Act (FIPPA) applies to the Authority, that nothing in this Appendix limits any requirements for compliance with FIPPA and that the Authority may be required to make disclosure of information under FIPPA.
- 1.11 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.
- 1.12 Except for Section 1.11, this Appendix is subject to the parties' obligations in respect of Confidential Information pursuant to Section 67 [Confidentiality and Communications] of the Design-Build Agreement.

2. CATEGORIES OF COMMUNICATIONS

- 2.1 **Communications Planning**: Developing overall and special initiative project communications plans, strategies and annual work plans.
- 2.2 **Community Engagement**: Engaging in discussions with Project stakeholders.
- 2.3 **Audiences**: Keeping all key audiences including external and internal Project stakeholders (as identified in communications plans) informed, including providing overall Project information, information about schedule, design, construction (including traffic management), facilities management and other services, using any and all appropriate communications tools and tactics.
- 2.4 **Construction Notices**: Keeping all key audiences, internal and external, apprised in a timely manner, of construction which will impact them in a discernable way.
- 2.5 **Signage**: Installing directional, informational, and promotional Project signs.
- 2.6 **Media Relations**: Providing media with Project updates and responding to issues raised by the media.
- 2.7 **Emergency Communications**: Planning, preparing and implementing crisis, incident, and complaint response communications.
- 2.8 **Construction-related Events and Tours**: Accommodating or assisting in the organization, promotion, and implementation of public, dignitary, employee or fundraising events to mark major milestones, change management initiatives, or site visits and tours.

- 2.9 **Filming and Photographic Record**: Documenting the progress of the Work through photographs, videos, and drone footage including the production of final public facing files.
- 2.10 **Industry Award Submissions**: Applications to appropriate industry awards in order to achieve suitable peer and industry recognition.
- 2.11 **Permitting**: Filing for necessary municipal permits required to undertake and complete the Work, including any required community engagement as per Section 69 [Laws, Notice, Permits and Fees] of the Design-Build Agreement.

3. LEAD AND SUPPORTING ROLES

- 3.1 Within each category of communications set out in Section 2 of this Appendix, 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 and is to form the basis of the Design-Builder's overall Communications Plan where they are responsible to take the lead role as outlined in Section 6.0 of this Appendix:

- 4.1 Developing an overall strategic communications plan, that includes plans for communications, community relations, consultation, media relations, emergency communications, construction-related events and tours, and industry award submissions;
- 4.2 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;
- 4.3 Implementing its role in approved plans;
- 4.4 Achieving the outcomes set out in the strategic communication plan;
- 4.5 Maintaining constructive and positive relationships with the public and other stakeholders;
- 4.6 Providing information, as required by the supporting party and its team members, to support communication and consultation activities;
- 4.7 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, construction site and building tours, and directing inquiries to the supporting party as appropriate;
- 4.8 In addition to the cost implications indicated in Section 2.5, all 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 is the Design-Builder's responsibility;
- 4.9 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
- 4.10 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:

- Assisting with the implementation of plans, including drafting of other communication documents or reviewing communications documents, as directed by the lead party;
- 5.2 Implementing its role in approved plans;
 - (a) Maintaining constructive and positive relationships with the public and other stakeholders;
 - (b) Providing information, as required by the lead party and its team members, to support communication and consultation activities;
 - (c) 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, construction site and building tours, and directing inquiries to the lead party as appropriate;
 - (d) 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
 - (e) 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 Engagement and	Authority	Design-Builder
Consultation		
Communications	Authority	Design-Builder
Notices of Construction-related	Design-Builder	Authority
Traffic, Noise, Light Intrusion, Dust,		
Disruption Vibration Impacts		
Media Relations	Authority	Design-Builder
Emergency and incident	Authority	Design-Builder
Communications Relating to		
existing Authority employees,		
programs, services and facilities; and		
Design-Builder performance		
Emergency and incident	Design-Builder	Authority
Communications related to Design-		
Builder Site health and safety		
Complaint Response (from	Authority	Design-Builder
public/Authority staff)		
Signage (Construction and Project	Design-builder	Authority
Promotion)		
Relocation communications (of staff	Authority	Design-Builder
and patients and directed to those		
audiences)		
Film and Photographic Record	Design-Builder	Authority

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, staffing, supplier, or 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.

8. COMMUNICATIONS PLANNING

The New Surrey Hospital and BC Cancer Centre Communications Strategy will be led by the Authority until the Work is completed, which includes the execution of the strategic plans, annual Work Plans, and communications with the media, internal and external stakeholders, and interested parties or individuals.

- 8.1 The Design-Builder will be provided with a copy of all or parts of the New Surrey Hospital and BC Cancer Centre Communication and Engagement Strategic Plan prepared by the Authority and applicable to this Project and will support the implementation of the strategies and activities listed in them.
- 8.2 The Design-Builder will appoint and provide a Project Director or Communications/Engagement Manager to be responsible for the implementation of its lead and supporting responsibilities, and who will be a single point of contact with the Authority's New Surrey Hospital and BC Cancer Centre Communications.
- 8.3 An annual Work Plan will be jointly developed by the Design-Builder and the Authority outlining communication activities and responsibilities for the subsequent twelve (12) month period, updated annually and initially delivered no later than the dates indicated in Section 2.2.
- 8.4 The Authority will establish the primary key messages for the local community and the media about the project and the Work and prepare content for use in pre-construction engagement and beyond. This is vital to avoid mixed messages and it will be important that all involved in the Work use consistent messaging. The Design-Builder will be required to contribute to this by submitting content to the Authority or otherwise participating in communications activities under the direction of the Authority as well as submitting content it drafts to the Authority for review and approval prior to release.

9. COMMUNITY ENGAGEMENT AND CONSULTATION

Stakeholder engagement and consultation will be primarily led by the Authority with the Design-Builder taking an active and supportive role in initiatives aimed at the Project's key stakeholders.

- 9.1 The Design-Builder will participate in briefings and meetings with political representatives and local community leaders, if required to do so by the Authority. Meetings may include events held in the evening or on weekends, and may be attended by the Mayor of the City of Surrey, City Councillors or staff, local community residential associations, special interest groups, and business groups.
- 9.2 Working with the Authority, the Design-Builder will contribute to and support effective engagement with Aboriginal and other ethnic groups ensuring an understanding of the work, and a positive and mutually-beneficial dialogue. This may include participating in meetings and consultations with representatives of such groups, to receive input on culturally sensitive aspects to the Work, and/or providing content and engagement materials in non-English formats.
- 9.3 The Design-Builder will participate in meetings and events targeting Authority employees, physicians, volunteers and service providers alongside the Authority, or if required to do so by the Authority, to ensure awareness and understanding of the Work, to sustain a positive dialogue, and to prepare people for change. This may include in-hospital forums, drop-ins, events, and meetings, which may occur during the day, evenings, or weekends.

9.4 The Design-Builder will organize and participate in meetings and events targeting local residents and neighbours either alongside the Authority, or if required to do so by the Authority, to ensure awareness is developed, concerns are understood, and proper consideration is given to avoid or minimize impacts. This may include quarterly resident and business association meetings, community fairs and events, Open House drop-in sessions, workshops, street-side chats, and small group meetings which may occur during the day, evenings or weekends. The Design Builder will be responsible for the development, cost, and distribution of ads/invites, mail-outs and promotional signage, poster boards explaining the Work and its impacts for community engagement events.

10. COMMUNICATIONS

- 10.1 The Authority will regularly develop and distribute informational and promotional materials and newsletters, and will develop and maintain project webpages, over which it will have final editorial control of all content.
- 10.2 The Design-Builder will provide the following support and information when requested by the Authority:
 - (a) Original text for articles and stories;
 - (b) Architectural, engineering, building cross sections, and other design drawings;
 - (c) Renderings and flythrough video;
 - (d) Annual Construction Look ahead narrative, calendars and timelines;
 - (e) Construction facts and infographics;
 - (f) Animations;
 - (g) 3D models;
 - (h) Photographs;
 - (i) Video footage;
 - (j) Drone footage;
 - (k) Company logos;
 - (1) Links to the live webcam(s) overlooking the Site;
 - (m) Floor plans with layout usages;
 - (n) Information on its Corporate Social Responsibility priorities, including highlighting socially responsible activities in the area; and

- (o) Information on the Work's green building, environmentally-friendly, and energy efficient characteristics.
- 10.3 The Design-Builder will allow for the provision for ethnic, mobility, hearing and site impaired external parties, including publishing content and notices in Braille or non-English languages, if requested by the Authority.

11. NOTICES OF CONSTRUCTION

The Design-Builder will lead the development and distribution of construction notices. Notices will be distributed before all major deliveries or site activities which could have any discernible impacts to internal and external stakeholders, such as road or area closures, noise, lighting, after hours work, demolition, hazardous materials/pest control, or road/sidewalk disruption in accordance with the most current City of Surrey's bylaw requirements. Considerations include:

- 11.1 Information letters/postcards/e-notices will be delivered to local residents and businesses located within a five-kilometre radius of the hospital's campus, prior to the start of Construction or road closures and at approximately 10 12 key milestones in the Design and Construction Schedule as confirmed by the Design-Builder and approved by the Authority;
- 11.2 The Design-Builder will provide at least one week for the Authority, and in some cases the City, to review and approve all notices prior to distribution to stakeholders;
- 11.3 Print and digital notices will provide a minimum of one week's notice to stakeholders unless otherwise approved by the Authority (which is given no less than 48 hours' notice), and unless the bylaw requirements dictates otherwise;
- 11.4 The Design-Builder will provide a Design-Builder designates name/email/phone number for the neighbourhood committee to voice concerns or ask questions, on notices and other project materials;
- 11.5 A 24-hour phone hotline number will be indicated (with the number posted in a prominent location on the site, on construction notices and signage, the project webpages, and all publicity material distributed to the local community) to which the Design-Builder responds to any phone calls received on the hotline within 1 hour. The hotline is intended for:
 - (a) Authority staff to notify the Design-Builder of any Construction related emergencies or complaints; and
 - (b) Neighbours and passers-by to contact the Design-Builder;
- 11.6 Notices will be customized to the audience and clearly outline in plain jargon-free language what, when, where construction is happening, the impacts expected to stakeholders and the actions required of them, the Design-Build contact person info, and a map;

- 11.7 The Design-Builder will post notices on the doors of local residential and commercial buildings and provide extra print copies for posting as requested by those building managers or for distribution to hospital areas, as required;
- 11.8 The Design-Builder will distribute print copies door-to-door to the surrounding neighbourhood when expected by the City;
- 11.9 Notices will be posted to the Authority's project webpages and may at times be posted to the City's website;
- 11.10 Digital versions of notices may be required for the hospital's in-house TV system, as directed by the Authority;
- 11.11 Print notices in the community newspaper(s) or its City Page may be required, as directed by the Authority or the City;
- 11.12 Street-side sandwich board signs, or in-hospital digital. TV notices may be required, as directed by the Authority or the City;
- 11.13 Social media posts may be required for Fraser Health's social platforms, as directed by the Authority;
- 11.14 The Design-Builder will maintain a subscriber and community contact list in conjunction with the Authority which will be used for distribution of construction notices and newsletters; and
- 11.15 For general inquiries the Design-Builder will be required to include all comments or queries raised by any external party and the response given within the Monthly Report to the Authority as required as a part of Schedule 4 [Management Systems and Plans].

12. MEDIA RELATIONS

Media relations will be led and managed by the Authority. The Design-Builder will provide material to support the Authority in this and will comply with the requirements herein.

Media engagement will be for the purpose of proactively promoting the Project or reacting to media inquiries related to the Project, incidents, or complaints.

The Design-Builder will not engage in any communications with, or give interviews to the media, trade publications or magazines without obtaining prior written approval from the Authority and with the timely opportunity for the Authority to vet drafts/final copies. All journalists' queries, requests for interviews or any other enquiries received by the Design-Builder will be directed to the Authority.

12.1 Media Briefings

If required to do so by the Authority, the Design-Builder will participate in or contribute to manage media briefings to be set up with key media to educate and inform them about

the Project, how it will be delivered, and the Work to be undertaken; or to inform them of actions taken to address any incidents or complaints.

12.2 <u>Generated Media Coverage</u>

In order to achieve supporting media coverage of the Work, media coverage will be generated, when appropriate, through a combination of news releases, features and issues/opinion articles, story pitches, videos or photos.

The Design-Builder will contribute to media material/content and provide information, original drafting and other material to support this, as required by the Authority.

12.3 Features

Opportunities for features will be identified annually or semi-annually by the Authority and these will form a component of the overall media programme.

The Design-Builder will participate in the development of story pitches and content for submission to appropriate journalists or in generating relevant material/content in order to achieve suitable and programme - supporting coverage.

12.4 News Announcements

The Design-Builder will contribute to the drafting and review of media releases to report important progress, achievements and milestones for the Project. This may include:

- (a) **Progress**: Reporting key developments and innovation in design, construction, technology, and construction/project milestones;
- (b) **Reassurance**: Reporting on progress and momentum to maintain awareness that the project will be delivered on time and in line with expectations;
- (c) **Information**: Reporting on information events or aspects of community engagement (as part of publicizing opportunities for people to engage and support local community relations activity); and
- (d) **Reactive**: Where appropriate (and in the event of any incident on site or public realm complaint), the Design-Builder will be required to support reporting/clarification of any such incident and assist the Authority in managing it.

12.5 Bylined Articles

Bylined articles are an effective way to enable people/companies/organizations to get undiluted messages across to target audiences and to position senior spokespersons. Bylined articles are expected to contribute to the overall media programme and assist with supporting coverage.

The Design-Builder will provide or contribute to bylined articles, under the direction of the Authority.

12.6 Ongoing Reactive Comment

In addition to the proactive media relations work outlined above, the Design-Builder will participate in, provide advice on and/or support the following:

- (a) Rapid reaction communications: when dealing with any incident on site or complaints relating to construction; and
- (b) Monitoring and being appraised of local media in order to assist the Authority in responding to opportunities and threats.

12.7 Media Monitoring

The Authority will be responsible for overall media monitoring. The Design-Builder will be apprised of any media reporting related to the Work and participate, with the Authority, in achieving a comprehensive understanding of media reporting. This is to enable the Design-Builder to:

- (a) Highlight opportunities/risks that it identifies to the Authority; and
- (b) Participate effectively in responding to/managing misreporting risk. The principle of the development of the New Surrey Hospital and BC Cancer Centre has been widely welcomed and sustaining trust, confidence and positivity between the redevelopment and the local community is a priority for the Authority.

13. INCIDENT AND COMPLAINT RESPONSE COMMUNICATIONS

The Authority's Incident and Complaint Response Communications Plan, included as Attachment 2 to this Appendix 1, is a guide for managing communications during a Project-related incident/crisis or a hospital incident that impacts or may impact employee/patient/public safety, the environment, public confidence in the Project or the ability of the Project to proceed; and also outlines protocols to respond to complaints.

The Authority's Incident and Complaint Response Communications Plan will serve as the basis for a jointly developed and agreed upon Plan for emergency, incident, or complaint response.

13.1 Before any Construction or demolition begins, the Design-Builder will review and provide their revisions and comments to the Incident and Complaint Response Communications Plan in consideration of its lead and supporting roles, any standards or definitions of its own levels of incident, and its contact representatives. The Design-Builder will work with the Authority to then come to a mutually agreed standard for the response to incidents, crisis and complaints.

- 13.2 The Authority will lead public/staff complaint response and emergency/incident communications relating to existing Authority employees, programs, services and facilities and Design-Builder performance.
- 13.3 The Design-Builder will lead emergency and incident communications related to Design-Build site health and safety.
- During the duration of the Work the Design-Builder will be responsible for sharing an upto-date copy of the agreed upon Incident and Complaint Response Communications Plan with its subcontractors before the subcontractors Work begins.
- 13.5 The Design-Builder and Authority will keep each other appraised of any changes to the names, emails, and cell phone numbers of their respective representatives who are to be contacted in the event of a construction-related emergency, incident or complaint.
- 13.6 The Design-Builder will be required to report summaries of incident, emergency and complaint responses within the Monthly Report to the Authority as per the reporting requirements outlined in Appendix 2 [Monthly Reporting Plan Requirements].

14. SIGNAGE

- 14.1 The Design-Builder will be responsible for all Construction site and road signage as per the Agreement and as required by the City of Surrey and its bylaw requirements which may also include digital signage.
- 14.2 The Design-Builder, at the request of the Authority, will provide street-side informational signage that provides updates on the Work, or site-specific signage for neighbouring facilities.
- 14.3 The Design-Builder, as required, will produce, install, and assume costs for a large sign on or near the Construction site showcasing an updated rendering of the building's design, with partner and government logos, the design of which will be agreed upon with the Authority.
- 14.4 The Design-Builder will provide opportunities and assistance to the Authority or its agents or partners for the installation of promotional fence banners, building wraps, or promotional signage.

15. CONSTRUCTION MILESTONE EVENTS, SITE VISITS AND TOURS

- 15.1 The Design-Builder will assist the Authority in organizing and delivering Construction milestone events and visits/tours of the Site for interested parties, including but not limited to the Authority or its agents/staff/physicians, PHSA/BC Cancer, Provincial/national/local politicians or City officers, or Surrey Hospitals Foundation and/or BC Cancer Foundation donors and campaign leaders, during the course of the construction works.
- 15.2 The Design-Builder. The Design-Builder will provide visual and written material and information about the Work, including samples, graphics, artwork, visualizations and other

relevant material, to the Authority to use in connection with events and visits and will provide representatives, equipment operators, and safety personnel to attend such events and visits where required to do so by the Authority.

- 15.3 The Authority will provide reasonable notice of such visits/tours wherever possible.
- 15.4 The Design-Builder will keep the Authority advised about areas of the Site that are unavailable for visits/tours as the Work progresses.

16. FILM AND PHOTOGRAPHIC RECORD

The Design-Builder will lead producing a film and photographic record of the Work for promotional use by the Authority.

- 16.1 From the commencement of the Work until Substantial Completion, the Design-Builder will provide a high quality colour webcam with Wi-Fi service with one or more webcams that are linked to the Authority's public webpages that provide frequently refreshed high quality images, and time-lapse videos showing the Construction activities. The Authority will suggest one or more locations reasonably required by the Design-Builder to install cameras and supporting infrastructure. The Design-Builder will be responsible for FIPPA requirements including approvals.
- 16.2 From the commencement of the Work until Substantial Completion, the Design-Builder will provide the Authority with high resolution drone video and image footage of the Construction site's progress and activities four times per year.
- 16.3 If required by the Authority, the Design-Builder will allow access to the Site for filming sessions which may be arranged by the Authority during the course of the Work (subject to the Design-Builder's health and safety policies). The Design-Builder will be made available for interview at the filming sessions if requested by the Authority, and if required provide safety personnel and equipment operators. The Authority will provide reasonable notice of such filming sessions wherever possible.

17. INDUSTRY AWARDS

The Authority intends to make submissions to appropriate industry awards in order to achieve suitable peer and industry recognition. These are likely to include architectural and building awards.

The Design-Builder will support the Authority in providing content for identified award submissions and work alongside the Authority and its appointed professional consultancy team to assist on awards entries.

The Design-Builder or its subcontractors and supply chain contractors will not undertake any submission for any industry award without prior agreement with the Authority, consistent with the rules of engagement related to the Design-Builder and in reference to the project for marketing purposes (above), and will provide drafts of submissions to the Authority for review and approval at least two weeks prior to submission deadlines.

18. USE OF THE PROJECT FOR MARKETING

Prior written approval must be obtained from the Authority before using the Work, or making any reference to the Authority (including its logo), its representatives or agents, or PHSA/BC Cancer, in any marketing or publicity material, or submissions for other work in response to proposal calls or submissions to third parties. The Authority must review and approve all uses of its logo.

This requirement applies to the Design-Builder and must be included in all the Design-Builder's subcontracts and supply chain contracts.

19. PERMITTING

The Design-Builder will be responsible for planning, managing and leading communications with the City and its stakeholders in connection with all permitting and utility servicing.

The Design-Builder will notify the Authority of planned consultation with the City and will consult with the Authority about the content and outcomes of the previous pre-application consultation to ensure that the planned consultation is coordinated and consistent with the previous consultation.

The Design-Builder will provide the Authority with copies of all correspondence issued to and received from the City. The Design-Builder will invite the Authority and its agents to attend all meetings arranged between the Design-Builder and the City, providing notice of not less than one week, and will take and furnish the Authority with minutes and other records of all meetings held.

END OF APPENDIX

SCHEDULE 4 –

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 2 MONTHLY REPORTING REQUIREMENTS

1. GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement Monthly Reporting Requirements in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

The Design-Builder will indicate updates to monthly component reports in a way that clearly communicates any changes.

If there are no changes to a previously reported component of the Monthly Report, the Design-Builder will submit a confirmation that there has been no material change that would impact the content or results of this component since the previous submission.

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1. PROJECT DESIGN STATUS

The Monthly Project Report will provide all supporting documentation, including, but not limited to, a narrative / summary of / about / addressing / describing / related to:

- (a) Design work completed over the past reporting period including:
 - (i) Key design issues,
 - (ii) Decisions that were critical to advancing the design development process, and
 - (iii) Design meetings completed with the Authority;
- (b) Anticipated design progression and design review meetings scheduled over the next two months;
- 1.2 Design Progress this Month
- 1.3 Design Progress Upcoming
- 1.4 Completed Design Review and Approval
- 1.5 Upcoming Design Review and Approval
- 1.6 Design Meetings (this Month and upcoming)

2. PROJECT CONSTRUCTION STATUS

- 2.1 Current Construction Status
 - (a) Construction work completed over the past reporting period along with a narrative detailing works to come in the following two months;
- 2.2 Upcoming Construction Activities
 - (a) Completed and upcoming monthly progress meetings and Site meetings, including meetings between the Design-Builder and/or its Sub-Contractors;

- 2.3 2-Week-Look-Ahead-Schedule
- 2.4 Requests for Information (attach updated RFI-Log)
- 2.5 Site Instructions (attach updated SI-Log)
- 2.6 Concerns and Opportunities

3. DESIGN AND CONSTRUCTION SCHEDULE STATUS

- 3.1 Changes to the Design and Construction Schedule (attach updated Design and Construction Schedule
- 3.2 Upcoming Milestones
- 3.3 The current Design and Construction Schedule including, but not limited to:
 - (a) The current status of the Work,
 - (b) Any deviations from scheduled performance, and
 - (c) Any changes in the Design-Builder's work plan as of the data date as per the requirements of Schedule 11 [Design and Construction Schedule];
- 3.4 Delay Claims (if any)

4. UPDATES TO MANAGEMENT PLANS

- 4.1 Communication Management Plan
 - (a) All communications related actives including, but not limited to:
 - (i) Construction notifications,
 - (ii) General enquiries,
 - (iii) External communications,
 - (iv) Notices of Delay Claims immediately upon receipt include status updates of these claims until their resolution; and
 - (b) Incident and complaint reporting as per the requirements of Schedule 4 [Management Systems and Plans] Appendix 1 [Communications Management Plan] Attachment 2 [Incident and Complaint Response Communications Plan];

- 4.2 Quality Management Plan:
 - (a) Covering all items completed in the reporting period that are relevant to the Quality Management Plan including:
 - (i) Quality Assurance Plan
 - (ii) Quality Control Plan
- 4.3 BIM Project Execution Plan
 - (a) Design clash coordination and identification of potential issues as per the requirements of the BIM Execution Plan introduced in Schedule 4 [Management Systems and Plans] Section 3.4;
- 4.4 Energy Management Plan
- 4.5 Infection Control Plan
 - (a) Infection Prevention and Control measures, confirming daily compliance with CSA Z317.13, and identification of any failure by the Design-Builder to comply;
- 4.6 Hospital Systems Integration Plan
- 4.7 Design and Construction Management Plan
 - (a) Construction Protocols
 - (b) Health and Safety Plan
 - (i) Occupational Health and Safety with a summary of injuries and/or incidents that have occurred on the Site over the past reporting period;
 - (c) Dust and Odour Control Plan
 - (i) Any incidents reports and any remediation measures related to:
 - (A) Dust control
 - (B) Noise control
 - (C) Noxious odours (including diesel exhaust)
 - (d) Furniture and Equipment Logistics Plan
 - (i) Planed Furniture and Equipment logistics integrated into the most up to date design;
 - (e) Construction Completion Plan

- (f) Settlement and Vibration Control Plan
 - (i) Any incidents reports and any remediation measures related to:
 - (A) Vibration monitoring
 - (B) Settlement monitoring
- (g) Traffic Management Plan
- (h) Waste Management Plan
- (i) Design Builder's Project Team
 - (i) Organization Chart (attach updated Org Chart)
 - (ii) Roles and Responsibilities (attach updated Roles & Responsibilities Chart)
- 4.8 Commissioning Plan
- 4.9 Deficiency Management Plan
 - (a) Any deficiencies identified and corrective actions taken to address such deficiencies during the period covered by such report;
 - (b) Deficiency management process in the reporting period and from start of construction until Substantial Completion or from start of Warranty period until expiry of the Warranty Period as applicable, as per the requirements set out in Schedule 4 [Management Systems and Plans] Appendix 11 [Deficiency Management Plan Requirements]
- 4.10 Other (as required or deemed necessary by the Design Builder)
- 4.11 Project Resources
 - (a) Onsite personnel counts with tally of the total number of person hours worked with a breakout summary of apprentice numbers and hours completed as per the requirements of Schedule 7 [Apprenticeship Policy];
- 5. RISK MANAGEMENT (INCL. RISK REGISTER)
- 5.1 Probability and Impacts (attach updated Risk Register)
 - (a) The Design-Builder will develop and keep up to date a risk register in compliance with industry best practice standards (the "Risk Register") and attach it to each Monthly Project Report. The intent is to:
 - (i) Record all risks and opportunities from the beginning;

- (ii) Incorporate key metrics to be monitored;
- (iii) Assess and evaluate probability and impacts;
- (iv) Identify key indicators and triggers;
- (v) Proactively identify mitigation strategies; and
- (vi) Develop risk responses.
- 5.2 Risk Monitoring and Control
- 5.3 Risk Mediation and Response Plans
- 5.4 Concerns and Opportunities
- 6. FINANCIAL & CHANGE CONTROL MANAGEMENT
- 6.1 Contract Status
- 6.2 Contract Documentation
- 6.3 Budget Control and Cost Control
 - (a) Overview
 - (b) Ongoing Issues
- 6.4 Change Orders (attach updated CO-Log)
 - (a) Change Order Summary
 - (b) Contemplated Change Orders
 - (c) Changes executed to date along with any Changes currently being priced or in development;
- 6.5 Invoicing
 - (a) Current Status
 - (b) Cash-flow

6.6 Concerns and Opportunities

7. SUBMITTALS

- 7.1 Shop Drawings Review (attach updated Submittal-Log)
- 7.2 Mock-Ups (attach updated Mock-Up Review Schedule)

8. LEED DOCUMENTATION

- 8.1 Current Status (attach updated LEED Score Card)
 - (a) All LEED credits that the design is incorporating and achieving along with:
 - (i) The most current LEED scorecard, and
 - (ii) A description of any impacts to the anticipated energy performance of the Facility as a result of design development;

9. PERMIT SUMMARY

- 9.1 Current Status (attach Log of all Permits)
 - (a) Permits in place as well as ones still to come with anticipated application/approval timelines;

- 9.2 Upcoming Permit Applications
- 9.3 Concerns and Opportunities

10. FACILITIES MANAGEMENT AND OPERATIONS INPUT

- 10.1 Input received from FMO
- 10.2 Upcoming Input required from FMO

11. SUBCONTRACTORS

- 11.1 Summary (attach List of all Sub-Contractors)
- 11.2 Concerns

12. COMPLIANCE REPORT

13. PHOTOGRAPHS

14. ATTACHMENTS TO EACH MONTHLY PROJECT REPORT

The following documents will be attached to each Monthly Project Report:

- (a) Letters of assurance from the Certified Registered Professional certifying that all design and construction is being constructed in compliance with the Reviewed Drawings and Specifications and the Design and Construction Specifications;
- (b) A list of all sub-trades retained as a part of the Project;
- (c) Photos summarizing onsite progress over the past month;
- (d) An updated Design and Construction Schedule in accordance with Schedule 11 [Design and Construction Schedule];
- (e) An updated Quality Management Plan in accordance with Schedule 4 [Management Systems and Plans] Appendix 3 [Quality Management Plan Requirements];
- (f) All supporting documentation including, but not limited to:
 - (i) Field reviews,
 - (ii) Inspection reports,
 - (iii) Photographs, and

- (iv) Other reports and material completed by all Professionals of record over the reporting period as per the requirements of, but not limited to:
 - (A) Schedule 1 [Statement of Requirements],
 - (B) Schedule 2 [Review Procedures], and
 - (C) Schedule 4 [Management Systems and Plans].

END OF APPENDIX 2

SCHEDULE 4 –

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 3

QUALITY MANAGEMENT PLAN

REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Quality Management Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

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1. QUALITY MANAGEMENT

1.1 General Content Requirements

- (a) The Design-Builder will develop and implement a quality management program (the "Quality Management Program") and inherent plans for the planning, development, and implementation measures required to complete all aspects of the Work pursuant to the quality management requirements in accordance with, but not limited to:
 - (i) Section 13 Quality Management
 - (ii) Schedule 1 [Statement of Requirements]
 - (iii) Schedule 2 [Review Procedure]
 - (iv) Schedule 4 [Management Systems and Plans]
 - (A) Section 2 Management Systems and Plans
 - (B) Section 3.3 Quality Management Plan Requirements
 - (C) Appendix 9 [Commissioning Plan Requirements]
 - (D) Appendix 10 [Asset Management Plan Requirements]
 - (E) Appendix 11 [Deficiency Management Plan Requirements]

1.2 Quality Management Approach

- (a) The Design-Builder will develop a quality management system (the "Quality Management System (QMS)") including an implementation plan that clearly outlines the approach, measures, and processes (the "Quality Management Plan (QMP)") to ensure that the specified quality standards for the Project are achieved.
- (b) The QMS consists of an organizational framework including, procedures, processes, and resources needed to implement the quality management plan including:
 - (i) **Quality Assurance (QA):** QA refers to documented processes to effectively achieve quality standards and performance specifications.
 - (ii) **Quality Control (QC):** QC refers to the actual monitoring and recording the results of executing quality management activities in order to assess performance to determine compliance with quality standards.

2. QUALITY MANAGEMENT PLAN (QMP)

2.1 Plan Quality Management¹

- (a) The processes the Design-Builder will undertake over the course of the Project, including:
 - (i) Identifying quality requirements and/or standards for the project and its deliverables
 - (ii) Documenting how the project will demonstrate compliance with quality requirements and/or standards.
- (b) The Design-Builder will plan, describe, implement, and comply with the following:
 - (i) Assemble experienced staff and Subcontractors capable of performing quality Work. Ensure that individuals involved with the QA Program will be held accountable for their Work;
 - (ii) Adhere to requirements set out in Schedule 1 [Statement of Requirements] and Schedule 4 [Management Systems and Plans].
 - (iii) Establish regular drawing and specification reviews, including written submission of comments, to ensure that the Design meets the established requirements and to reduce/eliminate errors;
 - (iv) Plan and conduct peer reviews and inspections to ensure errors and deficiencies are identified, corrected and recorded;
 - (v) Maintain an effective Shop Drawing verification and approval system;
 - (vi) Provide Mock-Ups or Sample Sections of repetitive Work to establish acceptable standard of workmanship;
 - (vii) Perform Work in accordance with industry standards in accordance with the Agreement. When required by the Specifications or by manufacturers' recommendations, have the manufacturer, supplier, or accredited agent, inspect the Work;
 - (viii) Maintain material ordering procedures that verify and confirm the materials purchased meet the specified standards;
 - (ix) Ensure adequate materials and assembly testing procedures are in place throughout the Project;
 - (x) Carry out on-site field reviews, review materials testing and inspector's reports, undertake required surveying, measuring, and verification of

¹ References from PMBOKGuide 6th Edition – Project Management Institute

- materials and construction methods to ensure conformance with the approved Design;
- (xi) Establish a system of inspection reports that demonstrate an active Site inspection routine by the Design-Builder's Consultants, Architect, Engineers, and agents.
- (xii) Verify materials and services to confirm that they are correct; Persons giving verification will be sufficiently qualified and will be independent from those who perform or install the materials or services.
- (xiii) Verify that the equipment which is to be used to perform the Work is appropriate and in good working order.
- (xiv) Commission systems as described in Schedule 1 [Statement of Requirements] Appendix L [Commissioning Roles and Responsibilities] and Schedule 4 [Management Systems and Plans] Appendix 9 [Commissioning Plan Requirements].
- (xv) Provide an inspection framework to ensure conformance of Work of one stage before the next stage.
- (xvi) Provide a means of tracking quality activities on Site including testing, inspections, and reviews.
- (xvii) Log inspection observations and test/inspection results and address deficiencies.
- (xviii) Provide record documents within the Monthly Report that professionals of record will:
 - (A) Provide a letter of assurance that is an attestation that the Work has been performed in accordance with the drawings and specifications approved by the Authority; and
 - (B) Maintain records as required by the Agreement.
- (xix) Include a Quality Report with every claim for payment and every Monthly Project Report.

2.2 Manage Quality²

(a) The processes of translating the quality management plan into executable quality activities to meet the Project quality standards

² References from PMBOKGuide 6th Edition – Project Management Institute

- (b) Quality Assurance Plan (QAP)
 - (i) Design Quality Assurance Plan
 - (A) Design quality objectives, verification metrics and validation activities;
 - (B) Key personnel and responsibilities;
 - (C) The Use of Virtual Reality to support the Design quality management process.
 - (ii) Construction Quality Assurance Plan
 - (A) Construction quality objectives, verification metrics and validation activities;
 - (B) Key personnel and responsibilities;
 - (C) The Use of Virtual Reality to support the Construction quality management process.

2.3 Control Quality

(a) QC measures will include engagement of Authority internal resources such as Clinical leads, FMO, IPC, IM/IT, Equipment Specialists, FHA Communications, and – where appropriate to confirm requirements or as directed by the Authority's Representative – additional consultants, contractors, agents, subject matter experts and stakeholders;

2.4 Implementation

- (a) The QA and QC procedures will be fully implemented by the Design-Builder. The Design-Builder will not commence any Construction until the QA and QC procedures applicable to that part of the Work have been developed and included in the approved QMP.
- (b) Implementation and inspection of processes, include:
 - (i) Procedures, and regulations related to Infection Control and Prevention;
 - (ii) Verification of qualifications, experience, and previous performance of system manufacturers and Subcontractors;
 - (iii) Where appropriate, certification of installers/applicators of materials or system manufacturers;

- (iv) Submission by material and system manufacturers of test reports to verify compliance with specified performance requirements or with performance requirements appropriate to the application;
- (v) Where appropriate, detailed design of systems and assemblies by Engineers, qualified in the applicable discipline and licensed to practice in the Province of British Columbia;
- (vi) Preparation and review by the Authority's Consultant and/or appropriate specialized Authority retained other consultants of Shop Drawings and assembly Drawings;
- (vii) Submission of Samples of materials, assemblies, and systems.
- (viii) Sampling and site or laboratory testing of specific materials, and/or assemblies;
- (ix) Construction of site Mock-Ups of specific assemblies and, where appropriate, testing of same to verify performance prior to Construction of the Work;
- (x) Where appropriate, site supervision of installation or application procedures by technical representatives of the material or system manufacturers;
- (xi) Post-installation certification by registered Engineers responsible for the detailed design of the systems or assemblies that all items have been installed in accordance with the Contract Documents;
- (xii) Commissioning Report as an important and integral element of the QC subsystem deliverables.

3. MONITORING AND EVALUATION: INSPECTIONS

3.1 Authority Engagement and Witnessing

- (a) The Authority will be consulted and actively engaged in witnessing, validating or inspecting Construction before it is covered up or concealed by subsequent work.
- (b) The QMP will include this process and allow sufficient time for notification and review by the Authority or the Authority's Consultant, subject matter experts, or agents.
- (c) Information relating to defects revealed by tests will be shared with the Authority and the Authority will be consulted on remedial plans.

3.2 Notice of Inspection

- (a) If any of the Work requires tests, inspections or approvals by this Agreement, or by the written instructions of the Authority, the Authority's Consultant, subject matter experts, agents, certifiers or by applicable Laws, the Design-Builder will give the Authority reasonable notice, as stated in Schedule 1 [Statement of Requirements]) of when such Work is ready for review and inspection by any AHJ.
- (b) Design-Builder will schedule required inspections and testing so as not to delay the Work.

3.3 Inspections and Testing

- (a) The Design-Builder will allow AHJ, the Authority, the Authority's Consultant, and testing agencies access to the Work.
- (b) If part of the Work is in preparation at locations other than the Site, allow access to such Work whenever it is in progress.
- (c) The Design-Builder will work with the Authority and obtain approval of the Testing Agency.
- (d) If the results of any testing or other aspect of the QMP or implementation of the QMP 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.

3.4 Independent Inspection Agency

(a) The Authority may require additional independent inspection and testing. The Design-Builder will coordinate and cooperate with Independent Testing Agencies to enable thorough and detailed testing of all systems and equipment.

4. PROCEDURES

4.1 Submission

- (a) A Quality Management Report will be included with:
 - (i) Each application for payment and
 - (ii) Each Monthly Project Report.

4.2 Samples

- (a) Submit Samples and materials required for testing, as identified in Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], and Schedule 4 [Management Systems and Plans].
 - (i) Submit with reasonable promptness and in an orderly sequence so as not to cause delay in Work.
 - (ii) Provide labour and facilities to obtain and handle Samples, Mock-Ups, and materials as agreed with the Authority's Representative on or off Site.
 - (iii) Provide sufficient space to store and cure test Samples.

4.3 Rejected Work

(a) Remove defective Work whether it is a result of poor workmanship or use of defective products or damage, and whether it is incorporated in the Work or not which has been rejected by the Authority or the Authority's Consultant.

4.4 Records

- (a) Maintain and provide to the Authority and the Authority's Consultant hard and electronic copies of the log of all QC performed as well as copies of all reports, tests, and inspections.
- (b) Maintain original signed inspection and test reports on Site and submit to the Authority at Project completion or as required.

4.5 Stop Work Procedure

- (a) The Design-Builder will identify procedures, processes, and requirements applicable in situations where Work needs to be stopped including:
 - (i) Reasons to stop Work,
 - (ii) Authority to stop Work, and
 - (iii) Responsibilities when Work needs to stop.

5. QUALITY MANAGEMENT ROLES AND RESPONSIBILITIES

5.1 Design-Builder's Quality Manager

(a) The Design-Builder will assign a dedicated manager (the "Design-Build Quality Manager") who will be responsible for developing and implementing the QMP for the Project.

(b) Qualifications:

- (i) At a minimum the Design-Build Quality Manager will bring demonstrated qualifications and experience in quality assurance measures (the "Quality Assurance (QA)") and quality control processes (the "Quality Control (QC)") including: CSA Z8000 Canadian Healthcare Standard, Infection Prevention and Control in Health Care Facility Design, CSA Z317.13 Infection Control during Construction, Renovation, and Maintenance of Healthcare Facilities, Testing and verification, deficiencies completion and project close-out.
- (ii) The Design-Build Quality Manager brings knowledge about best practice QA and QC philosophy and practices and is familiar with the process identified in the latest version of the Project Management Institute's PMBOK.

(c) Responsibilities:

- (i) Responsible for the day-to-day execution of the QMS.
- (ii) Work closely with the Authority and the Authority's Consultant and as directed by the Authority with FMO, IM/IT, IPC, Equipment Specialists, Clinical leads, subject matter experts, consultants, contractors, agents, suppliers, manufacturers, vendors, end users, stakeholders, Commissioning leads and other Project team members as required to ensure compliance that:
 - (A) Required quality standards for the Facility are met,
 - (B) Required quality standards for the Design, Construction, and Commissioning processes are met, and
- (iii) Develop and implement the QMP, including Design and Construction activities, testing, verification, adjusting, Commissioning, inspection, and close-out activities.
- (iv) Communicate with all Project team members as required and as directed by the Authority.
- (v) Work with trade contractors to explain the nature of the Quality Management System and their role and responsibilities and ensures the quality workmanship on and off site.
- (vi) Ensure compliance of Subcontractors, consultants, Commissioning Provider and agents with requirements of the QMP.
- (vii) Maintain quality records on Site including, but not limited to
 - (A) Inspections and tests reports;

- (B) Non-conformance reports;
- (C) Corrective actions reports and sign-offs; and
- (D) Other pertinent documentation.
- (viii) Facilitate quality inspections by the Authority's Representative and the Authority's Consultant and maintains quality records and reports on the quality process and status.
- (ix) Report to the Authority's Representative and the Authority's Consultant on quality process for the Project.

END OF APPENDIX 3

SCHEDULE 4 –

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 4

BUILDING INFORMATION MODELLING (BIM)

EXECUTION PLAN (BEP)

REQUIREMENTS

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1. BIM EXECUTION PLAN (BEP) REQUIREMENTS

1.1 General

In consultation with the Authority, the Design-Builder will develop and implement a BIM Execution Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

1.2 Content

- (a) The Authority's guidelines for Building Information Modelling (BIM) processes and documentation have been outlined within Schedule 1 [Statement of Requirements] Appendix 1U [BIM Requirements], including the provision of:
 - (i) A template BIM Execution Plan and
 - (ii) A template Information Delivery Plan as attachments.
- (b) Upon Agreement, the Design-Builder will:
 - (i) Refine, if necessary, update, and confirm the contents of the BIM Execution Plan and its accompanying documentation; and
 - (ii) Collate and share the Task Information Delivery Plans to establish the Design-Builder's Master Information Delivery Plan.

END OF APPENDIX

SCHEDULE 4 –

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 5 ENERGY MANAGEMENT PLAN

REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement an Energy Management Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans], Schedule 5 [Energy Guarantee] and the content outlined in the Table of Contents below.

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1. THE ENERGY MANAGEMENT PLAN REQUIREMENTS

1.1 Content of the Energy Management Plan

- (a) The content and format of the Energy Management Plan will meet the requirements outlined in Schedule 1 [Statement of Requirements] and Schedule 5 [Energy Guarantees], and will include two main components:
 - (i) Energy Modelling Summary Report [Section 1.2 of this Appendix]
 - (ii) Measurement and Verification Plan [Schedule 5 Appendix 2]

1.2 Content and Format of the Energy Modelling Summary Report

- (a) The Design-Builder will produce an Energy Modelling Summary Report that will:
- (b) For each submission include the following:
 - (i) A statement by the Independent Energy Consultant confirming that they have reviewed the submission and noting any concerns regarding the accuracy of the submission.
 - (ii) Energy Report [Section 1.2 (C)];
 - (iii) Energy Guarantee Compliance Declaration [Section 1.2 (D)];
 - (iv) Energy and Cost Summary [Section 1.2 (E)];
 - (v) Energy End-Use Summary, [Section 1.2 (F)] for all climate scenarios modelled per Table A1 [Energy Management Plan Submittal Schedule] [Schedule 5];
 - (vi) Performance Statement Data Summary [Section 1.2 (G)]; and
 - (vii) Model Input Summary, [Section 1.2 (H)]. Energy Model digital file(s) and any workaround calculations if applicable.
- (c) Energy Report to include, at a minimum:
 - (i) Executive Summary.
 - (ii) Statement of software used and version. Statement of climate scenario(s) modeled.
 - (iii) Using ASHRAE 90.1 definition of conditioned, semi-conditioned and unconditioned spaces, provide summary of all gross floor areas in the Facility, including Modeled Floor Area (MFA) and other areas broken down into:

- (A) Total MFA (m2):
 - A. Conditioned Area (m2).
 - B. Semi-Conditioned Area (m2).
 - C. Unconditioned Area (m2).
- (iv) Areas excluded from MFA: Parking Areas (m2).
- (v) Written narrative describing the modeled building systems and how they are designed the minimize energy consumption; including
 - (A) thermal characteristics of the building envelope including major wall elements, windows, and roof;
 - (B) architectural features impacting energy including orientation, shading, location of large window areas;
 - (C) mechanical building systems;
 - (D) electrical building systems;
 - (E) heat recovery features;
 - (F) controls system approach and system sequence of operation;
 - (G) process loads and any strategies to minimize them;
 - (H) description of how the design responds to Schedule 5 Appendix 1 Section 4.1 (Recommendations of the Energy Manager), including an explanation of the extent to which heat recovery and low exergy design approaches have been explored and incorporated into the design and where not incorporated, provide a rationale; and
 - (I) any other significant building feature or strategy that impacts energy.
- (vi) Describe how the Facility will comply with municipal approval requirements related to applicable energy code(s).
- (vii) Provide description of modeling methodologies including description of Energy Centre modeling, any workarounds or post-processing of results made outside of software.
- (viii) A narrative describing any deviations from or simplifications of the inputs and assumptions that are outlined in this Appendix and the rationale explaining why in the Design-Builder's opinion it is necessary to use different assumptions, for review and approval by the Authority; the

- Authority reserves the right to instruct the Design-Builder to revise these assumptions and these revisions will be included in an updated submission.
- (ix) Provide simplified results output summary reports from the energy simulation software, and more detailed outputs upon request.
- (x) At the discretion of the Authority, hourly output variables of the simulation may be requested for submittal by the Design-Builder in electronic format.
- (d) Energy Guarantee Compliance Declaration
 - (i) Provide written confirmation that the Facility achieves the Energy Target, stating in the declaration: the total achieved energy consumption (MWh) achieved along with the statement date.
- (e) Energy and Cost Summary
 - (i) Provide a summary for each climate scenario modeled, per Table B1 [Energy and Cost Summary] of Schedule 5.
- (f) Energy End-Use Monthly Summary
 - (i) Provide a summary for each climate scenario modeled, per Table B2 [Energy End- Use Monthly Summary] of Schedule 5.
- (g) Performance Statement Data Summary
 - (i) A completed Performance Statement Data Summary, per Table B3 [Performance Statement Data Summary] of Schedule 5.
- (h) Modelling Input Summary Table
 - (i) A completed Modelling Input Summary Table per Table B4 [Modelling Input Summary Template] of Schedule 5, or greater level of detail, to document key energy modeling inputs and assumptions.

1.3 Requirements for Updating the Energy Management Plan

The Energy Management Plan will be updated at each phase of Submittals as described in the Statement of Requirements to align with the Design and Construction of the Facility. At application for Substantial Completion of the Facility, an updated Energy Management Plan with updated energy models and reports, per Schedule 5 Appendix 1 Section 2, will be submitted indicating that in the Design-Builder's opinion, the Energy Target will be achieved by the actual building performance.

END OF APPENDIX

SCHEDULE 4 –

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 6

INFECTION PREVENTION AND CONTROL PLAN REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Infection Prevention and Control Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

1. OBJECTIVES

1.1 Infection Prevention and Control Plan Requirements

The Infection Prevention and Control (IPC) Plan will comply with the following requirements:

- (a) Ensure the procurement of subcontractors and contract documents include the requirements for IPC;
- (b) Ensure the construction sites and buildings remain safe from IPC issues and concerns throughout the Project life cycle;
- (c) Ensure any areas that may be affected by the Work have been investigated and proper IPC precautions are being adhered to;
- (d) Ensure IPC risk assessments are performed and an IPC Plan and an Infection Control Risk Assessment (ICRA) are submitted for all buildings that will be built, renovated or demolished;
- (e) Ensure the safety of the public and workers throughout the Project life cycle;
- (f) Ensure the safety of Patients, Staff, contractors, volunteers, and public after the Facility has been turned over to the Authority; and
- (g) Ensure ICRA are performed and guidelines are followed for Construction after the Facility has been turned over to the Authority.

1.2 Standards

Comply with current standards and requirements including but not limited to:

- (a) CSA Z317.13 Infection Control during construction, renovation and maintenance of health care facilities.
- (b) CSA Z317.2 Special requirements for heating, ventilation and air-conditioning (HVAC) systems in health care facilities,
- (c) CSA Z317.1 Special requirements in plumbing installations in health care facilities,
- (d) CSA Z8000 Canadian Health care facilities, FHA Water Damage and Mould Assessment/Remediation Plan,
- (e) SMACNA Duct Cleanliness for New Construction,
- (f) NADCA General Specifications for the Cleaning and Restoration of Commercial Heating, Ventilating and Air Conditioning Systems,
- (g) Current Authority standards and guidelines, and

(h) Other standards and guidelines as applicable to the Work.

2. INFECTION PREVENTION AND CONTROL PLAN – CONTENT

2.1 General

The IPC Plan will be based on the outline attached in Section 2.2 below and include, at a minimum, the following:

- (a) Identification of key stakeholders consistent with the Communication Plan;
- (b) A standing Work-specific, Multidisciplinary Team (MDT) established in collaboration with the Authority;
- (c) Tactics to ensure the MDT is kept informed and involved in any IPC discussions or decisions during the Design and Construction phases;
- (d) Roles and responsibilities for all parties involved in the IPC management of the Project (allocated in collaboration with the Authority);
- (e) A communication and reporting hierarchy and means and method of communication;
- (f) Tactics to ensure the identified key stakeholders are engaged in design meetings in accordance with the user consultation protocol described in Schedule 2 [Review Procedure];
- (g) Tactics to ensure IPC is taken into account and addressed for the selection of Furniture and Equipment as set out in F&E Logistics Plan in Appendix 8D;
- (h) Tactics to ensure IPC is taken into account for the selection of Hospital Technology Systems as set out in Hospital Technology Systems Integration Plan Schedule 4 [Management Systems and Plans] Section 3.7 and in Appendix 7 [Hospital Technology Systems Integration Plan];
- (i) Risk identification including risk factors, applicable population groups, sources and factors of contamination/infection and mitigation strategies;
- (j) Dust control and mitigation measures including but not limited to:
 - (i) Soil extraction;
 - (ii) Intake into HVAC systems;
 - (iii) Intake into windows;
 - (iv) In proximity to public spaces and pathways; and
 - (v) Effect on adjacent communities;

- (k) Mitigation and management measures for:
 - (i) Mechanical;
 - (ii) Ventilation;
 - (iii) Shipping and storage of equipment and materials including proper handling;
 - (iv) Site maintenance, protection and management;
- (l) Daily cleaning requirements;
- (m) Requirements for:
 - (i) Final Construction Cleaning;
 - (ii) All duct cleaning and testing in accordance with NADCA General Specifications for the Cleaning and Restoration of Commercial Heating, Ventilating and Air Conditioning Systems and CSA Z317.2.
 - (iii) Terminal Cleaning;
- (n) Education for Site workers:
 - (i) Develop and implement IPC preventative measures education for all workers on site with required CSA Z317.13 (2 day) course training implemented for all Design-Builder site supervisors as per the Authority requirements; and
 - (ii) Education material to be coordinated with the Authority.
- (o) IPC preventive measures checklist template for construction in completed areas and for construction in existing buildings:
 - (i) Final Construction Cleaning checklist template to be approved by the Authority;
 - (ii) Check lists will be completed and submitted to the Authority as part of the reporting protocol; and
 - (iii) IPC preventive measures incident report will be documented and submitted to the Authority for review and approval that:
 - (A) Identify root causes and corrective actions; and
 - (B) Provide corrective actions to prevent further occurrences.
- (p) Use the templates provided in CSA Z317.13 when carrying out Work in existing buildings and submit; and

(q) Document and track IPC issues/ non-compliance concerns, corrective actions, and outcomes/ disciplinary actions in an issues log.

2. Infection Prevention and Control Plan - Outline

The Design-Builder will develop the Infection Prevention and Control Plan (IPC) following the below attached draft Table of Contents / outline.

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- 1.2 Purpose of the plan
- 1.3 Objectives
- 1.4 Scope

2. STANDARDS, CRITERIA, ADDITIONAL REFERENCES

- 2.1 References to CSA Standards
- 2.2 Additional References

3. DEFINITIONS AND ABBREVIATIONS

4. KEY RESPONSIBILITIES

- 4.1 Constructor/prime contractor/design builder
- 4.2 Constructor project representatives
- 4.3 Construction/project managers, site superintendent(s)
- 4.4 Plan administrator
- 4.5 Industrial hygienist (infection control specialist)
- 4.6 Health care facility staff (medical/nursing)
- 4.7 Health care facility Facilities, maintenance, and operations (FM&O)
- 4.8 Site joint health and safety committee
- 4.9 Assistant superintendents/foremen
- 4.10 Safety personnel (e.g., CSO, project safety coordinator)
- 4.11 Workers
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6.2	Risk groups
6.3	Contamination/infection sources
6.4	Contamination factors
6.5	Infection control risk assessments (preventive measures analysis)
7.	RISK PREVENTION MEASURES AND CONTROLS
7.1	Proper material handling
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7.3 Additional/relate

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- 8.2 Weekly
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- Air monitoring 8.4

9. WORKER EDUCATION AND TRAINING

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 - Minimum requirements CSA Group Standard training (2 days) (a)
 - Site orientation/training (b)

- (c) Modified site orientation/training
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- 10.1 Subcontractors
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- 11. PLAN MAINTENANCE AND REVIEW
- 11.1 Overview
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- 11.3 Primary review requirements
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- 12. DOCUMENT AND RECORD MAINTENANCE
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- 13.1 Workers, site personnel
- 13.2 Subcontractors
- 13.3 Authority/MDT Members

END OF APPENDIX

SCHEDULE 4 –

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 7

HOSPITAL TECHNOLOGY SYSTEMS INTEGRATION PLAN REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Hospital Technology Systems Integration Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

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1. DEVELOPMENT OF THE HOSPITAL SYSTEMS INTEGRATION PLAN

1.1 Objective

- (a) The objectives of the Hospital Technology Systems Plan are as follows:
 - (i) Ensure hospital technology systems provided by the Design-Builder are designed, procured, installed, integrated and tested in a manner that results in a smooth transition to the Authority at Substantial Completion;
 - (ii) Ensure hospital technology systems provided by the Design-Builder can be supported by the Authority; and
 - (iii) Ensure key users and key stakeholders of the hospital technology systems are engaged throughout the process and areas of sole and shared responsibilities are known in advance to achieve the objectives stated herein

1.2 Content

- (a) The Hospital Technology Systems Integration Plan will include, but not be limited to:
 - (i) **Plan and Approach:** How the Design-Builder will achieve the Hospital Technology System Plan objectives as outlined in above;
 - (ii) **Master Technology Index:** A list and summary description of hospital technology systems provided by the Design-Builder;
 - (iii) **Roles and Responsibilities:** A list of key roles and responsibilities for each hospital technology system;
 - (iv) **Milestones:** Based on the Master Technology Index: A list of the key milestones and the dates for decisions and key activities related to each system;
 - (v) Considerations and Assumptions: For each listed system, key considerations and assumptions related to approvals, procurement, delivery, installation, Authority interface and supply of key components, system set-up including the Authority's engagement, programming, testing and commissioning; Also identify priority systems and systems required for occupancy permits;
 - (vi) **Integration Points:** Approach to system integration and how the Design-Builder will ensure systems are effectively integrated with each other and with Authority systems; Also identify those systems that don't need to be integrated;

- (vii) **Interfaces:** Identification of all required interfaces between systems (including medical equipment) in matrix format, including description of the interfaces and categorizing the interfaces into types according to the responsible parties that are involved for that interface (Design-Builder, Authority, vendor or others as appropriate);
- (viii) **Integration Design Details:** Integration Engine narrative, integration diagrams and sequence of operations for each system as a stand-alone and integrated system;
- (ix) **Stakeholder Management:** Stakeholder management methodology to ensure that interfaces with multiple stakeholders are resolved in a timely manner and with clear, sensible, achievable lines of responsibility;
- (x) **Systems Compatibility:** Approach to maintaining compatibility of systems across the Surrey Hospital and Cancer Centre Site and with other Authority sites and systems beyond as applicable;
- (xi) **Upgrades and Interconnectivity:** Approach to ensuring systems can be easily upgraded and integrated with legacy or interconnected systems and do not preclude future technologies and standards;
- (xii) Critical Dependencies and Schedule: Identification of any critical dependencies on the Authority for all interfaces, including a Schedule showing requirements of the Authority and timelines by which these activities are required to be completed. Note that, if the Design-Builder needs to connect to the Authority network, the Design-Builder will need to initiate the Solution Assessment Process as described in the Schedule 1 [Statement of Requirements] Section 7.8.2;
- (xiii) **Server and Network Requirements:** Server and other network requirements for application hosting and system connectivity;
- (xiv) **Missing or Unclear information:** Provide a list of any apparent missing information or lack of clarity about responsibility between the Authority, Design-Builder or vendor; and
- (xv) **Systems Sustainment:** The Design-Builder will support the Authority on ways and means to maintain the systems, including at the Authority's request to obtain service contract proposals from equipment providers.

END OF APPENDIX

SCHEDULE 4 –

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 8 DESIGN AND CONSTRUCTION MANAGEMENT PLAN REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Design and Construction Management Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

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<u>Design and Construction Management Plan – Proposed Outline:</u>

1. PROJECT OVERVIEW

- 1.1 Objectives
- 1.2 Critical Success Factors
- 1.3 Patient-centred Design
- 1.4 Virtual-First Approach
- 1.5 Integration
- 1.6 Efficiency
- 1.7 Adaptability
- 1.8 Flexibility
- 1.9 Resiliency
- 1.10 Sustainability
- 1.11 Evidence-based
- 1.12 Integration
- 1.13 Standardization
- 2. DESIGN-BUILDER'S PROJECT TEAM
- 2.1 Project Governance, Roles & Responsibilities
 - (a) Include the Design-Builder's Project Team members' reporting relationships, roles and responsibilities. Refer to Attachment 1 [Design-Build Project Team Org Chart, Roles and Responsibilities]
- 3. SCOPE AND REQUIREMENTS MANAGEMENT
- 3.1 Scope Statement
- 3.2 Scope Validation and Control
- 3.3 Assumptions and Constraints
- 3.4 Change Management Plan

4. DESIGN MANAGEMENT PLAN

- 4.1 Design Development
- 4.2 Construction Documentation
- 4.3 **Building Permit Application**
- 4.4 Milestone Submissions
- 4.5 Shop Drawings and Samples
- 4.6 Mock-ups
- 4.7 Virtual Reality
- 4.8 Hand-over and Training
- 4.9 Record Documentation
 - (a) Facilities Maintenance and Operation Manuals
- 5. CONSTRUCTION MANAGEMENT PLAN
- 5.1 Design and Construction Management Plan Appendices
 - (a) Requirements for plans that will be attached to the Design-Builder's Design and Construction Management Plan as appendices are set out in, but not limited to, Schedule 1 [Statement of Requirements] and Schedule 4 [Management Systems & Plans] Appendices 8A-8I.
 - (b) The Design-Builder will include cover pages and placeholders in the Design and Construction Management Plan for information that is not yet available and describe when this information will be available and included.

6. EQUIPMENT MANAGEMENT PLAN

- 6.1 Infrastructure Equipment
 - (a) Purchasing
 - (b) Installation
 - (c) Commissioning
- 6.2 Medical and Imaging Equipment
 - (a) Purchasing

- (b) Installation
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- 6.3 Long Lead Items
- 7. STAKEHOLDER MANAGEMENT
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- 10. DESIGN AND CONSTRUCTION SCHEDULE
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- 10.2 Key Activities and Milestones
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- 11. COST MANAGEMENT
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- 12.1 Risk Analysis and Response
- 12.2 Opportunities
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- 13. MEETINGS
- 13.1 Project Progress Meetings
- 13.2 Topic Meetings
- 13.3 Site Tours
- 13.4 Meeting Records

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REFER TO APPENDIX 8A-I

SCHEDULE 4 –

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 8

ATTACHMENT 1

DESIGN-BUILDER'S PROJECT TEAM ORG CHART,
ROLES & RESPONSIBILITIES REQUIREMENTS

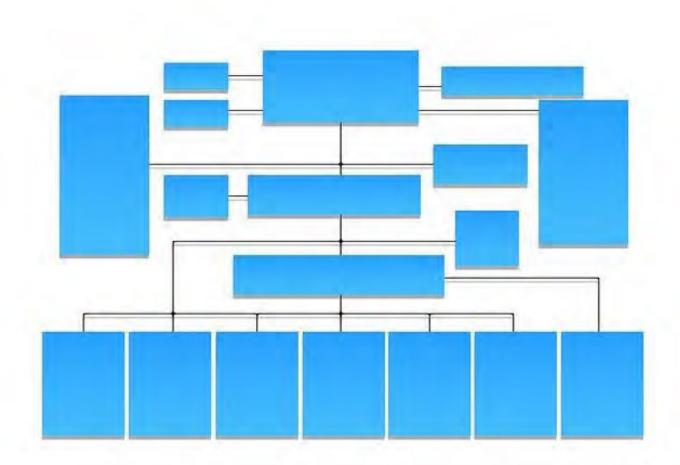
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1. DESIGN-BUILDER'S PROJECT TEAM – ORGANIZATIONAL CHART

1.1 Reporting Relationships

(a) Provide an overview of the Design-Builder's Project Team' governance and reporting relationships including Key Individuals, leads, and subject matter experts for each discipline.



2. ROLES AND RESPONSIBILITIES CHART

2.1 Roles and Responsibilities

- (a) The Design-Builder will provide the following information for each Key Individual, discipline leader, and subject matter experts:
 - (i) Project Team Member's Name
 - (ii) Project Team Member's Credentials (e.g. P.Eng, PMP, etc.)
 - (iii) Company Name
 - (iv) Contact information, phone and email address
 - (v) Key accountabilities and responsibilities
 - (vi) For all Key Individuals indicate the percentage (%) of time per week (based on a 40 hour work week) the Key Individual will be involved in the Project during the Design, Construction, Commissioning and Close-out Phases
 - (vii) For each Key Project Lead indicate whether the individual will be involved in the Project during Design, Construction, Commissioning, and Close-out Phases (Use the checkbox: √)

Name	Company's Name	Email	Phone	Credentials/ Qualifications	Responsibilities	Part/Full Time	Resource Allocation (Place % or ✓ as applicable)			
							Design	Construction	Commissioning	Close-out
Key Individuals							%	%	%	%
1) Design-Build Director										
2) Design-Build Design Manager										
Design-Build Construction Manager										
4) Design-Build Facilities Maintenance Lead										

Name	Company's Name	Email	Phone	Credentials/ Qualifications	Responsibilities	Part/Full Time	Resource Allocation (Place % or ✓ as applicable)			
							Design	Construction	Commissioning	Close-out
5) Lead Architect										
6) Design-Build Mechanical Engineering Lead										
7) Design-Build Electrical Engineering Lead										
8) Design-Build Commissioning Provider (CxP)										
9) Design-Build IM/IT Lead										
10) Design-Build Equipment Lead										
11) Design-Build Quality Manager										
12) Design-Build Clinical Planning Lead										
13) Design-Build Cancer Design Lead										
Key Project Leads							✓	✓	✓	✓
14) Design-Build Superintendent										
15) Design-Build Project Manager										
16) Design-Build Interior Design Lead										
17) Design-Build Radiation Protection Advisor(s)										
18) Design-Build Energy Consultant										
19) Design-Build Energy Modeller										
20) Design-Build Deficiency Manager										
21) Design-Build Structural Engineering Lead										
22) Design-Build Civil Engineering Lead										

Name	Company's Name	Email	Phone	Credentials/ Qualifications	Responsibilities	Part/Full Time	Resource Allocation (Place % or ✓ as applicable)			
							Design	Construction	Commissioning	Close-out
23) Design-Build Landscape Design Lead										
24) Design-Build Traffic Management Lead										
25) Design-Build Geotechnical Consultant										
26) Design-Build Environmental Consultant										
27) Design-Build Envelope Consultant										
28) Design-Build Elevator Consultant										
29) Design-Build Acoustic Design Lead										
30) Design Build Building Code Consultant										
31) Design-Build Security Lead										
32) Design-Build Communication Lead										
33) Design-Build Surveyor Design-Build Lead Estimator										
34) Design-Build Procurement Lead										
35) Design-Build Document Control Lead										
36) Design-Build Health and Safety Coordinator										
37) Design-Build Fire Safety Consultant										
Other										

2.2 Key Individuals Roles

(a) Refer to Schedule 9 [Key Individuals] for qualification requirements.

2.3 Key Project Lead Roles

- (a) The Design-Build Project Manager is Certified Project Management Professional.
- (b) The Design-Build Interior Design Lead is knowledgeable in Evidence-based Design as described in Schedule 1 [Statement of Requirements].
- (c) The Design-Build Radiation Protection Advisor is included in Schedule 1 [Statement of Requirements] Section 6.13.2.1(2)(e).
- (d) The Design-Build Energy Modeller is included in Schedule 1 [Statement of Requirements].
- (e) The Design-Build Deficiency Manager is included in, but not limited to, Schedule 4 [Management Systems and Plans] Appendix 11 [Deficiency Management Plan Requirements].
- (f) The Design-Build Geotechnical Consultant, Electrical, Structural, and Civil Engineering Leads are all Professional Engineers registered with the Engineers and Geoscientist of British Columbia (EGBC).
- (g) For all other roles, refer to Schedule 1 [Statement of Requirements] and Appendices for qualification requirements.

3. REPORTING REQUIREMENTS

The Design-Builder will complete the information available at the time of a submission and update as required throughout the course of the Project until Total Completion.

SCHEDULE 4 -

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 8A CONSTRUCTION PROTOCOLS REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement Construction Protocols in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

Nothing in this Appendix 8A [Construction Protocols Requirements] of Schedule 4 [Management Systems and Plans] limits the requirements of Section 28 [Access to and Use of Site] of the Agreement.

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1. HOURS OF CONSTRUCTION WORKING

1.1 Core Working Hours

- (a) The Core Working Hours on the Site and delivery activities, aligned with the City of Surrey's Construction Noise Bylaw, the Surrey Noise Control Bylaw 704T, the Surrey Building Bylaw No. 17850 and the City's Good Neighbour Protocol, and typically take place as follows:
 - (i) 07:00 20:00 hours Monday to Friday; and/or
 - (ii) 09:00 18:00 hours Saturday.

1.2 Night Work

(a) During Periods of necessary night working the work activity will be chosen, sited and enclosed such that noise levels at the nearest properties do not exceed the levels as per the requirements of the above listed bylaws and Schedule 1 [Statement of Requirements] Section 2.5.15.8 Security and Safety.

2. EXISTING CONDITIONS

2.1 General

(a) If the Design-Builder discovers that surface or subsurface conditions at the Site differ materially from those indicated in this Agreement, the Design-Builder will promptly notify the Authority and advise of a reasonable assumption of probable conditions when determined.

2.2 Risk and Impact Assessment

- (a) The Design-Builder will undertake an assessment of risks and impacts of all existing conditions that may potentially be damaged or otherwise adversely impacted, directly or indirectly, by the performance of the Work (the "Risk and Impact Assessment of Existing Conditions"). The Risk and Impact Assessment of Existing Conditions will be included and submitted as part of the Construction Management Plan and at least fourteen (14) calendar days prior to starting any Work.
- (b) Define the area (the "Zone of Influence") that may potentially be damaged or otherwise adversely impacted, directly or indirectly, by the performance, provision and carrying out of the Work.
- (c) Undertake a detailed pre-construction survey assessment including a photograph record (with location identifier and date for each photo) and video recording with date.

- (d) Identify potential damage and other adverse impacts arising from Construction of the Work, including but not limited to the following:
 - (i) Deformations resulting from static or vibratory loads;
 - (ii) Cracking of slabs, pavements, walls, utilities or other facilities;
 - (iii) Modification of surface or underground drainage patterns; and
 - (iv) Any other potential conflicts arising from existing conditions.
- (e) Identify the instrumentation that the Design-Builder proposes to utilize to monitor the existing conditions during Construction.
- (f) Where damage or other adverse impact is unavoidable despite the Design-Builder's compliance with good industry practice, the Design-Builder must:
 - (i) Identify the nature and extent of such unavoidable damage or other adverse impacts; and
 - (ii) Describe the Design-Builder's proposed steps and measures to repair the damage or mitigate other adverse impacts to such existing conditions to a state equivalent to that which existed prior to the damage or other adverse impact.
- (g) Work with the Authority's Communications team to coordinate with other properties that should be included in the detailed pre-construction survey assessment.

2.3 Monitoring

- (a) The Design-Builder will regularly monitor the condition of the Site and of property on and adjoining the Site throughout the Construction period. Such monitoring will cover all pertinent features and property including, but not limited to, buildings, structures, roads, walls, fences, slopes, sewers, culverts, landscaped areas, etc.
- (b) The Design-Builder will immediately notify the Authority if any deterioration in condition is detected.

3. EXISTING UTILITIES AND SERVICES

3.1 General

(a) Drawings and specifications indicate underground utilities of which the Authority is aware, but such indication shall not be a warranty that all utilities which may be underground have been disclosed nor that the locations of such utilities have been accurately defined.

- (b) The provision of the records of a survey of existing conditions shall in no way limit or restrict the Design-Builder's responsibility to exercise proper care to prevent damage to all property within or adjacent to the Site, whether all such property is covered by the survey or not.
- (c) Before commencing any Work, the Design-Builder will undertake thorough investigations to establish the locations and extent of utilities and service lines and notify the Authority of findings.
- (d) It is the Design-Builder's responsibility to obtain all information required for sewer, gas, water, telephone, fiber optic, electrical, traffic signal systems, and any other utilities.
- (e) Establish and maintain direct and continuous contact with the operators of any utilities which may interfere with or be affected by the Work:
 - (i) Co-operate with utility providers at all times and in all places of Work.
 - (ii) Keep the Authority informed of all communications with the utility companies and authorities.
- (f) Whenever working in the vicinity of existing utilities or services:
 - (i) Locate such utilities and expose those that may be affected by the Work, using hand labour as required.
 - (ii) Assess the possible impact of its operations on all utilities that may be affected by its operations, and protect, divert, temporarily support, or relocate, or otherwise appropriately treat such utilities and services to ensure that they are preserved.
 - (iii) Immediately report any damage to utilities to the Authority and to the utility company or AHJ affected, and promptly undertake such remedial measures as are necessary at no additional cost to the Authority

3.2 Protection of Utilities and Services

- (a) The provision of the records of a survey of existing conditions shall in no way limit or restrict the Design-Builder's responsibility to exercise proper care to prevent damage to all property within or adjacent to the Work Site, whether all such property is covered by the survey or not.
- (b) The Design-Builder will exercise due diligence to avoid damaging utilities of any kind and confirm the location of, and protect:
 - (i) All existing offsite utilities and services that may be affected by the Construction; and

- (ii) All existing onsite utilities and services that may be affected by the Construction.
- (c) As part of the Construction Management Plan the Design-Builder will implement quality management measures and processes to ensure no utilities and services will be damaged.
- (d) The Design-Builder is responsible for all damage or destruction of utilities and services caused in connection with the Work.

3.3 Relocation of Utilities and Services

- (a) The Design-Builder will relocate any existing utilities and services that conflict with Construction
- (b) Give the Authority and the utility companies written notice at least thirty (30) calendar days in advance of any construction or any activities which may interfere with the operation of such utilities.

3.4 Interruption of Utilities and Services

- (a) All existing utilities and services must remain in operation at all times. Interruptions will be permitted only:
 - (i) If there is no reasonable alternative to the interruption AND
 - (ii) If the interruption has been approved, through a Work Plan, in advance by the Authority and neighbouring property owners that may be affected by the interruption.
- (b) When breaking into or connecting to existing services or utilities, execute the Work at times directed by the local AHJ and with minimum of disturbance to businesses, residential properties, pedestrians and vehicular traffic.
- (c) Ensure that piping, sewer lines, conduit, and similar items, belonging to others, are protected in a manner approved by the utility provider and AHJ during Construction activity.

4. SITE PROTOCOLS AND REQUIREMENTS

4.1 Access to adjacent properties

(a) The Design-Builder will perform all Construction activities without blocking or disrupting vehicle or pedestrian access to adjacent properties, except as may be permitted pursuant to a Work Plan approved by the Authority.

4.2 Parking Plan and Laydown Areas

- (a) Before commencing the Construction, the Design-Builder will prepare and implement a strategy for parking and laydown areas (the "Parking and Laydown Areas Plan") in accordance with Schedule 1 [Statement of Requirements] and this Appendix.
- (b) The Design-Builder will take reasonable steps to ensure that the Design-Builder's and the Design-Builder's Subcontractor's workers are encouraged to use transit to get to the Site and Construction workers and suppliers do not use for vehicle parking any street within 1 km of the Site.

4.3 Smoking

- (a) The Design-Builder will take reasonable steps to ensure that the Design-Builder's and the Design-Builder's Subcontractor's Construction workers and suppliers will not smoke:
 - (i) On any portion of the Site,
 - (ii) On parking areas,
 - (iii) On laydown areas, and
 - (iv) On or in close proximity to adjacent properties.

4.4 Work Plan

- (a) Before commencing the Construction, the Design-Builder will prepare and implement, in co-operation with the Authority, a Work Plan approved by the Authority at least two (2) weeks prior to the scheduled Work. The Design-Builder will not proceed with any Work:
 - (i) Without the Authority's prior written approval of the Work Plan in accordance with this Appendix; Such approval will not to be unreasonably withheld or delayed; or
 - (ii) Advance written notice from the Authority confirming that a Work Plan is not required.

4.5 Health and Safety

(a) Before commencing the Construction, the Design-Builder will prepare and implement a Health and Safety Plan in accordance with Schedule 1 [Statement of Requirements] and Schedule 4 [Management Systems and Plans] Appendix 8B [Safety] Section 1 Health and Safety Plan.

4.6 Emergency Response and Incident Management

(a) Before commencing the Construction, the Design-Builder will prepare and implement an Emergency Response and Incident Management Plan in accordance with Schedule 1 [Statement of Requirements] and Schedule 4 [Management Systems and Plans] Appendix 8B [Safety] Section 2 Emergency Response and Incident Management Plan.

4.7 Fire Safety

(a) Before commencing the Construction, the Design-Builder will prepare and implement a Construction Fire Safety Plan in accordance with Schedule 1 [Statement of Requirements] and Schedule 4 [Management Systems and Plans] Appendix 8B [Safety] Section 3 Fire Safety Plan.

4.8 Traffic Management

(a) Before commencing the Construction, the Design-Builder will prepare and implement a Construction Traffic Management Plan in accordance with Schedule 1 [Statement of Requirements] and Schedule 4 [Management Systems and Plans] Appendix 8G [Traffic Management Plan].

4.9 Waste Management

(a) Before commencing the Construction, the Design-Builder will prepare and implement a Construction Fire Safety Plan in accordance with Schedule 1 [Statement of Requirements] and Schedule 4 [Management Systems and Plans] Appendix 8H [Waste Management Plan].

4.10 Workmanship

- (a) Workmanship shall be the best quality, executed by workers experienced and skilled in the respective duties for which they are employed.
- (b) Do not employ or allow on Site any unfit person or anyone unskilled in his/her required duties.

4.11 Tolerances

- (a) The Design-Builder will monitor fabrication and installation tolerance control of products to produce acceptable Work.
 - (i) Do not permit tolerances to accumulate beyond effective or practical limits.
 - (ii) Comply with manufacturers' tolerances.
 - (iii) In case of conflict between manufacturers' tolerances and the contract documents, request clarification before proceeding.

- (b) Adjust products to appropriate dimensions.
- (c) Position and confirm tolerance acceptability, before permanently securing products in place.

4.12 Off-site Construction

(a) If the Design-Builder performs any Construction outside of the Land, the Design-Builder will comply with all policies and other requirements of the Authority and Authorities Having Jurisdiction (AHJ).

5. TEMPORARY WORKS

5.1 Temporary Structures and Facilities

- (a) The Design-Builder will comply with all rules and regulations governing the activity of contractors at the New Surrey Hospital and BC Cancer Centre as provided by the Authority.
- (b) During the Construction Period, 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.
- (c) The Design-Builder will provide and pay for all services necessary for the Design-Builder's Construction use, including power, heating, cooling, ventilation, telephone, data, Wi-Fi, water, sewage, staff kitchen facilities, etc.

5.2 Installation and Removal

- (a) The Design-Builder will provide temporary controls in order to execute Work expeditiously.
- (b) The Design-Builder will remove from the Site all such work after use.

6. SITE ENCLOSURE

6.1 General

- (a) The Design-Builder will protect public and work forces on Site and will install, maintain and remove all Site enclosures necessary to safely execute the Work.
- (b) As part of the Construction Management Plan, the Design-Builder will develop and implement a plan to securely enclose the Site (the "Site Enclosure Plan") which will include a hoarding plan and identify all other Site enclosure measures such as fencing, barricades and barriers.

(c) The Site Enclosure Plan will, if applicable, show the different layouts and changes of fencing, screens, hoardings, barricades and barriers to address the needs of Construction phases.

6.2 Fencing

- (a) The Design-Builder will erect temporary Site enclosure(s) when and as required to support completion of the Work in alignment with safety and security requirements.
- (b) Fencing will be designed and erected to minimize the visual impact into the Site.
- (c) The Design-Builder will provide lockable vehicle entrance gate(s) as required and at least one (1) lockable pedestrian door coordinated with the Work, ongoing Construction activities, and the Design-Builder's Traffic Management Plan.
- (d) The Design-Builder will equip gate(s) and door(s) with locks and keys with restricted availability.
- (e) The Design-Builder will provide temporary Construction fencing around the entire perimeter of the Site and any laydown areas as follows:
 - (i) Fencing will either chain link or tamper proof modular fence anchored into the ground or modular-style steel fencing, of welded and interlocked panels, 10ft in length and 10ft high.
 - (ii) Fence panels will be stable and free standing with in-laid fully welded wire mesh that is deemed non-climbable.
 - (iii) The fencing will be installed and maintained true to line and plumb and all panels will be secured to the ground on uneven terrain, slopes, or areas prone to high winds.
 - (iv) Provide solid steel lock pins on bases and tops between each panel.
 - (v) Provide High-Viz yellow base shields to metal base stands where these extend onto the public sidewalks, bicycle paths, or roads.
 - (vi) Provide pedestrian and vehicular access gates as required by site operations.
 - (vii) The Design-Builder will maintain and protect the fencing from damage by equipment and Construction procedures.

6.3 Privacy Screen

- (a) Privacy screens will be designed and erected to minimize the visual impact into the Site.
- (b) The Design-Builder will use privacy screening of knit polyethylene, 60% density mesh scrim attached with grommets to the fence panels.

- (c) The Authority may elect to use the privacy screening or parts thereof, e.g., at prominent locations facing public areas, to showcase the New Surrey Hospital and BC Cancer Centre or other Authority or foundation initiatives. In this case:
 - (i) The Authority will design the privacy screening in these selected are
 - (ii) The Design-Builder will coordinate with the Authority to incorporate the design into the Design-Builder's privacy screening.
 - (iii) The Design-Builder will order and purchase the screens, coordinate with manufacturers, suppliers and vendors, pick up or coordinate deliveries, and install the privacy screen.
 - (iv) The Authority will reimburse the Design-Builder for the designated privacy screening in these selected areas.
 - (v) Once the Project is completed, the Design-Builder will take down the screen and hand over the screen that includes the Authority's design to the Authority.
- (d) No other signs, advertisements, or designs are permitted on any other part of the privacy screening.

6.4 Hoarding, Barricades and Barriers

- (a) Where required, the Design-Builder will construct Site hoarding, barricades, and barriers in accordance with:
 - (i) Schedule 1 [Statement of Requirements],
 - (ii) Schedule 4 [Management Systems and Plans] Appendix 8B [Safety],
 - (iii) Part 8 of the BC Building Code for vehicular areas barriers, and
 - (iv) Other applicable good practices and safety requirements, AHJ regulations, and industry standards and guidelines.
- (b) Barriers for Work outside the Site will be visible both day and night.
- (c) The Design-Builder will build walkways in close proximity to the Site with overhead protection where overhead Work is being performed.
- (d) The Design-Builder is responsible to get permits from the AHJ if required for placement of barriers.
- (e) Before setting up barricades in pedestrian areas the Design-Builder will notify the Authority's Consultant at least 48 hours in advance.
- (f) The Design-Builder will construct the hoarding, barricades and barriers as follows:

- (i) Construct of sound new lumber and plywood.
- (ii) Construct to withstand the local design wind pressures defined in the National Building Code of Canada.
- (iii) The overall height of all hoardings will be a minimum 2.4 metres (8 feet), unless specified otherwise elsewhere in this Agreement or required by Site conditions or the Design-Builder's means and methods.
- (iv) Hoarding will be designed and erected to minimize the visual impact into the Site.
- (v) The public side of the enclosure:
 - (A) Will be constructed in such a manner as to present a smooth unbroken surface painted white with one coat of exterior alkyd primer and one coat of exterior alkyd paint, and
 - (B) Will be maintained in clean state of good repair condition.
- (g) The Authority may elect to use the hoarding or parts thereof, e.g., at prominent locations facing public areas, to showcase the New Surrey Hospital and BC Cancer Centre or other Ministry, foundations or Authority initiatives. In this case:
 - (i) The Authority will design a large sign that shall be mounted onto the public side of the hoarding in a location identified by the Authority.
 - (ii) The Design-Builder will coordinate with the Authority to incorporate the sign into the hoarding.
 - (iii) The Design-Builder will order and purchase the sign, coordinate with the manufacturers, suppliers and vendors, pick up or coordinate the delivery and install the sign.
 - (iv) Once the Project is completed, the Design-Builder will take down the sign and hand it over to the Authority.
 - (v) The Authority will reimburse the Design-Builder for extra cost related to this special sign in this designated area.
- (h) No other signs, advertisements, or designs are permitted on any other part of hoardings, barriers and barricades, unless required for wayfinding or safety.
- (i) Guardrails
- (j) The Design-Builder will provide secure, rigid guard rails and barricades around deep excavations, open shafts, open stair wells, open edges of floors and roofs.

- (k) Provide guards rails and barriers as required by the construction documents, WorkSafeBC standards, and AHJ requirements.
- (l) The Design-Builder will maintain and protect the hoarding, barricades and barriers from damage by equipment and Construction procedures.

7. SCAFFOLDING, CRANES, HOISTS AND CHUTES

7.1 General

- (a) The Design-Builder will provide and maintain any scaffolding, ramps, ladders, swing staging, platforms, temporary stairs, etc. as required to safely complete the Work.
- (b) The Design-Builder will provide Professional Engineering design and services as required by temporary Work and those required to support the Design-Builder's means and methods.
- (c) Scaffolding, cranes, hoists, and chutes that are no longer required will be promptly removed.

7.2 Scaffolding

- (a) The Design-Builder will construct and maintain scaffolding in a rigid, secure, and safe manner and in conformance with WorkSafeBC requirements.
- (b) Scaffolding will be erected independent of walls.

7.3 Cranes

- (a) If cranes are required, the Design-Builder will work with Professional Engineers to develop crane layouts (the "Crane Layout Plan") that ensure safe crane operations.
- (b) The Design-Builder will work with registered Professional Civil and Structural Engineers and subject matter experts as required to ensure:
 - (i) The safety of the crane's design and structure, and
 - (ii) That cranes are securely positioned on grounds and surfaces appropriate for crane use and loads;
- (c) The Design-Builder will ensure that crane operators are qualified.

7.4 Hoists

(a) The Design-Builder will provide, operate, and maintain any hoists and/or cranes required for moving of workers, materials and equipment.

(b) Any hoists and/or cranes will be operated by a qualified operator only.

7.5 Chutes

- (a) Open free-fall chutes are not permitted.
- (b) Closed chutes will terminate into appropriate containers with lids.

8. SITE COMPOUNDS

8.1 Facilities

- (a) The Design-Builder will provide and maintain all welfare facilities, office, storage, and other spaces required to complete the Work in compliance with WorkSafeBC and AHJ regulations.
- (b) All Design-Builder site compounds will be contained within the Site. No Design-Builder site compounds will be permitted outside the Site.

8.2 Storage

- (a) Materials will be stored within designated areas which may include the use of steel containers.
- (b) Areas will be clearly marked and managed to prevent them becoming overfilled and ensured that the areas are suitable for the materials stored.
- (c) Within each work area, weather-tight and secure compounds will be established for the storage of materials.
- (d) Storage areas will not be established in ecologically or environmentally sensitive areas.
- (e) Hazardous materials such as fuel will be stored within secure compound areas to prevent spillage, theft or malicious damage.
- (f) Unless specified otherwise, materials for removal become the Design-Builder's property.
- (g) The Design-Builder will provide, maintain, clean and keep in orderly condition, lockable weatherproof sheds for storage of tools, equipment and materials.

8.3 Authority Site Trailer

(a) At a minimum, the Design-Builder will provide and maintain in clean condition during the progress of the Work, an adequately lighted, heated, air conditioned and ventilated office space for the Authority as set out in Schedule 1 [Statement of Requirements] Section 2.7.6 [Authority Site Trailer] and in compliance with WorkSafeBC and AHJ requirements.

- (b) FF&E will be provided by the Authority, except for 10 lockers dedicated to the Authority that will be provided by the Design-Builder.
- (c) The Design-Builder will provide one (1) Meeting Room for the Authority inclusive of sufficient power outlets and Wi-Fi. The Meeting Room will be dedicated to the Authority, lockable, and adequate in size and dimensions to accommodate, at a minimum, eight (8) people, a table that fits eight (8) people, 10 chairs, a wall mounted television (minimum 40") with video-conferencing capability, and a telephone with teleconference capability.
- (d) The Design-Builder will provide four (4) Offices for the Authority inclusive of sufficient power outlets and Wi-Fi. The Offices will be dedicated to the Authority, lockable and adequate in size and dimensions to accommodate, at a minimum, one (1) person with two (2) guests, a 4'x3' desk, task-lighting, three (3) chairs, and a filing cabinet
- (e) The Design-Builder will provide a Kitchenette for the Authority that is adequate in size, counter length, and number of power outlets to accommodate a fridge, microwave, toaster, coffee machine, and a water kettle.
- (f) The Design-Builder will provide a clearly marked and fully stocked first-aid case in a readily available location.
- (g) The Design-Builder will maintain the Authority's Office Trailer in clean condition and regularly remove waste.

8.4 Sanitary Facilities

- (a) The Design-Builder will provide sanitary facilities for the work force and the Project team in accordance with governing regulations and ordinances.
- (b) The Design-Builder will keep the sanitary facilities clean and fully stocked with the necessary supplies at all times and periodically will remove wastes.

9. TEMPORARY UTILITIES

9.1 Site Lighting

- (a) Temporary lighting to support Construction work will generally be limited to the Core Working Hours.
- (b) Site lighting will be configured so as to minimize its effect on the local community:
 - (i) Site lighting will be kept to a reasonable minimum and chosen to limit intrusion onto other properties and sky glow, whenever possible, except where it is essential for health and safety or security reasons; and

(ii) Temporary Work lighting will not impact neighbours and will be restricted or screened so that no overspill light extends beyond the property lines.

9.2 Temporary Lighting

- (a) The Design-Builder will provide, maintain and pay for:
 - (i) A general level of temporary lighting for Construction as prescribed by WorkSafeBC;
 - (ii) Additional temporary lighting equipment required for the proper execution of specific tasks;
 - (iii) Branch wiring from the power source to distribution boxes with lighting conductors, pigtails, and lamps, as required; and
 - (iv) Temporary lighting to interior and exterior staging and storage areas, after dark, for security purposes.

9.3 Temporary Communication Infrastructure

(a) The Design-Builder will provide, maintain and pay for temporary communication facilities necessary for its own use and that of its Subcontractors and the Authority.

9.4 Temporary Power

- (a) The Design-Builder will provide a source for and pay the costs of temporary power during Construction for all construction activities including temporary lighting and power required for operating special equipment and tools.
- (b) The Design-Builder will provide metering as required by the local utility and pay utility charges at prevailing rates until Substantial Performance.
- (c) The Design-Builder will connect to delivery points in accordance with the Canadian Electrical Code and to the satisfaction of the local AHJ and will provide all equipment and temporary lines to bring power services to the point of use.

9.5 Temporary Heating and Ventilation

- (a) The Design-Builder will provide temporary heating and ventilation required during the Construction period to properly execute the Work. Temporary heating and ventilation are required to:
 - (i) Facilitate progress of Work;
 - (ii) Execute specific tasks;
 - (iii) Protect Work and products against dampness and cold;

- (iv) Prevent moisture condensation on surfaces;
- (v) Provide ambient temperatures and humidity levels for storage, installation and curing of materials; and
- (vi) Maintain temperatures of minimum 10 degrees C in areas where Construction is in progress.
- (b) The Design-Builder will provide strict supervision of operation of temporary heating and ventilating equipment to:
 - (i) Conform with applicable codes and standards;
 - (ii) Enforce safe practices;
 - (iii) Prevent abuse of services;
 - (iv) Prevent damage to finishes; and
 - (v) Vent direct-fired combustion units to outside.
- (c) The Design-Builder will be responsible for:
 - (i) All associated utility costs until Substantial Performance;
 - (ii) Damage to Work due to failure in providing adequate heat, ventilation, and protection during construction;
 - (iii) Temporary Heating including attendance, maintenance, and fuel;
 - (iv) Ventilation of heated areas and keeping the Facility and any temporary facility free of exhaust or combustion gases;
 - (v) Adequate ventilation to meet health regulations for safe a working environment;
 - (vi) Ventilation of enclosed areas as required to cure materials, to dissipate humidity and to prevent accumulation of dust, fumes, vapours, or gases without the use of the permanent building systems;
 - (vii) Temporary fan units as required to maintain clean air for Construction operations;
 - (viii) Compliance with the indoor air quality WorkSafeBC requirements;
 - (ix) Local exhaust ventilation to prevent harmful accumulation of hazardous substances into atmosphere of occupied areas;

- (x) Disposal of exhaust materials in a manner that will not result in harmful exposure to persons;
- (xi) Ventilation of storage spaces containing hazardous or volatile materials;
- (xii) Ventilation of temporary sanitary facilities; and
- (xiii) Continued operation of ventilation and exhaust system for time identified by the Authority after cessation of Work process to assure removal of harmful contaminants.
- (d) Construction heaters used inside the building must be vented to the outside or be flameless type.
- (e) Solid fuel salamanders are not permitted.

9.6 Temporary Water Supply

- (a) The Design-Builder will provide continuous supply of potable water for Construction use and arrange for connection with an appropriate utility company and pay all costs for installation, maintenance, and removal.
- (b) The Design-Builder will pay for utility charges at prevailing rates until Substantial Performance and provide:
 - (i) All equipment and temporary lines to bring water to the point of use;
 - (ii) Flexible hoses as required;
 - (iii) Temporary water connection to fire hydrants to meet the AHJ requirements.

9.7 Temporary Drainage

- (a) The Design-Builder will provide temporary drainage and pumping facilities to keep excavations and the Site free from standing water.
- (b) The excavations should be completed, when possible, in the dry season and be limited in time.
- (c) The Design-Builder will not pump water containing suspended materials into waterways, sewer, or drainage systems and control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local AHJ requirements.
- (d) The Design-Builder will develop and implement sediment and erosion control measures (the "Sediment and Erosion Control Plan") for the Site that conforms to the requirements of the AHJ, Authority and industry best practice. The Sediment and Erosion Control Plan will be part of and submitted with the Construction Management Plan.

10. SITE HOUSEKEEPING

10.1 Housekeeping Strategy

- (a) The Design-Builder will develop and manage a comprehensive Site "housekeeping" strategy (the "Housekeeping Plan") that at a minimum ensures:
 - (i) Wheel cleaning facilities will be used to clean vehicles leaving the site;
 - (ii) All materials transported to and from the Site are conveyed by suitable vehicles using adequate wind shielding measures such as sheeting; and
 - (iii) The Site will be regularly cleaned and maintained in an orderly fashion to prevent the unnecessary build-up of dust, debris and rubbish to be cleared and removed at regular intervals throughout the Construction work week including but not limited to:
 - (A) Clean up during the shift;
 - (B) Day-to-day cleanup;
 - (C) Regular waste disposal;
 - (D) Daily removal of unused materials; and
 - (E) Regular inspection to ensure cleanup is complete.

10.2 Pest Control

(a) The Design-Builder will develop a pest control management plan (the "Pest Control Plan") to be implemented during Construction. The Pest Management Plan will be included in the Construction Management Plan.

11. CLEANING

11.1 Progressive Cleaning

- (a) The Design-Builder will clean-up Work areas as Work progresses and maintain the Site in tidy condition free from accumulation of waste products and debris.
- (b) The Design-Builder will ensure that all work forces on Site will remove tools and waste materials on completion of the Work and leave the Work area in clean and orderly condition.
- (c) At all times the Site will be suitable for occupancy by:
 - (i) AHJ representatives,
 - (ii) The Authority's Consultant,

- (iii) The Authority including members of the Authority's FMO, IPC, IM/IT and Equipment planning team,
- (iv) As well as for the work of other contractors, consultants, agents, vendors and suppliers engaged by the Authority.

11.2 Road Cleaning

- (a) The Design-Builder will comply with requirements of acts, regulations, and bylaws in force for regulation of traffic or use of roadways upon or over which it is necessary to carry out Work or haul materials or equipment.
- (b) The Design-Builder will keep roads, parking lots and traffic laneways clean to the satisfaction of the AHJ and the Authority.
- (c) The Design-Builder will immediately remove dirt or debris caused by the Work including dirt or debris deposited by delivery vehicles or by transportation of demolished or surplus materials from the site.

11.3 Removal of Waste and Debris

- (a) Waste materials will be removed from the Site at regularly scheduled times in compliance with the Design-Builder's Waste Management Plan as set out in Appendix 8H [Waste Management Plan].
- (b) The Design-Builder will make arrangements with and obtain permits from the AHJ for disposal of waste and debris.
- (c) Waste materials will not be burned or buried on Site.
- (d) Containers:
 - (i) Provide on-Site steel framed containers for collection of waste materials and debris.
 - (ii) Provide and use clearly marked, separated bins for recycling.
 - (iii) Store volatile waste in covered metal containers and remove from premises at end of each working day.

11.4 Snow Removal

(a) The Design-Builder will clear snow and ice from the area of Construction and pile snow in designated areas on the Site or remove it from the Site. Snow from the Site will not be moved onto neighbouring properties or public areas such as pedestrian walkways or roads.

11.5 Interior Areas

- (a) Clean interior areas prior to start of finish Work and maintain areas free of dust and other contaminants during finishing operations.
- (b) Provide adequate ventilation during use of volatile or noxious substances. Use of enclosure ventilation systems is not permitted for this purpose.
- (c) Use only cleaning materials recommended by manufacturer of the surface to be cleaned, and as recommended by the cleaning material manufacturer.
- (d) Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly painted surfaces nor contaminate building systems.
- (e) Refer also to requirements set out in Schedule 4 [Management Systems and Plans] Appendix 6 [Infection Prevention and Control].

11.6 Cleaning Materials

- (a) Use products which minimize environmental impact, including indoor air quality.
- (b) Avoid Volatile Organic Compounds (VOC's) or give preference to Low VOC's whenever possible.
- (c) Obtain recommendations for cleaning:
 - (i) New materials affected: from manufacturers of product installed.
 - (ii) New Facility affected areas: from the Authority's Custodial Services and the Authority's Infection Prevention and Control team (IPC).

11.7 Cleaning prior to Acceptance

- (a) In addition to cleaning requirements set out in:
 - (i) Schedule 4 [Management Systems and Plans],
 - (ii) Appendix 8E [Construction Completion Plan Requirements] Section 1.3 Cleanliness.
 - (iii) Appendix 6 [Infection Prevention and Control Plan Requirements], and
 - (iv) Appendix 8H [Waste Management Plan Requirements]; and
- (b) Prior to:
 - (i) Applying for Substantial Completion of the Work,
 - (ii) Occupancy of specified areas, and

- (iii) Vacating any part of the Site;
- (c) The Design-Builder will:
 - (i) Remove surplus products, tools, construction machinery and equipment not required for performance of the remaining Work;
 - (ii) Remove waste products and debris including those caused by:
 - (A) The Design-Builder including its Subcontractors, trades, suppliers, installers, and other contractors engaged by the Design-Builder,
 - (B) The Authority including the Authority's FMO and IM/IT team, and
 - (C) Any contractor, trade, supplier or installer engaged by the Authority;
 - (iii) Clean and polish surface finishes as recommended by the manufacturer;
 - (iv) Clean and polish glass, mirrors, hardware, wall tile, stainless steel, chrome, porcelain enamel, baked enamel, plastic laminate, mechanical and electrical fixtures, etc.;
 - (v) Execute final cleaning of products prior to the final Project assessment;
 - (vi) Replace broken, scratched or disfigured glass;
 - (vii) Clean lighting reflectors, lenses, and other lighting surfaces;
 - (viii) Clean interior and exterior glass, surfaces exposed to view;
 - (ix) Remove stains, spots, marks, graffiti and dirt from decorative work, electrical and mechanical fixtures, furniture fitments, walls, floors, etc.;
 - (x) Polish transparent and glossy surfaces;
 - (xi) Wax, seal, shampoo, or otherwise prepare floor finishes as specified or as recommended by the manufacturer;
 - (xii) Vacuum clean and dust building interiors, behind grilles, louvres, screens, etc.;
 - (xiii) Inspect finishes, fitments and equipment and ensure compliance with specified workmanship and operation;
 - (xiv) Exterior:
 - (A) Clean and sweep roofs, gutters, areaways, down-spouts, drainage components, and sunken wells;

- (B) Ensure that drains and rainwater leaders are clean;
- (C) Ensure that all Site storm drainage and sub-drainage systems and ditches are clean and free flowing and that no areas of ponded water are left on the Site;
- (D) Remove waste and surplus materials, rubbish, temporary fencing and hoarding, and Construction facilities from the Site;
- (E) Broom clean and wash exterior walks, steps and surfaces and rake clean other surfaces of grounds;
- (F) Remove dirt and other disfiguration from exterior surfaces;
- (G) Sweep and wash clean paved areas;
- (xv) Remove debris and surplus materials from crawl areas and other accessible concealed spaces;
- (xvi) Fixtures, Furniture and Equipment:
 - (A) Remove temporary labels, stains, and foreign substances;
 - (B) Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and the material being cleaned;
 - (C) Replace filters of operating equipment if not in a new condition at the time of handover;

12. POLLUTION CONTROL PLAN

12.1 Pollution Prevention Measures

- (a) The Design-Builder will take all precautions so that no transmission of Contaminants and noxious fumes interfere or contaminate the Site or surrounding roads, pedestrian walkways (including temporary walkways provided by the Design-Builder during construction) and neighbourhood.
- (b) The Design-Builder will be responsible for the control and management of pollutants on the Site during Construction and will implement pollution prevention measures (the "Pollution Control Plan") as follows:
 - (i) Establish a pollution risk register identifying potential hazards, and include suitable provisions for mitigation;
 - (ii) Protecting areas where contamination may occur, such as vehicle maintenance and refuelling areas;

- (iii) Provide onsite provision for the control of identified pollutants as well as protection of personnel and members of the public;
- (iv) Provide pollution control packs within vulnerable areas to allow immediate reaction to any pollution incident;
- (v) Develop incident control procedures in conjunction with the requirements of the AHJ and local emergency services;
- (vi) Provide pollution control briefing as part of the Site induction briefing; and
- (vii) Ensure no contaminating materials are deposited onto the Site, adjacent properties, laydown areas, parking areas, or public streets and pedestrian walkways.

13. SECURITY

13.1 Security Personnel

- (a) Security within the Site and the perimeter of the Site will be the responsibility of the Design-Builder 24 hours a day, 7 days a week.
- (b) The Design-Builder's security personnel will ensure that the Site is fully secure to limit any potential for intrusion into the Site.
- (c) The Design-Builder will provide adequate security personnel for after-hours Site security.
- (d) In case of Construction during operation of the Facility (or parts of the Facility), the Design-Builder will be responsible for security of the Construction area and will be fully coordinated with the Authority's Integrated Protection Services team (IPS).

13.2 Site Enclosures

(a) Refer to Section 6 [Site Enclosure] of this Appendix for additional requirements related to hoarding, fencing, privacy screens, barriers, barricades, and gates.

14. PROTECTION OF PROPERTY

14.1 Damage Caused by Construction

(a) The Design-Builder will ensure that the Authority's property, KPU's property, neighbouring property, and any other third party's property is protected from damage caused by the Construction, including buildings, roadways, sidewalks, drainage systems, utility services, landscaping, surfaces, services and infrastructure; and

- (b) The Design-Builder will promptly repair of any damage to property caused by the Design-Builder (or the Design-Builder's consultants, contractors, suppliers, installers, trades, agents, and any other third party engaged by the Design-Builder) in undertaking the Construction, including any damage caused by site settlement or ground vibration.
- (c) The Design-Builder is responsible for any damage incurred due to Construction, including damages caused by the Design-Builder Subcontractors and other trades.

15. PROTECTION OF INSTALLED WORK

15.1 General

- (a) The Design-Builder is responsible for damage incurred due to lack of or improper protection.
- (b) The Design-Builder will provide protection of installed Work including Equipment, as required and at a minimum as follows:
 - (i) Provide special protection where specified in individual specifications;
 - (ii) Provide temporary and removable protection for installed Products;
 - (iii) Control activity in the immediate Work area to prevent damage;
 - (iv) Provide protective coverings at walls, projections, jambs, sills, and soffits of openings, and around all exposed steel Work; and
 - (v) Protect finished floors, stairs and other surfaces from traffic, dirt, wear, damage or movement of heavy objects by covering with secured in place durable sheet materials.

15.2 Waterproofed and Roofed Surfaces

- (a) The Design-Builder will protect and prohibit traffic or storage upon waterproofed or roofed surfaces.
- (b) If traffic or activity is necessary, the Design-Builder will obtain recommendations for protection from the waterproofing or roofing material manufacturer.

15.3 Weather Enclosures

- (a) The Design-Builder will provide weather enclosures, as required for:
 - (i) Unfinished door and window openings,
 - (ii) Tops of shafts, and
 - (iii) Other openings in floors and roofs, as well as

(iv) Enclosed building interior Work area for temporary heat.

16. WORK PERFORMED POST-SUBSTANTIAL COMPLETION

16.1 Work Plan

- (i) For all Work that the Design-Builder will be performing in the Facility after Substantial Completion and prior to Total Completion being achieved will require a Work Plan to be submitted to the Authority; and
- (ii) No Work will be executed prior to approval from the Authority.

16.2 Coordination

- (i) All activities will be fully coordinated and scheduled with the Authority as per the requirements of Schedule 11 [Design and Construction Schedule];
- (ii) The Design-Builder will not enter or disrupt any operational area except as permitted by the Authority;
- (iii) The Design-Builder will not disrupt any infrastructure serving operational areas unless permitted by the Authority; and
- (iv) Where required by Clinical operation, the Design-Builder will complete Work after hours or during time frames directed by the Authority.

17. SIGNAGE

17.1 General

- (a) No signs, symbols, logos, or other advertising, promotional, or public relation material will be used on the Site without prior approval of the Authority.
- (b) The Design-Builder will maintain throughout the course of Construction until Total Completion all signs including signs supplied by the Authority, Ministry or foundations.
- (c) The Design-Builder will erect, remove and dispose or return to the Authority, at the Authority's direction, of all signs before Total Completion of the Work.
- (d) For additional requirements refer also to:
 - (i) Schedule 1 [Statement of Requirements] Appendix 1R [Wayfinding Standards];
 - (ii) Schedule 4 [Management Systems and Plans] Section 3.1 Communications Plan (ii); and

(iii) Schedule 4 [Management Systems and Plans] Appendix 1A [Communications Strategy].

17.2 Project Identification

- (a) The Authority will identify timing, location, and size of promotional signage that creates maximum awareness of the Project.
- (b) The promotional signage will include a high-resolution rendering of the building design, and appropriate logos from the Design-Builder and its partners, the government, Foundations, and Authority.
- (c) The Design-Builder may erect signage during Construction to identify the Design-Builder and its Subcontractors and other project-specific signage provided such signs are acceptable to the Authority, acting reasonably.
 - (i) Unless agreed with the Authority otherwise, the overall size of identification signs will not exceed 2 metres high by 3 metres wide.
 - (ii) The exact location, method of mounting and mounting height of the signs will be subject to the Authority's approval.
- (d) The Design-Builder will install, maintain and remove:
 - (i) BC Ministry Project signage,
 - (ii) Promotional banners or signs in a highly visible, high traffic area for the foundations, and
 - (iii) Any signs provided by the Authority.

17.3 Site and Construction Signage

- (a) The Design-Builder will be responsible for any signage required for temporary changes to the building or Site access, temporary alterations to emergency exiting and any other traffic or pedestrian rerouting required to accommodate the Work.
- (b) The Design-Builder may erect miscellaneous signage related to safety, wayfinding, temporary conditions, requirements of AHJ, or other signs required to fulfill its obligations under this Agreement.
- (c) The size, exact location, method of mounting, and mounting height of signs will be subject to the Authority's approval.
- (d) The Design-Builder will provide directional signage at the Site perimeter to appropriately direct pedestrian and vehicular traffic.

18. MEETINGS

18.1 Project Team Meetings:

- (a) The Design-Builder will schedule and conduct regular Project Team Meetings at which Authority, the Authority's Consultant, FMO, IPC, Clinical and Equipment stakeholders, and the Design-Builder's team, vendors and suppliers and other third parties and stakeholders as required can discuss jointly such matters as procedures, progress, problems, and scheduling.
- (b) The Design-Builder will schedule, prepare, chair, and administer Project Team Meetings throughout the course of Design and Construction and issue precise Meeting Minutes for within 72 hours including:
 - (i) Action items with identified responsibilities and due dates,
 - (ii) Updated Construction Schedule,
 - (iii) Updated Request for Information (RFI) log,
 - (iv) Updated Site Instruction (SI) log,
 - (v) Updated Change Order (CO) and Change Directive (CD) log,
 - (vi) Updated Shop Drawing, Samples, and Mock-up Submittal log, and
 - (vii) Other information and documents relevant to items discussed during the meeting.

18.2 Design-Builder Progress and Site Meetings

(a) The Authority's Representative and its delegates will have the right to attend all progress meetings and Site meetings, including meetings between the Design-Builder and its Subcontractors

18.3 Site Tours

(i) The Design-Builder will cooperate with the Authority to arrange for tours of the Site at reasonable times during Construction for interested clinical or research staff and other health care officials and personnel, in a way that does not interfere with the progress of the Construction.

END OF APPENDIX 8A

SCHEDULE 4 –

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 8B HEALTH AND SAFETY PLAN REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Health and Safety Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

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1. HEALTH AND SAFETY PLAN

1.1 General

- (a) The Design-Builder will file a Notice of Project with WorkSafeBC prior to commencement of any Work.
- (b) The Design-Builder will develop a written site-specific health and safety plan (the "Health and Safety Plan") based on hazard assessment prior to commencing any Work. The Design-Builder will continue to implement, maintain, and enforce the Health and Safety Plan until final demobilization from the Site and Project including related offsite production sites and laydown areas.
- (c) The Health and Safety Plan will be included and submitted as part of the design and Construction Management Plan and will address, at a minimum, requirements identified by:
 - (i) Regulatory agencies,
 - (ii) Occupational Health and Safety Standards,
 - (iii) The Authority's regulations,
 - (iv) Industry best practices,
 - (v) Schedule 1 [Statement of Requirements]. and
 - (vi) Requirements outlined in this Appendix.
- (d) The Design-Builder will ensure applicable items, articles, notices, and orders are posted in conspicuous location on Site in accordance with Acts and Regulations of the AHJ.

1.2 Health and Safety Coordinator

- (a) The Design-Builder will employ and assign a competent and authorized representative(s) to coordinate and enforce health and safety regulations and protocols (the "Health and Safety Coordinator(s)") who will:
 - (i) Have a minimum of two (2) years site-related working experience;
 - (ii) Have working knowledge of all applicable Occupational Health and Safety regulations;
 - (iii) Be responsible for implementing, enforcing daily, and monitoring Sitespecific adherence to the Design-Builder's Health and Safety Plan;

- (iv) Be responsible for completing the Design-Builder's Health and Safety Training Sessions and ensuring that personnel not successfully completing required training are not permitted to enter the Site to perform Work;
- (v) Be on Site during execution of Work; and
- (vi) Report directly to and be under direction of the Design-Builder's Site Superintendent.

1.3 Worksite Hazards

- (a) In compliance with WorkSafeBC regulations, the Design-Builder will identify worksite hazards and will develop operational occupational safety policies, procedures and plans that are specific to those hazardous aspects of the Work to ensure the safety of every person at a construction site and the public accessing or using the Site.
- (b) The Design-Builder will provide copies of these safety policies, procedures and plans prior to the commencement of the Work as part of the Work Plan submissions.
- (c) The Design-Builder will comply with requirements outlined in WorkSafeBC Part 2 Division related to coordination at multiple-employer workplaces.
 - (i) The Design-Builder as the prime contractor of a multiple-employer workplace must:
 - (A) Ensure that the activities of employers, workers and other persons at the workplace relating to occupational health and safety are coordinated; and
 - (B) Do everything that is reasonably practicable to establish and maintain a system or process that will ensure compliance with the Occupational Health and Safety provisions and the regulations in respect of the workplace.
 - (ii) Each employer of workers at a multiple-employer workplace must give to the prime contractor the name of the person the employer has designated to supervise the employer's workers at that workplace.
- (d) If WorkSafeBC or municipal agencies conduct a worksite inspection that results in "orders" being issued to the Design-Builder or any of its Subcontractors, the Design-Builder will immediately notify the Authority along with supplying copies of these orders to the Authority.
- (e) Blasting or other use of explosives is not permitted without prior receipt of written instruction from the Authority's Consultant.

1.4 Submissions

- (a) The Design-Builder will submit to Authority's Consultant:
 - (i) Monthly electronic copies of the Design-Builder's authorized representative's Work Site health and safety inspection reports;
 - (ii) Copies of reports or directions issued by Federal, Provincial and Territorial health and safety inspectors as applicable;
 - (iii) Copies of incident and accident reports;
 - (iv) Material Safety Data Sheets (MSDS);
 - (v) Results of site-specific safety hazard assessment; and
 - (vi) Results of safety and health risk or hazard analysis for Site tasks and operation.
- (b) Where prescribed by legislation, regulation, or safety program, the Design-Builder will submit certification of medical surveillance for Site personnel prior to commencement of Work, and submit additional certifications for any new Site personnel to the Authority's Consultant.

1.5 Review Process

- (a) The Design-Builder will submit a proposed Site-specific Health and Safety Plan to the Authority's Consultant as part of the Construction Management Plan (or as agreed with the Authority) and prior to commencement of any Work on Site and offsite production and laydown areas.
- (b) The Authority's Consultant (in collaboration with the Authority) will review the proposed Health and Safety Plan and provide comments to the Design-Builder within fifteen (15) working days after receipt of the plan.
- (c) The Design-Builder will revise and resubmit the Health and Safety Plan to the Authority's Consultant within ten (10) days after receipt of comments from Authority's Consultant.
- (d) The Authority's Consultant's and the Authority's comments will not be construed as approval and do not reduce the Design-Builder's overall responsibility for continuous construction health and safety.

1.6 Correction of Non-Compliance

(a) The Design-Builder will immediately address health and safety non-compliance issues identified by an AHJ, the Authority, the Authority's Consultant, agents,

- stakeholders, the Design-Builder's and Subcontractor's own forces, and other third parties.
- (b) The Design-Builder will provide the Authority's Consultant with a written report of action taken to correct non-compliance of health and safety issues identified.
- (c) The Authority's Consultant may stop Work if non-compliance of health and safety regulations is not corrected.

1.7 Work Stoppage

- (a) The Design-Builder will give precedence to safety and health of public and Site personnel and protection of the environment over cost and schedule considerations for Work.
- (b) Notwithstanding the above, the Authority or the Authority's Consultant may order the suspension of Work in cases of:
 - (i) Recognized imminent danger,
 - (ii) When the Design-Builder fails to comply with regulatory requirements outlined in WorkSafeBC Part 2 Division 4 [General Duties of Employers, Workers and Others],
 - (iii) When the Design-Builder fails to comply with WorkSafeBC orders issued, or
 - (iv) Fails to rectify previously identified worksite hazards or health and safety concerns.

1.8 Barricades and Barriers

- (a) Barricades and barriers on Site will conform to:
 - (i) Schedule 1 [Statement of Requirements],
 - (ii) Schedule 4 [Management Systems and Plans] Appendix 8A [Construction Protocols Requirements],
 - (iii) Part 8 of the BC Building Code for vehicular areas barriers, and
 - (iv) Other applicable safety practices required by codes, regulations, and industry best practice.
- (b) The Design-Builder will provide adequate warning for visually impaired persons in pedestrian areas.
 - (i) The Design-Builder will use chain link fencing or hoarding to allow blind persons to feel the base of the barricade with their canes.

- (ii) The Design-Builder will provide audible and/or tactile warning devices where required.
- (c) Refer to Schedule 4 [Management Systems and Plans] Appendix 8A [Construction Protocols Requirements] Section 15 [Site Enclosure] for additional requirements.

1.9 First Aid

(a) The Design-Builder will arrange for the provision of first aid facilities and an Accident Prevention Program conforming to requirements of the Workers' Compensation Board of B.C.

2. EMERGENCY RESPONSE AND INCIDENT MANAGEMENT PLAN

2.1 Emergency Response Plan

- (a) Prior to commencing any Work and based on hazard assessment, the Design-Builder will develop and implement written site-specific emergency and incident management protocols and procedures (the "Emergency Response and Incident Management Plan").
- (b) The Design-Builder will update the Emergency Response and Incident Management Plan as required and continue to maintain and enforce the plan until final demobilization from the Site and Project including related offsite construction and production sites and laydown areas.
- (c) The site-specific Emergency Response and Incident Management Plan will be included in and submitted with the Construction Management Plan and address:
 - (i) Regulations that mitigate risks;
 - (ii) Standard operating protocols and procedures to be executed:
 - (A) During emergency situations and
 - (B) In case of any incidents; and
 - (iii) Effective training of the Design-Builder's and the Design-Builder's Subcontractors' work forces.
- (d) The Design-Builder will be responsible to ensure that all work forces on Site and on offsite construction and production and laydown areas complete sufficient training and understand how to effectively respond to emergencies and efficiently manage incidents.

2.2 Spill Containment and Response Plan

(a) The Emergency Response Plan, will include a Spill Containment and Response Plan (refer to the Data Room for existing documentation), in accordance with City of Surrey and/or the AHJ as part of the permit application process requirements.

2.3 Control Procedures

- (a) The Design-Builder will provide suitable onsite provision to mitigate reasonably foreseeable risks. Control procedures will include:
 - (i) Regular monitoring and recording of risks to identify areas of high, medium and low risk;
 - (ii) Measures for the immediate containment of pollution at source;
 - (iii) Incident recording and reporting;
 - (iv) Immediately informing the Authority's management team;
 - (v) Raising the alarm to the emergency services;
 - (vi) Summoning emergency services where appropriate;
 - (vii) Provision for onsite incident management facilities to cater for reasonably foreseeable risks, such as the provision of spill kits at key locations;
 - (viii) Regular liaison with the locally based emergency services, to provide updates on current medium high risk activities; and
 - (ix) Provision of Site-based, and suitably qualified, health and safety personnel.

3. FIRE SAFETY PLAN

3.1 General

- (a) The Design-Builder will be responsible for the development and implementation of fire safety regulations, protocols and procedures in accordance with local AHJ requirements (the "Fire Safety Plan") during the course of Construction.
- (b) The fire Safety Plan will describe emergency access, impacted or changed egress points and routes to and from the Site during an emergency.
- (c) The Design-Builder will comply with requirements of:
 - (i) Part 8 of the BC Building Code,
 - (ii) BC Fire Code, and

- (iii) The Fire Services Act, Regulations and Bulletins.
- (d) The Design-Builder will be responsible to update or amend the Fire Safety Plans if at any point the Project boundary limits change due to the nature and timing of the Work being performed.
- (e) The Design-Builder will provide and maintain temporary fire protection equipment during performance of the Work required by insurance companies having jurisdiction, governing codes, regulations, and bylaws.
- (f) The Design-Builder will maintain placed or installed fire resistive construction, fireproofing, or fire-stopping to protect the portions of the Work during construction.
- (g) Onsite fires including those for burning garbage and construction waste materials are not permitted.

3.2 Fire Safety Consultant

- (a) The Design-Builder will retain a professional fire safety consultant (the "Fire Safety Consultant") to provide Fire Safety Plans and all related documentation as required by the AHJ.
- (b) The Fire Safety Consultant will coordinate in further consultation with the Authority to ensure such documentation meets all applicable Authority standards for Fire Safety Plans and related documentation.

4. ACCIDENT REPORTING

4.1 Accidents

- (a) The Design-Builder will immediately notify the Authority of any accident occurring within the Site involving its own or its Subcontractors' vehicles or equipment or those of any other party working on the Site.
- (b) The Design-Builder will immediately notify the Authority of any accident occurring during the Construction which involves a fatality, serious personal injury, or third party property damage in excess of \$1,000 or as specified in the Occupational Health and Safety Act, or successor act or regulation.
- (c) In the event of an accident involving a death, the Design-Builder will inform the Authority within one hour of when the Design-Builder first learned of the death or ought to have learned of the death, but in any event no later than 24 hours after the occurrence of the accident.

4.2 Reporting

- (a) The Design-Builder will investigate any accident (including those of its Subcontractors) and complete a detailed accident report in a form satisfactory to the Authority within 72 hours of when the Design-Builder first learned of the accident or ought to have learned of the accident.
- (b) The detailed accident report will include:
 - (i) Photographs;
 - (ii) Details of Site conditions;
 - (iii) Weather reports;
 - (iv) Records of signs; and
 - (v) Witness contact information.
- (c) The Design-Builder will include Accident Reporting requirements, protocols and procedures in the Construction Management Plan.

5. SAFETY MEETINGS

5.1 Frequency

(a) For the duration of the Construction, the Design-Builder will conduct safety meetings prior to the commencement of any Work or monthly, whichever occurs more frequently.

5.2 Attendees

(a) The Design-Builder will invite the Authority to send a representative to attend such safety meetings and will give reasonable advance notice of such meetings.

6. HAZARDOUS MATERIALS

6.1 Risk Assessment

- (a) In compliance with WorkSafeBC regulations, the Design-Builder will carry out risk assessments and produce method statements for works in areas where there may be hazardous materials.
- (b) Where significant risks to health, environment or safety are identified in a risk review the works will be closely monitored and suitable provisions put in place to mitigate the risks, before the works proceed.

6.2 Removal of Hazardous Materials

- (a) The Design-Builder will comply with WorkSafeBC regulations.
- (b) If appropriate the works will be suspended until the hazard is removed.
- (c) The Design-Builder will maintain on Site suitable testing equipment as well as personal protective equipment (PPE), decontamination and containment measures for all known hazardous materials.
- (d) Refer to Schedule 4 [Management Systems and Plans] Appendix 8A [Construction Protocols Requirements] Section 10 (b) [Hazardous Waste Management Plan].

END OF APPENDIX 8B

SCHEDULE 4 –

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 8C

DUST, NOXIOUS ODOUR AND NOISE CONTROL PLAN REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Dust, Noxious Odour and Noise Control Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

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1. DUST CONTROL PLAN

1.1 General

(a) As part of the Construction Management Plan the Design-Builder will develop and implement measures and procedures to minimize the impact of dust from construction activities on neighbours (the "Dust Control Plan").

1.2 Minimum Requirements

- (a) Identify possible dust causing material and activities, at Project start up;
- (b) Ensure adequate controls are in place to reduce environmental impact of any dust or emissions;
- (c) Ensure an adequate water supply on the Site for effective dust and particulate matter mitigation (using recycled water if possible);
- (d) Use enclosed chutes, conveyors and covered dumpsters;
- (e) Ensure equipment is readily available on Site to clear any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods;
- (f) Record and respond to all dust and air quality pollutant emissions complaints;
- (g) Provide suitable measures to prevent the spread of airborne pollutants on the Site and particularly beyond the site boundary.
- (h) Avoid unnecessary stockpiling on Site;
- (i) Control dust or mud on the roads and take action through regular sweeping, wet cleaning or grading;
- (j) Ensure Site fencing and hoarding will be routinely cleaned & maintained to prevent the build-up of dust; and
- (k) Ensure the Site will be laid out so that machinery and dust causing activities can reasonably be located away from receptors.

1.3 **Dust Tight Barriers**

- (a) As required to support safe working conditions, provide dust tight barriers and screens or partitions to localize dust generating activities, and for protection of public, workers, and finished areas of Work.
- (b) If required, provide dust control, including dust tight drywall/metal stud partitions from floor to ceiling to localize dust generating activities, and for the protection of workers and finished areas of Work

(c) Maintain and relocate protection until such work is complete.

1.4 Baseline Measurements

- (a) Prior to any Construction, the Design-Builder will document baseline measurements for dust particles in the air.
- (b) During the course of Construction, the Design-Builder will monitor and control dust particles in the air created by Construction to protect workers and public.

2. NOXIOUS ODOR CONTROL PLAN

2.1 General

(a) As part of the Construction Management Plan the Design-Builder will develop and implement measures, protocols and procedures to minimize the impact of noxious odors from construction activities on neighbours (the "Noxious Odor Control Plan").

3. NOISE CONTROL PLAN

3.1 General

- (a) The Design-Builder and its Subcontractors, trades and agents will comply with:
 - (i) The City of Surrey's Construction Noise Bylaw,
 - (ii) The Surrey Noise Control Bylaw 7044,
 - (iii) The Surrey Building Bylaw, No. 17850,
 - (iv) The City's Good Neighbour Protocol, and
- (b) As part of the Construction Management Plan the Design-Builder will develop and implement measures and procedures to minimize the impact of noise from construction activities on neighbours (the "Noise Control Plan").

3.2 Mitigation Measures

- (a) The Design-Builder will be responsible for assessing, monitoring and developing noise control procedures to ensure the disturbance caused by Construction activities and related traffic are minimized.
- (b) The Construction Management Plan will present noise mitigation measures including, but not limited to:
 - (i) Selection of construction methods and scheduling to minimize the impact of noise on neighbours;

- (ii) Selection of routes and scheduling for the transport of construction materials, spoil and personnel to minimize noise;
- (iii) Design and use of Site hoardings and screens to provide acoustic screening at the earliest opportunity;
- (iv) Don't locate doors and gates opposite occupied noise-sensitive buildings;
- (v) Assess construction operations against current standards for predicted noise levels with reasonably practical measures to reduce/attenuate noise levels, in particular:
 - (A) Ground works; and
 - (B) Concrete works.

3.3 Plant, Machinery and Equipment

- (a) Prior to commencing Construction, assess the noise impact of plant, machinery and equipment that will be utilized on Site and instigate suitable mitigation measure where noise levels exceed acceptable limits;
- (b) Minimize noise pollution through the use of noise attenuation techniques to comply with all Laws and Regulatory Requirements;
- (c) Locate plant, machinery and equipment liable to create noise and away from sensitive receptors or control such plant, machinery and equipment by the use of lined and sealed acoustic covers or enclosures to prevent or reduce risk of disturbance.
 - (i) Use such plant and equipment where practicable in the mode of operation that minimizes noise, and shut down when not in use, and
 - (ii) Where used, acoustic covers or enclosures will remain in place whilst the relevant noise generating equipment is in use;
- (d) Muffler silencers will be fitted to all Site-based plant, machinery and vehicles;
- (e) Only plant conforming to relevant national or international standards, directives and recommendations on noise emissions will be used; and
- (f) Regular maintenance will be undertaken on all plant and equipment in accordance with manufacturers' guidelines (maintenance records will be kept onsite).

3.4 Baseline Measurements

(a) Prior to any Construction the Design-Builder will document the average dBA on the perimeter of the Site, both in the morning and the afternoon.

(b) During the course of Construction, the Design-Builder will monitor and control noise levels to ensure noise created by Construction stays within levels that are meeting the local Bylaws.

END OF APPENDIX 8C

SCHEDULE 4 –

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 8D FURNITURE & EQUIPMENT LOGISTICS PLAN

REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Furniture & Equipment Logistics Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

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1. EQUIPMENT LOGISTICS PLAN REQUIREMENTS

1.1 Specific Requirements

- (a) The plan will include a clinical equipment schedule in compliance with Schedule 1 [Statement of Requirements] Appendices:
 - (i) Appendix 1H [Equipment and Furniture]
 - (ii) Appendix 1I [Food Services Equipment List]
 - (iii) Appendix 1J [Equipment List IM/IT]
- (b) The clinical equipment schedule will include:
 - (i) Procurement schedule,
 - (ii) Deployment schedule, and
 - (iii) Install, Commissioning and training schedule.
- (c) The Equipment Logistics Plan will be attached to the Design-Builder's Design and Construction Management Plan in Appendix 8D [Furniture and Equipment Logistics] and it will be updated throughout the Design and Construction process as information becomes available.

2. FURNITURE LOGISTICS PLAN REQUIREMENTS

2.1 Specific Requirements

(a) Same as above.

END OF APPENDIX 8D

SCHEDULE 4 –

MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 8E CONSTRUCTION COMPLETION PLAN REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Construction Completion Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

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1. CONSTRUCTION COMPLETION PLAN

- 1.1 Construction Completion Process
 - (a) As part of the Construction Completion Plan the Design-Builder will outline steps and requirements to efficiently complete the Work. At a minimum, Construction completion will be based on:
 - (i) Protocols, software (e.g. Procore and Field Wire) and timelines for deficiency inspections and correction as per as per the requirements set out in Schedule 1 [Statement of Requirements], Schedule 4 [Management Systems and Plans] Appendix 11 [Deficiency Management Plan Requirements];
 - (ii) Check-lists for ensuring the following are completed:
 - (A) Compliance with Schedule 1 [Statement of Requirements],
 - (B) Equipment installations,
 - (C) Hospital Technology Systems Integration,
 - (D) Commissioning,
 - (E) Municipal inspections,
 - (F) If required, provincial inspections from agencies such as Technical Safety BC (TSBC),
 - (G) If required, federal inspections from agencies such as NSCA,
 - (H) Training,
 - (I) Move-in readiness,
 - (J) Cleanliness,
 - (K) LEED certification application, and
 - (L) Energy compliance in accordance with requirements set out in this Agreement.
 - (iii) Operating and maintenance manuals (the "Operations and Maintenance Manuals (OMM)") and commissioning data manuals for all equipment:
 - (A) Have been prepared, checked and submitted by the Design-Builder and
 - (B) The Authority's Consultant has accepted the OMM as "complete".

- (C) The OMM will include approved Shop Drawings and Product Information
- (iv) As-built drawings and Record Documentation:
 - (A) Have been prepared, checked and submitted by the Design-Builder in accordance with Schedule 2 [Review Procedure], and
 - (B) The Authority's Consultant has accepted the as-built drawings and Record Documentation as "complete" (compliant).
- (v) Completion of all photographic records in accordance with Schedule 2 [Review Procedure].
- (vi) Provision of all warranties in accordance with Schedule 1 [Statement of Requirements].

1.2 Cleanliness

- (a) The Facility must be hospital level clean as per CSA Z317.13, and usable for the purposes intended at Substantial Completion or at an earlier date if the space is being turned over for installation of furniture, fixtures and equipment that might be susceptible to dust or dirt contamination.
- (b) Once clean, the Design-Builder will restrict traffic to maintain cleanliness.
- (c) The Design-Builder will promptly clean any area that becomes dirty as a result of contractor or any other activity including Authority or equipment vendor use in installing equipment.
- (d) Comply with requirements set out in Schedule 4 [Management Systems and Plans] Section 11.7 Cleaning prior to Acceptance.
- (e) Cleanliness for occupancy will comply with Schedule 4 Section 3.8 Infection Prevention and Control and Appendix 6 [Infection Prevention and Control Plan].

2. DEFICIENCY PROTOCOL

- (a) The Design-Builder will appoint a qualified expert in the management and completion of deficiencies (the "Deficiency Manager")
- (b) Detailed requirements for the identification, management, reporting and close-out of deficiencies, including the use of deficiency management software, as per the requirements set out in Schedule 4 [Management Systems and Plans] Appendix 11 [Deficiency Management Plan Requirements].

3. RECORD DOCUMENTATION

3.1 General

- (a) In addition to the requirements specified in Schedule 1 [Statement of Requirements] Appendix 1U [BIM Requirements] and Schedule 4 [Management Systems and Plans] Appendix 4 [BIM Project Execution Plan Requirements] and other Sections of this Agreement, before Substantial Completion, the Design-Builder will submit complete (compliant) Record Documentation to the Authority which will include, at a minimum, the following information in written and electronic form:
 - (i) **Operations and Maintenance Manuals (OMM):** The Design-Builder will submit OMM for all equipment and systems that have been included in the Design and Construction of the Facility including, but not limited to:
 - (A) Specifications;
 - (B) Cut Sheets for all equipment;
 - (C) Product data and details;
 - (D) Shop Drawings;
 - (E) **Warranties:** The Design-Builder will provide warranties in the name of the Authority for a minimum of two (2) years from the date of Substantial Completion or such extended period as stipulated in Schedule 1 [Statement of Requirements] Appendix 1X [Warranties];
 - (F) Warranty Letter of Credit: Refer to Section 44 [Performance Holdbacks] of the Agreement for details regarding the content of the Holdbacks:
 - (G) **System's Sequence of Operations:** As reviewed during Design phases;
 - (H) **Operating instructions:** The Design-Builder will provide operating instructions for all mechanical and electrical equipment and systems that include standard operating procedures with the original equipment manufacturer cut sheets and any other information needed to maintain and operate the Facility; and
 - (I) **List of Suppliers:** The Design-Builder will provide a list of all suppliers and sub-trades with contact names, addresses, phone numbers, email addresses and web sites.

- (ii) **As-built Documentation:** The Design-Builder will provide as-built documentation in form of completed as-built drawings (the "**As-built Drawings**") and specifications:
 - (A) The Design-Builder will throughout Construction, update the Reviewed Drawings and Specifications and 100% complete drawings and specifications and will assemble all final Shop Drawings, so as to produce accurate and complete Record Documents for the Facility;
 - (B) The Design-Builder will prepare a clean 3D model and a set of clean 2D drawings incorporating all Site Changes, Change Orders or any other deviations from the Design drawings. The Design-Builder will provide:
 - (1) Three (3) full-size hard copies of all As-built Drawings,
 - (2) 2D drawings in "CAD" and electronic format as specified in the BEP and in Adobe Reader 'PDF' format, and
 - (3) A 3D combined model in Autodesk Design Review 'DWF' and in an appropriate exchange format, such as NavisWorks Freedom 'NWD' or Tekla BIMsight, unless there is a specific requirement for Navis or Tekla;
 - (C) Upon request by the Authority, from time to time during the Construction, the Design-Builder will make available such As-built Drawings and Specifications to the Authority's Consultant for review to permit the Authority's Consultant to monitor the Design-Builder's compliance with the requirements of the Agreement and for the Authority's operational and other use;
 - (D) From time to time the Design-Builder will submit all electronic copies in compliance with the requirements of this Agreements or the standards established by the Authority for electronic copies.
- (iii) **Design Records:** The Design-Builder will retain and submit complete records of the Design process (the "**Design Records**").
- (iv) **Meeting Minutes:** The Design-Builder will retain a complete record of minutes of all meetings between the Authority and the Design-Builder relating to the Design and Construction (the "**Meeting Minutes**"):
 - (A) The Design-Builder will circulate such Meeting Minutes to the Authority and the Authority's Consultant for review and comment

within the time period specified in the Agreement for the particular meeting or if no time period is specified then within:

- (1) Three (3) Business Days after the relevant meeting, and
- (2) A reasonable period before any subsequent meeting so that all parties may consider the minutes and take required actions in advance of the subsequent meeting.
- (v) **Inspection Reports and Tests Results:** The Design-Builder will provide all official reports and certified test records of all inspections and tests which were undertaken as part of the Construction.
- (vi) **Monitoring Results:** The Design-Builder will provide all survey and monitoring records obtained in connection with requirements identified in Schedule 1 [Statement of Requirements].
- (vii) **Utility Plans:** The Design-Builder will provide all utility plans for the Facility.
- (viii) Landscape and Irrigation Plans: The Design-Builder will retain landscape and irrigation plans for the Facility.
- (ix) Copies of all Permits: The Design-Builder will retain copies of all permits for the Construction and occupation of the Facility.
- (x) **Quality Assurance:** The Design-Builder will submit at closing an updated version of the Quality Management Plan and all records of the Quality Assurance and Quality Control measures and procedures that were implemented as required by this Agreement.

3.2 Record Keeping

- (a) The Design-Builder will retain and maintain all the records including superseded records (referred to as "Record Retention" below) as follows:
 - (i) In accordance with this Appendix and other applicable terms of this Agreement;
 - (ii) In an organized manner;
 - (iii) In a form that is capable of audit;
 - (iv) In accordance with all requirements of the Canadian Institute for Health Information (CIHI);
 - (v) In accordance with the Design-Builder's normal business practices; and
 - (vi) In accordance with GAAP.

- (b) Wherever practical and unless otherwise agreed by the Authority, the Design-Builder will retain and maintain original records in hard copy form.
- (c) The Design-Builder will also maintain all electronic data and records in readable and accessible form.
- (d) Any drawings or plans required to be made or supplied pursuant to this Agreement will be of a size appropriate to show the detail to be depicted clearly without magnifying aids.
- (e) If by prior agreement with the Design-Builder the Authority has agreed to accept microfilm, microfiche or other electronic storage media (which must include secure back up facilities), the Design-Builder will make or supply, or have made or supplied, drawings and other documents in such agreed upon form.
- (f) The Design-Builder will retain and maintain all records referred to in Record Retention below, all in sufficient detail, in appropriate categories and generally in such a manner to enable each party to comply with its obligations and exercise its rights under this Agreement.
- (g) The Design-Builder will maintain all records for the period specified in this Agreement.
- (h) Prior to destroying or disposing of any records required to be maintained, the Design-Builder will give the Authority 60 days' notice of the Design-Builder's intention to destroy or dispose of records. If within such 60-day period, the Authority gives notice to the Design-Builder that the Authority wishes to receive any of the records, then the Design-Builder will, at the cost and expense of the Authority, deliver up such records to the Authority in the manner and at the location or locations as the Authority specifies, acting reasonably.
- (i) The Design-Builder will provide a comprehensive computerized information management system maintained through this Agreement Term and which will include:
 - (i) Records and information related to the Design and Construction of the Facility;
 - (ii) Access by the Authority (through online web access or other access acceptable to the Authority) to all such information such that the Authority will be able to read, copy, download and search all such records without licence or payment;
 - (iii) Hardware and software which operate the information management and system and which interface with the Authority's information technology systems, provided that any changes required and resulting from an upgrade to, or change by, the Authority to its system will be paid for by the Authority;

- (iv) Backup and storage in safe custody of the data, materials and documents in as would be accepted by a prudent Authority;
- (v) Records and details of specific license requirements; and
- (vi) Turnover of all Project information at the Agreement End Date organized in a searchable format.

3.3 Record Retention

- (a) The Design-Builder will retain, and will require its subcontractors to retain, the following:
 - (i) This Agreement, its Schedules, and the Design-Builder subcontracts;
 - (ii) The as-built drawings, plans, records and other Construction documentation described in Schedule 1 [Statement of Requirements] and other Schedules of this Agreement including, but not limited to:
 - (A) Any revisions or amendments to such documents (copies of all such documents will be kept at each applicable Facility and made accessible to the Authority at all times);
 - (B) Up-to-date CAD and BIM information, such as drawings, information models, and COBie data for the Facility, linked to, and compatible with, the Authority's information systems;
 - (C) All documents relating to all Permits, including applications, refusals and appeals, for a period of six (6) years after the expiry date of the relevant Permit;
 - (D) All notices, reports, test reports, results and certificates relating to the Design and Construction, the Site and any other relevant lands for a period of six (6) years after Substantial Completion;
 - (E) All records relating to any inspections of the Facility conducted under applicable Laws or by or for any provincial or federal agencies;
 - (F) All orders or other requirements issued to the Design-Builder by any governmental authority for a period of six (6) years after such order or requirement has been satisfied by Design-Builder;
 - (G) All operation and maintenance manuals, procedures, guidelines, policies and other similar records in respect of the Facility including all information electronically and/or manually recorded by the BMS and the CMMS for the Facility for a period of six (6) years after such information was recorded;

- (H) A comprehensive electronic inventory and asset register that provides up-to-date records for all F&E items at the time of Substantial Completion;
- (I) All documents relating to a referral to the Dispute Resolution Procedure for a period of six (6) years after a determination has been made with respect thereto;
- (J) All documents submitted in connection with any Change;
- (K) All records required by Law (including in relation to health and safety matters) to be maintained by the Design-Builder with respect to the Design and the Construction;
- (L) All documents relating to insurance and insurance claims for a period of twelve (12) years after the relevant claim is settled; and
- (M) All other records, notices or certificates required to be produced or maintained by the Design-Builder pursuant to the express terms of this Agreement or any Design-Builder contract.

3.4 Photographic Documentation

- (a) The Design-Builder will provide a photo documentation service as per the requirements outlined throughout Schedule 1 [Statement of Requirements] and in particular in:
 - (i) Section 2.5 Submittal Documents and
 - (ii) Appendix 1V Asset Management.

4. SPARE PARTS

4.1 General

- (a) The Design-Builder will supply spare parts, at a minimum:
 - (i) As specified in Schedule 1 [Statement of Requirements], Appendix 1Y [Spare Parts and Extra Stock Materials] and
 - (ii) As required to ensure uninterrupted operation of critical equipment where parts that might be subject to unexpected failure are not readily available to the Authority.

END OF APPENDIX 8E

SCHEDULE 4 – MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 8F SETTLEMENT AND VIBRATION CONTROL PLAN REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Settlement and Vibration Control Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

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1. SETTLEMENT MITIGATION PLAN

1.1 General

- (a) The Design-Builder acknowledges that construction-caused settlement of structures may disrupt the operation of equipment and utility services or cause damage to buildings, infrastructure or other structures and items. The Design-Builder will take all reasonable steps to avoid:
 - (i) Disrupting any equipment or services or
 - (ii) Damaging any buildings, infrastructure or other structures and items.
- (b) In advance of Construction, the Design-Builder will work with its Subcontractors, trades and equipment suppliers and develop and implement a settlement risk mitigation strategy (the "Settlement Mitigation Plan") to avoid identified risks and comply with requirements set out in Schedule 1 [Statement of Requirements] and in regulations, standards and guidelines.
- (c) Refer to Schedule 1 [Statement of Requirements] Section 2.7.7 for additional requirements.

1.2 Procedures

- (a) The Settlement Mitigation Plan will be submitted, developed, and implemented as part of the Construction Management Plan. At a minimum, the Design Builder will address risks of construction-caused settlement as follows:
 - (i) Identify high risk locations where potential settlement may be a concern or may cause discomfort (including neighbouring residential areas);
 - (ii) Establish a set of benchmarks in consultation with the Authority and document pre-construction conditions at nearby utilities, services, buildings, structures, infrastructure and other items exposed to possible settlement:
 - (iii) Monitor conditions at test locations during Construction activities that could possibly expose utilities, services, buildings, structures, infrastructure and other items to settlement and report results at least monthly;
 - (iv) Have a contingency plan in place to respond to conditions that exceed allowable thresholds for settlement; and
 - (v) Document final conditions following completion of the Work to record any permanent settlements, cracking or other damage and complete necessary repairs.

1.3 Benchmarks

- (a) The Settlement Mitigation Plan will include surveyed benchmarks and will be submitted for review:
 - (i) As part of the Schematic Design submission package and
 - (ii) In advance of any excavation.
- (b) The benchmarks will be surveyed and settlement monitoring will be undertaken:
 - (i) At least monthly during excavation,
 - (ii) Until the ground floor of the Facility is complete, and
 - (iii) At completion of the Facility.
- (c) Settlement measurements will be taken:
 - (i) During high-risk activities and
 - (ii) At times requested by the Authority to address concerns raised by neighbours.
- (d) If the reported values indicate unexpected settlement, the Design-Builder will establish additional monitoring locations or additional testing frequency in consultation with the Authority to determine the cause and to ensure remedial actions are effective.

2. VIBRATION CONTROL PLAN

2.1 General

- (a) The Design-Builder acknowledges that construction-caused ground vibration may disrupt the operation of equipment and utility services or cause damage to buildings, infrastructure or other structures and items. The Design-Builder will take all reasonable steps to avoid:
 - (i) Disrupting any equipment or services or
 - (ii) Damaging any buildings, infrastructure or other structures and items.
- (b) In advance of Construction, the Design-Builder will work with its Subcontractors, trades and equipment suppliers and develop and implement a vibration risk mitigation strategy (the "Vibration Control Plan") to avoid identified risks and comply with requirements set out in Schedule 1 [Statement of Requirements] and in regulations, standards and guidelines.

- (c) The Design-Builder will be responsible for assessing, monitoring and developing vibration control procedures to ensure the disturbance caused by Construction activities and related traffic are minimized.
- (d) The Vibration Control Plan is part of and will be submitted with the Construction Management Plan. It will outline the planning and implementation of measures and procedures to minimize the impact of vibration from construction activities on neighbours and other sensitive receptors.

2.2 Measures

- (a) The Vibration Control Plan will be submitted, developed, and implemented as part of the Construction Management Plan. The plan will outline measures and procedures that will be implemented to minimize the impact of vibration from construction activities on neighbours and other sensitive receptors.
- (b) At a minimum, the Design Builder will address risks of construction-caused vibration as follows:
 - (i) Identify high risk locations where potential vibrations may be a concern or cause discomfort (including neighbouring residential areas);
 - (ii) Establish a set of benchmarks in consultation with the Authority and document pre-construction conditions at nearby utilities, services, buildings, structures, infrastructure, equipment and other items exposed to possible settlement;
 - (iii) Selection of construction methods and scheduling to minimize vibration at sensitive receptors and times;
 - (iv) Selection of routes and scheduling for the transport of construction materials, spoil and equipment to minimize vibration at sensitive receptors;
 - (v) Assessment of construction operations against current standard for predicted vibration levels with reasonably practical measures to reduce/attenuate vibration levels, in particular:
 - (A) Ground works; and
 - (B) Concrete works.
 - (vi) Monitor conditions during Construction activities that could possibly expose utilities, services, buildings, structures, infrastructure, equipment and other items to excess vibration and report results at least monthly;
 - (vii) Have a contingency plan in place to respond to conditions that exceed allowable thresholds for vibration; and

(viii) Document final conditions following completion of the Facility to record any permanent settlements, cracking or other damage and complete necessary repairs.

2.3 Plant, Machinery and Equipment

- (a) Prior to commencing Construction, assess the vibration impact of plant, machinery and equipment that will be utilized on Site and instigate suitable mitigation measure where vibration levels exceed acceptable limits.
- (b) Minimize vibration through the use of vibration attenuation techniques to comply with all Laws and Regulatory Requirements.
- (c) Locate plant, machinery and equipment liable to create vibration away from sensitive receptors or control such plant, machinery and equipment by the use of materials and products limiting vibration through insulation dampers to prevent or reduce risk of disturbance:
- (d) Use such plant and equipment where practicable in the mode of operation that minimizes vibration, and shut down when not in use, and
- (e) Where used, materials and products limiting vibration will remain in place whilst the relevant vibration generating equipment is in use.
- (f) Only plant, machinery and equipment conforming to relevant national or international standards, directives and recommendations on vibrations will be used.
- (g) Regular maintenance in accordance with manufacturers' guidelines will be undertaken on all plant, machinery and equipment, as well as materials, products and other measures limiting vibration (maintenance records will be kept onsite).

2.4 Benchmarks

- (a) The Vibration Mitigation Plan will include surveyed benchmarks and will be submitted for review:
 - (i) As part of the Schematic Design submission package and
 - (ii) In advance of any excavation.
- (b) The benchmarks will be surveyed and vibration monitoring will be undertaken:
 - (i) At least monthly during excavation,
 - (ii) Until the ground floor of the Facility is complete, and
 - (iii) At completion of the Facility.

- (c) Vibration measurements will be taken:
 - (i) During activities that generate high levels of vibration or
 - (ii) At times requested by the Authority to address concerns raised by neighbours.
- (d) If reported values indicate unexpected vibration, the Design-Builder will establish additional monitoring locations or additional testing frequency in consultation with the Authority to determine the cause and to ensure remedial actions are effective.

3. PRE-CONSTRUCTION SURVEY

- (a) The Design-Builder's pre-construction survey (the "Pre-construction Survey") will include within a radius required by the Authority:
 - (i) The perimeter of the Site,
 - (ii) All adjacent properties including
 - (iii) Adjacent residential buildings,
 - (iv) Infrastructure, roadways and
 - (v) All underground services and installations
- (b) The Pre-construction Survey will include photos as well as surveyed levels and will be in a form and detail satisfactory to the Authority, acting reasonably.
- (c) The Pre-construction Survey will be provided to the Authority as a Submittal and will be reviewed in accordance with Schedule 2 [Review Procedure].

END OF APPENDIX 8F

SCHEDULE 4 – MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 8G TRAFFIC MANAGEMENT PLAN REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Traffic Management Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

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1. TRAFFIC MANAGEMENT PLAN

1.1 Reference Standards

- (a) As part of the Construction Management Plan the Design-Builder will develop and implement a traffic management plan (the "Traffic Management Plan") in compliance with the following reference standards as applicable:
 - (i) TAC (Transportation Association of Canada) Manual of Uniform Traffic Control Devices for Canada, Fifth Edition (2014).
 - (ii) Municipal guidelines and regulations enforceable in the place of the Work.
 - (iii) Manual on Uniform Traffic Control Devices (MUTCD).
 - (iv) In the event of any conflict between Reference Standards and the Specifications, the most restricting requirements will take precedence.

1.2 Traffic Consultant

- (a) The Design-Builder will engage a competent consultant specialised in traffic management (the "Traffic Consultant") who will be responsible to develop and implement the Traffic Management Plan.
- (b) The Traffic Consultant will revise the Traffic Management Plan as required by Construction progress.

1.3 Schedule

- (a) The Design-Builder will submit a Schedule linked to the master Project Schedule identifying the various times when traffic impacts are expected.
- (b) The Schedule will show the timing and duration of expected impacts and will be linked to the uniquely identified Traffic Management Plan.
- (c) The Design-Builder will organize and schedule the Work in such a manner as to minimize the duration and extent of its effect upon traffic movements in roads and rights-of-way and will not prohibit traffic on any part of a public or private road without having first obtained all necessary authorization to do so.

1.4 Safety of Vehicles, Cyclists and Pedestrians

- (a) The Design-Builder will develop and implement a plan to ensure all existing cycling, pedestrian and vehicle routes are maintained, including the following measures:
 - (i) Undertake the Construction so as not to impede vehicle traffic flow along the full existing width of 180th Street, 184th Street, and 55th Ave so as not to adversely affect the safety of vehicles, cyclists or pedestrians.

- (ii) Avoid interfering with the adjacent container business and the KPU.
- (b) The Design-Builder will provide snow removal on the walkways surrounding the Site and ensure walkways are safe for pedestrians.

1.5 Bus Stops

- (a) The Design-Builder will maintain the existing bus turnaround on the east side of 180th Street, south of 55th Ave, or temporarily relocate it during the Construction Period (in consultation with the Authority, the City of Surrey and Translink) to the satisfaction of Translink and the City of Surrey.
- (b) Avoid interfering with other bus stops in the vicinity of the Site.

1.6 Traffic Control

- (a) For the purposes of this Section traffic control includes maintaining and controlling:
 - (i) Vehicle traffic.
 - (ii) Pedestrian flows,
 - (iii) Cycling flows,
 - (iv) Infrastructure,
 - (v) Facilities, and
 - (vi) Other uses of the public or private rights of way impacted by the Work.
- (b) The Design-Builder will maintain traffic movements on roads affected by the Work, in accordance with all applicable laws, statutes, regulations, by-laws and ordinances of all federal, provincial, and local AHJ and the Authority's standards.
- (c) The Design-Builder will submit a Traffic Management Plan showing proposed methods for traffic control prior to commencing any operations that could affect existing arrangements.
 - (i) The Schedule and the Traffic Management Plans will be included in and submitted for review and approval with the Construction Management Plan.
 - (ii) Once accepted by the Authority and the Authority's Consultant the Design-Builder will submit the Traffic Management Plan to the AHJ for approval.
- (d) The Traffic Management Plan will allow the Work to be safely constructed, without unreasonably impacting vehicular, pedestrian, and cycling traffic.

- (e) Vehicle Routing Measures:
 - (i) The Design-Builder will ensure that access routes to and from the Site to be used by large trucks, semis and main Construction traffic will be agreed with the Authority and AHJ prior to commencement of Construction;
 - (ii) The Design-Builder will ensure that Construction routes will be clearly signposted, and the entrance to the Site will be clearly lit at all times;
 - (iii) The Design-Builder will ensure that traffic control and traffic calming measures will be provided at the Site entrance to ensure vehicles entering and exiting the Site do not cause undue congestion;
 - (iv) The Design-Builder will ensure that all Construction traffic will enter and exit the Site as approved by the Authority; and
 - (v) The Design-Builder will minimize the likelihood of congestion, strict monitoring and control of all vehicles entering, exiting and travelling across the Site will be maintained, including:
 - (A) The setting of specific delivery and collection times,
 - (B) Consolidation of deliveries wherever possible,
 - (C) A system of 'just in time' deliveries,
 - (D) The requirement for prior authorisation when visiting the Site via vehicle, which would be managed by the Design-Builder; and
 - (E) Site access controls and barriers.
- (f) The Design-Builder will provide and maintain access roads, sidewalk crossings, pathways, bicycle lanes, ramps and construction runways as may be required for access to the Work.
- (g) Should the Design-Builder identify any changes to the Schedule, or the Traffic Management Plan, the Design-Builder will provide a minimum one (1) month advance notice.
- (h) The Design-Builder will work with the Authority's Communication group to notify residents and businesses affected by the implementation of the Traffic Management Plans.
- (i) The Design-Builder will provide and maintain competent signal flag operators, traffic signals, barricades and flares, lights, or lanterns as required to perform Work and protect the public.

- (j) When working on travelled way:
 - (i) The Design-Builder will place equipment in a position to present minimum of interference and hazard to traveling public;
 - (ii) The Design-Builder will keep equipment units as close together as working conditions permit and preferably on the same side of travelled way;
 - (iii) The Design-Builder will not leave equipment on travelled way overnight;
 - (iv) The Design-Builder will not close or modify any lanes of road, sidewalks, pathways, bicycle routes, etc. without approval of the Authority and the applicable AHJ;
 - (v) The Design-Builder will keep travelled way graded, free of potholes and of sufficient width for required number of lanes and type of traffic.
- (k) The Design-Builder will provide and maintain road access and egress to property fronting along Work and in other areas as required, unless other means of road access exist that meet approval of the Authority and the AHJ.

1.7 Information and Warning Devices

- (a) The Design-Builder will provide, install, and maintain devices required to indicate construction activities or other temporary and unusual conditions resulting from Project Work which requires road user response.
- (b) Devices may include signs, temporary directional electrical warning signs, detour signs, danger signals, temporary barricades and guard rails, temporary lighting, overhead warning lights and flashing lights, permanent and temporary pavement markings, and the services of qualified flag persons and other miscellaneous warning devices as required.
- (c) The Traffic Management Plan will include a list of signs and other devices required for Project.
- (d) The Design-Builder will continually maintain traffic control devices in use by:
 - (i) Checking signs daily for legibility, damage, suitability, and location;
 - (ii) Cleaning, repairing or replacing to ensure clarity and reflectance; and
 - (iii) Removing or covering signs which do not apply to conditions existing from day to day.

1.8 Control of Public Traffic

- (a) The Design-Builder will provide competent flag persons, trained in accordance with, and properly equipped for the following situations:
 - (i) When public traffic is required to pass working vehicles or equipment which block all or part of travelled roadway;
 - (ii) When it is necessary to institute one-way traffic system through construction area or other blockage where traffic volumes are heavy, approach speeds are high and traffic signal system is not in use;
 - (iii) When workmen or equipment are employed on travelled way over brow of hills, around sharp curves or at other locations where oncoming traffic would not otherwise have adequate warning;
 - (iv) Where temporary protection is required while other traffic control devices are being erected or taken down;
 - (v) For emergency protection when other traffic control devices are not readily available;
 - (vi) In situations where complete protection for workers, working equipment and public traffic is not provided by other traffic control devices; and
 - (vii) At each end of restricted sections where pilot cars are required.

1.9 Disturbed Curbs and Sidewalks

- (a) If any curbs and/or sidewalks are disturbed during Construction the Design-Builder will:
 - (i) Provide temporary alternate safe passage for pedestrians and cyclists; and
 - (ii) Replace the disturbed curbs and sidewalks with new curbs and sidewalks and integrate them with existing curbs and sidewalks.

1.10 Deliveries

- (a) All deliveries to the Site will be booked in and out of the Site at designated security/access points;
- (b) The Site will be laid out in such a way that there is a clear and simple route for both vehicles and pedestrians; and
- (c) Vehicle and pedestrian routes will be kept separate with pedestrian crossing points being clearly marked and warning signs posted.

- (d) To prevent Construction traffic standing on public roadways, the Site entrance will have a 'pull-in' area to allow Construction delivery vehicles to move off public roadways immediately upon arrival at the Site;
- (e) Vehicles waiting in holding areas will switch off their engines while they are processed; and
- (f) Large vehicle deliveries will be scheduled outside peak hours as far as possible and will be spread across the working day.

2. APPROVAL AND PERMITTING

2.1 Authority Approval

- (a) The Design-Builder will not proceed with any Work without:
 - (i) The Authority's prior written approval of a Work Plan under this Section, such approval not to be unreasonably withheld or delayed; or
 - (ii) Advance written notice from the Authority confirming that a Work Plan is not required.

2.2 AHJ Approval

- (a) The Design-Builder will undertake the Construction in accordance with any Work Plan approved by the Authority; and
- (b) The Design-Builder is solely responsible for timely application and receipt of permits for any local traffic management measures and Site access as required by the AHJ.

END OF APPENDIX 8G

SCHEDULE 4 – MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 8H WASTE MANAGEMENT PLAN REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Waste Management Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

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1. **DEFINITIONS**

- (a) **Clean Waste:** Untreated and unpainted; not contaminated with oils, solvents, sealants or similar materials.
- (b) **Construction Waste:** Solid wastes typically including but not limited to, building materials, packaging, trash, debris, and rubble resulting from construction, remodelling, repair, and demolition operations.
- (c) **Hazardous:** Exhibiting the characteristics of hazardous substances including, but not limited to, ignitability, corrosiveness, toxicity, or reactivity.
- (d) **Non-hazardous:** Exhibiting none of the characteristics of hazardous substances, including, but not limited to, ignitability, corrosiveness, toxicity, or reactivity.
- (e) **Non-toxic:** Neither immediately poisonous to humans nor poisonous after a long period of exposure.
- (f) **Recyclable:** The ability of a product or material to be recovered at the end of its life cycle and re-manufactured into a new product for reuse by others.
- (g) **Recycle:** To remove a waste material from the Project site to another site for remanufacture into a new product for reuse by others.
- (h) **Recycling**: The process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- (i) **Return:** To give back reusable items or unused products to vendors for credit.
- (j) **Reuse:** To reuse a construction waste material in some manner on the Project site.
- (k) **Salvage:** To remove a waste material from the Project site to another site for resale or reuse by others.
- (l) **Sediment:** Soil and other debris that has been eroded and transported by storm or well production run-off water.
- (m) **Source Separation:** The act of keeping different types of waste materials separate beginning from the first time they become waste.
- (n) **Toxic:** Poisonous to humans either immediately or after a long period of exposure.
- (o) **Trash:** Any product or material unable to be reused, returned, recycled, or salvaged.

- (p) **Volatile Organic Compounds (VOC's):** Chemical compounds common in and emitted by many building products over time through outgassing:
 - (i) Solvents in paints and other coatings.
 - (ii) Wood preservatives; strippers and household cleaners.
 - (iii) Adhesives in particle board, fibreboard, and some plywood; and foam insulation.
 - (iv) When released, VOC's can contribute to the formation of smog and can cause respiratory tract problems, headaches, eye irritations, nausea, damage to the liver, kidneys, and central nervous system, and possibly cancer.
- (q) **Waste:** Extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable, returnable, recyclable, and reusable material.

2. WASTE MANAGEMENT PLANNING

2.1 General

- (a) The Design-Builder will develop and implement waste management regulations, processes and protocols (the "Waste Management Plan") in compliance with LEED waste disposal requirements and in accordance with Schedule 1 [Statement of Requirements] Section 2.7.4 Waste Management Hazardous and Non-Hazardous and as outlined below.
- (b) The purpose of the Waste Management Plan is to ultimately reduce the amount of material being landfilled.
- (c) The Design-Builder will submit to the Authority's Consultant, in accordance with Schedule 2 [Review Procedure], the Waste Management Plan as part of the Construction Management Plan or prior to any waste removal, whichever occurs sooner.
- (d) Refer also to additional requirements set out in Schedule 4 [Management Systems and Plans] Appendix 8A Section 10 Site Housekeeping and Section 11 Cleaning.

2.2 Content

- (a) The Waste Management Plan will contain the following:
 - (i) Analysis: Proposed site waste generated, including types and quantities.
 - (ii) Landfill Options: Name of landfill where trash is planned to be disposed.

- (iii) Alternatives to Landfill: List of each material proposed to be salvaged, reused, or recycled during course of the Project, proposed local market for each material,
- (iv) Materials Handling Procedures: A description of the means any waste materials identified will be protected from contamination, and a description of the means to be employed in recycling materials consistent with requirements for acceptance by designated facilities.
- (v) Transportation: A description of the means of transportation of recyclable materials, whether materials will be site-separated and self-hauled to designated centres, or whether mixed materials will be collected by waste hauler and removed from site, and destination of materials.
- (b) The Waste Management Plan will ensure quantification of Construction material diversion, recycling, and salvage goals and identify materials that will be recycled, at the minimum, including the following items:
 - (i) Clean dimensional wood and palette wood,
 - (ii) Scrap metal.
 - (iii) Cardboard,
 - (iv) Clean dimensional wood,
 - (v) Beverage containers,
 - (vi) Land clearing debris,
 - (vii) Concrete,
 - (viii) Brick,
 - (ix) Concrete Masonry Units (CMU),
 - (x) Asphalt,
 - (xi) Metals from banding, steel stud trim, ductwork, piping, rebar, roofing, other trim, steel, iron, galvanized sheet steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze,
 - (xii) Gypsum board,
 - (xiii) Plastic buckets waste reduced by using plastic lined cardboard dry packed materials instead of premixed moist packed materials where this option is available.
 - (xiv) Carpet and carpet pad trim,

- (xv) Paint,
- (xvi) Fluorescent tubes,
- (xvii) Plastic sheeting and packaging, where recycling programs are available, and
- (xviii) Rigid plastic foam insulation, where recycling programs are available.
- (c) Resources for Development of Waste Management Plan include Recycling Haulers and Markets: Investigate local haulers and markets for recyclable materials, then incorporate into Waste Management Plan.

3. WASTE MANAGEMENT IMPLEMENTATION

3.1 Manager

(a) Designate an on-site party responsible for instructing workers and overseeing and documenting results of the Waste Management Plan.

3.2 Distribution

(a) Distribute copies of the Waste Management Plan to the Design-Builder's work forces, all Subcontractors, site superintendents, and other contractors and suppliers as required.

3.3 Instruction

(a) Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by parties at appropriate stages of the Project.

3.4 Education

(a) Ensure all relevant parties are familiar with the Waste Management Plan including diversion target and tracking requirement, etc.

3.5 Separation Facilities

(a) Lay out and label a specific area to facilitate separation of materials for potential recycling, salvage, reuse, and return.

3.6 Housekeeping

(a) The Design-Builder will keep recycling and waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.

3.7 Hazardous Wastes

(a) Hazardous wastes shall be separated, stored, and disposed in accordance with WorkSafeBC regulations and requirements set out in this Agreement. For details refer to Section 4 Hazardous Waste Management Plan.

3.8 Management of Waste

- (a) Separate, protect, store and catalogue items to be reused and salvaged.
- (b) Separate, store, and dispose of hazardous wastes according to local regulations.
- (c) Transport and deliver non-salvageable items to licensed reuse, recycling, or disposal facility.
- (d) Track the types, amounts, destination, and diversion rates for all waste materials throughout the project, including both demolition and construction phases.
- (e) For each shipment of waste material from the Site or materials reused on the Site, track the types, amount shipped, destination (facility name and location), and amount diverted (reused, salvaged, or recycled).
- (f) Request and retain all weight tickets and receipts from all waste destinations such as transfer stations, recycling facilities, etc., showing material weights both disposed and diverted. Retain these for a period of at least two years.

3.9 Reduction of Vehicle Trips

- (a) The Design-Builder will use a waste compactor on-Site where possible to help reduce the number of vehicle trips related to waste collection.
- (b) Suppliers delivering packaged or wrapped components will be required to take redundant packaging away on delivery vehicles, rather than by separate measures.

3.10 Disposal of Waste

- (a) Burying of rubbish and waste materials is prohibited.
- (b) Disposal of waste into waterways, storm, or sanitary sewers is prohibited.

4. HAZARDOUS WASTE MANAGEMENT PLAN

- (a) The Design-Builder will be responsible for management, removal, abatement, containment and disposal of any potential underground hazardous substances such as storage tanks, any underground piping and appurtenances.
- (b) The Design-Builder will develop and implement a plan for the management of hazardous waste (the "Hazardous Waste Management Plan") that will outline

the plans, protocols, and procedures to be implemented and controlled by the Design-Builder for:

- (i) The separation of materials, and prevention of contamination of materials, to be recycled or salvaged; and
- (ii) The removal, handling and disposal of hazardous wastes in accordance with applicable laws.

END OF APPENDIX 8H

SCHEDULE 4 – MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 9 COMMISSIONING PLAN REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Commissioning Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

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1. COMMISSIONING PLAN REQUIREMENTS

1.1 Content of the Commissioning Plan

(a) The content of the Commissioning Plan will meet the requirements presented within Schedule 1 [Statement of Requirements] and Appendix 1L [Commissioning Roles and Responsibilities].

END OF APPENDIX 9

2.1.

SCHEDULE 4 – MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 10 ASSET MANAGEMENT PLAN REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement an Asset Management Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

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1. ASSET MANAGEMENT PLAN REQUIREMENTS

1.1 General Content Requirements

(a) The plan will include how the Design-Builder will meet the requirements set out in Schedule 1 [Statement of Requirements] Appendix 1V [Asset Management] and will attach the Asset Management Plan to the Design-Builder's Design and Construction Management Plan as Appendix 10 [Asset Management Plan].

2. ASSET MANAGEMENT PLAN – SUBMITTAL COORDINATION PLAN REQUIREMENTS

2.1 General

- (a) Provide a coordination plan for delivery of all Asset Management requirements taking into account overall project timing, dependency and integration with all other requirements such as related design and construction milestones, the commissioning plan, LEED certification, the Submittal phases, and related deadlines.
 - (i) Draft as part of the 30% Design Submittal Outline level plan with all topics and issues listed along with estimated timelines
 - (ii) Final as part of the 50% Design Submittal Detailed plan with topics and issues fully completed with final, agreed timelines

3. ASSET MANAGEMENT PLAN – HANDOVER PLAN REQUIREMENTS

3.1 General

- (a) Provide a plan for transition of maintenance and operations to the Authority including final coordination meetings to be held prior to the start of the Stabilization Period and Substantial Completion. Include the following:
 - (i) Ongoing Coordination Meetings, structure, timing, participants, etc.
 - (ii) Utilities & Interim services
 - (iii) Keys, access controls, system usernames, passwords, etc.
 - (iv) Receipt and review of final Submittals
 - (v) Final handover meeting

END OF APPENDIX 10

SCHEDULE 4 – MANAGEMENT SYSTEMS AND PLANS

New Surrey Hospital and BC Cancer Centre

APPENDIX 11 DEFICIENCY MANAGEMENT PLAN REQUIREMENTS

GENERAL REQUIREMENTS

In consultation with the Authority, the Design-Builder will develop and implement a Deficiency Management Plan in accordance with the requirements set out in the Agreement, Schedule 1 [Statement of Requirements], Schedule 2 [Review Procedure], Schedule 4 [Management Systems and Plans] and the content outlined in the Table of Contents below.

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1. SUMMARY

1.1 Objectives

- (a) Develop a transparent and effective deficiency management process, that
 - (i) is well understood and mutually agreed by both parties; and
 - (ii) effectively leverages the use of technology
- (b) Such an approach will provide the framework from which all deficiencies and warranties can be effectively and efficiently managed during the period of the Deficiency Management Plan.

2. DEFICIENCY MANAGEMENT PLAN REQUIREMENTS

2.1 Period of the Deficiency Management Plan

(a) The Deficiency Management Plan covers the Construction period up to at least a further two (2) years upon the expiry of the Warranty Period, collectively referred to as the "Deficiency Management Plan Period".

2.2 Notices

(a) Refer to Section 39 Warranty of the Agreement.

2.3 Responsibilities

- (a) The Design-Builder will be responsible for implementing, managing, and reporting on the deficiency management process (the "Deficiency Management Process").
- (b) The Authority, the Authority's Consultant and/or agents will regularly reviews the progress of the Works on the Site and monitor the Design-Builder's adherence to the Reviewed Drawings and Specifications and Reviewed Management Systems and Plans.
- (c) The Authority's, the Authority's Consultant's and/or agents' review or witnessing does not relieve the Design-Builder from any responsibility to complete the Work in compliance with the Agreement.

2.4 Deficiency Manager

- (a) The Design-Builder will assign a dedicated deficiency manager lead (the "Deficiency Manager") who will work in close collaboration with the Design-Build Quality Manager, and who will be responsible for the delivery of the Design-Builder's obligations under the Project specific Deficiency Management Plan.
 - (i) The Deficiency Manager will have a construction and building systems background enabling them to manage the various deficiencies effectively

- and in a timely manner with the full support of the various design disciplines such as architectural, civil, structural, mechanical, and electrical as well as the subcontractors and suppliers.
- (ii) Additional requirements for the Deficiency Manager are set out in Schedule 4 [Management Systems and Plans] Appendix 8 [Design and Construction Management Plan]

2.5 Software

- (a) The Design-Builder is to select and present the proposed software to be used to support the management of the deficiency process for the Authority's approval.
- (b) The software is required to be in place and operable providing the full functionality as required by both the Design-Builder to self certify and the Authority to carry out the oversight before the commencement of the Works on Site, and is to remain available to the Authority at all times for the duration of the Deficiency Management Plan Period.
- (c) The same software is to be used for the duration of the Deficiency Management Plan Period unless otherwise approved or requested by the Authority.
- (d) The Authority will identify selected members of the Authority's Project Team who will require full access to the proposed software, in the case that the Authority needs to input deficiencies into the software or generate reports.

2.6 Training

- (a) The Design-Builder will arrange for the software vendor to provide the training necessary for the Authority, the selected Authority's consultants and agents, to become competent users of the software prior to the start of the Works on Site.
- (b) The Design-Builder will provide a training refresh and provide further training as reasonably requested by the Authority for the Deficiency Management Plan Period.

2.7 Deficiency Management Report

- (a) The Design-Builder is to provide the Authority with a monthly deficiency management report (the "Deficiency Management Report") included in the Monthly Report as outlined in Schedule 4 [Management Systems and Plans] Appendix 2 [Monthly Reporting Requirements] and in accordance with Schedule 2 [Review Procedure].
- (b) The Deficiency Management Report will clearly set out the performance of the Deficiency Management Process, both during the current month and for future deliverables during the Deficiency Management Plan Period.
- (c) The Deficiency Management Report will also highlights key issues for resolution.

(d) The structure and contents of the Deficiency Management Report are to be agreed on with the Authority.

2.8 Close-out Evidence

- (a) The process for closing out deficiencies will be outlined in the Design-Builder's Deficiency Management Plan and submitted for the Authority's review and approval.
- (b) The Design-Builder is to use photographic evidence (where possible) to demonstrate the successful close-out of deficiencies referenced back to each uniquely identified deficiency.
- (c) As part of the evidence, the Design-Builder will include "before and after" images as well as a description of the issue and resolution.
- (d) The Authority may audit closed-out deficiencies.

2.9 Archive Copy

- (a) The Design-Builder is to provide to the Authority at the end of the Deficiency Management Plan Period an archive copy of the contents of the software database(s) used for the Process.
- (b) The archive copy is to include a search capability to enable the user to efficiently navigate the contents of the database, including the tracking of each deficiency from input to close out.

2.10 Detailed Plan

- (a) The Design-Builder is to clearly set out the approach to managing the Deficiency Management Process.
- (b) The Design-Builder is to develop an IT strategy for supporting the software and maintaining its functionality for the duration of the Deficiency Management Plan Period.
- (c) The Design-Builder is to outline the management process to be adopted in support of the proposed Deficiency Management Process and provide scenarios which illustrate how the key stakeholders in the Deficiency Management Process are expected to contribute.
- (d) The Design-Builder is to outline the management structure delivering an effective and efficient Deficiency Management Process for the duration of the Deficiency Management Plan Period.
- (e) The Design-Builder is to develop an outline of the monthly Deficiency Management Report (submitted as part of the Monthly Report defined in Schedule

- 4 [Management Systems and Plans] Appendix 2 [Monthly Reporting Plan Requirements]) for the Authority's review and approval.
- (f) The Design-Builder is to include a proposed audit plan, which is expected to include both internal and external audits as set out in the Quality Management Plan.
- (g) The Design-Builder is to set out a proposed resolution procedure for the Authority's review and approval in the event the parties cannot agree on a matter.
- (h) The Design-Builder is to set out a typical file architecture and signposting for the Authority's review and approval sufficient for the Authority to understand the ease of navigation of the final archive.

3. REFERENCES

3.1 Deficiency Plan Requirements

- (a) Main Body of the Design-Build Agreement:
 - (i) Section 13 Quality Management
 - (ii) Section 39 Warranty
 - (iii) Section 45 Substantial Completion and Total Completion
- (b) Schedule 1 [Statement of Requirements]:
 - (i) Appendix 1V [Asset Management]
- (c) Schedule 4 [Management Systems and Plans]:
 - (i) Table 1: Plan Development and Updates
 - (ii) Table 2: Management Plan Holdbacks and Deductions
 - (iii) Appendix 2 [Monthly Reporting Plan Requirements]
 - (iv) Appendix 3 [Quality Management Plan Requirements]
 - (v) Appendix 8E [Construction Completion Plan Requirements]
- (d) Schedule 8 [Independent Certifier Agreement]
 - (i) Schedule 1 FUNCTIONS Section (c)

END OF APPENDIX 11

SCHEDULE 5

ENERGY GUARANTEE

SCHEDULE 5

ENERGY GUARANTEE

1 INTERPRETATION

1.1 Definitions

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

"Approved Energy Modeller" means an individual who is a registered professional engineer with documented experience in energy modelling, and has the Building Energy Modelling Professional (BEMP) designation and is approved by BC Hydro to provide energy models for Clean BC (if applicable);

"Building Energy Modelling Professional" or "BEMP" means an energy modeller who has earned the ASHRAE BEMP designation, as listed on ASHRAE website http://certificants.ashrae.org/;

"Cooling Degree Days" for a period means the figure obtained or calculated from the 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;

"**Energy**" means electrical and thermal energy used within, by or for the Facility and electrical and thermal energy used within, by or for exterior elements connected to the building electrical and thermal systems for the Facility;

"**Energy Consumption**" for a period means the total amount of Energy consumed at and by the Facility during that period, expressed in MWh as reflected by the readings for the metered utilities, whether or not directly from utility providers, and as calibrated by the Independent Energy Consultant;

"Energy Costs" means the total calculated operational energy cost associated with the Facility Energy Consumption, expressed in \$ per year;

"Energy Dashboard" means a password protected web-accessible tool that can display real time (with up to 2 hour lag time) Energy Consumption for a range of time increments (including hourly, daily, monthly, and yearly) and broken down by energy type (electrical and thermal at a minimum) and major end uses, with comparisons to the Energy Target;

"**Energy Guarantee**" has the meaning given in Section 4.1 (Meet or Beat Energy Target) of this Schedule.

"Energy Model" means the hourly energy simulation model produced using whole building energy modelling software, including any calculations and Energy Model Summary Report of expected Energy Consumption and Energy Costs, with such model updated in accordance with this Schedule 5 and the Statement of Requirements;

"**Energy Model Assumptions**" means the energy model assumptions set out in Appendix 1 to this Schedule;

"Energy Modelling Summary Report" means the report referred to as the "Energy Modelling Summary Report" in Appendix 5 [Energy Management Plan Requirements] of Schedule 4 [Management Systems & Plans];

"**Energy Target**" means per year consumed by the Facility, excluding Energy used by the Energy Centre space (such as lights), though including plant equipment Energy in the Energy Centre serving the Facility;

"Energy Use Intensity" or "EUI" means the sum of all Energy used by the Facility (i.e. electricity) and divided by the MFA, reported as kWh/m2/year;

"Energy Utility" means each different type of energy that is purchased or produced for use in the Facility (and may include electricity from BC Hydro, hot water, steam or chilled water delivered from a plant sharing multiple buildings);

"Environmental Credit" means any income, credit, right, benefit or advantage relating to environmental matters, including type and level of emissions (including carbon and carbon equivalent greenhouse gas emissions), means of production of Energy, input sources, and compliance with any Environmental Laws;

"Environmental Laws" means all Laws relating to the protection of human health and all plant, animal, land, water and air resources that may be affected by the Project;

"Facility Operation Variances" means any material variances between the actual occupancy and usage of the Facility and the assumptions for occupancy and usage set out in the Statement of Requirements, the Reviewed Drawings and Specifications and the Proposal Extracts regarding the occupancy and usage of the Facility

"Heating Degree Days" for a period means the figure obtained or calculated from the 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;

"**IEC Functions**" means the functions to be carried out by the Independent Energy Consultant, as set out in Section 2.2 of this Schedule;

"Independent Energy Consultant" means a third party independent professional engineer retained jointly by the Authority and the Design-Builder in accordance with this Schedule;

"M&V" means measurement and verification:

"Measurement and Verification Plan" has the meaning given in Section 2.1 of Appendix 2, with such Measurement and Verification Plan to meet the requirements of this Schedule including Appendix 2;

"Megawatt hour" or "MWh" is the unit of Energy to be used throughout this Schedule and 1 MWh is equivalent to 3.6 GJ;

"Modelled Floor Area" or "MFA" means the total enclosed floor area of the Facility, as reported by the energy simulation software, excluding exterior areas and indoor parking areas. All other spaces, including partially-conditioned and unconditioned spaces, are included in the MFA. The MFA must be within 5% of the gross floor area from the architectural drawings, unless justification is provided demonstrating where the discrepancy arises and why the MFA should differ from the gross floor area by greater than 5%;

"Portfolio Manager" means the ENERGY STAR6 Portfolio Manager TM an interactive energy management tool that allows tracking and assessment of facility energy and water consumption in a secure online environment;

"Predicted Energy Consumption" means the prediction of Energy Consumption as determined from the Design-Builder's current Energy Model and documented in the Energy Modelling Summary Report or as determined by the Independent Energy Consultant;

"Process Load" means Energy Consumption other than zone lighting or zone receptacle loads that in general are a function of the occupant-driven or commercial processes occurring within the Facility rather than energy consumption associated with operation of the Facility;

"**Test Period**" means the 12 month period commencing no later than 12 months after the Substantial Completion Date and ending within 24 months after the Substantial Completion Date, to be mutually agreed upon between the Design-Builder and the Authority; and

"Weather Data" means the historic weather data obtained from Environment Canada's "National Climate Data and Information Archive" for the weather station at the Vancouver International Airport including the following hourly meteorological parameters:

- (i) atmospheric pressure;
- (ii) dry bulb temperature;
- (iii) humidity ratio (or dewpoint / wet bulb temperature); and
- (iv) solar parameters.
- 1.2 References to the term "Facility" where used in this Schedule 5 exclude the Child Care Centre.

2 INDEPENDENT ENERGY CONSULTANT

2.1 General

The Authority and Design-Builder will jointly engage an Independent Energy Consultant acceptable to the Authority. The Independent Energy Consultant will be an independent contractor, and not the servant, employee, partner or agent of the Design-Builder or the Authority.

The parties will enter into an agreement with the Independent Energy Consultant on substantially the same terms as set out in Schedule 12 [Independent Energy Consultant Agreement].

If within 20 Business Days of the Effective Date the Independent Energy Consultant has not been appointed, or if for any reason the Independent Energy Consultant is unable or unwilling to continue to perform the Independent Energy Consultant services or if the Independent Energy Consultant appointment has been terminated by the Authority and the Design-Builder, then:

- (a) within 5 Business Days of the date that is 20 Business Days after the Effective Date (or within 5 Business Days of the date of termination of the Independent Energy Consultant's appointment, if applicable), the Design-Builder will provide the names of 3 candidates acceptable to the Design-Builder for consideration by the Authority;
- (b) within 10 Business Days of receiving the candidate names, the Authority will notify the Design-Builder of the candidates acceptable to the Authority, and the parties will enter into a contract with an acceptable candidate generally in the form required by this Schedule; and
- (c) if none of the candidates are acceptable to the Authority, acting reasonably, or if for any reason an Independent Energy Consultant is not appointed within 40 Business Days of the Effective Date (or within 20 Business Days of the date of termination of the Independent Energy Consultant's appointment, if applicable), then either party may immediately apply to the Vancouver International Arbitration Centre.

2.2 IEC Functions

Without limiting any other applicable provision of this Agreement, the Independent Energy Consultant will provide services as follows:

- (a) Throughout the Construction Period and Test Period:
 - (i) the Design-Builder will keep the Independent Energy Consultant informed and will ensure that the Independent Energy Consultant reviews any major Facility changes that could impact the Energy Guarantee and confirm that the Energy Guarantee will be met;
 - (ii) the Independent Energy Consultant will make efforts to integrate various knowledge areas related to energy, metering, measurement and verification;
 - (iii) the Independent Energy Consultant will review the Energy Model updates and provide comment on the extent to which, in its professional opinion and within the time constraints of its involvement, the Energy Guarantee is anticipated to be met; and

- (iv) the Independent Energy Consultant will provide a written report of the foregoing reviews to the Authority.
- (b) In each of the phases listed below, the Independent Energy Consultant will:
 - (i) Design:
 - (A) Review the Design of the Facility and the Energy Model submission at each of the Facility milestones set out in Table A1 to ensure the Energy Model remains in alignment with the Energy Guarantee and report on findings to the Design-Builder and the Authority.

(ii) Construction:

- (A) Implement the Measurement and Verification Plan consistent with Option D IPMVP Volume three (3)-2003 (Concepts and Options for Determining Energy Savings for new construction).
- (B) Provide suggestions for a mechanism to optimize actual energy performance and associated operating costs.
- (C) With the Design-Builder, assist in the facilitation of operations and maintenance trouble shooting.
- (D) Review the metering matrix to ensure that the Energy Guarantee can be verified through the Measurement and Verification Plan.
- (E) Report on any Construction that fails to comply with, or will cause the Design-Builder to fail to comply with the Energy Guarantee, until such Construction is modified to comply with Reviewed Drawings and Specifications that demonstrate that the Energy Guarantee will be met.
- (F) To bridge the gap between Design and Construction energy performance, on a quarterly basis commencing on the date that is three months following the date of submission of the Design-Builder's 100% Design phase Submittals under Schedule 2 [Review Procedure], submit a summary statement to the Authority of all noted Facility changes that could impact the Energy Guarantee, the preparation of which should take into account, but not be limited to, the following:
 - (1) Review of shop drawings and Changes for impact on the Energy Target.
 - (2) Review the controls strategies and sequence of operations.
 - (3) Review of metering installation.

- (4) Ensuring the Approved Energy Modeller is provided with all Facility updates to be included in Energy Model updates and calibration.
- (5) Review and comment, as needed if the Independent Energy Consultant finds discrepancies between this Agreement and the work of the Approved Energy Modeller (input, output, results).
- (6) Determine, at Substantial Completion, whether and to what extent the Predicted Energy Consumption for the Facility exceeds the Energy Target, as applicable.
- (G) This process shall allow for the IEC to have four consecutive days onsite to verify that the building control system and the sequences of operation are able to operate in accordance with the mechanical control sequence and in keeping with the Energy Model and in collaboration with relevant parties (mechanical designer, controls contractor, and Authority building operator) to identify and resolve any discrepancies.

(iii) Test Period

- (A) Review the Measurement and Verification Plan prepared by the Design-Builder to ensure that there is alignment with the energy performance goals of the Project.
- (B) Execute the Measurement and Verification Plan.
- (C) Review the calibrated Energy Model versus operational performance data taking into account actual operational factors including actual climate conditions, occupancy, equipment schedules, and Authority-controlled effects, and flag deviations from the Energy Guarantee.
- (D) Document the measured performance of the Facility relative to the Energy Target.
- (E) Provide monthly reports summarizing performance by each end use relative to the Energy Target, and flag any issues and identify corrective actions needed, as identified in Section 2.2 (Energy Management Plan Submittals) of Appendix 1 to this Schedule.
- (F) Determine, before the end of the Test Period, whether and to what extent the Energy Guarantee should be adjusted based on factors which, in the Independent 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. The Independent Energy Consultant will develop a more detailed methodology for such adjustment to the satisfaction of the Authority and the Design-Builder. The Independent Energy Consultant may use the Energy Model or another analytical tool. The detailed methodology will include a simplified summary of inputs, assumptions, and changes reasonably required by the Authority for purposes of clearly explaining the adjustments.

(G) Determine, at the end of the Test Period, whether and to what extent the Energy Consumption for the Facility during the Test Period exceeds the Energy Target.

2.3 Timelines

- (a) During Design, the Independent Energy Consultant will review the Submittals before the Design-Builder submits such Submittals to the Authority in accordance with Schedule 2 [Review Procedure] and will provide certification in writing where the applicable Submittal confirms that the Design will meet the Energy Target. The Design-Builder will not submit any Submittal to the Authority pursuant to the Review Procedure without such certification from the Independent Energy Consultant.
- (b) During Construction, on a quarterly basis commencing on the date that is three months following the date of submission of the Design-Builder's 100% Design phase Submittals under Schedule 2 [Review Procedure], the Independent Energy Consultant will prepare and deliver to the Authority and the Design-Builder a quarterly written report containing a description of the IEC Functions completed in the previous quarter, with respect to Sections 2.2(a) and 2.2(b)(ii) of this Schedule.
- (c) During the Test Period, as the Independent Energy Consultant determines is required for purposes of the IEC Functions and, no later than the 10th day of each month, the Independent Energy Consultant will prepare and deliver to the Authority and the Design-Builder a monthly written report containing a description of the functions completed in the previous month, with respect to Sections 2.2(a) and 2.2(b)(iii) of this Schedule.
- (d) The format of written reports is to be approved by the Authority.

2.4 Qualifications

- (a) The Independent Energy Consultant will:
 - (i) be a professional engineer with documented experience in energy modelling and measurement and verification, such as but not limited to having the Building Energy Modelling Professional (BEMP) designation;

- (ii) have a high level of knowledge and experience with mechanical design;
- (iii) be experienced in measurement and verification (M&V);
- (iv) have familiarity with electrical design and controls;
- (v) have familiarity with commissioning process; and
- (vi) have familiarity with facilities maintenance and operation needs.
- (b) The role of the Independent Energy Consultant will not include preparing or completing Energy Models for or on behalf of the Design-Builder.

3 MONITORING EQUIPMENT

3.1 Equipment Installation

In accordance with the requirements of the Statement of Requirements, the Design-Builder will install equipment, including metering, satisfactory to the Authority to measure, record, and monitor Energy Consumption for purposes of the Energy Guarantee.

Such equipment must be suitable and properly calibrated to enable a detailed measurement, recording and monitoring of Energy and to allow analysis of the data collected to enable various matters, including:

- (a) comparisons to be made with the Energy Guarantee;
- (b) early warning of malfunctions and deviations from norms; and
- (c) to provide an Energy Dashboard to the Authority.

Such equipment must secure all such properly recorded information so that it is not lost or degraded as a result of any equipment or service malfunctions and is secure from adjustment, modification or loss from any source.

3.2 Review of Equipment

The Design-Builder will submit the proposed equipment required pursuant to Section 3.1 (Equipment Installation) of this Schedule to the Authority for review in accordance with Schedule 2 [Review Procedure] and Schedule 1 [Statement of Requirements].

4 ENERGY GUARANTEE

4.1 Meet or Beat Energy Target

The Design-Builder warrants to the Authority that the Facility will be designed and constructed so that the Energy Consumption for the Facility per year will not exceed the Energy Target (the "Energy Guarantee").

4.2 Design and Construction Period

- (a) The Design-Builder warrants to the Authority that at all times during Design and Construction, the Facility will, upon completion of Construction in compliance with the current Reviewed Drawings and Specifications, meet the Energy Guarantee.
- (b) The Design-Builder will, with each Submittal submitted to the Authority under Schedule 2 [Review Procedure], identify any impacts on the Energy Guarantee or the Energy Model Assumptions, for review by the Authority. Any such impacts will not be effective unless agreed in writing by the Authority. If the Design-Builder does not identify any impacts, the Submittal will be deemed to have no impact on the Energy Guarantee or the Energy Model Assumptions.
- (c) On a quarterly basis commencing no later than the date that is three months following the submission of the Design-Builder's 100% Design phase Submittals under Schedule 2 [Review Procedure], at times set out in Schedule 4 [Management Systems and Plans] and together with the application for the Certificate of Substantial Completion, the Design-Builder will provide an updated Energy Model and Energy Modelling Summary Report prepared by the Approved Energy Modeller that demonstrates that the Energy Guarantee will be met.
- (d) If at any time prior to the Substantial Completion Date, the Design-Builder fails to demonstrate that the Energy Guarantee will be met, the Design-Builder will:
 - (i) revise the Design and re-submit the Reviewed Drawings and Specifications for the Facility, together with an updated Energy Model and Energy Modelling Summary Report prepared by the Approved Energy Modeller demonstrating that the Energy Guarantee will be met, to the Authority for review under Schedule 2 [Review Procedure]; and
 - (ii) modify the Work as required to comply with the revised Reviewed Drawings and Specifications.
- (e) The Authority will not be required to make any payment for any Work that fails to comply with the Reviewed Drawings and Specifications, or if applicable under Section 4.2(d) of this Schedule, the revised Reviewed Drawings and Specifications, and the Independent Certifier will assess any such non-compliant Work and apply a holdback for the value of correction of such Work until such Work is modified and compliant.
- 4.3 Energy Consumption Certificate after Substantial Completion Date

As set out in Section 2.2(b)(ii)(F)(6) of this Schedule, following Substantial Completion, the Independent Energy Consultant will assess whether the Predicted Energy Consumption for the Facility exceeds the Energy Target. Following this assessment, and within six months after the Substantial Completion Date, the Design-Builder will deliver to the Authority a certificate of the Independent Energy Consultant showing:

- (a) the Predicted Energy Consumption for the Facility;
- (b) if applicable, the adjusted Energy Target, or if the Energy Target is not adjusted, confirmation that the original Energy Target is appropriate; and
- (c) any variable that affects or invalidates the Predicted Energy Consumption for the Facility relative to the Energy Model Assumptions.

4.4 Monitoring of Energy Consumption during Test Period

During the Test Period, the Design-Builder and the Independent Energy Consultant will monitor Energy Consumption in the Facility in order to determine the Energy Consumption for the Test Period.

4.5 Adjustment to Energy Target during Test Period

As set out in Section 2.2(b)(iii)(F) of this Schedule, the Independent Energy Consultant will determine whether and to what extent the Energy Target should be adjusted, for example to reflect new or improved information that impacts energy loads and/or end uses that are beyond the control of the Design-Builder or are heavily impacted by Independent Energy Consultant controlled variables.

4.6 Energy Consumption Certificate after Test Period

As set out in Section 2.2(b)(iii)(G) of this Schedule, at the end of the Test Period, the Independent Energy Consultant will assess whether the Energy Consumption for the Facility during the Test Period exceeds the Energy Target. Following this assessment, and within 90 days after the end of the Test Period, the Design-Builder will deliver to the Authority a certificate of the Independent Energy Consultant showing:

- (a) the Energy Consumption for the Facility during the Test Period;
- (b) if applicable, the adjusted Energy Target, or if the Energy Target is not adjusted, confirmation that the original Energy Target is appropriate;
- (c) the Weather Data for the Test Period, including the number of Cooling Degree Days and Heating Degree Days; and
- (d) any other variable that affects or invalidates the Energy Consumption for the Facility relative to the Energy Model Assumptions.

4.7 Energy Guarantee Post Substantial Completion

Notwithstanding any other provision of this Agreement, the Design-Builder does not warrant and is not liable under this Section 4 for failing to meet the Energy Guarantee or for the actual Energy Consumption after Substantial Completion of the Building.

5 ENTITLEMENT TO ENVIRONMENTAL CREDITS

5.1 Environmental Credits

The Authority will be entitled to any and all Environmental Credits related to the Facility and its operation.

5.2 Participate in Incentive Programs

The Design-Builder will, on behalf of the Authority, apply to available Clean BC/BC Hydro incentive programs and take all reasonable steps to obtain for the Authority the maximum benefits (funding, incentives and cost savings) offered by Clean BC/BC Hydro under such program(s). The Design-Builder will:

- (a) meet with Clean BC/BC Hydro and the Authority's energy manager at an early stage of the design of the Facility;
- (b) collaborate with the Authority's energy manager, and Clean BC/BC Hydro to identify potential improvements to the design of the Facility that will achieve greater energy efficiency;
- (c) revise the Design of the Facility as required to improve energy efficiency (to the extent possible without materially changing the Statement of Requirements or the intent of the Proposal Extracts), and use all reasonable efforts to obtain for the Authority the maximum funding or incentives offered by Clean BC/BC Hydro and minimize the Authority's energy costs during operation; and
- (d) provide to the Authority all invoices and other documentation reasonably required by the Authority to complete incentive agreements and for the Authority to receive incentive funds within the time frame agreed to in the incentive agreements.
- 5.3 In addition to the above requirements of this Section 5, the Design-Builder acknowledges that BC Hydro may provide to the Authority an incentive or rebate or other Environmental Credits in respect of energy modelling of the Facility, and the Design-Builder will assist the Authority in obtaining such incentive, rebate and other Environmental Credits, including:
 - (a) registering the Facility with all applicable BC Hydro programs;
 - (b) engaging a consultant acceptable to BC Hydro;
 - (c) submitting the Design and conducting any baseline testing, if necessary;
 - (d) conducting all energy modelling that may be 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;

- (f) completing the Work in accordance with the BC Hydro energy compliance checklist;
- (g) facilitating any BC Hydro inspection or review of Construction and construction materials; and
- (h) any other steps necessary to obtaining BC Hydro incentives, rebates and other Project Credits.
- 5.4 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 incentives, rebates and other Project Credits; and
 - (ii) all steps have been performed, including providing all required documentation, including cost confirmation of the implemented energy conservation measures, and information to the Authority and BC Hydro to obtain incentives, rebates and other Project Credits (other than those steps that may only be performed by the Authority).
- 5.5 The Authority acknowledges that BC Hydro incentives, rebates and other Project Credits may be received after Substantial Completion.
- 5.6 This Section 5 will not limit any requirements of the Statement of Requirements for energy modelling for any purpose.

6 ENERGY MODELLING

- 6.1 The Design-Builder will comply with energy modelling submittal requirements set out in Appendix 1 to this Schedule.
- 6.2 The Design-Builder acknowledges that the utility cost assumptions in Appendix 1 to this Schedule are to be used in the energy modelling and calibration, unless other rates are provided and agreed to by the Authority.

APPENDIX 1 ENERGY MODEL ASSUMPTIONS

1. **OVERVIEW**

The intent of this Appendix and the Tables included within and appended to this Appendix is to provide clarity regarding modelling methodologies, assumptions and reporting, especially related to Authority- controlled variables.

1.1 General

- (a) The Design-Builder shall apply the modelling assumptions and methodologies outlined in this Appendix for all energy models and supporting documentation submitted in relation to Energy Management Plan and the Energy Guarantee, applicable to the Facility.
- (b) Where modelling procedures are not indicated in this Appendix, the Design-Builder is to follow the procedures of the most recent version of ASHRAE 90.1 Appendix G Performance Rating Method.
- (c) A 'baseline' or 'reference' building simulation is not required for the Energy Target.
- (d) Compliance with the Energy Target provisions of this Schedule 5 is required regardless of simulation and calculation tools, or techniques employed by the Design-Builder.

1.2 Terminology

- (a) Simulation Templates
 - (i) Identifies a combination of simulation parameters that apply to specific room typologies within a department, as outlined in Table B5 [Simulation Templates and Loads].
- (b) Operating Schedules
 - (i) Operating schedules listed in Table B5 [Simulation Schedules and Loads] to this Appendix reflect hypothetical operation of the Facility in which departments operate under typical clinical hours of operation. All design and construction stage energy models to be based on these operating schedules, unless the Authority provides updated data or agrees in writing that different operating schedules can be used. Final calibrated Energy Model and Measurement and Verification Plan to be updated with actual operating schedules.

(c) Climate Scenarios

- (i) Three climate scenarios are requested to be analyzed for the design phase model submittals as noted in Table A1 [Energy Management Plan Submittal Schedule] of this Appendix:
 - (A) Climate scenario one is to be based on the provided EPW file per Section 3.1(d) of this Appendix representing current climate.
 - (B) Climate scenario two is to be based on the provided EPW file per Section 3.1(d) of this Appendix representing 2050's future predicted climate.
 - (C) Climate scenario three to be based on the provided EPW files per Section 3.1(d) of this Appendix representing 2080's future predicted climate.
- (ii) For the purpose of showing compliance with the Energy Target, only Climate Scenario one should be utilized.

1.3 Simulation Engines

- (a) For determining the Energy Target, simulation engines shall at a minimum have the following abilities:
 - (i) Explicitly model 8760 hours per year;
 - (ii) Hourly variations in occupancy, lighting power, miscellaneous equipment;
 - (iii) HVAC system operation variations in setpoints and schedules;
 - (iv) Part-load performance curves for mechanical systems and equipment;
 - (v) Compliance with ASHRAE Standard 140; and
 - (vi) Other supporting calculations tools are at the discretion of the Design-Builder
- (b) Compliance with the energy target provisions of this Schedule 5 is required regardless of simulation and calculation tools, or techniques employed by the Design-Builder.
- (c) Simulations are to be performed using IES Virtual Environment software. Requests are required to be submitted to use other software.
- (d) It is expected that time-series output data will be utilized to simulate or perform calculations that the simulation engine is unable to do.

2. ENERGY MODEL DESIGN AND CONSTRUCTION SUBMITTALS

2.1 Energy Management Plan Submittal Schedule

(a) Energy Management Plan schedule and Submittal documents are required for each major design milestone, per Table A1 [Energy Management Plan Submittal Schedule] of this Appendix.

Table A1: Energy Management Plan Submittal Schedule

Design Milestone	Climate File Scenario	Energy Report per Section 1.2(c) of Schedule 4 [Management Systems and Plans] Appendix 5 [Energy Management Plan]	Energy End-Use Summary per Section 1.2(f) of Schedule 4 [Management Systems and Plans] Appendix 5 [Energy Management Plan]	Energy & Cost Summary per Section 1.2(e) of Schedule 4 [Management Systems and Plans] Appendix 5 [Energy Management Plan]	
30%	1, 2 and 3	yes	yes	yes	
50%	1	yes	yes	yes	
70%	1	yes	yes	yes	
90%	1	yes	yes	yes	
100%	1	yes	yes	yes	
Substantial Completion	1, 2 and 3	yes	yes	yes	
M&V	1 (Calibrated)	Calibrated energy model per Measurement and Verification Plan.			

2.2 Energy Management Plan Submittals

- (a) Each submission shall include the following:
 - (i) An entire submission package in accordance with Appendix 5 [Energy Management Plan Requirements] of Schedule 4 [Management Systems and Plans]; or
 - (ii) Confirmation that there has been no material change that would impact the content or results of the report since the previous submission; or
 - (iii) A summary of the key changes since the previous submission including at minimum the following:
 - (A) A statement from the Independent Energy Consultant confirming that they have reviewed the submission and noting any concerns regarding the accuracy of the submission.

- (B) Energy Guarantee Compliance Declaration, per Section 1.2(b)(iii) of Appendix 5 [Energy Management Plan Requirements] of Schedule 4 [Management Systems and Plans].
- (C) Energy & Cost Summary, per Section 1.2(b)(iv) of Appendix 5 [Energy Management Plan Requirements] of Schedule 4 [Management Systems and Plans].
- (D) Energy per End-Use Summary, per Section 1.2(b)(v) of Appendix 5 [Energy Management Plan Requirements] of Schedule 4 [Management Systems and Plans] for all climate scenarios modelled per Table A1 [Energy Management Plan Submittal Schedule] of this Appendix.
- (E) Performance Data Summary Statement per Section 1.2(b)(vi) of Appendix 5 [Energy Management Plan Requirements] of Schedule 4 [Management Systems and Plans].
- (F) Model Input Summary Table, per Section 1.2(b)(vii) of Appendix 5 [Energy Management Plan Requirements] of Schedule 4 [Management Systems and Plans].
- (G) A narrative describing any deviations from or simplifications of the inputs and assumptions that are outlined in this Appendix and the rationale explaining why in the Design-Builder's opinion it is necessary to use different assumptions, for review and approval by the Authority; the Authority reserves the right to instruct the Design-Builder to revise these assumptions and these revisions will be included in an updated submission.
- (H) Energy Model digital file(s) and any workaround calculations.

3. ENERGY MODEL ASSUMPTIONS

3.1 General Independent Assumptions

- (a) To ensure comparable simulations while allowing flexibility in modelling approach, the Design-Builder shall use the default assumptions shown in the following sections to determine operating parameters for the various spaces, unless other Authority-provided data contradicts these assumptions, or where knowledge or experience dictate that a different assumption would better reflect actual operating conditions. If deviations are made to assumptions made herein, the Design-Builder shall provide a rational to why different assumptions have been used and what they are.
- (b) The Design-Builder shall apply the modelling assumptions and methodologies outlined in this Schedule 5 for all energy models and supporting documentation submitted in relation to Energy Management Plan, the Energy Target.

(c) The Design-Builder shall use the appropriate combination of individual space type categories and grouped space type categories in Table B5 [Simulation Schedules and Loads] of this Appendix to define the inputs to best represent the Design based on the particular zoning strategy and modelling approach used.

(d) Weather File

- (i) Weather data for the energy models submitted per Table A1 [Energy Management Plan Submittal Schedule] of this Appendix is to be:
 - (A) Climate Scenario 1:

```
2020s_CAN_BC_ Vancouver.Intl.AP.718920_CWEC2016.epw
```

(B) Climate Scenario 2:

```
2050s CAN BC Vancouver.Intl.AP.718920 CWEC2016.epw
```

(C) Climate Scenario 3:

(ii) Future-shifted weather data is to be provided by the Pacific Climate Impacts Consortium (https://www.pacificclimate.org/data/weather-files).

(e) Utility Rates

(i) Energy rate structures for calculation of annual energy cost are summarized in Table A2 [Electricity Rates for Energy Model] of this Appendix, of all charges and taxes to be accounted for on the rates, but excluding carbon offset costs, which are accounted for separately.

Table A2: Electricity Rates for Energy Model based upon latest BC Hydro Large General Service Rates

Electricity Charge	Rate	Unit
Basic Charge	\$0.27	Per day
Energy Charge	0.0602	\$/kWh
Demand Charge	12.26	\$/kW
GST	5%	Tax on all charges

(f) Carbon Offset Cost

(i) When calculating operational costs for energy, the carbon offset cost assumed is

.This cost is not included in above Table A2

[Electricity Rates for Energy Model] of this Appendix, and should be added to the total operational cost.

(g) Schedules and Hours of Operation

(i) All schedules applicable to the simulation are to be referenced in appended Table B5 [Simulation Schedules and Loads] of this Appendix, unless Authority provided information indicates otherwise.

(h) Room Set-Points

(i) All space temperature and humidity setpoints as indicated in Table B5 [Simulation Schedules and Loads] of this Appendix, unless Authority-provided information indicates otherwise. For supplementary details on space or zone categories not listed in Table B5 [Simulation Schedules and Loads] of this Appendix, refer to Table 1 of CSA Z317.2 as outlined in the Statement of Requirements.

3.2 Envelope Modelling Methodology

(a) General

- (i) Take-offs and building constructions as per design.
- (ii) Glazing areas to represent the total area of the rough opening, including glass and frame.
- (iii) Any windows, curtainwall and spandrel walls must include the thermal bridging impact of framing.
- (iv) Building opaque thermal performance must account for: variations in construction types and assemblies, above and below ground.

(b) Envelope Thermal Performance Calculations

- (i) Overall opaque assembly U-values must be determined using the Enhanced Thermal Performance Spreadsheet (available from BC Hydro Power Smart www.BCHydro.com/thermalguide), performance data for clear fields and interface details from the Building Envelope Thermal Bridging Guide (BETBG), and the calculation methodology as outlined in section 3.4 of the BETBG.
- (ii) For thermal bridges to be included and excluded, follow methodology outlined in City of Vancouver Energy Modelling Guideline v.2.0, Section 3.1.3 and 3.1.4.

(c) Infiltration

(i) Assume a nominal air infiltration rate of 0.25 (L/s)/m2 of exterior above grade envelope surface area.

(ii) Air leakage testing after construction will be used to update the model input for nominal air infiltration rate, and the energy model input (and associated Energy Target) will be updated accordingly.

3.3 Lighting, Miscellaneous and Process Loads

(a) Exterior Lighting

(i) Lighting load and controls as per design. Total kW with schedule based on photocells control modelling methodology per ASHRAE 90.1-2016.

(b) Interior Lighting

- (i) Lighting load as per design per ASHRAE or NECB space-by-space method, including modelling of occupancy and daylight sensors per design.
- (ii) Task lighting included in the total W/m2 applied with schedule.
- (iii) Daylight controls should be modelled explicitly in the software.
- (iv) Occupancy sensors energy credit applied as per ASHRAE 90.1-2016 Appendix G, Table G3.7.
- (v) Lighting Schedules as per Table B5 [Simulation Schedules and Loads] of this Appendix. With exception of spaces having 24 hour lighting requirement.
- (vi) Lighting energy in Communications Rooms and Electrical Rooms is to be modelled following NECB lighting Schedule A.

(c) Elevators

(i) Use Clean BC Commercial New Construction Incentive Energy Modelling Guideline, (version October 2019) for elevator energy assumptions kW/elevator and schedule per Table B5 [Simulation Schedules and Loads]. Indicate total number of elevators based on design, included in the energy model. For Substantial Completion energy model, base load on manufacturer's information for equipment.

(d) Electrical Plug and Process Loads

(i) Model inputs for Plug and Process Loads are indicated in the following table.

	Peak	Load	Schedule
	Energy Use	Sensible Gain	
Kitchen	277 kW	277 kW	NECB 2017, Sched. J

MDRD	288 kW	140 kW	NECB 2017, Sched. J
Cyclotron	100 kW	100 kW	NECB 2017, Sched. D
Communications Rooms Equipment Rooms (racks/ cabinet energy)	1000 MWh annually, divided evenly by floor area to all Communications Rooms as a continuous load	1000 MWh annually, divided evenly by floor area to all Communications Rooms as a continuous load	Continuous
Parking garage, mech rooms, shafts/voids, stairs	0	0	
All other spaces	10 W/m ²	10 W/m ²	NECB schedule by department, as indicated in Schedule 5 Table B5

(ii) For modelling purposes, it is assumed that there are no electric vehicle charging stations within the Facility.

(e) Service Water Heating

(i) Service water heating load need not be modelled at the zone level. Model 175 kW peak load following a schedule that is 100% of peak from 6am-8pm and 70% of peak for others.

3.4 Mechanical System Independent Assumptions

(a) Ventilation Rates

- (i) to be modelled per design. Apply CSA Z317.2 minimum air change rates and only setback air flow rates as indicated to be allowed during unoccupied periods and where design includes controls to enable ventilation setbacks and/or demand control ventilation.
 - (A) Air handling systems serving Type I areas may be operated at minimum levels, and
 - (B) Air-handling systems serving Type II and III areas may be reduced or shut down provided that relative space pressurization and humidity in adjacent zones is not affected.

(b) Temperature

(i) Setback of zone temperatures outside of Table B5 [Simulation Schedules and Loads] of this Appendix and the mechanical requirements per [Section 7.5 of Statement of Requirements] is not permitted.

- (ii) 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:
 - (A) Zones served by single-zone equipment such as cooling fan coils and ventilation air provided by a central VAV system.
 - (B) Large, open spaces served by multiple air terminals or supplemental HVAC units.
 - (C) Internal loads of thermal zones are to be based on the sum of internal loads applied to the spaces with the thermal zones.
 - (D) Schedules and temperature settings may be applied to thermal zones based on those of the dominant space.
- (iii) Combination of like interior zones are to follow the following criteria:
 - (A) Same internal load density (lighting, plug and process loads, and occupant).
 - (B) Same minimum outdoor air and supply air exchange rates.
 - (C) Served by the same air system and no zone supplemental equipment.
 - (D) Same operating schedules.
 - (E) Combination of like perimeter zones are to follow the following criteria:
 - (F) Criteria (a) through (d) per interior zones.
 - (G) Same net floor area \pm 20%
 - (H) Within a tolerance of 10%, zones have the same ratio of net floor area to: design cooling airflow; design heating airflow; and perimeter heating capacities.
 - (I) Same exterior surface and window constructions, and shading elements.

Same ratio of net floor area to exterior wall and window areas within a tolerance of 10%, and facing directions within 10° or all exterior surfaces facing $\pm 40^{\circ}$ from true north.

(iv) All zones are completely shaded, or all zones are completely unshaded by topographical features, other buildings, or by surfaces of the building itself.

4. ENERGY EFFICIENT DESIGN

4.1 Recommendations of the Energy Manager

The Authority recommends that, in order to cost-effectively meet the thresholds placed upon the Energy Target, the Design-Builder will need to consider the following energy conservation and carbon reduction strategies, in addition to those more commonly implemented:

- (a) Use of heat recovery chillers and/or other methods to ensure waste heat from cooling operations are captured for reuse and/or preheat;
- (b) Low exergy design, including the use of a Thermal Gradient Header to enable waste heat to be reclaimed and re-direct to where it is needed; and
- (c) Additional information can be made available to make transparent the basis of the thresholds placed upon the Energy Target.

Table B1: Energy and Cost Summary

Energy End-Use	Fuel Source	Energy (MWh)	EUI (kWh/m2/year)	Energy Cost (\$/year)	Energy Cost (\$/m2)
Interior Lighting	Electricity	3,845	50		
Exterior Lighting	Electricity	104	1	_	
Heating	Electricity	3,182	41	_	
Cooling	Electricity	3,146	41	-	
Heat Rejection	Electricity	76	1	_	
Humidification	Electricity	517	7	_	
Fans	Electricity	6,385	83	-	
Pumps	Electricity	879	11	-	
Service Water Heating	Electricity	915	12	_	
Receptacle Loads + Elec Process Loads	Electricity	5,619	73	-	
Elevators & Escalators	Electricity	721	9	-	
Thermal Process Loads	Electricity	791	10	-	
Renewable Energy Generation (If applicable)	Electricity	0	0		
	Total Energy	26,181	340		

Note: Fuel Source Adjustments done as necessary

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Table B2: Energy End-Use Monthly Summary

		January	February	March	April	May	June	July	August	September	October	November	December	Total
Energy End- Use	Fuel Source	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh	MWh
Interior Lighting	Electricity	324.5	294.9	328.1	317.1	324.5	317.1	326.3	326.3	317.1	324.5	317.1	328.1	3,845.4
Exterior Lighting	Electricity	11.4	9.0	8.9	7.6	6.9	6.5	6.5	7.2	8.0	9.8	10.7	11.9	104.4
Heating	Electricity	428.8	367.9	330.8	249.3	198.1	149.5	126.5	126.1	154.1	247.2	363.6	440.2	3,182.0
Cooling	Electricity	351.1	310.1	290.9	221.1	190.9	187.0	255.0	256.9	191.1	219.0	307.6	365.0	3,145.6
Heat Rejection	Electricity	8.4	7.3	6.3	4.7	4.1	4.4	8.2	7.2	4.5	4.8	7.1	8.9	75.8
Humidification	Electricity	86.7	90.8	64.5	44.9	18.4	0.0	0.0	0.0	0.0	30.8	79.9	101.2	517.3
Fans	Electricity	537.3	490.5	547.1	527.9	536.4	526.7	540.0	540.0	526.8	536.7	528.3	547.5	6,385.2
Pumps	Electricity	82.9	73.5	75.5	68.3	67.7	65.9	73.9	74.2	66.3	70.3	76.5	84.2	879.3
Service Water Heating	Electricity	77.7	70.1	77.6	75.2	77.8	75.3	77.7	77.8	75.4	77.7	75.2	77.7	915.2
Receptacle Loads + Elec Process Loads	Electricity	474.1	431.0	479.5	463.3	474.1	463.3	476.8	476.8	463.3	474.1	463.3	479.5	5,618.9
Elevators & Escalators	Electricity	60.0	55.3	62.1	59.8	60.0	59.8	61.2	60.9	59.8	60.0	59.8	62.1	720.5
Thermal Process Loads	Electricity	67.2	60.7	67.2	65.0	67.2	65.0	67.2	67.2	65.0	67.2	65.0	67.2	791.0
Renewable Energy Generation (If applicable)	Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Energy (M	IWh)													
	Electricity	2,510	2,261	2,338	2,104	2,026	1,921	2,019	2,021	1,931	2,122	2,354	2,573	26,181
Total Energy C	ost (\$)													
	Electricity													

Note: Fuel Source Adjustments done as necessary. wsleGAL\089427\00005\31661996v10

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Schedule 5 - Energy Guarantee

Appendix 1 - Energy Model Assumptions

Table B3: Performance Statement Data Summary

Performance Metric	Unit	30% Design	50% Design	70% Design	90% Design	100% Design	Substantial Completion	M&V
Total Energy	MWh							
Electricity	MWh							
Total Energy Cost	\$/year							
Electricity	\$/year							

Schedule 5 - Energy Guarantee Appendix 1 - Energy Model Assumptions

Table B4: Modelling Input Summary Template



25848.000 - New Surrey Hospital and Cancer Centre ENERCY MODELLING INPUTS

METHODOLOGY

Project Name	New Surrey Hospital and EC Ca	New Surrey Hospital and EC Canoer Centre					
Address	5500 180 Street, Cloverdale, Sc	may, R.C					
Location	Surrey, BC - ASHRAE Climate 2	ons 4					
Modelling Software	(ESVE						
Weather Files	2020s_CAN_EC_VensouverInt	LAR.716920_CWECX016.apw (C	urrant Hodel)				
	2050s_CAN_6C_Vanopiwar.intl.A9.716920_CWEC201K.epw						
	2000s_CAN_BC_Vansouverint	2000; CAN_9C_Vancouver.inti.AP.716920_CWEC2016.apw					
Reference	References	2021-03-04 NSHBCCC	2021-03-04 NSHBCCCC Final Indicative Design Report Consolidated				
		Schedule 1 - Statement of Requirements (The New Surrey Hospital and EC Center Centre Project Initial Draft June 10, 2022.					
		City of Vancouver Energy Modelling Guidelines 47.0					
		National Energy Code of Canada for Buildings 2017					
		Schedule 5 - Energy Cuarantee and Addendum 7					
Energy Targets							
Metric	Threshold	Units	Reference				
Energy Consumption	20,200	MWh/year Addendum 7 5(b)					
ARCHITECTURAL		7-1					
Space Types	1000						
Const. Toront Parameters		man.	March State Company				

Accembly West:	Proposed	Units.	Reference/Depaription	ASHRAE 90.1-2010 Appendix E + Addenous &L		
	8-70 to 23 Clear Field 6-8 Effective	(ft*-hr-if) / Stu	T D'Active an approximate attimate, includes all thermal bridging.	aasa	Steel-Framed, per Table 5.54 (sone 4)	
			t District to approximate domain, record to come trought.			
Selow Grade Walts at Slevator Core	8-10	(ft*-ht-if) / ktu	Water Committee of the Committee of	1.4	Sheel-Framed, per Table 5.5-4 (zone 4 - cemiheates)	
Parking Garage Soffit	8-25	(ft*-hr-if) / Etu	2.20 carried at an initial actimate in the model at a concernative actimate	8-14-3	Steel-joist, per 5.3-4 (zone 4-cemiheates)	
Roof	8.40	(ft*-br-4") / Etu	2-30 carried at an initial actimate in the model at a concernative actimate	8.20.9	insulation above deck, per 5.5-4 (yone 4)	

Orientation	Proposed	Units	Reference/Deportiption ASHRAE 90.1-2010 2		+ Addendum AL
Overall	Approximated based on 700271125_V75885_ABCH_Site, Section, 6 Exection 14016A502		138	Matshes proposed	
Fenestration Performance					
Penectration	Proposed	Units	Reference/Description ASHRAE 98.1-2010 Appendix C + Addends		+ Addendson &L
Sazeline Claring Assumption	0.32	Utot (ETU/RNAM)	Section accumption (double glazed unit) Accembly performance based on weighted systems project string. Surface 92 Low-s. Eletrophromic	0.50 / 0.55	Curtainwell / Punched or Operable, Par Table 5.5-4 (pone 4)
	0.23	SHOCtot	glazing was not modelled.	0.4	No shading
Shading	N/A		For the initial modelling electrochromic glazing az specified in the SOR (section 5.7.2.4(1)) has not been modelled		
dirtightnerr	Progcosd	Units.	Reference/Deportption	ASHRAE 90.1-2010 Appendix (+ Addendum AL
Inflitration Rate (Ø Operating Fe)	0.25	L/s/m2 of AG enclosure	Schedule 5 - Section 1.2 c	0.25	Matchec proposed

MECHANICAL HVAC Strategy

	Proposed	ASHRAD 90.1-2010 Appendix G + Addendum AL
Ceneral Description	VAV systems with hereat cells to serve the majority of the building. Separate COAS with anthology wheal to provide yestilistion already to supply dusts. Unit to beyonest outdoor air if beneficial, Edinautial that does not go brough the ANU heat money to certain cooling cells to cool the activated bir if beneficial (for heat recovery to building heating loop). Meeting and cooling plant includes electric bollers, heat recovery chillers and high performance chillers for summer cooling.	Sys. 7: VAY with reheat (1 system par floor), -heating provided with hot water colb in ANU and hot-water natural gas bolisor -coloning provided with online are root in ANU and water social sentimings -coloning provided with online are root in ANU and water social sentimings -coloning and sentiming of the root of the social sentiminate

Bollers	Proposed	Velta	Reference/Description	ASHRAD 90,1-2010 Appendix	C+ Addendum &L
Турч	Primary: Heat Recovery Chillers Backup: Electric bollers	- 4	Heat Resovery Chillers used for 1 first stage of heating, electric bollers are backup.	2 equally obed Hot water natural gas bollers	Table G1.1.1A - System type 7 G1.1.12
Heating Capacity	HRC - pee HRC data below Clap. Soller - 6533 x 3	ASH	Send on the mechanical concollected main equipment schedule 7023- 02-14 and CEL review comments 7021-01-10. electric bollers provided.	Autocized	
Thermal Efficiency	HRC - sea HRC data below Boller: 100%			A2%	to-Table 6.8.15
meeting Water Supply Temperature	120	•	Schedule 2 - 7.5.2.1(2) - The facility low bampandors heating water loop will supply within a 54.4(10) of 1970 to save the following Auredions of windows of windows and windows spreaded politics and schedule for the following within the following windows the probability of the following windows following within 1970 to 1970 the following windows will be followed by the following windows the following windows will be followed by the following will be followed by	ESC (1604) - SOC (1504)	C3.1.1.4 OR temperature Seaset 180F et 200F and below, 150F et 200F and above, and ramped linearly befores 110F and 150F et temperatures between 200F and 50F.
Heating Water Return Temperature	Very on the heating load		Secret on CEL review somments 2023-01-10	54C (130Y) - 16C (100Y)	
Pumps	Proposed	Units	Reference/Description	ASHRAC 90.1-2010 Appendix C + Addendum AL	
Pump type	Variable Speed		Primary Only	Brimary Variable Speed	63.5.5
Input Fower	Hw Primary = 12.404 Anti Loop = 13.9x2 HRC Heating = 13.2x3	18.9x2 KW Saras on the machanism controllarias man equipment tonescue 2007		101W/G/c) (19W/gam)	G3.7.3.1

25848.000

New Surrey Hospital and Cancer Centre - Energy Modelling Inputs



Childre	Progoced	Deltz	Reference/Description	ASHRAT 90.1-2010 Appendix C	+ Addendum &L
Heat Recovery Chiller(s)					
Тура	Water opoled heat pump		3 Chillers provided, Performance assumed to be similar to Asimilar WEST 1.		
Sequences	Provides 1st stage of heating a HRC to controlled by the heating load, and	nd sooling. to provide just enough	WE SECTION		
	HRC is controlled by the heating load, and cooling so that the heat reject mas	to the heating.	Sarad on the manhanisal reconsidered main equipment cohedule 2021.		
Cooling Capacity	156x3	Tons	02-26 and CEL review somments 2023-01-10	1/2	Syc-7: Reference has chilled water colls for cooling
Rest Output	5405×3	MEH	Eased on the mechanical consolidated main equipment schedule 2021- 02-28.		sooning
Efficiency	Cooling = 4.99 Heating = 4.37	COP	Based on Aarmao WF out sheet		
Cooling Water Temperature	DAT + 42, DAT + 57	4	Eases on the mechanical soncollidates main equipment schedule 2020- 02-14.		
Heating Water Temperature	EWT + 110, LWT + 120		Eased on the mechanical soncolidated main equipment schedule 2021- 02-14 and CEL review comments 2023-01-10		
Chiller(s) (With Field Cooler)					Ī
Type	Water-cooled centrifugal (VSD)	-	2 Chillers provided, Performance assumed to be similar to Dalkin	2 squally cited water-cooled	G3.1.3.7, Table G3.1.3.7
Sequences	Provided 2nd stage of boo Chiller to provide cooling load when then	iling. e is no simultaneous	WDC079L	pentrifugal chillers	personal taken september
36.46	heating load.			- 0	
Cooling Capacity	1600x2	Tons	Secal on the mechanical concollidated main equipment achedule 2023- 02-26.	Autosized	
Efficiency	62	COP	initial accumption on peak efficiency	4.17	Table 6.8.1C
Cooling Water Temperature	LWT + 47, EWT + 57	•	Based on the mechanical concolidated main equipment schedule 2023- 02-14; design condition 42f to 57f during peak summer cooling load based on CEL review comments 2023-01-10	6.7°C (449°) - 12.2°C (549°)	Recet based on OAT (C3.1.3.0) Varies linearly between GOF and SOF
Cooling Water Pumps	Proposed	Units	Reference/Description	ASHRAT 90.1-2010 Appendix G	+ Addendum &L
Pump type	Primary Variable Speed / Secondary Variable Speed	-		Frimary / Secondary Constant/VFO	C3.1.3.10
Input Fower	CHW Primary =21.3x2 CHW Secondary = 54.4x3 HSC Cooling = 8.2x4	ew	Sazed on the mechanical concollidated main equipment schedule 2020- 02-14 and CEL review comments 2003-01-10. Assumes Fremium officiancy motors and excludes standay.	344W/(\$/¢) (22W/gpm)	C3.1.1.10
Field Cooler	Progoced	Units	Reference/Description	ASHRAT 90.1-2010 Appendix D	+ Addendum AL
Field Cooler(z)					
Туре	Field Coolers	- 4	4 Coolers on duty, 1 standby. Marky.	Acial fan sooling towar	G2.1.3.11
Cooling Capacity	800x4	Tons	Easted on the mechanital concolidated main equipment cohedule 2023- 02-31.	Autostred	
fee	Verlable Speed 25.0 ShPe4			7-cpest	G11,111
Condenser water temperature	LWT - 80, SWT - 95 (Recet bezeld on outdoor air web bulb temperature)	*	Secal on the mechanical concolidated main equipment cohedule 2001- 01-25, and CEL review comments 2003-01-10	45 F	C3.1.3.11. Tower to supply 70F when weather permits
Fluid Cooler Liquid Side Pumps	Proposed	Onite	Reference/Description	ASHRAE 90.1-2010 Appendix G	+ Addendum AL
Pump type	Constant Speed		Suzed on CEL review comments 2023-01-10	Primary / Secondary Constant/VFD	G3.1.3.11
Input Fower	OF =27x3=26 Tower Fan Circulation = 10x2	ew .	Eased on the mechanical sonocidates main equipment ochesule 2021- 02-14. Accumes Framium efficiency motors and evaluates standay.	101W/(L/s) (19 W/gpm)	G3.1.3.11
2000					
Domestic Water Heating	T T	100	process and the same of the sa	ASHRAT 90.1-2010 Appendix G	Office Street
System	Proposed	Unitz	Reference/Departation	ASHRAE 98.1-2010 Appendix G	+ Addendum AL
DHW Heater	DHW prehasted by the heating plant with electric boiler for top up DHW Heater Tenk - 1851x6	нен		Gat storage water heater with No heat recovery	Par Table G3.1.1C (addendum AL), DHW is gas storage water heater. Par Section G.5.6.2 - no heat recovery since the load is smaller than 300kW
Thermal Efficiency	tee heating plant	*		10%	Sarred on Table 7.8
Building Load	175	ew .	Schedule $2 \cdot 1.3(\epsilon)$ - peak load following a schedule that is 100% of peak from Sam-Spin and 70% of peak for others.	175 kW	Matches proposed - per Table G3.7-11.1
DMW Freheat Temp	95 (d5K)	FIRE	Eared on information provided by CEL	n/a	
DHW HW Storage Temp	160 (71%)	etc)	Eased on information provided by CEL	199 (71%)	Matches proposed - per Table CI.T.11
DriW Pumps	Progosad	Unite	Reference/Description	ASHRAT 90.1-2010 Appendix C	process and the second
Pump type	VFD	-	Assumed	Vro	Matches proposed
Input Fower	Prohesting + 6.2 Recirculating + 2x4	kW	Secret on the mechanital concollected main equipment cohesiule 2023- 02-14. Accume: Premium efficiency motors and excludes standby.	Freheating = 0.2 Easirosisting = 2x4	Per Table C3.1-11.h, resirculation pump modelles explicitly. Matches proposed
a management of the same of th	Progosed	Delta	Saferance/Description	45HRAE 90.1-2010 Appendix C	+ Addendum &L
DCW Booster Pump					
DCW Booster Pusep Pump type	VFD	(4)	Assumed	VFO	Matchez propozed



VAV - Typical	Property	Unitr	Reference/Deportation	45HRAT 90.1-2016 Appendix C	A Maria Anna Al
Element:		Unitz		AND DESCRIPTION OF THE PERSON NAMED AND DESCRIPTION OF THE PERSON	
System Type	VAV / HW Exhaut		Modelled az 100% outdoor alr zystem	VAV with reheat	Table C1.1.1A - System type 7
Schedule	24/7			24/7	
Total Installed Air Flow	Group 1 (AHU 2 and 3) + 125,000 Group 2 (AHU 4 and 5) + 15,200 Group 3 (AHU 8 to 11) + 244,000	ulm	Flow rates based on the mechanical consolidated main equipment schedule 2023-03-14. Group 1 installed air flow (AHU 6 to 11, 61,000 ofm each) is smaller than the supply air flow of 64,112 ofm each AHU.	Max - autoritied from loads Min - CSA ACH requirement	
Total Normal Operation Was Air Flow	Group 1 (AHU 2 and 1) + 93,752 Group 2 (AHU 4 and 5) + 9,640	atre	Flow rates being on the information from load aritmets tab in the provided machanical calculation workbook 2003-00-14.	Was - autostreal from loads Wir - CSA ACN requirement	
	Croup 3 (AHU 6 to 11) + 256,446				
Off Hours Design Air Flow	Group 1 (AHU 2 and 1) = 59,314 Group 2 (AHU 4 and 5) = 4,212 Group 3 (AHU 4 to 11) = 116,011 Group 6 (AHU 12 to 14) = 57,356	of the	Flow rates based on the information from sub-programs tab in the provided mechanical calculation workbook 2003-02-14.	Minimum volume satpoints for VAV reheat boxes shall be 30% of some peak air flow or the CSA requirement, whichever is larger,	G33.333
Total System Fan Input Power (supply)	Installed Group 1 = 127.4; Group 2 = 15.6; Group 3 = 749.0 At Normal Operation Max: Group 1 = 73.1; Group 2 = 6.4; Group 1 = 779.2	ew.	Installed power lessed on the provided mechanical consolitated main equipment schedule, 2007-01-25 and estuming SCN motor efficiency. Normal operation may power calculated using RCCS VTO the curves.	1.3M/stm	Fan power par (2.1.2.10
Total System Fan Input Power (return)	Installed Orough 1 + 27.1 (Group 2 + 4.5 Croup 1 - 77.6 At Normal Operation Max: Group 1 - 21.3 (Group 2 - 1.9 Group 1 - 21.4 (Group 2 - 1.9 Group 1 - 21.4	xw	Installed powers based on the provided mechanical concollected main explanent cohesis (2023-01-02 and extracting SIX motor efficiency. Normal operation may power calculated using NECE VIO for curves.	fan power included in cupply fan	Fan power per G5.1.2.10
Fan Control	VAV			VAV	
Eschomical	OA Temperatura			24IC (75Y)	Table G1.1.2.55 - high limit shut off
Healing	hydronic			hydronia	Matches proposed
Cooling	hydronic			hydronia	Matches proposed
Supply Air Temperature	58F (14.4/0 - 68F (20/0) (Cote Sect.)	460	Sazed on small reply 2023-01-24	12.84C (5547) + 15.69C (6047)	G3.1.3.12 - Cooling SAT shall be reset higher by 5°F under the minimum spoiling los conditions.
Humidity Control	106-006		RH based on the information from AllSpaceDeta tab in the provided mechanical calculation workbook 2023-01-25.	30%-60%	Matches proposed
Dutsloor &ir					
System Type	DOAS with Enthalpy Wheat		DOAS unit to dust outdoor bir to supply discheors.	VAY with refeet	Table C1.1.1A - System type 7
Total Installed Air Flow	Group 1 (AHU 1) + 62,500 Group 3 (AHU 6 and 7) + 122,000 Group 6 (AHU 12 to 14) + 141,000	ulm	Flow rates based on the mechanical consolidated main equipment schedule 2003-02-14.	CSA vantilation requirement	
Total Outstoor Air Flow	Group 1 (AHU 1) - 46,525 Group 3 (AHU 6 anis 7) - 97,984 Group 6 (AHU 12 to 14) + 123,963	ofm	Flow rates based on the information from load estimate tab in the provided mechanical calculation workbook 2003-01-25.	CSA ventilation requirement	
Total System Fan Rower (supply)	Inctalled Group 1 - 61.5; Group 3 - 124.5; Group 5 - 141.9 At Normal Operation Mass Group 1 - 38.1; Group 1 - 81.7; Group 1 - 61.7; Group 6 - 61.7;	(cw	incitalised powers based on the provided mechanical consolidated main equipment cohesels 2023-01-02 and asseming 50% motor efficiency. Normal operation max power calculates using NECE VTD fee curves.	1.3%/\sh	Pan power per C3.1.2.10
Total System Fan Fower (schaust)	Installed Group 1 = 164, Group 1 = 36.3; Group 4 = 42.1 At Normal Operation Max: Group 1 = 11.4; Group 2 = 21.4; Group 6 = 21.4; Group 6 = 21.4; Group 7 = 21.	ew.	Installed powers based on the provided mechanical sociolisated main equipment solves is 2013-01-05 and estaming 50% motor efficienty. Normal operation may power adjointed using NECE VYO has current.	fan powar included in zapply fan	Fan power per GE-1-2-10
Heating	hydronio		initial accumption	hydronia	Matcher proposed
Cooling	Self (14.44C) - self (204C)	1.00	The state of the s	hydronia	Matcher proposed
Supply Air Temperature	(Zons Recet)	ir ect	Sures on small reply 2023-01-24	12.00 (559) - 15.00 (609)	G3.1.3.12
Fleat recovery	seg candible + 71% latest + 60%		Enthalpy wheel efficiency based on the information from load estimate tab in the provided mechanical calculation workbook 2073-02-14.	panolible - 30%. labort - 50%	Table 5.5.6.1 - 50% cancible, fatant required or explains an easing aspectly of 5,500 afm tots supply flow. With poning of one system, floor systems are greater than threshold.
Zone Level Systems					
Zona Lavel Heating	Hydronia Rahaet Colla eT 2017		initial accomption	Hydronic Pahast Colls eT 2017	Matches proposed
Electrical & iT Additional Cooling					
Dement	Proposad	Units	Seference/Description	ASHRAE 90.1-2010 appendix C	+ 3ddendum &L
System Type	Hydronio Fan-Coll	1000	Eased on small raphy 2023-01-24	Packaged Rooftop AC	System 3 per GX.1.1.b
Controls	Programmable Thermostat - Wall		- Committee of the comm	Programmable Thermostat - Wall	
	mounted	100.00		mounted	mensels proposes
Total Dazign Air Flow	201,850	ofm	Easted on email raphy 2023-01-24	Autorized	And the second s
Total System Fan Power (supply)	0.15	9/dm	Eased on the provided mechanical controlled main equipment schedule 2023-01-25	0.74	Fan power per G3.1.2.10
Fan Control	YFD			constant yolume	Trefs CALLTAIL
Heating	none			Natural Cap formaps	Table G3.3.3.11
Cooling	hydronis			DX Cooling	6.6.14 AC < 65k Btu/h 11.5658, 10.1 658, 1.10 COP
Total Cooling Capacity	Stephical: 261, IT: 104	Tons	Eased on the information from load actimate tab in the provided machanical calculation workbook 2023-01-25.	Autorized	THE PERSON NAMED IN COLUMN
			The state of the s		



Dement	Proposed	Units	Reference/Description	ASHRAC 90.1-2010 Appendix (+ Addendom &L
System Type	Unit Heaters		Heated using Hot Water Loop	Heating and Ventilation	Section 9 per CLALLa
	Programmable Thermostat - Wall				
	mounted				
Total System Fan Power (supply)	0.10	W/ofm	Initial assumption		1
Fan Control	on/off			constant volume	Table G3.1.3.3 E
Neating	hydronic			Websrei Cas formace	Table G11.1.18
Cooling Total heating Capacity	hydronic Autocized	WEH	Chiller water fan colls within arrangy centre to provide sociling	Autosized	
Feating Supply Temp	120 (46.9%)	9.60	Sazed on CEL review comments 2023-01-10	7000,44	
The state of the s	101101010	2,100	1		
Perking Exhaust					
Clement	Proposed	Units	Reference/Departation		010 appendix C - Addendum &L
octom Type	Exhaust Fan			Exhaust Fan	Metches proposed
Sohaniya	•	hours/day		4	Matches proposed
Total Dadign Air Flow	0.76	sfre/ft ²	Secret on AHRAS 62.3 Table 6-1	6.76	Matches proposed
Total System Fan Fower	0.25	W/dm	Initial accumption	0.1	Fan power per C1.1.2.10
an Control	on/off			Q1/0#	Matches proposed
Otchen Extraction System					
lement	Proposed	Units	Reference/Departption	ASHRAE 90.1-2010 Appendix 0	
lyctum Type	Exhaust Hoods		Enhaust Hoods	Reckaged VAV with reheat	C3.1.1.8 - If >5000 ofm, use system type 5 with demand ventilation system on 75% of the exha- air
charles .	MNECE Sex. E			MADCE Sex. E	Hatcher proposed
Total Dadign Air Flow	11,683	afm	Flow retar bases on the information from load estimate tab in the provided mechanical calculation workbook 2023-02-14.	11,482	C3.1.1.d - air to be reduced by 50% for 1/2 of tr occupied hours
Total System Fain Fower	0.40	W/dm	Initial Accumption	1.30	ASHEAT NO.3-2010 fan Calco
Makeup Air Source	AHU Group #3			Standalone	
fan Control	Variable volume		Based on CEL review comments 2027-01-10	Variable yolume	#>5000 ofm, air to be reduced by 10% for 1/2 of the occupied hours:
ELECTRICAL					
Lighting	-				
Main space type	Proposed	Controls	Reference/Description	45HR4E 90.1-	St0 Appendix C + Addendum AL
Overall Lighting Power	Verted Sidg. sep in 7.3	W/m²	Sered on NECS 2017 (including parking garage)	*9.3	Table 9.5.) based space takeoffs
Lighting Control	To match NECS requirements			Coo Senzoro	Cocupancy sensors in storage rooms, restrooms lookers, offices, meeting rooms, etc.
Process Loads			7		And the man of the Paradal St.
Load	1 300000	1	Englander and Control of the Control	100000000	2010 Appendix C + Addendum AL
uone:	Proposed	Units	Reference/Deportption	ashkat w.iv.	or o appendix C + addenous at.
Neg Loads	10.	M/m*	Addengum 7 5(b): NECS pohedule by department, as indicated in Schedule 5 Table 25	00.00	Metahing Proposed
IDRO (Electric Steam Sollers)	288 kW Energy, 140 kW Sarolbie	i.w	Schedule 5 - 3.3 d L MECE Schedule J	258 kW Energy, 140 kW Senzible	Matching Proposed
Clavation	3 Design x 18.5 kW/elevator	KWN par year	Schadule 2.3.1.6 "Uze Chain IC Commercial New Construction Insertive Energy Modelling Guideline, queries October 2016) for elector energy accumptions: (Michiester and policylar) per Table 2.5 (Michiester Construction per Table 2.5 (Michiester Construction) per Table 2.5 (Michiester Construction) per Construction (Michiester	© Davetors x 18.3 kW/sisestor	Matching Proposed
Data Cantra	n/s	two per year	Not defined in Schedule 5. Accumed to be included within Plug Loads.	6/4	Matching Proposed
food Services (Electricity)	277 kW Energy, 277 kW Sencible	EW .	Schedule 5 - 1.3.d L NECE Schedule J	277 kW Energy, 277 kW Sensible	Watching Proposed
MIT Equipment Rooms (Rasks/ Cabinet Energy)	1,000	UND	Addensium 7 5(e): 1000 MWh annually, sivided evenly by floor area to all IMIT rooms as a continuous load	1000	Matching Proposed
K-Rays, MRJ, CT Sounner Cooling	n/a	XWh per year	Not defined in Schedule 3. Assumed to be included within Plug Loads.	*/*	
Cyclotron	100 kW Energy, 100 kW Sencible	KW	Schedule 5 - 1.1.d I. NECE Schedule D	100 kW Energy, 100 kW Sensible	Material Imperior
Wiss Exhaust Fans (EF-1-12)	964	kw	installed gowers based on mechanical sonosilidated main equipment sonadus 2023-01-25 and assuming premium efficiency motors. Assume to operate 24/7. As a conservative allowance, we increased the miss.	96.4	Matching Proposed
	***		fan powerz by 20% Allowanos included within the model, external lighting with	***	
Exterior Lighting	20 (accumed) 6426 (Pask)	EW .	shotoparager sortrol. Sazed on the information from load estimate tab in the provided	20 (appened)	Matshing Proposed
Snow Malt	(42)(Pus)	МЕН	mechanical calculation work book as per 2023-01-25.	642 (Pauls)	Matching Proposed
Space Conditions					
Location	Main advadule types	Applicability	Enference/Description	Office, Physical Therapy,	010 Appendix C + Addendure AL
Office, Physical Therapy, Workshop	NECE A	Ughting and Coospano	There cohedular will be refined and updated to align with Schedule 3 - Table 27 and Addendum 7 5(s)	Workshop	klatching Proposed
Food Prep, Lounge/Rec, Sales	NECE S			Food Prep, Lounge/Res, Sales	
Conference/Meeting/Multipurpose, Clinical Irrais unit	NECE C			Conference/Meeting/Multipurpo ce, Clinical Trials unit	Metahing Proposed
Hechanical Room	NECE A			Wechanical Foom	Matching Proposed
Coupital Area	NECE H			Rospital Area	Matching Proposed
epatient Units	secs)	+		Inpetient Unitz	Matching Proposed
All other spaces (back of House, Staff				All other species (back of House	and and
Facilities)	NECE H			Staff Facilities)	Matching Proposed

Table B5: Simulation Templates and Loads

Department	NECB 2017 Schedule
A Ambulatory Care	A
B Inpatient Unit	J
C Emergency	Н
D Perioperative	Н
E Laboratory	Н
F Medical Imaging	Н
G Oncology Ambulatory Care Unit	A
H Clinical Trials Unit	С
I Systemic Therapy	A
J Oncology Pharmacy	A
K Radiation Therapy Planning	A
L Radiation Therapy Delivery	A
M Functional Imaging	A
N Interprofessional Team	Н
O Biomedical Engineering	A
P Medical Devices Reprocessing	A
Q Patient Transfer and Portering	Н
R Pharmacy Services	Н
S Virtual Health	Н
T Public Spaces	Н
U Administration	A
V Meeting and Education	С
W Back of House	Н
X Patient Food Services	В
Y Staff Facilities	Н
Z Mechanical Rooms	A

APPENDIX 2 MEASUREMENT AND VERIFICATION PLAN

1 MONTHLY MEASUREMENT AND VERIFICATION REPORTS

- 1.1 For at least 12 months during the Test Period, the Design-Builder will deliver to the Authority a monthly Measurement and Verification Report to present findings of the Measurement and Verification Plan. The parties will agree upon the exact form of the Measurement and Verification Report from time to time but as a minimum the Measurement and Verification Report will include the following:
 - (a) for each calendar month (within 10 Business Days of the end of the month);
 - (b) the Energy Consumption in MWh for each Energy Utility and each major end use in that month (including lighting, heating, cooling, pumps, and fans, or a more detailed end use breakdown);
 - (c) the Weather Data for that month, including the number of Cooling Degree Days and Heating Degree Days;
 - (i) Facility Operation Variances provided by the Authority including:
 - (A) full-time equivalent workers; and
 - (B) number of staffed beds;
 - (ii) a complete set of data as required for monthly uploads to Portfolio Manager;
 - (iii) a record of the latest period Portfolio Manager energy performance score (out of 100);
 - (iv) comparison of actual Energy Consumption compared to the Energy Target on an end use basis, or more detailed as needed;
 - (v) differentiation between weather impacts and Authority-control variables versus variables controlled or influenced by the Design-Builder through design and construction, such that the extent to which the Energy Target is met can be assessed:
 - (vi) highlight opportunities to improve energy efficiency;
 - (vii) suggested remedies for end uses that exceed the Energy Target for that end use; and
 - (viii) any other variable that affects the Energy Consumption relative to the energy model assumptions.

2 CONTENT AND FORMAT OF THE MEASUREMENT VERIFICATION PLAN

- 2.1 The Design-Builder will produce a plan (the "Measurement and Verification Plan") consistent with Option D (Whole Building Calibrated Simulation) Method 2 of International Performance Measurement & Verification Protocol (IPMVP) Volume III (three)-2003 (Concepts and Options for Determining Energy Savings for new construction).
- 2.2 The Measurement and Verification Plan should progress with the Design, and can be finalized when the Design has developed to a point where all M&V issues can be addressed and signed off. The parties will agree upon the exact form of the Measurement and Verification Plan, which will include all the items noted within IPMVP Volume III unless otherwise agreed.

INSURANCE CONDITIONS

Without restricting the generality of the indemnification provisions in Section 59, 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:
 - (a) with a policy effective from the Effective Date until the effective date of the policy referenced in Section 1.1(b) of this Schedule and with a limit of , inclusive per occurrence, and no less than general aggregate for bodily injury, death, and damage to property including loss of use thereof, product/completed operations liability with a limit of aggregate; and
 - (b) with a policy effective from a date no later than January 15, 2024,
 , inclusive per occurrence, and no less than
 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. The insurance does not extend to any liability arising in relation to any workforce camp or worker accommodation or any related services.
- 1.3 The insurance will preclude subrogation claims by the insurer against anyone insured hereunder except for claims arising out of the rendering of professional services from any architect, engineer, surveyor, or other professional design consultants.
- 1.4 The insurance will include coverage for:
 - (a) Products or Completed Operations Liability for a period of at least twenty-four (24) months;
 - (b) Blanket Contractual Liability;
 - (c) Cross Liability;
 - (d) Contingent Employer's Liability;

- (e) Personal Injury Liability;
- (f) Shoring, Blasting, Excavating, Underpinning, Demolition, Piledriving and Caisson Work, Work Below Ground Surface and Grading, as applicable (details of such work must be reported to insurer);
- (g) Liability with respect to Non-Owned Licensed Vehicles (no less than);
- (h) Broad Form Property Damage;
- (i) Limited Pollution Liability (no less than
- (j) Employees as Additional Insureds;
- (k) Broad Form Tenants Legal Liability (no less than
- (1) Operation of Attached Machinery; and
- (m) Forest Fire Fighting Expenses (no less than
- 1.5 Any applicable deductibles will not exceed , per occurrence.
- 1.6 This insurance will be maintained continuously from commencement of the Work until Substantial Completion, plus cover completed operations for a further period of at least
- 1.7 If the Project involves hot roofing work for renovations or existing structures, the Design-Builder will take out and maintain in force, or will cause to be taken out and maintained, commercial general liability insurance which will include the following:
 - (a) coverage in an amount not less than inclusive per occurrence and in the aggregate against bodily injury, personal injury and property damage and including liability assumed under this Agreement;
 - (b) include the Authority as an additional insured;
 - (c) be endorsed to provide the Authority with 30 days advance written notice of adverse material change or cancellation;
 - (d) include a cross liability clause; and
 - (e) this policy will be treated as primary coverage and the Authority's Wrap-Up Liability Insurance will be treated as excess coverage. This insurance shall be maintained continuously from commencement of hot roofing work until such work is completed.

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 2 (two) years after Substantial Completion, 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; and

- (b) Any applicable deductibles will not exceed
- 2.2 This insurance will be endorsed to provide the Authority with 30 days' advance written notice of cancellation.

3. PROPERTY COVERAGE INSURANCE

- 3.1 Subject to Section 3.5 of this Schedule, the Authority will provide, maintain and pay for Course of Construction, 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 on the Site 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 placed with a policy in effect from a date no later than January 15, 2024 and maintained until Substantial Completion. No coverage will be provided for any workforce camp or worker accommodation.
 - (a) Deductibles, per occurrence, will not exceed the following amounts; if more than one deductible applies, the highest one will apply:
 - (i) For floods, if covered by the policy,
 - (ii) For water damage and sewer back up, , subject to Section 3.7 of this Schedule;
 - (iii) [Intentionally Deleted.];
 - (iv) For earthquakes, if covered by the policy, the greater of of the total project value insured;

- (v) For testing and commissioning, : and
- (vi) For all other insured perils,
- (b) Waiting period deductibles, per occurrence and not exceeding the following amounts to be applied separately from any property deductible:
 - (i) For soft costs, a one (1) day waiting period for each month of the project duration subject to a minimum waiting period of 60 days will apply and a minimum
- 3.2 The coverage will include as a protected entity, each Design-Builder, Subcontractor, Architect or Engineer who is engaged in the Project.
- 3.3 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).
- 3.4 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.
- 3.5 The Course of Construction coverage will be subject to limits established by a probable maximum loss study to be conducted by the Authority, and the Design-Builder's liability under this Agreement for risk of loss will be limited to such limits. The Authority may at its option elect not to include either or both earthquake and flood as an insured peril(s), and the Design-Builder will have no liability for risk of loss for either or both such perils not included. Nothing in this Section 3.5 will restrict the Authority's right to terminate this Agreement for convenience under Section 53 [Non-Default Suspension/Termination].
- 3.6 The parties acknowledge that the Course of Construction policy is anticipated to include DE4 or equivalent wording. If DE5 or equivalent wording is available and the Design-Builder pays the additional cost for that wording, then Section 3.1(a)(iii) of this Schedule will be replaced with "Design Error, DE5 or equivalent", with the applicable deductible.
- 3.7 Deductibles for water damage and sewer back-up will be subject to availability from the insurance market at the time of placement of the Course of Construction policy. If the deductible for water damage and sewer back-up is greater than the Design-Builder will be responsible for the first of the deductible and the Authority will be responsible for the amount of the deductible that exceeds
- 3.8 The Design-Builder will provide reasonable assistance to the Authority in obtaining the Course of Construction policy, including providing information on a timely basis in relation to the probable maximum loss study and the coverage and deductible for water damage.

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 (including uncrewed aerial vehicles or drones) 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.
- 5.2 The Design-Builder will provide, maintain and pay for marine cargo insurance covering all materials, equipment and other property supplied under or used during the project and which are critical to performance of the Work if such materials, equipment and other property are conveyed by ocean marine transport. The insurance will include the following terms:
 - (a) coverage in an amount not less than the full replacement value of the shipment;
 - (b) coverage for the Design-Builder and all Subcontractors;
 - (c) include the Authority as an additional named insured;
 - (d) subject to the conditions of the Institute Cargo Clauses (All Risks), including war and strikes extensions, and including transit and storage where applicable;
 - (e) if an entire vessel is chartered for shipping materials, equipment or property then charterer's liability insurance will also be provided in amounts sufficient to protect and indemnify the Authority, Design-Builder and all Subcontractors from and against all liability arising out of the chartering of such vessel; and
 - (f) a deductible not exceeding

per occurrence;

6. CONTRACTORS POLLUTION LIABILITY INSURANCE

When applicable (hazardous materials and/or asbestos abatement work), the Design-Builder (or Design-Builder's Subcontractors) will require all Subcontractors to provide, maintain and pay for:

(a) 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 or 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.

Any insurance required under this Section 6 must name the Authority as an additional insured but only with respect to liability arising out of the Design-Builder's performance of the Work. Such insurance shall not be impaired by any time element limitations, biological contaminants (without limitation, mould and bacteria), asbestos, or lead-based paint exclusions. 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.
- 6.3 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. COMMERCIAL GENERAL LIABILITY INSURANCE

- 7.1 The following coverage is only required during the period that the Wrap Up Liability Insurance is not in force under Section 1, Wrap-Up Liability Insurance. The Design-Builder will take out and maintain in force, or will cause to be taken out and maintained, commercial general liability insurance which will include the following:
 - (a) Commercial General liability insurance in an amount not less than inclusive per occurrence and in the aggregate against bodily injury, personal injury and property damage and including liability assumed under this Agreement. This insurance must:
 - (i) include the Authority as an additional insured;
 - (ii) be endorsed to provide the Authority with 30 days advance written notice of adverse material change or cancellation; and
 - (iii) include a cross liability clause.

8. HCPP PROPERTY COVERAGE

8.1 From commencement of the Work until Substantial Completion, the Authority may take out and maintain in force, or may cause to be taken out and maintained in force, under the

Health Care Protection Program (the "HCPP"), insurance covering medical, diagnostic and imaging equipment purchased for, entering into and forming part of the Work, that is not otherwise covered by the construction property policy, and such policy:

- (a) will be made available to the Design-Builder by HCPP and HCPP's obligations under such policy will be supported by an indemnity from the Province of British Columbia in favour of HCPP;
- (b) will provide insurance coverage comparable to or better than the coverage required for such equipment under the Property Coverage Insurance as described in Section 3 of this Schedule;
- (c) will satisfy the requirements set out in Section 9 of this Schedule; and
- (d) will be on terms comparable to or better than those offered by insurers licensed in British Columbia.

9. GENERAL

- 9.1 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.
- 9.2 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.
- 9.3 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.
- 9.4 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.
- 9.5 The Design-Builder and/or its Subcontractors, the 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.
- 9.6 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.

- 9.7 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.
- 9.8 If the Design-Builder fails to provide, maintain and pay for insurance as required by this Schedule, other than automobile liability insurance, the Authority may obtain and pay for the required insurance, the cost of which will be payable on demand by the Design-Builder. The Authority may offset such amounts from any monies due to the Design-Builder if not paid within 15 days.

APPRENTICESHIP POLICY

1. APPRENTICESHIP POLICY

- 1.1 The Design-Builder acknowledges that it has obtained a copy of and has reviewed the B.C. government policy set out in Apprentices on Public Projects Policy and Procedure Guidelines, Date: July, 2015, Update: March, 2016 available at: https://www2.gov.bc.ca/assets/gov/business/economic-development/assets/apprentices-on-public-projects/policy and procedure guidelines.pdf (the "Apprenticeship Policy").
- 1.2 Unless defined in this Agreement, capitalized terms in this Schedule 7 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 7 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 the ministry identified as responsible in the Apprenticeship Policy (the "Responsible Ministry"), to exercise all provisions of the Apprenticeship Policy applicable to the Contracting Authority or the Province (whether through the Responsible Ministry or otherwise) provisions that permit the Contracting Authority:

- (a) to delay the start of Work on the Project until the Authority has confirmed, through the Ministry, 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 7 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.

INDEPENDENT CERTIFIER AGREEMENT

INDEPENDENT CERTIFIER AGREEMENT

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SCHEDULE 1 FUNCTIONS

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SCHEDULE 3 INDEPENDENT CERTIFIER PERSONNEL

INDEPENDENT CERTIFIER AGREEMENT

THIS AGRI	EEMENT is made as of the [●] day of [●], 20[●]
AMONG:	
	FRASER HEALTH AUTHORITY
	(the "Authority")
AND:	
	•
	(the "Design-Builder")
AND:	
	•
	(the "Independent Certifier")

WHEREAS:

- A. the Authority and the Design-Builder have entered into the Design-Build Agreement;
- B. the Authority and the Design-Builder wish to appoint the Independent Certifier, and the Independent Certifier wishes to accept such appointment, to perform certain services in connection with the Design-Build Agreement; and
- C. the Authority, the Design-Builder and the Independent Certifier wish to enter into this Agreement in order to record the terms by which the Independent Certifier will perform such services.

NOW THEREFORE in consideration of the mutual promises and agreements of the Authority, the Design-Builder and the Independent Certifier herein expressed and for other good and valuable consideration the receipt and sufficiency of which are hereby acknowledged, the Authority, the Design-Builder and the Independent Certifier covenant and agree as follows:

1. **DEFINITIONS**

1.1 Definitions

In this Agreement including the recitals and Schedules, unless the context indicates a contrary intention, terms which are defined in the Design-Build Agreement (and not otherwise defined in this Agreement) will have meanings given to them in the Design-Build Agreement and the following terms will have the following meanings:

[&]quot;Agreement" means this Independent Certifier Agreement and its schedules;

[&]quot;Change in Control" means with respect to a relevant person:

- (a) any direct or indirect change by contract or otherwise (other than as set out in (b)) which results in a person or group of persons having the ability to direct or cause the direction of the management, actions or policies of the relevant person; or
- (b) any direct or indirect change in the ownership or control of any legal, beneficial or equitable interest in any or all of the shares, units or equity in the relevant person (including the control over the exercise of voting rights conferred on equity share capital, unit interests or equity interests or the control over the right to appoint or remove directors, a general partner or other managers), including changes arising from assignment or transfer of existing shares, units or equity, issuance of new shares, units or equity or amalgamation, merger consolidation, amendment of a limited partnership certificate or other reorganization, or any other direct or indirect change which results in a person or group of persons, other than the equity holders of the relevant person immediately prior to the change, directly or indirectly:
 - (1) controlling the composition of the majority of the board of directors of the relevant person or of a general partner or manager of the relevant person;
 - (2) controlling the decisions made by or on behalf of the relevant person, including by controlling the voting power of the board of directors or by controlling the voting power of any class of shareholders or equity holders of any of the relevant person, a general partner of the relevant person or a manager of the relevant person or otherwise;
 - (3) holding equity (either beneficially or otherwise) of the relevant person with a subscribed value (taking into account contributions to be made in the case of a limited partnership) of more than one half of the subscribed value (taking into account contributions to be made in the case of a limited partnership) or equity (either beneficially or otherwise) of the relevant person with more than one half of the voting rights; or
 - (4) having the ability to direct or cause the direction of the management, actions or policies of the relevant person;

"DBA Parties" means, collectively, the Authority and the Design-Builder;

"Design-Build Agreement"	means that certain agreement entit	tled "Design-Build Agreement"	and made
between the Authority and	the Design-Builder as of the	, day of,	with
respect to the design and cor	struction of the Facility;		

"Fee" means the fees payable by the DBA Parties to the Independent Certifier for the Functions, as such fees are specified and made payable in Schedule 2 [Fee];

"Functions" means:

- (a) all of the functions and obligations conferred on the Independent Certifier under the Design-Build Agreement;
- (b) all of the functions and obligations conferred on the Independent Certifier under this Agreement, including the functions described in Schedule 1 [Functions]; and
- (c) all other things or tasks which the Independent Certifier is required to do to comply with its obligations under this Agreement;

"Functions Variation" means any change to the Functions;

"Intellectual Property" means any and all intellectual property rights throughout the world, whether subsisting now or in the future, including rights of any kind in inventions, patents, copyright, trademarks, service marks, industrial designs, integrated circuit topography rights, applications for registration of any of the foregoing, and know-how, trade secrets, confidential information and trade or business names;

"Project Material" means all material:

- (a) provided to the Independent Certifier or created by or required to be created by any DBA Party; and
- (b) provided by or created by or required to be created by the Independent Certifier as part of, or for the purpose of, performing the Functions,

including documents, equipment, reports, technical information, plans, charts, drawings, calculations, tables, schedules and data (stored and recorded by any means).

2. INTERPRETATION

2.1 Interpretation

The division of this Agreement into Sections, the insertion of headings and the provision of a table of contents are for convenience only, do not form a part of this Agreement and will not be used to affect the construction or interpretation of this Agreement. The word "including" will not be construed as limiting the general term or statement immediately preceding. Unless otherwise specified:

- (a) each reference in this Agreement to "Section" and "Schedule" is to a Section of, and a Schedule to, this Agreement;
- (b) each reference to a statute is deemed to be a reference to that statute and any successor statute, and to the regulations made under that statute and any successor statute, as amended or re-enacted from time to time;
- (c) words importing the singular include the plural and vice versa and words importing gender include all genders;
- (d) references to time of day or date mean the local time or date in Vancouver, British Columbia;
- (e) all references to amounts of money mean lawful currency of Canada; and
- (f) an accounting term has the meaning assigned to it, and all accounting matters will be determined, in accordance with GAAP consistently applied.

2.2 Obligations and Exercise of Rights by the DBA Parties

The obligations of the DBA Parties under this Agreement will be several. Except as specifically provided for in this Agreement, the rights of the DBA Parties under this Agreement will be jointly exercised by each of the DBA Parties.

3. ROLE OF THE INDEPENDENT CERTIFIER

3.1 Engagement

The DBA Parties hereby appoint the Independent Certifier, and the Independent Certifier hereby accepts such appointment, to carry out the Functions in accordance with this Agreement. The Independent Certifier will perform the Functions in accordance with this Agreement.

3.2 Acknowledgement by Independent Certifier

The Independent Certifier hereby acknowledges in favour of the DBA Parties that it has received a copy of the Design-Build Agreement.

3.3 Standard of Care

The Independent Certifier will exercise the standard and skill, care and diligence in the performance of the Functions that would be expected of an expert professional experienced in providing services in the nature of the Functions for projects similar to the Project.

3.4 Duty of Independent Judgment

In exercising the Functions, the Independent Certifier will act:

- (a) impartially, honestly and independently;
- (b) reasonably and professionally; and
- (c) in a timely manner:
 - (1) in accordance with the times prescribed in this Agreement or the Design-Build Agreement, as applicable; or
 - (2) where no times are prescribed, within five Business Days or such earlier time so as to enable the DBA Parties to perform their respective obligations under the Design-Build Agreement.

Although the Independent Certifier should take account of any opinions or representations made by the DBA Parties, the Independent Certifier will not be bound to comply with any opinions or representations made by either of them in connection with any matter on which the Independent Certifier is required to exercise its professional judgment.

3.5 Authority to Act

The Independent Certifier:

- (a) is an independent consultant and is not, and will not purport to be, a partner, joint venturer or agent of any DBA Party;
- (b) other than as may be expressly set out in the Design-Build Agreement, has no authority to give any directions to a DBA Party or its officers, employees, contractors, consultants or agents; and
- (c) has no authority to waive or alter any terms of the Design-Build Agreement, nor to discharge or release a DBA Party from any of its obligations under the Design-Build Agreement unless jointly agreed in writing by the DBA Parties.

3.6 Knowledge of the DBA Parties' Requirements

The Independent Certifier warrants that:

- it has and will be deemed to have informed itself fully of the requirements of the Design-Build Agreement;
- (b) it will inform itself fully of the requirements of such other documents and materials as may become relevant from time to time to the performance of the Functions;
- (c) without limiting Sections 3.6(a) or 3.6(b), it has and will be deemed to have informed itself fully of all time limits and other requirements for any Function which the Independent Certifier carries out under the Design-Build Agreement and this Agreement;
- (d) it has and will be deemed to have informed itself fully of the nature of the work necessary for the performance of the Functions and the means of access to and facilities at the Facility and Site including restrictions on any such access or protocols that are required; and
- (e) it has satisfied itself as to the correctness and sufficiency of its proposal for the Functions and that the Fee covers the cost of complying with all of the obligations under this Agreement and of all matters and things necessary for the due and proper performance and completion of the Functions.

3.7 Co-ordination by Independent Certifier

The Independent Certifier will:

- (a) fully co-operate with the DBA Parties;
- (b) carefully co-ordinate the Functions with the work and services performed by the DBA Parties:
- (c) without limiting its obligations under Sections 3.4 and 3.7(b), perform the Functions so as to avoid unreasonably interfering with, disrupting or delaying the work and services performed by the DBA Parties; and
- (d) provide copies to all DBA Parties of all reports, communications, certificates and other documentation that it provides to any DBA Party.

3.8 Conflict of Interest

The Independent Certifier warrants that:

- (a) at the date of signing this Agreement, no conflict of interest exists or is likely to arise in the performance of its obligations under this Agreement; and
- (b) if, during the term of this Agreement, any such conflict or risk of conflict of interest arises, the Independent Certifier will notify the DBA Parties immediately in writing of that conflict or risk of conflict and take such steps as may be required by each of the DBA Parties to avoid or mitigate that conflict or risk.

3.9 Independent Certifier Personnel

- (a) Subject to Section 3.9(b), the Independent Certifier will use the partners, directors or employees described in Schedule 3 [Independent Certifier Personnel] in connection with the performance of the Functions and such individuals' services will be available for so long as may be necessary to ensure the proper performance by the Independent Certifier of the Functions. Such individuals will have full authority to act on behalf of the Independent Certifier for all purposes in connection with this Agreement.
- (b) None of the individuals listed in Schedule 3 [Independent Certifier Personnel] will be removed or replaced unless they cease to work as a partner in or director or employee of the Independent Certifier or they are unable to work because of death or illness. The Independent Certifier will notify the DBA Parties of any such circumstances and will be responsible for finding a replacement who will previously have been approved in writing by the DBA Parties.

4. ROLE OF THE DBA PARTIES

4.1 Assistance

The DBA Parties agree to co-operate with and provide reasonable assistance to the Independent Certifier to familiarize the Independent Certifier with all necessary aspects of the Project to enable the Independent Certifier to carry out its obligations under this Agreement.

4.2 Instructions in Writing

All instructions to the Independent Certifier by the DBA Parties will be given in writing.

4.3 Information and Services

The DBA Parties will each make available to the Independent Certifier, as soon as practicable from time to time, all information, documents and particulars necessary for the Independent Certifier to carry out the Functions, including such information, documents and particulars required in order for the Independent Certifier to determine whether the criteria for Substantial Completion have been achieved, and will provide copies of all such information, documents and particulars to the other DBA Party.

4.4 Additional Information

If any information, documents or particulars are reasonably required to enable the Independent Certifier to perform the Functions and have not been provided by the Design-Builder or the Authority, as the case may be, then:

- (a) the Independent Certifier will give notice in writing to the Design-Builder's Representative or the Authority's Representative, as the case may be, of the details of the information, documents or particulars demonstrating the need and the reasons why they are required; and
- (b) the Design-Builder or the Authority, as the case may be, will arrange the provision of the required information, documents or particulars.

4.5 Right to Enter and Inspect

Upon giving reasonable notice to the Design-Builder's Representative, the Independent Certifier (and any person authorized by it) may enter and inspect the Site, Facility and work in progress at any reasonable time in connection with the exercise or proposed exercise of rights under this Agreement, subject to:

- (a) observance of the reasonable rules of the Design-Builder as to safety and security for the Site, Facility and work in progress;
- (b) not causing unreasonable delay to the carrying out of the Work by reason of its presence at the Site or Facility; and
- (c) not causing any damage to the Site, Facility or work in progress.

4.6 DBA Parties Not Relieved

Neither DBA Party will be relieved from performing or observing its obligations, or from any other liabilities, under the Design-Build Agreement as a result of either the appointment of, or any act or omission by, the Independent Certifier.

4.7 DBA Parties not Liable

On no account will a DBA Party be liable to another DBA Party for any act or omission by the Independent Certifier whether under or purportedly under a provision of the Design-Build Agreement, this Agreement or otherwise, provided that any such act or omission will not extinguish, relieve, limit or qualify the nature or extent of any right or remedy of either DBA Party against or any obligation or liability of either DBA Party to the other DBA Party which would have existed regardless of such act or omission.

5. SUSPENSION

5.1 Notice

The Functions (or any part) may be suspended at any time by the DBA Parties:

- (a) if the Independent Certifier fails to comply with its obligations under this Agreement, immediately by the DBA Parties giving joint notice in writing to the Independent Certifier; or
- (b) in any other case, by the DBA Parties giving seven days' joint notice in writing to the Independent Certifier.

5.2 Costs of Suspension

The Independent Certifier will:

- (a) subject to the Independent Certifier complying with Section 8, be entitled to recover the extra costs incurred by the Independent Certifier by reason of a suspension directed under Section 5.1(b) valued as a Functions Variation under Section 8; and
- (b) have no entitlement to be paid any costs, expenses, losses or damages arising from a suspension under Section 5.1(a).

5.3 Recommencement

The Independent Certifier will immediately recommence the carrying out of the Functions (or any part) on receipt of a joint written notice from the DBA Parties requiring it to do so.

6. INSURANCE AND LIABILITY

6.1 Independent Certifier's Professional Indemnity Insurance

- (a) The Independent Certifier will, at its cost, have in place:
 - (1) professional errors and omissions insurance:
 - (A) in the amount of per claim and in the aggregate, a deductible of not more than claim and from an insurer and on terms satisfactory to each of the DBA Parties;
 - (B) with a term and extended reporting period from the date of this Agreement until the expiration of from the cessation of the Functions; and
 - (C) covering liability which the Independent Certifier might incur as a result of a breach by it of its obligations or any breach of a duty owed by the Independent Certifier in a professional capacity to the DBA Parties, or either of them, under or in connection with this Agreement or the provision of the Functions; and
 - (2) at all times during the term of this Agreement, comprehensive general liability insurance in the amount of per claim and in the aggregate, no deductible for personal injury or bodily injury, a deductible of not more than per occurrence for property damage, naming the Authority as an additional insured and from an insurer and on terms satisfactory to each of the DBA Parties.
- (b) The Independent Certifier will:
 - (1) ensure that each of the insurance policies described in Section 6.1(a):
 - (A) bears an endorsement to the effect that the insurer will not effect any adverse material change or amendment to the policy or any cancellation of the policy without first giving at least 30 days prior written notice by registered mail to the Authority; and
 - (B) is obtained and maintained with reputable and qualified insurers, acceptable to the Authority, licensed in British Columbia; and
 - (2) provide copies of each of the insurance policies described in Section 6.1(a) to each of the DBA Parties upon request.

6.2 Workers' Compensation Insurance

The Independent Certifier will, at its own cost and at all times during the term of this Agreement, insure its liability (including its common law liability) as required under any applicable workers compensation statute or regulation in relation to its employees engaged in the Functions.

7. PAYMENT FOR SERVICES

7.1 Fee

- (a) In consideration of the Independent Certifier performing the Functions in accordance with this Agreement, the DBA Parties will pay the Independent Certifier the Fee.
- (b) The Fee includes all taxes (except for GST), disbursements and expenses (including accommodation, car rental, equipment and travel expenses), overheads and profit to perform the Functions.

7.2 Payment of Fee

- (a) Subject to Section 7.2(c), the DBA Parties will each pay half the Fee to the Independent Certifier in accordance with the payment schedule specified in Schedule 2 [Fee]. The Independent Certifier will invoice each of the DBA Parties separately. The obligation on the Design-Builder and the Authority to each pay its portion of the Fee to the Independent Certifier is not subject to joint and several liability and neither the Authority nor the Design-Builder will have any liability whatsoever for the non-payment by the other of any fees or costs payable by such other party under this Agreement.
- (b) The Design-Builder acknowledges and agrees that if any amount due and payable by the Design-Builder to the Independent Certifier is outstanding, the Independent Certifier will not have any obligation to the Design-Builder to make any certification under the Design-Build Agreement.
- (c) The Design-Builder will bear the full cost of the Fee related to certification of Work, including equipment and materials, that is located off-Site where such off-Site Work is not identified in the Design and Construction Schedule and agreed and included in the Fee.

8. FUNCTIONS VARIATIONS

8.1 Notice of Functions Variation

- (a) If the Independent Certifier believes, other than a "Functions Variation Order" under Section 8.3, that any direction by the DBA Parties constitutes or involves a Functions Variation it will:
 - (1) within 7 days after receiving the direction and before commencing work on the subject matter of the direction, give notice to the DBA Parties that it considers that the direction constitutes or involves a Functions Variation; and
 - (2) within 21 days after giving the notice under Section 8.1(a)(1) above, submit a written claim to each of the Authority's Representative and the Design-Builder's Representative which includes detailed particulars of the claim, the amount of the claim and how it was calculated.
- (b) Regardless of whether the Independent Certifier considers that such a direction constitutes or involves a Functions Variation, the Independent Certifier will continue to perform the Functions in accordance with this Agreement and all directions, including any direction in respect of which notice has been given under this Section.

8.2 No Adjustment

If the Independent Certifier fails to comply with Section 8.1, the Fee will not be adjusted as a result of the relevant direction.

8.3 Functions Variation Procedure

- (a) The Authority's Representative and the Design-Builder's Representative may jointly issue a document titled "Functions Variation Price Request" to the Independent Certifier which will set out details of a proposed Functions Variation which the DBA Parties are considering.
- (b) Within 7 days after the receipt of a "Functions Variation Price Request", the Independent Certifier will provide each of the Authority's Representative and the Design-Builder's Representative with a written notice in which the Independent Certifier sets out the effect which the proposed Functions Variation will have on the Fee.
- (c) Each of the Authority's Representative and the Design-Builder's Representative may then jointly direct the Independent Certifier to carry out a Functions Variation by written document titled "Functions Variation Order" which will state either that:
 - (1) the Fee is adjusted as set out in the Independent Certifier's notice; or
 - (2) the adjustment (if any) to the Fee will be determined under Section 8.4.

8.4 Cost of Functions Variation

- (a) Subject to Section 8.2, the Fee will be adjusted for all Functions Variations or suspensions under Section 5.1(b) carried out by the Independent Certifier by:
 - (1) the amount (if any) stated in the "Functions Variation Order" in accordance with Section 8.3(c);
 - if Section 8.4(a)(1) is not applicable, an amount determined pursuant to the fee schedule for Functions Variations in Schedule 2 [Fee]; or
 - (3) where such rates or prices are not applicable, a reasonable amount to be agreed between the DBA Parties and the Independent Certifier or, failing agreement, determined by the Authority's Representative and the Design-Builder's Representative jointly, acting reasonably.
- (b) Any reductions in the Fee will be calculated on the same basis as any increases.

9. TERM AND TERMINATION

9.1 Term

Subject to earlier termination, this Agreement will commence on the Effective Date and continue in full force until:

- (a) 60 days after the Total Completion Date; or
- (b) such later date as may be mutually agreed between the DBA Parties and the Independent Certifier.

9.2 Notice of Breach

If the Independent Certifier commits a breach of this Agreement, the DBA Parties may give written notice to the Independent Certifier:

- (a) specifying the breach; and
- (b) directing its rectification in the period specified in the notice being a period not less than 7 days from the date of service of the notice.

9.3 Termination for Breach

If the Independent Certifier fails to rectify the breach within the period specified in the notice issued under Section 9.2, the DBA Parties may, without prejudice to any other rights of the DBA Parties or either of them, immediately terminate this Agreement.

9.4 Termination for Financial Difficulty

The DBA Parties may, without prejudice to any other rights which the DBA Parties or either of them may have, terminate this Agreement immediately if:

- (a) events have occurred or circumstances exist which, in the opinion of the DBA Parties, may result in or have resulted in insolvency or the control of the Independent Certifier passing to another body or corporation; or
- (b) the Independent Certifier has communications with its creditors with a view to entering into, or enters into, any form of compromise, arrangement or moratorium of any debts whether formal or informal, with its creditors.

9.5 Termination for Convenience

Notwithstanding anything to the contrary in this Agreement, the DBA Parties may at any time terminate this Agreement upon 30 days' written notice to the Independent Certifier.

9.6 Independent Certifier's Rights upon Termination for Convenience

Upon a termination under Section 9.5, the Independent Certifier will:

- (a) be entitled to be reimbursed by the DBA Parties for the value of the Functions performed by it to the date of termination; and
- (b) not be entitled to any damages or other compensation in respect of the termination and (without limitation) any amount in respect of:
 - (1) the lost opportunity to earn a profit in respect of the Functions not performed at the date of termination; and
 - any lost opportunity to recover overheads from the turnover which would have been generated under this Agreement but for it being terminated.

9.7 Procedure upon Termination

Upon completion of the Independent Certifier's engagement under this Agreement or earlier termination of this Agreement (whether under Sections 9.3, 9.4 or 9.5 or otherwise) the Independent Certifier will:

- (a) co-operate with the DBA Parties;
- (b) hand to the DBA Parties all Project Material and all other information concerning the Project held or prepared by the Independent Certifier; and
- (c) as and when required by the DBA Parties, meet with them and such other Persons nominated by them with a view to providing them with sufficient information to enable the DBA Parties to execute the Project or the Persons nominated to provide the Functions.

9.8 Effect of Termination

Except as otherwise expressly provided in this Agreement, termination of this Agreement will be without prejudice to any accrued rights and obligations under this Agreement as at the date of termination (including the right of the Design-Builder and the Authority to recover damages from the Independent Certifier).

9.9 Survival

Termination of this Agreement will not affect the continuing rights and obligations of the Design-Builder or the Authority and the Independent Certifier under Sections 6, 7, 9.6, 9.7, 9.8, 10, 11.7, 11.8 and this Section 9.9 or under any other Section which is expressed to survive termination or which is required to give effect to such termination or the consequences of such termination.

10. INDEMNITY

10.1 Indemnity

The Independent Certifier will indemnify and save harmless the DBA Parties, and each of them, and their respective employees, agents, officers and directors from and against any and all losses incurred or suffered by any of them by reason of, resulting from, in connection with, or arising out of:

- (a) the breach of any representation, warranty, covenant, term, duty or obligation of the Independent Certifier set out in or arising under this Agreement or the Design-Build Agreement; or
- (b) any act or omission of the Independent Certifier in connection with the subject matters of this Agreement.

11. GENERAL

11.1 Entire Agreement

This Agreement and the Design-Build Agreement constitute the entire agreement between the DBA Parties and the Independent Certifier and supersede all communications, arrangements and agreements, either oral, written, made or entered into prior to the date of this Agreement between the DBA Parties and the Independent Certifier with respect to the subject matter of this Agreement.

11.2 **Negation of Employment**

(a) The Independent Certifier, its officers, employees, servants and agents and any other individuals engaged by the Independent Certifier in the performance of the Functions will not by virtue of this Agreement or the performance of the Functions become in the service or employment of the DBA Parties for any purpose.

(b) The Independent Certifier will be responsible for all matters requisite as employer or otherwise in relation to such officers, employees, servants and agents and other individuals who are engaged by the Independent Certifier.

11.3 Waiver

Failure by any DBA Party or the Independent Certifier to enforce a provision of this Agreement will not be construed as a waiver by that DBA Party or the Independent Certifier of any right in respect of that provision, or any other provisions of this Agreement.

11.4 Notices

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 electronic transmission to the address or electronic mail address of each party set out below:

(a) if to the Authority:

[•]

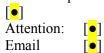
Attention: [•]

Email

(b) if to the Design-Builder:



(c) if to the Independent Certifier:



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

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; and
- (b) 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:
 - (1) the receiving party has, by electronic transmission or by hand delivery, acknowledged to the notifying party that it has received such notice; or

(2) 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.

11.5 Transfer and Assignment

- (a) The Independent Certifier:
 - (1) will not assign, transfer, mortgage, charge or encumber any right or obligation under this Agreement without the prior written consent of the DBA Parties, which each DBA Party may give or withhold in its absolute discretion; and
 - (2) agrees that any assignment, transfer, mortgage, charge or encumbrance will not operate to release or discharge the Independent Certifier from any obligation or liability under this Agreement.
- (b) For the purposes of this Section, an assignment will be deemed to have occurred where there is a Change in Control of the Independent Certifier after the date of this Agreement.
- (c) Each of the DBA Parties may assign, transfer, mortgage, charge or encumber any right or obligation under this Agreement in accordance with the terms of the Design-Build Agreement.

11.6 Governing Laws and Attornment

This Agreement will be governed by and construed in accordance with the laws of the Province of British Columbia and the federal laws of Canada applicable therein without regard to conflicts of law principles that would apply a different body of law, and the Authority, the Design-Builder and the Independent Certifier hereby irrevocably submit and attorn to the exclusive jurisdiction of the courts of that Province and all courts competent to hear appeals therefrom with respect to any action, suit, proceeding or dispute in connection with this Agreement.

11.7 Confidentiality

- (a) The Independent Certifier will ensure that:
 - (1) neither it nor any of its officers, employees, servants and agents disclose, or otherwise make public, any Project Material or any other information or material acquired in connection with or during the performance of the Functions without prior written approval of the DBA Parties; and
 - (2) no Project Material is used, copied, supplied or reproduced for any purpose other than for the performance of the Functions under this Agreement.
- (b) The DBA Parties may at any time require the Independent Certifier to give and to arrange for its officers, employees, servants and agents engaged in the performance of the Functions to give written undertakings, in the form of confidentiality agreements on terms required by the DBA Parties, relating to the non-disclosure of confidential information, in which case the Independent Certifier will promptly arrange for such agreements to be executed and delivered.

11.8 Project Material

(a) The DBA Parties and the Independent Certifier agree that the Independent Certifier does not and will not have any rights, including any Intellectual Property, in any Project

Material provided to the Independent Certifier or created or required to be created by any DBA Party.

- (b) All title and ownership, including all Intellectual Property, in and to the Project Material created or required to be created by the Independent Certifier as part of, or for the purposes of performing the Functions, is hereby assigned jointly to the Authority and the Design-Builder on creation, or where such title, ownership and Intellectual Property cannot be assigned before creation of the Project Material, it will be assigned to the Authority and the Design-Builder on creation. In addition, to the extent that copyright may subsist in such Project Material so created by the Independent Certifier, the Independent Certifier hereby waives all past, present and future moral rights therein and the Independent Certifier will ensure that any agent or employee of Independent Certifier will have waived all such moral rights.
- (c) The Independent Certifier will do all such things and execute all such documents as reasonably requested by either of the DBA Parties in order to confirm or perfect the assignment of Intellectual Property in the Project Material referred to in Section 11.8(b).

11.9 Time of the Essence

Time will be of the essence of this Agreement and of the transactions contemplated by this Agreement.

11.10 Amendment

No change or modification of this Agreement will be valid unless it is in writing and signed by each party to this Agreement.

11.11 Severability

If any provision of this Agreement will be declared invalid, unenforceable or illegal by the courts of any jurisdiction to which it is subject, such provision may be severed and such invalidity, unenforceability or illegality will not prejudice or affect the validity, enforceability or legality of the remaining provisions of this Agreement.

11.12 Enurement

Subject to the restrictions on transfer contained in this Agreement, this Agreement will enure to the benefit of and be binding on the parties and their respective heirs, executors, administrators, successors and assigns.

11.13 Counterparts

This Agreement may be executed in any number of counterparts and all counterparts taken together will constitute one and the same instrument.

[Signature Pages Follow]

IN WITNESS WHEREOF th	he Authority, the	Design-Builder	and the In	dependent (Certifier l	have e	executed
this Agreement.	-			-			

Per:					
	Name:				

FRASER HEALTH AUTHORITY

Title:

[THE DESIGN-BUILDER],

Per:			
	Name:		
	Title:		
Per:			
	Name:		
	Title:		

[INDEPENDENT CERTIFIER],

Per:			
	Name:		
	Title:		
Per:			
	Name:		
	Title:		

FUNCTIONS

The Independent Certifier will, subject to the provisions of the Design-Build Agreement, provide the services as set out below. In the event of a conflict between any provision of this Agreement, including this Schedule 1, and a provision of the Design-Build Agreement, the Design-Build Agreement will prevail.

- (a) The Independent Certifier will:
 - (i) consult with the Authority, the Design-Builder and others involved in the Design;
 - (ii) conduct monthly inspections of the Work; and
 - (iii) raise any quality concerns and investigate those identified by the Design-Builder and/or the Authority,

as the Independent Certifier determines is required for purposes of the Independent Certifier's functions under this Agreement and, no later than the 10th day of each month, prepare and deliver to the Authority and the Design-Builder a monthly written report containing a description of:

- (iv) the Work completed in the previous month; and
- (v) the progress of the Work relative to the Design and Construction Schedule, with an overview analysis of variances and investigations of quality concerns.
- (b) The Independent Certifier will:
 - (i) determine amounts owing to the Design-Builder based on the Independent Certifier's observations and evaluations of the Design-Builder's applications for payment;
 - (ii) issue certificates of payment;
 - (iii) determine the dates of Substantial Completion and Total Completion and the issuing of certificates for same;
 - (iv) for purposes of the *Builders Lien Act* (British Columbia), determining the date of substantial performance and acting as payment certifier for this Agreement and for progressive release of portions of the Lien Holdbacks in respect of Subcontracts;
 - (v) determine the holdback for any defects or deficiencies in the Work at Substantial Completion;
 - (vi) verify the Design-Builder's applications for release of the Performance Holdbacks;
 - (vii) assess the scope of any holdbacks to be made at any time; and
 - (viii) perform such other functions as are set out in the Design-Build Agreement.
- (c) For greater certainty, the Independent Certifier will adjust the amount of any payment to the Design-Builder to reflect the Independent Certifier's estimate of Work satisfactorily performed as of the date of the application for payment, and will not certify for payment of any Work not carried out in compliance with the Reviewed Drawings and Specifications.

FEE

[NTD: This Schedule should also include a fee schedule for Functions Variations.]

INDEPENDENT CERTIFIER PERSONNEL

KEY INDIVIDUALS

1. GENERAL DUTIES

- 1.1 Key Individuals will:
 - (a) Espouse good communication skills and a safety-first approach.
 - (b) Work effectively with:
 - (i) the Authority including Clinical, Infection Control, FMO, Equipment, and IMIT leads, end users, and subject matter experts;
 - (ii) the Authority's contractors, consultants, suppliers, vendors, and agents;
 - (iii) WorkSafeBC, the City of Surrey, B.C. and any other Authorities Having Jurisdiction (AHJ); and
 - (iv) other stakeholders and parties as required to successfully complete the Work.
 - (c) Address unexpected issues with a flexible and integrated team approach.
 - (d) Be motivated and driven to innovate and create a Facility that improves care delivery.
 - (e) Leverage technology to improve the patient's and staff's experience.
 - (f) Support timely conflict resolution.
- 1.2 The Design-Builder will ensure that all parties directly or indirectly engaged by the Design-Builder cooperate and resolve disputes so as not to affect the progress of the Work.

2. LIST OF KEY INDIVIDUALS AND DUTIES

2.1 Key individuals' responsibilities include, but are not limited to, the following:

Individual's Name	Company Name	Position	Specific Duties
	EllisDon Design Build Inc.	Design-Build Director	 Represents the Design-Builder and has overall responsibility to design and build the Project. Manages and delivers the Work in compliance with the requirements of this Agreement and authorized to negotiate Changes. Provides overall leadership and is responsible for coordination of the Design-Builder's resources, including the Design-Builder's consultants, contractors, subcontractors, and agents.
			 Attends meetings as required or requested by the Authority.
	EllisDon Design Build Inc.	Design-Build Design Manager	 Manages the Design-Build design team and is the designated day-to-day contact ensuring stakeholder requirements are met. Manages submissions to the
			 AHJ. Manages risks, Schedule, communication and stakeholder engagement. Manages the development of all plans required to efficiently, effectively, and safely deliver the Work.
			Communicates with all Project team members as required and as directed by the Authority and supports the development and implementation of the

Position	Specific Duties
	Authority's Communication Plan. • Assures that the Design- Builder's consultants, contractors, sub-contractors, agents, and subject matter experts attend Project meetings as required or as directed by the Authority. • Attends all meetings as required with the Authority and the Authority's Consultant. Note: • Instructions given to the Design-Build Design Manager will be deemed to have been given to the Design-Builder.
esign Design-Build Construction Manager	 Leads the construction of the Project and conducts constructability reviews throughout the Project's Design development process. Oversees all Site activities including on-Site and off-Site construction management in compliance with this Agreement. Is continuously present at the

Individual's Name	Company Name	Position	Specific Duties
			verification, adjusting, and Commissioning activities. • Attends all meetings as required or as directed by the Authority. Note:
			Resides full time in BC unless otherwise agreed to by the Authority.
	Ellis Don Facilities Services	Design-Build Facilities Maintenance Lead	Acts as the single point of contact for the Authority for coordinating the maintenance and asset management deliverables and requirements on behalf of the Design-Builder.
			Actively engages with the Authority's FMO and Asset Management teams and is accountable for ensuring that all requirements of this Agreement related to building maintenance, life cycle and operations are met.
			 Coordinates the Submittals as set out in this Agreement.
			Maintains a digital log of issues related to the Submittals and provides regular updates on the progress and close-out of issues.
			Facilitates and attends the inspections by the Authority specified in Schedule 1 [Statement of Requirements] Appendix 1V [Asset Management Requirements] Section 4.4 [Inspection of

Individual's Name	Company Name	Position	Specific Duties
			Installed Assets] and the recording and tracking of the issues raised following those inspections.
			Communicates Design strategies, details and requirements to stakeholders that do not have a construction or design related background (e.g. Clinical).
			 Attends all meetings as required or directed by the Authority.
			Notes:
			Resides full time in BC unless otherwise agreed to by the Authority.
			Refer to Schedule 1 [Statement of Requirements] Appendix 1V [Asset Management Requirements] Section 4.4 [Inspection of Installed Assets] for detailed responsibilities, qualifications and experience requirements.
	Parkin Architects Western Ltd.	Lead Architect	Leads the Design of the Project and the creation of an innovative Facility that meets the requirements of this Agreement.
			Manages the overall Project Design and development process ensuring that construction documentation and the final product conform with this Agreement.
			Facilitates integrated Design workshops with users from

various departments and support services to develop options, analyze flows and arrive at an acceptable solution.

• Coordinates conflicting requirements and facilitates solution finding.

- *Coordinates* and complies with all AHJ's requirements.
- **Demonstrates** strong leadership in innovation and healthcare and is accountable for the development of a compliant Design.
- Leads environmental, sustainability and resiliency considerations and ensures the Facility will achieve the identified targets and LEED Gold Certification.
- Acts as coordinating professional and ensures submissions from all disciplines are complete and coordinated.
- *Communicates* with all Project team members as required and as directed by the Authority.
- *Communicates* Design strategies, details and requirements to stakeholders that do not have a construction or design related background (e.g. Clinical).
- Attends all meetings as required or directed by the Authority.

Note:

• The Architect of Record must be registered with the AIBC.

Individual's Name	Company Name	Position	Specific Duties
	Crossey Engineering Ltd.	Design-Build Mechanical Engineering Lead	 Leads the mechanical Design of the Project. Communicates with all Project team members as required and as directed by the Authority. Coordinates and complies with all AHJ's requirements. Demonstrates strong leadership in innovation and healthcare mechanical design to meet the requirements of this Agreement. Ensures the Facility is designed to achieve sustainability and resiliency targets as well as LEED Gold Certification. Considers the impact of Design solutions on integration
			of systems, flexibility, adaptability, maintainability and hospital operations. • Communicates Design strategies, details and requirements to stakeholders that do not have a construction or design related background (e.g. Clinical). • Attends all meetings as required or directed by the Authority.

Individual's Name	Company Name	Position	Specific Duties
	Crossey Engineering Ltd.	Design-Build Electrical Engineering Lead	 Leads the electrical Design of the Project. Communicates with all Project team members as required and as directed by the Authority. Coordinates and complies with all AHJ's requirements. Demonstrates strong leadership in innovation and healthcare electrical design to meet the requirements of this Agreement. Ensures the Facility is designed to achieve sustainability and resiliency targets as well as LEED Gold Certification. Considers the impact of Design solutions on integration of systems, flexibility, adaptability, maintainability and hospital operations. Communicates Design strategies, details and requirements to stakeholders that do not have a construction or design related background (e.g. Clinical). Attends all meetings as required or directed by the Authority.
	EllisDon Design Build Inc.	Design-Build Commissioning Provider (CxP)	 Responsible for the commissioning of the Project. Communicates with all Project team members as required and as directed by the Authority. Considers the impact of Design solutions on integration

Individual's Name	Company Name	Position	Specific Duties
			of systems and hospital operations. • Ensures the Facility is designed and commissioned to achieve sustainability and resiliency targets as well as LEED Gold Certification. • Communicates strategies, details and requirements to stakeholders that do not have a
			 stakeholders that do not have a construction or design related background (e.g. Clinical). Attends all meetings as required or directed by the Authority.
			Note: • Refer to Schedule 1 [Statement of Requirements] Section 5.6 for detailed responsibilities, qualifications and experience requirements.
	HH Angus	Design-Build IM/IT Lead	Responsible for the deployment of Information Management and Information Technology (IM/IT) infrastructure through Design, construction, equipment fit out and commissioning and integration with other systems.
			Accountable for incorporation and implementation of requirements outlined in this Agreement and Schedule 1 [Statement of Requirements], providing leadership in

virtual care modalities. • Communicates with all Projected members as required a as directed by the Authority. • Demonstrates strong leadership in innovation and healthcare IM/IT Design to meet the requirements of this Agreement. • Communicates Design strategies, details and requirements to stakeholders that do not have a construction or design related background (e.g. Clinical). • Attends all meetings as required or directed by the Authority. EllisDon Design Build Equipment Lead • Responsible for leading the equipment related Work of the state of the	Individual's Name	Company Name	Position	Specific Duties
Communicates with all Projected members as required a as directed by the Authority Demonstrates strong leadership in innovation and healthcare equipment design meet the requirements of this Agreement. Works closely with the Design		Name EllisDon Design	Design-Build	creating a Facility that enables virtual care modalities. • Communicates with all Project team members as required and as directed by the Authority. • Demonstrates strong leadership in innovation and healthcare IM/IT Design to meet the requirements of this Agreement. • Communicates Design strategies, details and requirements to stakeholders that do not have a construction or design related background (e.g. Clinical). • Attends all meetings as required or directed by the Authority. • Responsible for leading the equipment related Work of the Project. • Communicates with all Project team members as required and as directed by the Authority. • Demonstrates strong leadership in innovation and healthcare equipment design to meet the requirements of this

Individual's Name	Company Name	Position	Specific Duties
			adaptability, maintainability and hospital operations. • Communicates equipment requirements to stakeholders that do not have a construction or design related background (e.g. Clinical). • Attends all meetings as required or directed by the Authority.
	EllisDon Design Build Inc.	Design-Build Quality Manager	 Responsible for the overall quality of the Design and construction of the Project. Attends all meetings as required or directed by the Authority. Note: Refer to Schedule 4, Appendix 3 [Quality Assurance Plan] for detailed responsibilities, qualifications and experience requirements.
	Melnychuk Consulting Inc.	Design-Build Clinical Planning Lead	 Responsible for leading the clinical planning and has active in-person participation during the procurement, Design and construction phases of the Project. Ensures clinical requirements are clearly understood and incorporated. Communicates with all Project team members as required and as directed by the Authority. Coordinates competing needs and requirements, and

Individual's Name	Company Name	Position	Specific Duties
			facilitates solutions finding process. • Leads the evidence-based Design approach and provides research as required. • Ensures the Design complies with the standards, codes and requirements set out in this Agreement. • Facilitates options development and analysis, review of the 7 Flows of Medicine, and ensures lean concepts are incorporated into the Design.
			Attends all meetings with the Clinical users and as required or directed by the Authority.
	ZGF Architects Inc.	Design-Build Cancer Design Lead	 Responsible for leading the clinical Design of the cancer centre components during the Design, procurement, construction and commissioning. Ensures BC Cancer requirements are clearly understood and incorporated. Communicates with all Project team members as required and as directed by the Authority.
			Coordinates competing needs and requirements and

Individual's Name	Company Name	Position	Specific Duties
			facilitates solutions finding process.
			 Leads the evidence-based Design approach and provides research as required.
			 Ensures the Design complies with best practices, standards, codes and guidelines.
			• Facilitates options development and analysis, review of the 7 Flows of Medicine, and ensures lean concepts are incorporated into the Design.
			 Attends all meetings with the BC Cancer users and as required or directed by the Authority.
			• <i>Coordinates</i> with radiation experts, physicists, and shielding consultants and ensures they are included in the Design process and inspections.
			• <i>Works</i> closely with BC Cancer staff on licensing applications.

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.

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

The Authority may at its option exercise any or all of the following priced options to reduce the items described in the table below for a corresponding reduction in the Contract Price (the "**Priced Options**"). The Design-Builder will, no less than 90 days before the date required by the Design-Builder, acting reasonably, indicate the date for exercise of the Priced Options. If the Authority exercises a Priced Option, the Authority must do so by the specified date.

Priced Option	Unit Rate Savings	SOR Ref. Clause	Target Decision Date After Effective Date
Door Finishes		Schedule 1 [Statement of Requirements] Section 6.8.2.2(2)	50% Reviewed status
Ligature Resistant Handrail		Schedule 1 [Statement of Requirements] Section 6.10.6.2.7.(a).6	50% Reviewed status
Certified STC Assembly vs STC Equivalency Door		Appendix 1D Table 3	50% Reviewed status
Speed Sleeves		Schedule 1 [Statement of Requirements] Sections 7.8.8.3 and 7.8.8.4(4)	70% Reviewed status
Data Drop Reduction		Schedule 1 [Statement of Requirements] Section 7.8.10.2(10)(12)(13)	Contract price to reflect price reduction based on data drop count from Bid of being reduced to at per data drop

Access Control Device Density	Single Reader Dual Reader	Schedule 1 [Statement of Requirements] Section 7.9.4 and Appendix O	50% Reviewed status
Space CO2 Sensor	(removal of zone CO2 sensor only per zone thermostat)	Schedule 1 [Statement of Requirements] Section 7.6.3.21(17)	50% Reviewed status
Composite Fiber Cabling	per pole	Schedule 1 [Statement of Requirements] Sections 7.8.12.2.6.(d).3 and 7.8.12.2(7)	70% Reviewed status

APPENDIX 1

DATA DROP - DEFINITIONS AND UNIT PRICING

APPENDIX 1 Authority Use Data Drop- Definitions and Unit Pricing

DEFINITIONS

"Authority use Data Drops" are defined as the mutually agreed 19,500 CAT6A structured cabling Data Drops included by the Design-Builder for the following Schedule 1 requirements:

- Clinical Equipment as defined in Appendix 1H [Equipment and Furniture]
 where the Data Drop provided connects to the Authority network or to third
 party equipment located in a Communications Room.
- IMIT Equipment as defined in Appendix 1J [Equipment List IM/IT]
- 7.8.11 IM/IT Data Network
- 7.8.12 IM/IT Wi-Fi Network
- 7.8.13 IM/IT Voice Network
- 7.8.15 Multimedia Infrastructure and Systems supporting Type 4 Virtual Health Rooms
- 7.8.17 Digital Signage
- 7.8.18 Patient Physiological Monitoring and Telemetry. If a COAX based Telemetry system is chosen by the Authority, these COAX cables will be included as "Authority use Data Drops". Whereby,
 - Number of Data Drops = Total Coax installed (m) / Avg. Data Drop length (45m)
- 7.8.23 CATV. CAT6A Horizontal component of a CATV Outlet

"Design-Builder use Data Drops", these are defined as the CAT6A structured cabling Data Drops that the Design-Builder is responsible for providing in order to meet the following Schedule 1 requirements:

- Division 11
 - 4.16.12 Automated Parking Payment System
 - 4.16.3 Real-Time Parking Count System
 - o 4.16.15 EV Charging Stations
- Division 14
 - o 6.14.1 Elevators (Elevator Phone and Control)
 - o 6.14.2 Pneumatic Tube System

- Division 22
 - 7.4.3 Medical Gas Systems (monitoring)
- Division 25
 - o 7.6.2 Integrated Building Management System
 - o 7.6.3 Building Management System
 - o 7.6.5 FMO Network and Infrastructure
- Division 26 Systems
 - o 7.7.8 UPS Systems
 - 7.7.9 Metering
 - 7.7.14 Lighting Control Systems
- Division 27 Systems
 - 7.8.15 Multimedia Infrastructure and Systems (with the exception of Type 4 Virtual Health Rooms)
 - o 7.8.16 Digital Wayfinding
 - o 7.8.19 Public Address
 - o 7.8.20 Nurse Call System
 - o 7.8.21 Clock System
 - 7.8.24 Real Time Location System
 - 7.8.25 Systems Integration (installation of Data Drops required specifically for system integration)
- Division 28 Systems
 - o 7.9.3 Fire Alarm System
 - o 7.9.4 Access Control
 - o 7.9.5 Panic Duress System
 - o 7.9.6 Intrusion Detection System
 - 7.9.7 Overdose Notification System
 - o 7.9.8 Intercommunications System
 - o 7.9.9 IP Video Surveillance System
 - 7.9.10 Patient Wandering System
- Division 41

Automated Guided Vehicles

AUTHORITY USE DATA DROPS UNIT PRICING

			Design Const	truction Timeline		
CAT6A DATA DROP	BEFORE CD 100	AFTER CD 100, BEFORE "PULL CAT6A AND LOW VOLTAGE CABLE" HAS BEGUN IN THE CONSTRUCTION ZONE	AFTER "PULL CAT6A AND LOW VOLTAGE CABLE" HAS BEGUN, BEFORE "INSTALL BOARD" IN THE CONSTRUCTION ZONE	AFTER "INSTALL BOARD"	WHEN USE OF ENVIROMENTAL CONTAINMENT UNIT IS REQUIRED FOR INFECTION CONTROL BY THE ICP	AFTER STRUCTURED CABLING CREW DEMOBILIZE FROM THE JOB
DELETE						
ADD						

		Design Construction Timeline						
	BEFORE	AFTER CD 100,	AFTER "PULL	AFTER	WHEN USE OF	AFTER		
1" CONDUIT AND BOX FOR T.O	CD 100	BEFORE "MID LEVEL ELECTICAL ROUGH-IN" HAS BEGUN IN THE CONSTRUCTION ZONE	CAT6A AND LOW VOLTAGE CABLE" HAS BEGUN IN THE CONSTRUCTION ZONE, BEFORE "INSTALL BOARD"	"INSTALL BOARD"	ENVIROMENTAL CONTAINMENT UNIT IS REQUIRED FOR INFECTION CONTROL BY THE ICP	ELECTRICAL CREW DEMOBILIZE FROM THE JOB		
A DD								

^{*} Based on work completed before structured cabling crew is demobilized from area

Clarifications Regarding Authority Data Drop Add / Delete Pricing

- Add pricing will apply to all "Authority use Data Drops" requested after the Design-Builder's CD 100 Design Submittal has obtained Reviewed status as per the DBA.
- Delete pricing will apply to all deleted or unused "Authority use Data Drops" from the total of 19,500.
- 3. The Design-Builder will provide a final detailed reconciliation of all Data Drops to the Authority after the CD 100 Design Submittal has obtained Reviewed Status. This reconciliation does not negate the responsibility of the Design to provide an inventory of Data Drops as prescribed in clause 2.5.9.4(3) of Schedule 1.

^{**} Does not include DB expenditures, overhead and profit

[&]quot; " Terms in quotations refer to scheduled tasks in the Project Master Schedule

- 4. Upon review of the CD 100 Data Drop reconciliation:
 - a. if the reconciled quantity is above the included 19500 "Authority use Data Drops", the Authority will amend the contract price to reflect a higher Data Drop cost based on the unit prices provided in this document.
 - b. if the reconciled quantity is below the included 19500 "Authority use Data Drops", the Authority will amend the contract price to reflect a lower Data Drop cost based on the unit prices provided in this document
- 5. In the event that any CD 100 design packages are advanced or delayed, the Design-Builder and Authority will, acting reasonably, agree to a revised date for CD 100 reconciliation.
- 6. Any adds or deletes requested by the Authority after CD 100 reconciliation, will be
 - a. Requested in writing by the Authority
 - b. Recorded by the Design-Builder
 - c. Reviewed monthly between the Design-Builder and the Authority to ensure agreement
- At minimum, additional reconciliations of Data Drops will occur, 180 days prior to target Substantial Completion and a final reconciliation will occur 30 days before Total Completion.
- 8. Unit pricing contained in this document is valid until 90 days following Substantial Completion of the New Surrey Hospital and BC Cancer Centre Project.
- 9. Unit Pricing is for CAT6A 80 meters and less.
- 10. Unit pricing provided is per Data Drop unit. No quantity discounts or surcharges will be applied to these unit prices.
- 11. Unit pricing reflects the Schedule 1 requirements (inclusive of Appendix 1M [PHSA Communications Infrastructure Standards and Specifications]) and to be of the same materials provided throughout the Project.
- 12. The determination of the correct unit price to use for additional Data Drops will be based on a clear set of tasks in the master construction schedule identifying each stage of Data

Drop installation as per the Unit Pricing Table above. The intent is to ensure the Authority is aware of deadlines that trigger the next level of unit pricing. The Design-Builder will include schedule and upcoming deadlines as an agenda item in collaborative coordination meetings to ensure clarity.

- 13. Unit pricing is only for the installation, testing and labelling of a Data Drop and any associated conduit installation scopes of work. Unit pricing does not include cutting, patching, painting, infection control other than use of a portable Environmental Containment Unit (ECU).
- 14. The Design-Builder is to include for installation, testing and labeling a combined total of 19,500 "Authority use Data Drops" to be added after field verification of signal coverage for Authority designed wireless systems. These Data Drops will not be subject to unit pricing unless in excess of the included 19,500 or previous reconciled quantity.

15. Unit Pricing is inclusive of all forms of expenditure incurred by DB trade partner in the performance of the work including overhead and profit for the subcontractor DB trade partner.

Form A1 Breakdown of Contract Price Table 1 Nominal Cost of the DBA Scope

Proponent Instructions:

- 1. Table 1 below includes prices for the work required as described in the RFP and the Design-Build Agreement. The prices below amount to the Nominal Cost of the Proposal. These prices include all taxes other than GST, except where otherwise expressly indicated.
- 2. Table 1 below includes the total cost for the Child Care facility. A detailed breakdown is to be provided in Table 3.
- 3. The Proponents are to add or delete columns as needed.
- 4. Values are to be rounded to the nearest dollar.

	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 11 - Equipment	
Division 12 - Furnishings	
Division 13 - Special construction	
Division 14 - Conveying equipment	
Division 21 - Fire suppression	
Division 22 and 23 - Common requirements mechanical	
Division 22 - Plumbing	
Division 23 - Heating, ventilating, and air conditioning (HVAC)	
Division 24 - Major equipment performance specification	
Division 25 - Integrated automation	
Division 26 - Electrical	
Division 27 - Telecommunications and IT	
Division 28 - Electronic safety and security	
Division 31 - Earthworks	
Division 32 - Site improvements	
Division 33 - Utilities on site	
Division 41 - Material Processing and Handling Equipment	
Other (Specify)	
Hard Costs Sub-Total	
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	
Code consultant fees	
Legal advisor fees	
Independent Certifier [1]	
Independent Energy Consultant [2]	
Other Consultant - Specify	
Other Consultant - Specify	
Other Consultant - Specify	
Other - Specify	
Other - Specify	
Other - Specify	
Soft Costs Sub-Total	
Con Costs Gub Total	
GENERAL EXPENSE COSTS	
Pursuit costs	
Mobilization	
Mockups	
Ongoing general expenses	
Project staff	
Project overhead	
Construction equipment	
Testing	
Bonding and security	
Insurances - E&O and Pollution	
Insurances - Specify	
Building permit	
Development cost charges (Development Permit Paid by FHA)	
General Expense Sub-Total	
	1 1
Nominal Cost of the DBA Scope	\$ 2,124,263,495
Design-Build Price Ceiling	
Under (over) Design-Build Price Ceiling	•
Under Ceiling Requirements (Yes / No)	- -

Notes:

- 1. Use for the purpose of the Financial Submission , to be replaced with actual Design-Builder's portion of costs prior to the Effective Date.
- 2. Use for the purpose of the Financial Submission , to be replaced with actual Design-Builder's portion of costs prior to the Effective Date.

Form A1 Breakdown of Contract Price Table 3 Breakdown of the Child Care Centre

Proponent Instructions:

- 1. Table 3 represents the breakdown of the Child Care Centre. The total price below is included in the Nominal Cost of the Proposal provided in Table 1. These prices include all taxes other than GST, except where otherwise expressly indicated.
- 2. The Proponents are to add or delete columns as needed.
- 3. Values are to be rounded to the nearest dollar.

	Value
HARD COSTS	i
General Requirements	
Construction	
Hard Costs Sub-Total	
SOFT COSTS	
Design fees	
Consultant fees	
Soft Costs Sub-Total	
GENERAL EXPENSE COSTS	
Ongoing general expenses	
Project staff	
Project overhead	
Construction equipment	
Testing	
Bonding and security	
Insurances - Specify	
Building permit	
Development cost charges	
General Expense Sub-Total	
Total Cost of the Childcare Facility	

SCHEDULE 11

DESIGN AND CONSTRUCTION SCHEDULE

1. **GENERAL**

1.1 Section References

1.1.1 Unless otherwise provided, references to Section numbers are references to Sections in this Schedule.

1.2 Definitions and Interpretation

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

"Design and Construction Schedule Update" has the meaning set out in Section 2.1.6;

"Schedule Information" means the Design and Construction Schedule and other schedule related information prepared by the Design-Builder under this Agreement; and

"Updated Design and Construction Schedule" means the latest Design and Construction Schedule that incorporates all revisions that have been accepted by the Authority and designated as 'Reviewed' through the Review Procedure.

2. DESIGN AND CONSTRUCTION SCHEDULE REQUIREMENTS

2.1 Design and Construction Schedule

- 2.1.1 The initial Design and Construction Schedule attached as **Appendix 1**, will become the Design and Construction Schedule Baseline 1.0 for all future schedules and will be amended or supplemented by the Design-Builder as required in accordance with this Agreement, including Schedule 2 [Review Procedure]. Where any such modification or amendment is accepted by the Authority, this will result in an Updated Design and Construction Schedule. The Design and Construction Schedule Baseline 1.0 will be shown on all Updated Design and Construction Schedules for the duration of the Project.
- 2.1.2 The Design and Construction Schedule is the Project master schedule and will include all other schedules required by this Agreement.
- 2.1.3 The Design and Construction Schedule will identify all critical activities and milestones throughout the course of the Project. For all activities and milestones, the Design and Construction Schedule will show a logical sequence and utilize the critical path method. The Design and Construction Schedule will highlight the critical path and show all free float time.
- 2.1.4 The Design-Builder will prepare all Schedule Information as specified herein. The Work under this Agreement will be planned, scheduled, executed, and reported by the Design-Builder. The Design-Builder will show the proposed sequence to perform the Work and dates contemplated for starting and completing all schedule activities in the Design and Construction Schedule. Design-Builder personnel must actively participate in the development of all Schedule

Information. Any and all Subcontractors, including the Design-Builder's Consultant, must also contribute to the development and maintenance of accurate Schedule Information. The Design-Builder will prepare Schedule Information that is a forward planning as well as a monitoring tool.

- 2.1.5 The Design and Construction Schedule will indicate the sequence and dates on which the activities that make up the Project, the critical path of activities, Project milestones, submittal schedules and all necessary tasks required to complete the Project are scheduled to be completed. The Design and Construction Schedule will also include, as applicable, all Work to be performed by the Authority and/or other involved parties and the Design-Builder will fully coordinate these activities and milestones with the Design-Builder's Work.
- 2.1.6 As a part of each Monthly Project Report the Design-Builder will submit an update to the Design and Construction Schedule (the "Design and Construction Schedule Update") providing monthly updates to the as-built status of the Project as of the data date and the Design-Builder's current plan to complete the remaining Work as of the Monthly Project Report date.
- 2.1.7 The Monthly Project Report will also describe the current status of the Work as it relates to any deviations from scheduled performance, and any changes in the Design-Builder's work plan as of the data date.
- 2.1.8 Every two weeks, the Design-Builder will submit a 2-Week Look-ahead Schedule to provide a more detailed day-to-day plan of upcoming Work identified on the Design and Construction Schedule Update. The first submission will follow once the Design and Construction Schedule Baseline 1.0 has achieved "REVIEWED" status.
- 2.1.9 The parties acknowledge that the initial Design and Construction Schedule attached as **Appendix 1** will be updated in accordance with this Agreement, including Schedule 2.

2.2 Breakdowns

2.2.1 The Design and Construction Schedule breakdown will be at a minimum level 4. Specific critical elements and components that require coordination with other parties will be at level 5.

2.3 Key Activities

- 2.3.1 For all activities, the Design and Construction Schedule will identify:
 - (a) durations;
 - (b) start and finish dates;
 - (c) predecessor(s);
 - (d) successor(s); and
 - (e) a description.
- 2.3.2 As a minimum, the Design and Construction Schedule will show the following activities:

- (a) Authority, stakeholder and Authority Having Jurisdiction reviews, processes, and procedures.
- (b) Phasing of the Work.
- (c) Long lead items.
- (d) Installation, integration, testing, Commissioning, and inspection requirements.
- (e) Other activities deemed important by the Design-Builder or as directed by the Authority.

2.4 Key Milestones

- 2.4.1 Key milestones in the Design and Construction Schedule show interdependencies through identified predecessors and successors and will, at a minimum, reflect the following:
 - (a) Submission of permit applications to Authorities Having Jurisdictions;
 - (b) Commencement of mobilization on the Site, which will start no earlier than written notice from the Authority following Effective Date of this Agreement;
 - (c) Dates for clinical equipment staging ready and functional as required by this Agreement;
 - (d) Dates for access to the building to deploy and install Category E Equipment on the date required by this Agreement;
 - (e) Substantial Completion;
 - (f) Total Completion;
 - (g) Design milestones aligned with the review dates and Submissions Schedule in Schedule 2 [Review Procedure], including Mock-ups; and with Schedule 4 [Management Systems and Plans];
 - (h) Construction milestones including (at a minimum):
 - (i) Mobilization to Site including hoarding, site offices and temporary utilities;
 - (ii) Start of excavation;
 - (iii) First concrete pour for foundations;
 - (iv) Start and end dates for each structural floor level;
 - (v) Start and end dates for roofing and overall building watertightness;
 - (vi) Start and end dates for exterior cladding;

- (vii) Milestones for interior finishing elements by floor and department; and
- (viii) Milestones related to mechanical and electrical systems; and
- (i) Dates for Delivery, Installation, Set-up, Commissioning, occupancy permits, and training of Furniture and Equipment aligned with the Construction Management Plan and Schedule 4, Appendix 8D [F&E Logistics];
- (j) Key dates from the Hospital Technology Systems Integration Plan as described in Schedule 4 [Management Systems and Plans] and, in particular, those dates when the Authority will be required to undertake activities or provide information.
- (k) Additional milestones to be scheduled and coordinated specifically relate to the Construction of the communications infrastructure, networks and systems. The Authority will be performing tasks that are dependent of these milestones which will be delivered by the Authority directly or indirectly through its contractors and suppliers:
 - (i) Network Ready Date. Refer to Schedule 1 Section 2.9.3.1 for details on requirements;
 - (ii) Substantial Completion date for the CPPS. Refer to Schedule 1 Appendix 1G [Campus Perimeter Pathway System Technical Specifications] for details on requirements;
 - (iii) Completion dates per floor for the backbone Communications Pathway System in the Facility. Refer to Schedule 1 Section 7.8.8.4 for details on requirements;
 - (iv) Completion date for rooftop Communications Pathway System in the Facility. Refer to Schedule 1 Section 7.8.8.5 for details on requirements;
 - (v) Rough-in dates for the backbone cabling subsystem in the Facility. Refer to Schedule 1 Section 7.8.10.3 for details on requirements;
 - (vi) Finishing dates for the backbone cabling subsystem where "finishing" is defined as the termination, testing, labelling and documentation of all components associated with the intra-building copper and fibre optic backbone cabling subsystem in the Facility. Refer to Schedule 1 Section 7.8.10.3 and 7.8.11 for details on requirements;
 - (vii) Rough-in dates per floor for the horizontal cabling subsystem in the Facility. For details on requirements, refer to Schedule 1 Sections 7.8.10.2 as well as Section 7.8.21 and 7.8.22 for horizontal cables associated with DAS and CATV;
 - (viii) Finishing dates per floor for the horizontal cabling subsystem as well as for horizontal cables associated with DAS and CATV in the Facility where

"finishing" is defined as the termination, testing, labelling and documentation of all components associated with these cabling infrastructures. For details on requirements, refer to Schedule 1 Sections 7.8.10.2, 7.8.11, 7.8.21 and 7.8.22;

- (ix) Wireless system installation dates per floor. This date is typically a predecessor to the installation of ceiling tiles in the Facility. Refer to Schedule 1 Section 7.8.12 for details on requirements;
- (x) Communications Room equipment ready dates in the Facility. Refer to Schedule 1 Section 7.8.9.8 and 7.8.11 for details on requirements;
- (xi) The date when the IM/IT Storage Room will be provided in the Facility in accordance with the requirements specified in Schedule 1 Appendix 1J [Equipment List IM/IT];
- (xii) Dates per floor when the Design-Builder will make areas of the Facility available to IM/IT to deploy its equipment in accordance with the requirements specified in Schedule 1 Appendix 1J [Equipment List IM/IT];
- (xiii) The date when the simulation lab will be ready for use by all parties. Refer to Schedule 1 Section 2.7.9 for requirements; and
- (xiv) The date when the operation, functionality and integration of all systems set out in this Agreement will be demonstrated within the simulation lab. Refer to Schedule 1 Section 2.7.9 for requirements.

2.5 Anticipated Outstanding Work at Substantial Completion

Work to complete deficiencies will most likely be necessary after Substantial Completion but be fully completed before Total Completion. The anticipated Work outstanding at Substantial Completion will be shown on the Design and Construction Schedule; updated two (2) months prior to the request for Substantial Completion, and the Design-Builder will ensure sufficient resources stay on the Project to achieve Total Completion within the established timelines set out in this Agreement.

2.6 Software

The scheduling software and export format selection will be in native Primavera format. The Design-Builder will provide the Design and Construction Schedule and all Design and Construction Schedule Updates electronically in that format.

The Design Builder will provide an electronic version of the Design and Construction Schedule in the required format within 60 days after the Effective Date and will provide an electronic version of the Design and Construction Schedule Updates in the required format at the same time the Design-Builder provides the Design and Construction Schedule Updates. Failure to produce the required electronic version will result in a \$1 million holdback to be made from the next applicable

payment or payments. The holdback will be returned within 30 days after provision of the required electronic version.

APPENDIX 1

DESIGN AND CONSTRUCTION SCHEDULE

This page and the following 34 pages removed in their entirety

SCHEDULE 12

INDEPENDENT ENERGY CONSULTANT AGREEMENT

INDEPENDENT ENERGY CONSULTANT AGREEMENT

Confidential

NEW SURREY HOSPITAL AND BC CANCER CENTRE FRASER HEALTH AUTHORITY

and



Dated: [•] ____, 202[•]

INDEPENDENT ENERGY CONSULTANT AGREEMENT

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SCHEDULE 1 IEC FUNCTIONS

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SCHEDULE 3 INDEPENDENT ENERGY CONSULTANT PERSONNEL

INDEPENDENT ENERGY CONSULTANT AGREEMENT

THIS AGR	ELEMENT is made as of the $[\bullet]$ day of $[\bullet]$, $20[\bullet]$
AMONG:	
	FRASER HEALTH AUTHORITY
	(the "Authority")
AND:	
	▼
	(the "Design-Builder")
AND:	
	▼
	(the "Independent Energy Consultant" or "IEC")

WHEREAS:

- A. the Authority and the Design-Builder have entered into the Design-Build Agreement;
- B. the Authority and the Design-Builder wish to appoint the Independent Energy Consultant, and the Independent Energy Consultant wishes to accept such appointment, to perform certain services in connection with the Design-Build Agreement; and
- C. the Authority, the Design-Builder and the Independent Energy Consultant wish to enter into this Agreement in order to record the terms by which the Independent Energy Consultant will perform such services.

NOW THEREFORE in consideration of the mutual promises and agreements of the Authority, the Design-Builder and the Independent Energy Consultant herein expressed and for other good and valuable consideration the receipt and sufficiency of which are hereby acknowledged, the Authority, the Design-Builder and the Independent Energy Consultant covenant and agree as follows:

1. **DEFINITIONS**

1.1 Definitions

In this Agreement including the recitals and Schedules, unless the context indicates a contrary intention, terms which are defined in the Design-Build Agreement (and not otherwise defined in this Agreement) will have meanings given to them in the Design-Build Agreement and the following terms will have the following meanings:

"Change in Control" means with respect to a relevant person:

- (a) any direct or indirect change by contract or otherwise (other than as set out in (b)) which results in a person or group of persons having the ability to direct or cause the direction of the management, actions or policies of the relevant person; or
- (b) any direct or indirect change in the ownership or control of any legal, beneficial or equitable interest in any or all of the shares, units or equity in the relevant person (including the control over the exercise of voting rights conferred on equity share capital, unit interests or equity interests or

[&]quot;Agreement" means this Independent Energy Consultant Agreement and its schedules;

the control over the right to appoint or remove directors, a general partner or other managers), including changes arising from assignment or transfer of existing shares, units or equity, issuance of new shares, units or equity or amalgamation, merger consolidation, amendment of a limited partnership certificate or other reorganization, or any other direct or indirect change which results in a person or group of persons, other than the equity holders of the relevant person immediately prior to the change, directly or indirectly:

- (1) controlling the composition of the majority of the board of directors of the relevant person or of a general partner or manager of the relevant person;
- (2) controlling the decisions made by or on behalf of the relevant person, including by controlling the voting power of the board of directors or by controlling the voting power of any class of shareholders or equity holders of any of the relevant person, a general partner of the relevant person or a manager of the relevant person or otherwise;
- (3) holding equity (either beneficially or otherwise) of the relevant person with a subscribed value (taking into account contributions to be made in the case of a limited partnership) of more than one half of the subscribed value (taking into account contributions to be made in the case of a limited partnership) or equity (either beneficially or otherwise) of the relevant person with more than one half of the voting rights; or
- (4) having the ability to direct or cause the direction of the management, actions or policies of the relevant person;

"DBA Parties" means, collectively, the Authority and the Design-Builder;

"Design-Build Agreement" means that certain agreement entitled "Design-Build Agreement" and made between the Authority and the Design-Builder as of the _____ day of _____, 202[•] with respect to the design and construction of the Facility;

"Fee" means the fees payable by the DBA Parties to the Independent Energy Consultant for the IEC Functions, as such fees are specified and made payable in Schedule 2 [Fee];

"IEC Functions" means:

- (a) all of the functions and obligations conferred on the Independent Energy Consultant under the Design-Build Agreement;
- (b) all of the functions and obligations conferred on the Independent Energy Consultant under this Agreement, including the functions described in Schedule 1 [IEC Functions]; and
- (c) all other things or tasks which the Independent Energy Consultant is required to do to comply with its obligations under this Agreement;

"IEC Functions Variation" means any change to the IEC Functions;

"Intellectual Property" means any and all intellectual property rights throughout the world, whether subsisting now or in the future, including rights of any kind in inventions, patents, copyright, trademarks, service marks, industrial designs, integrated circuit topography rights, applications for registration of any of the foregoing, and know-how, trade secrets, confidential information and trade or business names;

"Project Material" means all material:

- (a) provided to the Independent Energy Consultant or created by or required to be created by any DBA Party; and
- (b) provided by or created by or required to be created by the Independent Energy Consultant as part of, or for the purpose of, performing the IEC Functions,

including documents, equipment, reports, technical information, plans, charts, drawings, calculations, tables, schedules and data (stored and recorded by any means).

2. INTERPRETATION

2.1 Interpretation

The division of this Agreement into Sections, the insertion of headings and the provision of a table of contents are for convenience only, do not form a part of this Agreement and will not be used to affect the construction or interpretation of this Agreement. The word "including" will not be construed as limiting the general term or statement immediately preceding. Unless otherwise specified:

- (a) each reference in this Agreement to "**Section**" and "**Schedule**" is to a Section of, and a Schedule to, this Agreement;
- (b) each reference to a statute is deemed to be a reference to that statute and any successor statute, and to the regulations made under that statute and any successor statute, as amended or re-enacted from time to time:
- (c) words importing the singular include the plural and vice versa and words importing gender are gender neutral;
- (d) references to time of day or date mean the local time or date in Vancouver, British Columbia;
- (e) all references to amounts of money mean lawful currency of Canada; and
- (f) an accounting term has the meaning assigned to it, and all accounting matters will be determined, in accordance with GAAP consistently applied.

2.2 Obligations and Exercise of Rights by the DBA Parties

The obligations of the DBA Parties under this Agreement will be several. Except as specifically provided for in this Agreement, the rights of the DBA Parties under this Agreement will be jointly exercised by each of the DBA Parties.

3. ROLE OF THE INDEPENDENT ENERGY CONSULTANT

3.1 Engagement

The DBA Parties hereby appoint the Independent Energy Consultant, and the Independent Energy Consultant hereby accepts such appointment, to carry out the IEC Functions in accordance with this Agreement.

3.2 Acknowledgement by Independent Energy Consultant

The Independent Energy Consultant hereby acknowledges in favour of the DBA Parties that it has received a copy of the Design-Build Agreement.

3.3 Standard of Care

The Independent Energy Consultant will exercise the standard and skill, care and diligence in the performance of the IEC Functions that would be expected of an expert professional experienced in providing services in the nature of the IEC Functions for projects similar to the Project.

3.4 Duty of Independent Judgment

In exercising the IEC Functions, the Independent Energy Consultant will act:

(a) impartially, honestly and independently;

- (b) reasonably and professionally; and
- (c) in a timely manner:
 - (1) in accordance with the times prescribed in this Agreement or the Design-Build Agreement, as applicable; or
 - (2) where no times are prescribed, within five Business Days or such earlier time so as to enable the DBA Parties to perform their respective obligations under the Design-Build Agreement.

Although the Independent Energy Consultant should take account of any opinions or representations made by the DBA Parties, the Independent Energy Consultant will not be bound to comply with any opinions or representations made by either of them in connection with any matter on which the Independent Energy Consultant is required to exercise its professional judgment.

3.5 Authority to Act

The Independent Energy Consultant:

- (a) is an independent consultant and is not, and will not purport to be, a partner, joint venturer or agent of any DBA Party;
- (b) is qualified and experienced with respect to Energy for projects in British Columbia similar to the Project;
- (c) other than as may be expressly set out in the Design-Build Agreement, has no authority to give any directions to a DBA Party or its officers, employees, contractors, consultants or agents; and
- (d) has no authority to waive or alter any terms of the Design-Build Agreement, nor to discharge or release a DBA Party from any of its obligations under the Design-Build Agreement unless jointly agreed in writing by the DBA Parties.

3.6 Knowledge of the DBA Parties' Requirements

The Independent Energy Consultant warrants that:

- (a) it has and will be deemed to have informed itself fully of the requirements of the Design-Build Agreement;
- (b) it will inform itself fully of the requirements of such other documents and materials as may become relevant from time to time to the performance of the IEC Functions;
- (c) without limiting Sections 3.6(a) or 3.6(b), it has and will be deemed to have informed itself fully of all time limits and other requirements for any IEC Function which the Independent Energy Consultant carries out under the Design-Build Agreement and this Agreement;
- (d) it has and will be deemed to have informed itself fully of the nature of the work necessary for the performance of the IEC Functions and the means of access to and facilities at the Facility and Site including restrictions on any such access or protocols that are required; and
- (e) it has satisfied itself as to the correctness and sufficiency of its proposal for the IEC Functions and that the Fee covers the cost of complying with all of the obligations under this Agreement and of all matters and things necessary for the due and proper performance and completion of the IEC Functions.

3.7 Co-ordination by Independent Energy Consultant

The Independent Energy Consultant will:

- (a) fully co-operate with the DBA Parties;
- (b) carefully co-ordinate the IEC Functions with the work and services performed by the DBA Parties;
- (c) without limiting its obligations under Sections 3.4 and 3.7(b), perform the IEC Functions so as to avoid unreasonably interfering with, disrupting or delaying the work and services performed by the DBA Parties; and
- (d) provide copies to all DBA Parties of all reports, communications, certificates and other documentation that it provides to any DBA Party.

3.8 Conflict of Interest

The Independent Energy Consultant warrants that:

- (a) at the date of signing this Agreement, no conflict of interest exists or is likely to arise in the performance of its obligations under this Agreement; and
- (b) if, during the term of this Agreement, any such conflict or risk of conflict of interest arises, the Independent Energy Consultant will notify the DBA Parties immediately in writing of that conflict or risk of conflict and take such steps as may be required by each of the DBA Parties to avoid or mitigate that conflict or risk.

3.9 Independent Energy Consultant Personnel

- (a) Subject to Section 3.9(b), the Independent Energy Consultant will use the partners, directors or employees described in Schedule 3 [Independent Energy Consultant Personnel] in connection with the performance of the IEC Functions and such individuals' services will be available for so long as may be necessary to ensure the proper performance by the Independent Energy Consultant of the IEC Functions. Such individuals will have full authority to act on behalf of the Independent Energy Consultant for all purposes in connection with this Agreement.
- (b) None of the individuals listed in Schedule 3 [Independent Energy Consultant Personnel] will be removed or replaced unless they cease to work as a partner in or director or employee of the Independent Energy Consultant or they are unable to work because of death or illness. The Independent Energy Consultant will notify the DBA Parties of any such circumstances and will be responsible for finding a replacement who will previously have been approved in writing by the DBA Parties.

4. ROLE OF THE DBA PARTIES

4.1 Assistance

The DBA Parties agree to co-operate with and provide reasonable assistance to the Independent Energy Consultant to familiarize the Independent Energy Consultant with all necessary aspects of the Project to enable the Independent Energy Consultant to carry out its obligations under this Agreement.

4.2 Instructions in Writing

All instructions to the Independent Energy Consultant by the DBA Parties will be given in writing.

4.3 Information and Services

The DBA Parties will each make available to the Independent Energy Consultant, as soon as practicable from time to time, all information, documents and particulars necessary for the Independent Energy Consultant to carry out the IEC Functions, including such information, documents and particulars required in order for the Independent Energy Consultant to determine whether the criteria for Substantial Completion have been achieved, and will provide copies of all such information, documents and particulars to the other DBA Party.

4.4 Additional Information

If any information, documents or particulars are reasonably required to enable the Independent Energy Consultant to perform the IEC Functions and have not been provided by the Design-Builder or the Authority, as the case may be, then:

- (a) the Independent Energy Consultant will give notice in writing to the Design-Builder's Representative or the Authority's Representative, as the case may be, of the details of the information, documents or particulars demonstrating the need and the reasons why they are required; and
- (b) the Design-Builder or the Authority, as the case may be, will arrange the provision of the required information, documents or particulars.

4.5 Right to Enter and Inspect

Upon giving reasonable notice to the Design-Builder's Representative, the Independent Energy Consultant (and any person authorized by it) may enter and inspect the Site, Facility and work in progress at any reasonable time in connection with the exercise or proposed exercise of rights under this Agreement, subject to:

- (a) observance of the reasonable rules of the Design-Builder as to safety and security for the Site, Facility and work in progress;
- (b) not causing unreasonable delay to the carrying out of the Work by reason of its presence at the Site or Facility; and
- (c) not causing any damage to the Site, Facility or work in progress.

4.6 DBA Parties Not Relieved

Neither DBA Party will be relieved from performing or observing its obligations, or from any other liabilities, under the Design-Build Agreement as a result of either the appointment of, or any act or omission by, the Independent Energy Consultant.

4.7 DBA Parties not Liable

On no account will a DBA Party be liable to another DBA Party for any act or omission by the Independent Energy Consultant whether under or purportedly under a provision of the Design-Build Agreement, this Agreement or otherwise, provided that any such act or omission will not extinguish, relieve, limit or qualify the nature or extent of any right or remedy of either DBA Party against or any obligation or liability of either DBA Party to the other DBA Party which would have existed regardless of such act or omission.

5. SUSPENSION

5.1 Notice

The IEC Functions (or any part) may be suspended at any time by the DBA Parties:

(a) if the Independent Energy Consultant fails to comply with its obligations under this Agreement, immediately by the DBA Parties giving joint notice in writing to the Independent Energy Consultant; or

(b) in any other case, by the DBA Parties giving seven days' joint notice in writing to the Independent Energy Consultant.

5.2 Costs of Suspension

The Independent Energy Consultant will:

- (a) subject to the Independent Energy Consultant complying with Section 8, be entitled to recover the extra costs incurred by the Independent Energy Consultant by reason of a suspension directed under Section 5.1(b) valued as an IEC Functions Variation under Section 8; and
- (b) have no entitlement to be paid any costs, expenses, losses or damages arising from a suspension under Section 5.1(a).

5.3 Recommencement

The Independent Energy Consultant will immediately recommence the carrying out of the IEC Functions (or any part) on receipt of a joint written notice from the DBA Parties requiring it to do so.

6. INSURANCE AND LIABILITY

6.1 Independent Energy Consultant's Professional Indemnity Insurance

- (a) The Independent Energy Consultant will, at its cost, have in place:
 - (1) professional errors and omissions insurance:
 - (A) in the amount of \$5,000,000 per claim and in the aggregate, a deductible of not more than \$250,000 per claim and from an insurer and on terms satisfactory to each of the DBA Parties:
 - (B) with a term and extended reporting period from the date of this Agreement until the expiration of 3 years from the cessation of the IEC Functions; and
 - (C) covering liability which the Independent Energy Consultant might incur as a result of a breach by it of its obligations or any breach of a duty owed by the Independent Energy Consultant in a professional capacity to the DBA Parties, or either of them, under or in connection with this Agreement or the provision of the IEC Functions; and
 - at all times during the term of this Agreement, comprehensive general liability insurance in the amount of \$5,000,000 per claim and in the aggregate, no deductible for personal injury or bodily injury, a deductible of not more than \$50,000 per occurrence for property damage, naming the Authority as an additional insured and from an insurer and on terms satisfactory to each of the DBA Parties.
- (b) The Independent Energy Consultant will:
 - (1) ensure that each of the insurance policies described in Section 6.1(a):
 - (A) bears an endorsement to the effect that the insurer will not effect any adverse material change or amendment to the policy or any cancellation of the policy without first giving at least 30 days prior written notice by registered mail to the Authority; and
 - (B) is obtained and maintained with reputable and qualified insurers, acceptable to the Authority, licensed in British Columbia; and

(2) provide copies of each of the insurance policies described in Section 6.1(a) to each of the DBA Parties upon request.

6.2 Workers' Compensation Insurance

The Independent Energy Consultant will, at its own cost and at all times during the term of this Agreement, insure its liability (including its common law liability) as required under any applicable workers compensation statute or regulation in relation to its employees engaged in the IEC Functions.

7. PAYMENT FOR SERVICES

7.1 Fee

- (a) In consideration of the Independent Energy Consultant performing the IEC Functions in accordance with this Agreement, the DBA Parties will pay the Independent Energy Consultant the Fee
- (b) The Fee includes all taxes (except for GST), disbursements and expenses (including accommodation, car rental, equipment and travel expenses), overheads and profit to perform the IEC Functions.

7.2 Payment of Fee

- (a) Subject to Section 7.2(c), the DBA Parties will each pay half the Fee to the Independent Energy Consultant in accordance with the payment schedule specified in Schedule 2 [Fee]. The Independent Energy Consultant will invoice each of the DBA Parties separately. The obligation on the Design-Builder and the Authority to each pay its portion of the Fee to the Independent Energy Consultant is not subject to joint and several liability and neither the Authority nor the Design-Builder will have any liability whatsoever for the non-payment by the other of any fees or costs payable by such other party under this Agreement.
- (b) The Design-Builder acknowledges and agrees that if any amount due and payable by the Design-Builder to the Independent Energy Consultant is outstanding, the Independent Energy Consultant will not have any obligation to the Design-Builder to make any certification under the Design-Build Agreement.
- (c) The Design-Builder will bear the full cost of the Fee related to certification of Work, including equipment and materials, that is located off-Site where such off-Site Work is not identified in the Design and Construction Schedule and agreed and included in the Fee.

8. FUNCTIONS VARIATIONS

8.1 Notice of IEC Functions Variation

- (a) If the Independent Energy Consultant believes, other than a "IEC Functions Variation Order" under Section 8.3, that any direction by the DBA Parties constitutes or involves an IEC Functions Variation it will:
 - (1) within 7 days after receiving the direction and before commencing work on the subject matter of the direction, give notice to the DBA Parties that it considers that the direction constitutes or involves an IEC Functions Variation; and
 - (2) within 21 days after giving the notice under Section 8.1(a)(1) above, submit a written claim to each of the Authority's Representative and the Design-Builder's Representative which includes detailed particulars of the claim, the amount of the claim and how it was calculated.
- (b) Regardless of whether the Independent Energy Consultant considers that such a direction constitutes or involves an IEC Functions Variation, the Independent Energy Consultant will

continue to perform the IEC Functions in accordance with this Agreement and all directions, including any direction in respect of which notice has been given under this Section.

8.2 No Adjustment

If the Independent Energy Consultant fails to comply with Section 8.1, the Fee will not be adjusted as a result of the relevant direction.

8.3 IEC Functions Variation Procedure

- (a) The Authority's Representative and the Design-Builder's Representative may jointly issue a document titled "IEC Functions Variation Price Request" to the Independent Energy Consultant which will set out details of a proposed IEC Functions Variation which the DBA Parties are considering.
- (b) Within 7 days after the receipt of a "IEC Functions Variation Price Request", the Independent Energy Consultant will provide each of the Authority's Representative and the Design-Builder's Representative with a written notice in which the Independent Energy Consultant sets out the effect which the proposed IEC Functions Variation will have on the Fee.
- (c) Each of the Authority's Representative and the Design-Builder's Representative may then jointly direct the Independent Energy Consultant to carry out an IEC Functions Variation by written document titled "IEC Functions Variation Order" which will state either that:
 - (1) the Fee is adjusted as set out in the Independent Energy Consultant's notice; or
 - (2) the adjustment (if any) to the Fee will be determined under Section 8.4.

8.4 Cost of IEC Functions Variation

- (a) Subject to Section 8.2, the Fee will be adjusted for all IEC Functions Variations or suspensions under Section 5.1(b) carried out by the Independent Energy Consultant by:
 - (1) the amount (if any) stated in the "IEC Functions Variation Order" in accordance with Section 8.3(c);
 - (2) if Section 8.4(a)(1) is not applicable, an amount determined pursuant to the fee schedule for IEC Functions Variations in Schedule 2 [Fee]; or
 - (3) where such rates or prices are not applicable, a reasonable amount to be agreed between the DBA Parties and the Independent Energy Consultant or, failing agreement, determined by the Authority's Representative and the Design-Builder's Representative jointly, acting reasonably.
- (b) Any reductions in the Fee will be calculated on the same basis as any increases.

9. TERM AND TERMINATION

9.1 Term

Subject to earlier termination, this Agreement will commence on the Effective Date and continue in full force until:

- (a) 60 days after the Total Completion Date; or
- (b) such later date as may be mutually agreed between the DBA Parties and the Independent Energy Consultant.

9.2 Notice of Breach

If the Independent Energy Consultant commits a breach of this Agreement, the DBA Parties may give written notice to the Independent Energy Consultant:

- (a) specifying the breach; and
- (b) directing its rectification in the period specified in the notice being a period not less than 7 days from the date of service of the notice.

9.3 Termination for Breach

If the Independent Energy Consultant fails to rectify the breach within the period specified in the notice issued under Section 9.2, the DBA Parties may, without prejudice to any other rights of the DBA Parties or either of them, immediately terminate this Agreement.

9.4 Termination for Financial Difficulty

The DBA Parties may, without prejudice to any other rights which the DBA Parties or either of them may have, terminate this Agreement immediately if:

- (a) events have occurred or circumstances exist which, in the opinion of the DBA Parties, may result in or have resulted in insolvency or the control of the Independent Energy Consultant passing to another body or corporation; or
- (b) the Independent Energy Consultant has communications with its creditors with a view to entering into, or enters into, any form of compromise, arrangement or moratorium of any debts whether formal or informal, with its creditors.

9.5 Termination for Convenience

Notwithstanding anything to the contrary in this Agreement, the DBA Parties may at any time terminate this Agreement upon 30 days' written notice to the Independent Energy Consultant.

9.6 Independent Energy Consultant's Rights upon Termination for Convenience

Upon a termination under Section 9.5, the Independent Energy Consultant will:

- (a) be entitled to be reimbursed by the DBA Parties for the value of the IEC Functions performed by it to the date of termination; and
- (b) not be entitled to any damages or other compensation in respect of the termination and (without limitation) any amount in respect of:
 - (1) the lost opportunity to earn a profit in respect of the IEC Functions not performed at the date of termination; and
 - any lost opportunity to recover overheads from the turnover which would have been generated under this Agreement but for it being terminated.

9.7 Procedure upon Termination

Upon completion of the Independent Energy Consultant's engagement under this Agreement or earlier termination of this Agreement (whether under Sections 9.3, 9.4 or 9.5 or otherwise) the Independent Energy Consultant will:

- (a) co-operate with the DBA Parties;
- (b) hand to the DBA Parties all Project Material and all other information concerning the Project held or prepared by the Independent Energy Consultant; and

(c) as and when required by the DBA Parties, meet with them and such other Persons nominated by them with a view to providing them with sufficient information to enable the DBA Parties to execute the Project or the Persons nominated to provide the IEC Functions.

9.8 Effect of Termination

Except as otherwise expressly provided in this Agreement, termination of this Agreement will be without prejudice to any accrued rights and obligations under this Agreement as at the date of termination (including the right of the Design-Builder and the Authority to recover damages from the Independent Energy Consultant).

9.9 Survival

Termination of this Agreement will not affect the continuing rights and obligations of the Design-Builder or the Authority and the Independent Energy Consultant under Sections 6, 7, 9.6, 9.7, 9.8, 10, 11.7, 11.8 and this Section 9.9 or under any other Section which is expressed to survive termination or which is required to give effect to such termination or the consequences of such termination.

10. INDEMNITY

10.1 Indemnity

The Independent Energy Consultant will indemnify and save harmless the DBA Parties, and each of them, and their respective employees, agents, officers and directors from and against any and all losses incurred or suffered by any of them by reason of, resulting from, in connection with, or arising out of:

- (a) the breach of any representation, warranty, covenant, term, duty or obligation of the Independent Energy Consultant set out in or arising under this Agreement or the Design-Build Agreement; or
- (b) any act or omission of the Independent Energy Consultant in connection with the subject matters of this Agreement.

11. GENERAL

11.1 Entire Agreement

This Agreement and the Design-Build Agreement constitute the entire agreement between the DBA Parties and the Independent Energy Consultant and supersede all communications, arrangements and agreements, either oral, written, made or entered into prior to the date of this Agreement between the DBA Parties and the Independent Energy Consultant with respect to the subject matter of this Agreement.

11.2 Negation of Employment

- (a) The Independent Energy Consultant, its officers, employees, servants and agents and any other individuals engaged by the Independent Energy Consultant in the performance of the IEC Functions will not by virtue of this Agreement or the performance of the IEC Functions become in the service or employment of the DBA Parties for any purpose.
- (b) The Independent Energy Consultant will be responsible for all matters requisite as employer or otherwise in relation to such officers, employees, servants and agents and other individuals who are engaged by the Independent Energy Consultant.

11.3 Waiver

Failure by any DBA Party or the Independent Energy Consultant to enforce a provision of this Agreement will not be construed as a waiver by that DBA Party or the Independent Energy Consultant of any right in respect of that provision, or any other provisions of this Agreement.

11.4 Notices

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 electronic transmission to the address or electronic mail address of each party set out below:

(a) if to the Authority:



(b) if to the Design-Builder:



(c) if to the Independent Energy Consultant:



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

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; and
- (b) 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:
 - (1) the receiving party has, by electronic transmission or by hand delivery, acknowledged to the notifying party that it has received such notice; or
 - (2) 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.

11.5 Transfer and Assignment

(a) The Independent Energy Consultant:

- (1) will not assign, transfer, mortgage, charge or encumber any right or obligation under this Agreement without the prior written consent of the DBA Parties, which each DBA Party may give or withhold in its absolute discretion; and
- (2) agrees that any assignment, transfer, mortgage, charge or encumbrance will not operate to release or discharge the Independent Energy Consultant from any obligation or liability under this Agreement.
- (b) For the purposes of this Section, an assignment will be deemed to have occurred where there is a Change in Control of the Independent Energy Consultant after the date of this Agreement.
- (c) Each of the DBA Parties may assign, transfer, mortgage, charge or encumber any right or obligation under this Agreement in accordance with the terms of the Design-Build Agreement.

11.6 Governing Laws and Attornment

This Agreement will be governed by and construed in accordance with the laws of the Province of British Columbia and the federal laws of Canada applicable therein without regard to conflicts of law principles that would apply a different body of law, and the Authority, the Design-Builder and the Independent Energy Consultant hereby irrevocably submit and attorn to the exclusive jurisdiction of the courts of that Province and all courts competent to hear appeals therefrom with respect to any action, suit, proceeding or dispute in connection with this Agreement.

11.7 Confidentiality

- (a) The Independent Energy Consultant will ensure that:
 - (1) neither it nor any of its officers, employees, servants and agents disclose, or otherwise make public, any Project Material or any other information or material acquired in connection with or during the performance of the IEC Functions without prior written approval of the DBA Parties; and
 - (2) no Project Material is used, copied, supplied or reproduced for any purpose other than for the performance of the IEC Functions under this Agreement.
- (b) The DBA Parties may at any time require the Independent Energy Consultant to give and to arrange for its officers, employees, servants and agents engaged in the performance of the IEC Functions to give written undertakings, in the form of confidentiality agreements on terms required by the DBA Parties, relating to the non-disclosure of confidential information, in which case the Independent Energy Consultant will promptly arrange for such agreements to be executed and delivered.

11.8 Project Material

- (a) The DBA Parties and the Independent Energy Consultant agree that the Independent Energy Consultant does not and will not have any rights, including any Intellectual Property, in any Project Material provided to the Independent Energy Consultant or created or required to be created by any DBA Party.
- (b) All title and ownership, including all Intellectual Property, in and to the Project Material created or required to be created by the Independent Energy Consultant as part of, or for the purposes of performing the IEC Functions, is hereby assigned jointly to the Authority and the Design-Builder on creation, or where such title, ownership and Intellectual Property cannot be assigned before creation of the Project Material, it will be assigned to the Authority and the Design-Builder on creation. In addition, to the extent that copyright may subsist in such Project Material so created by the Independent Energy Consultant, the Independent Energy Consultant hereby waives all past, present and future moral rights therein and the Independent Energy Consultant will ensure that any agent or employee of Independent Energy Consultant will have waived all such moral rights.

(c) The Independent Energy Consultant will do all such things and execute all such documents as reasonably requested by either of the DBA Parties in order to confirm or perfect the assignment of Intellectual Property in the Project Material referred to in Section 11.8(b).

11.9 Time of the Essence

Time will be of the essence of this Agreement and of the transactions contemplated by this Agreement.

11.10 Amendment

No change or modification of this Agreement will be valid unless it is in writing and signed by each party to this Agreement.

11.11 Severability

If any provision of this Agreement will be declared invalid, unenforceable or illegal by the courts of any jurisdiction to which it is subject, such provision may be severed and such invalidity, unenforceability or illegality will not prejudice or affect the validity, enforceability or legality of the remaining provisions of this Agreement.

11.12 Enurement

Subject to the restrictions on transfer contained in this Agreement, this Agreement will enure to the benefit of and be binding on the parties and their respective heirs, executors, administrators, successors and assigns.

11.13 Counterparts

This Agreement may be executed in any number of counterparts and all counterparts taken together will constitute one and the same instrument.

[Signature Pages Follow]

IN WITNESS WHEREO	F the Authority, the I	Design-Builder and the	Independent Energy	y Consultant have executed
this Agreement.				

FRASER	HEALTH	AUTHORITY	ľ
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Per:			
	Name:		
	Title:		

[THE DESIGN-BUILDER]

Per:		
	Name:	
	Title:	
Per:		
	Name:	
	Title:	

[INDEPENDENT ENERGY CONSULTANT]

Per:			
	Name:		
	Title:		
Per:			
	Name:		
	Title:		

IEC FUNCTIONS

The Independent Energy Consultant will, subject to the provisions of the Design-Build Agreement, provide the services as set out below. In the event of a conflict between any provision of this Agreement, including this Schedule 1, and a provision of the Design-Build Agreement, the Design-Build Agreement will prevail.

The Independent Energy Consultant will:

- (a) review and implement the Measurement and Verification Plan prepared by the Design-Builder, ensuring consistency with Option D (Whole Building Calibrated Simulation) Method 2 of International Performance Measurement & Verification Protocol (IPMVP) Volume III (three) as outlined in more detail within the Energy Management Plan and in Schedule 4 (Management Systems and Plans);
- (b) lead the M&V process throughout the Design and Construction to ensure the Energy Target is achieved while minimizing operational costs;
- (c) identify and integrate the various consulting disciplines and other parties and whose decisions and actions impact the achievement of the Energy Target while minimizing operational costs;
- review the work of the Energy Modeller throughout the Project to the level of detail deemed appropriate by the IEC at each submission, taking into account requirements of the Design-Builder and Authority;
- (e) determine the date the M&V Period will commence;
- (f) review the Energy Model and associated Energy Consumption as described in this Schedule and the Agreement; and
- (g) all other services which the parties may require of the IEC or which the IEC is required to perform to meet the obligations under this Agreement.

FEE

[NTD: This Schedule should also include a fee schedule for IEC Functions Variations.]

INDEPENDENT ENERGY CONSULTANT PERSONNEL

PROPOSAL EXTRACTS

See separate document.

KKS PROCUREMENT OPPORTUNITIES

1. DEFINITIONS AND INTERPRETATION

- 1.1 In this Schedule, in addition to the definitions set out in Section 1 of this Agreement:
 - (a) "Design-Builder Procurement Representative" means the individual identified in Section 11.1(b) unless updated in accordance with Section 10.2;
 - (b) "KKS" means, collectively, the Katzie First Nation, the Kwantlen First Nation and the Semiahmoo First Nation;
 - (c) "KKS Designated Subcontractor" means a person or entity that is: (i) Qualified; and (ii) designated by the KKS Procurement Representative in writing to the Design-Builder as a "KKS Designated Subcontractor" for the purposes of this Agreement;
 - (d) **"KKS Procurement Representative"** means the individual identified in Section 11.1(a), unless updated in accordance with Section 10.1;
 - (e) "Look-Ahead" means the semi-annual forecast of Subcontracting Opportunities prepared by the Design-Builder in accordance with Section 3.1 of this Schedule;
 - (f) "Open Market Opportunity" means a Subcontracting Opportunity identified by the KKS as an Open Market Opportunity pursuant to Section 3.4(a) of this Schedule;
 - (g) "Qualified" means, when used in reference to a specific proposed KKS Designated Subcontractor, that the proposed KKS Designated Subcontractor: (i) possesses the relevant experience, capacity, and access to financial security required for the relevant Subcontracting Opportunity at the Design-Builder's discretion; (ii) will meet the quality and performance standards determined by the Design-Builder at the Design-Builder's discretion; (iii) satisfies any other mandatory criteria stipulated by the Design-Builder for the relevant Subcontracting Opportunity; and (iv) agrees to the form of Subcontract required by the Design-Builder; and
 - (h) "Subcontracting Opportunity" means, unless expressly indicated to the contrary in this Schedule, those potential first-tier Subcontracts directly with the Design-Builder, identified by the Design-Builder in the Look-Ahead and that are not already, or a potential candidate to be, sole-sourced, negotiated, or a preferred partner by the Design-Builder to a Subcontractor.
- 1.2 This Schedule will be interpreted according to the following provisions, except to the extent the context or the express provisions of this Schedule otherwise require:
 - (a) all references to the term "tender", "bid" or "bids" includes any response to tenders, requests for proposals, requests for qualifications, requests for information or any other competitive procurement document:
 - (b) all references to the term "bidder" means any party responding to a procurement document in any form of competitive procurement document; and

(c) all references to the term "Subcontractor" and "Subcontract" unless expressly indicated to the contrary in this Schedule, refer only to first-tier Subcontractors and Subcontracts directly with the Design-Builder.

2. BACKGROUND

- 2.1 The parties acknowledge that:
 - (a) the Authority and the KKS wish to provide opportunities for the participation of the KKS in the Project; and
 - (b) the Authority and the Design-Builder have agreed that the Design-Builder will make commercially reasonable efforts to provide Subcontracting Opportunities and other opportunities as set out in this Schedule.
- 2.2 With the exception of Section 8 of this Schedule, nothing in this Schedule will be interpreted to limit the Design-Builder's obligations to the Authority in accordance with the other requirements of this Agreement.
- 2.3 If in any case the Design-Builder, in its discretion, determines that a KKS procurement opportunity will, or may, impact the Design-Builder's ability to perform its obligations under the Design-Builder Agreement, the Design-Builder, in its discretion, may choose to forgo the procurement process outlined in this Schedule except for any opportunity related to Section 8 of this Schedule.

4. ADVANCE REVIEW OF QUALIFICATIONS

- 4.1 Notwithstanding any other provision of this Schedule, the Design-Builder is not required to enter into a Subcontract with a KKS Designated Subcontractor unless the proposed KKS Designated Subcontractor is Qualified, and is awarded the Subcontracting Opportunity in accordance with the Design-Builder's Subcontract procurement documents. Subcontractor qualification shall be at the Design-Builder's discretion.
- 4.2 To facilitate subcontracting, the KKS may at any time in advance of the commencement of a procurement, submit to the Design-Builder a description of a proposed KKS Designated Subcontractor's:
 - (a) experience;
 - (b) safety;
 - (c) capacity; and
 - (d) access to financial security as evidenced by acceptance and enrollment in the Design-Builder's subcontractor default insurance program, via Compass, with a sufficient rating to undertake the interested opportunities,

in relation to a particular Subcontracting Opportunity.

4.3 The Design-Builder will review the materials provided by the KKS under Section 4.2 of this Schedule and will, no later than 10 days prior to the tender issuance date, notify the KKS whether:

- (a) the proposed KKS Designated Contractor is Qualified, or for future Subcontracting Opportunities is likely to be Qualified; or
- (b) the proposed KKS Designated Contractor is not Qualified, or for future Subcontracting Opportunities is not likely to be Qualified, together with a summary of requirements that have not been met.

5. OPEN MARKET OPPORTUNITIES

- 5.1 The Design-Builder will provide notice to the KKS in the same manner that other bidders are notified for open market tenders and will issue the tender to meet the Design-Builder's schedule.
- 5.2 The Design-Builder will select the Subcontractor for each Open Market Opportunity in accordance with the Design-Builder's Subcontract procurement documents including any low-price compliant budget requirements.

9. TRAINING AND EMPLOYMENT

- 9.1 The Design-Builder will provide regular updates to the designated KKS Procurement Representative for available job postings for the Project with the intent of prioritizing the hiring of up to five suitably qualified, in the Design-Builder's discretion, KKS members for the purposes of the Project. The Design-Builder and the Authority will equally share the cost of the salary of those KKS members.
- 9.2 In addition, the Design-Builder will advertise in a manner accessible to members of the KKS, any available employment opportunities with the Design-Builder in respect of the Project. The Design-Builder will assess and interview members who apply and who are suitably qualified, in the Design-Builder's discretion, with capacity to fill and deliver in respect of available position(s). The cost of these individuals will not be a Change.

9.3 The Design-Builder will provide any KKS members who are offered employment by the Design-Builder with appropriate training and development opportunities, in accordance with the Design-Builder's new hire protocols in respect of the employment positions being filled. The Design-Builder will strongly encourage its Subcontractors to offer similar employment opportunities to KKS members for positions that become available within their organizations during the course of the Project.

10. PROCUREMENT REPRESENTATIVES

- The initial representative of the KKS for the purposes of this Schedule (the "KKS Procurement Representative") will be the individual designated as such in Section 11.1(a). The KKS will give written notice to the Design-Builder of any change of the KKS Procurement Representative. The KKS or the KKS Procurement Representative may by written notice delegate any or all of the functions of the KKS Procurement Representative to any other individual, including for a specified period of time in the absence of the KKS Procurement Representative.
- The initial representative of the Design-Builder for the purposes of this Schedule (the "**Design-Builder Procurement Representative**") will be the Design-Builder's Design-Build Construction Manager, or a qualified delegate assigned by the Design-Build Construction Manager.
- 10.3 For the purposes of this Schedule 14:
 - (a) all actions to be taken by the KKS will be taken by the KKS Procurement Representative; and
 - (b) all actions to be taken by the Design-Builder will be taken by the Design-Builder Procurement Representative,

except as provided otherwise in this Agreement.

11. CONTACT INFORMATION

- 11.1 The contact information for the KKS, the Design-Builder and the Authority are set out below:
 - (a) if to the KKS:

Sacred Waters Developments Ltd. 200-100 Park Royal South, West Vancouver, BC V7T 1A2

Attention: Graham Wood, CEO Email: graham@sacred-waters.ca

(b) if to the Design-Builder:

EllisDon Design Build Inc. Suit 350 13775 Commerce Parkway Richmond, BC V6V 2V4

Attention: Michael Kazda, Design-Build Construction Manager

Email: mkazda@ellisdon.com

(c) if to the Authority:

Fraser Health Authority New Surrey Hospital and BC Cancer Centre 400 – 13450 102nd Ave Surrey, BC V3T 0H1

Attention: Ken Mah, Chief Project Officer and Executive Director

Email: ken.mah@fraserhealth.ca

Each of the KKS, the Design-Builder and the Authority may change the contact information in writing.

[End of Schedule]