

REQUEST FOR PROPOSALS No. 24-025

FCPCC ATAD Mixing Upgrade Aeration Blower Supply

ISSUED: March 19, 2024

CLOSING DATE AND TIME:

Submissions must be received on or before: 3:00 PM (15:00 hrs) Local Time on April 9, 2024

Submissions and Questions are to be directed to:

Rob Wood, Project Engineer Regional District of Nanaimo French Creek Pollution Control Centre 957 Lee Road Parksville, BC V9P 1Z4

> Phone: 250-713-6356 Email: rwood@rdn.bc.ca

Questions are requested at least five (5) calendar days before the closing date.

Proposals will not be opened in public.



1. INSTRUCTIONS TO PROPONENTS

1.1 Closing Date/Time/Submission Method

Submissions must be received on or before 3:00 PM (15:00 hrs), Local Time, on April 9, 2022.

Submission Method:

By Email: In PDF format with "24-025 FCPCC ATAD Mixing Upgrade – Aeration Blower Supply" as the subject line at this electronic address:

rwood@rdn.bc.ca

Please note: Maximum email file size limit is 20MB, or less. The RDN will not be liable for any technological delays of submissions. Submissions received in any other manner will not be accepted.

1.2 Amendment to Proposals

Proposals may be amended in writing and sent via email to the RDN contact person identified on the cover page on or before the closing. Such amendments should be signed by the authorized signatory of the Proponent.

1.3 Addenda

If the RDN determines that an amendment is required to this RFP, the RDN will post the Addendum on the RDN (www.rdn.bc.ca) and new BC Bid (www.bcbid.gov.bc.ca/) websites. Each addendum will be incorporated into and become part of the RFP. No amendment of any kind to the RFP is effective unless it is contained in a written addendum issued by the RDN. It is the sole responsibility of the Proponent to check and ensure all amendments are included prior to submitting their final Proposal submission.

1.4 Withdrawal of Proposals

The Proponent may withdraw their Proposal at any time by submitting a written withdrawal email to the RDN contact person identified on the cover page on or before the closing.

1.5 Unsuccessful Vendors

The Regional District will offer debriefings to unsuccessful Proponents, on request, at a mutually agreeable time.



2. INTRODUCTION

The purpose of this Request for Proposal is to solicit submissions from qualified firms to provide four (4) aeration blower equipment packages to meet process, environmental, and noise emission requirements.

The blower packages are to include the blower, motor and mechanical power transmission components, mounting frame, environmental / noise enclosure and other appurtenances as required to meet the design requirements.

Installation is anticipated for Fall 2024, firms are to provide lead times with submission. All products are to be supplied per Incoterms 2020 Delivery Duty Paid (DDP), French Creek Pollution Control Centre, 957 Lee Road, Parksville, BC.

3. BACKGROUND

The Regional District of Nanaimo (RDN) owns and operates the French Creek Pollution Control Centre (FCPCC) wastewater treatment facility, located at 957 Lee Road, Parksville, BC. The facility was constructed in 1978 and has seen numerous upgrades during its lifetime.

The solids treatment process includes an Autothermal Thermophilic Aerobic Digester (ATAD). It is planned to upgrade the mixing system of the ATAD to four (4) hyperboloid mixer/aerators that require air supply to an aeration grid on the floor of the tank beneath each mixer. Three (3) of the blowers will supply air continuously to the four (4) tanks with the fourth (4) blower on standby. The ATAD system does not produce biogas.

4. SCOPE OF SERVICES

The scope shall include but not necessarily be limited to the engineering, supply, fabrication and shipping of the following:

- Four (4) blowers complete with motor, mechanical drive, mounting frame and enclosure.
- Other appurtenances as required to meet the design requirements.
- Onsite operator and maintenance staff training (1 day total).
- Onsite start-up and commissioning support (1 day total).
- Installation, operation and maintenance manual in electronic (searchable pdf) format, clearly marked with equipment number (1 total).

Process controls, instrumentation (except as noted in the blower technical specification in **Appendix A**), electrical connection, installation, and commissioning will be performed by others.

5. DELIVERABLES AND OUTCOMES

The desired outcome is to receive four (4) blowers that are reliable for continuous use, low maintenance, suitable for the electrical area classification and environmental conditions and meet the noise abatement requirements to not disturb nearby residents.



The deliverables shall include but not necessarily be limited to the engineering, supply and shipping of the four (4) blowers meeting all requirements of the blower technical specification in **Appendix A** along with onsite training, startup and commissioning support and a comprehensive installation, operation and maintenance manual.

6. REFERENCE/BACKGROUND INFORMATION

- Appendix A Blower Technical Specification
- Appendix B Blower Data Sheet
- Appendix C Concept Process and Instrumentation Diagram
- Appendix D Sample Contract

7. PROPOSAL SUBMISSION AND EVALUATION

To assist in receiving similar and relevant information, and to ensure your Proposal receives fair evaluation, the RDN asks Proponents to provide the following information.

Submission Requirements and Evaluation Criteria	Points		
Firm price, in Canadian dollars (CAD), for design and supply of four (4) blower and motor			
assemblies specified herein per Incoterms 2020 Delivery Duty Paid (DDP), French Creek			
Pollution Control Centre, 957 Lee Road, Parksville, BC.			
	40		
List daily rates to provide onsite representation for training, startup and commissioning			
services separately from the equipment supply price. Rates to be stated as 1) Travel day			
and 2) Onsite day and are to include all associated expenses.			
Recommended motor size, speed, and all pertinent information.			
Preliminary General Arrangement drawings of blower, motor assembly, and	10		
acoustic/weatherproof enclosure.			
Indicate shipping weight and offloading requirements.			
Preliminary blower and motor curves and completed Allnorth blower datasheet			
(Appendix B).			
Proposed project and drawing delivery schedule. Assume award date of April 23, 2024.			
Preliminary Quality Plan and Inspection and Test Plan (ITP).			
Warranty information.	5		
TOTAL	100		

Proposals will be evaluated on the following basis 60% Technical, 40% Financial, per the above table.

The lowest price proposal will receive full marks for the financial score. Other proposals will receive reduced scores based on the proportion higher than the lowest price. i.e. Score = Min Cost/Cost x Fee Points.

Proposals submitted should be in enough detail to allow the RDN to determine the Proponent's qualifications and capabilities from the documents received. The selection committee, formed at the RDN's sole discretion, will score the Proposals in accordance with the criteria provided.



The RDN may evaluate proposals on a comparative basis by comparing one proponent's proposal to another proponent's proposal. The RDN reserves the right to not complete a detailed evaluation if the RDN concludes the proposal is materially incomplete, irregular or contains any financial or commercial terms that are unacceptable to the RDN.

The selection committee may proceed with an award recommendation or the RDN may proceed to negotiate with the highest evaluated proponent with the intent of developing an agreement. If the parties after having bargained in good faith are unable to conclude a formal agreement, the RDN and the Proponent will be released without penalty or further obligations other than any surviving obligations regarding confidentiality and the RDN may, at its discretion, contact the Proponent of the next best rated Proposal and attempt to conclude a formal agreement with it, and so on until a contract is concluded or the proposal process is cancelled.

The RDN reserves the right to award the assignment in whole or in part or to add or delete any portion of the work. Throughout the evaluation process, the evaluation committee may seek additional clarification on any aspect of the Proposal to verify or clarify the information provided and conduct any background investigation and/or seek any additional information it considers necessary.

8. PROPOSED PURCHASE CONTRACT

The RDN's preferred form of Contract is attached herein (see **Appendix D**). Proponents should carefully review this form of Contract. Should any vendors request that RDN consider revisions to the form of Contract, Proponents should include any clauses of concern in their proposal submission and suggest replacement language.

9. GENERAL CONDITIONS

9.1 No Contract

By submitting a Request for Proposal and participating in the process as outlined in this RFP, proponents expressly agree that no contract of any kind is formed until a fully executed contract is in place.

9.2 Privilege Clause

The lowest or any proposal may not necessarily be accepted.

9.3 Acceptance and Rejection of Submissions

This RFP does not commit the RDN, in any way to select a preferred Proponent, or to proceed to negotiate a contract, or to award any contract. The RDN reserves the right in its sole discretion cancel this RFP, up until award, for any reason whatsoever.

The RDN may accept or waive a minor and inconsequential irregularity, or where applicable to do so, the RDN may, as a condition of acceptance of the Submission, request a Proponent to correct a minor or inconsequential irregularity with no change in the Submission.



9.4 Conflict of Interest

Proponents shall disclose in their Proposals any actual or potential Conflict of Interest and existing business relationships it may have with the RDN, its elected officials, appointed officials or employees.

9.5 Solicitation of Board Members and RDN Staff

Proponents and their agents will not contact any member of the RDN Board or RDN Staff with respect to this RFP, other than the RDN Contact named in this document.

9.6 Litigation Clause

The RDN may, in its absolute discretion, reject a Proposal submitted by Proponent, if the Proponent, or any officer or director of the Proponent is or has been engaged either directly or indirectly through another corporation in legal action against the RDN, its elected or appointed officers and employees in relation to:

- (a) any other contract for works or services; or
- (b) any matter arising from the RDN's exercise of its powers, duties, or functions under the Local Government Act, Community Charter or another enactment within five years of the date of this Call for Proposals.

In determining whether to reject a Proposal under this clause, the RDN will consider whether the litigation is likely to affect the Proponent's ability to work with the RDN, its consultants and representatives and whether the RDN's experience with the Proponent indicates that the RDN is likely to incur increased staff and legal costs in the administration of this Contract if it is awarded to the Proponent.

9.7 Exclusion of Liability

Proponents are solely responsible for their own expenses in preparing and submitting a Proposal and for any meetings, negotiations, or discussions with the RDN. The RDN will not be liable to any Proponent for any claims, whether for costs, expense, losses or damages, or loss of anticipated profits, or for any other matter whatsoever, incurred by the Proponent in preparing and submitting a Proposal, or participating in negotiations for a Contract, or other activity related to or arising out of this RFP. Except as expressly and specifically permitted in these Instructions to Proponents, no Proponent shall have any claim for compensation of any kind whatsoever, as a result of participating in this RFP, and by submitting a Proposal each Proponent shall be deemed to have agreed that it has no claim.

9.8 Ownership of Proposals

All Proposals, including attachments and any documentation, submitted to and accepted by the RDN in response to this RFP become the property of the RDN.

9.9 Freedom of Information

All submissions will be held in confidence by the RDN. The RDN is bound by the Freedom of Information and Protection of Privacy Act (British Columbia) and all documents submitted to the RDN will be subject to provisions of this legislation. The successful vendor and value of the award is routinely released.



Appendix A Blower Technical Specification



Blower Technical Specification ATAD Mixing Upgrade



Prepared For: Regional District of Nanaimo (RDN)

Submitted By: Allnorth

300-125 Wallace St,

Nanaimo, BC V9R 5B2

Canada

Phone: 250-753-7472

Allnorth Contact: Sean Pellerin, P.Eng.

Project Number: 2302932

Date: 08 March 2024



DOCUMENT INFORMATION

Project Number:	t Number: 2302932	
File Number: 14.50		
Filename:	2302932-1450-ts-001_A ATAD Blower Tech Spec	
Document Revision:	A	

REVISION HISTORY

Rev.#	Date of Issue	Reviewed By	Approved By	Description
Α	2024-03-08	NBF/AW	SGP	Issued for Quotation



TABLE OF CONTENTS

1	PROJECT BACKGROUND							
2	sco	PE	1					
	2.1	General	1					
	2.2	Vendor Scope of Supply	2					
	2.3	Vendor's Responsibility	2					
	2.4	Purchaser's Responsibility	3					
3	VEN	DOR DATA AND DRAWING REQUIREMENTS	3					
	3.1	Information to be Provided with Proposal	3					
	3.2	Vendor Drawings and Documents	3					
	3.3	Deliverables Supplied at Completion of Purchase Order	2					
	3.4	Tools and Spare Parts	∠					
4	DESI	IGN CONDITIONS	5					
	4.1	General	5					
	4.2	Location and Access	5					
5	MEC	HANICAL DESIGN REQUIREMENTS	5					
	5.1	General	5					
	5.2	Components	5					
	5.3	Blower Selection Criteria	6					
	5.4	Nameplate	6					
	5.5	Painting	6					
	5.6	Welding	6					
6	STR	UCTURAL DESIGN REQUIREMENTS	6					
7	ELEC	TRICAL DESIGN REQUIREMENTS	6					
8	COD	ES, STANDARDS & SPECIFICATIONS	7					
	8.1	General	7					
9	QUA	ALITY ASSURANCE	7					
	9.1	General	7					
	9.2	Shop Tests and Inspections	8					
10	СПІС	DDING HANDLING & STOPAGE	10					

APPENDICES

Appendix A ATAD Blower Datasheet



1 PROJECT BACKGROUND

The Regional District of Nanaimo (RDN) is planning to upgrade the mixing and aeration system, and process control of the four (4) Autothermal Thermophilic Aerobic Digestion (ATAD) tanks at the French Creek Pollution Control Centre (FCPCC) in Parksville, BC. The ATAD upgrade will replace the existing mixing and aeration system with hyperboloid type mixer/aerators for tanks 3 to 6. An air sparger ring underneath each hyperboloid mixer, one per tank, will provide air to the tank. This document covers the technical specification for the four (4) blowers (3 duty, 1 standby) that supply air to the sparger ring.

2 SCOPE

2.1 General

- 2.1.1 This specification, related datasheets and reference information covers the minimum technical requirements for the design, fabrication, inspection, testing, preparation for shipment and supply of four (4) screw-type blowers for the Regional District of Nanaimo (the Purchaser).
- 2.1.2 The blower(s) shall be screw-type variable speed electric motor driven, single-stage, air cooled rotary screw type complete with integral gearbox/belt-drive and accessories as described.
- 2.1.3 The blowers will be installed at the purchaser's French Creek Pollution Control Centre in Parksville, BC.
- 2.1.4 Each blower shall be custom engineered by the Vendor and shall include all system engineering required to ensure the blower is designed correctly and suitable for the intended application.
- 2.1.5 The Vendor shall base their commercial bid on the design and operating parameters, site conditions, and technical requirements as outlined in this specification, related datasheets, reference information, and other documentation that form the basis of the Request for Quotation (RFQ).
- 2.1.6 It is not intended that Vendors depart from their standard design and products. However, any deviations from these specifications shall be clearly listed and explained in the Proposal in the manner specified in this and related documents. Failure to indicate such deviations shall be understood to mean that none exist.
- 2.1.7 It is not the intent of this specification to detail every aspect of the design and manufacturing of this equipment. The selection of equipment, accessories, materials, and methods of fabrication not exclusively identified in this and all referenced specifications, but which are necessary for the completion of the work shall be the Vendor's responsibility.
- 2.1.8 Review of the Vendor's design drawings or other documents, or release of equipment for shipment shall not relieve the Vendor of his responsibility for compliance with this specification nor alter the conditions of the Vendor's warrantee or performance guarantee.
- 2.1.9 Unless the Vendor's proposal takes particular exception to this specification or attachments referenced herein, full compliance is implied and will be assumed. Any exceptions are to be noted as required. Alternatives may be offered for materials and fabrication, if technically or economically justified and provided that they meet the requirements of applicable codes, standards and specifications.



2.1.10 In the event of a conflict between this specification and other referenced documents, the Vendor shall consult the specified Purchaser's contact for a resolution in writing before any work is started. In the event of a conflict between this specification and governmental requirements, the more stringent requirement shall govern.

2.2 Vendor Scope of Supply

The Vendor's scope of supply shall consist of, but not limited to, the following:

- 2.2.1 Design, manufacture, test, prepare for shipment, and deliver to site four (4) blowers complete with ancillary equipment as outlined in this specification and the attached datasheets.
- 2.2.2 Each blower shall include, but is not limited to, the following ancillary items:
 - 1. Discharge expansion joint;
 - 2. Baseplate;
 - 3. Safety guards in accordance with WorkSafeBC;
 - 4. Integrated pressure relief valve;
 - 5. Base Frame & Acoustic Enclosure with ample access for maintenance and operation;
 - 6. Air inlet filter with filter pressure drop indicator;
 - 7. Blower element;
 - 8. Compensator;
 - 9. Check valve;
 - 10. Pulsation damper;
 - 11. Oil system;
 - 12. Drive motor with integrated gear box or belt drive;
 - 13. Integrated Instrumentation including discharge pressure transmitter;
 - 14. Heater and/or other components for operation in cold weather;
 - 15. NEMA 3R weatherproof enclosure.
- 2.2.3 Drawings and documentations as per section 3 Vendor Data and Drawing Requirements.
- 2.2.4 Freight to site: Incoterms DDP.
- 2.2.5 Fasteners and gaskets required for site assembly and installation.

2.3 Vendor's Responsibility

- 2.3.1 The Vendor or Manufacturer of the blower shall be well represented in North America & must have its own local service organization to ensure good overall service support during start-up and later when the blowers are in service.
- 2.3.2 All factory authorized service and spare parts shall be available from at least one location within North America.



2.4 Purchaser's Responsibility

The following items are outside of the Vendor's scope of supply and will be provided by the Purchaser or others:

- 1. Concrete foundations, bases, embedded steel and anchor bolts;
- 2. Instrument wiring, electric wiring, motor starters, motor controls except when an integral part of the equipment;
- 3. Piping, pipe supports, insulation, valves, and fittings external to the equipment.
- 4. Utilities such as power, water, and air;
- 5. Offloading and storage at site;
- 6. Erection labor and supervision;
- 7. Installation, start-up, and commissioning.

3 VENDOR DATA AND DRAWING REQUIREMENTS

3.1 Information to be Provided with Proposal

The Vendor shall provide the following information with their bid documents:

- 1. Firm price, in Canadian dollars (CAD), for design and supply of four (4) blower and motor assemblies specified herein;
- 2. Recommended motor size, speed, and all pertinent information;
- 3. Preliminary General Arrangement drawings of blower, motor assembly, and acoustic/weatherproof enclosure;
- 4. Indicate shipping weight and offloading requirements;
- 5. Preliminary blower and motor curves and completed Allnorth blower datasheets;
- 6. Proposed project and drawing delivery schedule;
- 7. Preliminary Quality Plan and Inspection and Test Plan (ITP).

3.2 Vendor Drawings and Documents

- 3.2.1 Drawings shall use the Purchaser's symbology and tagging system for equipment, piping and instruments as applicable.
- 3.2.2 Drawings shall be submitted in accordance with the project's schedule. Any exceptions to the schedule must be clearly indicated in the Vendor's quotation.
- 3.2.3 Vendor shall submit preliminary drawings for Purchaser review prior to fabrication. Drawings submitted for review will be returned to the Vendor with one of the following review codes:
 - 1. WORK MAY PROCEED:
 - REVISE & RESUBMIT. WORK MAY PROCEED SUBJECT TO INCORPORATION OF CHANGES INDICATED;
 - 3. STOP WORK PER ATTACHED WRITTEN INSTRUCTIONS;
 - 4. REVIEW NOT REQUIRED. WORK MAY PROCEED;
 - FINAL CERTIFIED.
- 3.2.4 Unless drawings are marked "3 STOP WORK" status, the Vendor is expected to proceed with fabrication in accordance with agreed fabrication schedule.



- 3.2.5 Once preliminary drawings are approved and any mark-ups have been incorporated, drawings are to be marked as "Certified" or "Issued for Construction" and submitted as a final drawing submission.
- 3.2.6 Where certified engineering drawings or documents are required, they shall be stamped by a Professional Engineer (P.Eng.) licensed with Engineers and Geoscientists BC.
- 3.2.7 Drawings and data returned to the Purchaser for revision must be resubmitted within ten (10) working days after receipt. Resubmittals shall retain original number and be clearly marked with revision triangles enclosing the revision number.

3.3 Deliverables Supplied at Completion of Purchase Order

The vendor shall provide the following information for completion of Purchase Order:

- 1. Certified General Arrangement drawings (in AutoCAD .dwg and PDF format), including cross section drawings with parts list;
- 2. Certified blower datasheets and performance curves;
- 3. Certified motor datasheets and torque-speed curves;
- 4. Project schedule indicating key deliverables and milestones from receipt of Purchase Order to delivery to the purchaser's site;
- 5. Process and instrumentation diagrams, showing Legend, Lube Oil Schematic, Process Schematic, Instrumentation with alarms and shutdowns, setpoint and interlocks;
- 6. Electrical schematic designed to show a complete loop of each circuit with termination points included, diagram for instrumentation etc;
- 7. Wiring diagram designed to show the detailed electrical arrangement drawings for electrical equipment furnished;
- 8. Blower & Motor Tests Submit the general schedule, test setup and preparation, mechanical test run, performance test run with test conditions, documentation, acceptance criteria for test run, oil system parameters, visual inspection, and final documentation;
- 9. Quality plan and Inspection and Test Plan (ITP);
- 10. Recommended spare parts list, including recommended/expected replacement frequency as applicable;
- 11. Coating and painting specifications;
- 12. Installation, Operation and Maintenance Manual.

3.4 Tools and Spare Parts

- 3.4.1 It is not foreseen any need for special tools / appliances necessary to disassemble, service, repair and adjust the positive displacement screw blowers; however, if the manufacturer does recommend special tools and appurtenances, these shall be provided with the machines along with the following spare parts:
 - 1. One (1) set of Air & Oil filter replacement kit (per unit)
 - 2. Blower oil (suitable quantity)
- 3.4.2 All spare parts shall be suitably packaged and clearly identified with indelible markings on the containers. Tools and spare parts shall be clearly marked, "Tools and Parts for Screw Air Blowers".



4 DESIGN CONDITIONS

4.1 General

- 4.1.1 The blowers shall meet the design and operating requirements outlined in this specification and the blower datasheets found in Appendix A.
- 4.1.2 Blower power shall not exceed the nameplate motor rating over the entire range of operation.
- 4.1.3 Blowers of a design requiring synchronization of air flow in order that two or more may operate in parallel shall be acceptable, that is, the blowers shall operate in a cascade, or parallel mode, based upon the vendor's recommendation.
- 4.1.4 The blowers shall be designed to suit the outdoor operation and site conditions stated in the datasheets.
- 4.1.5 The blowers shall be designed for continuous duty, 24 hours per day, 365 days per year and shall incorporate features to minimize duration of outages for routine maintenance and inspections.

4.2 Location and Access

The project site is 957 Lee Rd, Parksville, BC V9P 1Z4.

5 MECHANICAL DESIGN REQUIREMENTS

5.1 General

- 5.1.1 General Arrangement drawings shall be stamped by a Professional Engineer (P.Eng.) licensed with Engineers and Geoscientists BC.
- 5.1.2 Blower discharge nozzle flanges shall be in accordance with ANSI/ASME standards. Bolt holes shall straddle centerlines.
- 5.1.3 General Arrangement drawings shall include allowable nozzle loads, motor specifications with the shaft direction of rotation indicated.

5.2 Components

- 5.2.1 Lifting lugs shall be included where necessary.
- 5.2.2 The design, materials and construction shall be in accordance with the Vendor's standard practice or recommendation for the intended service, unless specified elsewhere in the specification and/or datasheets.
- 5.2.3 Exposed, moving components which are not guarded by the frame of the blower shall be guarded in accordance with WorkSafeBC standards. Guards shall be designed to be readily removable for maintenance.
- 5.2.4 Blower noise level shall not exceed 70 dBA at 1m, comply with WorkSafeBC and local bylaw requirements.



5.3 Blower Selection Criteria

5.3.1 Recommended motors will be sized to handle the worst-case process conditions.

5.4 Nameplate

- 5.4.1 A stainless-steel nameplate shall be permanently attached to the blower and not to the mounting baseplate.
- 5.4.2 The nameplate shall include, at a minimum, the following information:
 - 1. Equipment number per datasheets;
 - 2. Vendor's name, model number and serial number;
 - 3. Rated capacity, size, and type;
 - 4. Design blower head and flow, operating speed (rpm) and impeller size.

5.5 Painting

- 5.5.1 Vendor shall provide the surface preparation and painting procedures for review and approval prior to start of fabrication.
- 5.5.2 Stainless steel and finished machine surfaces such as flange faces, shafts, and couplings, shall not be painted.

5.6 Welding

- 5.6.1 Welding of structural and mechanical components shall generally comply with Canadian Welding Bureau (CWB) and ASME codes and standards as applicable.
- 5.6.2 Welding procedures and procedure qualification shall be submitted for review and approval prior to start of fabrication.
- 5.6.3 Welders shall be qualified to a registered welding procedure required in blower fabrication.
- 5.6.4 All welds shall be free from coarse ripples, undercuts, spatters, grooves, blow-holes, overlaps, abrupt ridges and valleys to avoid stress concentration points.

6 STRUCTURAL DESIGN REQUIREMENTS

General Arrangement drawings shall include the total weight of the blower assembly, dynamic loads, center of gravity, baseplate dimensions and anchor bolt location / size.

7 ELECTRICAL DESIGN REQUIREMENTS

- 7.1.1 Each blower shall be provided with a horizontal, variable speed inverter duty totally enclosed fan cooled (TEFC) squirrel cage induction motor.
- 7.1.2 The motor shall be designed in accordance with prevailing IEC / NEMA standards. The motor shall have a minimum 1.15 service factor. The insulation shall be Class "F" insulation with a Class "B" temperature rise above 40° C (105° F).



- 7.1.3 Only Siemens, WEG, Toshiba, Baldor, or ABB motors shall be supplied with the blowers.
- 7.1.4 Motors shall be of high efficiency design. Efficiencies shall be determined in accordance with IEC/NEMA Standard. Nominal and guaranteed efficiencies shall be included on motor nameplates in compliance with IEC/NEMA Standard.
- 7.1.5 The package shall be suitable for operation on 575V volt ($\pm 10\%$), 3 phase, and 60 Hz power for ambient air temperature of up to 40°C. Motors shall be suitable for being driven by a variable frequency drive (inverter duty).
- 7.1.6 Motors shall include optional pricing for factory-installed thermistors to monitor dangerous temperature conditions (1 per phase).

8 CODES, STANDARDS & SPECIFICATIONS

8.1 General

- 8.1.1 All work shall be completed in the English language and using metric units of measure.
- 8.1.2 The hierarchy of standards begins with the Codes and Regulatory requirements of the Province of British Columbia, then the national standards, then other specified codes, standards and client specifications identified within these codes and standards, then this specification, and finally the blower datasheets.
- 8.1.3 The supply of all equipment, materials and services and the design and construction of the equipment shall comply with this specification including the requirements of applicable codes, standards and specifications referenced in this document. All referenced material shall be to the latest revision.

9 QUALITY ASSURANCE

9.1 General

- 9.1.1 The Vendor shall have a Quality Assurance Program in place that ensures that requirements for design, procurement, materials, testing, and services specified for the product are met. The QA program shall conform to the requirements of ISO 9001:2015 or equivalent. The Purchaser shall be the sole judge of equivalency.
- 9.1.2 The Vendor shall provide a Project Quality Plan to cover all equipment produced in accordance with the Purchase Order and specifications. The Project Quality Plan shall be prepared in accordance with the requirements of ISO 10005:2018 and, in addition, shall include:
- 9.1.3 Purchaser's project number and applicable Purchase Order number.
- 9.1.4 Proof of qualification certification(s) and registration status for each location of control for manufacture of product or provision of service.
- 9.1.5 The identification of positions and individuals having authority to interface directly with the Purchaser, including all pertinent contact details.

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Page 7



- 9.1.6 The Vendor shall submit an Inspection and Test Plan (ITP) for Purchaser's review and acceptance prior to proceeding with the affected activities. ITP activities must contain activities performed by both the Vendor and his sub-vendors.
- 9.1.7 Each ITP activity must detail the controlling procedure/standard/specification and the acceptance criteria and must include a sign-off area for the Vendor/sub-vendor's representative and the Inspection Authority. Agreed witness points require formal notification.
- 9.1.8 The Vendor shall submit a concession request where there has been an inadvertent variation from the agreed specification. Non-conformances found in the vendor's processes shall be submitted to the Purchaser for acceptance of the final disposition. Rejection of the final disposition by the Purchaser will result in rework of the affected product(s).
- 9.1.9 In the event of a conflict, the Vendor shall advise the Purchaser so that corrective action may be taken.
- 9.1.10 The Vendor shall submit details on sustainable sourcing and practices in line with RDN's purchasing policy.

9.2 Shop Tests and Inspections

- 9.2.1 Each blower shall be tested in accordance with the ISO 1217 Ed. 3 Annex C, stipulating the FAD measurement at the outlet of the package, net of all losses. Performance Tests shall be conducted as a complete packaged unit including the blower, motor, sound enclosure, and instrumentation, and accessories. Any exceptions required must be outlined in detail at the time of quotation. The test shall include blower performance (both flow & pressure) over the complete operating range from given minimum motor speed to the maximum speed of the motor. Also, package power consumption shall be considered during the test which will include the main drive motor power, inlet filter & check valve pressure drop losses, oil cooler & oil pump.

 Blower net delivered flow rate shall be guaranteed with no negative tolerance and the discharge pressure shall be guaranteed with no power tolerance other than those noted in ISO 1217 Ed. 3 procedures.
 - 1. The capacity of the blower shall be defined as per paragraph 5.6 of the ISO 1217 Ed 3 Annex C of the Test Code. The design discharge pressure shall be measured on the discharge side of the blower at the discharge flange.
 - 2. All test equipment shall be calibrated and certified by an independent test agency no more than twelve (12) months prior to the test date. Certificates shall show the stability of calibration over a period of at least one year.
 - 3. The power computation as quoted shall be measured at the blower discharge flange. Power shall be calculated as per paragraph 5.7 of the ISO 1217 Ed 3 Annex C of the Test Code.
- 9.2.2 A factory functional operational check shall be performed on each unit.
- 9.2.3 The blower test report shall present computations in exact accordance with Section 5.6 & 5.7 of ISO 1217 Ed. 3 Annex C with performance curves showing flow, pressure, and power inputs.
- 9.2.4 Welds shall be visually inspected in accordance with the requirements of CWB standards.



- 9.2.5 Tests and inspections not covered by the above requirements shall be performed in accordance with the manufacturer's standards after Purchaser's acceptance. All inspection and test reports / certificates, including the signed ITP, shall be submitted to the Purchaser.
- 9.2.6 All mandatory tests outlined within the specifications may be witnessed by the nominated Inspection Authority. Purchaser's inspection / test witnessing requirements will be as per the agreed ITP. The Purchaser shall be notified at least 21 days in advance of all impending tests that the Purchaser has specified to be witnessed or observed.
- 9.2.7 The Vendor and his sub-Vendors are required to give access and all reasonable facilities required by Inspection Authority and the Purchaser's visiting Inspector during working hours for the purpose of inspecting the Work in Progress, examine and witness, or carry out tests of materials and workmanship at the Vendor's premises, and check on the progress of manufacture.
- 9.2.8 Purchaser reserves the right to inspect equipment at any reasonable time during fabrication to assure that the materials and workmanship are in accordance with specifications and governing codes.
- 9.2.9 All equipment covered by this specification shall be inspected in its fully assembled form by a representative of the Purchaser prior to shipment. Where appropriate, this inspection may be made concurrent with final testing of the equipment. Equipment shall not be shipped to site without the approval of the Purchaser's Inspector.
- 9.2.10 Acceptance of work by Purchaser does not in any way constitute a waiver of requirements to meet Vendor's contractual commitment, nor does shop inspection relieve Vendor of his responsibility to ensure the quality of the work.
- 9.2.11 In the event that any piece of equipment fails under test or does not comply with the requirements of this specification, in respect to either workmanship or material, it shall be repaired or replaced by the Vendor at no cost to the Purchaser.
- 9.2.12 Each main drive motor shall be given a routine, non-witnessed test in accordance with IEC / NEMA test procedures. A certified motor data sheet shall be furnished for approval prior to shipment.



10 SHIPPING, HANDLING & STORAGE

- 10.1.1 Blowers, motor assemblies, and all accessories shall be fully assembled to baseplate for shipment.
- 10.1.2 Lifting points shall be clearly marked and openings shall be covered.
- 10.1.3 The Vendor shall ensure that all equipment is adequately packed for transport to site and storage at site. Purchaser reserves the right to inspect the standard of packaging at the Vendor's works or his sub-Vendor's works and to reject equipment not adequately packed.
- 10.1.4 Blowers and components shall be protected from weather, rust, mechanical damage, and entry of harmful foreign material during shop fabrication and shipment.
- 10.1.5 Shipping preparation, handling and site storage procedures shall be submitted prior to implementation.
- 10.1.6 Identification tags shall be provided and placed on all equipment and loosely shipped materials. Tags shall be corrosion resistant and include the Purchase Order number and equipment / item number. All tags shall bear the component designation numbers shown on the Vendor drawings and bill of materials and must match the packing list.



Appendix B Blower Data Sheet



Blower Datasheet													
	300-125 Wallace Street, Nanaimo, BC V9R 5B2 Phone: 250-753-7472												
Client:			District of Nanaimo		Date			08-Mar-24					Rev.
Project: FCPCC ATAD Mixing Upgrade			Docı	ument Numb	ber:	2302932-14	150-d	at-001			Δ		
Project Number: 2302932				File N	Number:		14.50					Α	
	ment Number:	TBD		,	Area	1:		-					<u> </u>
-	ment Name:	ATAD Blov	wers										
Service		Air											
Operat	tion:	Continuo	us										
Rev	Date			Des	cript	ion				Ву		Chk	Арр
Α	08-Mar-24			Issued fo						RRF	1	SGP	SGP
				Sta	mpir	ng Area				Ċ			
			S	ECTION 1	- SIT	TE CONDITIC	ONS						
1	Location:		Parksville,			Altitude		n.):			10		m
2	Installation:	-	Outdoo						— kPa				
3	Area Classifica	etion:	Not Classif				Per BCBC		− kPa				
4	Ambient Temp	_	TVOC Classiii	Seismic Acceleration:			Per BCBC		_				
5	·	perature.	-8 /				rei	F		g			
	Dry Bulb	-		25	_°℃					Post-l	•	.	_
6	Wet Bulb	-13.4	N/A /		_ `		ance C	ategory:		POST-I	JISas	ter	
7			/inter extreme *S	Summer ex	trem								
8	Design Tempe	erature:						Requirement				_	
9	High	_	60 (outlet te	emp)	_°C	_		onditions	_	Fumes	J] Dust	İ
10	Low		-8		°C			Conditions		Other: N	loise		
			2 - DESIGN/OPERA		_	IONS - TO E	BE CON			IORTH			
No.		Specification	ons	Units				Value	9				Rev
1	Process Data:												
2	Fluid			% v/v				Air					^
2	Fluid			(UNO)				All					Α
3	Flow Rate:												
4	Design			Nm3/h	1			241 to 9	965				Α
5	Inlet Pressure			mBarG	_			ATM					Α
6	Discharge Pres			mBarG				480					Α
7	Operation:	33410		-	<u>, </u>			700					
	Continuous or	- lotovooitt.	+		-			Continu					Λ
8				-	-			Continu	ous				Α
9	No. of starts p	er hour if	intermittent		-								
10													
11	Operating Speed	d		rpm			l	Indicated by	Vend	dor			Α



No.	Specifications	Units	Value	Rev
12	·		MENTS - TO BE COMPLETED BY ALLNORTH	
13	Mechanical Specifications:	10/12/12/01/12		
14	Blower type	-	Indicated by Vendor	Α
15	Design Code	-	· · · · · · · · · · · · · · · · · · ·	
16	Name Plate Required	Yes/No	Yes	Α
17	Heater/Winterization/Weather Protection	Yes/No	Yes	А
18	Allowable Noise Limit	dBa	70 dBa at 1m	Α
19	Inlet Filter	Yes/No	Yes	А
20	Silencer	Yes/No	No - Unless required for noise limit	А
21	Inlet Damper / Valve:	Yes/No	No	Α
22	Outlet Damper / Valve:	Yes/No	No	А
23	Expansion Joint Inlet/Outlet	Yes/No	Outlet only	А
24	Acoustic Enclosure	Yes/No	Yes	А
25	Internal Pressure Relief Valve	mBarG	1000	А
26	Connections:			
27	Suction (Size, Type, Rating)	-	N/A	А
28	Discharge (Size, Type, Rating)	-	4" or 6" (Vendor to Confirm)	А
29	Housing Drain w/ Plug	-	Indicated by Vendor	А
30				
31	Materials of Construction:			
32	Body	-	Indicated by Vendor	Α
33	Rotor, Shaft, Sealing	-	Indicated by Vendor	Α
34				
35	Painting	-	Yes	Α
36	Lining	-	Indicated by Vendor	Α
37	Insulation (if required)	-	N/A	Α
38				
39		AL REQUIREME	ENTS - TO BE COMPLETED BY ALLNORTH	
40	Variable Speed Drive:	Yes/No	No (VFD by others, inverter duty motor req'd)	Α
41	Belt or Gear Drive:	Yes/No	Yes	A
42				
43	Motor Supply Voltage	VAC	600	А
44				
45	Primary Control:			
46	Speed / Level / Flow / Temp / Pressure	-	Flow	А
47	Other - Specify	-		
48				
49	Instrumentation Required:			
50	Gauges	-	Discharge Pressure Transmitter	А
51	Surge control system	-	None	А
52	Discrete I/O control voltage	V	N/A	A



No.	Specifications	Units	Value	Rev
53	·	ION 5 - TO BE	COMPLETED BY SUPPLIER	
54	Equipment quoted will meet Criteria	Yes/No		
	above?	103/140		
55	If Not, Explain Differences	-		
56				
57	Equipment Information:			
58	Manufacturer	-		
59	Make and Model	-		
60	Туре	-		
61	Housing Size	-		
62	Wheel Size	-		
63	Motor Frame Size	-		
64				
65	Performance Data:			
66	Flow Rate:			
67	Design	Nm3/h		
68	Maximum	Nm3/h		
69	Minimum	Nm3/h		
70	Total Static Pressure	mBarG		
71	Discharge Air Temperature	°C		
72	Aftercooler	°C		
73	Blower Speed, rated	rpm		
74	Blower Speed, maximum allowable	rpm		
75	Absorbed power, rated	hp		
76	Efficiency @ Design Conditions	%		
77	Best Efficiency Point	%		
78	Noise	dBa @ 1m		
79	Heat Rejection during Operation	kW		
80	Ventilation Air Requirement During	Nm3/h		
	Operation			
81				
	Mechanical Data:			
83	Unit Skid Mounted	Yes/No		
84	Casing Split	Yes/No		
85	Casing Design Pressure	kPag		
86	Impeller type / Diameter	-		
87	Shaft Diameter	mm		
88	Shaft Seal Type	-		
89				
90	Inlet Filter:			
91	Manufacturer	-		
92	Туре	-		
93	Size	-		
94	Support / Flange	-		
95	Replaceable cartridge type / size	-		
96				
97	Inlet Silencer:	Yes/No		
98	Manufacturer	-		
99	Туре	_		
	• •			



No.	Specifications	Units	Value	Rev
100	Size	-		
101	Support type - can be supported on inlet flange	Yes/No		
102				
103	Outlet Silencer:	Yes/No		
104	Manufacturer	-		
105	Туре	_		
106	Size	_		
107	Support type - can be supported on inlet flange	Yes/No		
108	-			
109	Inlet Damper / Valve:	Yes/No		
110	Manufacturer	-		
111	Туре	-		
112	Size / Rating	-		
113	Actuator type	-		
114	,,			
115	Discharge Damper / Valve / Check Valve (if required):	Yes/No		
116	Manufacturer	-		
117	Туре	-		
118	Size / Rating	-		
119	Actuator type	-		
120				
121	Connections:			
122	Suction (Size, Type, Rating)	-		
123	Discharge (Size, Type, Rating)	-		
124	Drain (Size, Type, Rating)	-		
125	Other (Size, Type, Rating)	-		
126	Thermostat	-		
127	Other	-		
128				
129	Drive System Components:			
130	Drive Type	-		
131	Drive Arrangement	-		
132	Motor:			
133	Manufacturer	-		
134	Туре	-		
135	Power Supply	V/Ph/Hz		
136	Power	hp		
137	Speed	rpm		
138	Enclosure Type	-		
139	Frame			
140	Service Factor	-		
141	Insulation Class	-		
142	Motor mount required/ included	-		
143	Coupling:	Yes/No		
144	Manufacturer	-		
145	Type / Model	-		

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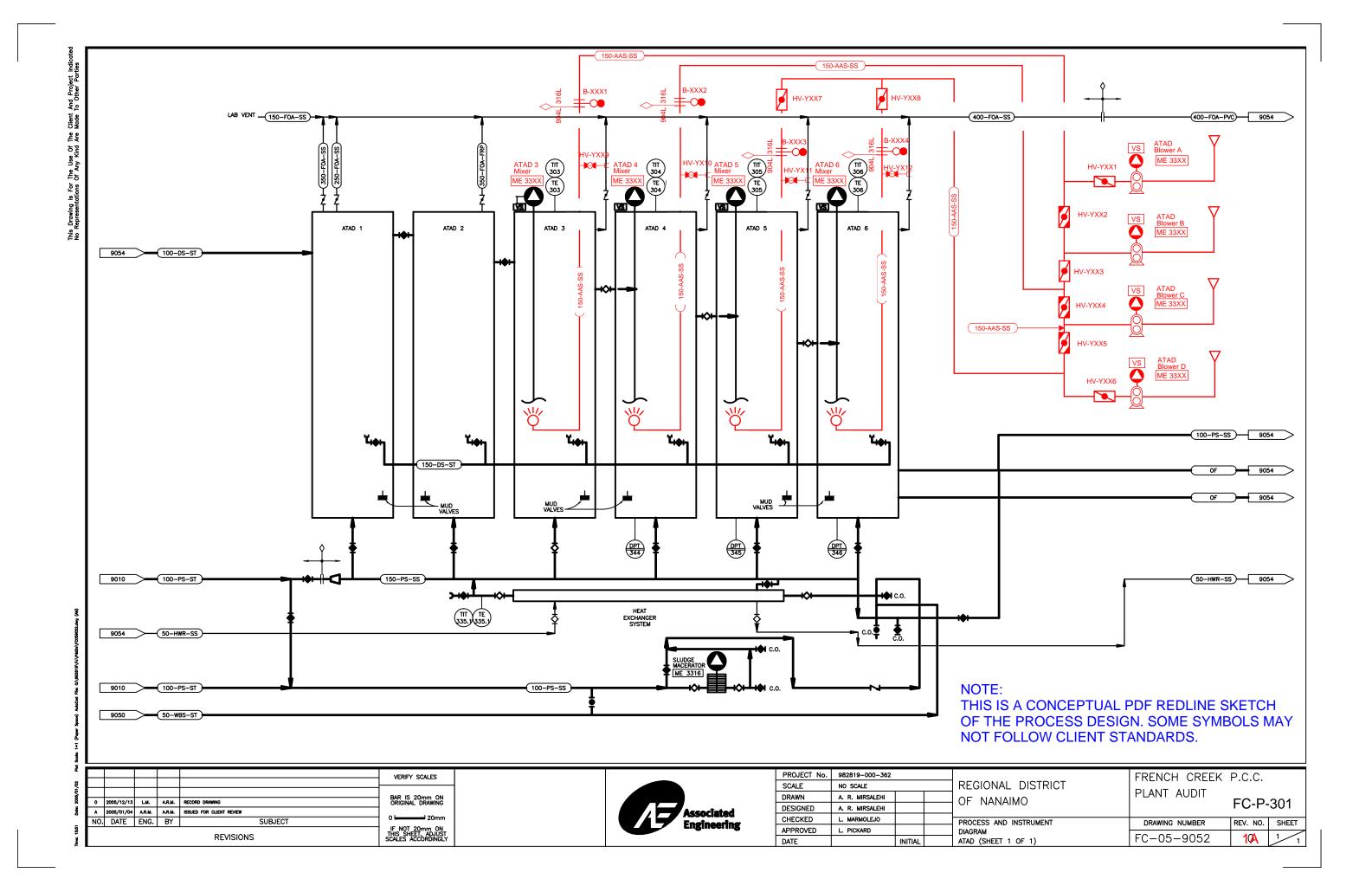
No.	Specifications	Units	Value	Rev
146	Size	-		
147	Service Factor	-		
148	Drive Guards:			
149	Comply to OSHA standards	Yes/No		
150	1 7	-		
151	Bearings:			
152	Manufacturer	-		
153	Туре	-		
154	Size	-		
155	L10 Life	-		
156	Lubrication type/system	-		
157	Lubrication level sight glass	Yes/No		
158	Sealing	-		
159	3	-		
	Material Data:			
161	Rotor	-		
162	Impeller - hub	-		
163	Inlet guide vane / housing	-		
164	Casing	-		
165	Shaft	_		
166	Shaft Sleeve	_		
167	Shaft Bushing	_		
168	Shaft Seal	_		
169	Bearing	_		
170	Base frame	_		
171	Bolting	_		
172	Filter Box material	-		
173	Acoustic Enclosure	-		
174	Damper / Valve	-		
175	Body	-		
176	Damper	-		
177	Shaft	-		
178	Louver	-		
179		-		
	Instrumentation Data:			
181	Pressure Gauge	-		
182	Differential Press. Gauge on Filter	-		
183	Temperature Gauge	-		
184	Vibration Sensor	-		
185	Thermostat	-		
186	Other	-		
187				
	Lining:			
189	Material	-		
190	Thickness	-		
191		-		
192	Loads and Moments			
193	Static Loads			
		N		
194	Fx, Fy, Fz	N		



No.	Specifications	Units	Value	Rev
195	Mx, My, Mz	N-m		
196	Dynamic Loads			
197	Fx, Fy, Fz	N		
198	Mx, My, Mz	N-m		
199				
200	Dimensions:			
201	Length	mm		
202	Width	mm		
203	Height	mm		
204				
205	Weight:			
206	Blower assembled	kg		
207	Filter	kg		
208	Motor weight	kg		
209	Blower assembled with motor	kg		
210	Cooling System Skid if separate	kg		
211	Heaviest part in erection	kg		
212	Heaviest part in maintenance	kg		
213				
214	Vendor Supply Checklist:			
215	Motor included	Yes/No		
216	Motor base included	Yes/No		
217	General Arrangement Drawing	Yes/No		
218		SECTION 5	- NOTES	
219				



Appendix C Concept Process and Instrumentation Diagram





Appendix D Sample Contract

REGIONAL DISTRICT OF NANAIMO

BETWEEN:	VENDOR.	(the "Supply Contractor")

AND: Regional District of Nanaimo (the "Corporation")

THIS AGREEMENT WITNESSES that the Supply Contractor and the Corporation agree as follows:

- 1. The Supply Contractor shall provide all labour, Supply Contractor's Plant and Equipment and materials required to supply the Goods within the required time, as required by the Contract Documents further defined in the Standard Form Supply Contract General Conditions.
- 2. The Corporation shall pay the Supply Contractor the Contract Price, as required by the Contract Documents.
- 3. The Contract Price shall be the sum in Canadian Dollars of the following:
 - (a) \$ _____ (Excl. Taxes), and
 - (b) any payments made on account of changes, as may be required by the Contract Documents.

The Contract Price shall be the entire compensation owing to the Supply Contractor by the Corporation for the Goods and shall cover and include necessary costs including but not limited to all supervision, labour, materials, Supply Contractor's Plant and Equipment, overhead, profit, financing costs, duty, shipping charges, fabrication and finishing, conveyance and delivery, packing, crating, freight, cartage, drafting charges, tariffs, warranty and all other costs and expenses whatsoever incurred in supplying the Goods (Incoterms DDP applies).

Except for the amounts which the RDN in good faith is disputing and except for any set off which the RDN may claim and except for invoices (or portions of invoices) in respect of which the RDN has requested and not received supporting evidence, the RDN shall pay invoices submitted to it for the Goods, within 30 days' receipt thereof.

- 4. Payment terms for the Goods shall be as follows:
 - (a) 10% of the Contract Price upon approval of the engineered drawing package;
 - (b) 40% of the Contract Price upon receipt of all materials required for fabrication/assembly;
 - (c) 50% of the Contract Price upon delivery and acceptance to the Delivery Point.

REGIONAL DISTRICT OF NANAIMO

- 5. The Supply Contractor shall supply all Goods to the Delivery Point on the date requested and confirmed by the Corporation, with one week notice. For scheduling purposes, this date will be ____ weeks (*TBC depending on quoted delivery time*) from the date of the Supply Contract, plus or minus two weeks.
- 6. The Contract Documents shall form a part of this Agreement as though recited in full.
- 7. The Contract supersedes all prior negotiations, representations, or agreements, whether written or oral and is the entire agreement between the Corporation and the Supply Contractor with respect to the subject matter of this Agreement.
- 8. The Supply Contractor shall not assign the Contract, or any portion of the Contract, or any payments due or to become due under the Contract, without the express written consent of the Corporation which will not be unreasonably withheld.
- 9. No action or failure to act by the Corporation or an authorized representative of the Corporation shall constitute a waiver of any right or duty afforded any of them under the Contract or constitute an approval or acquiescence in any breach thereunder, except as may be specifically agreed in writing.
- 10. This Agreement shall ensure to the benefit of and be binding upon the Corporation and the Supply Contractor and their respective heirs, executors, legal representatives, successors and permitted assigns. In the event of more than one person being the Supply Contractor, the grants, covenants, provisos and claims, rights, powers, privileges, and liabilities shall be construed and held to be several as well as joint.
- 11. Time shall be of the essence of this Agreement.
- 12. This Agreement may be executed in any number of counterparts, each of which will be deemed to be an original and all of which taken together will be deemed to constitute one and the same instrument. Delivery by electronic transmission in portable document format (PDF) of an executed counterpart of this Agreement is as effective as delivery of an originally executed counterpart of this Agreement.

STANDARD FORM SUPPLY CONTRACTSUPPLY AGREEMENT

REGIONAL DISTRICT OF NANAIMO Page 3 of 3 IN WITNESS WHEREOF the parties hereto have executed this Agreement as follows: **REGIONAL DISTRICT OF NANAIMO** by its authorized signatory on _____ day of _____, 20__ (the date of Agreement): SIGNED on behalf of the Corporation by: Signature: _____ **VENDOR** by its authorized signatory on _____ day of _ , 20 : SIGNED on behalf of the Supply Contractor by: Signature: Name: Signature: ____ Name: Title: _____

GENERAL

1.1 DEFINITIONS

The following words and terms, unless the context otherwise requires, in all Contract Documents, shall have the meanings set out below. Words importing the male gender include the female gender and either includes the neuter and vice versa and words importing the singular number includes the plural number and vice versa.

"Addenda" means any addition, deletion, clarification, or corrections issued with respect to the Original Solicitation Documents prior to execution of the Agreement;

"Agreement" means the Standard Form Supply Contract Form of Agreement executed by the Corporation and the Supply Contractor;

"Contract" means the contractual relationship formed between the Corporation and the Supply Contractor by each party's execution of the Agreement;

"Contract Documents" means the following documents:

- (1) the executed Agreement;
- (2) these General Conditions;
- (3) any Addenda;
- (4) the Original Solicitation Documents;
- (5) the Proposal; and
- (6) other relevant documents such as but not limited to letters of clarification and any reports, standards or the like included by reference in the Original Solicitation Documents or Addenda;

"Contract Price" has the meaning set out in the Agreement;

"Corporation" means the Regional District of Nanaimo;

"Day" means calendar day;

"Delivery Date" means the date set out in the Agreement as the latest date by which the Supply Contractor is required to supply Goods to the Delivery Point;

"Delivery Point" means the <Enter location and street address> as per Incoterms 2020 Delivery Duty Paid (DDP) with title transferring at the named place;

1

"Goods" means moveable property that the Supply Contractor is required to deliver to the Corporation pursuant to the Contract Documents and includes materials, products, equipment, and other physical objects of every kind and description whether in solid, liquid, gaseous, or electronic form;

"Inspector" means a person appointed by the Corporation having the authority set out in Clause 2.1.2.1 of these General Conditions.

"Original Solicitation Documents" means the request for proposals, invitation to tender or comparable form of solicitation posted by the Corporation which resulted in the Agreement being executed;

"Proposal" means the Supply Contractor's written submission to the Corporation in response to the Original Solicitation Documents;

"Specifications" means that part of the Contract Documents consisting of general requirements and written descriptions of the technical features of materials, equipment, construction systems, standards, and workmanship;

"Supply Contractor" means the person identified as such in the Agreement.; and

"Warranty Period" has the meaning set forth in Clause 3.4.1 of these General Conditions.

CONTRACT REQUIREMENTS

1.1.1 Successors' Obligations

The Contract shall enure to the benefit of and is binding upon not only the parties hereto but also their respective successors and permitted assigns.

1.1.2 Assignment of Contract

The Supply Contractor shall not assign the Contract in whole or in part, nor any payments due or to become due under the Contract without the prior written consent of the Corporation. No assignment of the Contract shall relieve the Supply Contractor from any obligation under the Contract or impose any liability on the Corporation. Involuntary assignment of the Contract because of bankruptcy, assignment of the Contract for the benefit of creditors or appointment of a receiver, or insolvency shall be deemed default under the Contract entitling the Corporation to terminate the Contract as hereinafter provided.

1.1.3 Waiver of Rights

Except as herein provided, no act or failure to act by the Supply Contractor or the Corporation at any time with respect to the exercise of any right or remedies conferred upon them under this Contract shall be deemed to be a waiver on the part of the Supply Contractor or the Corporation of any of their rights or remedies. No waiver shall be effective except in writing. No waiver of one right or remedy shall act as a waiver of any other right or remedy or as a subsequent waiver of the same right or remedy.

1.1.4 Amendment of Contract Documents

The Contract Documents shall not be amended except as specifically agreed in writing signed by both the Corporation and the Supply Contractor.

1.2 LAWS, REGULATIONS AND PERMITS

- 1.2.1 The Contract shall be construed under and according to the laws of the Province of British Columbia and subject to an agreement to refer a dispute to mediation as per Clause 2.3 of these General Conditions. The parties agree to irrevocably attorn to the jurisdiction of the Courts of the Province of British Columbia.
- 1.2.2 The Supply Contractor shall give all notices required by law and shall comply with all laws, acts, ordinances, rules, and regulations relating to or affecting the Goods. If any permits, authorizations, approvals or licences from any government or governmental agencies are necessary or desirable for the prosecution of the work they shall be obtained by the Supply Contractor at its expense, provided that the Supply Contractor shall not make application for any such permit, authorization, approval, or licence without first obtaining the written consent of the Corporation.

1.2.3 Patents, Royalties and Copyright

The Supply Contractor shall pay all fees, royalties or claims for any patented invention, article, process, or method that may be used upon or in a manner connected with the Goods or with the use of the Goods by the Corporation. Before final payment is made on the account of this Contract, the Supply Contractor shall, if requested by the Corporation, furnish acceptable proof of a proper release from all such fees or claims.

1.2.4 All references to money in the Contract Documents shall be interpreted as meaning lawful currency of Canada.

PART 2 CORPORATION-SUPPLY CONTRACTOR RELATIONS

2.1 AUTHORITY OF CORPORATION

2.1.1 Acceptability of Goods

The Corporation shall make the final determination of the acceptability of the Goods.

2.1.2 Appointment and Authority of Inspector

- 2.1.2.1 The Corporation may appoint an Inspector at any time before or after award of the Contract. If the Corporation appoints an Inspector, the Inspector shall represent the Corporation at the Delivery Point. The Inspector shall have the authority set out in the Contract Documents and such other authority as may be delegated in writing by the Corporation including but not limited to the following:
 - (a) to make determinations regarding the Goods; and
 - (b) to make determinations regarding the Supply Contractor's performance of its obligations under the Contract.

2.2 RESPONSIBILITIES OF THE SUPPLY CONTRACTOR

2.2.1 Attention to the Goods

The Supply Contractor shall diligently attend to the supply of the Goods so that they are delivered faithfully, expeditiously and in accordance with the Contract Documents.

2.2.2 Authorized Representative

The Supply Contractor shall advise the Corporation in writing of the name of the Supply Contractor's authorized representative.

2.2.3 Off-loading of Goods

The Supply Contractor shall provide all necessary instructions to ensure satisfactory off-loading of the Goods.

2.2.4 Shipment

The Supply Contractor shall properly package all Goods for safe shipment to the Delivery Point and a notice of shipment shall be sent by the Supply Contractor to the Corporation in advance of final delivery. The notice of shipment shall state the Delivery Date, the applicable purchase order number, description of the Goods, the Supply Contractor's name and the carrier by which the shipment is being made. Clear title to the Goods, free of all charges, liens and encumbrances shall pass to the Corporation when the Goods are received, inspected, deficiencies rectified, and accepted by the Corporation at the Delivery Point. Until such time as title of the Goods is accepted by the Corporation, all risk related to the Goods shall remain with the Supply Contractor. Except for the transfer of risk, the passing of title to the Corporation shall not affect any of the Supply Contractor's obligations.

2.2.5 Errors and Omissions

If the Supply Contractor discovers that there are any errors or omissions in the Contract Documents, it shall immediately notify the Corporation in writing. The Corporation will review the matter and if it concludes that there is an error or omission, it shall determine the corrective actions to be taken and will advise the Supply Contractor accordingly. If the corrective work associated with an error or omission increases or decreases the amount of work called for in the Contract, the Corporation shall issue an appropriate change order. After discovery by the Supply Contractor of an error or omission in the Contract Documents any work thereafter performed by the Supply Contractor shall be done at its risk unless otherwise agreed by the Corporation.

2.3 DISPUTE RESOLUTION

2.3.1 Disputes

A dispute occurs between the Corporation and the Supply Contractor where there is a difference between the parties as to the interpretation, application or administration of the Contract.

2.3.2 Dispute/Claim Resolution

(1) Any matters in dispute under this Contract which is not first resolved between the parties acting reasonably may, with the concurrence of both the Corporation and the Supply Contractor be submitted to mediation to a single mediator appointed jointly by them.

- (2) No one shall be nominated to act as a mediator who is in any way financially interested in the business affairs of either the Corporation or the Supply Contractor.
- (3) If the parties cannot agree on the choice of a mediator, each party shall select a nominee and the nominees shall jointly appoint a mediator.
- (4) The mediation shall take place in Nanaimo, British Columbia, unless agreed otherwise. Parties will be responsible for their own costs.



PART 3 MATERIAL, EQUIPMENT AND WORKMANSHIP

3.1 GENERAL

The Goods shall be of the quality specified in the Contract Documents or better. All work related to the Contract Documents shall be done with equipment and workmanship of the best quality and description and by employment of properly skilled workers and in strict conformity with and as required by the Contract Documents. Materials and equipment shall be the product of suppliers or manufacturers of established good reputation, regularly engaged in the supply or manufacture of such materials or equipment.

3.2 DEMONSTRATION OF COMPLIANCE WITH CONTRACT REQUIREMENTS

3.2.1 Inspection

Inspections and testing shall not in any way relieve the Supply Contractor from any of its obligations or responsibilities under the Contract Documents, and shall not in any way prejudice or constitute a waiver of any rights or remedies of the Corporation or any guarantees, warranties or covenants in favour of the Corporation, and the Corporation shall be entitled to rely on the expertise and obligations of the Supply Contractor and its subcontractors and their consultants and engineers to the same extent as if such inspections and testing by the Corporation or any Inspector or agent had not taken place.

If the Contract Documents, laws, ordinances, or any public regulatory authority requires parts of the Goods to be specially inspected, tested or approved, the Supply Contractor agrees that the Goods shall comply.

The Goods are subject to inspection and acceptance by the Corporation within a reasonable time after receipt. The Corporation will notify the Supply Contractor in writing of the rejection of any of the Goods which are not in accordance with the Contract Documents, and the Goods will be held subject to disposition by the Supply Contractor at the Supply Contractor's risk and subject to all charges accruing because of such rejection.

Notwithstanding any prior payment therefor, all Goods are subject to inspection and testing by the Corporation at the Delivery Point.

3.2.2 Certification

The equipment must be certified by the Supply Contractor in accordance with the local authorities with jurisdiction. Where compliance of Goods with the Contract Documents is not readily determinable through inspection and tests, the Corporation may require that the Supply Contractor provide, at the Supply Contractor's expense, properly authenticated documents, certificates, or other satisfactory proof of compliance. These documents, certificates or other proof shall include performance characteristics, materials of construction and the physical or chemical characteristics of materials.

3.2.3 Electrical

Electrical products that plug into an electrical outlet must meet Canadian national safety standards and be certified by an accredited certification body such as CSA, cUL or cETL.

3.3 DEFECTIVE OR IMPROPER GOODS

3.3.1 Correction of Defective Goods

If upon inspection, testing or otherwise the Goods or any portion thereof are found to be non-conforming, unsatisfactory, defective, or inferior quality or workmanship, or fail to meet any guarantee of operating or other Specifications contained herein, or any other requirements of the Contract Documents, then without prejudice to any other rights or remedies, the Corporation may give notice of its dissatisfaction to the Supply Contractor in writing and the Supply Contractor shall immediately upon receipt of such notice do all things that are required to satisfy the Corporation. If the Supply Contractor refuses or neglects to do all things that are required to satisfy the Corporation within one week from the receipt of notice, the Corporation may employ some other person to do so and all expenses and costs consequent thereon or incidental thereto shall be charged to the Supply Contractor. The employment of such other person or the doing of the said work by the Corporation itself shall not affect the Supply Contractor's duties and liabilities hereunder or relieve the Supply Contractor from the performance and fulfilment of any or all of the Supply Contractor's warranties, covenants, undertakings, obligations and duties under the Contract.

3.3.2 If upon inspection, testing or otherwise the Goods or any portion thereof are found to be non-conforming, unsatisfactory, defective, or inferior quality or workmanship, or fail to meet any guarantee of operating or other Specifications contained herein, or any other requirements of the Contract Documents, then without prejudice to any other rights or remedies, the Corporation may return the Goods or any part thereof to the Supply Contractor at the Supply Contractor's sole cost and all amounts theretofore paid by the Corporation to the Supply Contractor on account of the Contract

Price of such returned Goods, shall be repaid to the Corporation by the Supply Contractor. The Supply Contractor shall advise the Corporation in writing, where to return the Goods, and failing such advice from the Supply Contractor, the Supply Contractor agrees to accept the returned Goods at the Supply Contractor's registered office. Neither the inspection nor failure to make inspection, nor acceptance of Goods shall release the Supply Contractor from any warranties or other provisions of this Contract nor impair the Corporation's right to reject non-conforming Goods. The Corporation reserves the right even after it has paid for and accepted Goods to make a claim against the Supply Contractor on account of any Goods which do not prove to be satisfactory or are defective irrespective of the Corporation's failure to notify the Supply Contractor of a rejection of non-conforming Goods or revocation of acceptance thereof, or to specify with particularity any defect in non-conforming Goods after rejection or acceptance thereof.

3.3.3 Retention of Defective Goods

If in the opinion of the Corporation any portion of the Goods supplied under the Contract is defective or not in accordance with the Contract Documents and if the defect or imperfection in the same is not of sufficient magnitude or importance to make the Goods dangerous or undesirable, or if the removal of such Goods is impracticable, or will create conditions which are dangerous or undesirable, the Corporation shall have the right and authority to retain such Goods instead of requiring the defective or imperfect Goods to be removed and reconstructed, but the Corporation shall be entitled to make such deductions from the payments due or to become due to the Supply Contractor as are just and reasonable.

3.3.4 No Implied Approval

The fact that the Corporation has not disapproved of or rejected any part of the Goods shall not be deemed or be construed to be an acceptance of any such part of the Goods or any such materials.

3.4 WARRANTY AND GUARANTEE

- 3.4.1 The Supply Contractor agrees that the warranty provisions outlined in the Proposal are to the benefit of the Corporation and that the Goods are free from all defects arising from faulty construction, manufacturing, materials, equipment or workmanship for the period which is twelve (12) months ("Warranty Period") commencing on the earliest of the following dates: (i) the date Corporation accepts clear title to the Goods, or (ii) the date that is six (6) months from the delivery date of the Goods at the Delivery Point.
- 3.4.2 During the Warranty Period, the Supply Contractor, upon the receipt of notice in writing from the Corporation, shall promptly make all repairs arising out of defects in the Goods. The Corporation shall be entitled to make such repairs, if 10 Days after the giving of such notice to the Supply Contractor, the Supply Contractor has failed to make or undertake with due diligence the repairs. In case of an emergency, where, in the opinion of the Corporation, delay could cause serious loss or damage, or inconvenience to the public, repairs may be made without notice being sent to the Supply Contractor, only after all reasonable attempts have been made to contact the Supply Contractor. The costs of any repair made by the Corporation in connection with this clause shall be charged to the Supply Contractor and the Supply Contractor shall reimburse the Corporation for such costs. All covenants and agreements shall continue to be binding on the Supply Contractor until they have been fulfilled.
- 3.4.3 The Corporation is relying on Supply Contractor's skill and judgment in selecting and providing the proper Goods and any applicable services for the Corporation's particular use. The Supply Contractor warrants to the Corporation and its successors in interest that the Goods and any services covered hereby will correspond with the description of the same in the Contract Documents, will conform to all applicable Specifications, will be of the best quality and, unless otherwise specified, will be fit for the purpose for which they are to be used and will conform in all aspects, both in the manufacture and use thereof, with all applicable safety orders or regulations of the Province of British Columbia. The Supply Contractor also warrants that the Goods are free and clear of all liens and encumbrances whatsoever and that the Supply Contractor has a good and marketable title to the same.
- 3.4.4 The Supply Contractor warrants and guarantees that the Goods are free from all defects arising at any time from faulty design in any part of the Goods.
- 3.4.5 The Supply Contractor represents that it has read the Contract Documents and, particularly, the Specifications and has satisfied itself that the Goods can be supplied in accordance with the Contract Documents, free of defects and fit for the purpose for which they are to be used.

3.4.6 The warranty should be made out to the Regional District of Nanaimo, 6300 Hammond Bay Road, Nanaimo, B.C. V9T 6N2

PART 4 INDEMNIFICATION AND INSURANCE

4.1 INDEMNIFICATION AND RELEASE

- 4.1.1 The Supply 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 negligent acts, omission, willful misconduct or breach of this Contract by the Supply Contractor, 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.
- 4.1.2 Unless otherwise specified in the Contract, the Supply 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 uncopyrighted composition, secret or other process, patented or unpatented invention, articles or appliances manufactured, supplied or used in the Goods, and/or used or to be used by the Corporation before or after supply of the Goods as a result of work performed by the Supply Contractor, and if the Supply Contractor shall fail to save harmless and indemnify in manner aforesaid, any money collected from the Indemnified Parties shall be charged to the Supply Contractor.
- 4.1.3 The Supply 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 Supply Contractor or its servants or employees might have in any manner arising in any way out of or connected negligent acts, omission, willful misconduct or breach of this Contract by the Supply Contractor 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.

4.1.4 The indemnity provided in this clause by the Supply 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.

4.2 INSURANCE

4.2.1 General

The Supply Contractor and subcontractors shall provide at their own cost any insurance which they are required by law to provide or which they consider necessary to protect their own interests.

4.3 PATENT, TRADEMARK OR COPYRIGHT

4.3.1 The Supply Contractor represents that it has fully investigated all Specifications, including any furnished by the Corporation, in connection with the Goods and based on such investigation and its experience and superior knowledge with respect to such Goods has determined that the production and supply thereof will not infringe any patent, trademark or copyright.

PART 5 SHIPMENT OF GOODS/DAMAGE TO GOODS

5.1 SHIPMENT OF GOODS

5.1.1 Delivery of Goods

The Supply Contractor must deliver the Goods to the Delivery Point DDP (Incoterms 2020). Delivery of the Goods to a carrier for transmission to the Delivery Point does not constitute delivery of the Goods to the Corporation. Any such carrier is deemed to be the Supply Contractor's agent and not the Corporation's agent.

5.1.2 Delivery Costs

The Supply Contractor is responsible for all costs and expenses whatsoever in relation to the supply and delivery of the Goods to the Delivery Point, including without limitations, all shipping, carrier, transportation, freight, insurance, storage, handling, and off-loading costs, as well as any customs or excise charges or duties.

5.1.3 Supply Contractor to Bear Risk

The Supply Contractor shall bear all risks and shall assume all responsibility for the Goods, including, without limitation, any loss or damage to the Goods from any cause whatsoever, up to acceptance of the Goods by the Corporation.

5.1.4 Loss or Damage

If loss or damage to the Goods occurs for which the Supply Contractor is responsible, the Supply Contractor shall immediately effect repairs or replace any property as necessary to make good any such loss or damage. If the Supply Contractor refuses or neglects to do so, the Corporation may make good any such loss or damage, either by itself or by employing some other person, and the expense of doing so shall be charged to the Supply Contractor. If any repair or replacement of property is performed on the Goods because of loss or damage to the Goods for which the Supply Contractor is responsible the Supply Contractor represents and warrants that the warranty provided shall not be affected or changed to any manner or respect whatsoever.

5.1.5 Acceptance of Delivery of Goods by Corporation

Notwithstanding any other provision in the Contract Documents, the Corporation is not deemed to have accepted the Goods until the Goods have been delivered to and off-loaded at the Delivery Point and the Corporation has had a reasonable opportunity of examining them for the purpose of ascertaining whether they are in conformity with the Contract. The Corporation's acceptance or deemed acceptance of the Goods shall not prejudice any rights or remedies the Corporation may have hereunder relating to Goods that are found to be non-conforming, unsatisfactory, defective, of inferior quality or workmanship, or which fail to meet any Specifications or requirements of the Contract Documents.

PART 6 PROGRESS AND COMPLETION

6.1 CONTRACT TIME

6.1.1 Prosecution of the Goods

Time shall be strictly of the essence. The Supply Contractor shall supply the Goods in accordance with the Contract Documents. The Supply Contractor acknowledges that the schedule for supply of the Goods as set out in the Contract Documents is reasonable.

6.1.2 Schedule

The Supply Contractor shall provide a schedule and periodic updates coordinating the supply of Goods within the prescribed time. Contract time extensions, if any, shall be incorporated into updated schedules. The failure of the Supply Contractor to comply with this requirement may entitle the Corporation to terminate the Supply Contractor's right to continue with the supply of Goods or to delay progress payments.

6.2 TERMINATION

- 6.2.1 The Corporation may terminate the Contract if the Supply Contractor at any time becomes bankrupt, makes an assignment of his property for the benefit of his creditors, or if a receiver or liquidator should be appointed. Such termination shall be effective upon the Corporation giving notice thereof.
- 6.2.2 If at any time the Corporation reasonably forms the opinion that the Supply Contractor is in default under this Contract because the Supply Contractor:
 - (1) has breached a fundamental term of the Contract or is in substantial breach of the terms of the Contract;
 - (2) has failed to supply the Goods, within the time specified in the Contract Documents or extensions mutually agreed between the parties in writing;
 - (3) has failed or is failing to furnish or to maintain a detailed schedule;
 - (4) has become in any way unable to supply the Goods or any part thereof; or
 - (5) has repeatedly failed to make prompt payments to subcontractors, suppliers or others for labour, materials, or equipment;

then the Corporation may give notice in writing to the Supply Contractor of such opinion and require that such default or defaults be remedied forthwith. If, within five Days of such notice, such default or defaults are not remedied to the satisfaction of the Corporation or the Supply Contractor has not taken reasonable measures to commence remedying the default(s), the Corporation may terminate the Contract. Such termination shall be effective immediately.

6.2.3 The Corporation may terminate the Contract, without any cost or penalty or consequence whatsoever, if it concludes, acting reasonably on the information available to it, that the Supply Contractor is in material non-compliance with, or has been convicted of a material offence or violation of, health, safety, labour, or environmental laws.

6.3 NO CLAIM

Except as herein before provided, the Supply Contractor shall have no claim against the Corporation for any reason whatsoever by reason of the termination of the Contract.

PART 7 PAYMENT

7.1 PAYMENTS TO SUPPLY CONTRACTOR

- 7.1.1 Payments to the Supply Contractor will be made as per the Agreement and set forth otherwise in the Contract Documents.
- 7.1.2 Notwithstanding Clause 7.1.1 the Corporation may withhold from payment:
 - (1) Such reasonable amount as the Corporation determines appropriate with respect to any part of the Goods not in compliance with the Contract Documents;
 - (2) Statutory holdback if the supply of Goods is of a nature that creates an obligation on the Corporation to retain a holdback under the Builders Lien Act;
 - (3) The amount of any bona fide builder's lien claim asserted against the Corporation or which the Corporation acting reasonably anticipates will be made against the Corporation; or
 - (4) Any deduction or set-off the Corporation may otherwise be entitled to under the Contract.
- 7.1.3 Payments may be withheld until the relevant operating manuals and all operating and maintenance materials together with all warranties have been delivered to the Corporation.

- 7.1.4 In addition to any other remedy the Corporation may have in the Contract or law, the Corporation may refuse to make payment because of subsequently discovered evidence or test results, and shall be compensated for any payment previously made to the Supply Contractor to such extent as may be necessary to protect the Corporation from loss because of:
 - (1) Defective or damaged Goods;
 - (2) A deductive change order;
 - (3) Failure of the Supply Contractor to supply the Goods in accordance with the Contract Documents, including failure to maintain the supply of the Goods in accordance with the schedule; or
 - (4) Disregard by the Supply Contractor of the authority of the laws of any public body having jurisdiction.

The Corporation may refuse to make payment of the full amount because of claims made against the Corporation on account of the Supply Contractor's performance or supply of Goods. In such case, the Corporation shall give the Supply Contractor prompt written notice stating the reasons for each action.

7.1.5 Prior to payment to the Supply Contractor, if requested by the Corporation, the Supply Contractor shall deliver to the Corporation a statutory declaration in form satisfactory to the Corporation declaring that all subcontractors, labour and accounts for material and equipment have been paid and that no persons, firms or corporations have any lien against the lands comprising the Delivery Point or the work together with such other documentation as the Corporation, acting reasonably, determines is necessary or desirable.