**City of Guelph**

**Administration Building Expansion**

**At 110 Dunlop Drive, Solid Waste Facility**

**Terms of Reference**

**For Consultant Selection**

**City of Guelph, Facilities and Energy Management Department**

**February 10, 2020**

**Table of Contents**

1.0 Project Overview3

2.0 Background3

3.0 Background Documents4

4.0 Scope of Works4

5.0 Project Schedule5

6.0 Project Budget6

7.0 Project Assignment6

8.0 Sub Consultants12

9.0 Permits13

10.0 Communication and Assessable Documents13

11.0 Resource/ Experience Requirements 13

12.0 Deliverables14

13.0 Work Site Compliance14

14.0 Project Exclusions15

**List of Appendices**

**APPENDIX A** Facilities Needs Assessment and Master Plan for the Guelph Solid Waste Resources at 110 Dunlop Drive. Prepared by Stirling Rothesay Consulting Inc. on August 10, 2018.

Relevant portion only

**110 Dunlop Drive, Solid Waste Facility**

**1.0 PROJECT OVERVIEW**

The City of Guelph is seeking proposals from qualified and experienced engineering consultants to provide consulting services for expansion to existing Administration building at the City’s Waste Resource Innovation Centre (“the WRIC”). This assignment includes:

* completing final design of an expansion to the existing administration building that is aligned with the City’s Community Net Zero Carbon and Corporate 100 per cent Renewable Energy Targets;
* obtaining the required permits and approvals; and
* providing services during tendering, construction, and the warranty period.

**2.0 BACKGROUND**

The City of Guelph (“the City”) owns and operates the Solid Waste Resource Innovation Centre (“the WRIC”) at 110 Dunlop Drive. The WRIC consists of the Administration Building, the Waste Transfer Station, the Organics Waste Processing Facility (the “OWPF”), the Material Recovery Facility (“the MRF”), the SUBBOR Building, the Household Hazardous Waste Depot (“the HHW depot”), the Public Drop-Off Area (“the PDO area”), three scales, two scale houses, three portables, and supporting infrastructure.

A needs assessment was conducted by Stirling Rothesay Consulting Inc. in 2018 to determine how best to address the WRIC’s needs over the next 25 years. It was recommended to expand the Administration building to meet the future functional needs. It also recommended that a Vehicle Storage Facility be constructed to allow waste packer trucks to be stored indoors to increase vehicle life span and minimize maintenance costs.

In 2019, J.L. Richards was engaged to prepare two schematic reports for the City - including conceptual plans and “Class D” cost estimates for the overall facility layout and works. The first report outlines three (3) schematic site plan options, with site plan option 2 being the Solid-Waste’s preferred option. Site plan option 2 involves making the most significant changes to the site including making major modifications to the existing site services.

To date, there has been minimal schematic design work completed for the proposed Administration Building expansion. The needs assessment conduced in 2018, including rough schematic design sketches for the proposed Administration Building and requires further validation by City staff and a more thorough assessment of the administration needs for the overall site is required. The Consultant will need to conduct additional consultation with staff on the site administration needs and Corporate Strategic Plan alignment (and complete a conceptual design) prior to detailed design.

**3.0 BACKGROUND DOCUMENTS**

The following documents are available if required, however only relevant portion of the document is attached in the (Appendix A) for review and incorporation in final Design;

* City of Guelph Waste Innovation Centre Site Assessment – Schematic Design Report. Prepared by J.L. Richards & Associates Limited. April 2019.
* Facility Needs Assessment and Master Plan for the Guelph Solid Waste Resources at 110 Dunlop Drive. Prepared by Stirling Consulting Inc. August 2018.

**4.0 SCOPE OF WORK**

**Task – Final Design of Administration Building Expansion**

Per the 2019 Facility Needs Assessment and Master Plan, the Administration Building Expansion will increase the footprint to approximately 810 m2 in area. The proposed building scope is distributed approximately as follows:

* Administration office space: 590 m2
* Employee amenities: 180 m2
* 5% contingency for space requirement
* External development and Parking space, keeping in mind protection of existing infrastructure storm water ponds and available space.
* Renovation of Existing Building
* Approvals for Permanent works
* Design of Re-Location Porta cabin Offices for re-location
* Approvals for re-location

The needs assessment also identifies that the Administration Building expansion should accommodate approximately 50 staff (40 full time and 10 temporary).

The final design should consider all design details outlined in the background documents above, in addition to the City’s requirements listed in phase A and Appendix A attached report. Final design must align with the Community Net Zero Carbon and Corporate 100 percent Renewable targets by employing energy management and carbon emissions reduction best practices as outlined in phase A of this Terms of Reference, along with the City of Guelph’s Facility Accessibility Design Manual, 2015, and other applicable codes and regulations.

**5.0 PROJECT SCHEDULE**

The successful Consultant will begin work immediately after award of this work. The Design Working Group will be formed immediately and the Consultant should be prepared for regular meetings with City staff to discuss the impacts of design decisions and costing. Project Manager Amir Bhatti will be the single point of contact for project communication for the City.

The proposed project high level schedule is as follows subjected to timely approvals including MECP approval:

|  |  |
| --- | --- |
| **Project Phases** | **Proposed Date Range** |
| **Phase A – Concept Design & Class D Estimate** | 1.5 Months |
| Award of work to Consultant |  |
| Project initiation/scope review workshop |  |
| Concept Design & Class D Estimate |  |
| Concept Design Presentation |  |
| Design of Staff Re-location Facility |  |
| **Phase B – Detailed Design, Drawings and Permits** | Design 6 Months, Permits/approvals (4 Months) |
| TASK-1 Re-Location Facility | Subjected to Timely Approvals (6 Months)  |
| Building Permits for Temporary Re-Location Facility  |  |
| Award Bidder for Re-Location Facility |  |
| Construction of Temporary Re-Location Facility |  |
| TASK – 2 Detail Design of Expansion Works |  |
| Detailed design drawings |  |
| Public engagement |  |
| Site plan approvals  |  |
| MECP approvals – application |  |
| MECP approvals – review & approvals |  |
| Class B Estimate |  |
| Building permit approvals |  |
| **Phase C – Tender Document and Award** | Tender Doc 3 Months, Tender to Award 6 Months |
| Class A Estimate |  |
| Tender documents |  |
| Tender issuance |  |
| Contract award |  |
| **Phase D – Contract Administration** | 10 Months |
| Project Commencement  |  |
| Contract supervision and administration |  |
| Project Completion |  |
| Warranty Period (1 Year)  |  |
| Closeout and Document Achieve |  |

**6.0 PROJECT BUDGET**

This project budget must cover all project fees – taxes, permit fees, professional consulting, contingencies, etc. The project budget is to be further refined as part of the Consultant’s work, and should be Value Engineered where required.

Cost estimates should be broken down by construction phases to support the City’s decision-making and budgeting process. Cost estimates should also categorize items into absolute, must-have or nice-to-have. Where possible, cost-benefit analysis should be completed to accompany the estimates.

**7.0 PROJECT ASSIGNMENT**

The Project assignment shall be performed in four (4) phases including two tasks (Design of Temporary Re-location Facility and Detailed Design of Expansion of Administration Building), each to be provided with its own estimate of fees and disbursements by the consultant. Please note that phases may be conducted in conjunction with other phases. At completion of each phase, the City of Guelph and the consultant shall review the need to progress to the next phase, whereby the City of Guelph in its sole discretion, reserves the right to terminate the project work, modify the schedule, or delay the future phase(s) until more opportune time due to funding issues or other considerations. The project phases for this assignment as are follows:

1. **PHASE A – Concept Design and Class D Estimate**

Stakeholder consultation

* Host a design charrette in order to engage various staff members when it comes to the new project.
* Arrange and host pre-design meetings for an internal review and comment on the project components by affected operational staff and groups or as advised by WRIC management.
* Allow for a presentation of the preliminary designs to City Staff for feedback. Said feedback is to be incorporated into the final conceptual design that is subsequently presented to Staff for approval.
* Arrange for and hold pre-consultation meetings / sessions / inquiries with appropriate approval and regulatory authorities such as, but not limited to, Infrastructure, Development, & Enterprise Services (Site Plan Approval, Engineering, Building Department, Environmental Services, etc.), Ministry of the Environment Conservation and Parks, Grand River Conservation Authority (GRCA), etc., to review planning, building, zoning, servicing, environmental and other issues to be addressed in the final design and construction of the facility.

Reporting

* Prepare a feasibility report based on the needs identified under scope of work and the budget, and provide options that would fit within the budget.
* Prepare a minimum of three preliminary plan options, including site and building layouts, building façade and energy model along with cost analysis for each option. Layouts will need to coincide with the current surrounding site features, space/circulation requirements for personnel, vehicles, machinery and equipment.
* Prepare Class D cost estimate.
1. **PHASE B – Detailed Design, Drawings, and Permits**
* Provide detailed design and services for Architectural, Structural, Mechanical, Electrical, Civil, Fire, and Life Safety, Signage, Landscaping, Elevating Devices, Site Services, Interior Design, Commissioning, Hardware, Acoustics, Security, Code compliance, etc. along with project management, energy and sustainability consulting and cost consulting services.
* Plan, participate and provide (in both electronic and hard format) meeting notes (agenda and minutes) for all meetings (at the City of Guelph) for on-going project status reviews (bi-weekly) and for the purpose of discussing, reviewing, presenting and/or seeking approval for project components, the design parameters, and final design details.
* Prepare a detailed schedule for all phases of the project.
* Consultant shall follow and update standard template for Risk Register to be provided by the City.
* Review all existing documents, drawings, studies, site conditions, and needs identified by City staff.
* Review of existing site conditions and develop a transition plan to maintain the WRIC operational needs at all times.
* Develop scope of work / terms of reference and manage all required subsurface soils investigations and geotechnical / geo-environmental engineering services (that are to be provided separately at the City of Guelph’s cost).
* Coordinate the installation of all required site utility services (water, wastewater, storm drainage, electrical, gas, telecommunications, etc.), if required upgrade the existing to cope with the new requirements including approvals from concerned city department(s).

Reporting

* Provide one rendering of the final design for use on the construction signage.
* Preparation of a site landscaping plan with planting details and specifications and potential irrigation components, if required. Prefer plants that grow under natural conditions and have minimal irrigation requirements.
* Preparation of internal site servicing and grading plans, if required.
* Preparation of topographic surveys and plans, if required.
* Provide an interior design plan to specify the supply & installation of space requirements and floor, wall and window coverings to be specified.
* Prepare energy model and report.
* Prepare the final recommended facility design and project cost analysis. Value Engineer the project if the estimate comes over budget.

Cost estimates

* Prepare cost estimates at 50% and 90% of the detailed drawing phase. Preparation of accurate and detailed construction cost analyses of the recommended design components and options to be reviewed and considered for final design approval.
* Final conceptual design presented must include a “Class D” budget estimate.
* Prepare and submit a “Class A” estimate at the end of Design Drawing phase.
* Prepare utility cost estimates informed by the energy model.

Design standards and regulatory requirements

* Design of functional building and site facilities in compliance with the Ontario Building Code, Fire Code, and all other applicable legislation and regulations.
* Meet / address the requirements of City of Guelph Facility Accessibility Design Manual (reference via <http://guelph.ca/living/accessibility/facilities/>) and ensure that trade install to the City of Guelph Facility Accessibility Design Manual.
* All Materials, communication or otherwise, that are public-facing must conform with the Accessibility for Ontarians with Disability Act requirements for municipalities.
* Plan and conduct permits / approvals. Submit applications, provide and present all necessary technical information (if required) to obtain Site Plan Committee approvals, site alteration permits, building permit applications and approvals, MECP (Ministry of the Environment Conservation and Parks) permits, GRCA permits (Fill Permit Submission), road corridor permits, Environmental Compliance Approval, etc.
* Provide design for IT and security to CPTED design standards. Security to include, but not limited to, cameras and access.
* The City of Guelph wants to progress towards the Community Net Zero Carbon and Corporate 100 percent Renewable targets. A high performance level of design and construction that implements sustainable principles / practices is an important objective throughout the building, as established by the Canada Green Building Council (CAGBC). The City of Guelph wishes to design and construct the buildings to the CAGBC Net Zero Carbon standard.
* Design is to incorporate energy management through the use of an iterative design process. The process is to:
	+ Meet and exceed the latest OBC and OBC SB-10 requirements and other regulations;
	+ Participate in SaveONenergy High Performance New Construction (HPNC) program – Custom Path to qualify the design and construction for incentives;
	+ Energy modelling (using recognized and HPNC eligible energy modelling software) is to be used throughout the design process to inform the design on the feasibility / viability of energy management measures on a life cycle costing (capital cost vs operating cost) basis;
		- Review preliminary architectural design and identify energy management measures (EEMs)
		- Feasibility analysis of EMMs based on life cycle costing using energy modelling
		- Review of feasibility analysis of EMMs with COG and short list options
		- Preliminary design of short list EMMs
		- Detailed design
1. **PHASE C – Tender Document and Award**
* Preparation of the complete bidder prequalification documents and requirements in coordination with the City of Guelph’s Purchasing Office. The City of Guelph will administer the pre-qualification process for bidders. Partner with the City of Guelph’s pre-qualification selection team providing professional opinion as required.
* Preparation of complete tender documents, specifications, and the required sets of final drawings to enable a tender to be called in coordination with the City of Guelph’s tendering requirements and preparation of CCDC-2 2008 stipulated price contracts.
* Provide for hard-copies of the final tender documents & drawings.
* Advance Tenders – Prepare tender documents and provide administration of any advance tenders for project materials, products, contracted services or construction.
* Preparation of documents for tender call / Provide answers to technical questions from Bidders, to the City of Guelph. Attend pre-tender site meetings.
* Summarize, analyze and evaluate tender results.
* Provide recommendations for a tender award to the City of Guelph for review.
1. **PHASE D – Contract Administration**

Contract Supervision

* Upon award of the construction contract, the consultant shall be responsible for the CCDC2, 2008 contract administration of the project to its end.
* All required / frequent construction meetings, site inspections and meeting inspection notes & records until full and final acceptance of the completed work. It is assumed that there will be bi-weekly construction meetings/inspections as required.
* Coordinate services of consultants as applicable; and is responsible for all errors and omissions of all sub consultants.
* Provide continuity of resources form the design phases.
* Have the authority to act on the City of Guelph’s behalf to the extent provided in this Contract and the Contract Documents.
* Have access to the Work at all times wherever it is in preparation or progress.
* Exercise the authority to reject work which does not conform to the Contract Documents, and whenever, in the Prime Consultant’s opinion, it is necessary or advisable for the implementation of the intent of the Contract Documents exercise the authority to require special inspection of testing of work, whether or not such work has been fabricated, installed, or completed.
* Provide technical advice on ‘Approved Equal’ materials in the contract documents and co-ordinate this change with contractor and the City of Guelph, including ensuring proper documentation.
* Exercise the authority to order minor adjustments in the Work which are consistent with the intent of the Contract Documents, when these do not involve an adjustment in the contract price or an extension of the contract time.
* Furnish supplemental instructions to the Contractor with reasonable promptness or in accordance with a schedule for such instructions agreed to by the Prime Consultant and the Contractor.
* Monitor all sustainable design and construction achievements
* Serve as the “Consultant” as per the CCDC 2 Stipulated Price Contract Agreement between the Owner and the Contractor. To ensure performance of the building systems in compliance with the City of Guelph’s expectations and with the documents created during Design development.
* Responsible for and oversees services of consultants and is responsible for all errors and omissions of all sub consultants.

Administration

* Prepare “Issued for Construction” set of drawings and specifications incorporating all addenda for distribution to General Contractor upon award of Contract. Provide the City with one electronic and hard copy.
* Submit for the review and approval of the City of Guelph a quality assurance plan that details the requirements and measurements for site reviews, testing, inspection, and other construction monitoring.
* Forward all instructions from the City of Guelph to the Contractor for carry out and coordinate as applicable the General Review/Field Review of the Work and include in each Field Review detailed written comments on quality of work, adherence to construction schedule, verification of trades on site, and overall conformance with contract documents. Field review to be a minimum of every two weeks and include for review of milestone events affecting the quality of construction.
* Examine, evaluate and report to the City of Guelph information of the progress and quality of the Work, and report to the Client defects and deficiencies in the Work observed during the course of the site reviews.
* Prepare, as necessary by at a minimum monthly, a written assessment of the construction progress as it relates to the approved construction schedule, including recommendations on remedial action where necessary;
* In the first instance, interpret the requirements of the Contract Documents and make findings as to the performance there under by both the City of Guelph and Contractor.
* Render interpretations in writing and graphic form as may be required with reasonable promptness on the written request of either the City of Guelph of the Contractor
* Render interpretations and findings consistent with the intent of and reasonably inferable from the Contract Documents, showing partiality to neither the City of Guelph nor the Contractor.
* Review and take other appropriate action within a reasonable time as agreed in writing with the General Contractor, promptness upon such Contractor’s submittals as shop drawings, product data, and samples, for conformance with the intent of the Work as provided in the Contract Documents.
* Maintain an electronic log to show the status and disposition of Shop Drawings and other required contractor submittals.
* Retain a hardcopy of all shop drawings and samples and other required submissions.
* Prepare Contemplated Change Notices (CCNs), Change Directives (CDs) and Change Orders (COs) for the consideration of the Project Manager and for the Client’s approval and signature in accordance with the Contract Documents, and maintain electronic logs to accurately document the status of all issued and CCNs, CDs, and Cos cross referenced to the General Contractor’s numbering system for changes and quotes and incorporating the Prime Consultant’s estimated cost and reasons for each change.
* Determine the amount owning to the Contractor under the Contract based on the Contractors application(s) for payment.
* Issue certificates for payments in the value proportionate to the amount of the Contract and the Contractor’s Schedule of Values, of work performed and products delivered to the place of the Work.
* Determine the date of Substantial Performance of the work.
* Include for cost estimates to remediate deficiencies and track progress of all deficiencies until completion.
* Provide as-built-drawings to include all addenda, CO’s, SI’s and any on-site conditions that are substantially different from contract documents. Provide an electronic set of as built drawings (CAD and PDF) and specifications.
* Prior to the end of the period of one year following the date of Substantial Performance of the Work, review any defects or deficiencies which have been observed and reported during that period, and notify the Contractor in writing of those items requiring attention by the Contractor to complete the Work in accordance with the Contract.

Commissioning

* Employ a Commissioning Consultant to provide comprehensive services related to the commissioning of the building envelop and building systems. The Commissioning agent will review the contract drawings and specifications at 50% completion and offer comments to the City of Guelph regarding the mechanical and electrical systems. The Commissioning agent will be part of the design team through all phases and will conduct ongoing inspections throughout the one- year building warranty period on a seasonal basis and will attend and sign off on the one-year warranty period on a seasonal basis and will attend and sign off on the on year warrantee review.
* Coordinate the effort of the Commissioning Consultant to monitor the performance of all building systems (mechanical and electrical) through four (4) complete seasons (summer, fall, winter, spring), report to the City of Guelph on compliance or non-compliance with the performance expectations. Provide necessary documentation and direction to the General Contractor with respect to correction of variances from performance expectations.

Closeout and warranty

* Review all warranties and close out documents prior to Substantial Completion.
* Advise the City of Guelph on acceptance to “Facility Turnover” to City of Guelph if applicable.
* Verify the validity of the Contractor’s application for final payment and issue a certificate of final payment.
* Prior to release of the 10% holdback, the Consultant is to verify the Contractor has paid all sub-contractors, material suppliers, etc., and that no liens exist on the property against the City of Guelph.
* Substantial Completion by the contractor will include the provision of a detailed list of all major components of the facility. All components must be number tagged. A spreadsheet matching(use city’s assessment register template) the assigned numbers to components will include all pertinent information, i.e. model #, manufacturer, cost, etc.
* Prepare a suitable fire plan for the City consistent with City of Guelph asset management requirements.

**8.0 SUB CONSULTANTS**

The Consultant will be responsible to coordinate all the required sub consultants. All documents produced by the sub consultants shall bear the seal of an individual in good standing with their respective designation, including but not limited to, OALA, OAA and P.Eng. as required. The proponent shall be responsible for the errors and omissions of all sub consultants. All the sub consultants must be included in the Proponent’s submission and fixed free (excluding Geotechnical).

For the information of Proponents and as a consideration for potential team members the following sub consultants shall be included as part of the Proponent’s team at a minimum:

* Structural
* Mechanical
* Electrical
* Civil
* Architect/Interior Designer
* Landscape
* Sustainability Consultant
* Energy Modeller
* Cost Consultant
* Commissioning
* IT, Security and Communication
* Surveyor
* Other sub consultants as identified by the Proponent

**9.0 Permit**

All permit applications are to be submitted by the consultant who must provide ‘Issue for Permit’ hard copy drawings (11” x 17” and 24” x 36”). Fees for permit applications and approvals shall be paid for directly by the City of Guelph, and will not be the responsibility of the consultant.

**10.0 Communication and Accessible documents**

All public-facing materials (print, web, display, etc.) must:

* follow the City’s Corporate Identity Guidelines and House Style Guidelines
* meet the municipality’s requirements within the current Accessibility for Ontarians with Disabilities Act
* reflect the City of Guelph Accessible Documents Guidelines Desk Reference Manual - September 2016
* include an accessible version of the document that can be altered by the City of Guelph upon a request for an accommodation, and include an accessible Adobe Portable Document File (PDF)

## 11.0 Resource/ Experience Requirements

In addition to general building design and construction management, the proponent team must have demonstrated experience in the following areas:

* Delivery of large-scale, complex multi-disciplined projects;
* Upgrades transitioned in an operational facility with a 100 percent up-time requirement;
* Electrical and control system upgrades;
* Interior design of office and meeting room space and amenities;
* Interior design of operations and maintenance work space;
* Design and integration of Utility networks;
* Project and project risk management.

## 12.0 Deliverables

Electronic and hard copies of all documents as per need and standard project practices.

Proposal must comprise of the summary table broken down into four phases of the project with Grand total in the end.

|  |
| --- |
| **Phase A – Concept Design & Class D Estimate** |
| Base Fee:Disbursement:Total Fee:  |
| **Phase B – Detailed Design, Drawings and Permits** |
| Base Fee:Disbursement:Total Fee: |
| **Phase C – Tender Document and Award** |
| Base Fee:Disbursement:Total Fee: |
| **Phase D – Contract Administration** |
| Base Fee:Disbursement:Total Fee: |
|  |
| **Grand Total:**  |

Approval from City of Guelph is required to transit to next phase and is contingent with budget approval.

## 13.0 WoRK sITE COMPLIANCE

The consultant and contractor must ensure Environment Compliance Approval ECA and Safety Compliance as per Ministry of the Environment Conservation and Parks, Ontario Occupational Health and Safety ACT and Regulations Green Book 2019-20(Latest available) for all the staff members that work on the project.

Relevant Staff member are available at WRIC and need to be engaged in advance to get the pre-site access training for ECA, Health and Safety as per the WRIC yard operational requirement.

The City of Guelph has implemented a comprehensive program to manage the safety of consultants and contractors working for, or on behalf of the corporation. The program and forms required can be accessed at the following City address: <https://guelph.ca/city-hall/by-laws-and-policies-2/contractor-safety-management-program/>

All incidents need to be reported as per standard guidelines advised by the related compliance. Failure to comply may lead to fine and legal action by the concerned authority.

## 14.0 PROJECT EXCLUSIONS

The consultant will design the office furniture arrangement based on the template for Asset Management Document (to meet the corporate furniture standards specified for the City) to be provided by the City for office equipment arrangement and IT needs. Office furniture, office equipment and IT equipment will be considered excluded from the scope of work. However IT infrastructure is considered to be included in the project which implies the port locations, sockets and conduit requirements with pull wire/ropes.

## APPENDIX A

Attached documents

* Facilities Needs Assessment and Master Plan for the Guelph Solid Waste Resources at 110 Dunlop Drive by Stirling Rothesay Consulting Inc. on August 10, 2018.

Relevant portion only.

* Schematic Work Site Drawing