General Requirements

Specifications

Schedule

1. The following major milestones shall be adhered to by the contractor:

Item	Date
Commencement & Mobilization	October 21 st , 2024
Substantial Performance	Within 10 weeks of award
Total Completion and Demobilization	2 weeks after substantial completion

- 2. The Contractor shall, within one (1) week of contract award, provide the following detailed schedule(s) to the City:
 - a. Construction Progress Schedule
 - b. Submittal Schedule(s) for Shop Drawings, Product Data and Samples
 - c. Product Delivery Schedule for long-lead items
 - d. Cash Flow Schedule in format acceptable to the City

If the Contractor cannot reasonably meet any agreed upon milestone date, the Contractor shall provide written notification to the City as soon as possible, but no less than one (1) week before the given milestone. The City and Contractor shall decide upon a course of action which may include allowing rescheduling of the milestone, or requiring the Contractor to seek extra resources, at their cost, to achieve the milestone. Each occurrence shall be agreed to on a case by case basis. If dates are re-scheduled, the Contractor shall provide to the City with a revised construction progress schedule within three (3) business days.

The City shall have the right to adjust the schedule if the City deems it necessary in order to establish a realistic job schedule or meet the requirements of programs and services being delivered at the facility, upon approval of the

schedule by the City; this schedule shall be strictly adhered to. Should the Company fail to keep pace with the schedule during the progress of the work, the City shall order the Company to employ additional staff and equipment or to work longer hours in order to keep the job on schedule. The Company shall have no claim for additional compensation if ordered to employ additional staff, equipment or to work longer.

3. The Contractor shall provide to the City and Consultant a schedule of submittals for all long lead time delivery products and equipment, within five (5) business days of award and prior to ordering, for review and comment.

Unless otherwise noted or specified, submittals for this Work shall include:

- interference drawings
- lighting fixtures
- plumbing fixtures
- washroom fixtures/accessories
- HVAC equipment
- controls
- colour selection charts and samples for all finishes and products
- paint drawdowns
- 4. The Contractor shall, immediately prior to construction and upon notification, attend where directed by the City, a pre-construction meeting along with representatives of major subcontractors.
- 5. Site meetings and task-specific pre-construction meetings will be held regularly on a bi-weekly interval, on a schedule to be determined at the initial pre-construction meeting.

Submittals, Samples and Mock-Ups

- 1. The Contractor shall provide submittals to the City and Consultant for review with reasonable promptness and in orderly sequence so as to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed. Digital copies in PDF format are an acceptable alternate format for submittals, provided all required information is clear and legible.
- 2. The Contractor shall carefully review submittals prior to submission. This review by the Contractor represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and co-ordinated with requirements of the Work and Contract Documents. The Contractor assumes all responsibility to ensure that work required by the Contract Documents is

- provided, whether indicated on the reviewed shop drawings or not. Submittals not stamped, signed, dated and identified as to specific project by the Contractor will be returned without being examined and shall be considered rejected.
- 3. The Contractor's responsibility for errors and omissions in submission or from deviation in submission from the requirements of the Contract Documents is not relieved by City's or Consultant's review.
- 4. The Contractor shall provide notice, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for the deviations.
- 5. Adjustments made on shop drawings are not intended to change Contract Price. If adjustments affect value of Work, the Contractor shall state such in writing prior to proceeding with Work.
- 6. Work affected by submittals shall not proceed until review is complete.

General Requirements

- 1. It is understood that the Contractor, by executing the Contract, unequivocally acknowledges that it is the "constructor" within the meaning of the OHSA and amendments thereto, as applicable to the scope of work outlined in the Bid Document and Contract, with complete control for health and safety matters over all persons who may be present at the site, whether such persons are members of the Contractor's own forces, employees of the City, utility companies or other sub-contractors or are third parties present at the site. The City shall not be the constructor and the Contractor hereby confirms that it assumes responsibility as the constructor for all purpose.
- 2. The Contractor shall provide all labour, material and equipment required to meet the schedule.
- 3. Provide certificates to the City confirming the safe disposal of any hazardous wastes and recycling of equipment and materials in accordance with applicable legislation.
- 4. The Contractor shall warranty all work and materials for a period of two (2) years, effective as of the certified date of Substantial Performance.

Inspections Permits and Tests

1. The Contractor shall cooperate fully with, and provide assistance to, all outside authorities including Building Inspectors, testing agencies and Consultants, with the inspection of the Work.

- Any material or work which fails in any way to meet the terms of the contract is subject to rejection or to be paid for on an adjusted price basis in the sole discretion of the City.
- 3. The City shall obtain and pay costs associated with a building permit for this Work.

Work Restrictions

- 1. It is the City's preference for all work to be conducted between 7:00 a.m. and 7:00 p.m., Monday to Friday. Work outside of these hours requires prior approval by the City.
 - The City's Noise By-Law 6834/08 governs hours of operation for construction equipment. Schedule 2 allows operation of construction equipment **only** between 7:00 am to 7:00 pm (prohibited on Sundays & statutory holidays). Exemptions require written approval from the City.
- 2. The City reserves the right to order individuals to leave the site if the individual is in violation of any safety requirement or any Act, and any expense incurred will be the responsibility of the Contractor.

Access and Use of the Site

- 1. All Work shall occur in zones which have been designated. The limits of the work shall be as shown on the project drawings or as directed by the City.
- 2. All work or materials delivered on the site or premises to form part of the works, shall be considered the property of the Contractor until installed and shall not be removed without consent of the City, but the Contractor shall have the right to and shall remove the surplus material upon final completion the work and acceptance by the City.
- 3. The Contractor shall remove all waste and construction materials from the site prior to completion. Before the contractor's personnel leave the site, it shall be in a condition which is acceptable to the City.
- 4. The Contractor shall provide protection to prevent unauthorized personnel from having access to areas of work. Unauthorized personnel shall mean anyone not directly concerned with the execution, supervision or inspection of the work. Maintain access to controls and equipment required for ongoing operation of the facility.
- 5. The Contractor shall restrict use of existing parking for project layout or workforce to areas designated by the City.
- 6. The Contractor shall not unreasonably encumber the site with equipment and materials or locate such as to interfere with the operations of the City.

- 7. The Contractor shall locate waste bins, equipment, material storage and project layout area to area(s) designated by the City.
- The Contractor shall provide temporary sanitary facilities and potable water for use by workers. Building washrooms and water systems shall not be used by Contractor's forces.
- 9. Smoking and vaping, including of cannabis, are prohibited by law in all workplaces within City buildings and on City property.
- 10. No signs or advertisements, other than warning signs, are permitted on the site.
- 11. The City shall, where possible, provide existing electricity, lighting and water necessary for work purposes. When this is not possible, the Contractor shall provide it at no additional cost.
- 12. The Contractor shall provide temporary utilities as required to complete the work and maintain the project schedule, at no additional cost, including:
- 13. The Contractor shall maintain copies of the following documents on site at all times:
 - a. Contract Drawings
 - b. Permit Drawings
 - c. Specifications
 - d. Addenda
 - e. Reviewed Submittals
 - f. Approved Samples
 - g. Hardware and Colour Schedules
 - h. Change Orders
 - i. Supplemental Instructions
 - Requests for Information
 - k. Inspection and Test Reports, including designated substance reports
 - I. MSDS sheets for all products to be used or stored on site
 - m. Meeting Minutes
 - n. All as-built record documents related to the building site and work including drawings provided by the City.
 - o. Contractor's site-specific safety plan
 - p. Contractor's fire safety plan

- 14. The Contractor shall obtain information on known underground services from local utilities, and be responsible for all related costs.
- 15. The Contractor shall provide all necessary protection, including access routes for the public, to existing facilities at all times.
- 16. The Contractor shall maintain clear exiting and fire routes at all times. Provide flagmen where required.

Standard of Work

- The Contractor shall inspect existing conditions and any defects shall be reported in writing to the Contract Administrator. The commencement of work, or any part of it, shall be deemed to mean the acceptance of the existing conditions upon which the Work depends, including all work required to obtain specified warranties from manufacturers and other parties, and to the satisfaction of the City.
- 2. The Contractor shall coordinate all sections of the Work. Responsibility as to which subcontractor or supplier provides labour, material, equipment or services rests solely with the Contractor.
- The Contractor shall take all necessary job measurements for proper execution of the Work, and assume complete responsibility for accuracy and completeness thereof, including verifying field measurements and that affected adjacent Work is coordinated.
- 4. The Contractor shall ensure that all work is performed by competent tradespeople, licensed and skilled in the respective work being completed. Only first-class quality of work will be accepted, not only with regard to safety, efficiency and durability, but also with regard to neatness and accuracy of detail.
- 5. The Contractor shall execute the Work with regards to safety, efficiency, and neatness to detail using quality products.
- 6. The Contractor must notify the City immediately of any unsafe and dangerous site conditions that exist.
- 7. The Contractor shall provide safeguards and protection against fire in accordance with current fire codes, and regulations.
- 8. The Contractor shall protect surrounding private and public property, including utilities, from damage as a result of the Work and be responsible for damages incurred. No claims will be considered which are based on delays or inconvenience resulting from relocation or repair due to the Contractor failing to provide adequate protection.
- 9. The Contractor shall pay any charges levied by utilities or authorities for work carried out by them in connection with the Work, unless specified otherwise.

- 10. The Contractor shall report existing unknown services encountered during excavation to Consultant for instructions; cut back and cap or plug unused services in accordance with approved practices of the affected utility provider.
- 11. The Contractor shall fill and patch voids and gaps around openings and penetrations and at the perimeter of assemblies to maintain continuity of fire separations and produce a fire-resistant smoke-tight seal.
- 12. All work shall conform to the most current rules, regulations and definitions of their applicable Canadian Code and all local authorities having jurisdiction.
- 13. The Contractor shall ensure that fixtures and equipment are installed in such a way as to conserve as much headroom space as possible, and that all operating devices and controls at ergonomic heights and with required clearances for safe use.
- 14. Products, materials, equipment and articles incorporated into the Work shall be new, not damaged or defective, and of the best quality for purposes intended. If requested, furnish evidence as to type, source and quality of products provided.
- 15. Defective products, materials and poor workmanship will be rejected, regardless of previous inspections. Inspection does not relieve responsibility but is a precaution against oversight or error. The Contractor shall remove and replace defective products at own expense and be responsible for delays and expenses caused by rejection.
- 16. Unless specified otherwise, the Contractor shall maintain uniformity of manufacture for any particular or like item throughout the Work.
- 17. If, in the sole opinion of the City, the Contractor fails to conform to the manufacturers' installation procedures/practices, the City may require the Contractor to complete corrective work at no additional charge to the City, to the satisfaction of the City.
- 18. The Contractor shall ensure that the work is inspected and tested before being concealed.
- 19. The Contractor shall prevent electrolytic action between dissimilar metals and materials.
- 20. The Contractor shall provide all forms, templates, anchors, sleeves, inserts and accessories required to be fixed or inserted in the work and set in place or instruct the related trades as to their locations, and pay the cost of extra work caused by, and make up time lost, as the result of failure to provide the necessary cooperation, information or items to be fixed to or built in.
- 21. The Contractor shall comply with Federal, Provincial and Municipal regulations pertaining to waste, air, solid waste, chemical waste, sanitary waste, sediment

- and noise pollution.
- 22. The Contractor shall store volatile or hazardous materials in approved containers. Store in secure and appropriate condition and locations.
- 23. The Contractor shall prevent oily or other hazardous substances from entering the ground, drainage areas, or local bodies of water.
- 24. The Contractor shall immediately report all spills or discharges of pollutants or contaminants under the control of the Contractor to the City and Consultant. This reporting will not relieve the Contractor of his legislated responsibilities regarding such spills or discharges.
- 25. The Contractor shall provide dust control, air pollution control and odour control, and be responsible to clean any building systems or areas affected by the Work to the satisfaction of the City.
- 26. The Contractor shall be responsible for security of site, equipment, tools and materials.
- 27. The Contractor shall provide and maintain tools, in a clean and orderly condition, lockable weatherproof sheds or containers for storage of tools, equipment and materials. Locate materials not required to be stored in weatherproof sheds or containers on site in a manner to cause the least interference with work activities and in a location assigned by the Contract Administrator.
- 28. The Contractor shall provide all necessary barricades, fencing, hoarding, guards and railings to protect the work areas and prevent access by unauthorized personnel from entering the site. Provide all necessary safety screens and hoarding to protect pedestrians and vehicles passing through the work area when necessary.
- 29. The Contractor shall provide, operate and maintain hoists and cranes required for moving materials and equipment. Lift equipment shall be operated only by qualified operators certified and inspected in accordance with applicable legislation to be fit for use. The existing elevator will be shut down during the
- 30. The Contractor shall Store packed materials in original, undamaged condition with manufacturer's labels and seals intact. Handle and store materials in accordance with manufacturer's recommendations. Replace all damaged material.

Cleaning and Waste Control

1. The Contractor shall employ processes that ensure generation of as little waste as possible, including prevention of damage due to mishandling, improper storage, contamination, inadequate protection or other factors as well as minimizing over packaging and poor quantity estimating.

- The Contractor shall provide appropriate on-site waste containers and remove waste materials from site at regularly scheduled intervals, including perform a daily cleaning and leave the site in a safe condition at the end of each workday.
- 3. The Contractor shall not encumber the site with debris resulting from construction activity. All materials, tools, equipment and rubbish resulting from such work shall be promptly removed from the site.
- 4. Spray-application of paint or other finishes is not permitted without written permission from the Contract Administrator.

Closeout Procedures

- 1. Upon completion, the Contractor shall confirm in writing that following have been performed:
 - a. Work has been completed and inspected for compliance with Contract Documents:
 - b. Defects have been corrected and deficiencies have been completed;
 - c. Equipment and systems have been tested, adjusted and balanced and are fully operational;
 - d. All certificates and approvals required by Boiler Inspection Branch, Fire Commissioner, Utility companies, TSSA and other regulatory agencies have been obtained and provided to the City;
 - e. Operation of systems have been demonstrated to City's personnel; and
 - f. Work is complete and ready for Final Inspection.

2. Inspection:

- a. The Contractor shall conduct an initial inspection of the Work, identify deficiencies and defects, and repair as required to conform to Contract Documents. Submit the deficiency list to the Contract Administrator.
- b. Upon request, the City's Contract Administrator and Consultant will perform an inspection of Work to identify obvious defects or deficiencies. Contractor shall correct Work accordingly.
- c. When all identified deficiencies have been completed, the Contractor shall request final inspection of Work by the City and Consultant. If Work is deemed incomplete by the City or Consultant, complete outstanding items and request re-inspection.
- 3. Prior to Substantial Performance, the Contractor shall provide copies of signed and stamped engineers review and sign-off letters stating that the work has been built in accordance with their drawings and designs. Conditional or vague letters of sign-off will not be accepted. All specialty design engineers for all sub-

contractors and suppliers will be required to review the work in progress at appropriate intervals to ensure compliance with their designs and drawings and shall provide final sign-off letters. The Contractor shall provide copies of all field reports issued by specialty engineers and carry all costs associated with full compliance with this requirement.

- 4. Declaration of Substantial Performance: when the City and Consultant consider deficiencies and defects to have been corrected and it appears requirements of Contract have been substantially performed, and in accordance with the provisions of the Construction Act, the City and Contractor shall jointly signa Certificate of Substantial Performance to be prepared by the City.
- 5. The Contractor shall be responsible for publication of the signed Certificate of Substantial Performance.

Closeout Documentation

- The Contractor shall provide to the City two (1) hard copies, and one (1) electronic copy (PDF format on a USB flash drive) of the operating and maintenance manuals for the installed materials, systems and equipment.
- 2. Hard copy manuals shall be bound in three-ring binders, clearly labeled and organized with a table of contents, and contain the following, as a minimum:
 - a. System operating and maintenance instructions, troubleshooting guidelines and operating log.
 - b. Material Safety Data Sheets
 - c. Equipment Operating and Maintenance Instructions
 - d. Field test records
 - e. Inspection certificates
 - f. Manufacturer's certificates
 - g. Disposal/Recycling Certificates for all removed equipment
 - h. Reviewed shop drawings
 - i. As-built drawings
 - j. Specifications
 - k. Addenda
 - I. Change orders and other modifications to the Contract
 - m. Independent specialty engineers sign-off
- 3. Equipment Operating and Maintenance instructions shall include
 - a. Description of each unit or system

- b. List of component parts
- c. Normal operating characteristics
- d. Limiting conditions
- e. Performance curves
- f. Engineering data and tests
- g. Complete nomenclature and commercial numbers for replaceable parts
- Startup, break-in and normal operating instructions and sequences, including: regulation, control, stopping, shut-down and emergency instructions.
- Routine maintenance procedures, troubleshooting guides, disassembly, repair and re-assembly instructions, alignment, adjusting, balancing and checking instructions
- j. Servicing and lubrication schedules, and lists of lubricants required
- Where equipment shall be placed into service prior to Substantial Performance of the Work, provide operation and maintenance manuals to the Contract Administrator at least two weeks prior to operation of new equipment or systems;
- I. Arrange and be responsible for demonstration and training for the City's staff by manufacturer's representatives as soon as possible after completion of testing, balancing and acceptance for operation of new or replaced equipment and systems. Allow for multiple training and demonstration sessions, over phased completion of the Work.
- 4. As built drawings shall comprise of, as a minimum:
 - a. Refrigeration schematic (outlining equipment installed)
 - b. Dehumidification schematic, including all modified ducting
 - c. Dehumidification structural schematic
 - d. Mechanical piping schematic, including all DHW, natural gas, and exhaust lines
 - e. Electrical and controls diagrams
 - f. Spatial diagrams for the mechanical rooms, including plan views and vertical clearance diagrams (to scale)
- 5. As-built and shop drawings shall be legibly marked to record actual construction, including:
 - a. Any deviation from construction documents;
 - b. Measured locations of utilities and appurtenances, referenced to visible and accessible features of construction;

- c. Field changes of dimensions and details;
- d. Changes made by change orders;
- e. Details not on original contract drawings; and
- f. References to related shop drawings and modifications.
- 6. The Contractor shall pay all costs for materials, production, assembly, transportation and delivery of closeout documents.