REGIONAL DISTRICT OF NANAIMO

REQUEST FOR PROPOSALS (RFP)

Bay Avenue Pump Station Upgrade Design / Build Project

October 11, 2018

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Glossary

For the purposes of this RFP, the terms in quotation marks have the following meanings:

"**Acceptance**" means confirmation of the RDN to accept the Proponent's Proposal;

"**Addendum or Addenda**" means any change(s) to this RFP communicated in writing by the RDN pursuant to this RFP;

"**Agreement**" means the legal document to be negotiated between the RDN and the Preferred Proponent for the design and construction of the Project;

"**Agreement Price**" means the price set out Appendix C, Schedule 2;

"**RDN**" and "**Owner**" mean the Regional District of Nanaimo, British Columbia;

"**RDN's Representative**" and "**Project Manager**" are used interchangeably, and mean the representative of the Owner designated under the Agreement;

"**Closing Location**" means The Regional District of Nanaimo, 6300 Hammond Bay Road, Nanaimo, British Columbia V9T 6N2, Regional and Community Utilities, Main Reception Desk – Second Floor;

"**Closing Time**" means on or before **2:00 p.m.** Pacific Standard Time, according to the Main Reception Desk clock, **Thursday, December 13, 2018;**

"**Completion**" means completion of the Work in accordance with all Drawings and Specifications that meet all Performance Specifications as determined by the RDN's Representative in accordance with the Agreement;

"**Completion Date**" means the date of Completion of the Work as determined by the RDN's Representative in accordance with the Agreement;

"**Construction Schedule**" means the document of that name comprised in the Contractor's Proposal, or negotiated changes as per the Agreement;

"**Contractor**" means the person or persons or a company whose Proposal has been accepted by the RDN and who has entered into an "Agreement" with the RDN and includes the Contractor's personal representative or successors;

"**Contractor's Representative**" means the representative of the Contractor designated under the Agreement;

"**Design**" means the design for the Project, and all Work comprised in it, that is set out in the Drawings and Specifications;

"**Drawings**" means all construction drawings for the Project that are prepared by or for the Contractor, that are accepted in writing by the RDN's Representative as provided in the Agreement;

"**Evaluation Team**" means the personnel and consultants named by the RDN to evaluate the Proposals received in response to this RFP;

"**Insurance Conditions**" means the Agreement conditions set out in Appendix D, Schedule 3;

"**Land**" means the parcels of land located in the Regional District of Nanaimo identified in the RFP;

"**Limits of Construction**" means the geographic limits of the Project;

"**Month**" means a calendar month;

"**Notice of Acceptance**" means the date on which the RDN's Representative advises the Proponent of the RDN's intent to accept the Proponent's Proposal for the Project;

Glossary

"**Official Community Plan**" means statement of goals, objectives and policies produced and approved by the Regional District of Nanaimo which guides the future development of the community;

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

"**Preferred Proponent**" means the Proponent deemed to have the best overall Proposal in response to this RFP and is selected to enter into negotiations leading to an Agreement with the RDN**;**

"**Performance Specifications**" means the RDN's requirements for design and construction of the Project contained in the RFP;

"**Prime Member**" means any Team Member who proposes to be responsible for more than 40% of the design or 20% of the construction work of the Project;

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

"**Project**" means the design and construction of the Bay Avenue Pump Station Upgrade on the Work Site to Completion in accordance with the Project Requirements, Design Specifications and the Agreement Documents;

"**Proponent**" means the entity preparing the response to the RFP, including its Prime Members;

"**Proposal**" means the response to the RFP;

"**Proposal Price**" means the price set out Appendix C, Schedule 2;

"**RFP**" means the document entitled "Bay Avenue Pump Station Upgrade" issued by the RDN in respect of the Project;

"**Specifications**" means any construction specifications that are prepared for the Project by or for the Contractor and that are accepted in writing by the RDN;

"**Standards**" means any and all Laws, building codes, professional standards and specifications applicable to the Work, or to work such as the Project, as they are in force from time to time or in the latest current version thereof, as the case may be;

"**Statement of Requirements**" means the RDN's requirements for design and construction of the Project contained in the RFP;

"**Subcontractor**" means a person having a contract or agreement with the Contractor to perform a part or parts of the Work or to supply products worked to a specific design according to the Agreement, but does not include one who only supplies products not so worked;

"**Substantial Completion**" means substantial performance as determined in accordance with the Builders Lien Act (British Columbia) by the RDN's Representative in accordance with the Agreement;

"**Successful Proponent**" means the party or entity representing the Preferred Proponent once the Agreement is signed;

"**Team**" means a company, firm or consortium that responds to this RFP;

"**Team Member**" means any company or firm comprising part of a Proponent;

"**Work**" means any action required under the Agreement to fulfill the obligations of the Successful Proponent;

"**Work Site**" means that part of the Land identified in the RFP as the place where the Project is to be constructed.

Instructions to Proponents

SUMMARY OF KEY INFORMATION	
RFP Title:	**Proposal: Bay Avenue Pump Station Upgrade Design / Build Project** Please use the above RFP title on all correspondence.
RDN's Representative:	The authorized Representative for this RFP is: Mike Squire, AScT Project Engineer, Engineering Services Regional District of Nanaimo 6300 Hammond Bay Road, V9T 6N2 Phone: (250) 390-6560 Fax: (250) 390-1542 Email: msquire@rdn.bc.ca Address all correspondence to the RDN's Representative. Information offered from sources other than the above RDN's Representative is not official, may be inaccurate, and must not be relied on in any way by any party for any purpose.
Project Information	A non-mandatory site information meeting is scheduled for: **10:00am - October 24, 2018** at the Regional District of Nanaimo, Board Chambers 6300 Hammond Bay Road Nanaimo, BC V9T 6N2
Read All Parts of this RFP Carefully	The recipient is solely responsible for ensuring it has received and understands the complete RFP as described in the Table of Contents and for ensuring it has received and understands all Addenda.
Closing Date and Time for Proposal Submissions:	**Thursday, December 13, 2018; on or before 2:00 p.m. local time**
Closing Location:	Proposals are to be delivered to: Regional District of Nanaimo Regional and Community Utilities, Main Reception Desk, Second Floor, 6300 Hammond Bay Road, Nanaimo, BC V9T 6N2

1.0 INSTRUCTIONS TO PROPONENTS

1.1 General

1.1.1 Definitions

Unless otherwise defined Capitalized Terms used in this RFP are defined in the Glossary.

1.1.2 Purpose and Eligibility

The purpose of this RFP is to solicit Proposals from Proponents to enter into an Agreement with the RDN to design and construct the Project as described in this RFP and to carry out all Work in accordance with this RFP and the terms of the Agreement.

This is a Request for Proposals and is not a contract tender call. No Contract A or any other contractual, tort or other legal obligations are created or imposed on the RDN by this RFP or by submission of any Proposal or by consideration of, or failure or refusal to, consider any Proposal by the RDN. Further, the Agreement, when executed, is the sole source of any contractual obligation on the RDN with respect to the Project.

All Proposals received in response to this RFP will be evaluated and the Proponent judged to be the Preferred Proponent will be selected to enter into negotiations leading to an Agreement with the RDN for this Project.

By submitting a Proposal, a Proponent agrees that if selected as the Successful Proponent, the Proponent will execute the Agreement generally in the form included in Appendix D of this RFP. The Successful Proponent's Proposal or any portion thereof, if accepted by the RDN, will form a part of the Agreement.

1.1.3 Receipt of Complete RFP

It is the Proponent's responsibility to ensure that the Proponent has received a complete RFP as listed in the Table of Contents. The submission of a Proposal constitutes representation by a Proponent that it has verified receipt of a complete RFP including any and all Addenda. Each and every Proposal will be deemed to be made on the basis of the entire RFP, including any and all Addenda issued prior to the requested Closing Date and Time.

This RFP consists of the following documents, together with any Addenda issued:

- **Section 1**: Instructions to Proponents: describes certain conditions pertaining to the Proposal submission, the Proposal process to be followed, and the general Proposal submission and Evaluation requirements.
- **Section 2**: Scope of Work: defines the requirements for the design and construction of the Project;
- **Section 3**: Submission Requirements: sets out the submission expectations.

- **Section 4**: Evaluation Process & Criteria: defines the evaluation process.
- **Appendix A – Schedule 1 - Project Requirements**: defines the functional requirements and technical standards for the Project.
- **Appendix A – Schedule 2 – Design Specifications**: defines the design criteria and Performance Specifications.
- **Appendix B – Schedule 1 – Proposal Offer Letter:** letter to complete the Project.
- **Appendix B – Schedule 2 – Sample Consent of Surety**: letter to provide the bonds for the Project.
- **Appendix B – Schedule 3 – Sample Insurance Undertaking**: letter to provide the insurance for the Project.
- **Appendix C – Schedule 1 – Proposal Form**: form of Proposal to complete the Project.
- **Appendix C – Schedule 2 – Schedule of Prices**
- **Appendix D – Sample Form of Agreement**: a draft of the Agreement to be executed by the RDN and the Proponent, which is in the form the RDN expects it to be executed.
- **Appendix E – Information Provided by the RDN**

1.1.4 Proponent's Clarification

The Proponent should review the entire RFP prior to submitting a Proposal. Any requests for clarification of issues related to the RFP should be transmitted in writing to the RDN Representative. Unless otherwise expressly permitted by the RDN Representative in writing, requests for clarification of the subject matter of this RFP should be transmitted in writing to the RDN Representative no later than ten (10) calendar days before the Closing Time.

1.1.5 Addenda

Written Addenda are the only means of changing, amending or correcting this RFP. The RDN's Representative may change, amend or correct this RFP by issuing an Addendum by posting it on the RDN website at www.rdn.bc.ca and the BC Bid website at www.bcbid.gov.bc.ca. No employee or agent of the RDN other than the RDN's Representative, is authorized to change, amend or correct the RFP or issue any Addenda. It is the sole responsibility of each Proponent to check for Addenda and incorporate any into their final Proposal submission.

Information pertaining to this RFP that is offered by or obtained from sources other than the RDN's Representative, in writing, is not official, may not be accurate, and must not be relied on in any way by any Proponent for any purpose associated with this RFP.

1.1.6 Additional Information Supplied by the RDN

The RDN has arranged to make additional information described in Appendix E available to Proponents. Access to this information will be through the RDN's

Cloud Site. Requests for access can be obtained by e-mail to the RDN's Representative.

Without derogating from the obligations of a Proponent to investigate and satisfy itself of every condition affecting the Project, unless otherwise expressly indicated in writing in this RFP, the RDN assumes responsibility for the accuracy of data or information supplied in this RFP, but does not assume responsibility for the sufficiency or interpretation of that data or information, or that the data or information provided is necessarily representative of anticipated or actual conditions.

No warranty or guarantee as to accuracy, sufficiency, or relevance is made by any party for any other information, unless otherwise explicitly stated in this Section 1, Instructions to Proponents.

1.1.7 Proponent's Investigation

By submitting a Proposal, a Proponent is deemed to have:

- investigated and satisfied itself of every condition affecting the Work, including but not limited to the Site conditions, labour supply conditions, and resources to be provided;
- based its investigation on its own examination, knowledge, information, and judgement, and not upon any statement, representation, or information made or given by or on behalf of the RDN other than information contained in this RFP;
- assumed all risks regarding conditions affecting the Work, including but not limited to all risks associated with subsurface geotechnical conditions, archaeological finds, whether or not those conditions are revealed by any information available to or investigations undertaken by the Proponent; and
- been provided with the opportunity to request any additional information it may have required in order to prepare its Proposal.

1.1.7.1 Access to the Site

For the purposes of conducting inspections, testing, or investigations of the Site prior to the Closing Time, the RDN will, to the best of its ability, allow Proponents to have access to those portions of the Site owned either by the RDN or other governments and public agencies, subject to environmental and time constraints.

Proponents must not engage in any physical activities on the Site without the prior approval of the RDN's Representative. If Proponents wish to conduct any testing or subsurface investigation, written requests for Site access must be received by the RDN's Representative a minimum of two (2) days prior to the requested date(s) stating the details of the requested access.

As a condition of entering the Site, Proponents irrevocably accept full responsibility for any and all events arising from the Proponent's access to the Site and Proponents will be solely liable for any injury or damage

caused to any person or property arising out of the Proponent's Site access.

1.1.7.2 Licenses and Permits

Proponents assume full responsibility for obtaining and holding any and all rights, permits, licences, consents, approvals, and authorities issued by any level or agency of government or private party that are required to conduct any Site investigations prior to the Closing Time.

1.1.8 Compliance with the Agreement

Proponents acknowledge that by submitting a Proposal, the Proponent who is selected to be the Successful Proponent will be required to enter into the Agreement and to perform the Work in strict accordance with the Agreement.

1.2 Responsibilities of the RDN

The RDN will manage the procurement and delivery of the Project. Pursuant to the provisions of the Agreement, the RDN will monitor the design and construction of the Project as a knowledgeable Owner and may perform quality audits to verify the Contractor's delivery of quality, durable, and environmentally acceptable infrastructure in accordance with the Agreement.

The RDN will, during the execution of the Work, monitor the progress of the Work to verify that the Contractor is conforming to the Agreement. The RDN will review the Contractor's conformance to the Agreement, accept payment requests, issue payments, accept substantial performance of the Project and issue the Completion Certificate subject to the procedures defined in the Agreement.

For clarity, nothing in this section creates any contractual or other legal obligation on the RDN. The Agreement, when executed, is the sole source of any contractual or other obligation on the RDN with respect to the Project.

1.3 Responsibilities of the Contractor

Responsibilities of the Contractor include, but are not limited to, all responsibilities for engineering, design, construction, environmental protection, archaeological protection, quality control, and commissioning required to deliver the Project in accordance with the requirements of the RFP documents. The Contractor's responsibilities are defined in, but in no way limited to, the requirements of the RFP and the Agreement.

The Contractor will be responsible for dealing with all agencies having jurisdiction over the Contractor and the Project, adjacent landowners, with the general public, and for resolving all issues that arise from its execution of the Work.

The Contractor will be responsible for securing all Governmental Approvals and Permits required for the Project from those agencies having jurisdiction over the Project, unless noted otherwise in the Agreement.

1.4 Responsibilities Table

One of the objectives of the RDN is to obtain an appropriate allocation of responsibilities and risks of the Project. The RDN has carefully examined the various risks involved in this Project and has reflected this analysis in this RFP.

Proponents are advised that the details of the risks associated with the Project and the Proponent's responsibilities for such risks are contained in this RFP. Table #1 - Risk Allocation Outline is included below for convenience only and is not intended to be, nor should it be construed to be, a comprehensive description of allocation of the Proponent's responsibilities and risks applicable to this Project.

Table #1 – Risk Allocation Outline

The responsibilities are allocated between the RDN and the Proponent as follows:

Risks / Ownership	RDN	Contractor
Site and Land		
▪ Availability of the site for construction	✓	
▪ Environmental contamination of site risk prior to construction	✓	
▪ Site geotechnical conditions		✓
▪ Demolition, site clearing and diversion/ relocation of all utilities		✓
Project Design		
▪ Planning and Development of the Site	✓	
▪ Supplied data (sufficiency, interpretation by Contractor)	✓	✓
▪ Geotechnical investigation	✓	✓
▪ Detailed Design		✓
▪ Archeological Permits / BCLS Land Tenure	✓	
▪ Design Review and approval	✓	
▪ Design error		✓
▪ Utilities and associated conflicts		✓
▪ Changed conditions		✓
▪ Patent infringement		✓
Project Administration		
▪ Construction permits - RDN	✓	
▪ Construction permits - Other		✓
▪ MFLNRO Notification and Communication	✓	
▪ Insurance/Surety		✓
▪ Quality Management / Quality Assurance / Safety		✓
▪ Ability to achieve Project parameters		✓
▪ Contractor insolvency		✓
▪ Delays by RDN	✓	
▪ Force majeure	✓	✓
▪ Project acceptance	✓	
Site / Construction		
▪ Environmental contamination of site during construction as a result of the Contractor's actions		✓
▪ Procurement and construction		✓
▪ Construction Inspections / Quality control / Safety		✓
▪ WorkSafeBC issues		✓
▪ Tree Clearing and Permits	✓	
▪ Commissioning		✓
▪ Weather		✓
▪ Fire		✓
▪ Vandalism		✓
▪ Damage to works		✓
▪ Damage / injury to 3rd parties		✓
▪ Defective works and materials		✓
▪ Site maintenance required as a result of construction activities		✓

1.5 Proposal Process and Schedule

1.5.1 Proposal Schedule

The intended schedule for the RFP process and the Project is as follows:

Anticipated Date	Action
October 11, 2018	Issue RFP to Proponents
December 13, 2018 on or before 2:00 pm local time	RFP Closing Date & Time
February 27, 2019	Notice of Acceptance
October 16, 2020	Proposed Completion Date

The dates listed above are estimates and the RDN, in its complete discretion, reserves the right to change the above dates at any time.

1.5.2 RDN's Representative

The authorized contact person for this RFP is the "RDN's Representative":

Mike Squire, AScT
Project Engineer, Engineering Services
Regional District of Nanaimo
6300 Hammond Bay Road
Phone: (250) 390-6560
Fax: (250) 390-1542
Email: msquire@rdn.bc.ca

Information given orally by the RDN, or by RDN staff members, will not be binding on the RDN and will not be considered in any form or manner in the evaluation of the Proposals.

1.5.3 Submission of Proposals

By delivery of a Proposal, the Proponent is deemed to have received, accepted and understood the entire RFP including any and all Addenda.

Proponents shall submit a Proposal that addresses all of the documentation requirements of this RFP.

Proposal deliverables shall be kept to a minimum to avoid unnecessary expenditures of effort by all Proponents, while still being sufficient for the RDN to conduct a fair, thorough, and objective evaluation.

During the Evaluation Process, the RDN may require additional information or clarification by the Proponent.

Proposals should be delivered to the RDN at the Closing Location on or before

2:00 p.m. local time on December 13, 2018

Proponents should ensure that a complete, clearly labelled and securely sealed Proposal is received at the Closing Location by the Closing Time. Each Proponent should ensure that its Proposal is clearly marked on the outside as follows:

"Proposal: Bay Avenue Pump Station Upgrade Design / Build Project"

ATTENTION: Mike Squire, AScT
Project Engineer, Engineering Services
Regional District of Nanaimo
6300 Hammond Bay Road, V9T 6N2
Phone: (250) 390-6560
Fax: (250) 390-1542
Email: msquire@rdn.bc.ca

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and should be accompanied by a transmittal form clearly listing the number and description of each item contained in the Proposal package.

1.5.4 Evaluation of Proposals

Proposals will be evaluated by the RDN in accordance with Section 4. Points will be awarded to the following maximums:

- **Rated Criteria = 30 points**
- **Price Criteria = 70 points**

Rated criteria points will be awarded only where the Proposal exceeds the basic objectives of this RFP, or is superior to the other Proposals in the areas of:

- Project Management
- Construction Management
- Technical Plans

1.5.5 Execution of Proposal

By the submission of its Proposal, the Proponent is deemed to represent and warrant that its Proposal has been duly authorized and validly executed.

1.5.6 Proposal Acceptance

The RDN plans to advise Proponents of the selection of the Preferred Proponent within sixty (60) calendar days of the Closing Time. The Preferred Proponent's Proposal will be accepted, subject to successful post-selection negotiations, within ninety (90) calendar days after the Closing Time.

The RDN reserves the right to negotiate changes to the Preferred Proponent's Proposal and the Agreement with the Preferred Proponent prior to acceptance.

A written Notice of Acceptance is the only valid form of acceptance of any Proposal.

1.5.7 Execution of Agreement:

Upon conclusion of negotiations, the RDN will provide the Preferred Proponent with three (3) copies of the Agreement required for execution by the Preferred Proponent.

Within fourteen (14) calendar days of the Preferred Proponent's receipt of these documents, such time limit being extended only on the written approval of the RDN, the Preferred Proponent will return them to the RDN's Representative, fully executed, together with the Securities and Insurance as defined in the Agreement.

1.6 Right Not to Accept Proposals

The Preferred Proponent's Proposal, or any Proposal, will not necessarily be accepted. The RDN reserves the right to reject any or all Proposals. If the RDN determines that all Proposal Prices submitted by all Proponents are too high, or that all of the Technical Proposals are unacceptable, or the RDN decides in its sole and absolute discretion that it does not, for any reason, wish to continue with this RFP process, then the RDN may reject all of the Proposals. In the event the RDN rejects all of the Proposals, it reserve the right to call for tenders or call for proposals for the same or similar Work.

1.7 Prior to Commencement of Work

The Contractor must, within fourteen (14) calendar days of the receipt of the Notice of Acceptance, such time limit being extended only on the written approval of the Owner, and prior to commencement of Work on the Site, obtain and deliver to the RDN:

- executed Agreement;
- performance securities as per GC28 of the Agreement;
- evidence of compliance with Insurance Conditions as per GC28 of the Agreement;
- a valid WorkSafeBC registration number;
- a copy of the WorkSafeBC Notice of Project; and
- a Safety Program in compliance with WorkSafeBC regulations and acceptable to the RDN.

1.8 Dispute Resolution and Limitation of Damages

Each Proponent, by submitting a Proposal, irrevocably agrees that:

- if the RDN elects to reject any Proposal or all Proposals, they will not be liable to any Proponent for any claims, whether for costs, damages, loss of anticipated profit, or any other matter whatsoever.

1.9 Freedom of Information and Protection of Privacy Act

All documents and other records pertaining to the Project in the custody of or under the control of the RDN become the property of the RDN and are subject to the Freedom of Information and Protection of Privacy Act. Subject to the limitations of the Freedom of

Information and Protection of Privacy Act, all documents and other records submitted in response to this RFP will be considered confidential.

1.10 Collusion

Proponents will not discuss or communicate with one another on the preparation of their Proposals. Each Proponent will ensure that its' participation, and that of its Team Members, in the RFP process is conducted without collusion or fraud. Failure to comply with this requirement may lead to disqualification without further notice or warning.

1.11 No Lobbying

All Proponents are expressly forbidden from lobbying any member of the RDN, including elected leaders regarding this RFP. Failure to comply with this requirement may lead to disqualification without further notice or warning.

1.12 Exclusivity

No Proponent, nor any of its Prime members, will have any interest whatsoever in any other Proponent's Proposal, either directly or indirectly, nor will it enter into any agreement with another Proponent before the Closing Time that could create such an interest. If it is subsequently determined that such an interest does exist, that will constitute sufficient cause, in the RDN's discretion, to terminate the Agreement. Team members who will be responsible for either 30% of construction, or 40% of the design of the Project, **may not** participate on more than one Team.

2.0 SCOPE OF WORK

This section of the RFP describes the scope of the Project that the Contractor, unless identified otherwise, will be responsible to deliver. The scope of Work includes the provision of the full and complete design and all materials and performance of all Work necessary and appropriate for the construction of the Project as described in this Section and as provided in the Agreement.

The RDN has allocated **$3.4 million** in Canadian Dollars for the design and construction of the Project.

2.1 Background

The Regional District of Nanaimo (RDN) owns and operates the Bay Avenue Wastewater Pump Station, located within the Bay Avenue road right of way adjacent to 385 Bay Avenue in Parksville, B.C.

Wastewater flows are conveyed to the Pump Station by a 1.3 km long, 600 mm diameter reinforced concrete gravity interceptor pipeline, installed along the Parksville Bay shoreline. Wastewater is then pumped through a 940 m long, 450 mm diameter ductile iron force main where it is discharged to a 3 km long reinforced concrete trunk main with diameter varying from 675 mm to 750 mm before reaching the French Creek Pollution Control Centre.

The original Pump Station was constructed in 1978 and consisted of a cast-in-place wet well with three submersible pumps and a space for a fourth pump with controls located at ground level beside the station. Subsequent upgrades in 1997 and 2003 included the installation of standby power, a fourth pump and updated controls within a prefabricated metal enclosure at ground level beside the station. Currently the Pump Station includes four (4) 47HP Flygt submersible sewage pumps with a total theoretical maximum pumping capacity of 255 L/s. Specifically the components of the Pump Station are as follows.

- Below grade cast in place concrete wet-well, 3 m x 5 m x 7.3 m deep, with 10.4m^3 of total storage volume below the inlet pipe c/w access hatches and lifting / jib crane.
- Prefabricated metal enclosure adjacent to the wet-well, which houses the electrical controls and standby diesel generator.
- BC Hydro owned transformers (3x 50 kVA, 600 V, c/w 400 amp breaker).
- PLC based instrumentation and control system c/w a dedicated UPS.
- 4-47 HP model CP3201 Flygt pumps, c/w VFD's.
- Standby power generator (180kW) permanently connected to onsite electrical system c/w a buried diesel fuel storage tank.
- Chemical injection diffuser system and storage tank for ferrous chloride addition (not in service).
- Public access stairs and fencing.

- Ultra Violet Ionizer (not in service).

A hydraulic modeling and upgrade strategy report for the French Creek Trunk Sewer System was completed in 2016 by Koers and Associates Engineering Ltd. This report identified that the current pumping capacity was insufficient for current and future projected peak flows, and recommended that the pumps be upgraded to 94 L/s each to address this issue. This will exceed the 2035 peak demand flow of 285 L/s. Preliminary review indicates the capacity of the four existing pumps is 70 L/s each and should be upgraded to 94 L/s each. It was anticipated that this will require each of the pumps, pump bases and piping to the header to be replaced as well as new VFD units, electrical wiring and generator.

In accordance with the RDN design standards, the pumping capacity of the station is to be upgraded such that the peak design flow can be conveyed with no more than 3 pumps operating, leaving the fourth pump available in the event one of the others is not operational.

In addition to the recommended capacity upgrade, the following operational issues were also identified:

- There is no direct vehicle access to the station for maintenance and heavy equipment removals. Currently the site can only be accessed by foot via stairs, and heavy equipment is mobilized by a truck-mounted crane.
- The emergency standby generator was originally a portable unit constructed in 1997, is beyond its service life, obsolete, and needs to be replaced.
- The current Pump Station is located at a geodetic elevation of 4.5 m and is in close proximity to the beach. The possibility of sea-level rise causes concern for the future operation of the Pump Station at its current location.
- The first in-line pump closest to the inlet at the Bay Avenue pump station is experiencing clogging due to the use of variable speed motors resulting in a slower rotational speed compared to traditional fixed speed pumps.

A feasibility study completed by Koers and Associates Engineering Ltd. was also completed in 2016 to evaluate options for relocating the Pump Station to other sites versus upgrading the existing Pump Station. The recommended option was to re-build the Pump Station at pavement level immediately west of the current location and replace the existing pumps with Flygt N-Series pumps (3 – Flygt NP 3301 HT~ 456 pumps) to reduce maintenance due to impeller clogging. This concept would involve installation of a vertical caisson or secant pile ring from the street level to be used for the wet well and then jacking a pipe horizontally to tie-in to the existing wet well. The existing wet well would be maintained to provide additional attenuation storage for emergency situations and provide continued redundancy in operation for maintenance periods. This concept would involve deep excavation and require working around or re-routing the existing water, drainage, sewer and overhead hydro utilities. In addition, the existing pump station and forcemain would have to be kept live while constructing the new station.

This concept is challenging and requires a review of least risk and cost. While the new pump station wetwell can likely be constructed using caisson or secant piling

construction techniques, the extension and tie-in of the 600mm gravity sewer to the new pump station requires innovative intrusive deep trench on the foreshore or a boring / auguring installation from a new wetwell back towards the existing wetwell.

In April of 2017 the RDN requested proposals for Preliminary Design Services for the Bay Avenue Wastewater Pump Station Replacement.

Of note during the proposal stage;

- One proponent proposed a consideration for ramping down to an intermediate level and construction of a deep drywell to connect to the existing wet well. This concept considered a dry well, instead of a second well for the purpose of potentially mitigating hazardous gases associated with the confined space entry, and would enable operator's easier access to the pumps for maintenance. The proponent further concluded the need for the additional wet well would require further assessment but also noted with modern controls and VFDs, system storage becomes less important as a design consideration given there is storage in the existing wet well and gravity mains along the foreshore.

- Another proponent developed an option that involves upgrading the existing station in place by raising the existing wetwell and constructing retaining walls around the site. This option considered reduced cost and risk with improved efficiency of operations and maintenance by providing better access to the station while maintaining public access to the beach. With this approach, the deep installation of the new wetwell and the risky installation of the gravity sewer will be avoided. Also, the reduced construction area would reduce the environmental disturbance.

In October 2017 a Final Pre-Design Report for Bay Avenue Wastewater Pump Station Replacement was completed by Kerr Wood Leidal (KWL). Taking in to consideration of operations, maintenance, odour control, archeological impacts, environmental impacts, regulatory requirements, costs and land constraints. The following was proposed to advance to detailed design:

- Construction of a raised platform and mechanical room to elevate the electrical controls above the estimated climate change flood control level of year 2050 of 6.7m.
- The station should be designed to have a capacity of 285 L/s – year 2035 population.
- Odour sampling should be undertaken by the owner to define design criteria for the required odour control.
- First Nation consultation may be required and a Section 12 permit before any excavation and design and construction works should be limited to avoid environmental and archeological impacts.
- A BCLS should be retained to define land tenure.
- MFLNRO should be notified for courtesy but no formal permitting is required

- The detailed design should incorporate mitigation measures to address sewage, stormwater and oil spills.
- Based on the Upgrade Options Memorandum dated August 25, 2027, KWL suggested removing one of the four pumps to improve the flow hydraulics in the station and using a triplex arrangement with larger pumps to convey the design flows.
- KWL have selected two Flygt NP 3315 MT – 140HP pumps to meet the 2035 design flow rate of 285 L/s. The station will operate with two duty and one standby configuration. This configuration provides minimum velocity in the forcemain of 1.2 L/s with one pump running.

In February 2018 the RDN retained Omni Engineering (now a division of R.F. Binnie & Associates) to review the recent reports and recommendations as well as current RDN design standards to add another opinion to help ensure RDN proceed in the most economical way forward on this upgrade. Binnie compared the option of the station working in a 3-pump arrangement, as proposed by KWL, to a 2-pump arrangement, as requested by RDN, and reviewed how a jockey pump may assist operation at this station. Binnie's scope of work included a review of:

- Alternate Pump Arrangements
- Wet Well Capacity
- Station Capacity and Pump Arrangement
- Bypass Pumping
- Construction Staging
- Flow Control
- Generator Sizing
- Operations Costs (Energy Efficiency)

Their conclusions / recommendations are as follows:

1. A two-duty pump plus one jockey pump option is possible, however:
    a. Control volume in the existing wet well is an issue even if pumps switch leads each cycle. They will likely require some back-up in the inlet foreshore interceptor sewer before starting.
    b. The pumps are less efficient than the ones proposed by KWL in the 3-pump option
    c. The jockey produces lower velocities in the forcemain requiring flushing cycles with the large pumps
    d. The most efficient of the large pump options has an issue with NPSH.
2. Operating the pumps at lower speeds is a factor in the clogging issues
3. The new pumps should work on VFD's with a de-ragging program set to reverse the pumps when low flows are detected
4. A flowmeter should be installed at this site
5. The pumps should be alternating each cycle to minimize control volumes

6. Submersible pumps require the smallest station footprint and minimize construction costs associated with dry well pumps
7. Dry wells offer the best access to the pumps but are costlier and require more space than the submersible pump option
8. Continue with the 3-pump option proposed by KWL.
9. The key elevations (benching, bottom, inlet invert) should be checked if larger pumps are proposed to know the required control levels.
10. Modify the current programming of the pump station to alternate pump starts with each pump cycle.
11. Increase the current pump speeds to reduce the frequency of ragging.

Subsequent to the design review, a new option was proposed by the RDN with an additional cylindrical wet well (caisson or secant pile ring) and an access driveway to better facilitate maintenance access. This option is shown in the Bay Avenue Design Review Memorandum in Appendix A. The purpose of this option is to:

- Allow maintenance crews to better access the station.
- Provide a second wet well to allow bypass of the original wet well during the station upgrade as well as long term redundant maintenance flexibility to isolate and clean either wet well.
- Allow for more efficient pumping and longer run times.
- Allow usage of the existing 47 HP model CP3201 Flygt pumps, c/w VFD's submersible pumps that the RDN currently owns.

This option consists of a new wet well installed and set up for pumping to allow the existing wet well and ground elevation to be raised by approximately 4.30m. Three pumps would be installed in the existing upgraded wet well, and two pumps in the new wet well. Four pumps working would need to provide the peak flow of 285 L/s (this may be lowered to 270 L/sec +/- for the current population, plus ten year) and the last pump would be used as a spare.

Their conclusions / recommendations are as follows:

- WaterCAD modeling shows that using 4 of the existing pumps will not reach the proposed future PWWF of 270 L/sec. It is expected that pumps would need to be changed in the future but should work for a number of years. Flow testing of the existing pumps will help calibrate the WaterCAD model to see if the model matches the site test.
- This option has significant advantages in saving future yearly maintenance costs as the station would be accessible by vehicle.
- The initial construction cost is expected to be higher than the KWL proposed option. It is recommended that a local contractor review the two options to provide a constructability perspective on the differences.

- A Geotechnical and Structural Engineer should review the idea of adding the fill to the south side of the station on the existing slope to bring the access driveway to the station.

These reports and other information are attached and listed in Appendix "E".

2.2 Project Scope

The Bay Avenue Pump Station Upgrade work shall include, but not be limited to, the following:

- Installation of a new generator / switchgear / transformer up on Bay Avenue,
- upgrading the station in place by raising the existing wetwell approximately 4.3m,
- providing a graded vehicle access to the pump station,
- upgraded odour control,
- constructing a new caisson / secant pile ring wet well,
- installation of three pumps into the existing upgraded wet well and two pumps in the new wet well (Four pumps working would need to provide a peak flow of 270 L/s and the last pump would be used as a spare),
- construction of a new dry well for piping, valves, pig loader, metering and controls,
- building retaining walls (piled footing / foundation walls) around the site and enclosing the dry well station with a pre-engineered building.

The expectation is that this option would reduce costs and the risks associated with the upgrade and improve the efficiency of the operations and maintenance activities by providing better access to the station from Bay Avenue while also providing public access. It is anticipated that the environmental disturbance will be contained within the perimeter of the new foundation walls. The added benefit with this option is that the upgrade could be built in stages to allow the pump station to remain in operation while the bypass is in place.

The proposed option would assume the following scenarios / conditions:

1. Both wet wells would be in use and four out of the five pumps would be in service (assuming one pump is out of operation) to provide the required design flows and flushing velocities.

2. Wet Well No. 1 (existing) and Wet well No. 2 (proposed) would have the ability to be isolated and taken out of service for scheduled maintenance during dry weather flows. If possible the RDN would like to use the Flygt 47 HP pumps (or newer Flygt equivalent) to a design capacity of 270 L/s assuming the peak design flow does not include a visiting population on top of the I&I flow.

3. During the scheduled maintenance in dry weather flows, if Wet Well No. 1 is out of service Operations have confirmed and accepted that the two pumps in Wet Well No. 2 would be acceptable to handle the total dry weather flow.

4. Avoid confined space entry with providing stair access / working platforms to pump wells for wash down maintenance.

5. Station access and public access could be combined use.

6. SCADA Controls to be Allen-Bradley

Detailed information is provided in the Project Requirements in Appendix A – Schedule 1.

2.3 General

Proponents are encouraged to propose their best solution which meets or exceeds the requirements described in this RFP.

2.4 Project Requirements

The project requirements are described in Appendix A – Schedule 1 – Project Requirements. Regardless of the exact scope of the infrastructure proposed by the Proponent, the Proponent's proposed design must meet the intent of the Project Requirements.

Key Project Objectives are to:

- Realize an innovative financial and technical solution that will deliver the Project in the most efficient and cost effective manner, and will result in broad public acceptance of the proposed solution;
- Design and construct the Project to standards that will result in an operationally safe, efficient and high quality infrastructure;
- Construct the Works with minimal disruption to surrounding neighborhoods, community, and to the operations of the road and utility networks. All work to be carried out to ensure that existing traffic flows and residents are not adversely affected by construction activities;
- Complete the Project by **October 16, 2020** (Preferred completion date).

2.5 Design Specifications

The Proponent's proposed design must meet or exceed the Design Specifications as described in Appendix A – Schedule 2. This section defines the minimum standards that will be met by the Proponent-prepared designs and the minimum quality for materials that will be used. Any deviation from the design criteria, standards or quality defined by this Section must be clearly identified as an alternative and must be justified by the Proponent and submitted in addition to its compliant Proposal. No such deviation shall be considered, permitted, or accepted unless specifically identified to the RDN and expressly approved by the RDN, in writing.

3.0 SUBMISSION REQUIREMENTS

3.1 General

Proposals must be submitted by qualified and experienced Proponents in order to be considered.

Information provided by the RDN on any form that is part of this RFP must not be altered or contradicted in any way.

The Proposal in response to this RFP should be submitted in **three (3)** separate packages as detailed below.

Package A: Submittal Letters (one marked "original" plus one (1) additional hard copy);

Package B: Financial Proposal (one marked "original" plus one (1) additional hard copy in separately sealed package) and

Package C: Technical Proposal original plus four (4) hard copies, one (1) electronic copy in PDF format).

Original submissions should be marked "Original" and any copies marked "copies". In the event there are any discrepancies between any paper copies and electronic copies, the paper copy marked "Original" shall prevail.

3.2 Proposal Content

3.2.1 Package A - Submittal Letters

Proponents should include:

a) a Proposal Offer Letter as attached in Appendix B - Schedule 1 signed by an authorized signatory of the Proponent;

b) a letter from a surety or financial institution as attached in Appendix B -Schedule 2 , confirming the Proponent can provide the security requirements as required by the Agreement, and if awarded the Agreement, the surety will provide the required securities;

c) a letter from an insurer (or insurance broker as agent for the insurer) as attached in Appendix B – Schedule 3;

d) a current Clearance Letter from WorkSafeBC indicating your firm is in good standing and remittance is up to date to the latest reporting period.

3.2.2 Package B - Financial Proposal

Proponents should include a Financial Proposal, in a separate sealed package, which should include:

a) a completed Proposal Form as attached in Appendix C - Schedule 1;

b) a completed Schedule of Prices in the form provided in Appendix C – Schedule 2.

3.2.3 Package C - Technical Proposal

Proponents should include sufficient information to demonstrate that:

a) they have a comprehensive and clear understanding of the functional objectives and purpose that the RDN wishes to achieve by undertaking the Project;

b) they will undertake the design and construction of the Project so the finished Project will meet or exceed the RDN's functional objectives and purposes for the Project.

Proponents should submit a Technical Proposal which should include the following:

3.2.3.1 Project Management Plan:

Proponents should address all Work required to be performed to satisfy its obligations, duties and responsibilities for the Project. Although some of the plans listed below will not be submitted until after project acceptance, each Proponent should satisfy themselves that they understand all project requirements, and that they have fully incorporated those requirements into all project solutions.

Specific information to be provided includes the following:

(a) Organizational Structure

Describe the Proponent's organizational structure for the complete Project and the relationships between all functions in the organization including reporting requirements and proposed interfaces with the RDN. The organizational chart and supporting documentation should identify the key individuals directly responsible for the significant elements of the Project, such as:

- Project Management
- Quality Management
- Civil Design
- Environmental Management
- Construction Safety

Proponents should identify the professionals who will be directly responsible for signing-off on each of the above functions.

The organization chart should identify significant subconsultants and subcontractors. Proponents should indicate how the individual organizations listed above will interface with each other to coordinate the delivery of Project requirements.

The organization chart should identify the Work to be performed by the Proponent's own resources, and Work proposed to be performed by subcontracted organizations or subconsultants.

(b) Project Schedule

Proponents should provide a preliminary Project Schedule for the design, construction and commissioning of the Work in a time-scaled critical path method network diagram format using industry standard software and should include all tasks representing the design and construction of the major elements of the Work, the key milestones, Substantial Completion, the direction of Work and the logical interdependencies between the tasks and the milestones.

(c) Quality Management Plan

Each Proponent should submit a brief outline of the proposed Quality Management Plan (QMP). The brief outline may be up to a **maximum** of two (2) double sided pages (or four (4) single sided pages) in length and should include:

- Estimated inspection hours per week by engineer's onsite representative.
- Personnel responsible for each of observing, preparing, reviewing and signing off the quality management reports.
- Flow path of quality control information from Work Site to the RDN's Representative.
- General construction quality control management protocol.

AFTER Project Acceptance, but BEFORE the Notice to Proceed, the Successful Proponent shall provide a copy of their proposed Quality Management Plan (QMP) for this Project that ensures the requirements of the Drawings and Specifications as proposed by the Proponent in its Proposal are complied with. The QMP should demonstrate the Proponent's understanding, commitment and ability to manage issues relating to the Project and ensure conformance with all Agreement requirements. The QMP should:

- Identify the Proponent's quality manager and the qualifications and relevant experience of this individual and describe generally the quality management support staff that will be assigned to the Project;
- Identify the roles and responsibilities for quality management, including the chain of command and authority of the quality management staff to effect conformance to the Project requirements; and
- Provide an outline of the processes to be used to assess and document conformance with Agreement requirements, remediate any non-conformances found, and improve processes that led to the non-conformances.

3.2.3.2 Construction Management Plan – Required AFTER Project Acceptance

Proponents should provide a Construction Management Plan that includes, as a minimum, the following:

- Description of how the construction of the design described in the technical reports will be carried out in compliance with the requirements of the Agreement;
- Description of key issues and constraints affecting construction;
- Description of proposed construction methodologies and work procedures.

Required plans will be based on following descriptions:

(a) Public Communication Plan - Required AFTER Project Acceptance

- Description of how the Proponent will establish its presence on-site and maintain ongoing public accessibility during the Project;
- Description of how the Proponent will involve and maintain contact with interested groups and stakeholder groups;
- Description of how the Proponent will communicate with the RDN and maintain communication records for submission to the RDN at the end of the Project.

(b) Environmental Management Plan - Required AFTER Project Acceptance

- The Environmental Management Plan must describe how the Proponent proposes to manage environmental matters on the Project including but not necessarily limited to:
    - Assessment of impacts
    - Monitoring during construction
    - Operations and maintenance activities
    - Hydrologic Impacts

(c) Construction Sequencing & Strategy Plan – Req'd. AFTER Project Acceptance

- Construction sequencing and strategy tied to the Project Schedule and identifying:
    - scope and timing of main Work packages
    - temporary works, process tie-ins and detours
    - survey and layout
    - seasonal considerations
    - drainage and environmental mitigation works
    - rehabilitation of work areas
    - construction access

3.2.3.3 Technical Plans:

Proponents should provide the following brief Technical Plans as part of their Technical Proposal to describe their design solutions to the RDN's functional objectives in undertaking this Project:

(a) Constructability Review Plan

(b) By-Pass Pumping Plan

All Technical Plan should conform to the requirements of Section 2 – Scope of Work and Appendix A – Schedule 1 – Project Requirements, & Appendix A – Schedule 2 – Design Specifications. Any deviation from these requirements should be specifically discussed and justified in the appropriate Technical Plans.

Technical Plans should clearly identify and specify all materials and equipment proposed to be incorporated into the Project, including information detailing the manufacturer, the model specifications, and performance criteria. These specifications will define the minimum standards that will be met by the Proponent and the minimum quality for materials that will be used.

(a) Constructability Review Plan

The Constructability Review Plan should conform to the criteria set out in Section 2 – Scope of Work, Appendix A - Schedule 1 - Project Requirements, and Appendix A - Schedule 2 – Design Specifications.

The minimum requirements for the drawing to accompany the Constructability Review Plan are as follows:

- One overall performance based plan showing the proposed construction, staging and value added components.

The minimum requirements for the contents of the Constructability Review Plan are as follows:

- Description of the construction procedures and proposed staging to be used in conformance with the contract documents, highlighting how construction of the Bay Avenue Pump Station Upgrade will be integrated with the overall construction strategy;
- Document and justify any proposed revisions to the design criteria.

(b) By-Pass Pumping Plan

- Description of the construction procedures for continuing the pumping operation of the Bay Avenue Pump Station while constructing the new upgrade works.

4.0 Evaluation Process and Criteria

4.1 Evaluation Team

The evaluation of Proposals will be undertaken on behalf of the RDN by the Evaluation Team appointed by the RDN which will consist of one or more persons. The Evaluation Team may consult with others, including RDN staff members and third party consultants, as the Evaluation Team may, in its discretion, decide as required, including appointing specialist evaluation teams to consider and make recommendations with respect to specific issues. The Evaluation Team will give a written recommendation for the selection of the Preferred Proponent to the RDN.

4.2 Evaluation Process

The general criteria for evaluation are:

- Qualifications of the design and construction team.
- Suitability, value added and appropriateness of the design
- The economy of price with a defined delivery schedule

The Evaluation Team will evaluate the Proposals by way of the following evaluation process:

- undertake a completeness review as described in Section 4.3
- undertake a technical review as described in Section 4.4
- undertake the evaluation of Proposals as described in Sections 4.5, 4.6, and 4.7

4.3 Completeness Review – (Step 1)

The Proposal submissions will be reviewed for completeness as follows:

(a) **Package A** (Submittal Letters) Original plus one (1) copy received in a sealed envelope including:

- Letter signed by the authorized signatory of the Proponent as outlined under Section 3.2.1 (a)
- Letter signed by the Proponent's surety as outlined under Section 3.2.1 (b)
- Letter signed by the Proponent's insurer as outlined under Section 3.2.1 (c)
- Current WorkSafeBC Clearance Letter as outlined under Section 3.2.1 (d)

(c) **Package B** (Financial Proposal) Original plus one (1) copy received in a sealed envelope including:

- Proposal Form as outlined under Section 3.2.2 (a)
- Schedule of Prices as outlined under Section 3.2.2 (b)

(d) **Package C** (Technical Proposal) Original plus four (4) copies and one (1) electronic copy as outlined in Section 3.1.

- Project Management Plans as outlined under Section 3.2.3.1
- Construction Management Plans as outlined under Section 3.2.3.2
- Technical Reports as outlined under Section 3.2.3.3

4.4 Technical Evaluation – (Step 2)

Technical Proposals will be reviewed for completeness and a performance based value added approach that meets the purpose, intent and requirements of this RFP as outlined in section 4.3.

The Evaluation Team may, at its discretion, request clarifications from one or all of the Proponents with respect to a portion of, or the information in a Proposal. The Evaluation Team is not required to request the same clarifications from all Proponents. The Evaluation Team may consider such clarifications in evaluating a Proposal.

4.5 Evaluation Criteria – (Step 3)

4.5.1 Project Plans

Proponents should include clear and concise information covering the subjects listed in this section to ensure serious consideration by the Evaluation Team:

- Organizational Structure & Project Schedule
- Quality Management Plan

4.5.2 Technical Plans

Proponents should include technical plans for the disciplines listed below and any other disciplines they may identify as being required for the performance of the Work:

- Constructability Review Plan that complies with RFP requirements and provides a technically sound layout.
- By-Pass Pumping Plan that complies with RFP requirements.

4.6 Proposal Price Evaluation – (Step 4)

The Evaluation Team will open the Financial packages.

Points for price will be calculated by the following formula:

$$\mathbf{70} - \left(1.3 \times \left(70 \times \frac{\text{Proponent's Net Price} - \text{Lowest Proponent's Net Price}}{\text{Lowest Proponent's Net Price}}\right)\right) = \textbf{Price Score}$$

If the Price Score is less than zero then the Price Score will default to zero.

4.7 Final Evaluation – (Step 5)

The final scoring of each Proposal will be determined in accordance with the following Evaluation Matrix, and the Evaluation Team will compare and evaluate those Proposals the Evaluation Team determined would be acceptable by the RDN to identify the Proposal the Evaluation Team judges overall to be the most advantageous to the RDN.

Evaluation Matrix

PROPOSAL EVALUATION SUMMARY	MAXIMUM POINTS TO BE AWARDED
Step 1: Completeness Review – As per Section 4.3	
Package A (Submittal Letters) as per 4.3(b) **Package B** (Financial Proposal) as per 4.3(c) **Package C** (Technical Proposal) as per 4.3(d)	**2**
Step 2: Technical Evaluation – As per Section 4.4	
Complete & Workable Design Solution	**2**
Step 3: Evaluation Criteria – As per Section 4.5	
Organizational Structure / Schedule (see 3.2.3) Quality Management Plan (see 3.2.3) Technical Reports (see 3.2.3)) a) Constructability Review Plan b) By-Pass Pumping Plan	**3** **3** **10** **10**
Technical Point Total	
Maximum Available Earned Points	**30**
Step 4: Price Envelope Evaluation- As per Section 4.6	
Proposal Price Evaluation Point Total	
Maximum Available Price Points	**70**
Step 5: Final Evaluation	
Earned Rated Criteria Points:	
Maximum Available Total Proposal Score	**100**

4.8 Selection of Preferred Proponent

The Proposal with the highest total score will be deemed to be the Preferred Proposal.

The Evaluation Team will recommend to the RDN, the Proposal that it determines is most advantageous to the RDN in accordance with this RFP. The Evaluation Team will not be obligated to recommend the Proposal that offers the lowest price or cost. The lowest priced proposal, or any proposal, may not necessarily be accepted. The RDN may accept or reject the Evaluation Team's recommendation.

4.9 Negotiation of Agreement and Award

In accordance with the Canadian Free Trade Agreement, Article 512, if the RDN selects a Preferred Proponent, it may enter into discussions with the Preferred Proponent to clarify any outstanding issues and attempt to finalize the terms of the Agreement,

including financial terms. If discussions are successful, the RDN and the Preferred Proponent will finalize the Agreement. If at any time the RDN forms the opinion that a mutually acceptable Agreement is not likely to be reached within 10 calendar days, the RDN may then give the Preferred Proponent 5 calendar days' written notice to terminate discussions, in which event the RDN may then either open discussions with the next highest ranked Proponent and so on until a contract is in place or terminate this RFP and obtain or proceed with the Project in some other manner.

4.10 Debriefing

At the conclusion of the Proposal evaluation process, all Proponents will be notified of the identity of the Preferred Proponent and the value of the award. Any unsuccessful Proponent may request a confidential debriefing with the RDN which shall be limited to a review and discussion of that Proponent's Proposal. If at any time during the debriefing the RDN decides that the debriefing is no longer constructive or appropriate the RDN may, in its sole discretion, terminate that meeting.

A1 GENERAL

A1.1 Summary

The Project includes the provision of the full and complete design and all labour, materials and equipment for the performance of all work necessary or appropriate for the construction of the Project as described in, Appendix A – Schedule 1 - Project Requirements, Appendix A - Schedule 2 - Design Specifications, Section 3.0 – Submission Requirements and the Agreement.

The Project Requirements outline the minimum requirements for the design and construction of the Project. The Contractor shall design and construct the Project in full accordance with the Project Requirements and all relevant bylaws, regulations, and codes.

A1.2 Complete Design

The Proponent shall provide complete design drawings and specifications, and shall provide complete construction and post construction services including supply, installation, and testing for the Project complete with site works, geotechnical and civil works described herein. The scope of services must address, as a minimum, the items identified in this RFP. Proponents should also identify any additional work they feel should be added to the Project scope. The general scope of services includes the following:

- Reporting in accordance with this RFP, including progress reporting and meetings with RDN personnel and the owner's representative.
- Review all applicable background information, data, surveys, reports and existing drawings related to the Project.
- Review design and operational requirements and facilitate a meeting with RDN Operations Staff to discuss design options and confirm the design scope.
- Obtain topographical information and conduct detailed surveys as required of the pertinent areas to provide a base plan for design.
- Determine any potential geotechnical recommendations as required to support the design.
- Perform environmental and archaeological assessments as required to support the design and project permitting.
- Provide permitting support, obtain all required approvals and permits, and assist the RDN in securing any required ROWs.
- Review the Preliminary Design Report / Drawings and the Design Review Memorandum Report.
- Prepare Detailed Design drawing submissions at the 30% and 90% completion milestones for owner / operations input, value engineering and discussions.
- Facilitate design review meetings with RDN staff, one week after each design submission.
- SCADA system integration

- Process Control Narratives
- Power System Study / Fault Current Study (after construction completion)
- Arc Flash Hazzard Study (after construction completion)
- Assist with regulatory applications including Development Permit / Building Permit applications
- Services during construction
- Confined Space Hazzard Assessment (during design and after construction completion) with preferences for design to minimize the number of spaces and for isolation that avoids measures of isolation
- Commissioning Services / Training / Documentation

At completion of the Work, the Project shall be fully functional for the intended purpose.

A1.3 Preliminary Geotechnical Report, Survey Compilation and Reference Drawings

Refer to Appendix E. Available construction record information will be assembled and made available to Proponents.

A2 SCOPE OF WORK

A2.1 Summary

The Project consists of the design and construction of the Bay Avenue Pump Station Upgrade. In summary, the Project's scope of work is centred on the following key elements;

a) Installation of a BC Hydro service connection, new generator / switchgear / transformer at road level on Bay Avenue,
b) upgrading the station in place by raising the existing wetwell approximately 4.3m, and providing a graded vehicle access to the pump station,
c) removal of the existing ferrous chloride tanks and injection system and relocation / reactivation of the existing ultra-violet ionizer odour control system,
d) construction of a new caisson / secant pile ring wet well,
e) installation of three pumps into the existing upgraded wet well and two pumps in the new wet well (Four pumps working would need to provide a peak flow of 270 L/s and the last pump would be used as a spare),
f) construction of a common dry well / control building to house piping, valves, pig loader, metering and controls,
g) construction of retaining walls (piled footing / foundation walls) around the site and enclosing the dry well station with a pre-engineered building,
h) relocation of the public stairs access.

Project scope to include the additional requirements provided below:

A2.2 Location and Scope of Work Drawings

The Project location is on Bay Avenue in Parksville, B.C., adjacent to Parksville Bay foreshore and 385 Bay Avenue. The works are further illustrated on the drawings in Appendix D of the Bay Avenue Wastewater Pump Station Design Review Memorandum - September 2018, prepared by R. F. Binnie and Associates.

A2.3 Bay Avenue Storm Drainage Outfall Replacement

Locate and remove approximately 65 meters of 300mm diameter corrugated steel pipe from the existing drainage manhole located at the east end of Bay Avenue to the Parksville Bay foreshore outfall. Design, supply and install approximately 65m of 450mm diameter (or required diameter) HDPE or PVC storm drain from the existing storm drainage manhole at the top of Bay Avenue (termination point from Newcastle Engineering – August 2018 drawing) to the Parksville Bay foreshore complete with new service for pump station footing drains, new service lead for catch basin and new outfall in accordance with the City of Parksville, Engineering Standards and Specifications – Storm Drainage Design – Section 4.

Remove existing catch basin located at the of Bay Avenue east end of asphalt. Install new catch basin at new pavement end and connect to new storm drainage outfall in accordance with the City of Parksville, Engineering Standards and Specifications – Storm Drainage Design – Section 4.

A2.4 Pump Station / Wet Wells Upgrades

The existing station receives flows from two different sewers; one from the east along the foreshore, which conveys most of the flow into the station, and another sewer from the west which services a smaller 300mm diameter pipe for residential flows from the City of Parksville.

Based on the proposed triplex pumps arrangement in the existing wet well, the three pumps will be moved as far west as possible, allowing the east sewer inlet to remain in its original location. The existing west sewer inlet will be rerouted to discharge on the east side of the station. The rerouting of the west sewer inlet will be accomplished by extending the incoming sewer alignment towards the east. Locate and remove approximately 32m of existing 300mm diameter Asbestos Cement gravity sewer main from the existing sanitary sewer manhole located at the east end of Bay Avenue to the existing pump station wet well. Design, supply and install approximately 42m of 300mm diameter HDPE or PVC sanitary sewer pipe from the existing sanitary sewer manhole located at the east end of Bay Avenue to the inlet gravity side (east side) of the existing pump station wet well in accordance with the City of Parksville, Engineering Standards and Specifications - Sanitary Sewer Design - Section 5.

The inlet redesign will consider to minimize surface turbulence in the wet well as surface turbulence can promote the stripping of sewage gases out of wastewater with consequent sewage odour generation. The relocated inlet will also provide incoming wastewater with as symmetrical an approach to the pumps as practicable to limit vortex development that could reduce pump efficiency and increase pump wear.

The existing wet well will be maintained and only minor concrete surface repair is expected. As the three proposed pumps will be moved as far west as possible to

improve hydraulics, the wet well will be re-benched to optimize pump operation with the new arrangement and to minimize stagnant areas which may accumulate debris. The benching will be designed to Hydraulic Institute Standards.

A new wet well will be constructed in the vicinity of where the current ultra violet ionizer odour control system is located by constructing a new caisson / secant pile ring wet well to house two submersible pumps and vertical discharge pipes.

Interconnection is required between the existing pump station wet well and the proposed pump station wet well by designing, supplying and installing approximately 8m of 300mm diameter HDPE, Stainless Steel or PVC sanitary sewer pipe complete with isolation valves allowing for flow diversion between the two wet wells. Any piping, supports, fittings or valves inside the wet well will be stainless steel 316.

The pump starts will be designed to suit the number of pump cycles recommended by the pump manufacturer while also meeting RDN's criteria of not less than 5 minutes at peak flows (RDN Bylaw no. 500 – Part 4 Subdivision Regulations – Schedule '4D1' community Sewer System Standards). RDN's standards of a detention time not exceeding 12 hours during ADWF will need to be confirmed during detailed design.

The low and high-level floats as well as the ultrasonic transducer or pressure transducer will be located away from the inlet to minimize any disturbance to the readings, but they will be installed in an area of easy access for maintenance purposes.

The discharge piping leaving each wet well and pump will extend vertically past the current top of concrete of the pump station and enter the new dry / control room. The above-ground horizontal piping alignment (dry well / control room) will be installed where the current genset enclosure is located, south of the existing pump station. The new dry well will avoid the need for confined space entry equipment. The three discharge pipes for the existing wet well and two discharge pipes from the new wet well will tie-in to a header in the mechanical room above-ground in a pipe chase / trench complete with grating over at the control room floor elevation. The pipe chase will provide spill containment. The arrangement will further continue with a plug valve, followed by a pig-out port, a flowmeter and another plug valve that will exit the building towards the east of the station. The above-ground piping in the dry well will exit the control building and transition vertically in order to tie-in to the existing 450mm diameter ductile iron forcemain located on the southwest end of the station. The tie-in will be completed by hot-tapping used for the temporary by-pass and line-stopping the existing forcemain for the installation of a permanent bypass manhole.

All piping will be hydraulically and seismically restrained as required and pipe supports will be designed in accordance with the most current Building Code at the time of detailed design. The system will have high points prior to the tie-in to the header. Air-relief valves complete with ball valve isolation will be provided at high points.

A2.5 Pump Station Overflow

The existing station wet well has a 600-mm diameter reinforced concrete overflow pipe that will remain. Considerations shall be given to raising the elevation in order to achieve a higher outfall on the foreshore free of debris and tidal influence.

A2.6 Building Structure

The existing wet well is a reinforced concrete structure built in 1978. The wet well consists of 600mm thick structurally reinforced walls supported by a 620mm thick structurally reinforced footing based on the 1978 Original Construction Record Drawings by Dayton & Knight Ltd. The drawings also indicate that the concrete compressive strength is 4,000 psi (approximately 28 MPa). The wet well top of concrete elevation is approximately 4.6 m and the invert elevation is approximately -2.6m based on the 2003 Upgrade Record Drawings by Associated Engineering. It is expected that a waterproofing system, such as Krystol T1/T2, will be applied to the inner surface of the wet well for minor concrete repairs during the construction of the upgrades.

Based on the geotechnical desktop study (Appendix D), the existing wet well sits on dense silty sand till with a bearing capacity in the order of 250kPa. The bearing pressure due to the structure including the new elevated platform and walls is in the order of over 140kPa. The recommended site classification for seismic structural design is Site Class C. Confirmation of the new dead loading is required.

The mechanical room and elevated platform will be designed based on the post-disaster importance category in accordance with the requirements of the BC Building Code. The new building structure will transfer compressive loads to the existing wet well walls and footing and the existing wet well is expected to have enough capacity to carry such additional loads given the thickness of the members and reinforcement shown on record drawings.

It is expected that the dry well / control room reinforced concrete footing walls will be minimum 250 mm thick, 35 MPa. The platform reinforced concrete slab (i.e. the mechanical room floor) is also expected to be minimum 250 mm thick to sustain the loading from all equipment. Dowels will need to be installed to connect the existing structure to the new walls and micro-piles will be installed to support the structure outside the existing wet well bearing and the proposed site retaining walls. The feasibility of micro-piles will need to be assessed further during detailed design once a borehole has been advanced.

The dry well / control room housing enclosure will need to be reviewed for form and function to suit the overall operating objectives while recognizing that the building will need to blend into the surrounding foreshore and be aesthetically pleasing for the neighbourhood and general public.

Access to the wet wells will be provided by direct stair access to avoid confined space. Platforms are to be installed in the wet well for fall protection and for ease of wet well wash-down and general maintenance actives.

A2.7 Ventilation

The wetwell and mechanical/electrical room will be provided with forced air ventilation. The ventilation rate will depend on the electrical classification within the wetwell and will also be based on the recommendations in the National Fire Protection Association (NFPA) 820.

A2.8 Electrical Service, Transformer, Switchgear, Controls and Backup Generator

- Removal of the existing generator, enclosure, MCC, transformers, controls and alarming.
- A new minimum 400A, 3 Phase, 600V service will be required from BC Hydro off the existing overhead power on Bay Avenue.
- A new minimum 300kVA pad mounted transformer is required on grade at street elevation above the pump station on Bay Avenue.
- A new outdoor rated Service Kiosk will be required and installed at street elevation above the pump station on Bay Avenue and will contain:
    - Incoming pullbox;
    - Main Breaker:
    - Utility Metering Equipment:
    - Automatic Transfer Switch (ATS); and
    - Small Distribution transformer and load centre.
- A power distribution within the station will be facilitated by a 600V Motor Control Centre (MCC) located in the above grade drywell, mechanical and control room complete with a surge protection devise connected to the MCC 600A bus. Access to the MCC cabinet can either be accessed from the exterior or interior of the control building. A smaller distribution transformer at the control room will step down the 600V to 120/208V to power lighting, receptacles and other general station electrical loads.
- The pumping units in the station will be started and controlled using Variable Frequency Drives (VFDs). Smaller motors used for supply and exhaust fans will use Full Voltage Non-Reversing (FVNR) starters appropriately sized for the application.
- The station control system (SCADA) will be an Allen-Bradley Programmable Logic Controller (PLC). All signals from station instrumentation will be routed to the PLC to facilitate station control and alarm annunciation. The station's control system will be powered by a UPS. The UPS will provide power long enough to allow the standby generator to start and power the station in the event the BC Hydro service is interrupted. Instrumentation and alarms will be specified in accordance with the RDN's I/O list which is expected to be provided by the RDN during the detailed design phase. However, it is expected that the following provisions for sensors will be made.
    - Pressure gauges will be provided on the discharge of each pump and on the main header pipe. Pressure indicating transmitters (PITs) will also be provided (discharge header only). The PITs will be Siemens Sitrans P. The pressure gauges will be connected to the pipes with taps installed at the 9:00 or 3:00 positions and will be designed to be installed so that they can be easily read by Operations personnel. At each pressure gauge there will be an isolation valve and stainless steel diaphragm seal. Where analog gauges are used, they will be of the liquid filled process type and have 4.5" diameter faces. The indication range is expected to be from -13 psi to +125 psi in 2 psi increments with a secondary kPa reading. A pressure transmitter

hardwired to the programmable logic controller (PLC) will be provided on the main discharge header.

- A flowmeter will be installed on the discharge side of the station to measure and record flow rate, duration, volumetric sum. The flowmeter will be located on the above-ground pipe alignment south of the pump station in order to comply with minimum straight pipe length requirements upstream and downstream of the flowmeter to provide accurate readings. The manufacturer's recommendations will be followed to determine the piping requirements for the flowmeter. The flowmeter will interface with RDN's SCADA system to provide flow data transmission. RDN proposes that Siemens Sitrans FM Magflow 5100W electromagnetic flowmeter tube and MAG 6000 remote mounted transmitter or equivalent be specified. The flow meter will be grounded/bonded as required.
- Wetwell level control will be provided by an ultrasonic level controller or pressure transducers. The wetwell high level alarm will be controlled via the PLC. A separate mechanical float switch will be provided for the emergency high level signal to the PLC. The mechanical float switch will also be necessary in the event of a power failure or other event that compromises the ultrasonic level sensor. Note that the float is for emergency high alarming purposes and is not intended for pump control. It is expected that a Flygt ENM-10 float switch will be specified.

- An onsite outdoor Cummins diesel fueled minimum 300kW generator will be installed in the event BC Hydro's service is interrupted and located at street elevation above the pump station on Bay Avenue. The ATS will ensure seamless transition and no disruptions to pumping or 120V service. A weatherproof, graffiti protected and acoustically attenuated enclosure with a minimum decibel of 8db at 8m away. A double wall fuel tank will be incorporated into the enclosure sub-base with a capacity to run the generator for a minimum of 36 hours. The backup generator will also be equipped with a battery charger and block heater.

A2.9 Odour Control

The current ferrous chloride tank injection system and ultra violet ionizer odour control systems are currently not in use. The existing ferrous chloride tanks, pipes and dosing system will need to be removed. The RDN wishes to reactivate and relocate the existing ultra violet ionizer with the new ventilation and air exchange being proposed.

A2.10 General Road and Public Access to Parksville Bay

The objective of this portion of the Project is to provide an access driveway to the top grade of the proposed wet well elevation. In general the road access will be in accordance with the City of Parksville, Engineering Standards and Specifications – Roads, Curbs, Walkways, and Sidewalks – Section 7, RC-8 standard with the exception of a minimum of 3.0m wide asphalt, maximum 15 % grade. The access will be multi-use for both RDN Operations and the general public to use. The proponent shall verify the exact length of pavement and public access required);

- Provide an asphalt level course, where required, to eliminate any low points (as per smoothness criteria) and maintain a uniform roadway cross-fall of at least 3% from centerline down to the shoulder in existing crowned areas of the road or a minimum of 2% super elevation;
- Provide a minimum 50mm thick asphalt top lift to entire roadway width;
- Provide a minimum 0.5 meter wide compacted granular shoulder to each side of the edge of the new paved roadway;
- Stairs will be concrete complete with railing or galvanized steel on helical pile footings.

A2.11 Bypass Pumping

It is expected that installing a complete bypass pump(s) to handle design flows around the station is the first stage of the project before any other site work is started. Installing the bypass in conjunction and consideration of new infrastructure works will allow easier connection of new infrastructure and commissioning. The following are recommended to achieve uninterrupted operational and construction services;

- Wet tap a bypass tee valve on the forcemain above the pump station at road level on Bay Avenue.
- Install a plug between the inlet manhole and the wet well.
- Provide an onsite diesel electric generator for power to electric driven pumps.
- Install temporary pumps, floats and controls on the existing gravity manhole.
- Close the line valve on the discharge from the existing wetwell.
- Construct the new wetwell, commission and transfer bypass pump temporary to the new wet well to allow remainder of upgrades to be completed.
- 24 hour monitoring and alarming is required for the entire duration of the bypass pumping operation.

A2.12 General Works

- The works shall be carried out within the statutory right of way and/or existing road right of way;
- To minimize traffic disruption, free flow condition over well produced and maintained surfaces (asphalt preferred) will be required;
- Disruption to adjacent properties and the public during construction will be minimized. All work to be carried out to ensure that existing traffic flows are not adversely affected;
- All excavations within public area are to be protected by barriers to prevent traffic or pedestrians from accessing the excavation during work in progress. Outside of work hours all excavations are to be backfilled and compacted, or covered with steel plates firmly anchored into the ground;

- There are a number of underground utilities located within the upgrade area that may be impacted, including, but not limited to BC Hydro, Fortis BC (gas), Telus, Shaw Cable and City of Parksville water & storm drains and sanitary sewer;
- Reinstatement of all driveways, boulevards and private properties affected by the Project are to be restored to existing or better conditions**.** Proponents to obtain sign-off from all adjacent affected properties indicating acceptance of finished work, and include copies of sign-off sheets in the project record submission;
- Two weeks prior to the start of construction all adjacent property owners shall be notified by the Contractor by way of a type written letter personally delivered to each property's letter or newspaper receptacle. Where a driveway or private sidewalk is to be blocked off for a period exceeding 15 minutes the property owner shall again be notified 48 hrs in advance by way of a type written letter or a personal visit;
- Surrounding landscaped areas are required to be reinstated to it's original state or better. Landscaping shall conform to the most recent edition of the "B.C. Landscape Standard". Landscaped slopes shall not exceed 6:1 (horizontal : vertical) or the pre-construction slope, whichever is steeper. Retaining structures may be substituted upon approval from the RDN Project Manager. The intersection of the new landscaped slope with the existing ground slope shall be gently rounded to eliminate abrupt grade changes. Grass seed or turf of proven quality and origin, to match existing quality, will be required for all grass landscape restoration and arrangements must be made for any fertilization or watering necessary to ensure it becomes established;
- Pipes are to be stored to avoid the risk of contaminants entering the pipe. This must include storing pipe on wood pallets to raise the pipe above ground level and also bag or cap all pipe ends to prevent animals and contaminants from entering the pipe. Protection must be placed on pipes immediately upon arriving onsite;
- Pipes are to be loaded, offloaded and installed as per standard AWWA procedures. Pipes are to be visually inspected immediately prior to installation to check that no dirt, rocks, debris or other objects are present within the pipe. All debris found within the pipe must be removed prior to installing the pipes;
- Pipes are to be installed as per AWWA procedures and good construction practice. Trenches must be dewatered prior to installing pipe. End joints (bell spigots) of all pipes are to be wiped clean immediately prior to final installation. Open pipe ends to be delivered to the site bagged or capped until required for jointing purposes;
- Use only crushed gravel / bedding sand for granular pipe bedding and surround material. Use suitable imported materials approved by a geotechnical engineer for trench backfill and ensure that good construction practices are followed.
- Proper trench compaction is vital to ensure that settlement of the trench does not occur following paving. This would include backfilling of trenches in "lifts" of no more than 18" with compaction equipment being used for each lift. Compaction from the surface of full trench depth is not permitted It will be the utility contractor's responsibility to rectify settlement problems, if they occur;
- All contract items shall be constructed in a manner that ensures positive drainage on RDN right-of-way and private property adjacent to the site. The Contractor shall bear full responsibility for maintaining or improving the existing drainage patterns, erosion

control, flood and foreshore protection. This may include altering grades or the installation of catch basins. All costs incurred in accomplishing this goal are to be incorporated in the lump sum;

- Road Closure Permits are to be obtained from the City of Parksville Engineering Department prior to commencing with any work. A traffic management plan prepared by qualified traffic personal will be required prior to issuance of Road Closure Permit.

A2.13 Testing / Commissioning

The Contractor shall undertake/provide the following:

- The RDN operations staff shall be present during live tie-ins to sewer mains and reconnection of service connections. The Contractor shall supply all labour, material, equipment, fittings and appurtenances for the connection, including, but not be limited to excavation, disposal of excavation material, trench backfill and restoration. The Contractor shall notify the RDN in writing five (5) working daysprior to the tie-in work **with a written tie in procedure.**

A2.14 Geotechnical

The scope of the geotechnical Work includes, but is not necessarily limited to, the following:

- All engineering, field investigations and any other work required to meet the requirements of the Project;
- The Contractor shall retain a Professional Engineering Consultant (materials testing firm) to verify compaction of the gravel base material, the use of appropriate backfill material, that standard engineering qualities of the concrete have been achieved (slump, air, strength etc.) and asphalt according to accepted practice for sample sizes and C.S.A. test procedures. **The consultant shall fax or email all results directly to the Owner within 24 hours of the test completion;**
- The Contractor shall identify any geotechnical concerns or subsurface conditions and provide remedial works to address the problem. The Contractor shall immediately inform the RDN of any potential geotechnical problems.

A2.15 Utilities

The scope of the utilities Work includes, but is not necessarily limited to, design, supply, installation, construction and maintenance during construction of the following:

Existing Utilities

- Maintenance and protection of existing utilities “in-service” that are in any way affected by the Project;
- liaison, coordination with and obtaining approvals from all utility owners that are in any way affected by the Project;

- provide as-built drawings or other information to the utility owners following relocation or adjustment;
- confirm the in-field location of all utilities;

Identify all utilities that require relocation and secure all necessary arrangements with the utility owner to affect the relocation. The Proposal Price shall include all costs of necessary utility relocation work, whether carried out by the utility owner or by the Proponent.

The Proponent shall utilize the "BC1 Locate Call Before You Dig" service which can be contacted at: 1-800-474-6886 and / or Kelly's 1st Call Locating at : 778-269-5359.

A2.16 Traffic Management

The Contractor shall be responsible for the safe management of traffic, within the Limits of Construction, during construction to minimize negative impacts on the traveling public. A Traffic / Pedestrian Management Plan that fully integrates the Contractor's Proposed Project Schedule with traffic control shall be developed.

Prior approval is required from the City of Parkville's Engineering Department regarding any detouring, lane closures, construction access, construction speed zones or implementation of any other traffic management procedures on any municipal streets.

A2.17 Communications and Public Relations

The Contractor shall fully implement its Public Communication Plan in accordance with the requirements as outlined in section 3 – Submission Requirements (3.2.3.2 (a)) and subsequently adopted through the Design-Build Agreement.

The Contractor shall arrange a communications process with the RDN and their designates to ensure that all parties are kept fully informed in advance of proposed detouring, lane closures construction access, construction speed zones and other traffic management procedures being planned.

A2.18 Maintenance

The Contractor shall be responsible for all maintenance within the Limits of Construction from the Project Occupation Date to the Substantial Completion Date.

Maintenance services shall include, but are not necessarily limited to, the following:

- pavement surface cleaning;
- drainage / erosion / flooding control;
- by-pass pumping

The Contractor will notify the RDN, through the RDN Project Manager, fourteen (14) calendar days prior to:

- the Site Occupation Date,
- the start of and completion of any planned shutdown, and

- the completion of construction;

A2.19 Drawings and Documentation

The Contractor shall, at completion of the Project, provide all documentation as defined in Appendix B – Schedule 2 - Design Specifications - Section A6.3.

A2.20 Project Schedule

It is the RDN's intent that the Substantial Completion of the Project will be achieved prior to **October 16, 2020.** The Contractor shall provide a fully detailed Proposed Project Schedule updated on a bi-weekly basis, to the RDN Representative for the Term of the Project.

A2.21 Municipal Bylaws and Permits

The Contractor shall ensure that all City of Parksville Municipal Bylaws, such as, but not limited to, the Highway and Traffic Bylaw and Noise Bylaw, will be adhered to and that all permits and licenses will be obtained prior to commencing Work.

A2.22 Work by Others

Work may be performed by others within or near the Project Limits. This Work may include, but will not be limited to, the following:

- BC Hydro
- Fortis BC
- Telus
- Shaw
- City of Parksville

The Contractor will cooperate fully with others working in the Project area and coordinate its Work accordingly.

A2.23 Work For Others

The Contractor may wish to enter into separate arrangements with other parties to complete construction work such as servicing properties within or adjacent to the Project Site. These separate arrangements are acceptable to the RDN providing the following conditions are met:

- the Contractor shall notify in writing and obtain approval from the RDN Representative for all proposed separate arrangements with other parties;
- the Contractor shall be responsible for any design, application for necessary approvals and obtaining approvals prior to construction; and

RDN approval will generally be granted provided any additional work to be performed by the Contractor will not adversely affect RDN costs, the Contractor's schedule, the quality

of the Work under the Design-Build Agreement or adversely impact operations and maintenance procedures or costs for the RDN

A2.24 Pre-Construction Inspection

The Contractor is encouraged to conduct an evaluation of the conditions at the site and an assessment of proposed construction activities to determine whether any surrounding properties are at risk of damage arising from vibrations induced by construction activities. A professional engineer would conduct this assessment.

The Contractor would be responsible for conducting pre-construction inspections of all properties identified to be at risk. The Contractor would also be responsible to monitor the impact of construction on these properties, address any complaints regarding construction impacts, modify construction activities to minimize impacts and resolve any claims arising from impact on properties as a result of construction activities.

Pre-construction photo/video documentation of existing conditions is to be provided to the RDN Project Manager prior to commencement of construction activities. Pre-existing areas where damage/concerns are present should note:

- Address of property
- Location issue (note measurement from fixed point)
- Nature of issue/current condition

In order to reduce the likelihood of future disagreements, the Contractor is encouraged to photograph each project site prior to construction, a duplicate set of photographs, labeled for each project should be provided, in a booked form acceptable to the RDN Project Manager. Digital photos on CD-ROM, data DVD or memory stick with a paper copy of photo index is preferred.

A3 DESIGN STANDARDS

A3.1 General

The Project will be designed and constructed in accordance with Appendix A – Schedule 1 – Project Requirements, the Scope of Work outlined in Section 2.0, the RDN's current directives, accepted standards, specifications, practices, policies and procedures in effect at the date of execution of the Design-Build Agreement. The Technical Standards and Specifications, together with the design criteria presented in this section, define the minimum standards that will be met by the Proponent prepared designs and the minimum quality for materials that will be used.

Any deviation from the design criteria, standards or quality defined by the Technical Standards and Specifications must be clearly identified as an alternative and must be justified by the Proponent and submitted in addition to its compliant Proposal.

No such deviation shall be considered, permitted, or accepted unless specifically identified to the RDN and expressly approved by the RDN in writing.

A3.2 Performance Responsibility

- Unless otherwise noted, the reference documents in Section A3 – Design Standards will provide technical standards, specifications and guidelines for compliance on the Project. Provide test results and certification of all testing results to RDN's representative;
- The methods of work proposed by Proponents shall be provided and set out in a manner that can be designed and constructed within the target completion date. The methodology should address the composite works and specific details for the work at each of the Project locations;
- Proponents shall provide a detailed activity schedule.

A3.3 Material Specification

- All other materials incorporated into the Project and all construction practices shall be in accordance with the City of Parksville Subdivision Servicing Bylaw – Appendix I, Engineering Standards and Specifications (current edition), and the Master Municipal Construction Documents (MMCD) Specifications (latest edition).

A3.4 Design Criteria

Unless otherwise noted, the following manuals together with other reference documents will provide technical standards, specifications and guidelines for compliance on this Project:

- City of Parksville Subdivision Servicing Bylaw – Appendix I, Engineering Standards and Specifications (current edition);
- Equipment and materials to be ASTM / CSA certified;

- Ministry of Transportation and Highways Traffic Control Manual for Work on Roadways;
- Geometric Design Standards for Canadian Roads and Street (latest edition) Canadian Roads and Transportation Association (TAC);
- Master Municipal Construction Document (MMCD) Specifications (latest edition);
- All other applicable RDN Bylaws;
- The Master Municipal Contract Documents (MMCD) Platinum Edition;

A3.4.1 Utilities

Unless otherwise specified, all existing utilities in the road rights-of-way are to be retained in service during and after completion of the Project.

The RDN shall contact the utility companies to determine whether any new utilities may be required as part of this project.

A3.4.2 Pavement

The Project includes the design and construction of new and upgraded pavement structures within the Project Area. Only asphalt pavements will be accepted.

Details for asphalt paving shall be designed and constructed in accordance with good practice.

Trench repair section shall be a minimum of **50mm** base lift asphalt in excavated and disturbed areas to provide a smooth and level driving surface.

Provide an asphalt level course, where required, followed by a minimum **50mm** thick asphalt top lift on the entire roadway are part of the required pavement works.

A3.4.3 Civil Works

a) The Contractor shall design and undertake all dewatering, excavation, and all associated works necessary for underground construction.

b) The Contractor shall provide the Geotechnical and Civil Engineer's design, Letter of Assurance, and certification for all earthworks and civil works as required by MMCD. The most recent of any listed code or standard shall apply.

A3.4.4 Geotechnical

a) Use only crushed gravel and bedding sand for granular pipe bedding and surround material. Use suitable imported materials approved by a geotechnical engineer for trench backfill and ensure that good construction practices are followed. **In-situ material cannot be used as pipe bedding material or trench backfill material if new water main alignment is located within 1 meter from edge of paved road surface.**

b) Compaction from the surface of full trench depth is not permitted. Proper trench compaction is vital to ensure that settlement of the trench does not occur following paving. This would include backfilling of trenches in “lifts” of no more than 18” with

compaction equipment being used for each lift. It will be the utility contractor's responsibility to rectify settlement problems, if they occur.

A3.4.5 Environmental

The DFO/MELP Land Development Guidelines shall be used for environmental design.

The Contractor shall avoid or, where avoidance is not possible, minimize to the fullest extent any adverse environmental impacts associated with the Project to the satisfaction of the environmental agencies.

A3.4.6 Wet Well / Pump Station

The wet wells shall be designed in accordance with the HI standard for pump intakes (HI/ANSI 9.8-2012, Rotodynamic Pumps for Pump Intake Design).

The pump starts will be designed to suit the number of pump cycles recommended by the pump manufacturer while also meeting RDN's criteria of not less than 5 minutes at peak flows (RDN Bylaw no. 500 – Part 4 Subdivision Regulations – Schedule '4D1' community Sewer System Standards). RDN's standards of a detention time not exceeding 12 hours during ADWF will need to be confirmed during detailed design.

All piping supports, fittings or valves inside the wet well will be stainless steel 316 (Schedule 10 for pipe), stainless steel piping to resist corrosion due to the surrounding marine environment. All piping will have a combination of Victaulic and flanged joints with corrosion resistant bolts, nuts and washers for durability and lower costs and will be sized and designed in accordance with Hydraulic Institute Standards where practicable with long radius fittings. Although the pumps and valves will not be located above the flood level, all equipment will be submersion-rated to withstand flood conditions.

All structures must be designed and constructed in accordance with the latest edition of the British Columbia Building Code, including Addenda and all federal and municipal regulation and Bylaws.

Design Criteria: kPa (psf)

Parksville / Qualicum Beach								
Snow Loads		Seismic Loads		Spectral Acceleration				
Ss	2.2 kPa (46,00 psf)	Rd	1.0	Sa (0.2)	Sa (0.5)	Sa (1.0)	Sa (2.0)	PGA
Sr	0.4 kPa (8.35 psf)	Ro	1.0	0.82	0.58	0.32	0.17	0.39
Is	ULS 1/SLS 0.9	Ie	ULS 1.0					
Wind Loads		Site Class		Live Loads		Dead Loads		
q10	0.46 kPa (9.60psf)	E						
q50	0.64 kPa (13.35psf)							
Iw	ULS 1/SLS 0.75							

Provide temporary bracing and shoring for the construction loading conditions and stability of the structure during construction. Construction loads shall not exceed design loads. Professional engineer registered in the province of British Columbia is required to design and take responsibility for any temporary shoring, bracing or other designs required to complete construction.

Verification of all dimensions on site is required prior to commencing fabrication.

The following submissions are required for this project:

1. Concrete mix designs
2. Weldable reinforcing mill certificates
3. Structural steel mill certificates
4. Structural steel shop drawings*
5. Structural aluminium mill certificates
6. Structural aluminium shop drawings*

* indicates the requirement that submission be sealed by an engineer registered in the province of British Columbia

A3.4.7 Structural Steel

All steel work shall be in accordance with CSA-S16.

All connections shall be designed to CSA S16. Connections shall be designed for 50% of the total factored uniformly distributed load for laterally supported beams (1/2 of full beam load at each end) as per the latest edition of the CISC Design Manual. Final connection configuration is the responsibility of the fabricator. Use a minimum of 2-M20 (3/4") galvanized A325 bolts per connection. Shop connections shall be welded and field connections shall be bolted. Connections designed by the contractor shall be sealed by a professional engineer registered in the Province of British Columbia.

All bolted connections shall have pre-tensioned high strength bolts in accordance with CSA-S16.

Provide structural steel to CSA G40.21 with the following grades:

Wide Flange Beams and Columns:	350W (50W) or ASTM A572 Grade 50 or ASTM A992
Channels and Angles:	300W (44W)
HSS Sections:	ASTM A500 (345 MPa) or 350W – Class C
Miscellaneous Steel Plates:	300W (44W)

Provide anchors to CSA G40.21 with the following grades:

Erection Bolts to ASTM A325
Anchor Bolts to ASTM A307 or "B7" Grade

Provide seal welded closure plates at all open ends of HSS members. Plate thickness to be a minimum of 6 mm (1/4"). Provide 13 mm (1/2”) diameter weep hole at the base of each HSS column.

Provide bevelled washers on all connections to tapered flanges of structural members.

A3.4.8 Structural Aluminum

Aluminum shall be Grade 6061-T6.

Structures to be designed and fabricated in accordance with CAN3 – S157 – M83.

Welding shall be in accordance with CSA W59.2 – M 1991.

Fabricator shall be certified to CSA W47.2.

Provide a minimum 6mm fillet weld or equivalent for connections and grind smooth all sharp edges.

For corrosion protection: where aluminum is in contact with either timber or concrete, a layer of peel and stick flashing (polyethylene sheet backed by a rubberized asphalt adhesive) shall be installed as a barrier between the dissimilar items.

Bolted connections shall utilize 316 stainless steel bolts complete with nuts and s/s washers. Nylon washers are to be used between all s/s washers where they are in contact with aluminum. Stainless steel beveled washers are to be used on connections to channel flanges.

Bolted connections shall be used for all field connections. No connections shall use less than 2-19 diameter bolts.

Provide seal welded closure plates at all open ends of HSS members. Plate thickness to be a minimum of 6 mm (1/4"). Provide 13 mm (1/2") diameter weep hole at the base of each HSS column.

Provide bevelled washers on all connections to tapered flanges of structural members.

A3.4.9 Welding

All steel welding shall be in accordance with CSA W59 and shall be performed by fabricators fully approved by the Canadian Welding Bureau (CWB) under CSA 55.3. fabricating shop to have a minimum Division 2.1 Certification by the CWB to the requirements of CSA W47.1 and CSA W55.3 for resistance welding of structural components.

All aluminium welding shall be in accordance with CSA W59 and shall be performed by fabricators fully approved by the CWB under CSA W55.3. Fabricating shop to have a minimum Division 2.1 Certification by the CWB bureau to the requirements of CSA W47.2 and CSA W55.3 for resistance welding of structural components.

A3.4.10 Reinforcing Steel

Reinforcing steel to be deformed steel 400 Grade and shall conform to CSA-G30.18.

Weldable low alloy deformed steel reinforcing bars, grade 400W, to conform to CSA-G30.18.

Welded wire mesh to conform to CSA G30.5 "welded steel wire fabric for concrete reinforcement".

Steel wire, deformed, shall conform to CSA ASTM A496-02 "welded steel wire fabric for concrete reinforcement".

Welding of reinforcing steel to conform to CSA WI B6 "welding of reinforcing bars in reinforced concrete construction".

All reinforcing bars shall be tied securely to prevent displacement.

Lap lengths for reinforcing steel shall be as follows:

	Uncoated	Epoxy coated (uncoated x 1.7)
10m	400 mm (16")	680 mm (27")
15m	600 mm (24")	1020 mm (41")
2Om	900 mm (36")	1530 mm (61")
25m	12OO mm (48")	2040 mm (82")
30m	1600 mm (64")	2720 mm (109")
35m	1900 mm (76")	3230 mm (129")

Where concrete surfaces are to be exposed only non-corrosive type reinforcing chairs are to be used to support the reinforcing steel.

Dowels are to be tied in place prior to pouring concrete - "wet dowelling" of any reinforcing steel is not permitted.

Hooks on all ties shall be bent at least 135 degrees and have a minimum leg of 12 times the tie bar diameter.

A3.4.11 Cast In Place Concrete

All concrete work shall conform to the requirements of CSA A23.1 and A23.2

Concrete mixes shall conform to CSA A23.1and A23.2 and shall have the following properties:

Mix Class	Mix Number	28 Day Strength	Max. Aggregate Size	Slump	Air Content	Exposure Class	Admixtures
Exterior Slabs-on-Grade / Retaining Walls / Columns	3	35 MPa	19mm	80mm	5% - 8%	C-2	N/A

Concrete testing shall be carried out by the contractor and shall be in accordance with CSA23.1 and A23.2. The minimum number of tests performed shall be as per CSA A23.2.

Chamfer all exposed edges of concrete with a 19mm (3/4") chamfer.

Concrete finishes shall be in accordance with CSA A23.1.

All concrete curing shall be in accordance with CSA 23.1. Special precautions shall be taken as noted in CSA 23.1 for placing and curing concrete above 30 degrees Celsius and below 5 degrees Celsius.

All reinforcing steel to have 75mm (3") clear cover distances.

Anchor bolts for structural steel and embedded plates shall be securely tied or fastened in place prior to pouring concrete. All anchor bolts shall be laid out using a template ("wet dowelling" of anchors bolts and embedded plates is not permitted).

A3.4.12 Pre-Cast Concrete

Design, fabrication and erection must conform to CSA CAN3-A23.4-00, CSA S413-94 and ACI A135.

Precast manufacturer must be certified in accordance with CSA A251.

All reinforcing steel, bolts, plates, inserts etc. for precast connections shall be detailed and supplied by precast manufacturer.

Precast supplier must check all architectural, mechanical and electrical drawings for openings and provide design where required. Steel framing of openings to be supplied by precast supplier.

Reinforcement will be in accordance with reinforcing steel specification.

Powder actuated fasteners will not be used for fastening to precast members.

All tolerances and covers shall conform to the following table:

Fabrication Tolerances			
	Length & Height	Straightness & Skewness	Thickness
Up to 3.0m (10'-0")	0 to 10mm (3/8")	+/- 10mm (3/8")	+/- 5mm (3/16")

A3.4.13 Mechanical and Adhesive Anchors

All anchors are to be Hilti and installed in strict accordance with the manufacturer's written instructions.

All anchors are to be the adhesive type and be Hilti 'HAS' rod.

Use Hilti HY 150 Max when:

- a quick cure is required,
- conditions are dry,
- holes are hammer drilled,
- holes are not over-sized,
- base material temperature is above 5' Celsius

Use Hilti Hit Ice when;

- under the same conditions as HY 150 Max but base material temperature is 5' Celsius and below.

Use Hilti Hit RE500 adhesive when;

- extended working time is required and cure time is not critical,
- holes are drilled using diamond core, pneumatic or hammer drills,
- deep embedment is specified,
- the application is underwater, or
- holes are oversized.

Holes for adhesive anchors will be cleaned out with high pressure air and then a brush prior to anchor installation.

Holes for mechanical anchors will be cleaned out with high pressure air or brush prior to anchor installation.

Installers of Hilti products will have received training by Hilti (Canada) Corp. in the use of the specified products.

A3.4.14 Ventilation

Standard for Fire Protection in Wastewater Treatment and Collection Facilities. The electrical classification will be determined according to the Canadian Electrical Code (CEC) see Table 2-1.

Ventilation and Electrical Classification, per NFPA 820

Location and Function	Location and Function	Ventilation	CEC Area Electrical Classification
Wastewater pumping station wet wells - liquid side of a pumping station serving a sanitary sewer or combined system (NFPA 820 Table 4.2-Row 16)	Possible ignition of flammable gasses and floating flammable liquids	No ventilation or less than 12 air changes per hour Continuously ventilated at 12 air changes per hour	Class 1 Zone 1 Class 1 Zone 2
Aboveground pump station – Pump room not physically separated from wet well. Pumping wastewater from combined wastewater through enclosed pumps and pipes. (NFPA Table 4.2 – Row 19)	Possible ignition of flammable gasses and floating flammable liquids	No ventilation or less than 12 air changes per hour Continuously ventilated at 12 air changes per hour	Class 1 Zone 1 Class 1 Zone 2

For any areas determined to be confined space, 20 cubic feet per minute flow is required.

The ventilation requirements in the chamber are dependent on the electrical classification of the space. Wherever possible, the ventilation requirements that allow for the least stringent electrical classification be followed. Although the atmosphere in the mechanical/electrical space is classified as Class, Zone 2 which would require a classified MCC line-up, it is noted that Chapter 9 of NFPA 820 provides a relaxation of this classification when the ventilation is designed such that the room is pressurized at 0.1in water column (WC). Such ventilation should be sized to meet the requirements of Article 500 of NFPA 70 and the requirements of NFPA 496. Complying with these standards will reduce the atmosphere to unclassified for the purposes of the electrical design.

Recommended Ventilation Rates:

Description	Ventilation Rate	System
Reuse existing wetwell (submersible) with mechanical / electrical room.	12 AC for the wetwell 12 AC for the mechanical / electrical room	Wetwell to be negatively pressurized using an exhaust fan from the wetwell through the odour control system. Passive air supply from top of wetwell. Supply fan for Mechanical / Electrical Room and room pressurized to 0.1in WC and ventilation sized to NFPA requirements.

A3.4.15 Electrical Service, Transformer, Switchgear, Controls and Backup Generator

A power distribution within the station will be facilitated by a 600V Motor Control Centre (MCC) located in the above grade drywell, mechanical and control room complete with a surge protection devise connected to the MCC 600A bus. Access to the MCC cabinet can either be accessed from the exterior or interior of the control building. A smaller distribution transformer at the control room will step down the 600V to 120/208V to power lighting, receptacles and other general station electrical loads.

The pumping units in the station will be started and controlled using Variable Frequency Drives (VFDs). Smaller motors used for supply and exhaust fans will use Full Voltage Non-Reversing (FVNR) starters appropriately sized for the application.

The station control system (SCADA) will be an Allen-Bradley Programmable Logic Controller (PLC). All signals from station instrumentation will be routed to the PLC to facilitate station control and alarm annunciation. The station's control system will be powered by a UPS. The UPS will provide power long enough to allow the standby generator to start and power the station in the event the BC Hydro service is interrupted. Instrumentation and alarms will be specified in accordance with the RDN's I/O list which is expected to be provided by the RDN during the detailed design phase. However, it is expected that the following provisions for sensors will be made.

- Pressure gauges will be provided on the discharge of each pump and on the main header pipe. Pressure indicating transmitters (PITs) will also be provided (discharge header only). The PITs will be Siemens Sitrans P. The pressure gauges will be connected to the pipes with taps installed at the 9:00 or 3:00 positions and will be designed to be installed so that they can be easily read by Operations personnel. At each pressure gauge there will be an isolation valve and stainless steel diaphragm seal. Where analog gauges are used, they will be of the liquid filled process type and have 4.5" diameter faces. The indication range is expected to be from -13 psi to +125 psi in 2 psi increments with a secondary kPa reading. A pressure transmitter hardwired to the programmable logic controller (PLC) will be provided on the main discharge header.
- A flowmeter will be installed on the discharge side of the station to measure and record flow rate, duration, volumetric sum. The flowmeter will be located on the above-ground pipe alignment south of the pump station in order to

comply with minimum straight pipe length requirements upstream and downstream of the flowmeter to provide accurate readings. The manufacturer's recommendations will be followed to determine the piping requirements for the flowmeter. The flowmeter will interface with RDN's SCADA system to provide flow data transmission. RDN proposes that Siemens Sitrans FM Magflow 5100W electromagnetic flowmeter tube and MAG 6000 remote mounted transmitter or equivalent be specified. The flow meter will be grounded/bonded as required.

- Wetwell level control will be provided by an ultrasonic level controller or pressure tranducers. The wetwell high level alarm will be controlled via the PLC. A separate mechanical float switch will be provided for the emergency high level signal to the PLC. The mechanical float switch will also be necessary in the event of a power failure or other event that compromises the ultrasonic level sensor. Note that the float is for emergency high alarming purposes and is not intended for pump control. It is expected that a Flygt ENM-10 float switch will be specified.

An onsite outdoor Cummins diesel fueled minimum 300kW generator will be installed in the event BC Hydro's service is interrupted and located at street elevation above the pump station on Bay Avenue. The ATS will ensure seamless transition and no disruptions to pumping or 120V service. A weatherproof, graffiti protected and acoustically attenuated enclosure with a minimum decibel of 8db at 8m away. A double wall fuel tank will be incorporated into the enclosure sub-base with a capacity to run the generator for a minimum of 36 hours. The genset will also be equipped with a battery charger and block heater.

A3.4.16 Mechanical Design

- Check valves will be installed on the horizontal discharge line of each pump, upstream of the isolation valve, to allow for maintenance. The check valves will be accessible from drywell / mechanical control room. Swing-flex style check valves (Val-Matic Swing-Flex or Pratt RD-Series) are specified. All check valves will be specified to have flanged connections and ductile iron valve bodies. The check valves will be of a type and configuration that allows for manual operation with a manual backflow actuator.
- Isolation valves will be provided at various locations where components require isolation for maintenance or replacement. Three different types of isolation valves will be used as follows:
  - Knife gate valves complete with flanged bodies and hand wheels will be installed on the discharge line of each of the three pumps. They will be located downstream of the check valves, prior to the tie-in to the header.
  - Plug valves complete with flanged connections and ductile iron bodies will be installed on the above-ground piping alignment south of the pump station. There will be two plug valves, one installed upstream of the pig-out chamber and flowmeter and another upstream of the bypass chamber. RDN proposes Dezurik or Valmatic eccentric plug valves be specified.
  - Ball valves will be used for isolation of air valves, drains, instrumentation, and other small piping connections.

- All isolation valves will be installed in locations that will improve accessibility and the valves will be coated to withstand corrosion due to the surrounding marine environment. Valves located externally and above ground shall be provided with a locking mechanism to prevent nuisance tampering.
- Redundant air release valves will be installed on the discharge line of each pump to provide a mechanism to remove trapped air from the pumping system prior to the tie-in to the station header. There will be a ball valve at the location of each air release valve to provide means of isolating the air release valve for maintenance.

A3.4.17 General Works

- Handrails and guardrails shall be fabricated from either ASTM A500 HSS 38x3.6 extruded sections, ASTM A53 DN 40x3.683 seamless pipe, or from an approved equivalent. Handrails and guardrails shall be fabricated by bending and/or welding. All welds shall be full strength seal welds and shall be ground smooth prior to painting. Remove all sharp edges and burrs prior to painting.
- Stair stringers shall be cast in place concrete or metal fabricated with bolted connections for treads. A minimum of 2 - 16mm diameter bolts shall be used at all connections. Cranked stringers shall be provided with moment connections capable of resisting 80% of the full moment strength of the stringer section.

A4 DESIGN REVIEW SUBMISSIONS

The RDN will carry out design reviews during the Proponent's design development. These reviews will cover all design disciplines and will confirm that the Proponent's design complies with the standards, specifications and criteria as set out in the RFP.

Before proceeding with the final design, the successful proponent will present 30% complete design drawings to the RDN for review. The RDN will review the submitted plans and specifications and provide comments within ten (10) business days before the Proponent may proceed with final design. The Proponent will be responsible for obtaining other approvals as necessary.

The next review by the RDN will be at the 90% design stage. This review will assure that the design drawings have been completed in accordance with the approved preliminary design (30% complete design drawings) and the RFP requirements. The RDN will review the completed drawings within five (5) business days and before the Proponent begins construction except in the case where the Proponent has made alternate arrangements with the RDN.

A5 QUALITY CONTROL / QUALITY ASSURANCE

Contractor shall perform or cause to be performed any tests, studies, and investigations in connection with the Work including geotechnical, materials, and engineering in order to ensure that the design and construction of the Work is in conformance with the Agreement. The Contractor shall provide a Quality Management Plan as required in Section 3.0 – Submission Requirements as well as the following:

- Provide testing program for quality assurance during construction; include testing of concrete, fill material and backfill compaction.
- Provide all required investigation, testing, and inspection services for design and quality control during construction using Professional Engineers registered in the Province of British Columbia and qualified to undertake this work.
- Provide certification of all tests and investigations.
- The Contractor shall retain a Professional Engineering Consultant (materials testing firm) to verify compaction of the gravel base material, and standard engineering qualities of the concrete (slump, air, strength etc.) and asphalt according to accepted practice for sample sizes and C.S.A. test procedures. **The consultant shall fax or email all results directly to the Owner within 24 hours of the test completion.**
- The RDN's Project Manager's approval of any materials or mixture shall in no way relieve the Contractor from his obligation to provide materials, mixtures and workmanship in accordance with the specifications.
- Where specified, random sampling procedure shall be followed, and where no specific random sampling procedure is specified the sampling procedure shall be as identified by the RDN Project Manager in the case of acceptance testing and by the Contractor in the case of quality control.
- **End Product Specification (EPS)** A specification whereby the RDN Project Manager does not define the methods of construction. Under EPS, the RDN Project Manager will monitor the Contractor's control of the process that produces the items of construction and will accept or reject the end product according to a specified acceptance plan. The Contractor is entirely responsible for quality control. End product acceptance is the responsibility of the RDN Project Manager and may include a program of acceptance testing.
- Quality control testing is the responsibility of the Contractor throughout every stage of the work from the crushing and production of aggregates to the final accepted product. Tests performed by the RDN Project Manager will not be considered to be quality control tests. The Contractor shall provide and pay for equipment and qualified personnel to perform all quality control testing necessary to determine and monitor the characteristics of the materials produced and incorporated into the Work, and the final product produced.

A6 PROJECT RECORDS – FINAL DOCUMENTATION

Completed final documentation shall be defined in this section and certified by the RDN Representative.

Substantial Completion will be withheld until final documentation has been completed to the satisfaction of the RDN.

Final documentation shall comprise of all required deliverables. The RDN will carry out reviews of the deliverables prior to granting Substantial Completion. In all cases the RDN's review comments will be provided no later than one month after submission of the required documentation.

A6.1 Warranty

Semi-annual warranty inspection reports. Certification that all deficiencies shall be addressed prior to final completion

A6.2 Insurance and Bonds

Copies of insurance and bonds with the RDN named as additionally insured.

A6.3 Record Drawings / Reports

For Engineering Drawings

- RDN engineering numbering system must be used, and all drawings referenced must refer to the RDN drawing number ONLY.
- Use clouds instead of dark / light lines on drawings to indicate changes.
- Elevations must be included on all plan, section and reinforcement drawings.
- Include Scale Bars on drawings with dimensions.
- Electrical and Instrumentation MUST be on separate drawings, and identified accordingly.
- Electrical drawings to include panel details.
- All engineering drawing revisions must be identified on final record drawing. i.e. list date and numbers of IFT, IFC, etc., with Record drawing being listed last with an appropriate revision number.
- PDF files of Record drawings must be stamped with P.Eng. seal.
- PDF files provided must be black and white.
- All drawings must be provided on USB sticks unless permission to provide it otherwise is provided.
- 'North' should point directly to the top of the sheet.
- RDN PID numbers must be used. This may involve working with RDN Wastewater Services Staff to determine the number.
- All equipment that is identified with a PID # on an engineering drawing must be labelled with a lamacoid label in the field.
- Process Control Narratives must be prepared and provided to the RDN Wastewater Services. The Process Control Narratives must be reviewed by RDN Wastewater Services Staff prior to being finalized.
- Asset list with PID tag #, equipment name, location, manufacturer, model #, vendor, purchase price for all items worth greater than $5,000 and also for all health and safety equipment (including monitoring equipment) and environmental monitoring equipment.

Contractor shall submit one (1) full size (A1 or larger) and one (1) small size (11"x17") complete paper sets of Record Drawings, dated, signed and sealed by a Professional Engineer Registered in the Province of British Columbia, and one digital copy of Record Drawings in AutoCAD 2013 and in accordance with the RDN's CAD standards as outlined in Appendix E. Record Drawings shall be submitted to and accepted by the RDN prior to the acceptance of the Work.

Operations and Maintenance manuals prepared for the pump station including the backup generator, switchgear, pumps, valves, flowmeter, SCADA controls, instrumentation, mechanical, heating and ventilation equipment.

A Hazard / Risk Assessments report completed as part of the project. All effort must be made to meet the BC OH&S regulation for confined spaces, so that the number of 9.22 applications can be minimized.

All design work, engineering reports, and record drawings for the Project shall be certified by the professional of the appropriate discipline licensed to practice in the Province of British Columbia.

Letters of Assurance signed by the professional of the appropriate discipline confirming all works have been constructed in accordance with the design requirements, shall be supplied.

A6.4 Design Folders

Design folders shall be provided and shall have indexes and sectional dividers. The folders shall include

- Pertinent correspondence arranged in chronological order by subject matter;
- Design calculations and backup information;
- Product data and letter confirming that entire installation as it pertains to each system has been installed to manufacturer's instructions;
- Any other pertinent information.

The Contractor shall provide two (2) sets of clearly marked reports and other documentation including the following:

- Test results, and quality control reports;
- All geotechnical, and other reports;
- All quality control folders showing test data and location;
- A certified Quality Management report;
- Environmental reports;
- A Construction Completion Report that includes:
    - Title Page;
    - Table of Contents;
    - Contractor’s Team;
    - Executive Summary;
    - Operations and Maintenance Manual
    - Hazard / Risk Assessment Report
    - Photograph index, including pre and post construction. May be submitted on CD or approved portable digital media.

PROPOSAL OFFER LETTER

Attention: Mike Squire, AScT
Project Engineer, Engineering Services
Regional District of Nanaimo
6300 Hammond Bay Road

Re: Request for Proposals:
Bay Avenue Pump Station Upgrade

The undersigned Proponent declares the following to be true:

1) We have obtained, carefully read and understood the entire RFP including any and all Addenda issued by the Regional District of Nanaimo;

2) We agree to all the terms and conditions of the RFP including any and all Addenda;

3) The enclosed Proposal is submitted in response to the RFP and contains confidential information about the competitive position of the Proponent, Prime Members and Prime Member Subcontractors including trade secrets and commercial, financial, labour relations and technical information;

4) The contact of the Proponent listed in the Proposal has full authority to represent the Proponent and its Team Members in any and all matters related to this Proposal, including but not limited to, providing clarifications, rectifications and additional information that may be requested in association with this Proposal;

5) We agree to be bound by all offers, statements and representations made in this Proposal including any and all clarifications, inquiries, rectifications and additional information that may be requested in association with this Proposal;

6) Our Team Members:

   a) have carefully read and understood the RFP (including any and all Addenda) and the nature and scope of their Work;

   b) are satisfied with respect to all conditions relating to, affecting, or that may affect the Work including, but not limited to, the Site (except for those conditions that could not reasonably have been foreseen based on the information provided in the RFP and their own investigations) and the labour, equipment, material and other resources that may be necessary to the performance of their Work; and

   c) have agreed to be bound by all offers, statements and representations made in this Proposal including any and all clarifications, inquiries, rectifications and additional information that may be requested in association with this Proposal;

7) Having full knowledge and understanding of the nature and scope of the Work and having fully investigated and satisfied ourselves of all conditions relating to, affecting, or that may affect the Work including, but not limited to, the Site (except for those conditions that could not reasonably have been foreseen based on the information provided in the RFP and our own investigations) and the labour, equipment, material and other resources that may be necessary to the performance of the Work; the Proponent, on behalf of itself and its Team Members, hereby submits an offer to:

   a) execute the Agreement with the Regional District of Nanaimo in the form substantially similar as set out in the RFP;

   b) complete the design and construction of the Work in a manner that will meet or exceed all requirements of the Agreement to the satisfaction of the Regional District of Nanaimo;

c) supply all labour, tools, materials and other resources as necessary to complete and perform the Work described in the Agreement, except such materials as may be expressly specified in the Agreement as to be furnished by the Regional District of Nanaimo; and

d) provide the performance securities and insurance in accordance with the Agreement for the Guaranteed Maximum Price in accordance with the RFP.

We acknowledge and agree that the Guaranteed Maximum Price includes full and final payment for any and all costs related to the completion of the Work in accordance with the Agreement, including but not limited to all fees, cash allowances, contingencies and taxes, excluding GST, except as otherwise expressly provided in the Agreement in the form set out in the RFP.

Capitalized terms used herein have the meaning given to them in the RFP.

_____ _____

(Name of Proponent) *(Date)*

_____

(Signature of Authorized Representative)

_____ _____

(Name of Authorized Representative) *(Title of Authorized Representative)*

SAMPLE CONSENT OF SURETY

DATE: _____ NO: _____

WHEREAS

_____

(the "Contractor") has submitted a written Proposal to the REGIONAL DISTRICT OF NANAIMO as Obligee dated _____ concerning the Bay Avenue Pump Station Upgrade and the condition of the obligation being such that the Contractor shall have its Proposal accepted within ninety (90) days from the Closing Time of the Request For Proposals, we, _____ (name of Surety) a corporation created and existing under the laws of Canada and duly authorized to transact the business of Suretyship in Canada as Surety, agree to issue for the Contractor, if the Contractor shall enter into a written Agreement (the Agreement) with the Regional District of Nanaimo, the following bonds:

1) A performance bond for (50%) of the Guaranteed Maximum Price that is consistent with the terms and conditions of the specimen bonds included in Schedule 1 of the Agreement as described in the Request for Proposals;
2) A labour and material bond for (50%) of the Guaranteed Maximum Price that is consistent with the terms and conditions of the specimen bonds included in Schedule 2 of the Agreement as described in the Request for Proposals.

This consent shall be null and void unless an application for the said bonds is made within fourteen (14) days following the award of the Agreement.

_____
(Name of Surety)

_____ *(Seal)*

_____
(Attorney-In-Fact)

SAMPLE INSURANCE UNDERTAKING

TO: Regional District of Nanaimo

We, the undersigned, as authorized representative on behalf of _____ (name of insurance company) do hereby undertake and agree to provide the insurance as specified in the Agreement forming a part of the Request for Proposals for the Bay Avenue Pump Station Upgrade if the Agreement is awarded to _____ (name of Contractor).

We further undertake to provide to the Regional District of Nanaimo, signed, certified copies of such policy(s) and attached endorsements within fourteen (14) days after the date the Agreement is awarded and prior to commencement of any Work on the Project.

Dated at: _____ this ____ day of _____, 20____

SIGNED:

_____
(Duly Authorized Representative of Insurance Company)

PROPOSAL FORM

Proponent's Name: _____

The Proponent hereby declares that it has carefully examined the Work Site, has read and examined the RFP and the Regional District of Nanaimo-supplied supporting documents and has conducted such other field investigations necessary in preparing the Proposal, and hereby offers to furnish all labour, technical and professional services, supervision, materials, tools, supplies and equipment, and to discharge all duties and obligations necessary to construct the Bay Avenue Pump station Upgrade all in accordance with the provisions stated in the RFP, for the prices shown in the Schedule of Prices attached hereto and incorporated by reference herein, including all taxes except GST, which aggregate to the:

GUARANTEED MAXIMUM PRICE OF

_____

written

DOLLARS ($_____)

numerical

(The above pricing in Canadian Dollars includes all taxes except GST)

The Proponent understands that if this Proposal is accepted by the Regional District of Nanaimo, it should execute the Agreement and deliver it, together with the Bonds and Insurance, to the Regional District of Nanaimo within fourteen (14) calendar days after having received the Agreement in executable form from the Regional District of Nanaimo. The Contractor will proceed with the Work upon receipt of the fully executed Agreement and written Notice to Proceed from the Regional District of Nanaimo.

Enclosed herewith is evidence of the good standing of the Proponent, whether it is a corporation, joint venture or partnership, and evidence that the person(s) signing this Proposal Form is/are authorized to bind the Proponent (and each member of any joint venture or partnership forming the Proponent) to this Proposal and to the Agreement resulting from this Proposal.

The Proponent acknowledges that it has received, read and understood the following Addenda to the Request for Proposals:

Addendum No.___	Date Received: _____	Addendum No.___	Date Received:_____
Addendum No.___	Date Received: _____	Addendum No.___	Date Received: _____

The Proponent hereby declares that the following design professionals and personnel will be engaged by the Proponent to design and supervise the Project and to provide necessary documents and letters of assurances to the authority having jurisdiction.

Engineer _____
(*Design Professional*)

Engineer _____
(*Design Professional*)

The Proponent certifies that it has examined and is fully familiar with all of the provisions of the Agreement; that it has carefully checked all the facts and figures and all statements made in this Proposal; that it has conducted such other field investigations which are prudent and reasonable in preparing this Proposal, including a thorough review of the RFP supporting documents; that it has satisfied itself with respect to the actual conditions of the Work Site and the nature and location of the Project, the general and local conditions to be encountered in the performing the Work, and other matters which in any way affect the Project or the Project Cost; and that it has notified the Regional District of Nanaimo of any deficiencies in or omissions from the RFP or other documents provided by the Regional District of Nanaimo and of any unusual Site conditions observed prior to the date hereof.

The Proponent represents that all of the statements made in response to this Proposal are true and correct as of the date hereof. The Proponent hereby agrees that the Regional District of Nanaimo will not be responsible for any errors or omissions in this Proposal.

The Proponent further certifies that it has not discussed or communicated with any of the other Proponents about the preparation of their Proposals and that its participation in this RFP process has been conducted without collusion or fraud.

NOTE: If the Proponent is a partnership or joint venture, give the full names of all of the partners or joint venturers. Evidence of the authority of the person signing on behalf of the Proponent, whether a corporation, partnership or joint venture shall be attached to the Proposal Form. Additionally, each partner or joint venturer of a Proponent will furnish a letter signed by an officer of the respective partnership or joint venture stating that the respective partnership or joint venture agrees to be held jointly and severally liable for any and all the duties and obligations of the Proponent under the RFP and any agreement arising therefrom.

The Proponent has executed this Proposal Form on the _____ day of _____.

By: _____
(Signature)

Name: _____

Company _____

Title: _____

By: _____
(Signature)

Name: _____

Company: _____

Title: _____

TABLE OF CONTENTS

SCHEDULES

THIS DB AGREEMENT made this **[ ]** day of **[ ]**, 20**[ ]**.

BETWEEN:

REGIONAL DISTRICT OF NANAIMO

("Corporation")

AND:

[ ]
("Contractor")

WHEREAS:

A. Pursuant to this DB Agreement the Corporation wishes to have the Bay Avenue Pump Station Upgrade designed, constructed and commissioned.

B. The Corporation has caused performance requirements, described in this DB Agreement, to be created for the design, construction and commissioning of this Work.

C. The Contractor wishes to design, construct and commission the Bay Avenue Pump Station Upgrade for the Corporation in accordance with the terms and conditions of this DB Agreement.

NOW THEREFORE in consideration of the promises exchanged in this DB Agreement, and in consideration of payment of $1.00 by each party to the other and other good and valuable consideration, (the receipt and sufficiency of which are acknowledged by the Corporation and the Contractor), the Corporation and the Contractor covenant and agree with each other as follows:

Appendix D – Sample Form of Agreement

1. DEFINITIONS AND INTERPRETATION

1.1 Definitions

The following definitions will apply to this DB Agreement, unless otherwise specified or the context otherwise requires:

"**approved**", "authorized", "directed", "ordered", "requested", "required", "sanctioned" and "satisfactory" shall, unless some other meaning is obvious from the context, respectively mean approved, authorized, directed, ordered, requested, required, or sanctioned by, or satisfactory to, the Corporation's Representative;

"**Change Order**" means a written directive from the Corporation's Representative changing the Work.

"**Commissioning Agent**" means the person appointed as such by the Corporation in respect of the Project;

"**Completion Date**" means **October 16, 2020**;

"**Contamination**" means any materials, substances or special (hazardous) wastes, the storage, manufacture, disposal, treatment, generation, use, transport, remediation, or release into the environment is now or hereafter prohibited, controlled, or regulated under applicable environmental laws, including but not limited to the *Environmental Assessment Act* (British Columbia), Contaminated Sites Regulation (British Columbia), *Environmental Management Act* (British Columbia), *Canadian Environmental Protection Act* (Canada), *Fisheries Act* (Canada), *Transportation of Dangerous Goods Act* (Canada) or *Canada Water Act* (Canada);

"**Construction Schedule**" means the schedule for construction of the Work set out on Schedule "A", as it may be up-dated from time to time as required by the DB Agreement;

"**Contract Documents**" means this DB Agreement, Schedules to the DB Agreement, the Drawings and Specifications, plus all other documents which are expressly made a part of the DB Agreement in a provision of the DB Agreement or Schedules;

"**Contractor's Consultant**" is the contractor's nominated prime consultant who is a registered architect, and is listed in the Contractor's Proposal, or such replacements to which the Corporation may from time to time agree in accordance with this DB Agreement, who is engaged by the Contractor to prepare the Drawings and Specifications and to otherwise consult to the Contractor on the Project;

"**Contractor's Proposal**" means the proposal submitted by the Contractor to the Corporation in response to the Request for Proposals together with all amendments and supplements to the Contractor's Proposal;

"**Contractor's Representative**" means the representative of the Contractor designated under this DB Agreement;

"**Corporation**" means Regional District of Nanaimo;

"**Corporation's Representative**" means the representative of the Corporation designated under this DB Agreement;

"**Day**" means a business day and excludes Saturdays, Sundays and statutory holidays;

"**DB Agreement**" means this Design-Build Agreement including the Schedules and attachments to this DB Agreement, as amended, supplemented and restated from time to time by agreement in writing signed by the parties to this DB Agreement;

"**DB Agreement Price**" means the sum specified in Section 4.5;

"**Design**" means the design for the Work, including that set out in the Drawings and Specifications;

"**Drawings**" means all construction drawings for the Work that are prepared by or for the Contractor as required by this DB Agreement and accepted by the Corporation;

"**Geotechnical Reports**" means the reports included as Reference Documents;

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

"**Heritage Object**" means an object as defined in the *Heritage Conservation Act* (British Columbia);

"**Land**" or "Lands" means the parcels of land located in the City of Parksville on which the Project will be constructed.

"**Laws**" means any and all statutes, regulations, laws, court orders, judgment, codes, standards, policies, or specifications issued by an authority having jurisdiction applicable to the Project, the Contractor, the Work or the Work Site, or the use of all or part thereof;

"**Month**" means a calendar month;

"**Municipality**" means the City of Parksville;

"**Notice to Proceed**" means the written notice from the Corporation to the Contractor to proceed with the Work;

"**Other Contractor**" means any person employed by or having a separate contract directly or indirectly with the Corporation for work related to the Project, but excluding:

(1) Consultants employed by the Corporation, for work related to the Project; and

(2) The Work required to be performed by the Contractor under this DB Agreement;

"**Project**" means the project being undertaken by the Corporation for which the Work is required;

"**Quality Control Plan**" means the plan prepared by the Contractor for quality control with respect to the Work as required by this DB Agreement;

"**Schedules**" means the schedules "A" to "E" attached to this DB Agreement;

"**Schedule of Prices**" means the schedule of prices attached as Schedule I;

"**Specifications**" means the construction specifications that are prepared for the Work by or for the Contractor and that are accepted by the Corporation under this DB Agreement;

"Reference Documents" means the information provided by the Regional District of Nanaimo in Appendix E of the RFP.

"**Request for Proposals**" and "**RFP**" both mean the request for proposals consisting of the items listed in the Table of Contents in respect of the Project issued by the Corporation on **October 11, 2018** together with all amendments, supplements and addenda thereto;

"**Standards**" means the compendium of requirements for Design, Specifications, and Reference Documents set out or cited in the DB Agreement;

"**Subcontractor**" means a person having a contract with the Contractor, including the Contractor's Consultant, to perform a part or parts of the Work or to supply products or materials for the Work;

"**Substantial Performance**" means the time when:

(1) The Work is ready for use or is being used for the purpose intended.

"**Total Completion**" means total completion of the Work such that all of the Work is satisfactorily complete and the Project has been commissioned and is ready for use or is actually being used for the purpose intended, all as determined by the Corporation's Representative in accordance with this DB Agreement;

"**Work**" means the provision of all professional, technical, skilled and unskilled labour, services, material, equipment including without limitation, all Design, construction, and any action necessary for the Contractor to complete and perform its obligations in accordance with the terms and conditions of this DB Agreement;

"**Work Site**" means that part of place where the Bay Avenue Pump Station Upgrade is to be constructed.

1.2 Interpretation

In the Contract Documents:

a) words in the singular include the plural and vice versa, and words in one gender include all genders;

b) the table of contents, and headings of sections and schedules, are for convenience of reference only and do not form part of the Contract Documents and shall not affect the construction or interpretation of the Contract Documents;

c) the words "section" and "subsection" mean and refer to the specified section or subsection of the relevant Contract Documents unless reference is made to another agreement;

d) unless specified otherwise, a reference in the Contract Documents to an agreement (including this DB Agreement), document, protocol, specification, enactment or standard at any time refers (subject to all relevant approvals) to that agreement, document, protocol, specification, enactment or standard as amended, supplemented, restated, substituted, replaced, novated or assigned at such time, and any successor thereto;

e) the words "include", "includes" or "including" mean "include without limitation", "includes without limitation" and "including without limitation" respectively, and the words following "include", "includes" or "including" shall not be considered to set forth an exhaustive list;

f) unless otherwise defined in the Contract Documents, words and abbreviations used in the Contract Documents which have well known trade meanings shall be interpreted to have those trade meanings;

g) a period of days referred to in the Contract Documents shall be deemed to begin on the first day after the event that began the period and to end at 5:00 pm on the last day of the period;

h) all references to currency refer to lawful money of Canada (unless expressed to be in some other currency) and all amounts to be calculated or paid pursuant to the Contract Documents are to be calculated and paid in lawful money of Canada;

i) references to time of day or the date mean the local time or date in Nanaimo, British Columbia;

j) unless reference is made to a statute in effect at a particular time, each reference to a statute is deemed to be a reference to that statute and any successor statute, and to any regulations and rules made under that statute and any successor statute, each as amended or re-enacted from time to time;

k) each reference to a ministry, office, agency or similar body of any governmental authority is deemed to be a reference to any successor or replacement in function of such ministry, office, agency or similar body;

1.3 Priority

If there is inconsistency or conflict between the provisions of the Contract Documents, then the provisions shall take precedence and govern in the following order:

a) the DB Agreement and any written amendments to the DB Agreement, shall have precedence over all other provisions;

b) Performance Requirements;

c) the Specifications shall govern over Drawings and plans;

d) the Drawings;

   i dimensions shown in figures on a plan shall govern where they differ from dimensions scaled from the same plan; and

   ii plans of larger scale govern over those of smaller scale; and,

e) the other Schedules.

Later dates shall take precedence and govern within each of the above categories of Contract Documents.

1.4 Schedules and Reference Documents

The Schedules to this DB Agreement are incorporated into and form part of this DB Agreement.

The Reference Documents are attached for reference only and do not form part of the DB Agreement.

2. CONTRACTOR'S REPRESENTATIONS AND WARRANTIES

The Contractor represents and warrants to the Corporation and acknowledges that the Corporation is relying upon such representations and warranties in entering into the DB Agreement, that at the date of this DB Agreement:

a) the Contractor is a corporation duly incorporated and validly existing under the laws of British Columbia and is legally entitled to carry on business in British Columbia;

b) the Contractor has the power, capacity and authority to enter into this DB Agreement and to observe, perform and comply with every term and condition in this DB Agreement;

c) all necessary proceedings and actions have been taken to authorize the execution and delivery of this DB Agreement by the Contractor;

d) this DB Agreement has been properly executed by an authorized signatory of the Contractor and constitutes the valid and legally binding obligations of the Contractor and is enforceable against the Contractor in accordance with its terms;

e) all statements, representations and any information, whether oral or written, made, furnished, or given to the Corporation by or on behalf of the Contractor, including for certainty, by the Contractor's Representative and by the directors, officers and agents, or any of them, of the Contractor in connection with this DB Agreement is materially correct and accurate;

f) the Contractor 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 DB Agreement;

g) there is no bona fide proceeding pending or threatened against the Contractor, which would, if successful, materially adversely affect the ability of the Contractor to fulfill its obligations under this DB Agreement;

h) the Contractor has filed all tax, corporate information, and other returns required to be filed by all 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 Contractor under those Laws as of the date of this DB Agreement;

i) the Contractor is not in breach of any Laws that are material to performance of the Contractor's obligations under this DB Agreement;

j) the Contractor holds all permits, licences, consents, and authorities issued by any level of government or any agency of government, that are required by Laws to conduct its business;

k) the Contractor will pay punctually as they become due, all accounts, expenses, wages, salaries, taxes, rates, fees, and assessments required to be paid by it on any of its undertakings and will do so in respect of the Work and fulfillment of its obligations under the DB Agreement;

l) the Contractor has had sufficient time, opportunity and resources to investigate, assess and analyze and has investigated, assessed, analyzed 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 but not limited to, the Land, and Work Site conditions, and the labour, equipment, material, personnel and other resources that may be necessary for the performance of the Work in a manner that will meet or exceed all requirements of the DB Agreement, to the satisfaction of the Corporation;

m) the Contractor's investigations, assessments and analyses, including of the Land, and Work 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, assessments and analyses, including any conclusions as to the effect, if any, on the Design, construction, Substantial Performance and DB Agreement Price, (or any of them) are based on the Contractor's own experience, investigations, examination, knowledge, information, interpretation, assessment, analysis, and judgment and not upon any statement, representation, data or information , whether oral or written, made, produced or provided by, through or on behalf of the Corporation or its consultants or advisors;

n) with the exception of the factual accuracy of geotechnical data and of other facts contained in Geotechnical Reports, and without limiting the foregoing the Contractor has not relied upon the accuracy, sufficiency, completeness, relevance, or suitability of any statement, representation, or information, whether oral or written, made, produced or provided by, through, or on behalf of the Corporation, its consultants or advisors;

The Contractor acknowledges and agrees that:

a) notwithstanding Section 2 (n), the Corporation is not in any way responsible or liable for the accuracy, sufficiency, completeness, relevance, suitability or interpretation of any information whether oral or written, made, produced or provided by, through or on behalf of the Corporation, its consultants or advisors regarding Land or Work Site conditions, such conditions including for greater certainty, geotechnical conditions, subsurface conditions, bearing pressure, settlement characteristics, and nature and consistency of soil encountered on the Land or Work Site;

o) the Contractor is not entitled to any adjustment in the Construction Schedule or the DB Agreement Price, or to any other remuneration, compensation or damages whatsoever, in any way connected with the Land or Work Site conditions, such conditions including for greater

certainty, geotechnical conditions, subsurface conditions, bearing pressure, settlement characteristics, and nature and consistency of soil encountered on the Land or Work Site;

p) the investigations made by the Corporation of the conditions of the Land or Work Site including subsurface conditions are of a preliminary nature and are made for the purpose of study and preliminary design and may not be sufficient or representative of anticipated or actual Land or Work Site conditions;

q) it accepts all risk of completing the Project and Work in a manner that will meet or exceed, in the sole opinion of the Corporation, all the terms and conditions of this DB Agreement including the Performance Requirements;

r) it has the responsibility for informing itself of all aspects of the Project and all information necessary to perform the Work; and

s) it will carry out the Work substantially in accordance with the representations, terms and covenants contained in this DB Agreement**.**

All representations and warranties and all documents delivered by or on behalf of the Contractor are material and the Corporation has relied on them, notwithstanding any prior or subsequent investigation by the Corporation.

The Contractor's representations and warranties are continuing representations, warranties and agreements and continue in force and survive the date of Total Completion or earlier termination of this DB Agreement, notwithstanding the fulfillment by the Contractor of any of its obligations under this DB Agreement or payment by the Corporation to the Contractor of any of the monies due to the Contractor pursuant to this DB Agreement.

3. CORPORATION'S REPRESENTATIVE

3.1 Corporation's Representative Authority

The Corporation's Representative shall have the authority to represent the Corporation to the extent provided by the Contract Documents, or otherwise as approved by the Corporation in writing and delivered to the Contractor.

3.2 Contractor's Communication with the Corporation

The Contractor shall direct all communication relating to this DB Agreement from the Contractor to the Corporation by way of the Corporation's Representative, and the Contractor specifically agrees:

a) no communication to or from any other representative of the Corporation, or any other person will be accepted as notice or communication under this DB Agreement; and

b) the Contractor will not at any time attempt to contract or make any representation to any representative of the Corporation, the Regional District of Nanaimo, or any other governmental body with respect to any matter or issue that arises, or may arise, under this DB Agreement, or in relation to the Project.

4. PROSECUTION OF THE WORK

4.1 Commencement of Work

The Contractor shall commence the Work in accordance with the Construction Schedule, upon receipt of the Notice to Proceed.

4.2 Time for Total Completion

The Contractor shall thereafter continuously and diligently perform the Work in accordance with the approved Construction Schedule, as may be updated in accordance with the requirements of this DB Agreement, and in accordance with the other provisions of this DB Agreement so that the Work has reached Total Completion on or before the Completion Date, subject to time extensions permitted by the DB Agreement.

4.3 Scope of Work

The Contractor shall perform and provide all design, labour, services and other acts, and provide all supplies, materials, construction equipment and machinery required for performance of the Work in accordance with the provisions of the DB Agreement.

4.4 Standard of Work

The Contractor shall:

a) comply with all Laws, and perform the Work in accordance with all Laws;

b) obtain at the Contractor's expense, all licenses, permits and approvals (except those specified herein as required to be obtained or paid for by the Corporation) required by Laws;

c) ensure that the Work conforms to all Laws;

d) perform the Work to the standards of the best practices followed by contractors, professions, manufacturers and trades, who are experienced in work in British Columbia similar to the Work. The DB Agreement will ensure that all standards of the Work, including Design and construction, meet or exceed by the requirements of industry, Laws and Standards; and

4.5 DB Agreement Price

The Corporation agrees to pay the sum of **[ ]** in Canadian dollars plus GST to the Contractor as the complete and total payment for satisfactory performance of the Work to Total Completion and for satisfactory performance of all of the Contractor's other obligations under this DB Agreement.

4.6 Construction Schedule and Reporting Requirements

The Contractor shall:

a) undertake the Work in accordance with the Construction Schedule; and

b) monthly, together with its monthly application for payment, provide either:

i written confirmation that the Construction Schedule is valid and current; or

ii a written up-date of the Construction Schedule showing any adjustments as permitted by the DB Agreement, for review by the Corporation's Representative;

and no payment shall be owing by the Corporation to the Contractor before submission of the above.

5. DESIGN SUBMITTAL AND REVIEW

5.1 Preliminary Design and Specifications

The Contractor will undertake the Design, including preparation of the Drawings and Specifications, based upon the Contractor's Proposal, and compatible with and in conformity with the Performance Requirements, unless otherwise agreed or required by the Corporation.

5.2 Design Review Process

When the Design is 30% complete and ready for construction, and when the Design is 90% complete and ready for construction, the Contractor shall submit four copies (in paper and PDF format) of the Design, including Drawings and Specifications, to the Corporation's Representative.

Within **10 days** of receipt, the Corporation's Representative shall review the portion of the Design submitted by the Contractor and the Corporation's Representative shall give notice to the Contractor that the submitted Design and design information:

a) appears to be in conformance with the intended purpose of the Project as set out in this DB Agreement;

b) appears to contain deficiencies or inconsistencies; or

c) is, in the opinion of the Corporation's Representative, acting reasonably, insufficient for the purposes of a design review.

If the Corporation's Representative gives notice to the Contractor that the information submitted for design review appears to contain deficiencies or inconsistencies, the Contractor shall:

a) provide further information necessary to demonstrate to the satisfaction of the Corporation's Representative that the Design does not contain deficiencies or inconsistencies; or

d) revise the Design, taking into consideration the apparent deficiencies or inconsistencies identified by the Corporation's Representative, and re-submit the revised Design to the Corporation's Representative for design review in accordance with Section 5.2, and

the Corporation's Representative shall have not less than 10 days to complete the design review after receipt of the further information and supporting calculations or revised Design.

5.3 Notice

If the Corporation's Representative gives notice to the Contractor in accordance with Section 5.2 (c) that the information submitted for design review is, in the opinion of the Corporation's Representative, insufficient for the purposes of a design review, the Contractor shall:

a) provide notice to the Corporation's Representative demonstrating, to the satisfaction of the Corporation's Representative, acting reasonably, how the previously submitted information is sufficient for the purposes of a design review; or

a) submit sufficient further Design information and supporting calculations as necessary for design review in accordance with Section 5.2.

The Corporation's Representative shall have 10 days to respond to any notice submitted in accordance with Section 5.3 (a) by notifying the Contractor that:

a) the Corporation's Representative accepts the notice as correct and the previously submitted Design and design information appears to be in conformance with the intended purpose of the Project as set out in this DB Agreement;

b) the Corporation's Representative accepts the notice as correct and the previously submitted Design, however, the design information appears to contain deficiencies or inconsistencies; or

c) the Corporation's Representative does not accept the notice as correct.

The Corporation's Representative shall have not less than 10 days to complete the design review after receipt of the further Design information and supporting calculations submitted in accordance with Section 5.3 (b).

5.4 Design Obligations

Any audits, reviews, inspections, approvals, acceptances, consents or design reviews by the Corporation's Representative in connection with any of the Work shall be for the limited purposes of enabling the Corporation's Representative to review the conformance of the Work, and the performance of this DB Agreement by the Contractor, with this DB Agreement, and shall not under any circumstances relieve or excuse the Contractor from all of its obligations to ensure complete compliance with this DB Agreement, and, without limitation, the requirement that the Project meet the standards of quality and safety as specified in this DB Agreement.

Approval, review or acceptance by the Corporation's Representative, or the Corporation of any aspect of the Work does not relieve the Contractor of its obligations to perform all Work in accordance with this DB Agreement.

5.5 Preparation by Consultant and Professional Certification

The Contractor shall cause the Design to be prepared by, or under the direction of, the Contractor's Consultant. All portions and aspects of the Drawings and Specifications submitted by the Contractor to the Corporation or the Corporation's Representative shall:

a) be prepared under the direction of, and sealed under the professional seal of a Professional Engineer registered in the Province of British Columbia or, where appropriate, under the professional seal of a Registered Architect registered in the Province of British Columbia; and

b) be certified by a Professional Engineer, or, where appropriate, by a Registered Architect under his or her professional seal, that:

   i the Drawings and Specifications implement the Performance Requirements and otherwise conform to them;

   ii the Drawings and Specifications have been prepared in accordance with, and comply with the DB Agreement requirements, including all Standards.

5.6 Professional Liability Insurance

All Professional Engineers engaged by the Contractor or the Contractor's Consultant to prepare portions or aspects of the Design shall carry professional liability insurance.

The Contractor shall obtain and maintain, at its own expense, professional liability (errors and omissions) insurance coverage to a limit of not less than $1,000,000 on a claims-made basis. Such coverage shall be maintained for a period of one year subsequent to Total Completion.

5.7 Contractor's Design Responsibility

The Contractor shall:

a) prepare the Design and shall be responsible for the means, methods, techniques, sequences and procedures necessary to properly complete the Design in accordance with the current Construction Schedule provided by the Contractor;

b) ensure that the Work, including the Design, is appropriate and complies with the Performance Requirements such that the Work is fit and suitable for the intended purpose of the Project, as set out in this DB Agreement;

c) have the non-delegable duty and obligation to the Corporation to complete the Work, including the Design, in a manner that is appropriate and complies with or exceeds the Performance Requirements such that the Work is fit and suitable for the intended purpose of the Project, as set out in this DB Agreement;

d) make any revisions to the Design as may reasonably be required from time to time by the Corporation resulting from a Change Order or amended Construction Schedule.

e) be entirely and completely responsible for all aspects of Design. Nothing in this DB Agreement makes the Corporation or the Corporation's Representative responsible in any way whatsoever for any aspect of the Work, including the Design. For certainty, the Contractor shall, notwithstanding any review, audit, approval, acceptance, monitoring or commentary by the Corporation, the Corporation's Representative with respect to any aspect of the Design as described above, remain liable and responsible for the appropriateness of the Design.

6. CONTROL AND SUPERVISION OF THE WORK

6.1 Standard of Control

The Contractor shall have control of the Work and shall effectively direct and supervise the Work, including Subcontractors, and provide project management and construction management, using its best skill and attention and in accordance with standards as described and called for in this DB Agreement.

The Contractor shall be liable and responsible for all Design and all construction and commissioning means, methods, techniques, sequences and procedures with respect to the Work, and for coordinating all parts of the Work under this DB Agreement in accordance with the current Construction Schedule and for coordinating the Work with work performed by Other Contractors.

6.2 Superintendent

The Contractor shall employ a competent construction superintendent, and necessary assistants, at the Work Site at all times during the progress of the Work at the Work Site.

The superintendent, and all assistants, shall be as identified in the Contractor's Proposal or otherwise as satisfactory to the Corporation and they shall not be changed except for good reason and then only after consultation with and agreement by the Corporation.

The Contractor's superintendent and assistants shall represent the Contractor at the Work Site and directions given to them by the Corporation's Representative shall be deemed to have been given to the Contractor and the Contractor's Representative.

The Contractor shall at all times maintain good order and discipline among its Subcontractors, employees and agents engaged on the Work and shall not employ on the Work any unfit person nor anyone not skilled in the task assigned to him or her.

6.3 Work Site Conditions

The Contractor acknowledges and agrees that:

a) the Contractor has had the opportunity to undertake examinations or subsurface investigations of the Land and Work Site, and the Geotechnical Reports of geotechnical conditions at the Work Site, in order to satisfy itself as to the Land and Work Site conditions, including subsurface conditions, bearing pressure, settlement characteristics, and nature and consistency of soil and the impact these could have on any or all of the Design, Completion Date or DB Agreement Price;

b) the Corporation, its advisors, and the Corporation's Representative are not in any way responsible or liable for any Land or Work Site conditions actually encountered, including subsurface conditions, bearing pressure, settlement characteristics, and nature and consistency of soil, and the Contractor has made its own determinations of such conditions and their effect, if any, on the Design, construction, Completion Date, and DB Agreement Price; and

c) the Contractor is not entitled to any adjustment in the Completion Date or DB Agreement Price, or to any other remuneration or damages whatsoever, in any way connected with Land or Work Site conditions, including subsurface conditions, bearing pressure, settlement characteristics, and nature and consistency of soil which would or should have been apparent to a contractor experienced in work similar to the Work, or projects similar to the Project, upon review of the Land or Work Site and any available reports and information including the Geotechnical Reports.

7. TIMELINESS OF THE WORK AND DELAYS

7.1 Time of Essence

Time is of the essence of this DB Agreement and the Contractor shall complete the Work by the Completion Date and in accordance with the Construction Schedule, as may be adjusted in accordance with the provisions of the Contract Documents.

7.2 Delay Due to Owner

If the Contractor is delayed in the performance of the Work by reason of:

a) any default by the Corporation in giving an acceptance or other time-sensitive requirement to be exercised by the Corporation or the Corporation's Representative under this DB Agreement;

b) any act of the Corporation or the Corporation's Representative which causes a delay in the Work;

c) any deficiency in the work of Other Contractors,

the Completion Date and the DB Agreement Price shall be adjusted by such reasonable time and amount as may be agreed in writing by the Contractor and the Corporation. If the parties are unable to agree on the amount of any such adjustment, the dispute resolution procedures included in the DB Agreement shall apply.

7.3 Delay Due to Circumstances beyond Contractor's Control

If the Contractor is delayed in the performance of the Work by labour disputes, strikes, lock-outs (including lock-outs decreed or recommended for its members by a recognized contractor's association of which the Contractor is a member), fire, unusual delay by common carriers, unavoidable casualties, an order issued by any court or public authority having jurisdiction (providing that such order was not issued as the result of any act, omission or fault of the Contractor**,** its employees, servants, contractors or agents) or, by any cause whatsoever beyond the Contractor's control (except that the Contractor's financial circumstances shall not be considered beyond the Contractor's control), then the Completion Date shall be extended for such reasonable time as may be agreed in writing by the Corporation and the Contractor.

In such event the Corporation shall not owe the Contractor any additional payment on account of such delay, and for certainty the Contractor shall bear any and all additional costs arising from such delay.

If the parties are unable to agree on the amount of any such time extension, the dispute resolution procedures included in this DB Agreement shall apply.

7.4 Notice of Delay

The Contractor shall give the Corporation's Representative written notice of delay in the performance of the Work within 5 Days of the date the Contractor first becomes aware of the circumstances which give rise to the delay. The written notice must provide particulars of the cause of any delay, the expected length of any delay and the steps the Contractor intends to take to mitigate or overcome the delay.

No extension of the Completion Date, or other adjustment of the Construction Schedule, or claim for any adjustment of the DB Agreement Price will be permitted unless the Contractor gives the required written notice within the required time and provide the required information.

In the case of a continuing, single cause of delay, only one notice is necessary.

7.5 Contamination

If the Contractor, after commencing the Work, encounters or has reason to believe in the existence of any Contamination in, on or under the Work Site, the Contractor shall:

a) immediately take all reasonable steps, including suspension or stoppage of the Work, as are necessary and appropriate to minimize the risk of any person or property suffering injury, sickness, death, damage or destruction as a result of exposure to, or the presence of, such Contamination;

b) report any known release of a hazardous substance, or the discovery of the existence of any Contamination, to the Corporation's Representative within 24 hours of such knowledge or discovery, and to any relevant governmental authorities in compliance with all applicable Laws, and thereafter give a comprehensive written report to the Corporation's Representative describing all remedial measures to be taken;

c) otherwise act in compliance with all applicable Laws in respect of such Contamination; and

d) remediate any Contamination in accordance with all applicable Laws.

If the Contractor is delayed in performing the Work by reason of encountering Contamination in, on or under the Work Site (except any Contamination brought on to the Work Site by the Contractor, or any person for whom the Contractor is responsible), then the events shall be deemed to be a delay caused by the Corporation and the provisions of Section 7.3 shall apply.

7.6 Heritage Objects

If the Contractor, after commencing the Work, encounters or has reason to believe in the existence of any Heritage Object in, on or under the Work Site, the Contractor shall:

a) immediately take all reasonable steps, including suspension or stoppage of the Work, as are necessary to minimize damage to such Heritage Object;

a) report any finding of such Heritage Object to the Corporation's Representative within 24 hours of such finding, and to any relevant governmental authorities in compliance with all applicable Laws, and thereafter give a comprehensive written report to the Corporation's Representative describing all measures to be taken by the Contractor in respect of such Heritage Object; and

b) otherwise act in compliance with all applicable Laws in respect of such Heritage Object.

c) If the Contractor is delayed in performing the Work by reason of encountering any Heritage Objects in, on or under the Work Site, then the events shall be deemed to be a delay caused by the Corporation, and the provisions of Section 7.3 shall apply.

8. CONCEALED OR UNKNOWN CONDITIONS

If the Owner or the Design-Builder discovers conditions at the Place of the Work which are:

a) subsurface or otherwise concealed physical conditions which existed before the commencement of the Contract and which differ materially from those indicated in the Contract Documents; or

b) physical conditions, other than conditions due to weather, that are of a nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then the observing party shall give Notice in Writing to the other party of such conditions before they are disturbed and in no event later than 5 Working Days after first observance of the conditions.

The Owner will promptly investigate such conditions. If the conditions differ materially from the Contract Documents and this would cause an increase or decrease in the Design-Builder's cost or time to perform the Design Services or the Work, the Owner will issue appropriate instructions for a change in the Contract as a Change Order.

If the Owner is of the opinion that the conditions at the Place of the Work are not materially different or that no change in the Contract Price or the Contract Time is justified, the Owner will advise the Design-Builder in writing of the grounds on which this opinion is based.

The Design-Builder shall not be entitled to an adjustment in the Contract Price or the Contract Time if such conditions were reasonably apparent during the request for proposal period or bidding period and prior to proposal closing or bid closing.

9. REJECTED WORK

9.1 Removal of Defective Work

The Contractor shall, from time to time and at its own expense, promptly and properly remove, replace and re-execute any and all defective Work, whether the result of poor design, poor workmanship, use of defective materials or damage through carelessness or other acts, and whether incorporated in the Work or not, which has been rejected by the Corporation's Representative as failing to conform to the requirements of this DB Agreement.

Any work of Other Contractors destroyed or damaged by such removals or replacements shall be made good by the Contractor promptly at the Contractor's expense.

If the Contractor does not remove such defective materials or work, or make good any resulting repairs, within the time as determined by the Corporation's Representative acting reasonably and set out in a written notice to the Contractor from the Corporation's Representative, the Corporation may remove them and store materials, or make good the required repairs, at the expense of the Contractor, and deduct such costs from any amounts owing by the Corporation to the Contractor.

If in the opinion of the Corporation it is not expedient to correct defective work, as described above, the Corporation may deduct from the DB Agreement Price the difference in value between non-conforming work and that called for by this DB Agreement, in an amount as determined initially by the Corporation's Representative acting reasonably and agreed to by the Contractor, and failing agreement as determined under the dispute resolution procedures included in this DB Agreement.

10. SUSPENSION OF WORK OR TERMINATION OF CONTRACT FOR NO FAULT

10.1 Owner May Suspend or Terminate

The Corporation may suspend performance of the Work or terminate this DB Agreement, by giving written notice to that effect to the Contractor, and the suspension or termination is effective in the manner specified in the notice, if, in the opinion of the Corporation:

a) a suspension or termination of the Work is necessary because of an emergency, to ensure the safety or life of others, or of the Work or neighboring property;

b) a suspension or termination of the Work is required by an order of any court or governmental authority having jurisdiction; or

c) a suspension or termination of the Work is in the sole judgment of the Corporation required to protect the interests of the Corporation.

The provisions of this Section do not apply if the suspension or termination is related in any way to a wrongful act, omission, breach or fault of the Contractor or of the Corporation or of anyone employed by them or for whom they are responsible in law.

10.2 Contractor's Response

The Contractor, upon receiving written notice of suspension or termination from the Corporation in accordance with Section 9.1, shall immediately suspend all operations except those which, in the Contractor's reasonable opinion and agreed to by the Corporation, are necessary for the safety of personnel or for the care and preservation of the Work, materials and plant.

Subject to any directions in the notice of suspension or termination, the Contractor shall discontinue ordering materials, shall 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, as agreed to by the Corporation), and the Contractor shall make every reasonable effort in the event of termination to cancel existing subcontracts and orders on the best terms available, and at minimum cost.

In the case of suspension of the DB Agreement, during the period of suspension the Contractor shall not remove from the Work Site any of the Work, material or equipment, without the prior written consent of the Corporation's Representative.

10.3 Consequences of Suspension

If the period of suspension is 40 Days or less, the Contractor, upon the expiration of the period of suspension by written notice from the Corporation's Representative, shall resume the performance of the Work and the Contractor shall be paid for all reasonable and substantiated costs reasonably incurred by the Contractor in complying with suspension and the Completion Date and Construction Schedule shall be extended by the period of suspension.

If the period of suspension is more than 40 Days:

a) the Contractor or the Corporation, may, terminate this DB Agreement by written notice to the other party, or

b) the Corporation and the Contractor may agree to continue with and complete the Work, in which case the Contractor shall resume operations and complete the performance of the Work in accordance with any terms and conditions agreed upon by the Corporation and the Contractor.

If the period of suspension continues more than 120 Days without the Corporation and the Contractor having agreed on the terms and conditions under which the Contractor will continue with and complete the Work, this DB Agreement shall be deemed to be terminated.

10.4 Termination

If the DB Agreement is terminated pursuant to Section 9.1, the Corporation shall pay the Contractor its reasonable and substantiated costs for all Work performed, and other such damages as the Contractor may have sustained as a result of the termination of this Contract. Notwithstanding the foregoing, the Corporation will not be obligated to pay the Contractor for economic loss or loss of profits, or anticipated profits in connection with this DB Agreement or its termination.

10.5 Continuing Obligations

The Contractor's obligations as to quality, correction, indemnification and warranty will continue in force after suspension or termination under Section 9.1 in respect of all Work performed before the effective date of the suspension or termination.

11. CONTRACTOR'S DEFAULTS

11.1 Causes for Immediate Termination

In the event of any of the following:

a) the Contractor becomes bankrupt or insolvent, makes a general assignment for the benefit of creditors, or a receiver is appointed; or

b) the Contractor delivers a statutory declaration in support of application for a progress payment under the DB Agreement that the Corporation's Representative, acting reasonably, determines was false or was materially inaccurate; or

c) the Contractor has made an assignment of the DB Agreement without the required consent of the Corporation;

then the Corporation may, upon delivery of written notice of termination from the Corporation to the Contractor, terminate the Contract.

11.2 Notice of Default

If the Contractor:

a) abandons the Work for 5 consecutive Days without the consent of the Corporation; or

b) fails or refuses to deliver an up-date to the Construction Schedule as required by the DB Agreement, or causes or permits a material deviation from the approved Construction Schedule and fails or refuses to take steps to bring the Work back in compliance with the approved Construction Schedule; or

c) has, in the reasonable opinion of the Corporation, persistently failed to observe, or has persistently breached, a material provision of this DB Agreement;

then the Corporation may deliver to the Contractor written notice of default, giving the Contractor 5 Days to remedy such default.

If the default cannot reasonably be corrected within 5 Days of notice, the Contractor shall be considered to be in compliance with the DB Agreement if the Contractor:

a) commences to remedy the default within 5 Days of notice;

d) provides the Corporation with a schedule for remedy of the default acceptable to the Corporation's Representative; and

e) completes the remedy in accordance with such schedule.

During correction of any default, the Contractor shall continue with the Work to the extent that it is able to do so, unless the Corporation directs, in writing, that the Work be stopped. The Corporation has complete discretion to direct that the Work be stopped. In directing that Work be stopped the Corporation may consider any factor it considers relevant, including whether the safety of any worker or integrity of the Work is at risk, whether the Contractor has failed to comply with any Laws, including health and safety requirements, or whether the Contractor has failed to adhere to safe work practices and procedures.

If the Contractor fails to remedy the default within the 5 Days, or the approved schedule for remedy, then without prejudice to any other right or remedy available to the Corporation, the Corporation may at the Corporation's election, upon further written notice from the Corporation's Representative:

a) terminate the DB Agreement;

f) delete all or any part of the Work; or

g) make any other arrangement to remedy the default which the Corporation considers appropriate.

11.3 Consequences of Compliance

If after receiving a notice of default from the Corporation's Representative the Contractor corrects the default, the Corporation may not terminate the Contract for reason of that default, but the Contractor shall pay the Corporation for the Corporation's reasonable and substantiated costs of enforcing this provision of the DB Agreement, including the costs of the Corporation's staff, overhead costs and costs, if any, of consultants and contractors retained by the Corporation, and for any other costs incurred as a result of the default, including delay, suffered by the Corporation. In such event the Corporation shall deliver to the Contractor a substantiated record of all such costs claimed, and then the Corporation shall be entitled to set off the total of such costs from any payment the

Corporation owes to the Contractor, and if such total costs incurred by the Corporation exceed the amount of payments owing by the Corporation to the Contractor, then such shortfall shall be immediately due and owing by the Contractor to the Corporation.

11.4 Deletion of Work As Result of Default

If the Contractor is in default pursuant to Section 10.2, then:

a) the Corporation shall be entitled to take over such portion of Work to complete it as the Corporation may decide, including engaging Other Contractors to complete such Work; and

b) the Contractor shall not be entitled to any further payment in respect of that Work, including payments then due and payable but not paid, until such Work is complete, at which time the Corporation shall, without prejudice to any other right or remedy available to the Corporation, be entitled to set off from any payments owing by the Corporation to the Contractor an amount equal to all costs, losses and damages suffered by the Corporation by reason of the default of the Contractor and by reason of non-completion of that Work by the Contractor, including the costs of the Corporation's staff, overhead costs and costs, if any, of consultants and contractors retained by the Corporation, and if such total costs incurred by the Corporation exceed the amount of payments owing by the Corporation to the Contractor, then such shortfall shall be immediately due and owing by the Contractor to the Corporation.

The taking of all or any part of the Work out of the Contractor's hands does not relieve or discharge the Contractor from any obligations under the DB Agreement or imposed upon it by any Standards, except the obligation to perform the Work so taken out of its hands. For certainty, if the deletion of Work relates to the construction of a portion of the Work for which the Contractor has provided the Drawings and/or Specifications, then the Contractor shall remain responsible for design described in such Drawings and/or Specifications even though the construction of such portion is undertaken by the Corporation or by Other Contractors.

11.5 Termination for Default

If the Corporation terminates the DB Agreement pursuant to the terms of this DB Agreement because of the Contractor's default, then the Corporation may, acting in its sole and unfettered discretion:

a) take possession of the Work Site, material and Work, and to utilize the Contractor's construction machinery and equipment at the Work Site (subject to the rights of third parties), and to complete the Work by whatever method it may deem expedient at the Contractor's expense; and

b) withhold any payments owing to the Contractor until the Work is finished; and

c) upon completion of the Work set off from any payments owing by the Corporation to the Contractor an amount equal to all costs, losses and damages suffered by the Corporation by reason of the default of the Contractor and by reason of non-completion of that Work by the Contractor, including the costs of the Corporation's staff, overhead costs and costs, if any, of consultants and contractors retained by the Corporation, and if such total costs incurred by the Corporation exceed the amount of payments owing by the Corporation to the Contractor, then such shortfall shall be immediately due and owing by the Contractor to the Corporation.

If the costs as described above of completing the Work is less than the unpaid balance of the DB Agreement Price, the Corporation shall pay the Contractor the difference, less a reasonable amount for fulfilment of the Contractor's warranty obligations under the DB Agreement, as determined by the Corporation, acting reasonably.

11.6 Right to Complete

If for any reason the Corporation terminates this DB Agreement pursuant to the Corporation's rights as provided by the DB Agreement before completion of the Work, or if the Corporation deletes a portion of the Work pursuant to the Corporation's rights under this DB Agreement, then without prejudice to any other remedy available to the Corporation, the Contractor will forthwith deliver to the Corporation all plans, Drawings, Specifications and other details as reasonably required for the completion of the construction of the Work and the Contractor will exercise any and all of its rights to obtain documents from third parties, including the Contractor's Consultant. The Corporation shall have the right to use such documents for the purposes of completing the Work and for the purposes of using, maintaining, repairing and operating the Project.

12. SEPARATE CONTRACTS WITH OTHER CONTRACTORS

The Corporation reserves the right to enter into separate contracts in connection with the Project with Other Contractors.

The Contractor shall:

a) co-ordinate the Work with that of Other Contractors and connect the Work with their work and shall ensure that the Design and Specifications enable that to be done without disruption to the Work or the work of Other Contractors; and

b) ensure that performance of the Work is carried out in accordance with the Construction Schedule so that Other Contractors are not delayed in their Work.

The Contractor shall promptly report in writing to the Corporation's Representative any apparent deficiencies in Other Contractors' work which could affect the Work as soon as they come to the Contractor's attention, in a timely way so as to avoid delays to the

Work. The Contractor shall not be entitled to any time extension for such delays which the Contractor could have avoided or mitigated by timely reporting.

13. ASSIGNMENT

The Contractor shall not assign this DB Agreement or any portion of it or allow the obligations of the Contractor under this DB Agreement to be performed by any other person without the prior written consent of the Corporation, which consent may be withheld in the Corporation's sole discretion.

14. SUBCONTRACTS

The Contractor shall preserve and protect the rights of the Corporation under the DB Agreement with respect to any Work to be performed by a Subcontractor, so that the subcontracting does not prejudice the Corporation's rights under this DB Agreement, and the Contractor shall be responsible to the Corporation for the performance of all its Subcontractors and shall require its Subcontractors to perform their work in accordance with the terms and conditions of this DB Agreement.

The Contractor shall be as fully responsible to the Corporation for acts and omissions of its Subcontractors and of persons directly or indirectly employed by its Subcontractors as for the acts and omissions of persons directly employed by the Contractor.

Nothing contained in this DB Agreement shall create any contractual, employment, agency or other relationship between any Subcontractor and the Corporation or between any employee or agent of a Subcontractor and the Corporation.

15. UTILITIES

The Contractor shall be responsible for making all necessary arrangements, at its own cost as part of the Work, with utility companies and public authorities for the supply of electric power, telecommunications, natural gas, water, sewer service and other utilities, both temporary and permanent, required for the construction of the Work.

The Contractor shall, at its own cost, apply for and obtain all necessary permits and approvals for all necessary utility connections, relocations and services and where work must be undertaken directly by the utility company, the Contractor shall pay for that work at its own expense.

16. INDEMNIFICATION

The Contractor shall save harmless and indemnify the Corporation, and its' directors, officers, servants, employees and agents (the "Indemnified Parties") from and against all actions, claims, demands, proceedings, suits, losses, damages, costs and expenses of whatsoever kind or nature (including but not limiting the generality of the foregoing, in respect of death, injury, loss or damage to any person or property) arising in any way out of or connected with the Work by the Contractor or its Subcontractors, or their servants or employees under this DB Agreement, except to the proportionate extent that such

actions, claims, demands, proceedings, suits, losses, damages, costs and expenses were caused by the Indemnified Parties or any of them.

Unless otherwise specified in the DB Agreement, the Contractor shall save harmless and indemnify the Indemnified Parties from and against all actions, claims, demands, proceedings, suits, losses, damages, costs and expenses of whatsoever kind or nature arising in any way from liability of any nature or kind for or on account of any copyrighted or un-copyrighted composition, secret or other process, patented or unpatented invention, articles or appliances manufactured, supplied or used in the Work, and/or used or to be used by the Corporation before or after completion of the Work as a result of the Work performed by the Contractor, and if the Contractor shall fail to save harmless and indemnify in manner aforesaid, any money collected from the Indemnified Parties shall be charged to the Contractor.

The Contractor shall release and discharge the Corporation, and its' directors, officers, servants, employees and agents (the "Released Parties") from and against all actions, claims, demands, proceedings, suits, losses, damages, costs and expenses of whatsoever kind or nature (including but not limiting the generality of the foregoing, in respect of death, injury, loss or damage to any person or property) which the Contractor or its Subcontractors, or their servants or employees might have in any manner arising in any way out of or connected with the Work by the Contractor or its Subcontractors, servants or employees under this DB Agreement, except to the proportionate extent that such actions, claims, demands, proceedings, suits, losses, damages, costs and expenses were caused by the Released Parties or any of them.

The indemnity provided in this Section 15 by the Contractor to the Indemnified Parties shall not in any way be limited or restricted by any insurance or by limitations on the amount or type of damages, compensation or benefits payable under the Workers' Compensation Act or any other similar statute.

17. INSURANCE REQUIREMENTS

The Contractor shall itself and shall cause each Subcontractor to obtain and maintain, at its own expense, the insurance set out below until all conditions of the DB Agreement have been fully complied with.

a) Comprehensive General Liability Insurance

Comprehensive General Liability insurance in the amount of not less than $5,000,000 affording coverage for public liability and/or death and/or damage to property.

NOTE: The Insurer shall acknowledge this DB Agreement as an insured contract under the policy and shall have added as an Additional Insured the Indemnified Parties.

b) Automobile Liability

For each vehicle used in the performance of the DB Agreement and regulated by the Insurance (Motor Vehicle) Act (British Columbia) or similar legislation, a Standard Corporation's Form Automobile Policy provided by the Insurance Corporation of British Columbia (AUTOPLAN) with Third Party Legal Liability Limits of not less than $2,000,000.

c) Equipment

All Risk Insurance covering the Contractor's plant and equipment and all construction equipment, owned, rented or leased, or for which the Contractor or Subcontractor may be responsible. In the event of loss or damage to the said construction equipment, or any part thereof, the Contractor or Subcontractor shall, if so requested by the Corporation in writing, forthwith replace such damaged or destroyed equipment.

d) Course of Construction Property Insurance

i Insured

The insured parties shall include the Corporation, the Contractor and all Subcontractors engaged in or connected with the construction, Work Site preparation and related operations to this Project.

ii Coverage

The policy shall insure against all risks of direct physical loss or damage to the insured property while the Work is in the course of construction, Work Site preparation, reconstruction, repair, erection, fabrication, testing and including all materials, equipment, machines, structures, property, fittings, fixtures, betterments and supplies of any nature whatsoever to be entered into and form part of the finished Work while at the Work Site or elsewhere in Canada or the Continental United States of America, all the property of the insured or the property of others for which the insured has assumed responsibility, or for which the insured is required to carry insurance, including while on a ferry, railway car or transfer barge all in connection with land transportation.

Coverage shall also apply to all temporary facilities consisting principally of, but not limited to: hoarding, barricades, ramps, utility connections, job site structures, construction hoists and elevators, scaffolding, framework, fences, shoring, falsework, temporary buildings and temporary protection for winter work, not destined to form part of the completed Work but which are incidental to the completion thereof.

iii Term

The policy term shall be from the inception date of the construction to the date of Total Completion.

iv Limits of Liability

The estimated fully completed value of the Work including but not limited to the value of architects, engineers and consultant fees, any Corporation supplied labour and materials, reasonable profit, insurance costs, overhead, taxes, labour, administrative fees and all other expenses which are incurred as additional costs as a result of a partial or total loss.

v Extensions of Coverage

a) Flood
b) Earthquake
c) Transit
d) Any other location including offsite storage for prepurchased material.

The Contractor and Subcontractors shall provide at their own cost any additional insurance which they are required by Laws to provide or which they consider necessary. The Contractor and Subcontractors shall give written notice to the Corporation in the event that the Contractor or any Subcontractor purchases additional insurance setting out the details of such additional insurance.

Each insurance policy obtained by the Contractor or any Subcontractor shall include the following clauses:

e) "WAIVER OF SUBROGATION

It is understood and agreed that in the event of a loss and upon payment of any claim hereunder, the insurer will waive its right of subrogation against the Corporation and all architects, engineers and consultants engaged in or connected with construction and on Work Site preparation and related operations of the project and any of their servants, agents, employees, parent, subsidiary, affiliate or related firms."

f) "NOTICE

It is hereby understood and agreed that this policy will not be cancelled, reduced, materially altered or amended without the insurer giving at least thirty (30) days prior written notice by registered mail to the Corporation and the Contractor."

The Contractor shall file with the Corporation, prior to the commencement of the Work, a certificate of insurance covering all policies and endorsements required by this

Section 16 to be obtained by the Contractor and Subcontractors. The Contractor and all Subcontractors shall also file with the Corporation evidence of the renewal of any insurance policy required by this DB Agreement at least 15 Days prior to the expiry date of the policy.

18. CONTRACTOR'S DISCHARGE OF LIABILITY

18.1 Contractor Will Pay Amounts Owing

The Contractor shall pay all invoices and discharge all liabilities incurred by it for labour, materials or services used or ordered for or reasonably required for use in the performance of this DB Agreement, on the date upon which each becomes due.

18.2 Contractor Will Cause Subcontractors to Pay Amounts Owing

The Contractor shall cause every Subcontractor to pay all invoices and discharge all liabilities incurred by it for labour, materials or services used or ordered for or reasonably required for use in the performance of the subcontract, on the date upon which each becomes due. Workers employed by a Subcontractor shall be paid in full at intervals not less frequently than required by Laws.

19. CHANGES IN THE WORK

The Corporation may, make changes to the Work including the Drawings or Specifications by altering, adding to, or deducting from the Work, with the DB Agreement Price and Completion Date being adjusted in accordance with this DB Agreement. Only changes to the scope of Work made by the Corporation's Representative in writing are valid. For certainty, revisions to Drawings and Specifications prior to the Corporation's approval are not changes under this DB Agreement.

No claim for an addition or deduction to the DB Agreement Price is valid unless the change in Work is so ordered and unless the change in the DB Agreement Price is valued or agreed to be valued as provided for in Section 19.

No change in the Completion Date is valid unless the change in Work is ordered by the Corporation's Representative and unless the parties have agreed to the change in Completion Date. If the parties are unable to agree on the change to the Completion Date, the dispute resolution procedure included in this DB Agreement shall be used.

A change in time to perform the Work stated in the Change Order is the only change to be made to the time to perform the Work consequent upon the Change Order. No other request or claim by the Contractor for additional time may be made by the Contractor or will be considered by the Corporation.

20. VALUATION AND CERTIFICATION OF CHANGES IN THE WORK

Where the Corporation has required a change in the work, then the parties shall promptly and, before the Contractor undertakes the changed Work, agree on the change

to the DB Agreement Price (if any), the time required to perform the change, the change in the Completion Date (if any), and on the method of valuing the changed Work.

Upon receiving a Change Order, the Contractor shall promptly, and in any case within 10 Days after the change in the Work is required by the Corporation, present to the Corporation its proposal for the method of valuing the changed Work, any change to the DB Agreement Price, the time required to perform the change, and any change in the Completion Date which the Contractor considers will result from the change.

The value of any change in the Work shall be determined by the following methods:

a) by an agreed-upon lump sum increase in the DB Agreement Price; or

b) by unit prices agreed upon;

The valuation method and lump sum change in the DB Agreement Price (if applicable) and the unit prices (if applicable) shall be agreed to by the Corporation and the Contractor before proceeding with the change in the Work. The Contractor shall keep accurate records of quantities and costs as agreed upon and shall present an account of the costs of the change in the Work, together with receipts where applicable, at least once each Month during performance of the change in the Work, and shall present a final account upon completion of the change in the Work.

Despite the foregoing paragraph, if the method of valuation, measurement and value of any change cannot be promptly agreed upon, and in any case within 10 Days after the notice of change is received by the Contractor, the method of evaluation shall be determined by the Corporation's Representative and the value of the change will be evaluated under such method with the purpose of both parties agreeing to the value of the change. If there is failure to find agreement of the value of the change, the Contractor or the Corporation's Representative shall give notice that the evaluation be referred to and determined by the dispute resolution process established by this DB Agreement.

The change in the DB Agreement Price stated in the Change Order shall be conclusively deemed to be the total cost of all the work required by and consequent upon the Change Order. No other request or claim by the Contractor for additional costs may be made by the Contractor or will be considered by the Corporation.

21. DETERMINATION OF COSTS AND CONTRACTOR'S OVERHEAD

21.1 Cost of Changes

Whenever it is necessary for the purposes of this DB Agreement to determine the cost of a change in the Work, unless the parties otherwise agree, the value of the change of such labour, plant or material shall be the amount agreed upon by the Contractor and the Corporation from time to time according to the following calculation. Upon agreement of the quantities of the additional work less the quantities of any work deleted from the DB Agreement, the value of the labour, equipment and material required for or deleted

from the Work shall be calculated on the basis set out in Section 20.2 (a) and (b). In the event of a net deduction that reduces the DB Agreement Price, there shall be no adjustments for overhead or profit as set out in Section 20.2(b).

21.2 Contractor and Owner Cannot Agree

If the Contractor and the Corporation cannot agree as to the cost of labour, plant or material related to a change in the Work, such costs shall be equal to the aggregate of:

a) all reasonable and proper amounts actually expended by or legally payable by the Contractor in respect of the labour, plant or material which fall within one of the following classes of expenditures:

i payments to Subcontractors and consultants;

ii wages, salaries and traveling expenses of employees of the Contractor while they are actually and properly engaged on the Work, other than wages, salaries, bonuses, living and traveling expenses of personnel of the Contractor generally employed in a supervisory role, at the head office, at the site management office or at a general office, of the Contractor unless such personnel is engaged at the Work Site and directly carrying out the change with the approval of the Corporation;

iii payments for materials necessary for and incorporated in the Work or necessary for and consumed in the performance of the Work;

iv payments for rental of tools, other than tools customarily provided by tradesmen, necessary for and used in the performance of the Work;

v payments for preparation, inspection, delivery, installation and removal of plant and materials necessary for the performance of the Work;

vi assessments payable under any statutory scheme relating to workers' compensation, unemployment insurance, or holidays with pay;

vii payments for renting equipment and plant (but not hand tools), and allowances for equipment and (but not hand tools), owned by the Contractor, necessary for the performance of the Work, provided that such payments or allowances have been agreed to by the Contractor and the Corporation; and

viii other payments, made with the approval of the Corporation, that are necessary for the performance of the Work, as determined in agreement with the Corporation; plus

b) 15% of the total of the expenditures of the Contractor under (a) above, being an allowance of 10% for payments and charges related to overhead, head office expenses and general administration costs of Contractor, including finance and interest charges and 5% for profit, EXCEPT THAT the percentage addition on payments to Subcontractors shall be 10% and not 15%, comprised of 5% for payments and charges related to overhead, head office expenses and general administration costs of Contractor, including finance and interest charges and 5% for profit.

22. PAYMENT APPLICATIONS

22.1 Payment Schedule of Prices

The Contractor shall submit to the Corporation's Representative, at least 14 Calendar Days before the first application for payment, a payment application form showing a breakdown of the Schedule of Prices as listed in the below sample, aggregating the total amount of the DB Agreement Price and divided so as to facilitate evaluation of applications for payment.

Sample - Schedule of Prices

	DESCRIPTION	PRICE
1	**Project Initiation Meeting** *As described in Appendix A - "Project Requirements" & associated contract documentation*	**$**
2	**Background Information Review, Collection and Site Investigations** *As described in Appendix A - "Project Requirements" & associated contract documentation*	**$**
3	**30 % Design and Review** *As described in Appendix A - "Project Requirements" & associated contract documentation*	**$**
4	**90 % Design and Review** *As described in Appendix A - "Project Requirements" & associated contract documentation*	**$**
5	**Permitting Support and Regulation Approvals** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
6	**Quality Management Plan** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
7	**Construction Management Plan** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
8	**Mobilization / De-Mobilization** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
9	**Bonds, Insurance, Permits** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
10	**Submittals** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
11	**By-Pass Pumping** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
12	**Electrical Servicing / Installation** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
13	**Wet Well Installation** *As described in Submission Requirements and Appendix A -*	**$**

Appendix D – Sample Form of Agreement

	DESCRIPTION	PRICE
	"Project Requirements" & associated contract documentation	
14	**Exiting Wet Well Rehabilitation** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
15	**Dry Well and Control Building Installation** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
16	**Mechanical Installation** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
17	**Storm Drainage Outfall Replacement** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
18	**Odour control Installation** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
19	**Civil and Site Services** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
20	**Walkway Installation** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
21	**Testing / Commissioning** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
22	**Warranty** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
23	**Record Drawings / Reports** *As described in Submission Requirements and Appendix A - "Project Requirements" & associated contract documentation*	**$**
	SUB TOTAL (LINES 1 – 23 ABOVE) **GUARANTEED MAXIMUM PRICE**	**$**
	5 % GST	**$**
	TOTAL	**$**

The payment application form shall be made out in such form and supported by the signature of the Contractor's Representative as appropriate and such evidence as the Corporation's Representative may reasonably require and, when approved by the Corporation's Representative, shall be used as the basis for all applications for payment, unless at any time during the performance of the Work it is found to be in error, in which case it shall be corrected in accordance with the reasonable requirements of the Corporation's Representative.

22.2 Monthly Applications for Payment

The Contractor will apply for progress payments on account of the DB Agreement Price before the end of each Month using the payment application form described in Section 21.1.

The Contractor shall date each application for payment the last Day of the Month and the Contractor shall claim the value of Work actually performed and material actually delivered to the Work Site, based on the approved Schedule of Prices. The Corporation will be required to pay for materials delivered to the Work Site but not yet incorporated into the Work only if arrangements reasonably satisfactory to the Corporation's Representative have been made, including evidence of transfer of ownership, and protection against damage or theft.

22.3 Application Form

Each application for payment, either for Work performed by the Contractor or by Subcontractors, shall be supported by:

a) a certificate from the Contractor's Representative that that Work has been completed in accordance with the DB Agreement, including the Drawings and Specifications; and

b) a sworn declaration of a knowledgeable officer or management employee of the Contractor, in a form reasonably acceptable to the Corporation's Representative, that all amounts relating to the Work due and owing to third parties, including Subcontractors, have been paid in respect of the relevant period covered by the application for payment.

23. PROGRESS PAYMENTS

23.1 Payment Certificate

The Corporation's Representative shall, not later than 10 Days after the receipt of a proper application for payment from the Contractor submitted in accordance with Section 21, issue a certificate for payment in the amount applied for or in such amount as the Corporation's Representative determines to be properly due. If the Corporation's Representative amends the application, the Corporation's Representative shall promptly notify the Contractor in writing and give reasons for the amendment.

The payment certificate shall set out, based on the Contractor's application for payment:

a) the total value of the Work completed, including design, construction and materials incorporated into the Work;

b) the total value of each item of Work based on the schedule of prices as accepted by the Corporation's Representative;

c) all holdbacks, if any;

d) the total amount owing by the Corporation to the Contractor; and

e) any amounts owing by the Contractor to the Corporation, including amounts which under the DB Agreement the Corporation may set off from payments owning to the Contractor.

23.2 Holdback for Defects and Deficiencies

In addition to other holdbacks as provided by the DB Agreement, when considering Substantial Performance the Corporation may hold back 200% of the Corporation's Representatives' reasonable estimate, on account of deficient or defective Work, which holdback may be held, without interest, until such deficiency or defect is remedied. The items of defect or deficiency and the amounts of related holdback shall be listed separately on the payment certificate.

23.3 Incomplete Work

If after Substantial Performance the Contractor is unable to complete the Work because of conditions beyond the reasonable control of the Contractor, the Corporation may hold back from payments otherwise due the Contractor up to 110% of the value of the Corporation's Representatives' reasonable estimate of the cost to the Corporation to have others perform the incomplete Work.

23.4 Payment

The Corporation shall make each progress payment to the Contractor on account no later than 10 Days after the issuance of a certificate for payment by the Corporation's Representative.

23.5 Payment Not Acceptance

No payment made by the Corporation under this DB Agreement, or partial or entire use or occupancy of the Project by the Corporation, shall constitute an acceptance of any portion of the Work that is not in accordance with the Drawings or Specifications or other requirements of this DB Agreement.

24. BUILDERS LIEN ACT

24.1 Payment Certifier

For the purposes of the *Builders Lien Act* (British Columbia), the Corporation's Representative shall be the payment certifier for this DB Agreement, and the Contractor shall be the payment certifier for all subcontracts. The Contractor shall cooperate with the Corporation and will assist the Corporation by providing information or assistance in a timely manner as the Corporation considers necessary to carry out the duties of payment certifier for this DB Agreement.

24.2 Contractor to Furnish Information

The Contractor agrees to furnish to the Corporation, upon request, the information which the Corporation may request pursuant the *Builders Lien Act* (British Columbia) and the Contractor acknowledges that the Corporation may withhold payments to the Contractor if the information is not provided, in which case the Contractor shall not be entitled to any interest or other consequential compensation or damages for the payments so withheld.

24.3 Builders Lien Holdback

The Corporation will deduct from each progress payment (and other payment) made to the Contractor a holdback pursuant to and in the amount required by the *Builders Lien Act* (British Columbia).

Subject to the registration or existence of any builders lien or claim of builders lien or other liens for labour, services, Contractor's plant and equipment or materials relating to the Work Site or the Work, the Corporation shall pay the builders lien holdback as soon as practicable after the expiry of the holdback period of the *Builders Lien Act* (British Columbia).

Notwithstanding the foregoing, the Contractor shall be entitled to receive from the holdback retained by the Corporation, an amount equal to the amount applicable to a subcontract if,

a) a certificate of completion has been issued in respect of the subcontract to which the Contractor was a party, and a copy has been provided to the Corporation's Representative; and

b) the applicable builders lien holdback period has expired without any claims of lien being filed that arose under the subcontract.

The payment of holdback pursuant to this section, or the issuance of a certificate with respect to this DB Agreement or subcontracts, shall be for the purposes of the *Builders Lien Act* (British Columbia) only and shall not alter or affect the terms and conditions of this DB Agreement, and without limiting the generality of the foregoing, the Contractor's obligation to complete the Work without deficiency.

The payment of monies under this section shall not of itself be deemed to be acceptance of the Work for the purpose of the extinguishment of any covenant or agreement on the part of the Contractor to be performed or fulfilled under this DB Agreement, which has not been performed or fulfilled under this DB Agreement, all of which covenants and agreements shall continue to be binding on the Contractor.

24.4 Discharge of Builders Liens

The Contractor shall, at its own cost and expense, cause any and all builders liens and other liens for labour, services, Contractor's plant and equipment or materials alleged to have been furnished with respect to the Work Site or the Work which may be registered against or otherwise affect the Lands or the Work, except liens properly filed by the Contractor on its own behalf, to be paid, satisfied, released or vacated forthwith after the

Corporation has sent to the Contractor written notice of any claim for any such lien. In the event of a bona fide dispute of the validity or correctness of any claim for any such lien, the Contractor shall be entitled to defend against the claim for such lien in any proceedings brought in respect thereof after first paying into court the amount claimed, or sufficient security therefor, and such costs as the court may direct and registering all such documents as may be necessary to cancel such lien, or providing such other reasonable security in respect of such claim as the Corporation may be in writing approve. Upon receiving satisfactory security for its costs and an indemnity in writing, the Corporation will authorize the Contractor to apply to the court in the name of the Corporation to have any lien removed upon payment into court or deposit in court of satisfactory security therefor.

25. SUBSTANTIAL PERFORMANCE

25.1 Application for Certificate of Substantial Performance

The Contractor's application for the certificate of Substantial Performance shall be supported by a certificate from the Contractor's Consultant, that the Work completed to date has achieved Substantial Performance in accordance with the DB Agreement, including the Drawings and Specifications.

25.2 Corporation's Inspection

The Corporation's Representative shall, not later than 5 Days after the receipt of an application from the Contractor for a certificate of Substantial Performance, make an inspection and assessment of the Work to verify the validity of the application.

The Corporation's Representative shall, not later than 7 Days after completing the inspection, notify the Contractor of approval, or the reasons for disapproval, of the application.

When the Corporation's Representative finds that Substantial Performance of the Work has been reached, the Corporation's Representative shall issue a certificate of Substantial Performance. The date of Substantial Performance of the Work shall be as stated in the certificate of Substantial Performance.

25.3 List of Deficiencies

Immediately following the issuance of the certificate of Total Completion of the Work, the Corporation's Representative shall issue a list of deficiencies in the Work, and, in consultation with the Contractor, establish a schedule for the completion of all deficiencies and a date for Total Completion. The Contractor shall complete all deficiencies by the date for Total Completion.

25.4 Application for Certificate of Total Completion

When the Contractor has completed all deficiencies and achieved Total Completion, the Contractor may apply for the certificate of Total Completion.

25.5 Corporation's Inspection

The Corporation's Representative shall, not later than 5 Days after the receipt of an application from the Contractor for a certificate of Total Completion, make an inspection and assessment of the Work to verify the validity of the application.

The Corporation's Representative shall, not later than 7 Days after completing the inspection, notify the Contractor of approval, or the reasons for disapproval, of the application.

When the Corporation's Representative finds that Total Completion of the Work has been reached, the Corporation's Representative shall issue a certificate of Total Completion. The date of Total Completion of the Work shall be as stated in the certificate of Total Completion.

26. LIMITATION OF CERTIFICATES

By issuing any certificate the Corporation's Representative and the Corporation do not guarantee, or otherwise become liable or responsible in any way for, the correctness or completeness of the Work, including the Design and Specifications, and no certificate makes the Corporation's Representative or the Corporation in any way responsible or liable for adequacy of the Design or for the Work.

27. TAXES AND DUTIES

The Agreement Price is inclusive of all applicable taxes, including social services tax under the

Social Services Tax Act (British Columbia), but not goods and services tax under the Excise Tax Act (Canada). The RDN shall pay to the Contractor any goods and services tax under the Excise Tax Act (Canada) on materials and services provided to the RDN by the Contractor as part of the Work and such taxes shall be shown separately on progress payment applications made by the Contractor. The Contractor shall remit to Canada all goods and services tax as and when required by the Excise Tax Act (Canada) and shall, without limiting GC15, indemnify and hold the RDN harmless from and against any goods and services tax under the Excise Tax Act (Canada), and other taxes, that the Contractor fails to remit as and when due, and from and against any penalties and interest which may be levied against the RDN, and any costs, in respect thereof.

Unless otherwise expressly provided in the Agreement, the Contractor shall pay all government goods and services tax under the Excise Tax Act (Canada), social services tax under the Social Services Tax Act (British Columbia), customs duties and excise taxes under the Excise Tax Act (Canada), payable in accordance with any enactment with respect to any component of the Work.

Any increase or decrease in material or equipment costs to the Contractor due to changes in taxes or duties (other than goods and services tax under the Excise Tax Act

(Canada)), after the date of the Agreement shall increase or decrease the Agreement Price accordingly.

Where an exemption or refund of taxes, customs duties or excise taxes is applicable to the Agreement by way of the Contractor filing claims for, or cooperating fully with the RDN and the proper authorities in seeking to obtain such exemption or refund, the Contractor shall make such applications and provide such cooperation.

Refunds that are properly due to the RDN and have been recovered by the Contractor shall be promptly refunded to the RDN.

28. EASEMENTS AND NOTICES

The Contractor shall apply, obtain and pay for all necessary temporary or permanent easements or rights of way necessary for performance of the Work. The Contractor shall give all necessary notices and pay all fees required by Laws and comply with all Standards.

29. WORKERS' COMPENSATION

The Contractor shall be, and assume the responsibilities of, the "prime contractor" for the Work Site and shall, as required in the *Workers Compensation Act* and Regulations thereunder, and as such the Contractor acknowledges its responsibilities as the "prime contractor" for coordinating safety for the Work Site, including its own workers as well as those of Subcontractors, utilities, suppliers, inspectors, and all other parties performing work on the Work Site, or any party entering the Work Site.

The Contractor shall provide the Corporation's Representative, prior to commencement of the Work, with the name and telephone numbers (including a 24 hour emergency contact number) of the Contractor's Safety Representative responsible for the Work Site.

Prior to commencing the Work and prior to receiving progress payments or payment on issuance of the certificate of Total Completion, the Contractor shall provide to the Corporation, evidence of compliance with all health and safety requirements, including with respect to the *Workers Compensation Act*, and including payments of assessments due under it to the Workers Compensation Board.

Without limiting the foregoing, the Corporation's Representative may at any time require the Contractor to provide evidence of compliance with all health and safety requirements.

When required to do so by the Corporation, the Contractor shall obtain and provide the Corporation, evidence of compliance of any or all of its Subcontractors with the safety requirements.

The Contractor shall at all times engage in safe work practices and procedures and shall ensure that all persons under its control or direction have received adequate and appropriate health and safety training.

The Contractor shall cooperate with all safety inspections conducted by the Workers' Compensation Board or other regulatory body having jurisdiction over health and safety, and promptly remedy any noted deficiencies.

The Contractor shall indemnify and save harmless the Corporation for any and all fines, levies, penalties and the like imposed on the Corporation by the Workers' Compensation Board or other regulatory body having jurisdiction related to or arising from non-compliance with applicable health and safety regulations by the Contractor or anyone under the Contractor's control or direction.

The Corporation may deduct from the DB Agreement Price or other payments to the Contractor an amount equal to the amount of any fine, levy, or penalty imposed on and paid by the Corporation.

The Corporation's Representative and any personnel authorized by the Corporation's Representative shall at all times have the right of access to the Work Site.

30. PROTECTION OF WORK AND PROPERTY

The Contractor shall protect the property adjacent to the Work Site from damage and shall hold the Corporation harmless from any claims that may arise as the result of the Contractor's operations under this DB Agreement, or from its failure to provide such protection, or both.

The Contractor shall protect the Work and the Corporation's property on the Work Site from damage and shall be responsible for any damage which may arise as the result of its operations under this DB Agreement.

Should any damage occur to the Work or the Corporation's property, or both, for which the Contractor is responsible, it shall make good such damage at its own expense or pay all costs incurred by others in making good such damage.

Should any damage occur to the Work or the Corporation's property, or both, for which the Contractor is not responsible, it shall make good such damage to the Work and, if the Corporation so directs, to the Corporation's property, and the DB Agreement Price and Completion Date shall be adjusted in accordance with this DB Agreement.

31. DAMAGES AND MUTUAL RESPONSIBILITY

If the Contractor has caused damage to any Other Contractor on the Work Site, the Contractor agrees upon due notice by the Corporation to settle with such Other Contractor by agreement or arbitration. If an Other Contractor brings any proceeding or action against the Corporation on account of any damage alleged to have been so sustained, the Corporation shall notify the Contractor and may require the Contractor to defend the action at the Contractor's expense. If any final order, judgment or award against the Corporation arises therefrom, the Contractor shall pay or satisfy such order, judgement or award, and pay all costs incurred by the Corporation in defending the claim, including all actual legal fees and disbursements.

If the Contractor becomes liable to pay or satisfy any final order, judgment or award against the Corporation, then the Contractor shall have the right, upon undertaking to indemnify the Corporation against any and all liability of costs, to appeal in the name of the Corporation such final order or judgment to any and all courts of competent jurisdiction.

32. BONDS

Before commencing the Work at the Work Site, the Contractor shall deliver to the Corporation an executed performance bond substantially in the form attached as Schedule C and an executed labour and materials payment bond substantially in the form attached as Schedule D.

Each bond shall be in the amount of 50% of the DB Agreement Price and shall be issued by a surety licensed to transact the business of a surety in British Columbia and acceptable to the Corporation, acting reasonably.

Upon entering into a contract with a Subcontractor, the Contractor shall advise the Subcontractor that a labour and material payment bond is in effect and shall supply a copy of the bond to the Subcontractor if requested by the Subcontractor.

33. WARRANTY

33.1 Defects in Design

The Contractor shall, for the life of the Project, correct any defect arising from an error or deficiency in any aspect of the Design or Specifications, provided that the Corporation notifies the Contractor of such defect within six (6) months of the Corporation becoming aware of such defect.

33.2 Defects in Workmanship and Materials

The Contractor shall correct promptly, at its own expense:

a) any Work which is in the reasonable opinion of the Corporation's Representative or the Corporation, not in compliance with the Performance Requirements, Design, Specifications, or otherwise not in accordance with this DB Agreement; and

b) any defects or deficiencies in the Work due to faulty products or workmanship appearing;

prior to one year from the date of Substantial Performance, or prior to one year from the date of termination of this DB Agreement if this DB Agreement is terminated prior to Substantial Performance.

33.3 Exclusion on Warranty Claims

With respect to Sections 33.1 and 33.2, the Contractor shall not be liable under this warranty to remedy, nor does the Contractor warrant against:

a) the effects of normal wear and tear of any part of the Work;

b) any failure of any part of the Work due to misuse, abuse or neglect by the Corporation;

c) any failure by the Corporation to perform normal repairs or maintenance; or

d) any failure of any part of the Work resulting from conditions of operation more severe than specified in the Performance Requirements.

33.4 Payment for Corrections and Repairs

The Contractor shall, at its own expense, correct or pay for any damage resulting from any corrections made under this warranty section.

34. PRODUCTS

Unless otherwise expressly provided in this DB Agreement, the Contractor shall provide and pay for all labour, products, materials, tools, equipment, plant, machinery, water, heat, light, power, transportation, and all other facilities, things and services whatsoever, without limitation, necessary for the performance of the Work.

All products and materials provided shall be new, unless otherwise agreed to by the Corporation's Representative in writing. Any products that are not specified shall be of a quality best suited to the purpose required.

35. USE OF PREMISES

The Contractor shall confine tools, equipment, machinery and plant, storage of materials and products, and operations of its workers and its Subcontractor's workers, to limits indicated by or under all enactments, or as agreed with the Corporation, and shall not unreasonably encumber the Work or Work Site.

The Contractor shall not load or permit to be loaded any part of the Work with a weight or force that will endanger the safety of the Work.

The Contractor shall enforce instructions of the Corporation or Corporation's Representative regarding signs, advertisements, fires and smoking.

36. CLEANUP AND FINAL CLEANING OF WORK

The Contractor shall maintain the Work in a tidy condition and free from the accumulation of waste products and debris.

When the Work reaches Total Completion, the Contractor shall promptly remove all surplus products, tools, construction machinery and equipment, and any waste and debris other than that caused by the Corporation, Other Contractors or their employees, and leave the Work clean and suitable for occupancy by the Corporation.

37. CUTTING AND REMEDIAL WORK

The Contractor shall do all cutting and remedial work that may be required to make the several parts of the Work come together properly and in accordance with this DB Agreement.

The Contractor shall co-ordinate the Construction Schedule and the Work to ensure that this requirement is kept to a minimum.

Cutting and remedial work shall be performed by specialists familiar with the products and materials affected and shall be performed in a manner to neither damage nor endanger the Work.

38. ROADS AND SIGNS

38.1 Roads

The Contractor shall ensure that all loads of materials being hauled to and from the Work Site are properly tarped and secured. In the event any material escapes while being hauled to or from the Work Site, the Contractor shall take immediate steps to clean up such materials.

38.2 Signs

The Contractor shall ensure that adequately illuminated signs and lamps are lit to warn of danger with respect to Work Site access. The Contractor shall ensure that signage is consistent throughout and professionally presented, in at least the English language.

39. TESTING

The Contractor shall test all systems and equipment until the necessary approvals from all regulatory bodies are obtained and the Corporation is satisfied that the Work is fully-functioning and usable for the Corporation's purpose. Substantial Performance shall not be attained until all testing is completed.

40. COMMISSIONING

The Contractor shall commission the Work in accordance with the requirements of the DB Agreement and in conjunction with the Commissioning Agent.

41. QUALITY CONTROL AND INSPECTION OF WORK

Before commencing any physical construction at the Work Site, the Contractor shall prepare a Quality Control Plan which shall be submitted to the Corporation’s

Representative for approval. The Contractor shall diligently implement the approved Quality Control Plan throughout performance of the Work.

The Quality Control Plan shall be consistent with the plan submitted by the Contractor in response to the RFP and shall ensure that the Work meets the requirements of the DB Agreement.

The Contractor shall ensure that the Contractor's Consultant conducts regular site inspections of the Work and the Project to ensure compliance with the Performance Requirements, the Design and Specifications, Standards, this DB Agreement and the applicable requirements of Laws.

The Contractor shall ensure all materials are tested in accordance with Canadian Standards Association by an approved testing agency.

The Contractor shall maintain, in chronological order, complete files with copies of site inspection reports, material testing reports, and Project record documents.

The Contactor shall appoint one or more independent consultants, with the appropriate professional education, skill and experience, to carry out and report upon all testing and other quality control activities comprised in the Quality Control Plan or required by enactments.

The Contractor shall ensure that the independent consultant appointed implements the Quality Control Plan, including by reporting to the Corporation's Representative on implementation of the Quality Control Plan as and when required by the Quality Control Plan.

The Corporation's Representative may at any time audit the Quality Control Plan and its implementation and may, at the Corporation's expense, carry out independent quality control testing at any time.

The Corporation and the Corporation's Representative shall have access to the Work at all times for inspection wherever the Work is in preparation or progress and the Contractor shall provide reasonable facilities for such access. No inspection by the Corporation or the Corporation's Representative shall relieve the Contractor from its responsibility for the quality of the Work, for compliance with this DB Agreement, including but not limited to the Performance Requirements, the Design and Specifications, the Quality Control Plan, or for implementation of the Quality Control Plan.

If the results of any inspection, testing or audit or any aspect of the Quality Control Plan discloses that any part of the Work is deficient or defective in any way (the "Defective Work") whether the Defective Work is the result of poor design, poor workmanship, defective materials or damage and regardless of whether incorporated into the Work or not, the Corporation may, by notice in writing, order the Contractor to complete, remove, re-execute and/or replace the Defective Work and the Contractor shall do so forthwith at

its own expense. If the Corporation determines, in its sole unfettered discretion, that it is not expedient to correct the Defective Work, the Corporation may accept the Defective Work and deduct from the DB Agreement Price the difference in value between the Work required under this DB Agreement and the Defective Work.

If the Contractor covers or permits to be covered any of the Work, or before any required Quality Control Plan testing thereon is completed, the Contractor shall, as required under the Quality Control Plan or at the direction of the Corporation's Representative, uncover the Work, have the inspections and testing satisfactorily completed, and make good the Work at its own expense.

The Contractor shall cause a Professional Engineer to certify to the Corporation, under his or her professional seal, that the Quality Control Plan has been implemented in every respect in accordance with its terms and in accordance with all Standards applicable to the Quality Control Plan.

Promptly after Total Completion, the Contractor shall deliver to the Corporation all test samples and results taken for, and generated by, implementation of the Quality Control Plan.

Nothing in this Section 41 or any audit or testing performed and no action or inaction by the Corporation or the Corporation's Representative shall relieve the Contractor from its responsibility for the quality of the Work, or for compliance with this DB Agreement, including but not limited to the Performance Requirements, the Design and Specifications, the Quality Control Plan, and for implementation of the Quality Control Plan. For greater clarity, nothing in this Section shall be interpreted to make the Corporation in any way responsible for the quality of the Work.

42. DOCUMENTS ON THE SITE

The Contractor shall keep one copy of this DB Agreement and all permits, licences, Drawings and Specifications and shop drawings, at the Work Site, in good order and available to the Corporation's Representative.

43. INTELLECTUAL PROPERTY

The Contractor shall pay all royalties and patent licence fees required for the performance of this DB Agreement and shall hold the Corporation harmless from and against all claims, demands, losses, costs, damages, actions, suits or proceedings arising out of the Contractor's performance of this DB Agreement which are attributable to an infringement or an alleged infringement of any patent of invention by the Contractor or anyone for whose acts it may be liable.

The Contractor agrees that the Corporation is hereby granted an unconditional and irrevocable perpetual licence to use, in whole or in part, all Drawings and Specifications and all models furnished by the Contractor for any purpose related to the Work including repair, modification or renovation.

44. TRANSFER OF DRAWINGS

Before issuance of the certificate of Substantial Performance, the Contractor shall provide to the Corporation the following:

(a) one (1) complete large set (A1 or larger) and one (1) complete small set (11" x 17") of paper print Drawings and Specifications, signed and sealed by the relevant design Engineers, showing the as-constructed Work and identified in bold letters with the words "CERTIFIED AS-CONSTRUCTED";

(b) one (1) electronic copies of the as-constructed Drawings to the standards specified in Appendix A of the RFP ;

(c) two (2) complete hard copy sets of maintenance manuals for all equipment comprised in the Work; and

(d) one (1) electronic copies of the maintenance manuals for all equipment comprised in the Work.

45. DESIGNATED REPRESENTATIVES

The Corporation hereby designates the following person as the Corporation's Representative, for the purposes of this DB Agreement:

[ ]

Telephone:
Fax:
Email:

The Contractor hereby designates the following person as the Contractor's Representative, for the purposes of this DB Agreement:

[ ]

Telephone:
Fax:
Email:

A party may change its representative by giving written notice to the other party of the new representative.

46. DISPUTE RESOLUTION

Prior to the commencement of the Work the parties shall mutually agree upon an independent person with experience in design and construction matters, to be appointed

by the parties as the Referee under the DB Agreement, with authority as given by the Contract Documents.

If there is any dispute between the parties arising out of the Work, including the interpretation, of any provision of the Contract Documents, or a performance obligation of a party, or an alleged breach of the DB Agreement, either party may give written notice of the dispute to the other party and the Contractor's Representative and the Corporation's Representative shall meet within two (2) Days after the notice of dispute is given and shall attempt in good faith, and using reasonable efforts, to resolve the matter. Work shall, as reasonably possible, continue in the event of any dispute and the parties at all times shall use reasonable efforts to avoid, or minimize any delay to the Construction Schedule.

If the parties' representatives cannot resolve the dispute within two (2) Days, the dispute shall be referred to the Referee. The parties will provide the Referee with all complete access to all information and records as the Referee may decide he/she requires to investigate the dispute. Within seven (7) Days of the referral, or such longer time as the both parties may agree, the Referee shall provide a non-binding written report setting out the Referee's opinion as to the resolution of the dispute.

If either party disputes the Referee's determination, the disputing party shall give written notice to the other party within 10 Days of receipt of the Referee's report, setting out fully the reasons for disagreeing with the Referee ("Referee Dispute Notice").

After delivery of a Referee Dispute Notice, the dispute will be determined by arbitration if the parties agree, or failing agreement, in a court of competent jurisdiction in Nanaimo, British Columbia and courts of appeal therefrom.

In the event the parties agree to arbitration, the arbitration will:

a) be determined by a single arbitrator;

b) be governed by the Rules of the British Columbia International Commercial Arbitration Centre, except that the arbitrator shall be agreed upon by the parties, and failing agreement between the parties, will be appointed by a judge of the Supreme Court of British Columbia in Nanaimo, British Columbia on application by either party; and

c) will take place in Nanaimo, British Columbia and will otherwise be governed by the laws of British Columbia including the Commercial Arbitration Act (British Columbia).

If neither party disputes the Referee's decision within the time and in the manner provided for in this Section, the Referee's decision will be binding on the parties.

The Referee's decision will be admissible in any arbitration or court proceedings in connection with the dispute.

Responsibility for any arbitration costs will be determined by the arbitrator.

Any of the times specified in this Section 46 may be varied, on a dispute by dispute basis, by mutual agreement between the Corporation and the Contractor.

No party shall be precluded from initiating a proceeding in a court of competent jurisdiction for the purpose of obtaining any emergency or provisional remedy to protect its rights that may be necessary and that is not otherwise available under this DB Agreement, including without limitation, temporary and preliminary injunctive relief and restraining orders.

The costs of the Referee shall be divided equally between the parties.

47. FREEDOM OF INFORMATION & PROTECTION OF PRIVACY ACT

47.1 The Contractor agrees and acknowledges that:

(a) the RDN is subject to the provisions of the Freedom of Information and Protection of Privacy Act (British Columbia) and that the Agreement, the information they contain and any other information supplied by the Contractor to the RDN in connection with the Project are not implicitly confidential for the purposes of that enactment, but the Contractor may stipulate that any technical, scientific, commercial, financial or trade secret information supplied to the RDN in connection with the Project is confidential for the purposes of that Act; and

(b) the Agreement, and the information it contains and any other information supplied by the Contractor to the RDN in connection with the Project, may be the subject of an access to information request made to the RDN under the Freedom of Information and Protection of Privacy Act (British Columbia) and that, despite GC37.1(a), the RDN may be obliged by that Act to disclose all or part of the Agreement or the information it contains or all or part of any information of the Contractor supplied to the RDN in connection with the Project, whether or not the Contractor has expressly stipulated that the information in question is confidential for the purposes of that Act.

48. NOTICE AND OTHER GENERAL PROVISIONS

48.1 Notice

Except in the case of an emergency, when notice may be given by telephone with later confirmation in writing, any notice which may be or is required to be given under this DB Agreement shall be in writing and either be delivered by hand, email or sent by facsimile transmission, addressed as follows:

(a) To the Corporation or the Corporation's Representative:

Regional District of Nanaimo,
6300 Hammond Bay Road
Nanaimo, BC V9T 6N2
Phone: (250) 390-6560
Fax: (250) 390-1542
Email: msquire@rdn.bc.ca

(b) To the Contractor:

or to such other street address, email address or facsimile number of which notice has been given as provided in this section. Any notice which is delivered by hand is to be considered to have been given on the first business Day after it is dispatched for delivery. Any notice which is sent by fax or email transmission is to be considered to have been given on the first business Day after it is sent. If a party changes its street address, email address or facsimile number, it shall promptly give notice of its new street address, email address or facsimile number, or both, to the other party as provided in this section.

48.2 Waiver

An alleged waiver of any breach of this DB Agreement is effective only if it is an express waiver in writing of that breach. A waiver of a breach of this DB Agreement does not operate as a waiver of any other breach of this DB Agreement.

48.3 Severability

If any term of this DB Agreement is held to be unenforceable by a court, that term shall be severed from this DB Agreement and the rest of this DB Agreement shall remain in force unaffected by the severance of that term.

48.4 Entire Agreement

This DB Agreement is the entire agreement between the parties regarding its subject-matter and it supersedes the Corporation's Request for Proposals and the Contractor's Proposal and all other negotiations and communications between the parties.

48.5 Modification

This DB Agreement may not be modified except by written agreement of the Corporation and Contractor.

48.6 Interest

If either party should fail to make payments to the other party when due under this DB

Agreement or in an award of arbitration, interest, compounded monthly, at the rate of 2% per annum above the prime rate of the Royal Bank of Canada, on such unpaid amounts shall also become due and payable from the date payment is due until payment.

48.7 Law of the Contract

The law of British Columbia shall govern the interpretation of this DB Agreement and the parties irrevocably attorn to the exclusive jurisdiction of the courts of British Columbia.

48.8 Rights and Remedies

The duties and obligations imposed by this DB Agreement and the rights and remedies available under this DB Agreement shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by any Laws.

48.9 Confidentiality

Except as required by the *Freedom of Information and Protection of Privacy Act* (British Columbia), the Corporation and the Contractor shall keep confidential all matters respecting technical, commercial and legal issues relating to or arising out the performance of this DB Agreement and shall not, without the prior written consent of the other, disclose any such matters, except to its professional advisors in strict confidence.

48.10 Binding Effect

The DB Agreement enures to the benefit of and binds the parties to it and their respective successors, permitted assigns, heirs, executors and administrators.

Further Assurances

The parties shall do everything reasonably necessary to give effect to the intent of this DB Agreement, including the execution of further instruments.

As evidence of their agreement to be bound by the terms, the parties have caused this DB Agreement to be executed by their authorized signatories as of the dates set out below:

IN WITNESS WHEREOF the parties have executed this DB Agreement as of the date first above written.

The **Regional District of Nanaimo:**)
)
)
Board Director: _____)
)
)
Clerk _____)

Approved by resolution of the Council of the RDN on _____.

The Contractor:)
)
)
Authorized Signatory _____)
)
)
Authorized Signatory _____)

SCHEDULE A – CONSTRUCTION SCHEDULE

As per 3.0 Submission Requirements – 3.2.3.1(b)

SCHEDULE B – ORGANIZATION STRUCTURE

As per 3.0 Submission Requirements – 3.2.3.1(a)

SCHEDULE C - PERFORMANCE BOND

SCHEDULE D - LABOUR AND MATERIALS PAYMENT BOND

SCHEDULE E – SCHEDULE OF PRICES

As per RFP Financial Submission - Appendix C

Appendix E – Information Provided by the RDN

INFORMATION PROVIDED BY THE REGIONAL DISTRICT OF NANAIMO

ITEM	DESCRIPTION	SOURCE	DATE
1	Original Construction Record Drawings	Dayton and Knight	1979
2	Upgrade Record Drawings,	Dayton and Knight	1997
3	Upgrade IFC Drawings	Associated Engineering	2003
4	French Creek Trunk Sewer System (Parksville Gravity Interceptor, Bay Ave Pump Station & Forcemain) Hydraulic Modelling and Upgrade Strategy	Koers and Associates	January 2016
5	Bay Avenue Pump Station Upgrade or Relocation Feasibility Study	Koers and Associates	September 2016
6	Pre-Design, Bay Avenue Wastewater Pump Station Replacement	Kerr Wood Leidal	October 2017
7	Bay Avenue Wastewater Pump station Design Review Memorandum	R. F. Binnie and Associates	September 2018
8	Bay Avenue Storm Sewer Replacement	Newcastle Engineering Ltd.	September 2018
9	Legal cadastral, orthophotos and AutoCAD Drawings	RDN	-
10			
11			
12			
13			
14			
15			