



THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 520-2023

**PROFESSIONAL CONSULTING SERVICES FOR DETAILED DESIGN, TENDER FOR
CONSTRUCTION, AND CONTRACT ADMINISTRATION OF THE NORTH GARAGE
REPLACEMENT**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 PROFESSIONAL CONSULTING SERVICES FOR DETAILED DESIGN, TENDER FOR CONSTRUCTION, AND CONTRACT ADMINISTRATION OF THE NORTH GARAGE REPLACEMENT

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, August 14, 2023.

B2.2 The Consulting Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

B3.1 The Consulting Contract Administrator or an authorized representative will conduct a Site investigation tour of Winnipeg Transit's existing garage at 421 Osborne Street on July 25, 2023 from 1:00 p.m. to 2:30 p.m.

B3.1.1 Further to B3.1:

- (a) Proponents are requested to register for the Site investigation by contacting Ali Campbell, P.Eng., by email (acampbell@dillon.ca) or by phone (204-990-8367) to request their attendance by 12:00 p.m. (noon) on July 21, 2023. Proponents are limited to attending one (1) guided Site investigation at Winnipeg Transit's existing garage at 421 Osborne Street.
- (b) Attendees are required to provide and wear steel toed footwear and follow applicable safety guidelines while in the garage.
- (c) The City may host additional tour dates. Notice of these dates will be provided to proponents who have requested attendance to the Consulting Contract Administrator by 4:00 p.m. on July 21, 2023.

B3.2 Although attendance at the Site Investigations is not mandatory, the City strongly suggests that Proponents attend.

B3.3 The Proponent shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Proponent's direct observation, or is provided by the Consulting Contract Administrator in writing.

B3.4 The Proponent is responsible for inspecting the Site, the nature of the Work to be done and all conditions that might affect their Proposal or their performance of the Work, and shall assume all risk for conditions existing or arising in the course of the Work which have been or could have been determined through such inspection.

B3.5 A guided tour of the North Garage Replacement Site will not be conducted. Proponents are permitted to investigate the Site from the public right of way.

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Consulting Contract Administrator identified in D2.

B4.2 If the Proponent finds errors, discrepancies or omissions in the Request for Proposal, or is unsure of the meaning or intent of any provision therein, the Proponent shall promptly notify the Consulting Contract Administrator of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.

- B4.3 Responses to enquiries which, in the sole judgment of the Consulting Contract Administrator, require a correction to or a clarification of the Request for Proposal will be provided by the Consulting Contract Administrator to all Proponents by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Consulting Contract Administrator, do not require a correction to or a clarification of the Request for Proposal will be provided by the Consulting Contract Administrator only to the Proponent who made the enquiry.
- B4.5 All correspondence or contact by Proponents with the City in respect of this RFP must be directly and only with the City's Consulting Contract Administrator. Failure to restrict correspondence and contact to the Consulting Contract Administrator may result in the rejection of the Proponents Proposal Submission.
- B4.6 The Proponent shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Consulting Contract Administrator in writing.
- B4.7 Any enquiries concerning submitting through MERX should be addressed to:
MERX Customer Support
Phone: 1-800-964-6379
Email: merx@merx.com

B5. CONFIDENTIALITY

- B5.1 Information provided to a Proponent by the City or acquired by a Proponent by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Consulting Contract Administrator. The use and disclosure of the Confidential Information shall not apply to information which:
- (a) was known to the Proponent before receipt hereof; or
 - (b) becomes publicly known other than through the Proponent; or
 - (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.
- B5.2 The Proponent shall not make any statement of fact or opinion regarding any aspect of the Request for Proposals to the media or any member of the public without the prior written authorization of the Consulting Contract Administrator.

B6. ADDENDA

- B6.1 The Consulting Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Request for Proposal, or clarifying the meaning or intent of any provision therein.
- B6.2 The Consulting Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.3 Addenda will be available on the MERX website at www.merx.com.
- B6.4 The Proponent is responsible for ensuring that they have received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.5 The Proponent shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid/Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.
- B6.6 Notwithstanding B4, enquiries related to an Addendum may be directed to the Consulting Contract Administrator indicated in D2.

B7. PROPOSAL SUBMISSION

- B7.1 The Proposal shall consist of the following components:
- (a) Form A: Bid/Proposal (Section A) in accordance with B8; and
 - (b) Fees (Section B) in accordance with B9.
- B7.2 The Proposal should also consist of the following components:
- (a) Experience of Proponent and Subconsultants (Section C) in accordance with B10;
 - (b) Experience of Key Personnel Assigned to the Project (Section D), in accordance with B11; and
 - (c) Project Understanding and Methodology (Section E) in accordance with B12.
- B7.3 Further to B7.1 all components of the Proposal shall be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Proposal.
- B7.4 Further to B7.2, all components of the Proposal should be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely.
- B7.5 Proposal format, including number of pages, size of pages and, font, etc., will not be regulated, except that the Proposal should contain a table of contents, page numbering and should be in the Sections identified above. Proponents are encouraged to use their creativity to submit a Proposal which provides the requested information for evaluation and other information which illustrates the strength of their proposed solution.
- B7.6 The Proposal shall be submitted electronically through MERX at www.merx.com.
- B7.6.1 Proposals will **only** be accepted electronically through MERX.
- B7.7 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B22.1(a).
- B7.8 Any cost or expense incurred by the Proponent that is associated with the preparation of the Proposal shall be borne solely by the Proponent.

B8. PROPOSAL (SECTION A)

- B8.1 The Proponent shall complete Form A: Bid/Proposal, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid/Proposal shall be completed in accordance with the following requirements:
- (a) if the Proponent is a sole proprietor carrying on business in their own name, their name shall be inserted;
 - (b) if the Proponent is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Proponent is a corporation, the full name of the corporation shall be inserted; and
 - (d) if the Proponent is carrying on business under a name other than their own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Proposal is submitted jointly by two (2) or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Bid/Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.

- B8.4 Paragraph 13 of Form A: Bid/Proposal shall be signed in accordance with the following requirements:
- (a) if the Proponent is a sole proprietor carrying on business in their own name, it shall be signed by the Proponent;
 - (b) if the Proponent is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Proponent is a corporation, it shall be signed by their duly authorized officer or officers; and
 - (d) if the Proponent is carrying on business under a name other than their own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B8.4.1 The name and official capacity of all individuals signing Form A: Bid/Proposal should be entered below such signatures.

B8.5 If a Proposal is submitted jointly by two (2) or more persons, the word "Proponent" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Proponents in the Proposal and the Contract, when awarded, shall be both joint and several.

B9. FEES (SECTION B)

B9.1 The Proposal shall include a Fixed Fee for all disciplines and/or phases identified in D4 Scope of Services.

B9.2 Adjustments to Fees will only be considered based on increases to the Scope of Services.

B9.2.1 The City will not consider an adjustment to the Fees based on changes in the Project budget or the Final Total Construction Cost.

B9.3 Notwithstanding C1.1(b), Fees shall include costs for out of town travel, related meals and accommodations for the duration of the Project and shall not be considered an Allowable Disbursement.

B9.4 The Fee Proposal shall also include an allowance for Allowable Disbursements as defined in C1.1(b), but shall exclude the costs of any materials testing, soils and hazardous materials investigation during construction.

B9.5 Notwithstanding C11.1, Fees submitted shall not include the Goods and Services Tax (GST) or Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.

B9.6 Payments to Non-Resident Consultants are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B10. EXPERIENCE OF PROPONENT AND SUBCONSULTANTS (SECTION C)

B10.1 Proposals should include:

- (a) Details demonstrating the history and experience of the Proponent and Subconsultants in providing programming, design, management of, and contract administration services on three (3) similar projects. Similar projects should include the detailed design, tender preparation, and construction services of a transit bus or commercial fleet garage. At a minimum, one (1) similar project must be for a transit bus garage with zero-emission buses (ZEB), or a garage designed to be transitioned to accommodate ZEB.

B10.2 For each project listed in B10.1(a), the Proponent should submit:

- (a) description of the project;
- (b) role of the Consultant;
- (c) project's original contracted cost and final cost;

- (d) design and schedule (anticipated project schedule and actual project delivery schedule, showing design separately);
- (e) project owner; and
- (f) reference information (two (2) current names with telephone numbers and email addresses per project).

B10.2.1 Where applicable, information should be separated into Proponent and Subconsultant project listings.

B10.3 The Proposal should include general firm profile information, including years in business, average volume of work, number of employees and other pertinent information for the Proponent and all Subconsultants.

B11. EXPERIENCE OF KEY PERSONNEL ASSIGNED TO THE PROJECT (SECTION D)

B11.1 Describe your approach to overall team formation and coordination of team members.

B11.1.1 Include an organizational chart for the Project.

B11.2 Identify the following Key Personnel assigned to the Project:

- (a) Project Manager;
- (b) Design Leads:
 - (i) Architectural Lead;
 - (ii) Facilities Engineering Lead; and
 - (iii) ZEB Infrastructure Lead;
- (c) Resident Construction Inspector.

B11.3 Submit the experience and qualifications of the Key Personnel assigned to the Project for projects of similar complexity, scope and value, including the principals-in-charge, the Consultants Representative, managers of the key disciplines, lead designers and public engagement professionals. Include educational background and degrees, professional recognition, job title, years of experience in current position, years of experience in design, and years of experience with existing employer. Roles of each of the Key Personnel in the Project should be identified in the organizational chart referred to in B11.1.1.

B11.4 For each person identified, list at least two (2) comparable projects in which they have played a primary role similar to that proposed for this Project. If a project selected for a key person is included in B10, provide only the project name and the role of the key person. For other projects provide the following:

- (a) description of project;
- (b) role of the person; and
- (c) project owner.

B11.5 The responsibilities for each of the roles listed in B11.2 are based on minimum expectations for personnel within these roles.

B11.6 Where the responsibilities for the roles listed in B11.2 would exceed the scheduling or capacity of the individual, the Design Consultant may assign an additional staff member as back-up, although the intention is for each of these roles to be a singular role.

B11.7 An individual may be identified for multiple roles provided the individual is capable of fulfilling the responsibilities of each role.

B11.8 The Design Consultant may include additional personnel management or leadership roles to supplement the Project.

- B11.9 Unless otherwise approved by the Consulting Contract Administrator, the individuals assigned to the roles in B11.2 shall remain in that role. The intent of these roles is to maintain continuity throughout the Project Term.
- B11.10 Where approved by the Consulting Contract Administrator in writing, the Design Consultant may substitute individuals in the roles listed in B11.2.
- B11.11 When any changes are made to the individuals, roles, or team organization, the Design Consultant shall submit an updated team structure and organization.
- B11.12 Description of Key Personnel:
- (a) Project Manager:
- (i) The Project Manager is the technical leader of the Project for the Design Consultant and is responsible for the planning and execution of technical activities of the Project throughout Design, Construction, and Post-Construction.
- (ii) Responsibilities:
- ◆ coordinate and oversee all Key Personnel, managers, and leads and ensure adequate communication between the Design Consultant and the General Contractor;
 - ◆ ensure all Key personnel, managers, leads and the General Contractor have sufficient information to undertake the task or activity that their teams are responsible for;
 - ◆ ensure adequate personnel are assigned to the Project to achieve the requirements of the technical specifications;
 - ◆ oversee the regular and effective reporting required for the Project;
 - ◆ coordinate monthly updates to the City of Winnipeg Risk Register;
 - ◆ responsible for oversight of preparing, implementing, and overseeing the Commissioning Plan; and
 - ◆ liaise with the Consulting Contract Administrator on an on-going basis to address all concerns related to the Project.
- (iii) Qualifications:
- ◆ Professional Engineer status, meaning an individual who holds a certificate of registration to engage in the practice of engineering in Manitoba under The Engineering and Geoscientific Professions Act, C.C.S.M. E120, or any replacement legislation;
 - ◆ Architect, meaning an individual who is a Registered Member of the Manitoba Association of Architects and who practices through an Architectural or joint Architectural and Engineering (A/E) practice that is registered with the Manitoba Association of Architects;
 - ◆ experience in management leadership for design of projects of similar scope and complexity including commercial fleet garages;
 - ◆ at least twenty (20) years of experience on projects of similar scope and complexity, including commercial fleet garages; and
 - ◆ experience with projects including zero-emission fleet technology.
- (b) Design Leads (Architectural, Facilities, ZEB):
- (i) Each Design Lead is the head of design related tasks for their specific discipline or component of the Project and is responsible for the completion of design activities and the development of Drawings and specifications.
- (ii) The Design Leads are expected to liaise and coordinate with other Design Leads as required to ensure the design requirements of each discipline or component of the Project are being met and are complementary.
- (iii) Responsibilities:
- ◆ coordination and distribution of design related work;

- ◆ coordination and completion of all design activities and development of all Drawings and specifications;
 - ◆ ensure adequate personnel are assigned for the completion of design, Drawings, and specification development;
 - ◆ ensure the assigned personnel meet the required qualifications and experience, and have sufficient knowledge for the task they are responsible for;
 - ◆ ensure that all final design, Drawing, and specification submissions that are issued for construction and subsequent amendments or revisions are sealed by the design engineer responsible for that aspect of the Project;
 - ◆ manage the distribution, tracking, and logging of all design, Drawing, and specification submissions, including checking and reviewing processes, and those issued for construction as well as subsequent amendments or revisions;
 - ◆ ensure all designs are adequately checked; and
 - ◆ coordinate the review of all submittals and shop Drawings together with the engineer of record.
- (iv) Qualifications:
- ◆ at least ten (10) years of relevant design experience on projects of similar scope and complexity on the discipline or component of the Project they are responsible for;
 - ◆ the Architectural Lead shall be a licenced architect registered in the province of Manitoba; and
 - ◆ the Facilities and ZEB Lead shall be a professional Engineer registered in the Province of Manitoba.
- (c) Resident Construction Inspector:
- (i) The Resident Construction Inspector is responsible for confirming that the General Contractor undertakes their activities with the intention of delivering a high-quality project, and for coordination between the General Contractor, the Design Consultant, and Contract Administrator as it relates to the design Drawings and specifications.
- (ii) Responsibilities:
- ◆ ensuring sufficient personnel are in the field to monitor construction and complete the necessary quality control activities at the appropriate times and in a timely manner, from the various disciplines;
 - ◆ ensure the assigned personnel meet the required qualifications and experience, and have sufficient knowledge of the task they are responsible for;
 - ◆ ensure the retained material testing laboratories and inspecting firms meet the required certification for the task they are responsible for;
 - ◆ ensuring the assigned personnel are effectively inspecting construction activities documenting quality, identifying and addressing deficiencies, and resolving non-conforming work;
 - ◆ lead the coordination of day-to-day Site activities;
 - ◆ part-time on-Site inspection averaging twenty-five (25) hours per week throughout the course of the construction. This does not include the requirements of various personnel responsible for the on-Site inspection activities for specific technical disciplines (e.g., mechanical, electrical, etc.), which would be time included for activities identified in D4.5(d)(v);
 - ◆ field measurement and verification of construction material quantities in a manner so as to minimize Contract disputes;
 - ◆ provision of periodic and timely updates to the Consulting Contract Administrator on progress and/or expenditures through regular Site meetings with formal minutes as described in the City of Winnipeg's Project Management Manual;

- ◆ representation of the City to the local residents and businesses in a professional manner with responsible and prompt reaction to reasonable requests (minimizing impact and/or disruption of the Project to the extent possible);
 - ◆ on-going updates to the lane-closure information as required; and
 - ◆ coordination of traffic management and construction work.
- (iii) Qualifications:
- ◆ The Resident Construction Inspector shall have at least five (5) years of experience with construction inspection and the management of teams on projects of similar complexity including commercial fleet garages.

B12. PROJECT UNDERSTANDING AND METHODOLOGY (SECTION E)

- B12.1 Describe your firm's project management approach and team organization during the performance of Services, so that the evaluation committee has a clear understanding of the methods the Proponent will use in the delivery of this Project.
- B12.2 Methodology should be presented in accordance with the Scope of Services identified in D4.
- B12.3 Describe the collaborative process/method to be used by the Key Personnel of the team in the various phases of the Project.
- B12.4 Proposals should address:
- (a) the team's understanding of the broad functional and technical requirements;
 - (b) the team's understanding of the urban design issues;
 - (c) the proposed Project budget;
 - (d) the teams' understanding of IAP2 processes and principles and how they apply to the Project;
 - (e) the Project methodology with respect to the information provided within this RFP and the City's Project Management Manual at <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#2> and templates at <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4>; and
 - (f) any other issue that conveys your team's understanding of the Project requirements.
- B12.5 Proposals should address the proponent's specific understanding of the Project as it relates risks associated with the scope, complexity, and novelty of a ZEB facility for the City of Winnipeg. As it relates to these items, the Proposal should clearly demonstrate or include the following:
- (a) an understanding of potential risks and challenges to the Project;
 - (b) strategies to mitigate risks and challenges; and
 - (c) recommendations, innovative approaches, or processes that would be used by the Design Consultant to complete the Project.
- B12.6 The City considers Foundations of Public Engagement offered by IAP2 an asset. Although IAP2 training is considered an asset, it is not a requirement, and qualifications and experience will be weighted more heavily than training.
- B12.7 The Proposal should include Form P: Person Hours for all disciplines and or phases identified in D4 Scope of Services.
- B12.7.1 The total Fees on Form P: Person Hours should match Fees submitted in response to B9.
- B12.8 Proponents may use Form P: Person Hours or a table of their own design provided it includes all information requested in accordance with B12.7.

- B12.9 A sample of Form P: Person Hours can be found at <https://winnipeg.ca/matmgt/templates/information.stm>
- B12.10 For each person identified in B11.2, list the percent of the person's time to be dedicated to the Project in accordance with the Scope of Services identified in D4.
- B12.11 Proponents should present a carefully considered Critical Path Method schedule using Microsoft Project or similar project management software, complete with resource assignments (key designers), durations (weekly timescale) and milestone dates or events. The schedule should address each requirement of the Scope of Services.
- B12.12 The Proponent's schedule should include critical dates for review and approval processes by the City and other organizations anticipated during the design and tendering phases of the Project. Reasonable times should be allowed for completion of these processes.

B13. ELIGIBILITY

- B13.1 As a result of providing Owner's Advocate/Project Management services in relation to this Project, the following Persons are not eligible to be a Proponent, participate as team members of a Proponent, or act as advisors to a Proponent or to any of their team members or to otherwise participate in the development and preparation of Proposals for the Project:
- (a) Dillon Consulting Limited; and
 - (b) Landmark Planning and Design.
- B13.2 A Proponent may be disqualified if any of the above-noted ineligible persons participate in the development and preparation of the Proponent's Proposal for the PROFESSIONAL CONSULTING SERVICES FOR DETAILED DESIGN, TENDER FOR CONSTRUCTION, AND CONTRACT ADMINISTRATION OF THE NORTH GARAGE REPLACEMENT .

B14. DISCLOSURE

- B14.1 Various Persons provided information or services with respect to this RFP. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.
- B14.2 The Persons are:
- (a) WSP Canada;
 - (b) Golder Associates;
 - (c) Parsons Canada Ltd.;
 - (d) J&D Environmental Ltd.; and
 - (e) Colliers International.
- B14.3 Additional Material to be provided upon request made to the Consulting Contract Administrator following provision of the signed City of Winnipeg Non-Disclosure Agreement (See D6).

B15. CONFLICT OF INTEREST AND GOOD FAITH

- B15.1 Further to C3.2, Proponents, by responding to this RFP, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.
- B15.2 Conflict of Interest means any situation or circumstance where a Proponent or Key Personnel proposed for the Services has:
- (a) other commitments;
 - (b) relationships;

- (c) financial interests; or
- (d) involvement in ongoing litigation;

that could or would be seen to:

- (i) exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Proposals or award of the Contract; or
 - (ii) compromise, impair or be incompatible with the effective performance of a Proponent's obligations under the Contract;
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of their participation in the RFP process or the Project; or
 - (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the RFP process) of strategic and/or material relevance to the RFP process or to the Project that is not available to other Proponents and that could or would be seen to give that Proponent an unfair competitive advantage.

B15.3 In connection with their Proposal, each entity identified in B15.2 shall:

- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Project;
- (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the RFP process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Consulting Contract Administrator; and
- (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.

B15.4 Without limiting B15.3, the City may, in their sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in their sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Proponent to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in their sole discretion, to avoid or mitigate the impact of such Conflict of Interest.

B15.5 Without limiting B15.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in their sole discretion:

- (a) disqualify a Proponent that fails to disclose a perceived, potential or actual Conflict of Interest of the Proponent or any of their Key Personnel;
- (b) require the removal or replacement of any Key Personnel proposed for the Services that has a perceived, actual or potential Conflict of Interest that the City, in their sole discretion, determines cannot be avoided or mitigated;
- (c) disqualify a Proponent or Key Personnel proposed for the Services that fails to comply with any requirements prescribed by the City pursuant to B15.4 to avoid or mitigate a Conflict of Interest; and
- (d) disqualify a Proponent if the Proponent, or one of their Key Personnel proposed for the Project, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.

B15.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in their sole discretion.

B16. QUALIFICATION

B16.1 The Proponent shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Proponent does not carry on business in Manitoba, in the jurisdiction where the Proponent does carry on business;
- (b) be financially capable of carrying out the terms of the Contract;
- (c) have all the necessary capital, organization, and equipment to perform the Services in strict accordance with the terms and provisions of the Contract; with reference to and providing examples of project specific experience in design, construction, management, tender preparation, and contract administration of heavy-duty commercial fleet, transit bus garage facilities, or similar, that support, or are ready to support, electrical vehicle storage, charging and servicing, having achieved LEED Silver Status or better (over CAD thirty million dollars (\$30,000,000.00)); and
- (d) have or establish and staff, an office in Winnipeg for the duration of the Project.

B16.2 The Proponent and any proposed Subconsultant (for the portion of the Services proposed to be subcontracted to them) shall:

- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <https://winnipeg.ca/finance/findata/matmgt/listing/debar.pdf>

B16.3 The Proponent and/or any proposed Subconsultant (for the portion of the Services proposed to be subcontracted to them) shall:

- (a) have successfully carried out services for the programming; design, management of construction and contract administration for architectural and/or engineering projects of similar complexity, scope and value; and to those required for this Project;
- (b) be fully capable of performing the Services required to be in strict accordance with the terms and provisions of the Contract;
- (c) have a written workplace safety and health program, if required, pursuant to The Workplace Safety and Health Act (Manitoba);
- (d) have the knowledge and resources to administer the requirements of The Workplace Safety and Health Act (Manitoba) during the construction works associated with this Contract;
- (e) undertake to meet all licensing and regulatory requirements of the appropriate governing authorities and associations in the Province of Manitoba;
- (f) have completed the Accessible Customer Service online training required by the Accessibility for Manitobans Act (AMA) (see B16.4 and D6);
- (g) the proposed Key Personnel acting as Project Manager to have a minimum of twenty (20) years of project management experience with at least one (1) project with a value of at least thirty million dollars (\$30,000,000.00) and be located in Winnipeg throughout the course of the Project; and
- (h) the proposed Key Personnel acting as the Resident Construction Inspector to be located in Winnipeg throughout the course of the construction phase.

B16.4 Further to B16.3(f), the Proponent acknowledges they and all Subconsultants have obtained training required by the Accessibility for Manitobans Act (AMA) available at <http://www.accessibilitymb.ca/training.html> for anyone that may have any interaction with the public on behalf of the City of Winnipeg.

B16.5 The Proponent shall submit, within three (3) Business Days of a request by the Consulting Contract Administrator, further proof satisfactory to the Consulting Contract Administrator of the qualifications of the Proponent and of any proposed Subconsultant.

(a) Client reference(s), including contact information, attesting to satisfactory performances and integrity on consulting contracts of similar value and scope as the proposed Work.

B16.6 The Proponent shall provide, on the request of the Consulting Contract Administrator, full access to any of the Proponent's equipment and facilities to confirm, to the Consulting Contract Administrator's satisfaction, that the Proponent's equipment and facilities are adequate to perform the Services.

B17. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

B17.1 Proposals will not be opened publicly.

B17.2 After award of Contract, the Contract amount and the name of the successful Proponent and their address will be available on the MERX website at www.merx.com.

B17.3 The Proponent is advised any information contained in any Proposal Submission may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).

B17.3.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Proposal Submission identified by the Proponent as such in accordance with and by reference to Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.

B17.4 Following the award of Contract, a Proponent will be provided with information related to the evaluation of their submission upon written request to the Consulting Contract Administrator.

B18. IRREVOCABLE OFFER

B18.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B18.2 The acceptance by the City of any Proposal shall not release the Proposals of the other responsive Proponents and these Proponents shall be bound by their offers on such Services for the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B19. WITHDRAWAL OF OFFERS

B19.1 A Proponent may withdraw their Proposal without penalty prior to the Submission Deadline.

B20. INTERVIEWS

B20.1 The Consulting Contract Administrator may, in their sole discretion, interview Proponents during the evaluation process.

B21. NEGOTIATIONS

B21.1 The City reserves the right to negotiate details of the Contract with any Proponent. Proponents are advised to present their best offer, not a starting point for negotiations in their Proposal Submission.

B21.2 The City may negotiate with the Proponents submitting, in the City's opinion, the most advantageous Proposals. The City may enter into negotiations with one (1) or more Proponents without being obligated to offer the same opportunity to any other Proponents. Negotiations

may be concurrent and will involve each Proponent individually. The City shall incur no liability to any Proponent as a result of such negotiations.

- B21.3 If, in the course of negotiations pursuant to B21.2, the Proponent amends or modifies a Proposal after the Submission Deadline, the City may consider the amended Proposal as an alternative to the Proposal already submitted without releasing the Proponent from the Proposal as originally submitted.

B22. EVALUATION OF PROPOSALS

B22.1 Award of the Contract shall be based on the following evaluation criteria:

- | | |
|--|-------------|
| (a) compliance by the Proponent with the requirements of the Request for Proposal or acceptable deviation therefrom: | (pass/fail) |
| (b) qualifications of the Proponent and the Subconsultants, if any, pursuant to B16: | (pass/fail) |
| (c) Fees; (Section B) | 40% |
| (d) Experience of Proponent and Subconsultant; (Section C) | 20% |
| (e) Experience of Key Personnel Assigned to the Project; (Section D) | 15% |
| (f) Project Understanding, Methodology (Section E) | 25% |

B22.2 Further to B22.1(a), the Award Authority may reject a Proposal as being non-responsive if the Proposal Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Proposal, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.

B22.3 Further to B22.1(b), the Award Authority shall reject any Proposal submitted by a Proponent who does not demonstrate, in their Proposal or in other information required to be submitted, that it is qualified.

B22.4 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B22.1(a) and B22.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.

B22.5 Further to B22.1(c), Fees will be evaluated based on Fees submitted in accordance with B9.

B22.6 Further to B22.1(d), Experience of Proponent and Subconsultants will be evaluated considering the experience of the organization on projects of similar size and complexity as well as other information requested, in accordance with B10.

B22.7 Further to B22.1(e), Experience of Key Personnel Assigned to the Project will be evaluated considering the experience and qualifications of the Key Personnel and Subconsultant personnel on Projects of comparable size and complexity, in accordance with B11.

B22.8 Further to B22.1(f), Project Understanding and Methodology will be evaluated considering your firm's understanding of the City's Project, project management approach and team organization, in accordance with B12.

B22.9 Proposals will be evaluated considering the information in the Proposal Submission and any interviews held in accordance with B20.

B22.10 Where references are requested, the reference checks to confirm information provided may not be restricted to only those submitted by the Proponent, and may include organizations representing Persons, known to have done business with the Proponent.

B23. AWARD OF CONTRACT

- B23.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.
- B23.2 The City will have no obligation to award a Contract to a Proponent, even though one (1) or all of the Proponents are determined to be qualified, and the Proposals are determined to be responsive.
- B23.2.1 Without limiting the generality of B23.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Services;
 - (b) the prices are materially in excess of the prices received for similar services in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Services, or a significant portion thereof, with their own forces;
 - (d) only one (1) Proposal is received; or
 - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B23.3 Where an award of Contract is made by the City, the award shall be made to the qualified Proponent submitting the most advantageous offer.
- B23.4 The City may, at their discretion, award the Contract in phases.
- B23.5 Further to B23.4 the City reserves the right to negotiate and award future phases to the successful Proponent.
- B23.6 Further to Paragraph 7 of Form A: Bid/Proposal and C4, the City may issue an Award Letter to the successful Proponent in lieu of execution of Contract Documents.
- B23.6.1 The Contract documents as defined in C1.1(u) in their entirety shall be deemed to be incorporated in and to form a part of the Award Letter notwithstanding that they are not necessarily attached to or accompany said Award Letter.
- B23.7 The form of Contract with the City of Winnipeg will be based on the Contract as defined in C1.1(v).
- B23.8 Following the award of Contract, a Proponent will be provided with information related to the evaluation of their Proposal upon written request to the Consulting Contract Administrator.
- B23.9 If, after the award of Contract, the Project is cancelled, the City reserves the right to terminate the Contract. The Proponent will be paid for all Services rendered up to time of termination.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Consultant Services* (Revision 2022-09-02) are applicable to the Services of the Contract.
- C0.1.1 The *General Conditions for Consultant Services* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm.
- C0.2 A reference in the Request for Proposal to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Consultant Services*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

D1.1 In addition to the *General Conditions for Consultant Services*, these Supplemental Conditions are applicable to the Services of the Contract.

D2. CONSULTING CONTRACT ADMINISTRATOR

D2.1 The Consulting Contract Administrator is:

Taran J. Peters, P.Eng.

Telephone No. 204 453-2301

Email Address: tpeters@dillon.ca

D2.2 At the pre-commencement meeting, the Consulting Contract Administrator will identify additional personnel representing the Consulting Contract Administrator and their respective roles and responsibilities for the Services.

D3. BACKGROUND

D3.1 The administrative structure for the City of Winnipeg is a Chief Administrative Officer (CAO) who is the head of the public service and provides overall leadership to all City departments.

D3.2 The City of Winnipeg Transit Department has provided public transit service to Winnipeg for over one hundred thirty (130) years. Transit currently operates a fleet of over six hundred (600) buses from three (3) bases in Winnipeg located at 421 Osborne Street, 600 Brandon Avenue, and 1520 Main Street.

D3.3 North Garage at 1520 Main Street is Winnipeg Transit's oldest facility, having opened in the 1950's as a streetcar storage facility called Caruthers Garage. The facility is functionally obsolete, and is in poor condition. The risk of North Garage becoming unusable due to further deterioration of the facility is likely Winnipeg Transit's most significant operational risk.

D3.4 North Garage was designed for vehicles of another era, and cannot accommodate articulated buses, buses with bike racks, or new buses in Transit's fleet equipped with roof mounted air conditioners. It cannot be upgraded to accommodate ZEB.

D3.5 The design and construction of a Transit Bus Parking, Servicing, Maintenance and Repair Garage to replace North Garage is one of Winnipeg Transit's highest priority infrastructure projects. It is vital for the replacement to be constructed as soon as possible in order to mitigate the current risks to Winnipeg Transit's operations, to allow for the replacement of forty (40) foot buses with sixty (60) foot buses, accommodate at a minimum, operation of twenty-four (24) battery electric buses (BEB) on opening day, and to have provisions for future transition to a fully ZEB facility.

D3.6 This Project will be delivered through a Design-Bid-Build process.

D3.7 The procurement will be turnkey and will include all necessary equipment and fixtures for a fully functional bus parking, servicing, maintenance and repair garage at the completion of the Contract.

D3.8 The design of the Site will specify installation of the required infrastructure to park, charge, and service electric buses to accommodate at a minimum twenty-four (24) BEB on opening day, with provisions to operate as a fully ZEB facility in a future phase.

- D3.9 The location of the garage is immediately west of the intersection of Oak Point Highway with Selkirk Avenue (See E7).
- D3.10 The garage is expected to be approximately forty thousand (40,000) square metres in size.
- D3.11 Transit has received Council approval to proceed with the procurement of a new Transit Bus Parking and Servicing Garage funded through the Investing in Canada Infrastructure Program (ICIP).
- D3.12 The following are the general basic requirements of the North Garage Replacement:
- (a) capacity to store two hundred fifty (250) buses (forty (40) foot equivalent);
 - (b) types of buses include: forty (40) foot and sixty (60) foot articulated diesel buses. The garage will include twenty-four (24) electric buses including chargers/dispensers and provisions for a full ZEB garage.
 - (c) employee and visitor parking;
 - (d) minimum LEED Silver certified building;
 - (e) building to be secured to protect its assets through a continuous fence of the Site's perimeter and gates system or similar, CCTV system;
 - (f) provisional space on-Site for future photovoltaic solar panel arrays and auxiliary equipment including batter storage, inverters, exterior hydrogen fuel storage, control;
 - (g) spaces to facilitate light to medium duty bus maintenance and repairs, bus parking and servicing, and administrative office spaces; and,
 - (h) exterior gensets
 - (i) bus maintenance and repair space:
 - (i) forty (40) foot bus and sixty (60) foot bus repair bays equipped to complete light duty and battery electric bus repairs including tires, inspection, and maintenance;
 - (ii) bus lifts;
 - (iii) steam bay;
 - (iv) air compressor farm;
 - (v) oil room;
 - (vi) parts storage area;
 - (vii) facilities maintenance: electrical, industrial mechanic, and HVAC shops;
 - (viii) separate rooms for diesel bus batteries and electric bus batteries meeting relevant safe storage requirements;
 - (ix) washroom and locker rooms;
 - (x) lunch room;
 - (xi) shop supervisors' offices; and,
 - (xii) janitorial room.
 - (j) indoor bus parking and servicing space:
 - (i) bus parking;
 - (ii) auxiliary vehicle parking (supervisor vans, trucks, loaders, graders, etc.);
 - (iii) liquid fuel tank farm;
 - (iv) exterior bus wash systems including water reclamation system;
 - (v) vacuum/cyclone systems for interior cleaning;
 - (vi) flat area for interior deep cleaning and washing;
 - (vii) bus fueling and servicing bays;
 - (viii) charging stations and dispensers to accommodate twenty-four (24) electric buses;
 - (ix) tank room;
 - (x) washroom and locker rooms; and

- (xi) lunch room.
 - (k) administration office space:
 - (i) parking for staff and visitors;
 - (ii) customer service desk;
 - (iii) administration staff area;
 - (iv) operations staff: supervisors and dispatch offices, sign-up room, driver's lounge and rest room;
 - (v) meeting rooms;
 - (vi) washroom and lunch room;
 - (vii) IT service area; and,
 - (viii) Control room.
 - (l) on-Site substation including two (2) 12.5 MVA transformers to supply electric bus charging capacity for this current phase and future phases; and
 - (m) improvements to the intersection of Oak Point Highway and Selkirk Avenue, the addition of secondary mid-block access point(s) from Oak Point Highway, revisions to Hyde Avenue, and consideration for future active transportation facility connections to the Site based on recommendations of the Traffic Impact Study (See E12) and in accordance with City of Winnipeg Accessibility Standards.
- D3.12.1 Further to D3.12, the basic requirements provided above are intended to communicate the general functions, complexity, and scope of the Project, but are subject to variation during the design period.

D4. SCOPE OF SERVICES

- D4.1 The City of Winnipeg Public Service has received Council approval to proceed with procurement of the North Garage Replacement (the Project). The Project will be delivered through a Design-Bid-Build process.
- D4.2 The City is seeking to Contract with a Design Consultant to undertake the design for all aspects of a Transit Bus Parking, Servicing, Maintenance and Repair Garage located at the North Garage Replacement Site. The Design Consultant shall be the design Consulting firm, along with their subconsultants, responsible for the delivery of services of this Project.
- D4.3 The Services required under this Contract shall consist of producing a design and specifications and tender documents that meet the standards expected by the client groups, public and elected officials and oversight of the General Contractor to ensure the Project is constructed according to the design and meets applicable quality standards in accordance with the following:
- (a) Design and Specification Development;
 - (b) Contract Document Preparation;
 - (c) Procurement Process;
 - (d) Construction Services; and
 - (e) Post Construction Services.
- D4.3.1 The Services required under D4.5(b), D4.5(b)(xx), D4.5(d), and D4.5(e), shall be in accordance with the City's Project Management Manual <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#2> and templates <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4>. Notwithstanding the foregoing, the Design Consultant is being engaged by the City for their professional expertise; the Design Consultant shall bring to the Consulting Contract Administrator's attention any aspect of the City's Project Management Manual or templates which the Design Consultant is of the opinion is not consistent with good industry practice.

- D4.4 The following shall apply to the Services:
- (a) City of Winnipeg Green Building Policy: New City-Owned Buildings and major additions
<http://clkapps.winnipeg.ca/DMIS/DocExt/ViewDoc.asp?DocumentTypeId=2&DocId=5989>
 - (b) Universal Design Policy
<http://clkapps.winnipeg.ca/DMIS/DocExt/ViewDoc.asp?DocumentTypeId=2&DocId=3604>
 - (c) Public Engagement Guidelines
<https://winnipeg.ca/PublicEngagement/pdfs/PublicEngagementRequirements.pdf>
 - (d) City of Winnipeg Climate Action Plan
<https://legacy.winnipeg.ca/sustainability/PublicEngagement/ClimateActionPlan/default.stm#tab-documents>
 - (e) City of Winnipeg Project Management Manual
<https://legacy.winnipeg.ca/infrastructure/pdfs/manuals/Section1.pdf>
 - (f) Green Building Program for the Province of Manitoba
<https://www.manitoba.ca/finance/greenbuilding/pubs/gbpmanual.pdf>
 - (g) Government of Canada – Climate Lens General Guidance
<https://www.infrastructure.gc.ca/pub/other-autre/cl-occ-eng.html>
- D4.4.1 Further to D4.4, the documents listed above shall be applicable to design at the Issued for Construction design stage.
- D4.5 The Design Consultant Services will be delivered from Design to Post-Construction and Warranty Period, with the following general responsibilities:
- (a) The Design Consultant Services will be delivered from Design to the Construction and Warranty Period, with the following general responsibilities:
 - (i) Provide services as Project liaison to oversee and manage communications, coordination and resolution of Project matters between all Project parties and stakeholders including the General Contractor, External Stakeholders, Authorities Having Jurisdiction, Manitoba Hydro, City of Winnipeg Water and Waste, City of Winnipeg Public Works, Province Safety and Health, and any other City departments, agencies and Technical Advisory Committees;
 - ◆ Further to D4.5(a)(i), during the Project, Manitoba Hydro will be completing a preliminary review, in the form of a Level 3 study to confirm the capacity, estimated timeline, and cost to provide required power to the Site. The Design Consultant shall liaise and coordinate with Manitoba Hydro, providing all necessary information related to the design of the Project at the request of Manitoba Hydro for the purpose of the Level 3 Study.
 - (ii) Provide update reports on the 15th day of each month to the Consulting Contract Administrator with respect to Project status including budget, schedule, risks/opportunities, stakeholder activities and progress as well as provide options analysis/recommendation as required to ensure compliance with the Project's goals and objectives.
 - (b) In the Design Development Phase, services will include but are not limited to:
 - (i) facilitate workshops with Winnipeg Transit to validate Project requirements, present design updates, and gather input on key design decisions;
 - (ii) facilitate meetings with City of Winnipeg departments to validate Project requirements, present design updates, and gather input on key design decisions;
 - (iii) municipal and third-party utility coordination and identification of required Site servicing upgrades;
 - (iv) Conduct green building design workshops with the City according to E20;
 - (v) Conduct green building feasibility studies according to E21;

- (vi) prepare regular design submissions to the Consulting Contract Administrator and the City at stages equivalent to thirty-three percent (33%), sixty-six percent (66%), ninety-nine percent (99%) design, stamped Issued for Tender Drawings, and stamped Issued for Construction (IFC) Drawings;
- (vii) prior to construction the IFC Drawings shall be submitted to the General Contractor;
- (viii) provide a recommendation of advanced procurement or alternatives at the thirty-three percent (33%) design stage for components of the North Garage Replacement, that, due to supply chain factors are expected to have long lead times for procurement;
- (ix) prepare tender documents in the form of a Bid Opportunity to procure specific components of the North Garage Replacement expected to have long lead times for procurement, issue the Bid Opportunity through the City of Winnipeg Materials Management of timing to minimize impacts to the Project schedule, and complete evaluation with input provided from the Consulting Contract Administrator;
 - ◆ Further to D4.5(b)(ix) the Design Consultant is responsible to identify the material and equipment, as well as the expected lead time.
- (x) prepare pre-qualification documents at the thirty-three percent (33%) design stage in the form of Request for Qualifications for the General Contractor Bidders, issue Request for Qualification through City of Winnipeg Materials Management, and complete evaluation and recommendation with input provided from the Consulting Contract Administrator;
- (xi) facilitate bi-weekly design update meetings (City, client groups, stakeholders, etc.);
- (xii) facilitate a Public Engagement Session at the thirty-three percent (33%) design stage per E14 to inform area residents of the Project, and gather information to be considered in the design. The Design Consultant will be responsible to provide a venue, identify stakeholders, prepare engagement materials acceptable to the City of Winnipeg Communications Department, and produce a pre-design engagement summary report including feedback from the Public Engagement Session and correspondences via email and telephone;
- (xiii) design submissions are to include all elements related to the Site and improvements to Oak Point Highway and Selkirk Avenue within the City of Winnipeg right-of-way including intersection improvements, addition secondary access point(s) from Oak Point Highway, and considerations for future active transportation connections according to the recommendations of the Traffic Impacts Study (See E12);
- (xiv) design submissions are to include all elements related to the substation on the Site;
- (xv) ensure the design is aligned with the City's Green Building Policy, Accessibility Policy, Climate Action Plan, and Climate Change Goals (See E20, E21, and Appendix 'E');
- (xvi) ensure the design will gain enough points for the building to meet a minimum LEED Silver Certification;
- (xvii) ensure the design meets the City's requirements for Building Automation, Security, Information Technology (IT), Accessibility, including Furniture, Fixtures and Equipment (FFE);
- (xviii) prepare cost estimates at the thirty-three percent (33%), sixty-six percent (66%) and ninety-nine percent (99%) design stages;
 - ◆ Further to D4.5(b)(xviii), cost estimates prepared at the 33%, 66%, and 99% design stages shall identify the cost associated with supporting the operation of ZEB including but not limited to specific electrical components, substation, additional required sprinkler systems and safety features, roof components, dispensers, and rough-in provisions.
- (xix) develop digital three-dimensional renderings and video simulation of the North Garage Replacement for the purpose of public and stakeholder engagement including the building exterior from Oak Point Highway at Selkirk Avenue, interior office spaces, and interior garage spaces; and

- (xx) facilitate a Public Engagement Session at the pre-construction stage to inform area residents of the Project. The Design Consultant will be responsible provide a venue, identify stakeholders, prepare engagement materials acceptable to the City of Winnipeg Office of Public Engagement, and produce a pre-design engagement summary report including feedback from the Public Engagement Session and correspondences via email and telephone.
- (c) In the Contract Document and Procurement Process phase, services will include but are not be limited to:
 - (i) prepare construction documents for all architectural, civil, structural, mechanical, electrical, Site services, landscaping and all other elements in conformance with the outcomes of this Proposal;
 - (ii) prepare a tender package including the Bid Opportunity, technical specifications, and Drawings to procure a General Contractor for the Construction Services phase;
 - (iii) provide technical support to the Consulting Contract Administrator in responding to RFIs and prepare Addenda including making recommendations on requests for equals/alternatives and updates to IFC Drawings and specifications as required during the bidding period;
 - (iv) review and confirm General Contractor Project schedules;
 - (v) provide input to the Consulting Contract Administrator and City to develop tender evaluation criteria;
 - (vi) attend pre-bid meetings and Site investigation tours with General Construction proponents, provide responses to questions, create addendums during the bidding period and produce an award recommendation letter; and,
 - (vii) identify and obtain permits required to commence construction in advance of awarding the General Contractor contract. Following award, costs borne by the Design Consultant for obtaining the permits will be transferred to the General Contractor.
- (d) In the Construction Services phase, services will include but are not limited to:
 - (i) liaise with the Consulting Contract Administrator, Project Manager, various City Departments and utility providers as required throughout construction;
 - (ii) facilitate and chair bi-weekly construction meetings with the City Team and General Contractor with increased frequency as required, and distribute meeting minutes;
 - (iii) complete reviews of the General Contractor's Project schedule including a review of the critical path, potential conflicting events, timelines required for stakeholder reviews and approvals, and other non-technical considerations that could impact the Project schedule with updates provided at the monthly construction meeting;
 - (iv) enforce compliance with relevant building and construction codes, City by-laws, zoning, legal, permits, geotechnical, and environmental requirements;
 - (v) complete construction inspection and review by performing resident construction inspection duties on-Site for all critical stages of construction including activities such as concrete pours, major construction activities, potential removal of contaminated material, and installation of process equipment to ensure the manufacturer's requirements are met. The Design Consultant should provide on-Site inspection oversight from mobilization until Substantial Completion has been reached;
 - (vi) review shop Drawings and relevant product data/samples provided by the Contractor;
 - (vii) monitoring and reporting on the General Contractor's adherence of construction with the Contract Documents;
 - (viii) monitoring the ongoing adherence of all Health and Safety requirements according to the Province and Authorities Having Jurisdiction by the General Contractor;
 - (ix) produce monthly inspection reports on the following categories of work at a minimum: Architectural, Mechanical, Electrical, Civil, Structural, Landscape, IT and

- Data Communications, and Security Systems, which shall be submitted to the Consulting Contract Administrator by the 10th of each month;
- (x) provide and maintain a Request for Information (RFI) management system and with access provided to the City Team and the General Contractor; and
 - (xi) prepare, correspond, and execute RFI responses, Proposed Change Notice, and Change in Work Orders as required, and Progress Estimates on a monthly basis, and review contractor invoices with certification of payment and progress in a timely manner.
- (e) In the Post-Construction Services phase, services will include but are not limited to:
- (i) prepare a Commissioning Plan with the General Contractor and oversee commissioning of new equipment according to the plan;
 - (ii) review, commission, and monitor performance of all new process equipment installed;
 - (iii) provide oversight of the General Contractor for the commissioning process for all components of the facility;
 - (iv) maintain a Critical Equipment Commissioning Matrix used to track commissioning dates, status, and other key information throughout the Construction Period;
 - (v) ensure the General Contractor has obtained all required final approvals and inspections from Authorities Having Jurisdiction, including procurement of an Occupancy Permit;
 - (vi) prepare and issue Substantial Completion Certificate;
 - (vii) coordination and compilation of an As-Built Construction Report including of facility operation and maintenance manuals, training, warranties, RFIs, proposed changed notices, change in work orders, progress estimates, construction photos, construction logs, quality assurance/quality control documents, and as-built Drawings, and any other pertinent construction documentation;
 - (viii) lead a Deficiency Inspection at the beginning of the Post-Construction Period;
 - (ix) maintain a list of construction deficiencies and track their progress to completion;
 - (x) facilitate a monthly post-construction meeting to review updates to the Deficiency List and other Project Closeout items;
 - (xi) prepare and issue Total Performance Certificate;
 - (xii) assist the City with coordination of hand-over and occupancy of the facility;
 - (xiii) provide a Start-up Assistance and Systems and Equipment Performance Review;
 - (xiv) facilitate a warranty inspection at the end of the Warranty Period; and
 - (xv) produce Warranty and Post-Warranty reports following the warranty inspection.

D5. DEFINITIONS

D5.1 When used in this Request for Proposal:

- (a) **“City”** means those individuals acting on behalf of Winnipeg Transit;
- (b) **“City Document Management System Team”** or **“City DMS Team”** is the team responsible to oversee the administration of the DMS system for the City;
- (c) **“City Team”** refers to the City and the Consulting Contract Administrator;
- (d) **“City Departments”** means departments at the City of Winnipeg, external to Winnipeg Transit, who are considered to be stakeholders to the Project (e.g., Public Works, Water and Waste, Traffic Management, etc.);
- (e) **“Consulting Contract Administrator”** means the Consultant firm (Dillon Consulting Limited) contracted to act as the Owner’s Engineer/Project Manager during the Design, Construction, and Post-Construction stages of the Project;
- (f) **“Design Consultant”** means the Consultant firm(s) and their sub-Consultants contracted through this RFP, who will perform the professional architectural and engineering services for the Project;

- (g) **“Design Consultant Document Management System Team”** or **“Design Builder DMS Team”** is the team responsible to oversee the administration of the DMS system for the Design Consultant;
- (h) **“Document”** is a deliverable that has been prepared to address a specific topic or purpose including Submittals, Non-Conformance Reports (NCRs), RFIs, Proposed Change Notice (PCN), etc.;
- (i) **“Document Management System”** (DMS) is an electronic administration and communication system used to access, view, organize, store, track, communicate and submit Documents for the Project;
- (j) **“Document Tracking Register”** a digital register updated on a real-time basis for the various Project Documents;
- (k) **“General Contractor”** means the building construction firm(s) and their Subcontractors contracted through a Tender process who will perform all the tasks related to the construction of the new garage and deliver the product according to Drawings and specifications;
- (l) **“North Garage Replacement”** shall be the title for the new bus parking, servicing, maintenance, and repair garage constructed on the Site and delivered to Winnipeg Transit through the Project;
- (m) **“Project”** shall refer to the Project described in the Scope of Services (D4);
- (n) **“Project Budget”** means the total available funding required for a Project, including construction (Contract) costs (based on the Estimate Scope), utility costs, Consulting Fee, and any associated costs identified in the additional comments of a project;
- (o) **“Site”** means the lands dedicated by the City for the construction of the North Garage Replacement as defined in Section E7;
- (p) **“Supply Chain Disruption”** means an inability by the Contractor to obtain goods or services from third parties necessary to perform the Work of the Contract within the schedule specified therein, despite the Contractor making all reasonable commercial efforts to procure same. Contractors are advised that increased costs do not, in and of themselves, amount to a Supply Chain Disruption; and
- (q) **“Warranty Period”** shall be the two (2) year period following Substantial Completion.

D6. RELEVANT DOCUMENTS AND HISTORICAL DRAWINGS

D6.1 Relevant documents and Drawings are available by request to the Consulting Contract Administrator after completion of a Non-Disclosure Agreement. These documents and Drawings will be released at the sole discretion of the City. A list of the available documents is included below:

- (a) Eastern Corridor Satellite Garage Basis of Estimate Memo (Draft) 2019;
- (b) 221-07203: Oak Point Highway Site Review Memo 2022;
- (c) Oak Point Highway Garage Site Review – Phase 2 – Rev.1 2023;
- (d) Reports from various historical environmental studies completed at the Site; and,
- (e) Other reports completed by City Departments or third parties relevant to the design of the site.

D6.2 Non-Disclosure Agreement documents are included in Appendix ‘F’.

D7. ACCESSIBLE CUSTOMER SERVICE REQUIREMENTS

D7.1 The Accessibility for Manitobans Act (AMA) imposes obligations on The City of Winnipeg to provide accessible customer service to all persons in accordance with the Customer Service Standard Regulation (“CSSR”) to ensure inclusive access and participation for all people who live, work or visit Winnipeg regardless of their abilities.

- D7.1.1 The Design Consultant agrees to comply with the accessible customer service obligations under the CSSR and further agrees that when providing the Goods or Services or otherwise acting on the City of Winnipeg's behalf, shall comply with all obligations under the AMA applicable to public sector bodies.
- D7.1.2 The accessible customer service obligations include, but are not limited to:
- (a) providing barrier-free access to goods and services;
 - (b) providing reasonable accommodations;
 - (c) reasonably accommodating assistive devices, support persons, and support animals;
 - (d) providing accessibility features e.g., ramps, wide aisles, accessible washrooms, power doors and elevators;
 - (e) inform the public when accessibility features are not available;
 - (f) providing a mechanism or process for receiving and responding to public feedback on the accessibility of all goods and services; and
 - (g) providing adequate training of staff and documentation of same.

D8. UNFAIR LABOUR PRACTICES

- D8.1 Further to C3.2, the Design Consultant declares that in bidding for the Work and in entering into this Contract, the Design Consultant and any proposed Subconsultant(s) conduct their respective business in accordance with established international codes embodied in United Nations Universal Declaration of Human Rights (UDHR) <https://www.un.org/en/about-us/universal-declaration-of-human-rights> International Labour Organization (ILO) <https://www.ilo.org/global/lang-en/index.htm> conventions as ratified by Canada.
- D8.2 The City of Winnipeg is committed and requires its Consultants and their Subconsultants, to be committed to upholding and promoting international human and labour rights, including fundamental principles and rights at work covered by ILO eight (8) fundamental conventions and the UDHR which includes child and forced labour.
- D8.3 Upon request from the Consulting Contract Administrator, the Design Consultant shall provide disclosure of the sources (by company and country) of the raw materials used in the Work and a description of the manufacturing environment or processes (labour unions, minimum wages, safety, etc.).
- D8.4 Failure to provide the evidence required under D8.3, may be determined to be an event of default in accordance with C14.
- D8.5 In the event that the City, in its sole discretion, determines the Design Consultant to have violated the requirements of this section, it will be considered a fundamental breach of the Contract and the Design Consultant shall pay to the City a sum specified by the Consulting Contract Administrator in writing ("Unfair Labour Practice Penalty"). Such a violation shall also be considered an Event of Default, and shall entitle the City to pursue all other remedies it is entitled to in connection with same pursuant to the Contract.
- D8.5.1 The Unfair Labour Practice Penalty shall be such a sum as determined appropriate by the City, having due regard to the gravity of the Design Consultant's violation of the above requirements, any cost of obtaining replacement goods/ services or rectification of the breach, and the impact upon the City's reputation in the eyes of the public as a result of same.
- D8.5.2 The Design Consultant shall pay the Unfair Labour Practice Penalty to the City within thirty (30) Calendar Days of receiving a demand for same in accordance with D8.5. The City may also hold back the amount of the Unfair Labour Practice Penalty from payment for any amount it owes the Design Consultant.
- (a) The obligations and rights conveyed by this clause survive the expiry or termination of this Contract, and may be exercised by the City following the performance of the

Work, should the City determine, that a violation by the Design Consultant of the above clauses has occurred following same. In no instance shall the Unfair Labour Practice Penalty exceed the total of twice the Contract value.

SUBMISSIONS

D9. AUTHORITY TO CARRY ON BUSINESS

D9.1 The Design Consultant shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Design Consultant does not carry on business in Manitoba, in the jurisdiction where the Design Consultant does carry on business, throughout the term of the Contract, and shall provide the Consulting Contract Administrator with evidence thereof upon request.

D10. SAFE WORK PLAN

D10.1 The Design Consultant shall provide the Consulting Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.4(a) for the return of the executed Contract.

D10.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/safety/default.stm>

D11. INSURANCE

D11.1 The Consultant shall procure and maintain, at their own expense and cost, insurance policies with limits no less than those shown below.

D11.2 As a minimum, the Consultant shall, without limiting their obligations or liabilities under any other contract with the City, procure and maintain, at their own expense and cost, the following insurance policies:

- (a) Comprehensive or Commercial General Liability Insurance including:
 - (i) an inclusive limit of not less than five million dollars (\$5,000,000.00) for each occurrence or accident with a minimum five million dollars (\$5,000,000.00) products and completed operations aggregate and five million dollars (\$5,000,000.00) general aggregate;
 - (ii) all sums which the Consultant shall become legally obligated to pay for damages because of bodily injury (including death at any time resulting therefrom) sustained by any person or persons or because of damage to or destruction of property caused by an occurrence or accident arising out of or related to the Services or any operations carried on in connection with this Contract;
 - (iii) coverage for products/completed operations, blanket contractual, consultant's protective, personal injury, employer's liability, employees as additional insureds, and non-owned automobile liability; and
 - (iv) a cross liability clause and/or severability of interest clause providing that the inclusion of more than one (1) Insured shall not in any way affect the rights of any other Insured hereunder in respect to any claim, demand, suit or judgment made against any other Insured.
- (b) Project specific professional liability insurance covering the services provided by the Consultants for the Project. Such insurance shall provide minimum coverage of ten million dollars (\$10,000,000.00) per claim. The insurance shall be maintained for twenty-four (24) months after the Project has been completed, or the policy shall be endorsed to allow for a twenty-four (24) month reporting period after Total Performance; and

- (c) Automobile liability insurance covering all licensed motor vehicles, owned, hired, leased to or and operated on the Project Site to be insured with minimum limits five million dollars (\$5,000,000.00), combined single limited for bodily injury, death and property damage per accident. Such coverage may be met through commercial general liability, where applicable.
- D11.3 The policies required in D11.2(a) shall provide that the City is named as an additional insured thereunder and that said policies are primary without any right of contribution from any insurance otherwise maintained by the City.
- D11.4 The Consultant shall require any Consultants hired to perform geo technical drilling and sample collecting or closed-circuit television to procure and maintain, at their own expense and cost, comparable insurance to that set forth under D11.2(a) and D11.2(c).
- D11.5 The Consultant shall require each of their Subconsultants hired for design, architectural or engineering services as outlined in the Scope of Services to provide comparable insurance to that set forth under D11.2(a), D11.2(b) and D11.2(c).
- D11.6 The Consultant shall provide the Consulting Contract Administrator with a certificate(s) of insurance in a form satisfactory to the City Supervisor of Insurance, at least ten (10) Business Days prior to the commencement of any Services, but in no event later than the date specified in C4.4(a) for the return of the executed Contract. Such certificates shall state the exact description of the Services and provide for written notice in accordance with D11.9.
- D11.7 The Consultant may take out such additional insurance as it may consider necessary and desirable. All such additional insurance shall be at no expense to the City.
- D11.8 All insurance, which the Consultant is required to obtain with respect to this Contract, shall be with insurance companies registered in and licensed to underwrite such insurance in the Province of Manitoba.
- D11.9 The Consultant shall not cancel, materially alter, or cause any policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the City.

SCHEDULE OF SERVICES

D12. COMMENCEMENT

- D12.1 The Design Consultant shall not commence any Services until it is in receipt of a notice of award from the City authorizing the commencement of the Services.
- D12.2 The Design Consultant shall not commence any Services until:
 - (a) the Consulting Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D9;
 - (ii) the Safe Work Plan specified in D10; and
 - (iii) evidence of the insurance specified in D11.
 - (b) the Design Consultant has attended a meeting with the Consulting Contract Administrator, or the Consulting Contract Administrator has waived the requirement for a meeting; and
 - (c) the direct deposit application specified in D16.1.
- D12.3 The City intends to award this Contract by November 13, 2023.
- D12.3.1 If the actual date of award is later than the intended date, the dates specified for Critical Stages, will be adjusted by the difference between the aforementioned intended and actual dates.

D13. CRITICAL STAGES

- D13.1 The Design Consultant shall achieve critical stages of the Services for this Contract in accordance with the following requirements:
- (a) Thirty-three percent (33%) Design Submission – March 15, 2024
 - (b) General Contractor Request for Qualification documents issued to the City of Winnipeg Materials Management – April 15, 2024
 - (c) Sixty-six percent (66%) Design Submission – June 15, 2024
 - (d) Ninety-nine percent (99%) Design Submission – September 15, 2024
 - (e) Issued for Tender documents issued to City of Winnipeg Materials Management – October 15, 2024
 - (f) Start of Construction – March 1, 2025
 - (g) Project Substantial Completion – March 1, 2027
 - (h) Project Total Completion – June 30, 2027

D14. SUPPLY CHAIN DISRUPTION SCHEDULE DELAYS

- D14.1 The City acknowledges that the schedule for this Contract may be impacted by Supply Chain Disruption. Commencement and progress of the Services shall be performed by the Design Consultant with due consideration to delivery requirements and schedule identified in the Contract, in close consultation with the Consulting Contract Administrator.
- D14.2 If the Design Consultant is delayed in the performance of the Services by reason of the Supply Chain Disruption, the Services schedule may be adjusted by a period of time equal to the time lost due to such delay and costs related to such delay will be determined as identified herein.
- D14.3 A minimum of seven (7) Calendar Days prior to the commencement of Services, the Design Consultant shall declare whether a Supply Chain Disruption will affect the start date. The Design Consultant shall provide sufficient evidence that the delay is directly related to a Supply Chain Disruption, including but not limited to evidence related to availability of staff, ordering of Material or Goods, production and/or manufacturing schedules or availability of staff as appropriate.
- D14.4 For any delay related to Supply Chain Disruption and identified after Services have commenced, the Design Consultant shall within seven (7) Calendar Days of becoming aware of the anticipated delay declare the additional delay and shall provide sufficient evidence as indicated in D14.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D14.5 The Services schedule, including the durations identified in the Contract, will be adjusted to reflect delays accepted by the Consulting Contract Administrator.
- D14.6 Any time or cost implications as a result of Supply Chain Disruption and in accordance with the above, as confirmed by the Consulting Contract Administrator, shall be documented in accordance with C8.

D15. INVOICES

- D15.1 Further to C11, the Design Consultant shall submit monthly invoices for work performed during the previous calendar month to:

The City of Winnipeg
Corporate Finance – Accounts Payable
4th Floor, Administration Building, 510 Main Street
Winnipeg Manitoba R3B 1B9
Facsimile No.: 204-949-0864

Send Invoices to CityWpgAP-INVOICES@winnipeg.ca
Send Invoice Inquiries to CityWpgAP-INQUIRIES@winnipeg.ca

D15.2 Invoices must clearly indicate, as a minimum:

- (a) the City's purchase order number;
- (b) date of delivery;
- (c) delivery address;
- (d) type and quantity of work performed;
- (e) the amount payable with GST and MRST shown as separate amounts; and
- (f) the Design Consultant's GST registration number.

D15.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

D16. PAYMENT

D16.1 Further to C11.14, the City shall make payments to the Design Consultant by direct deposit to the Design Consultant's banking institution, and by no other means. Payments will not be made until the Design Consultant has made satisfactory direct deposit arrangements with the City. Direct deposit application forms are at https://winnipeg.ca/finance/files/Direct_Deposit_Form.pdf.

DISPUTE RESOLUTION

D17. DISPUTE RESOLUTION

D17.1 If the Design Consultant disagrees with any opinion, determination, or decision of the Consulting Contract Administrator, the Design Consultant shall act in accordance with the Consulting Contract Administrator's opinion, determination, or decision unless and until same is modified by the process followed by the parties pursuant to D17.

D17.2 The entire text of C17.4 is deleted, and amended to read: "Intentionally Deleted".

D17.3 The entire text of C17.5 is deleted, and amended to read:

- (a) If Legal Services has determined that the Disputed Matter may proceed in the Appeal Process, the Design Consultant must, within ten (10) Business Days of the date of the Legal Services Response Letter, submit their written Appeal Form, in the manner and format set out on the City's Materials Management Website, to the Chief Administrative Officer, and to the Consulting Contract Administrator. The Design Consultant may not raise any other disputes other than the Disputed Matter in their Appeal Form.

D17.4 Further to C17, prior to the Consulting Contract Administrator's issuance of a Final Determination, the following informal dispute resolution process shall be followed where the Design Consultant disagrees with any opinion, determination, or decision of the Consulting Contract Administrator ("Dispute"):

- (a) In the event of a Dispute, attempts shall be made by the Consulting Contract Administrator and the Design Consultant's equivalent representative to resolve Disputes within the normal course of project dealings between the Consulting Contract Administrator and the Design Consultant's equivalent representative.
- (b) Disputes which in the reasonable opinion of the Consulting Contract Administrator or the Design Consultant's equivalent representative cannot be resolved within the normal course of project dealings as described above shall be referred to a without prejudice escalating negotiation process consisting of, at a minimum, the position levels as shown below and the equivalent Design Consultant representative levels:
 - (i) the Consulting Contract Administrator;

- (ii) Supervisory level between the Consulting Contract Administrator and applicable Department Head; and
 - (iii) Department Head.
- D17.4.1 Names and positions of Design Consultant representatives equivalent to the above City Team position levels shall be determined by the Design Consultant and communicated to the City at the pre-commencement or kick off meeting.
- D17.4.2 As these negotiations are not an adjudicative hearing, neither party may have legal counsel present during the negotiations.
- D17.4.3 Both the City Team and the Design Consultant agree to make all reasonable efforts to conduct the above escalating negotiation process within twenty (20) Business Days, unless both parties agree, in writing, to extend that period of time.
- D17.4.4 If the Dispute is not resolved to the City Team and Design Consultant's mutual satisfaction after discussions have occurred at the final escalated level as described above, or the time period set out in D17.4.3, as extended if applicable, has elapsed, the Consulting Contract Administrator will issue a Final Determination as defined in C1.1(dd), at which point the parties will be governed by the Dispute Resolution process set out in C17.

THIRD PARTY AGREEMENTS

D18. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

- D18.1 Funding for the Services of the Contract is being provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada and accordingly, as required by the applicable funding agreements, the following terms and conditions shall apply.
- D18.2 For the purposes of D18:
 - (a) **"Government of Canada"** includes the authorized officials, auditors, and representatives of the Government of Canada; and
 - (b) **"Government of Manitoba"** includes the authorized officials, auditors, and representatives of the Government of Manitoba.
- D18.3 Indemnification By Consultant
 - D18.3.1 In addition to the indemnity obligations outlined in C13 of the General Conditions for Consultant Services, the Design Consultant agrees to indemnify and save harmless the Government of Canada and the Government of Manitoba and each of their respective Ministers, officers, servants, employees, and agents from and against all claims and demands, losses, costs, damages, actions, suit or other proceedings brought or pursued in any manner in respect of any matter caused by the Design Consultant or arising from this Contract or the Services, or from the goods or services provided or required to be provided by the Design Consultant, except those resulting from the negligence of any of the Government of Canada's or the Government of Manitoba's Ministers, officers, servants, employees, or agents, as the case may be.
 - D18.3.2 The Design Consultant agrees that in no event will Canada or Manitoba, their respective officers, servants, employees or agents be held liable for any damages in Contract, tort (including negligence) or otherwise, for:
 - (a) any injury to any person, including, but not limited to, death, economic loss or infringement of rights;
 - (b) any damage to or loss or destruction of property of any person; or
 - (c) any obligation of any person, including, but not limited to, any obligation arising from a loan, capital lease or other long-term obligation;in relation to this Contract or the Work.
- D18.4 Records Retention and Audits

- D18.4.1 The Design Consultant shall maintain and preserve accurate and complete records in respect of this Contract and the Services, including all accounting records, financial documents, copies of contracts with other parties and other records relating to this Contract and the Services during the term of the Contract and for at least six (6) years after Total Performance. Those records bearing original signatures or professional seals or stamps must be preserved in paper form; other records may be retained in electronic form. All accounting terms will have the meanings assigned to them, all calculations will be made and all financial data to be submitted will be prepared, in accordance with the public sector accounting standards in effect in Canada.
- D18.4.2 In addition to the record keeping and inspection obligations outlined in C7.16 of the General Conditions for Consultant Services, the Design Consultant shall keep available for inspection and audit at all reasonable times while this Contract is in effect and until at least six (6) years after Total Performance, all records, documents, and contracts referred to in D18.4.1 for inspection, copying and audit by the City of Winnipeg, the Government of Manitoba and/or the Government of Canada and their respective representatives and auditors, and to produce them on demand; to provide reasonable facilities for such inspections, copying and audits, to provide copies of and extracts from such records, documents, or contracts upon request by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada and their respective representatives and auditors, and to promptly provide such other information and explanations as may be reasonably requested by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada from time-to-time.
- D18.5 Other Obligations
- D18.5.1 The Design Consultant consents to the City providing a copy of the Contract Documents to the Government of Manitoba and/or the Government of Canada upon request from either entity.
- D18.5.2 If the Lobbyists Registration Act (Manitoba) applies to the Design Consultant, the Design Consultant represents and warrants that it has filed a return and is registered and in full compliance with the obligations of that Act, and covenants that it will continue to comply for the duration of this Contract.
- D18.5.3 The Design Consultant shall comply with all applicable legislation and standards, whether federal, provincial, or municipal, including (without limitation) labour, environmental, and human rights laws, in the course of providing the Services.
- D18.5.4 The Design Consultant shall properly account for the Services provided under this Contract and payment received in this respect, prepared in accordance with generally accepted accounting principles in effect in Canada, including those principles and standards approved or recommended from time-to-time by the Chartered Professional Accountants of Canada or the Public Sector Accounting Board, as applicable, applied on a consistent basis.
- D18.5.5 The Design Consultant represents and warrants that no current or former public servant or public office holder, to whom the Value and Ethics Code for the Public Sector, the Policy on Conflict of Interest and Post Employment, or the Conflict of Interest Act applies, shall derive direct benefit from this Contract, including any employment, payments, or gifts, unless the provision or receipt of such benefits is in compliance with such codes and the legislation.
- D18.5.6 The Design Consultant represents and warrants that no member of the House of Commons or of the Senate of Canada or of the Legislative Assembly of Manitoba is a shareholder, director or officer of the Design Consultant or of a Subconsultant, and that no such member is entitled to any benefits arising from this Contract or from a Contract with the Design Consultant or a Subconsultant concerning the Work.
- D18.5.7 The Design Consultant agrees that the Contract does not establish a partnership, joint venture, principal-agent relationship or employer-employee relationship in any way or for any purpose whatsoever between Canada and the Design Consultant, or between Manitoba and the Design Consultant, nor between Canada or Manitoba and any

Subconsultant. Further, the Design Consultant agrees this Contract shall not be construed as authorizing any person, including the Design Consultant, to Contract for or to incur any obligation on behalf of Canada or on behalf of Manitoba, or to act as an agent for Canada or as an agent for Manitoba.

PART E - SPECIFICATIONS

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

E1.1 These Specifications shall apply to the Work.

- (a) *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work:
 - (i) *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at: <http://www.winnipeg.ca/matmgt/Spec/Default.stm>;
 - (ii) The version in effect three (3) Business Days before the Submission Deadline shall apply; and
 - (iii) Further to C2.4(d), specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*;
- (b) *National Building Code of Canada 2020 Volume 1*;
- (c) *City of Winnipeg Transportation Impact Study Guidelines May 2011*;
- (d) *City of Winnipeg Accessibility Plan (2021-2022)*;
- (e) *City of Winnipeg Zoning By-law 200/06*;
- (f) *City of Winnipeg Tree Planting and Maintenance Specification*;
- (g) *City of Winnipeg Transportation Standards Manual*;
- (h) *City of Winnipeg Standards and Guidelines for the Mitigation of Methane Gas at Buildings and Utilities and City of Winnipeg Guidelines for Construction on Landfill Sites (2006)*;
- (i) *Transportation Association of Canada (TAC) Geometric Design Guide (GDG) and supplemental manuals*;
- (j) *Canadian Institute of Transportation Engineers (ITE) Traffic Engineering Handbook*;
- (k) *ITE Manual of Uniform Traffic Control Devices for Canada (MUTCDC)*;
- (l) *National Environmental Balancing Bureau Procedural Standards (2000)*;
- (m) *City of Winnipeg Green Building Policy*;
- (n) *American Society of Heating, Refrigerating and Air-Conditioning Engineers 90.1-2022 Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings*; and
- (o) *American Society of Heating, Refrigerating and Air-Conditioning Engineers 189.1-2017 International Green Construction Code*.

E1.2 The following Drawings are applicable to the Work (See Appendix 'A'):

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
Figure 1	Existing Property Limits
Figure 2	Existing Base Plan

E2. CITY SUPPLIED DATA

E2.1 The Design Consultant will ensure that work is coordinated and all provisions are made in the construction documents as required to incorporate the requirements, systems, technologies, and general recommendations of the City as outlined in this RFP, and as discussed in the subsequent design and construction stages. To the degree that the scope of these services is limited, the selected Proponent will provide all additional selected Proponent services necessary to achieve the completion of the Project.

E2.2 To the Design Consultant, the City will provide all available Site data and Drawings that pertain to the Project including:

- (a) CAD LBIS data;

- (b) Phase II Environmental Site Assessment Report conducted on the following sites (See E10);
- (c) Geotechnical Analysis Report conducted on the Site (See E11);
- (d) Traffic Impact Study of the intersection of Oak Point Highway at Selkirk Avenue (See E12); and
- (e) Topographic survey data of the following areas (See E13).

E2.3 No interpretation of the data will be provided. The data is provided as-is and no guarantee is made to its accuracy. It is the responsibility of the Design Consultant to verify the information provided, and seek out additional information as needed to complete the Project.

E3. VISION

E3.1 Vision Statement

- E3.1.1 Our vision for the North Garage Replacement: A valued resource for Winnipeg Transit, which, while being seamlessly integrated into its host community of Point Douglas, is an independent asset which blends into the urban fabric while serving its main purpose as a storage and maintenance garage, achieved through:
- (a) **INTEGRATION INTO THE COMMUNITY**, which means that the size, massing, colours, and textures of the building are made to blend into the size, scale, and materials for the existing neighbouring properties. Other assets such as screening, building orientation, views into and out of the Site, Site signage and green elements such as berms, shrubs, trees, and other natural decorative elements shall be used to achieve harmonization with the character of the community.
 - (b) **INDEPENDANT AND ISOLATED FUNCTIONING**, which means that the activities of the garage cannot impact upon the character of the existing area. This is achieved by: shielding activities from view; that noises and smells generated by the daily activities of the garage are shielded from the community; that staff activities, parking, access to Site or others, have no impact on the community.
 - (c) **A HEALTHLY WORKING FACILITY** that provides a healthy and comfortable environment for its staff. The facility must provide access to natural light, high levels of fresh clean air and create a positive and progressive working environment, taking special care to protect staff from the potential liabilities that may be caused by regular bus movement. The facility must also be configured to encourage natural paths of travel for key staff including operators, mechanics, and office administration.
 - (d) **SUSTAINABILITY** of the overall design, construction and operation of the facility. The design must be efficient and flexible; recognizing and adapting to changes in bus management; be responsive to changes in bus maintenance protocols as well as the sizes and configurations of larger buses.
 - (e) **ADAPTABILITY** to future phases of operations and development at the North Garage Replacement Site. While on opening day, the facility is intended to support parking, servicing, repairs, and charging for up to twenty-four (24) BEB, the intent is that the facility will be modified in the future to support a fully ZEB fleet.

E4. KEY PROJECT OBJECTIVES

- E4.1 The new transit bus parking, servicing, maintenance, and repair garage is intended to:
- (a) be operated and staffed by City of Winnipeg Transit personnel;
 - (b) utilize a number of adaptable and flexible program spaces to support a wide range of work-related and wellness programs focused on operational efficiency and staff well-being;
 - (c) service and administrative space to accommodate up to thirty-five (35) staff;
 - (d) driver waiting areas to accommodate up to thirty-five (35) staff;
 - (e) wellness related space to accommodate up to sixty (60) staff;

- (f) include flexible meeting and training areas capable of seating up to thirty (30) staff;
- (g) function as a fully integrated facility, ideally with a single control point;
- (h) employ consistent way-finding and signage throughout the facility;
- (i) address accessibility and universal design in the all of the areas;
- (j) incorporate LEED or green technologies wherever possible to achieve LEED Silver certification;
- (k) incorporate connections and Site improvements within the Site limits;
- (l) incorporate designated spaces for auxiliary vehicle and equipment storage and servicing;
- (m) be outfitted to act as a light-medium duty repair facility for diesel buses and ZEB;
- (n) have provisions to accommodate a future transition to a fully ZEB facility;
- (o) be considerate of the neighbouring community in the planning of the functionality of the complex;
- (p) aesthetically integrate into the neighbouring community; and
- (q) limit disruption or disturbance of the neighbouring community throughout the construction phases of the Project as well as through the ongoing operation of the facility.

E5. CITY OF WINNIPEG UNIVERSAL DESIGN POLICY

- E5.1 The City has adopted their own Universal *Design Policy and Guidelines*. The Design Consultant is responsible to review and comply with these guidelines and with the *Manitoba Building Code* requirements on barrier free design. In the case of discrepancies the more stringent requirement shall apply. A copy of the *Accessibility Standards* can be found at the following URL: http://www.winnipeg.ca/ppd/Universal_Design.stm

E6. NEIGHBOURHOOD FIT CRITERIA

- E6.1 The Design Consultant shall address the following criteria in the Site and building design for the North Garage Replacement that will respect the surrounding business properties as well as the residential community of Tyndall Park, located north of Oak Point Highway and Selkirk Avenue.

- E6.1.1 Building and Site development along the entire Oak Point Highway length of the subject property that mitigates sensory and environmental impacts to the adjacent neighbours, including noise, lighting, aesthetics, safety, traffic, and environmental considerations. Treatments may include:
- (a) landscaping, including vegetated berms, discrete security fencing, Site and sound attenuation, and traffic calming;
 - (i) landscape features including berms and vegetation along Site edges can also offer Site definition and create a visual and sound buffer on either side; and
 - (ii) planting can also frame strategic views into the Site highlighting the building's architectural features;
 - (b) all lighting must be full cut-off;
 - (c) all Site features must incorporate crime prevention through environmental design (CPTED) principles;
 - (d) location of all human elements of the North Garage Replacement, including office space, lunchroom, etc. along the Oak Point Highway frontage;
 - (e) parking areas should be designed to be legible for both vehicular and pedestrian traffic:
 - (i) pedestrian corridors from parking areas to building should be safe and accessible; and
 - (ii) incorporating low impact development (LID) features such as planted islands, filter strips and swales for bio retention to reduce storm water runoff, to improve the appearance and environment of surface parking areas, to help define

pedestrian corridors, to provide landscape views from within the building, and to contribute to staff outdoor program spaces.

- E6.1.2 Building and Site development along the entire Oak Point Highway length of the subject property that enhances the sensory and environmental impacts to the adjacent neighbourhood, including:
- (a) create a park-like setting on the property with the Oak Point Highway frontage that includes multi-use pedestrian pathways, naturalized vegetation, native species, and coniferous trees;
 - (b) incorporate landscape articulation on Oak Point Highway frontage and building articulation on Oak Point Highway façades to provide a visually appealing presence on Oak Point Highway frontage, to convey that this is a key operation facility of Winnipeg Transit, and to articulate the entrances to the Site and building;
 - (c) modulate the scale of expression of the Site and building exterior to provide appropriate presence and scale viewed at a distance along north and south of Oak Point Highway, viewed from the intersection of Oak Point Highway and Selkirk Avenue, and viewed from the surrounding commercial and residential properties;
 - (d) the Site and building shall integrate safety and security through the principles of CPTED; and
 - (e) the Site and building shall accommodate future expansion of operations.

E7. LEGAL DESCRIPTION OF PROPERTY AND LIMITS OF WORK

General Requirements

- E7.1 Property and parcel limits, including adjacent properties are provided in Appendix 'A'. It is expected that the Site will include construction on the following:
- (a) Lots 49 – 58 of Plan 24342;
 - (b) Block 3 of Plan 17744;
 - (c) Selkirk Avenue, City owned, right of way west of Oak Point Highway; and
 - (d) Hyde Avenue, City owned, right of way west of Oak Point Highway.

- E7.2 Parcel's not explicitly listed above are not available for this Project.

Design Services

- E7.3 The Design Consultant is responsible for all applications for changes to property limits, parcel changes, and building permits if required.

E8. SITE SERVICES

General Requirements

- E8.1 It is the Design Consultant's responsibility to identify existing Site services and determine all required Site services and utilities with respect to the design of the Project.

Scope of Work

- E8.2 The overall Site services may include, but are not limited to, the following:
- (a) water supply (both domestic and fire, with metering and backflow prevention);
 - (b) sewage disposal (with oil separation);
 - (c) telephone system;
 - (d) natural gas (complete with metering);
 - (e) cable/IT system connection to City system;
 - (f) electricity supply;

- (g) power substation;
- (h) storm water management;
- (i) lighting/security; and
- (j) automated vehicle access control gate at each Site access point to Oak Point Highway (specific locations to be confirmed by the Traffic Impact Study, see E12).

Design Services

- E8.3 It is the responsibility of the Design Consultant to coordinate with outside agencies throughout the design to identify Site services impacted by the Project.
- E8.4 No existing/proposed utilities shall be designed to be located under the building except required building services (sewer, water, etc.).
- E8.5 A review of water supply requirements and waste water discharges, similar to usage at the Brandon Transit Garage, has been discussed with the City of Winnipeg Water and Waste Department with respect to the existing municipal infrastructure (water main, sewer mains) and upgrades to the existing infrastructure are not expected; however, it is the responsibility of the Design Consultant, in conjunction with the City's Water and Waste Department, to confirm the capacities of the existing systems to support the Site development.

Construction Services

- E8.6 It is the responsibility of the Design Consultant to coordinate with outside agencies throughout construction phase as it relates to Site services impacted by the Project. This shall include, but is not limited to, regular communication with outside agencies, resolving issues that arise on Site, and responding to requests for information from the General Contractor.

E9. HAZARDOUS MATERIALS

Construction Services

- E9.1 If asbestos landfill debris, or other hazardous materials are encountered during the Design, Construction, or Post-Construction phases of the Contract, the Design Consultant shall stop work in the area and notify the City immediately. Removal of hazardous materials shall be dealt with by the City and the General Contractor shall await further instruction by the Consulting Contract Administrator.
- E9.2 100 Oak Point Highway has been identified as an Impacted Site by the Province of Manitoba Contaminated Sites Registry (File #73438).
- E9.3 As per environmental assessments on the property, impacted material encountered during the work of the Contract shall be addressed as part of a Remediation Plan submitted by the Design Consultant for approval by Manitoba Environment and Climate, following review by the City and the Consulting Contract Administrator. The Consulting Contract Administrator shall be notified if suspected impacted material is encountered beyond any of the previous environmental assessments (See E10).

E10. ENVIRONMENTAL SITE ASSESSMENT

- E10.1 The City will be undertaking the completion of the following during the bidding period:
- (a) Phase II Environmental Site Assessment for the area including the following sites:
 - (i) Plan 24342 Lots 49, 50, 51, 53, 54, 55, 56;
 - (ii) Plan 17744 Block 3;
 - (iii) Selkirk Avenue right of way west of Oak Point Highway; and
 - (iv) Hyde Avenue right of way west of 70 Oak Point Highway;
 - (b) Methane vapour sampling for the area including the following sites:

- (i) Plan 24342 Lot 52 and 57.

E10.2 The Phase II Environmental Assessment and methane vapour sampling data will be provided by the City to the successful proponent.

E11. GEOTECHNICAL INVESTIGATION

E11.1 The City will be undertaking the completion of a Geotechnical Investigation Report during the bidding period for the following areas:

- (a) The Site: Boreholes will be conducted in a 50m x 50m grid throughout the Site, not including the area bounded by the control zone as identified in SWD-D-125 No.28 Brooklands Landfill Site prepared by the City of Winnipeg Water and Waste Department Solid Waste Division (See D6), which will include four (4) boreholes spaced approximately equally throughout the control zone; and,
- (b) Roadways within the City of Winnipeg right of way: Including Oak Point Highway, Selkirk Avenue, and potential secondary access points to the limits recommended for improvement by the Traffic Impact Study (See E12). Geotechnical investigation will be conducted in accordance with the City of Winnipeg Site Investigation Requirements for Public Works Street Projects. See Appendix 'C' Part F3.

E11.2 The successful proponent will receive a Geotechnical Investigation Report documenting a geotechnical assessment completed for the Site.

E11.3 It will be the responsibility of the Design Consultant to obtain any additional geotechnical investigation required beyond what is provided by the City.

E12. TRAFFIC IMPACT STUDY

E12.1 The City will be undertaking the completion of a traffic impact study during the bidding period considering added traffic at the intersection of Oak Point Highway and Selkirk Avenue as a result of activities at the North Garage Replacement. The study will also consider secondary access point(s) to the Site.

E12.2 The successful proponent will be provided with the traffic impact study report completed to provide recommendation on improvements to City owned right of way along Oak Point Highway, Selkirk Avenue, and potential secondary side access point(s) to accommodate future use of the North Transit Garage including:

- (a) improvements to the intersection of Oak Point Highway and Selkirk Avenue;
- (b) mid-block location for secondary access point(s) along Oak Point Highway; and
- (c) consideration for connection to future active transportation facilities.

E13. TOPOGRAPHIC SURVEY

E13.1 The City will be undertaking a topographic survey of the Site, Oak Point Highway, Selkirk Avenue, and potential secondary Site access point(s) considering the recommendations of the traffic impact study.

E13.2 The successful proponent will receive topographic survey data for the following areas:

- (a) the Site including:
 - (i) twenty (20) metres by twenty (20) metres grid throughout the Site;
 - (ii) ditch inverts, cross sections, and profiles within the Site;
 - (iii) drainage structures including culvert inverts if applicable; and
 - (iv) other relevant topographic features pertinent to the design;
- (b) Oak Point Highway, Selkirk Avenue, Hyde Avenue to the extents recommended to be improved by the Traffic Impact Study including high points, low points, lane lines, hydrants, valves, curb stops, end of radii, tie in points, existing edges of buildings, utility poles, utility

cabinets, guardrails, fences sidewalks, signs, etc. collected for the purpose of detailed design of each roadway.

- E13.3 It will be the responsibility of the Design Consultant to obtain any additional topographic survey required beyond what is provided by the City.

E14. PUBLIC ENGAGEMENT

Objective(s) of Engagement

- E14.1 The key objectives of the engagement process are that all interests are identified and sought out, and each participant's ideas and concerns are understood and carefully considered. Indicators of a successful engagement program for this type of Project include satisfying the following objectives for each Project stakeholder:
- (a) participants and the general public understand the City's current systems and processes;
 - (b) participants and the general public recognize the need for the Project being undertaken;
 - (c) participants' perceptions and needs are considered and incorporated into the review;
 - (d) participants input in response to terms of reference are collected and considered; and
 - (e) participants understand how their input was considered and incorporated (where possible).
- E14.2 Stakeholders may be concerned with or interested in the following key items (among others):
- (a) Site selection rationale;
 - (b) potential traffic and access impacts;
 - (c) building size and design;
 - (d) potential shadow, privacy, safety, or disturbance impacts;
 - (e) potential construction and post-construction activity impacts (i.e., noise, vibrations, dust, etc.); and
 - (f) potential property value implications.

Public Engagement Methodology

- E14.3 Project Initiation and Engagement Strategy
- E14.3.1 The Design Consultant will attend a Project initiation meeting. The purpose of this meeting will be to confirm the Project scope and timeline. In an interactive session with the City Team, the group will create a shared understanding of key Project components and determine preliminary key messages.
- E14.3.2 The City Team will provide the Design Consultant with relevant background information including Project history, key design elements, opportunities, and constraints for review. The Consultant will review these materials in order to prepare the stakeholder engagement strategy.
- E14.3.3 The Consultant will prepare a stakeholder engagement strategy for review by the City Team. The stakeholder engagement strategy should generally follow the steps laid out in this Public Engagement Methodology section.
- E14.3.4 The Consultant will collaborate with the Office of Public Engagement to ensure that the stakeholder engagement strategy clearly identifies:
- (a) the Public's role in the decision-making process;
 - (b) the decision points/steps within the overall Project, and the scope of decisions to be made at each step;
 - (c) the need/interest associated with each decision step, along with the recommended level of participation; and
 - (d) how input will be considered and incorporated where possible

- E14.3.5 The Consultant will attend bi-weekly Project team meetings to provide and receive input from a stakeholder engagement lens.

Master Stakeholder List

- E14.4 The Design Consultant will undertake a stakeholder scoping exercise and prepare a master stakeholder list to track stakeholders, contact information, and correspondence. The stakeholder list should generally include the following groups:
- (a) Internal Departments:
 - (i) Public Works (including individuals responsible for street openings and closings);
 - (ii) Property and Development;
 - (iii) Water and Waste (including individuals responsible for landfill operations);
 - (iv) Emergency Services (including the Winnipeg Police Service);
 - (v) Office of Public Engagement; and
 - (vi) Winnipeg Transit;
 - (b) Landowners Within Project Area:
 - (i) Landowners as identified within the subject lands;
 - (ii) Indigenous Rights Holders (further discussion required with the City of Winnipeg);
 - (iii) Commercial and industrial operations; and
 - (iv) Environmental groups as identified;
 - (c) Landowners and Business Owners Near Project Area:
 - (i) Residences within the immediate vicinity of the subject Site (i.e., Tyndall Park);
 - (ii) Nearby commercial and industrial operations; and
 - (iii) Directly adjacent railways;
 - (d) other Stakeholders/Stakeholder Groups:
 - (i) Local school division;
 - (ii) Local residents' groups (if any);
 - (iii) Active Transportation representatives (if any);
 - (iv) Utilities and service providers in the area;
 - (v) Local Councillor;
 - (vi) Winnipeg Airports Authority; and
 - (vii) Manitoba Trucking Association;
 - (e) General Public; and
 - (f) others as identified through the public and stakeholder engagement process.

Notification Plan

- E14.5 The Consultant will prepare a notification plan that accommodates notification methods suitable for the stakeholder groups identified in the master stakeholder list.
- E14.6 Notification methods may include the following:
- (a) telephone calls;
 - (b) emails;
 - (c) mail drops;
 - (d) postal code mailing;
 - (e) advertisements; and
 - (f) others as deemed appropriate.

Round 1 Public and Stakeholder Engagement (thirty-three percent (33%) Design)

E14.7 The Design Consultant will prepare Round 1 Public and Stakeholder engagement meeting materials (proposed at thirty-three percent (33%) design completion). It is anticipated that Round 1 will include targeted group stakeholder meetings with each of the stakeholder groups listed above, as well as a Public Engagement Session for the general public.

E14.8 The Design Consultant will host in-person Round 1 Public and Stakeholder engagement meetings (proposed at thirty-three percent (33%) design completion). The Design Consultant will introduce the Project, share the preliminary design, and seek feedback/input from stakeholders and the general public.

Feedback Reporting

E14.9 The Design Consultant will compile, synthesize and analyse input and feedback from meeting notes and correspondences via email and telephone to produce a Round 1 Engagement Report.

E14.10 The Design Consultant will meet with the City Team to review feedback collected from Round 1 Public and Stakeholder engagement processes which can be used in the development and assessment of evaluation criteria in subsequent steps.

E14.11 The Design Consultant will prepare an issue-response chart, to be shared with stakeholders and the general public during the second round of stakeholder engagement.

Round 2 Public and Stakeholder Engagement (ninety-nine percent (99%) Design)

E14.12 The Design Consultant will prepare Round 2 Public and Stakeholder engagement meeting materials (proposed at ninety-nine percent (99%) design completion). It is anticipated that Round 2 will include targeted group stakeholder meetings with each of the stakeholder groups listed above, as well as a Public Engagement Session for the general public.

E14.13 The Design Consultant will host in-person Round 2 Public and Stakeholder engagement meetings (proposed at ninety-nine percent (99%) design completion). The Design Consultant will provide a Project update, share the preferred design, outline how concerns were considered/addressed, seek further input, and outline next steps in the process.

Feedback Reporting

E14.14 The Design Consultant will compile, synthesize and analyse input and feedback from meeting notes and correspondences via email and telephone to produce a Round 2 Engagement Report.

E14.15 The Design Consultant will meet with the City Team to review feedback collected from Round 2 Public and Stakeholder engagement processes.

E14.16 The Design Consultant will prepare an issue-response chart, to be shared with stakeholders and the general public during ongoing communications, and will be included in the Final Engagement Report.

E14.17 The Consultant will follow up with stakeholders (as necessary) to close the loop on Round 2 Public and Stakeholder engagement processes.

Ongoing Communications

E14.18 The Design Consultant will prepare periodic communications with stakeholder groups and the general public on an as-needed basis, including during the Construction Phase.

Engagement Materials

E14.19 The Design Consultant will work with the City Team to develop an engagement storyline.

- E14.20 The Design Consultant will ensure that public and stakeholder engagement materials are displayed or presented at engagement events.
- E14.21 The Design Consultant will ensure that public and stakeholder engagement materials are posted to the City of Winnipeg website or Project webpage, if applicable.
- E14.22 The review of public materials and advance notice of public events require time. The Design Consultant will ensure adequate time is accounted for in the Project schedule.
- (a) all public materials must be posted the day of any in-person event;
 - (b) the anticipated review period for materials will be a minimum three (3) weeks prior to posting; and
 - (c) following review, the translation of final public materials (if required) should be allocated at least one (1) week to complete.

Public and Stakeholder Engagement Deliverables

- E14.23 The Design Consultant shall develop and provide the following Deliverables in accordance with <https://winnipeg.ca/PublicEngagement>:
- (a) the master stakeholder list;
 - (b) a public engagement strategy that clearly identifies:
 - (i) the public's role in the decision-making process;
 - (ii) the decision points/steps within the overall Project, and the scope of the decisions to be made at each step;
 - (iii) the need/interest associated with each decision step, along with the recommended level of participation; and
 - (iv) how input will be considered and incorporated where possible;
 - (c) event(s) and engagement opportunities;
 - (d) summaries corresponding to engagement phases; and
 - (e) a final public engagement report:
 - (i) a comprehensive overview of the engagement program, meeting notes, important correspondence, display materials, engagement materials, notification materials, a summary of responses, stakeholder contact lists and records, and all other relevant materials and content.

Public and Stakeholder Engagement Expectations

- E14.24 The Design Consultant will work collaboratively with the Office of Public Engagement and the City Team.
- E14.25 The Design Consultant will prepare a comprehensive master stakeholder list.
- E14.26 The Design Consultant will prepare an effective public and stakeholder engagement process that identifies and seeks out all interests and ensures that each participant's ideas and concerns are understood and carefully considered.
- E14.27 All public and stakeholder engagement material developed by the Design Consultant will meet City of Winnipeg Standards.
- E14.28 The Design Consultant will find a means of effectively integrating the input provided by participants in the public and stakeholder engagement process, rather than simply reporting what was said.
- E14.29 The Design Consultant will review early stakeholder input, which will in turn help inform design options; these design options will in turn be shared with stakeholders, who can then provide specific input based on the details of the preliminary design concept. The new feedback will then be shared with the Design Consultant, helping to inform both the development of

evaluation criteria as well as the evaluation of the design option(s). When the Consultant returns to stakeholders for the final round of engagement, they should be able to speak confidentially as to how feedback was considered, and where possible, addressed – in cases where potential impacts cannot be mitigated, the team will be able to explain the rationale as to why not.

E14.30 The Consultant will review engagement feedback in a team setting and at key milestones, in order to determine how the Project may be adjusted (e.g., timing, construction style, communication needs, etc.).

E14.31 The City will cover expenses for public engagement activities, including, for example, venue rental charges, equipment rental, catering for refreshments, translation, printing, postage, courier, newspaper advertising, photocopying, subject to prior approval of costs by the Consulting Contract Administrator. Wherever possible, City facilities will be used to host public events.

E15. SITE DEVELOPMENT

General Requirements

E15.1 The Site shall be designed to promote efficient use of the available lands for the purposes of the Project, with consideration for stakeholders including City Departments, external stakeholders, and third-party utility providers.

Scope of Work

E15.2 The following elements shall be considered as part of Site development:

- (a) vehicular access;
- (b) on-Site vehicle and bus circulations;
- (c) active transportation;
- (d) barriers and fencing;
- (e) civil infrastructure design; and
- (f) consideration for the former Brooklands landfill site.

Design Services

E15.3 Vehicular Access

E15.3.1 Transit buses are not to access the Site from adjacent properties.

E15.3.2 Primary Site access to be from Oak Point Highway at the Selkirk Avenue intersection.

E15.3.3 Secondary access points shall be added from Oak Point Highway according to the recommendation of the traffic impact study (see E12).

E15.3.4 Access to the Site will require upgrades to the intersection of Oak Point Highway at Selkirk Avenue and at the secondary access(es). Intersection and Site access geometry including channelization and storage length are to meet or exceed those recommended within the traffic impact study. The Design Consultant will be required to obtain reviews and approvals of all work within the Oak Point Highway right of way from the City of Winnipeg Public Works Department.

E15.3.5 Intersection geometry at the primary and secondary access(es) shall accommodate all turning movements of design vehicles. The proponent shall prepare reference Drawings demonstrating that all turning movements are achievable.

E15.3.6 The intersection of Oak Point Highway and Selkirk Avenue shall be designed in accordance with the City of Winnipeg *Accessibility Plan 2021-2022*.

E15.4 On-Site Employee Vehicle and Bus Circulation

- E15.4.1 The on-Site facility shall accommodate all turning movements by all identified design vehicles, including but not limited to: standard (twelve (12) metres) bus, articulated bus, an articulated bus pulled by a tow truck, refuse collection trucks, typical material delivery truck, and emergency vehicles, without the need to reverse the vehicles.
- E15.4.2 Two-way traffic flow shall be accommodated throughout the Site without travelling through the building. Consideration should be given to a separation of routes between staff parking and bus traffic.
- E15.4.3 Adequate bus aprons must be provided at the entrance and exit of the garage to facilitate numerous turning movements at any one (1) time.
- E15.4.4 Consider and include any code requirements including the provision of a fire lane, if deemed necessary.
- E15.4.5 Loading area(s) for supply and equipment deliveries, maintenance, and emergency vehicles to be provided.
- E15.4.6 The Design Consultant is responsible for the geometric design of all Site roadways, such that the existing transit fleet, service vehicles, and future fleet vehicles are able to navigate the Site at a reasonable speed. The information is provided as-is and it is the responsibility of the Design Consultant to confirm the turning radii and appropriate design vehicles.
- E15.4.7 A bus turnaround should be provided on the Site located near the main entrance of the building with parking capacity for three (3) forty (40) foot buses acting as a rest point for transit routes terminating at the North Garage Replacement Site.
- E15.5 Active Transportation
- E15.5.1 Active transportation infrastructure shall be designed on-Site for convenient and safe circulation, direct building access, and connection to public sidewalks along Oak Point Highway.
- E15.5.2 Pedestrian crosswalks shall be provided where pedestrian and vehicular conflicts exist within the Site.
- E15.5.3 Intersection upgrades at the primary intersection (Oak Point Highway at Selkirk Avenue) shall include a separated active transportation facility for east-west travel within the City right of way.
- E15.5.4 On-Site active transportation facility shall include safe and convenient connectivity within the Site to the public facility.
- E15.6 Barriers and Fencing
- E15.6.1 Secure Site on all sides to minimize access points for pedestrians and adjacent properties.
- E15.6.2 Naturalized barriers shall be rationalized and considered where appropriate.
- E15.6.3 Enclose exterior mechanical equipment. Fencing shall be designed to discourage climbing onto any new buildings located on the Site.
- E15.6.4 Bollards are to be located to protect areas susceptible to vehicle damage within the Site including, but not limited to, outdoor fuel tanks, fire hydrants, electrical sub-station, and main access points to the building.
- E15.6.5 Automated Vehicle Access Control Gate
- (a) An automated gate, actuated by vehicle detection on both sides is required at all access points. The gate shall have the ability to be disabled and operated manually in an emergency. The gate shall automatically open in the event of a power failure or other emergency.
- E15.7 Civil Infrastructure Design

- E15.7.1 A geometric design criteria (GDC) shall be prepared and approved prior to commencement of concept designs. The GDC shall document features on-Site and within the public right of way.
- (a) the GDC shall establish design vehicles, target speeds, desirable and minimum lane widths, minimum turning and curb radii, curb types, sidewalk widths, and parking stall dimensions;
 - (b) the GDC shall document location of technical reference for each feature, including, but not limited to, the latest edition of:
 - (i) *The City of Winnipeg Transportation Standards Manual*;
 - (ii) *Transportation Association of Canada (TAC), Geometric Design Guide (GDG)*;
 - (iii) *TAC, supplemental design manuals*;
 - (iv) *Canadian Institute of Transportation Engineers (ITE) Traffic Engineering Handbook*; and
 - (v) *City of Winnipeg Accessibility Design Standards*;
 - (c) for any elements which do not meet the standards listed in E15.7.1(b), a request for design exception shall be prepared. Design exceptions shall follow the sample form presented in the Transportation Association of Canada Geometric Design C Chapter 1, and include rationale for the requested exception. The design shall not progress forward until written approval has been granted.
- E15.7.2 On-Site parking requirements shall be rationalized by the Design Consultant for this initial phase and future expansion.
- E15.7.3 Design features in accordance with City of Winnipeg Standard Construction Specifications such as, but not limited to:
- (a) gravity sewers (sanitary and land drainage);
 - (b) water mains and services;
 - (c) manholes and catch basins;
 - (d) pavement construction;
 - (e) earthworks; and
 - (f) sidewalks.
- E15.7.4 Pavement structures shall be adequately designed to provide a minimum thirty (30) years of service without major rehabilitation. Major rehabilitation is defined as requiring more than twenty-five percent (25%) to forty percent (40%) of the pavement surface area to be reconstructed due to pavement cracking, rutting, or sub-base failure.
- E15.7.5 Site runoff will be designed to meet the maximum allowable flows as instructed by the Land Drainage Branch of the City of Winnipeg's Water and Waste Department.
- (a) Temporary on-Site storage of surface runoff will be designed to meet the maximum flow requirements.
- E15.8 Brookland Landfill
- E15.8.1 The former Brookland landfill is located at the west end of the Site. A description and a drawing describing the former Brookland Landfill site may be provided to proponents as per D6).
- E15.8.2 Previous investigations conducted at the former Brookland landfill site indicate that contaminated material extends to a depth of 1.5 metres.
- E15.8.3 Construction of new buildings on the former Brookland landfill are subject to the following requirements:
- (a) compliance with the City of Winnipeg Standards and Guidelines for the Mitigation of Methane Gas at Buildings and Utilities and Guidelines for Construction on Landfill Sites (2006) and as approved by the City of Winnipeg Water and Waste Department;

(b) contaminated materials located beneath new construction shall be either:

- (i) fully excavated, removed, and properly disposed of; or
- (ii) capped;

depending on the use of the land and placement of infrastructure, in accordance with and as approved by the City of Winnipeg Water and Waste, Solid Waste Department and the Consultant Contract Administrator;

(c) piles will not be permitted to be driven through contaminated material.

E15.8.4 The Design Consultant shall make an effort to contain the main buildings within Lots 52, 54, 55, 56, 57 and 58 of Plan 24342, Block 3 of Plan 17744, the west portion of the Hyde right of way and the east portion of the Selkirk right of way. Lots 49, 50 and 51 of Plan 24342 is the site of the former Brookland landfill and is intended to be used for staff parking.

E15.9 On-Site Signage

E15.9.1 Concept design shall consider space and placement for traffic control signage and wayfinding signage.

E15.9.2 Traffic control signage shall adhere to the Manual of Uniform Traffic Control Devices for Canada standards.

E15.10 Provisional Site Areas

E15.10.1 The Site shall have provisional areas designated for use in future phases of development for the following uses. The design and construction of the future use of these provisional areas are outside of the scope of the Project:

- (a) exterior hydrogen fuel storage; and
- (b) solar panel array.

E15.11 Other

E15.11.1 Channelized runoff such as from downspouts from the building shall not be directed across the surface of roadways/sidewalks as this may cause icing in winter.

Construction Services

E15.11.2 The Design Consultant shall be responsible for verifying any work undertaken by the General Contractor on the former Brookland landfill is completed in accordance with the requirements as specified in E15.8.

E16. BUILDING GENERAL REQUIREMENTS

E16.1 Building Services Division is responsible for the short and long term maintenance of all City-owned facilities which emphasizes maximum life cycling of equipment. The various building codes are considered to be a minimum guideline. Where feasible, upgrade of equipment and construction details is most desirable for all design considerations.

E16.2 Unless otherwise specified within this RFP, the Design Consultant shall, at a minimum replicate the systems, including, but not limited to, mechanical systems, fluid fill/movement systems, desk millwork details of Winnipeg Transit's existing Brandon Garage and Fort Rouge Garage.

E16.3 Consideration of ease of maintenance and accessibility for all equipment installed shall be assessed and form part of the review criteria.

E16.4 Beyond information provided to the Proponent as part of the RFP process, the Design Consultant shall assist the City Team in obtaining necessary building certificates e.g., "Building Location Certificate", "Occupancy Load Certificate" "Occupancy Load Card", "Surveyor's Certificate".

- E16.5 Considerations for lifecycle and replacement assessment, vandalism resistance, climbability resistance, and graffiti control and removal shall be incorporated into the specification and design of all building components.
- E16.6 Graffiti control and removal shall be incorporated into the selection of all building components.
- E16.7 Upon completion of Project, update or develop a new fire safety plan to meet current City of Winnipeg Fire Department regulations and ensure the plan is located within facility at all required locations.
- E16.8 The building plan shall provide all functional adjacencies and flows of people, vehicles, equipment, and materials efficiently and safely.
- E16.9 Circulation spaces shall accommodate and promote opportunities for positive and productive informal interactions, accommodate informal spaces for rest and reprieve, and shall integrate daylight and exterior views of landscape areas to the greatest practical extent.
- E16.10 The building design shall integrate accessible design requirements and the principles of noted in section E5.
- E16.11 The building design shall integrate safety and security through the principles of CPTED.
- E16.12 The building systems and materials shall provide required durability and lifecycle, requirements to be verified by the Consulting Contract Administrator.
- E16.13 The building design shall accommodate future expansion of operations, to be verified by the Consulting Contract Administrator. A conceptual Drawing of future expansion and operations are included in the Eastern Corridor Satellite Garage Basis of Estimate Memo (Draft) 2019 (See D6.1(a)).
- E16.14 Occupied interior spaces shall provide access to daylight and exterior views of landscaped areas to the extent practical, for visual reprieve, for inherent wayfinding and for CPTED.
- E16.15 The exterior and interior of the building shall provide a coordinated architectural expression, and be appropriate for the specific functions of spaces.

E17. LANDSCAPE ARCHITECTURE

General Requirements

- E17.1 Site landscape design should create a welcoming and aesthetically pleasing Site. Landscape Design should strive for design excellence and creativity incorporating high quality materials, innovative techniques and sustainable practises.

Scope of Work

- E17.2 The following elements shall be included in the scope of services:
 - (a) berms;
 - (b) on-Site parking;
 - (c) exterior lighting;
 - (d) parking lots;
 - (e) hardscape and softscape elements throughout the Site; and
 - (f) Site layout.

Design Services

- E17.3 Where berms are designed to provide a buffer and enrich the Site context, such berms should be used to raise the ground plane and visually reduce the scale of the building.

- E17.4 Site planning should consider CPTED principles to ensure adequate sight lines and lighting to deter crime, vandalism, and graffiti.
- E17.5 Main building entrances should include outdoor employee amenity areas and hardscape elements which include, waiting areas, bike racks, and waste receptacles. Outdoor bicycle parking should be in accordance with the most recent Zoning By-law 200/06.
- E17.6 The entire outdoor planted area shall be designed to be low maintenance.
- E17.7 Where paths are designed, they shall be identified as walking paths, cycling paths or multi-modal paths, and designed to respect governing criteria and by-law requirements for each application.
- E17.8 Parking
- E17.8.1 All fencing shall be designed to provide headlight shielding (light-proof fencing).
- E17.8.2 All general lighting shall feature downcast fixtures with full cut-off shields to eliminate light trespass.
- E17.8.3 Where parking block heater plugs are provided they shall be in weatherproof housing and on timers.
- E17.8.4 Parking areas should be landscaped and screened from public streets in accordance with the most recent Zoning By-law 200/06.
- E17.8.5 Parking stalls to be provided on-Site to meet anticipated building occupancy and programming requirements.
- E17.8.6 Handicapped parking stalls and drop-off area/lane to be provided in close proximity to entrance.
- E17.8.7 Sustainable Site planning and stormwater management should be considered when designing the parking areas utilizing best management practises.
- E17.8.8 Provide nominal parking for service and delivery vehicles, and/or visitors at appropriate locations.
- E17.9 The Site shall be planned in such a way as to assure a net zero cut and fill profile. This is to say that the proposed Site design shall be accomplished with no soils being removed from Site and no fill being brought to Site. It is highly recommended that available soil is used to create on-Site berms.
- E17.10 Where planting is designated, such planting shall conform to the following:
- (a) the Site shall be designed to LEED Zero-Scape standards, meaning that no watering, beyond naturally occurring water and water features shall be accepted;
 - (b) where trees are planted these shall be largely evergreen in order to maximize visual shielding and minimize the presence of autumn leaf drops;
 - (c) all planting shall be designated to a hardiness level of Zone 2:
 - (i) No non-native or invasive species shall be specified;
 - (d) all ground cover shall be either naturalized or native species:
 - (i) where these species (i.e., prairie grasses) grow taller, it is recommended that these be used as natural buffers to help define the limits of public access to the Site.
- E17.11 Site design shall be designed in such a way as to promote on-Site rainwater percolation, especially at locations where roof drain to the the Site surface.
- E17.12 Where possible, natural elements shall be used to dampen sources of noise, especially those areas closest to large transit garage doors and the turning aprons area located at either end of the proposed building.
- E17.13 The design shall in accordance with the most recent Zoning By-law 200/06.

Construction Services

E17.14 The Design Consultant shall provide on-Site inspection services to verify that the General Contractor adheres to the *City of Winnipeg Tree Planting and Maintenance Specification*.

E18. SITE AND BUILDING SPACE NEEDS REQUIREMENTS

E18.1 The space needs requirements for Phase 1 (Initial Buildout) identified in the 'Eastern Corridor Satellite Garage Basis of Estimate Memo (Draft)', dated September 26, 2019, shall form the basis of preliminary space needs requirements. See D6.1(a).

E18.1.1 The space needs requirements identified for future expansions of the Site are to be referenced to coordinate the Site and building plans with future expansion to be located on the Site. Future expansions are not a part of the Project.

E18.2 All information presented in the Eastern Corridor Satellite Garage Basis of Estimate Memo including but not limited to Site plans, floor plans and elevations, equipment lists and costing is preliminary. The Design Consultant shall accept the limitations of using the provided information, as implicit and as stated in the Eastern Corridor Satellite Garage Basis of Estimate Memo (Draft).

E18.3 The Design Consultant shall verify the feasibility of accommodating the space needs requirements on the Site, and recommend amendments that may be required to accommodate the Site.

E18.4 The space needs requirements shall include the following amendments:

- (a) add bicycle storage space for employees and visitors. The bike storage space for employees shall be a secured indoor space dedicated for bike storage. The design shall rationalize the size of the bike storage space. The bike storage space shall be directly accessible to the exterior of the building and connect to the active transportation facility and the pedestrian sidewalk. The Bike Storage Space shall include security fencing, and electronic key activated gate;
- (b) add Transit Control Room;
- (c) add tank room;
- (d) Maintenance Supervisor Offices – consideration shall be made for office spaces to be located on a mezzanine to facilitate supervision sightlines of the shop, subject to financial review approval by the City;
- (e) remove Carpentry/Woodworking Shop;
- (f) remove Upholstery Shop;
- (g) remove Machine Shop;
- (h) remove Body Shop;
- (i) remove Paint Bay;
- (j) remove Kitchen, Serving Line, Dining Room; and
- (k) remove office spaces for loops, schedulers, plant, and equipment staff.

E19. LEED SILVER CERTIFICATION PROCESS

E19.1 Achieve a minimum level of LEED Silver certification under the current version of LEED.

E19.2 Include in the design team an expert in green building and integrated design with a defined minimum level of project experience of similar scope and complexity to ensure performance and cost-effective implementation in accordance with the City of Winnipeg Green Building Policy.

E19.3 Lead the development of the LEED scorecard and monitor the progress of the credits throughout the design process. The development of the scorecard must balance the building

environmental features, owner's sustainability goals with the intended Project construction budget.

- E19.4 Support the Project through the entire process of LEED certification, including, but not limited to, Project registration, documentation, application and submittals, and any credit interpretations and audits.
- E19.5 The Design Consultant must provide independent third-party services for commissioning. The commissioning authority must have experience in at least two (2) building projects with a similar scope of work, with experience extending from early design phase through at least ten (10) months of occupancy.

E20. GREEN BUILDING AND SUSTAINABILITY

- E20.1 The City's intention for the Winnipeg Transit North Garage Replacement is to be an energy efficient, net-zero carbon ready building.
- E20.2 A net-zero carbon building is defined as a highly energy-efficient building that produces on-Site, or procures, carbon-free renewable energy or high-quality carbon offsets to counterbalance the annual carbon emissions from operations.
- E20.3 A net-zero carbon ready building is one that could operate as a net-zero carbon building in the future and prioritizes low-carbon investments based on integrated design principles and lifecycle analysis.
- E20.4 The building will be required to achieve a minimum of fifty percent (50%) energy savings over NECB-2020 in all office areas and a minimum of twenty-five percent (25%) energy savings over NECB-2020 in all bus storage/maintenance areas.
- E20.5 At a minimum, this Project is expected to meet all requirements stated in the following sustainable regulations along with being a net-zero carbon ready building:
- (a) Manitoba's Green Building Program
<https://www.gov.mb.ca/finance/greenbuilding/index.html>;
 - (b) City of Winnipeg Green Building Policy: New City-Owned Buildings and major additions
<http://clkapps.winnipeg.ca/DMIS/DocExt/ViewDoc.asp?DocumentTypeld=2&DocId=5989>;
 - (c) LEED Silver Certification;
 - (d) requirements listed in the Investing in Canada Infrastructure Program (ICIP) Funding Application; and
 - (e) CSA A460:19 Bird Friendly Building Design Standard.
- E20.6 Climate Lens: Climate Change Resilience Assessment and Greenhouse Gas Mitigation Assessment. See Appendix 'E'. The Climate Lens report may be a useful resource in understanding the long-term sustainability and resilience requirements for the Project.
- E20.7 The Design Consultant shall conduct at least three (3) sustainability design workshops to explore the Project's sustainability goals and targets. The first sustainability design workshop should concentrate on passive design features, the second should focus on active systems (mechanical and electrical) and the third should be a LEED charrette. This will allow the City to explore sustainable features that will need to be incorporated into the design. All workshops shall be complete by the end of schematic design.
- E20.8 Certification under the Canada Green Building Council's Zero Carbon Building (ZCB) Design Standard is not proposed. The implementation of low or zero carbon practices are of interest to the City.
- E20.9 The Design Consultant shall use acceptable energy modelling software. This includes eQuest, IES-VE, or Energy Plus (with either Open Studio or Design Builder). Software limitations shall

not excuse the limitation of accuracy of energy modelling to show compliance with the standard. Any software limitations are expected to be overcome with appropriate engineering calculations.

- E20.10 At Project completion, the Design Consultant shall provide the City with the energy modelling files and the output/results files. The weather file that was used for the modelling shall also be provided.
- E20.11 Specific energy and carbon reduction approaches that the Design Consultant shall consider where possible, are detailed in Appendix 'E'.
- E20.12 The Consultant shall use energy efficient HVAC equipment and systems. Feasibility studies for ground source and air to water heat pump systems are required, details of which are in E21.
- E20.13 To determine financial feasibility, a ground solar photovoltaic (PV) and roof and wall solar thermal (air and water) feasibility study is to be prepared by the Design Consultant. The details to be included in the study are in E21.
- E20.14 As per Manitoba's Green Building Program and the City's Green Building Policy, LEED Silver certification is required.
- E20.15 Electric Vehicle charging stations and/or parking stalls that are Electric Vehicle charging ready shall be evaluated during early schematic design.

E21. GREEN BUILDING FEASIBILITY STUDIES

E21.1 Four (4) feasibility studies detailed below are to be completed in the schematic design phase.

E21.2 Ground Source Heat Pump Feasibility Study

E21.2.1 Prepare a ground source heat pump feasibility study which will include the following:

(a) building and Site assessment:

- (i) the proposed building shall be evaluated using engineering judgement to select the appropriate zone terminal units which would function with a ground source heat pump system;
- (ii) the proposed borefield location shall be reviewed to verify that a ground source heat pump system is appropriate for the Site. Please note that additional buildings will be constructed in future phases, therefore investigate the size limits of the borefield location;
- (iii) local ground thermal conductivity shall be investigated through the use of geological surveys and local experts. A test borehole is not required at the feasibility stage;
- (iv) a reasonable effort shall be made to identify any issues with drilling at the proposed location; and
- (v) the proposed system shall be described, including the system size, location and sizing of vertical/horizontal geoexchange field, building connection point, heat pump configuration, and sequence of controls;

(b) building energy model:

- (i) an energy model shall be created (the same building energy model can be used for this feasibility study and for general building design);
- (ii) the building energy model and GHX model shall be used to directly inform design. All relevant loads that affect system balancing should be investigated. This may include the DHW load, ventilation loads, fluid cooler, snow melting, etc.;
- (iii) relevant screen shots illustrating results from the building energy model shall be included in the report; and
- (iv) it is anticipated that natural gas will be employed for supplementary heating, with a view to one hundred percent (100%) electrification in the future;

(c) GHX model/design/sizing:

- (i) GHX sizing shall not be based on rules of thumb;
 - (ii) GHX sizing shall be completed using an appropriate software;
 - (iii) a plot illustrating twenty (20) year ground temperature changes shall be included;
 - (iv) annual heat flows to and from the ground shall be explicitly stated;
 - (v) a layout for the proposed borefield shall be provided; and
 - (vi) relevant screen shots illustrating results from GHX model shall be included in the report;
- (d) energy/financial/greenhouse gas (GHG) Analysis:
- (i) the energy, cost and GHG savings of a ground source heat pump shall be evaluated and then compared against a reasonable natural gas fired conventional heating system. It is expected that a conventional system would include air heat recovery where applicable;
 - (ii) provide life cycle costing analysis with net present value (NPV) over a forty (40) year evaluation period and the payback year if applicable. Current Manitoba Hydro rates are to be used whilst discount and escalation rates will be provided by the City. Operations, maintenance and replacement costs are to be considered. Provide a spreadsheet with the analysis in an attachment to the study;
 - (iii) identify incentives and incorporate them into the analysis if applicable;
 - (iv) AHRI-rated specifications of proposed equipment shall be used to estimate equipment efficiencies. Efficiency values shall be adjusted to represent expected operating conditions (for example, entering or leaving water temperatures that deviate significantly from rated performance points) and the adjustment should be justified within the report;
 - (v) component costs should be traceable and included as separate line items; acceptable sources include either RS means mechanical data and actual equipment quotes for this Project or from recent previous projects; and
 - (vi) the GHG savings for a ground source heat pump option should be estimated based on current emissions for Manitoba as reported in the National Inventory;
- (e) environmental impact:
- (i) identify any potential ground loop impacts on the local water source and the environment (if any);
- (f) report:
- (i) provide a report which clearly indicates/describes methodologies, parameter assumptions (and sources) and findings, to such a degree that City staff can verify all requirements have been met; and
 - (ii) model files and data inputs used to support the analysis to be provided with the report.

E21.3 Air to Water Heat Pump Feasibility Study

E21.3.1 Prepare an air to water source heat pump feasibility study which will include the following:

- (a) building and Site assessment:
 - (i) the proposed building shall be evaluated using engineering judgement to select the appropriate zone terminal units which would function with an air to water heat pump system;
- (b) building energy model:
 - (i) an energy model shall be created (the same building energy model can be used for this feasibility study and for general building design);
 - (ii) the building energy model shall be used to directly inform design;
 - (iii) relevant screen shots illustrating results from the building energy model shall be included in the report; and

- (iv) it is anticipated that natural gas will be employed for supplementary heating, with a view to one hundred percent (100%) electrification in the future;
- (c) energy/financial/GHG analysis:
 - (i) the energy, cost, and GHG savings of an air to water heat pump shall be evaluated and then compared against a reasonable natural gas fired conventional heating system. It is expected that a conventional system would include air heat recovery where applicable;
 - (ii) provide life cycle costing analysis with net present value (NPV) over a forty (40) year evaluation period and the payback year if applicable. Current Manitoba Hydro rates are to be used whilst discount and escalation rates will be provided by the City. Operations, maintenance and replacement costs are to be considered. Provide a spreadsheet with the analysis in an attachment to the study;
 - (iii) identify incentives and incorporate them into the analysis if applicable;
 - (iv) AHRI-rated specifications of proposed equipment shall be used to estimate equipment efficiencies. Efficiency values shall be adjusted to represent expected operating conditions (for example, entering or leaving water temperatures that deviate significantly from rated performance points) and the adjustment should be justified within the report;
 - (v) components costs should be traceable and included as separate line items; acceptable sources include either RS means mechanical data and actual equipment quotes for this Project or from recent previous projects; and
 - (vi) the GHG savings for an air to water heat pump option should be estimated based on current emissions for Manitoba as reported in the National Inventory Report;
- (d) report:
 - (i) provide a report which clearly indicates/describes methodologies, parameter assumptions (and sources) and findings, to such a degree that City staff can verify all requirements have been met; and
 - (ii) model files and data inputs used to support the analysis to be provided with the report.

E21.4 Ground Solar Photovoltaic (PV) Panel Feasibility Study

E21.4.1 Prepare a ground solar PV feasibility study which will include the following:

- (a) conduct a shading study to evaluate the available land. Look for unshaded areas with proper orientation and sufficient space to accommodate the solar array. Consider any potential shading from nearby trees, buildings, or structures that may impact energy production;
- (b) provide an estimate of the maximum PV system size, and system production using accepted industry solar PV design software and provide that software report as an attachment to the study;
- (c) provide a preliminary layout of the potential system;
- (d) conduct GHG savings analysis; and
- (e) provide life cycle costing analysis with net present value (NPV) over a forty (40) year evaluation period and a payback year if applicable. Current Manitoba Hydro rates are to be used whilst discount and escalation rates will be provided by the City of Winnipeg. Operations, maintenance and replacement costs are to be considered. Provide a spreadsheet with the analysis in an attachment to the study.

E21.5 Roof and Wall Solar Thermal (Air and Water) Feasibility Study

E21.5.1 Prepare a roof and wall solar thermal (air and water) feasibility study which will include the following:

- (a) conduct a shading study incorporating existing and permitted building heights and other obstructions;

- (b) provide an estimate of the maximum solar air and solar water system size, and system production using accepted industry design software and provide that software report as an attachment to the study;
- (c) provide a preliminary layout of the potential system taking into account the set-back from roof edges, mechanical equipment and roof drains;
- (d) conduct GHG savings analysis; and
- (e) provide life cycle costing analysis with NPV over a forty (40) year evaluation period and a payback year if applicable. Current Manitoba Hydro rates are to be used whilst discount and escalation rates will be provided by the City of Winnipeg. Operations, maintenance and replacement costs are to be considered. Provide a spreadsheet with the analysis in an attachment to the study.

E22. ARCHITECTURAL

General Requirements

- E22.1 The design of the North Garage Replacement shall provide for and include at a minimum, the elements specific to the architectural details in the following section. The information provided is not exhaustive and it is the Design Consultant's responsibility to ensure all design elements required for a functional architectural system is provided.

Design Services

- E22.2 Requirements for facility security must be incorporated.
- E22.3 All exterior windows shall be low-e and thermally broken commercial grade aluminum.
- E22.4 Optimize natural light and exterior views of landscaped areas with windows and skylights.
- E22.5 Sound attenuation consideration shall be provided for occupancy areas including but not limited to office administration spaces, rest areas, training rooms, and quiet rooms.
- E22.6 Where used in wet areas, floor shall be slip resistant and heated.
- E22.7 All concrete floors shall be sealed.
- E22.8 Ceilings in wet areas shall be painted with moisture and mildew resistant paint.
- E22.9 Exposed ceilings shall have acoustic treatment.
- E22.10 All corridor turns, whether in the repair, the service, the storage, or the exterior areas must accommodate the conventional buses, and articulated buses without reversing.
- (a) Further to E22.10, the Design Consultant shall review with the City Team, specific movements on the Site, and within and new buildings that are required to accommodate forward movements of an articulated bus pulled by a tow-truck.
- E22.11 The storage room should have, if practical, an overhead door, and proper road access to the loading area from the outside for deliveries with a docking capability to unload from high trucks.
- E22.12 The configuration of the vehicle inspection/repair area should be designed for easy access to the tools and equipment.

E23. BUILDING STRUCTURAL REQUIREMENTS

General Requirements

- E23.1 The design of the North Garage Replacement shall provide for and include at a minimum, the elements specific to the building structures detailed in the following section. The information provided is not exhaustive and it is the Design Consultant's responsibility to ensure all design elements required for a functional building structural system is provided.

Scope of Work

E23.2 The following elements shall be considered as part of Site development:

- (a) foundations;
- (b) floor slabs;
- (c) framing for administration and bus repair areas;
- (d) roofing components; and
- (e) design loads.

Design Services

E23.3 Foundations

E23.3.1 Piling type and design parameters to be in accordance with the recommendations of the geotechnical report (See E11) and accepted industry standards.

E23.3.2 Unless the Proponent can demonstrate strong reasons to the contrary, the new building shall be supported by a single foundation type. (i.e., do not mix pile types).

E23.3.3 Provide cast-in-place reinforced concrete pile caps under all interior columns.

E23.3.4 Provide cast-in-place reinforced concrete grade beams under all perimeter walls and interior load bearing walls. Include pilasters where required to accommodate perimeter columns.

E23.3.5 Void form to be as per recommendations of the geotechnical report.

E23.3.6 Sub-surface drainage system (i.e., weeping tile) to be as per recommendations of the geotechnical report (if required). Coordinate with architectural and mechanical disciplines.

E23.4 Floor Slabs

E23.4.1 Refer to floor loading outlined in E23.9 "Design Loads" below.

E23.4.2 Slab-on-grade floor systems, if proposed, shall be designed in accordance with the current edition of "Concrete Floors on Ground" by PCA (Portland Cement Association – EB075). Subgrade Modulus "k" shall be as determined by the Proponent's geotechnical engineer, and must be consistent with the subgrade preparation and engineered fill outlined within the Proponent's design.

E23.4.3 Minimum slab-on-grade floor thickness to be one hundred fifty (150) millimetres for areas not having vehicular or bus traffic. Floor thickness for indoor areas subject to vehicular and bus traffic shall be determined by the Design Consultant.

E23.4.4 Proposal submission to clearly spell out depth of excavation, sub-grade preparation, geotextile (if required), silt removal (if required), sub-base parameters, compaction requirements, concrete thickness, concrete strength, and reinforcement.

E23.4.5 Provide non-metallic trowelled-in hardener to all floor slabs subjected to vehicle traffic. Hardener to provide, as a minimum, protection against moderate abrasion, moderate impact, and resistance to oils and greases.

E23.4.6 Provide structural slabs to all office/administrative areas.

E23.4.7 Acceptable structural slab systems include:

- (a) cast-in-place reinforced concrete over void form;
- (b) cast-in-place reinforced concrete over crawl space;
- (c) precast concrete (i.e., hollow core with topping) over crawl space; or
- (d) approved equivalent "all-concrete" system.

E23.5 Concrete Strengths (minimum) and Exposure Class according to CSA A23.1-19/CSA A23.2-2019. As determined by the geotechnical and structural engineer.

E23.6 Framing – Administration Area

E23.6.1 Acceptable structural framing elements include: steel deck, open web steel joists, structural steel beams, structural steel columns, precast concrete systems (“all precast” or in combination with steel), cast-in-place concrete, or load-bearing concrete block walls.

E23.6.2 Wood framing and/or light gauge steel structures are not acceptable.

E23.7 Framing – Bus Garage Area

E23.7.1 Acceptable structural framing elements include: steel deck, open web steel joists, structural steel beams, structural steel columns, precast concrete systems (“all precast” or in combination with steel), or cast-in-place concrete.

E23.7.2 Pre-engineered steel buildings, wood framing, and/or light gauge steel structures are not acceptable.

E23.7.3 All wall panels within one thousand two hundred (1,200) millimetres of the finished floor, are to be of robust construction, capable of withstanding the low speed impact of a transit bus or other auxiliary vehicles.

E23.7.4 All structural components in close proximity to typical bus traffic areas (including overhead doors, interior columns, etc.) are to be protected by minimum one hundred fifty (150) millimetres concrete filled steel bollards. Bollards to be embedded in concrete below grade (not bolted to top of floor).

E23.7.5 Lateral bracing located to accommodate building functions.

E23.8 Roofing Components

E23.8.1 If used, all flat roof construction shall be torch down roofing.

E23.8.2 If metal roof construction used, it shall incorporate a snow/ice guard system to prevent avalanching to ground.

E23.8.3 Provide commercial grade eaves troughs and downpipes.

E23.8.4 THALER Jack Stacks or approved equal shall be used on all plumbing vents.

E23.8.5 Roof may be designed to promote rainwater capture and cycling into bus wash system.

E23.9 Design Loads

E23.9.1 Roof snow load as per National Building Code.

E23.9.2 Snow drift loads as per National Building Code and Structural Commentaries.

E23.9.3 Wind loads as per National Building Code.

E23.9.4 Seismic loads applicable as per 2020 NBC.

E23.10 Means of marking bus parking lanes to be permanently embedded in concrete.

E24. MECHANICAL

General Requirements

E24.1 The design of the North Garage Replacement shall provide for and include at a minimum, the elements specific to the building mechanical systems detailed in the following section. The information provided is not exhaustive and it is the Design Consultant’s responsibility to ensure all design elements required for a functional mechanical system are provided.

E24.2 Provide the required mechanical systems to support a transit garage facility for the storage, operation, maintenance, and servicing a fleet:

- (a) conventional diesel fuelled buses; and
- (b) battery electric buses.

- E24.3 Comply with the most stringent requirements of the latest editions of the applicable building codes, local regulations, by-laws, the requirements of the Authorities Having Jurisdiction, Federal, Provincial and Municipal Codes, and the applicable standards of the Underwriters' Association. These codes and regulations constitute an integral part of these specifications and include the following:
- (a) National Building Codes;
 - (b) National Energy Code;
 - (c) LEED;
 - (d) American Society of Heating, Refrigerating and Air-Conditioning Engineers;
 - (e) Canadian Standards Association;
 - (f) National Fire Protection Association;
 - (g) City of Winnipeg Green Building Policy;
 - (h) allow for LEED Silver Accreditation; and
 - (i) identify potential opportunities for low-carbon energy and/or renewable energy systems to be incorporated into the design.

Scope of Work

- E24.4 The following shall be considered as part of the mechanical scope of work:
- (a) utilities and services;
 - (b) HVAC;
 - (c) building automation system;
 - (d) plumbing and drainage; and
 - (e) fire protection.
- E24.5 The following are a list of general building requirements to be included in the mechanical design:
- (a) administration and office areas:
 - (i) HVAC system to maintain interior temperature;
 - (ii) general ventilation; and
 - (iii) plumbing fixtures for staff areas;
 - (b) repair and maintenance areas:
 - (i) heating system to maintain interior temperatures;
 - (ii) in-floor heating at bus entrance/exits;
 - (iii) general ventilation systems;
 - (iv) diesel tailpipe exhaust systems;
 - (v) dust/fume extraction systems;
 - (vi) gas detection systems;
 - (vii) compressed air system including compressors, dryers, piping, and air outlets;
 - (viii) trench drain system with oil, and sediment separators;
 - (ix) bulk fluid dispensing; and
 - (x) general plumbing for all fixtures including emergency shower/eyewash stations, hose bibs, and employee facilities;
 - (c) fuel and servicing areas:
 - (i) heating system to maintain interior temperatures;
 - (ii) in-floor heating at bus entrance/exits;
 - (iii) bus wash with consideration given to water reclaim or rain water harvesting;
 - (iv) fluid top-up stations including storage, pumps, and distribution;

- (v) trench drain system with oil and sediment separators;
- (vi) fuel dispensing system;
- (vii) general and local ventilation as required, with moisture control for high humidity areas; and
- (viii) gas detection systems;
- (d) tank farm:
 - (i) exterior double wall above ground diesel fuel storage tanks; and
 - (ii) Veeder Root Tank Monitor System for level, temperature, and leaks;
- (e) parts and storage areas:
 - (i) heating system to maintain interior temperatures;
 - (ii) general, and local ventilation suitable for specific space function; and
 - (iii) bulk fluid storage, and distribution system;
- (f) bus storage area:
 - (i) heating system to maintain interior temperatures;
 - (ii) general ventilation;
 - (iii) gas detection; and
 - (iv) floor drains connected to oil/water separator.

Design Services

E24.6 Utility and Services

- E24.6.1 Utility services for water and wastewater are anticipated to be provided from a 300Ø water main and 375Ø wastewater main from Oak Point Highway.
- E24.6.2 The Design Consultant shall verify that the utility water source is adequate for building fire protection services and plumbing services and the utility wastewater source is adequate for the building drainage requirements.

E24.7 HVAC

- E24.7.1 HVAC systems shall be designed to meet sustainability goals and minimize carbon footprint HVAC systems as required to ensure LEED Silver accreditation.
- E24.7.2 The HVAC systems must be designed to support both diesel fueled and battery electric operated buses.

E24.8 Building Automation System

- E24.8.1 Provide building automation system to optimize the efficiency of the mechanical building systems.
- E24.8.2 Metering and sub-metering of natural gas, electricity, and other utilities.

E24.9 Plumbing and Drainage

- E24.9.1 Consideration shall be given for water use reduction throughout the facility.

E24.10 Fire Protection

- E24.10.1 The entire building shall be fully sprinklered capable of meeting code requirements for a fully ZEB facility.
- E24.10.2 A full wet system is expected, with local dry-pipe heads, or glycol anti-freeze loops as required to prevent freezing at small individual locations.

E25. ELECTRICAL

General Requirements

- E25.1 The design of the North Garage Replacement shall provide for and include at a minimum, the elements specific to the building electrical systems detailed in the following section. The information provided is not exhaustive and it is the Design Consultant's responsibility to ensure all design elements required for a functional electrical system are provided.
- E25.2 Design shall conform to the most stringent requirements of the latest editions of the applicable C.S.A. standards; NFPA70 and the requirements of the Authorities Having Jurisdiction; Federal, Provincial and Municipal Codes; and the applicable standards of the Underwriters' Association.

Scope of Work

- E25.3 The following elements shall be considered as part of Site development:
- (a) provide a complete electrical design for the new transit facility;
 - (b) new 66kV feed from Manitoba Hydro;
 - (c) customer owned transformation;
 - (d) medium voltage distribution;
 - (e) low voltage distribution;
 - (f) Site lighting;
 - (g) video surveillance;
 - (h) building electrical:
 - (i) electrical distribution;
 - (ii) motor control;
 - (iii) lighting;
 - (iv) lighting controls;
 - (v) security access control;
 - (vi) voice/data systems;
 - (vii) public address system;
 - (viii) life safety (fire alarm, emergency lighting, exit signs); and
 - (ix) grounding and bonding;
 - (i) emergency power generator;
 - (j) ZEB battery charging systems for initial and future complete build out;
 - (k) ZEB battery charging systems to be plug-in and/or pantograph;
 - (l) EV charging for service vehicles and staff parking areas;
 - (m) power management system;
 - (n) short-circuit, co-ordination, and arc-flash study and report sealed by an engineer;
 - (o) electrical design to minimize arc-flash energy levels;
 - (p) provision for future solar installation;
 - (q) provision for future micro grid controller; and
 - (r) preparation of equipment supply Bid Opportunities for long lead items including, but not limited to, 66kV transformers, switchgear assemblies, motor control centres, ZEB charging equipment.

Design Services

- E25.4 Preliminary Design Report
- E25.4.1 Design Consultant shall prepare a preliminary design report to include:
- (a) single line diagrams;
 - (b) Site plans;
 - (c) load calculations; and,

- (d) construction phasing recommendations for ZEB charging infrastructure.

E25.5 Electrical Drawings

- (a) Drawings shall include:
 - (i) single line diagrams;
 - (ii) Site plans;
 - (iii) floor plans:
 - ◆ lighting;
 - ◆ power distribution;
 - ◆ security;
 - ◆ voice/data;
 - ◆ public address system; and
 - ◆ life safety;
 - (iv) panel schedules;
 - (v) equipment lists;
 - (vi) grounding;
 - (vii) fire alarm riser diagram;
 - (viii) wiring diagrams;
 - (ix) motor control schematics;
 - (x) mounting details; and
 - (xi) area classifications.

E25.6 Utility Site Services

- (a) Provide all necessary arrangements and coordination with the applicable supply authorities (Manitoba Hydro, BellMTS, Shaw Cable, etc.) in order to ensure service availability when required.

E25.7 Permits, Fees and Inspections

- (a) The Design Consultant shall identify all permits necessary for construction. The Design Consultant shall fill out permit information to assist a General Contractor for obtaining permits along with providing approvals to close out all permits.

E25.8 Electrical Systems

E25.8.1 General

- (a) Provide all work and equipment as described in electrical outline specifications.

E25.8.2 Electric Distribution Systems

- (a) All necessary arrangements and coordination must be made with Manitoba Hydro in order to ensure availability to service when required.
- (b) The electrical distribution system shall be designed to provide redundancy in the case of equipment failure including the main 66 kV transformers.
- (c) The electrical distribution system shall be sized for final build out for ZEB charging system. The Design Consultant shall make recommendations as to installation of electrical equipment for first phase of ZEB charging and final buildout.
- (d) The Design Consultant is responsible to design the electrical system but at a minimum it should consist of the following:
 - (i) two (2) 66kV pad mount transformers;
 - (ii) medium voltage distribution, low resistance grounded;
 - (iii) double ended medium voltage switchgear;
 - (iv) four hundred eighty (480) VAC double ended switchgear for ZEB charging equipment;

- (v) six hundred (600) VAC double ended switchgear for facility distribution;
- (vi) six hundred (600) VAC motor control centre;
- (vii) one hundred twenty (120)/two hundred eight (208) VAC distribution;
- (viii) six hundred (600) VAC emergency generator(s) for facility operation, except ZEB charging equipment;
- (ix) harmonic mitigation;
- (x) microgrid controller; and
- (xi) future connection of solar electric system and battery storage.

E25.8.3 Main Distribution:

- (a) dedicated electrical room for medium voltage equipment;
- (b) double ended medium voltage;
- (c) arc flash resistant;
- (d) customer metering;
- (e) all switchgear breakers shall provide power meter data to the energy monitoring system; and
- (f) zone interlocking with six hundred (600) VAC and four hundred eighty (480) VAC distribution breakers.

E25.8.4 Sub-Distribution:

- (a) design double-ended switchgear for both six hundred (600) VAC and four hundred eighty (480) VAC distribution;
- (b) six hundred (600) VAC distribution shall be for building services;
- (c) four hundred eighty (480) VAC distribution shall be used exclusively for the ZEB charging equipment; and
- (d) all switchgear breakers shall provide power meter data to the energy monitoring system.

E25.9 Emergency Generator

E25.9.1 The emergency generator shall be capable of handling all building loads with the exception of the ZEB charging equipment.

E25.9.2 The Design Consultant shall make recommendation for generator sizing and multi generator paralleling with utility.

E25.10 Voice/Data

E25.10.1 Coordinate with Utility to provide a voice/data service.

E25.10.2 Coordinate all IT System Requirements and Specifications with the City IT group

E25.10.3 Provide recommendations and design for dedicated fibre optic data connection to existing control centre at Fort Rouge Garage.

E25.10.4 Voice/data system for offices, board rooms, staff areas, control rooms etc.

E25.10.5 Provide full WiFi coverage throughout entire facility to allow *Infodev* radio system access for buses.

E25.10.6 Design to include dedicated telecommunication rooms.

E25.10.7 Provide voice/data at the following locations. Additional locations to be determined by the Consultant and the City during the Preliminary Design Report and the Detailed Design phase:

- (a) offices;
- (b) meeting rooms;

- (c) staff facilities;
- (d) control centre;
- (e) bus fuelling lanes;
- (f) bus parking kiosk;
- (g) revenue vault;
- (h) fuel meters;
- (i) vehicle inspection/repair area;
- (j) dispatch office/driver waiting area;
- (k) all of the HVAC BACnet controllers;
- (l) card access;
- (m) security cameras;
- (n) WiFi access points;
- (o) ZEB battery chargers; and
- (p) power meters.

E25.11 Short Circuit, Coordination and Arc Flash

E25.11.1 Provide a complete short circuit and coordination study and arc flash analysis (SCCAF) for the electrical distribution system including:

- (a) determination of maximum available short circuit current at main bus;
- (b) ensure that equipment supplied under this Contract is suitable for required ratings;
- (c) examine degree of protective coordination for selective tripping for all main feeder breakers; and
- (d) make all necessary adjustments to devices and submit two copies of short-circuit and coordination study complete with engineer's seal to the City for their review.

E25.11.2 The short circuit study and SC rating of electrical distribution equipment shall be based on the calculation of the utility transformer with one standard size larger of the actual size and at the infinitive fault availability.

E25.11.3 The coordination study and arc flash analysis shall be based on the actual utility transformer sizing, and actual utility fault level availability at the utility transformer primary side.

E25.11.4 The studies shall be performed based on the initial equipment installation for the ZEB loads and the final full build out equipment.

E25.12 Hazardous Area

E25.12.1 Design Consultant shall perform a hazardous area classification and design the equipment and installation as required to meet the classification.

E25.13 Wash Bay Areas

E25.13.1 The electrical apparatus and associated hardware located in the wash bay area and the areas in which excessive moisture are likely to be present shall be conforming to CEC section 22.

E25.14 Diesel Fuel Tank Monitoring System

E25.14.1 Provide fuel tank monitoring and leak detection system.

E25.14.2 System to be monitored by the facility's BMS.

E25.15 Building Management System - Metasys®

E25.15.1 Wire and connect all power and communication cables, including but not limited to controllers, computers, communication interfaces. See mechanical specification for further details.

E25.16 Fire Alarm System

E25.16.1 Provide a multiplex/addressable fire alarm system with the following components:

- (a) main fire alarm panel FACP (at main entrance);
- (b) LED and LCD Enunciators (LED to show grouped detection per floor/fire compartment, vertical (stair/elevator) shaft etc.);
- (c) manual pull stations;
- (d) smoke detectors;
- (e) input/detection module for all sprinkler systems components including:
 - (i) flow switches;
 - (ii) tamper-proof valve switches;
 - (iii) Also for any of the following required sprinkler components: loss of excess water pressure switch.
- (f) fan shot-down/on-off control at FACP for each major (public) air handling system;
- (g) fire alarm – central station connection for alarm and trouble;
- (h) release of all hold-open or security system held doors on any fire alarm;
- (i) fire alarm speakers or horns c/w strobes, in general are locations throughout the building. All strobes shall be synchronized; and
- (j) where applicable, provide mag lock release contacts.

E25.17 CO and NOx Detection System

E25.17.1 Design gas detection systems complete with connections to BAS.

E25.18 Service Vehicle Parking

E25.18.1 Branch circuit panels for parking receptacles to be provided.

E25.18.2 Provide parking receptacle controls, such as IPLC, at exterior parking stalls.

E25.19 Staff Vehicle Parking

E25.19.1 Branch circuit panels for parking receptacles to be provided.

E25.19.2 Provide parking receptacle controls, such as IPLC, at exterior parking stalls.

E25.20 Staff Vehicle EV Charging

E25.20.1 Provide EV charging for staff parking areas.

E25.20.2 Number of EV chargers shall meet requirements for LEED Silver or as determined with input from the City Team.

E25.21 Emergency Lighting

E25.21.1 Provide a complete powered battery backup system for the entire building to provide emergency lighting in the event of a loss of AC power to the normal lighting system.

E25.21.2 Provide self-contained battery banks.

E25.22 Exit Signs

E25.22.1 Provide self-contained LED type exit signs.

E25.23 Lighting

E25.23.1 Lighting fixtures shall be LED type.

- E25.23.2 Lighting design shall conform to illumination levels recommended in the Illuminating Engineering Society's (IES) Lighting Handbook.
- E25.23.3 Design Consultant to perform illumination study and provide to the City for review and comment at each design submittal stage.
- E25.24 Lighting Controls
 - E25.24.1 Design centralized lighting control system.
 - E25.24.2 Provide occupancy sensors to control lights in public areas.
 - E25.24.3 Daylight based controls where applicable.
 - E25.24.4 Provide wall mounted combination switches (occupancy sensors complete with dimmer switches) to control lights in offices and meeting rooms.
 - E25.24.5 Provide occupancy sensors in washrooms.
 - E25.24.6 Provide two (2) stage lighting controls in garage area. First stage lighting to be on at all times and second stage of lighting activated by occupancy sensors.
- E25.25 Uninterrupted Power Supply System (UPS)
 - E25.25.1 Coordinate all requirements with the City's IT department representative.
- E25.26 Security Camera Systems
 - E25.26.1 Design security camera system consisting of interior and exterior cameras.
 - E25.26.2 The system shall be capable of monitoring the entire facility and be integrated into buildings security system.
- E25.27 Card Access System
 - E25.27.1 Provide a centralized Card Access and Security System.
 - E25.27.2 Provide card access at all personnel doors.
 - E25.27.3 All video surveillance and card access systems to be tied with existing City of Winnipeg Pegasys System.
- E25.28 Public Address System
 - E25.28.1 Provide a centralized public address system throughout the building. The system to be integrated with and controlled by the telephone system.
- Construction Services
 - E25.29 Provide non-resident construction services.
 - E25.29.1 Furnish a Certificate of Acceptance from the Inspection Authorities on completion of work. Copies of Certificate to be included in Maintenance Manuals.
 - E25.30 Inspections
 - E25.30.1 Conduct bi-weekly electrical inspections of the General Contractor's work.
 - E25.30.2 Provide review of the Contractor's work for the purpose of determining the general quality of the work.
 - E25.30.3 Provide guidance where required to interpret plans and specifications.
 - E25.30.4 Provide directives to Contractor on work not conforming to the Contract documents.
 - E25.30.5 Provide inspection report within five (5) days of inspection.
 - E25.31 Start-up Tests

E25.31.1 The Design Consultant shall prepare a list of tests to be conducted by the General Contractor. At a minimum the tests shall include the following systems:

- (a) new electrical distribution system;
- (b) motor controls, fire alarm system;
- (c) card access system;
- (d) UPS system;
- (e) standby generator system;
- (f) low voltage lighting control; and
- (g) public address system.

E25.31.2 The Design Consultant shall witness all testing.

E25.32 Commissioning

E25.32.1 The Design Consultant shall prepare a list of commissioning activities to be conducted by the Contractor. At a minimum the commissioning shall include the following systems:

- (a) new electrical distribution system;
- (b) motor controls;
- (c) fire alarm system;
- (d) card access system;
- (e) UPS system;
- (f) standby generator system;
- (g) low voltage lighting control; and
- (h) public address system.

E25.32.2 The Design Consultant shall witness all commissioning.

E25.33 Training

E25.33.1 The Consultant shall prepare a list of training requirements to be conducted by the Contractor. At a minimum the training shall include the following systems:

- (a) new electrical distribution system;
- (b) motor controls;
- (c) fire alarm system;
- (d) card access system;
- (e) UPS system;
- (f) standby generator system;
- (g) low voltage lighting control; and
- (h) public address system.

E25.33.2 The Design Consultant shall witness all training.

E25.33.3 Accommodate a maximum of ten (10) City Transit employees for their respective training.

E25.34 Operations and Maintenance Data

E25.34.1 The Design Consultant shall specify the requirements for the operations and maintenance (O&M) manuals prepared by the General Contractor.

E25.34.2 The Design Consultant shall review O&M manual submittals for completion and accuracy.

E25.34.3 Provide operation and maintenance data for incorporation into O&M manual.

E26. PROJECT RECORDS

- E26.1** The Design Consultant shall deliver to the City Team the following documents with the sixty-six percent (66%) design submittal:
- (a) Preliminary Design Report:
 - (i) prepare and submit a preliminary design report outlining the results of the investigations and assessments carried out, options investigated, and the recommended scope of work, complete with thirty-three percent (33%) design Drawings and cost estimate, traffic management plan for work at the primary and secondary accesses, risk assessment, proposed construction schedule, and stakeholder relations feedback;
 - (ii) a draft report is to be submitted;
 - (iii) the report is to be finalized after incorporating feedback from the City; and
 - (iv) four (4) hard copies along with one (1) digital copy in PDF version properly bookmarked of the final report shall be submitted prior to the ninety-nine percent (99%) design submission.
- E26.2** Prior to Total Completion of the Contract, the Design Consultant is to oversee the preparation and delivery of the following:
- (a) O&M Manuals:
 - (i) four (4) hard copy sets (three (3) rings binders with index tabs) and one (1) digital copy in PDF format of operations and maintenance manuals each consisting of installation data, parts list, operating instruction, and recommended maintenance procedures;
 - (ii) four (4) sets of warrantee documents, outlining items warrantied, the conditions of the warrantee and the limits of the warrantee; and
 - (iii) manuals to include mechanical and electrical requirements including, but not limited to, those listed in E24 and E25.
- E26.3** The Design Consultant is to prepare and deliver to the Consulting Contract Administrator, six (6) months after Substantial Completion, the following:
- (a) As-Built Drawings:
 - (i) two (2) hard copy sets (paper) and one (1) digital copy in each of AutoCAD (.dwg) format and PDF format of all disciplines including, but not limited to, architectural, landscape architectural, civil engineering, structural, mechanical, and electrical;
 - (ii) all As-Built Drawings shall be sealed in accordance with the requirements of Engineer Geoscientists Manitoba;
 - (iii) any roadworks completed within City of Winnipeg right of way shall follow the City of Winnipeg Public Works Department as-built submission requirements (See Appendix 'B' Part F1); and
 - (iv) any modifications or additions to City of Winnipeg Water and Waste Department assets completed as a result of the Project (not including service connections) shall follow the City of Winnipeg Water and Waste Department as-built submission requirements (https://legacy.winnipeg.ca/waterandwaste/dept/cad_gis.stm);
 - (b) Final Construction Report including:
 - (i) a brief description of Services accomplished including initial and final scope of work;
 - (ii) issues encountered and resolutions achieved;
 - (iii) any outstanding services or issue-resolutions required;
 - (iv) Stakeholder list;
 - (v) reports summarizing correspondence with stakeholders including Stakeholder Engagement Sessions and informal communications;
 - (vi) daily field reports (as an appendix);
 - (vii) RFIs (as an appendix);
 - (viii) non-conformance reports (NCRs) (as an appendix);

- (ix) proposed change notices (PCNs) (as an appendix);
- (x) change in work orders (CWOs) (as an appendix);
- (xi) Pre-Construction, Construction operations, and Post-Construction photos provided in digital format using appropriately organized file structure (as an appendix);
- (xii) all meeting minutes (pre-award, pre-construction, construction, as an appendix);
- (xiii) field QA/QC reports (as an appendix);
- (xiv) final construction costs and projected costs to complete the Project (based on actuals), including utility costs, Consulting Fees, internal Project costs and overheads, and any other associated costs;
- (xv) provision of record Drawings for all roadworks within the Oak Point Highway, Selkirk Avenue, and Hyde Avenue City of Winnipeg owned right of way in accordance with the Public Works As-Built Drawings requirements identified within Appendix 'B';
- (xvi) certificates (as an appendix); and
- (xvii) progress estimates (as an appendix);
 - ◆ Further to E26.3(b) all records between the Design Consultant and the General Contractor shall be compiled into a single repository to be submitted to the City; and one (1) digital copy with the compiled repository that is organized by folders of document type (i.e., RFI, NCR, etc.);

(c) LEED Documentation:

- (i) the Design Consultant shall keep a record of all LEED certification documentation from the design and construction period;
- (ii) all records from the Design Consultant regarding LEED certification shall be compiled into a single repository to be submitted to the City; and
- (iii) one (1) digital copy with the compiled repository that is organized by folders of document type.

E26.3.1 These items shall be submitted within six (6) months of Substantial Completion of the construction Contract.

E27. DOCUMENT MANAGEMENT SYSTEM

E27.1 The Design Consultant shall undertake their Document Management System activities to satisfy the requirements of the Project.

E27.2 The Design Consultant DMS team shall work collaboratively with the City DMS team to perform the tasks as set out in this specification.

E27.3 System Requirements

E27.3.1 The Design Consultant shall provide a digital technology platform that can satisfy the DMS.

E27.3.2 The DMS shall:

- (a) be an organizational-based system whereby the Documents are available to access, view, organize, store, track, communicate, and submit Documents;
- (b) organize Documents in such a manner that are easily searchable and accessible, segregated by Document type;
- (c) ensure the accessibility and integrity of all Documents, including any associated redundancy and data backups;
- (d) be able to track and provide a register of Documents in the form of a Document Tracking Register; and
- (e) be solely for this Project and shall not incorporate any other data not specific to this Project.

E27.3.3 The Design Consultant shall provide access to the Design Consultant's DMS for the City DMS Team up to a maximum of three (3) users for the Project with sufficient access privileges necessary to accomplish the document management activities as set out.

E27.4 Document Requirements

- E27.4.1 The Design Consultant shall submit, store, and maintain up to date revisions of all Documents on the DMS for the Project, including submittals, RFIs, request for substitutions, NCRs, NCR Plans, change orders, other project management related documentation.
- E27.4.2 The Design Consultant shall provide native files of any Document upon request by the City DMS team.
- E27.4.3 The Design Consultant shall submit any Document markups in electronic form. Non-digital edits and markups will not be permitted (i.e., scanned hand-written edits or markups).
- E27.4.4 The Design Consultant shall individually upload each Document to the DMS as a separate Document at the time of review, with the exception of the following:
- (a) photographs may be packaged into a folder or compressed file provided it contains a specific set of photographs corresponding to a particular date or event;
 - (b) Drawing packages with multiple sheets, corresponding to the same design and Drawing number, shall be uploaded as a single file; and
 - (c) or as expressly permitted in writing by the City Team.

E27.5 Document Tracking

- E27.5.1 The Design Consultant is responsible to organize the Document Tracking Register to provide easy search and view capabilities.
- E27.5.2 The Document Tracking Register shall:
- (a) be digitally prepared and updated on real-time basis;
 - (b) track Documents of different types submitted to the City;
 - (c) at a minimum track Documents according to Document type, tracking number, applicable dates and status;
 - (d) assign a sequential numerical value to Documents of the same Document type; and
 - (e) track Document types on separate sheets within the Document Tracking Register.
- E27.5.3 Document Tracking Register shall incorporate, at a minimum, the following types of Documents:
- (a) submittals;
 - (b) RFIs;
 - (c) RFSS; and
 - (d) NCRs.
- E27.5.4 The Design Consultant shall develop a Document naming convention for all Documents prior to the operation or use of the DMS. The naming convention shall align with the assets identification, and identify the Document type, tracking number, title of Document, design stage (if applicable), and version number of the Document.

E27.6 DMS Operation

- E27.6.1 The Design Consultant shall submit all Documents through the DMS in accordance with this specification.

E28. CONTRACT ADMINISTRATION

- E28.1 Contract Administration Services associated with the Project are provided in Appendix 'D' – Definition of Professional Consultant Services – Engineering, and shall be conducted in accordance with the City of Winnipeg's Project Management Manual (Manuals – Section 9 – Contract Administration. <https://winnipeg.ca/infrastructure/pdfs/manuals/Section9.pdf>)

- E28.2 The Design Consultant is required to provide non-resident Contract Administration Services including but not limited to:
- (a) ensuring persons from the Design Consultant team with demonstrated experience are assigned to administer the Project for the duration of the Project, with personnel changes only upon approval of the City Team;
 - (b) timely processing of accurate progress payments and invoices;
 - (c) conducting pre-award and pre-construction meetings with formal notes as described in the City of Winnipeg's Project Management Manuals;
 - (d) prepare contractor documentation including RFI, NCR, PCN, CWO, and other pertinent communications with the General Contractor; and
 - (e) provision to the City of a complete current report on the Project status on a monthly basis advising of progress, schedule, Project costs, Change in Service, and Change in Work in accordance with D4.5.
- E28.3 The Design Consultant is required to provide resident Contract Administration Services including but not limited to:
- (a) coordination of the day-to-day Site activities;
 - (b) ensuring the General Contractor's conformance to the City of Winnipeg's Manual of Temporary Traffic Control;
 - (c) prepare contractor documentation including daily construction reports, quality assurance and quality control (QA/QC) testing, Site photos, and other pertinent communications with the General Contractor;
 - (d) on-Site inspection according to the following:
 - (i) the Resident Construction Inspector shall lead the coordination of on-Site inspection on behalf of the Design Consultant, averaging twenty-five (25) hours per week on-Site throughout the Construction Services phase;
 - (ii) in addition to E28.3(d)(i), the following inspections shall also take place for the following categories of work:
 - ◆ conduct at a minimum, bi-weekly inspections of electrical, mechanical, and architectural components of work;
 - ◆ conduct at a minimum, weekly inspections of ZEB specific components of work;
 - ◆ conduct at a minimum weekly inspections of Site earthworks including clearing, grading, compaction, and landscaping;
 - ◆ conduct inspections for all major Site servicing components of work including but not limited to underground servicing connections and new utility installations;
 - ◆ conduct inspections for all major structural components of work including piling, concrete pours, structural reinforcing, craning operations, and roof component assembly;
 - ◆ conduct inspections for the removal of all impacted material disturbed at the Site;
 - ◆ provide full time coordination, layout, and inspection services for all asphalt and concrete paving works within the Site; and
 - ◆ provide full time coordination, layout, and inspection services for roadworks within the City of Winnipeg right of way(s) of Oak Point Highway and Selkirk Avenue and other access points;
 - (e) field and/or laboratory testing and verification of construction material quality;
 - (f) field measurement and verification of construction material quantities in a manner so as to minimize Contract disputes;
 - (g) provision of periodic and timely updates to the City Team on progress and/or expenditures, through:

- (i) regular Site meetings with formal minutes as described in the City of Winnipeg's Project Management Manual; and
- (ii) other formal and/or informal documented means;
- (h) representation of the City for the local residents and businesses in a professional manner, with responsible and prompt reaction to reasonable requests (minimizing impact and/or disruption of the Project to the extent possible);
- (i) on-going updates to the lane-closure information line as required;
- (j) Coordinate traffic management and construction work; ensuring the General Contractor's signage is in conformance with the City of Winnipeg's Manual of Temporary Traffic Control and the staging/signage plans in the Contract; maintaining an up to date set of construction staging Drawings as it relates to roadworks within the Oak Point Highway and Selkirk Avenue City of Winnipeg right of way; and
- (k) Supervision of Subconsultant activities on the Site.

E28.4 The Design Consultant will be responsible for:

- (a) on-going Project reporting and support to the City Team for Project reporting in accordance with the City of Winnipeg's Project Management Manual and templates;
- (b) on-going comprehensive management of the Project;
- (c) on-going coordination of meetings with the City Team;
- (d) on-going consultation and coordination with all affected utilities;
- (e) allow sufficient time for review by the City Team and additional personnel;
- (f) preparation of estimated capital costs and cash flow forecasts;
- (g) monitor and update the Project Risk Management Plan where required;
- (h) on-going communication, consultation and coordination with all affected stakeholders, and public relations activities required; and
- (i) any and all associated ancillary services required to successfully complete the Project to the satisfaction of the City Team.

E29. POST CONSTRUCTION

E29.1 Post-Construction Services associated with the Contract are described in Appendix 'D' – Definition of Professional Consultant Services – Engineering, and shall be conducted in accordance with the City of Winnipeg's Project Management Manual.

E29.2 The Design Consultant is required to provide Post-Construction Services including but not limited to:

- (a) preparation of one (1) of each of the following for every construction Contract administered under the Project:
 - (i) Certificate of Substantial Completion;
 - (ii) Certificate of Total Completion; and
 - (iii) Certificate of Acceptance;
- (b) additional Contract Administration for maintenance (pay) items within the warranty period of the construction Contract;
- (c) resolution of deficiencies and/or outstanding warranty issues; and
- (d) submission of a final construction report within six months of Substantial Completion of the construction Contract including the documents noted in E26.3(b).