The City of Saint John

CITY OF SAINT JOHN

REQUEST FOR PROPOSAL

2021-091301P

MATERIALS TESTING AND CONSTRUCTION INSPECTION SERVICES

Sealed proposals, hand delivered or couriered, and addressed to Chris Roberts, SCMP, CPPB, Supervisor, Supply Chain Management, 1st Floor, Municipal Operations Complex, 175 Rothesay Avenue, Saint John, NB, E2J 2B4, and marked on the envelope:

"RFP No. 2021-091301P - Materials Testing and Construction Inspection Services"

will be received until 4:00 p.m. (A.D.T.), Thursday, April 8, 2021.

Due to the ongoing pandemic, there will be no public opening.

The lowest or any proposal not necessarily accepted.

Chris Roberts, SCMP, CPPB
Supervisor
Supply Chain Management

ISSUE DATE: Thursday, March 18, 2021

SCOPE OF WORK

1. GENERAL:

The City of Saint John has prepared this document for Engineering Firms wishing to provide their services to the City of Saint John. This Request for Proposals is to be used as a guide, in combination with good engineering judgment and standard engineering practices and is not intended to be a complete procedural document. It reflects basic standards the Consultant is to adhere to when preparing a Proposal or carrying out work for the City.

The Engineering Firm (Consultant) shall in all matters act as a faithful advisor to the City. The Consultant shall keep the City informed on all matters relating to the design, procurement, and construction and any other aspects forming part of the scope of the Project.

The Consultant for the Project shall be an engineering firm licensed to practice within the Province of New Brunswick. The Consultant's Professional Engineers for the Project shall be registered with the APEGNB. The Consultant's Engineering Technologists for the Project shall be registered with the NBSCETT, with a minimum of two years of municipal road paving experience or laboratory experience and have demonstrated proficiency in performing the inspections or testing. The Consultant's Senior Engineering Technologist for the Project shall be registered with the NBSCETT, with a minimum of five years of municipal road paving experience and have demonstrated proficiency in performing the inspections and project management. The Consultant may propose Technicians with equivalent demonstrated experience for consideration and approval by the Engineer.

For the purposes of this RFP document, “Engineer” shall refer to the City Representative responsible for administering this contract, and “Project Coordinator” shall refer to the City Representative responsible for coordinating in house projects requiring services under this agreement.

The Consultant shall be aware of any follow any orders, policies, directives, standards and guidelines issued by any governmental authority governing all or any part of the work under the RFP.

2. PROJECT DESCRIPTION:

The Project will include materials and construction testing, inspection, and engineering technical services related to asphalt concrete, Portland cement concrete, and soils and granular materials compaction for development, design, and construction projects undertaken by and in the name of the City of Saint John.

Schedule: It is anticipated that the technical services will be required during the construction seasons of 2021 and 2022.

The successful Consultant will be required to provide materials and construction testing, inspection, and engineering technical services as detailed in the Proposal Form and according to the following most current sections of the City of Saint John General Specifications:

Division 13 Excavation, Trenching and Backfill Requirements
Division 23 Portland Cement Concrete
Division 24 Roadway Construction
Division 27 Asphalt Concrete

A set of Forms, developed for reporting the technical services, is attached as an Appendix. The Engineering Firms shall note that these Forms are to be read in conjunction with Division 27 Asphalt Concrete and Division 23 Portland Cement Concrete. The Consultant shall be required to report to the Engineer on a timely basis by email and regular submission of forms will be required.

The Work under this Project includes materials and construction testing, inspection, and engineering technical services for:

2.1 **Asphalt Concrete Testing, Inspection, and Engineering Technical Services**

a. Projects using materials purchased by the City for its own use:
    i. Limited plant inspection and associated testing, once every three weeks on average.
b. Maintenance resurfacing projects of streets and Capital Construction by Contractor:
    i. Full time plant inspection and associated testing when Plant is producing asphalt for City of Saint John Contracts.
    ii. Full time field inspection and testing as required. Field inspection for the 2021 and 2022 construction seasons will also include full time inspection for the adjustment of manholes, catch basins and valve boxes. Quantities for structure adjustments will be recorded for payment by site inspector.
c. Development-Subdivision paving of streets by Contractor:
    i. Full time plant inspection and associated testing as required.
    ii Full time field inspection and testing as required.
d. Quality control (QC) will be carried out by the Contractor and quality assurance (QA) will be carried out by the Consultant. The Consultant will have full authority to reject defective material and workmanship and to suspend the carrying out of any work that is being improperly done, subject to the final decision of the Engineer.

e. Completion of required field testing and laboratory testing in accordance with the latest revision of applicable test methods, standards and procedures to assist in evaluation of the quality of the work.

Note: The City of Saint John requires Certification by the Canadian Council of Independent Laboratories (CCIL) for asphalt testing laboratories. Asphalt laboratories are to have Type “A” Certification – Asphalt Mix Design for Superpave Methods. A copy of the CCIL Certification will be required to be submitted with the 2021 proposals.

2.2 Portland Cement Concrete Field and Laboratory Testing, Inspection, and Engineering Technical Services

a. Certification by the Canadian Council of Independent Laboratories (CCIL) for Concrete Testing Laboratories in accordance with CSA Standard A283 "Qualification Code for Concrete Testing Laboratories":
   i. A copy of the CCIL Certificate shall be submitted with the proposal.

b. Field Testing:
Quality control (QC) will be carried out by the Contractor and quality assurance (QA) will be carried out by the Consultant. The Consultant shall have full authority to reject defective material and workmanship and to suspend the carrying out of any work that is being improperly done, subject to the final decision of the Engineer.
   i. The Project Coordinator requiring testing services will notify the Consultant providing technical services of the timeline for concrete placement.
   ii. Quality Assurance by the Consultant shall consist of the following random testing:
      - Slump test, air test, temperature, and sampling and casting of three compressive strength specimens;
      - Sampling and testing frequency of concrete:
        -The minimum frequency shall be one test for every 5 tests done by the Contractor; and
        -On small Projects involving only a few loads of concrete, one complete test shall be made.

c. Test Samples:
   i. Compressive strength test samples shall consist of three concrete cylinders;
   ii. Moulds for forming concrete test cylinders shall be the reusable type and meeting the requirements of CSA A23.2 - 1D;
   iii. Moulds shall be considered reusable for as long as they permit the sampling of concrete cylinders according to the requirements of CSA A23.2 - 1D; and
   iv. Reusable moulds shall be slightly coated with mineral oil before use.

d. Laboratory testing of hardened concrete according to the latest revision of CSA Standard A23.2 including:
    i. Curing and capping of concrete cylinders; and
    ii. Compressive strength testing obtained at 7 and 28 days.
e. Reporting of field and laboratory testing:
    i. Field test results obtained shall be recorded on the Form - Concrete Testing Summary (see Appendix) and shall be submitted to the City.
    ii. Compressive strength results shall be submitted on the Consultant's standard reporting form.
f. Construction Supervision

    Full time construction management for new installation of concrete curb and sidewalk on a number of projects included with the Maintenance Resurfacing of streets outlined in Item 2.1(b) above and possibly on other in-house projects shall be carried out by the Consultant. The Project Coordinator will notify the Consultant of the timeline for concrete placement. Construction management shall consist of the coordination of construction activities including communication with property owners with respect to the location and width of driveway entrances, providing layout for dropped sections for driveways and pedestrian crosswalk, checking of alignment, grades, cross-slope elevations, curb reveal, compaction of granular base, concrete thickness, concrete finishing, curing, etc., to ensure that all the Contractor's work meets the specifications. In addition, construction management shall consist of quality assurance (QA) for Portland cement concrete and soils compaction and testing as outlined in Items 2.2 (b) and 2.2 (c) above and 2.3 below. Refer also to the Form - Concrete Work Pour Approval in the Appendix.

2.3 Soils and Granular Materials Compaction, Testing, Inspection and Engineering Technical Services

Field and laboratory testing for subbase and base aggregates to be used for street construction:

a. Soil data input for retaining walls and other projects;
b. Soils testing to be carried out by an experienced Engineering Technologist on an hourly rate basis; and
c. Testing of backfill materials and compaction to City Specifications;
    i. Laboratory testing including aggregate gradation, moisture content, Proctor density, etc., in accordance with applicable ASTM test methods;
    ii. Soils compaction testing using nuclear density equipment;
    iii. Sieve analysis of granular materials from Contractor-proposed sources, on City request; and
    iv. Random compaction testing, on City request.

3. PROFESSIONAL SERVICES REQUIRED:

The professional services required for this project are as follows:

Consulting Advisory Services

1. General:

The Consultant will be required to:

a. Act as the City's agent as required in connection with the engineering aspects of the Project;
b. Assist the City by advising on and recommendation on the approving the appropriateness of the program of construction reviews and testing services which may be required by the Consultant or imposed by law, for the execution of the Project by the Contractor; and
c. As an agent for and on behalf of the City, advise the City in writing as to further investigative work which, in the Consultant's opinion, is necessary to ensure that all the Contractor's work meets the Specifications and that the completed Project will function as intended.

Construction and Contract Administration Services

The Consultant will be required to:

a. Using as a minimum the City of Saint John General Specifications and attached Forms, follow a sampling and testing plan (Quality Assurance Plan), milestones and documentation that the Consultant, at the Consultant's professional discretion, considers necessary to enable the Consultant to ascertain whether the City and its Suppliers and Contractors are carrying out the Work in accordance with the General Specifications and the Contract Documents for the Projects (minimum frequencies are provided in Section 2 - Project Description);
b. Make such visits to the Project Site and apply such sampling and testing procedures at the Project Site at intervals appropriate to the stage of construction as required by the Quality Assurance Plan and in accordance with the Contract and Specification requirements for the Projects;
c. Provide all equipment and facilities necessary for the technical services;
d. Provide full time field inspection during milling and asphalt concrete paving operations to ensure that proper construction practices are followed. This will entail, but not be limited to, the supply of experienced Engineering Technologists who will visually verify truck loads, sign truck weight tickets, check uniformity of materials, temperature of mix, joint configuration, asphalt thickness, compaction, surface smoothness, etc.;

e. Provide full time plant inspection during asphalt production for City of Saint John paving operations to ensure adherence to the Asphalt Quality Control Plan. This will entail, but not be limited to, the supply of an experienced Engineering Technologist who will monitor RAP content, ensure there is no deleterious materials being introduced into mix, and verify best management practises for aggregate stock piling are being followed, monitor asphalt mix production for compliance with Job Mix Formula, periodic verification of truck tare weights, etc.;
f. Attend on-site meetings with the Engineer or Engineer's Representative and Contractor's Representative. Grades, cross-slope elevations and height of adjusted structures shall be checked and the Street Surface Preparedness Inspection Form (see Appendix) will be completed prior to commencement of paving operations;
g. Monitor Contractor's compliance with the Quality Control Plan and keep the City informed through periodic reports;
h. During the course of the work, note defects and deficiencies (non-conformances) observed in the Work and review the correction of same when completed by the Contractor. The Contractor or Supplier and the City shall be provided with written notification of any deficiencies requiring correction or non-conforming test results. All details and remedial measures information shall be provided to the City in Daily Reports;
i. Advise the Engineer immediately, verbally and in writing, of any deficiencies, improper practices or other non-conformances;
j. Attend meetings necessary for the coordination of the design, field technical services and the execution of the Work;
k. Contact the Engineer (or Project Coordinator) prior to agreeing with a third party to go to the Work Site to carry out testing services;
l. Upon completion of each respective Project, the Consultant shall provide the Project Coordinator, within 14 calendar days, a Report with the asphalt concrete test results, street name, a sketch of the location of the asphalt concrete placement, final tally of the asphalt tickets for the Project, a copy of the asphalt tickets, and a copy of all Asphalt Paving Daily Reports for the Project;
m. QA test results to be sent directly to the City's Project Coordinator and not to the contractor or QC Consultant unless authorized by the City's Project Coordinator
n. With respect to Developments, the Consultant shall verify with the City as to the acceptance of the street up to crushed gravel base prior to the placement of asphalt concrete. In addition, the Consultant shall verify with the City, and not with the Contractor, that the street is ready for asphalt placement;
o. The Consultant shall include in the Report a sentence recommending acceptance or rejection of the Work for in-house street Projects, Developments and any other in-house Projects. In addition, the Report shall be signed by a Professional Engineer, registered with APEGNB;
p. The Consultant shall assign each project location with a unique identifying number for tracking purposes and include this number on all test result forms and invoices; and

q. Prepare cost summaries for each Project that work is being done on and submit at the end of each month to the Engineer responsible for administering this contract to review for payment. Prepare cost summaries for each project location for work being done on Developments and submit as work is completed. The Engineer will distribute the summaries to the respective Project Coordinator(s) who will review and approve their respective summaries, forwarding approved summaries within one (1) week of receipt back to the Engineer. The Consultant shall prepare a Master Invoice for all Projects being worked on during the month of billing and submit at the end of each month to the Engineer. The Engineer shall review the itemized Master Invoice from the Consultant and approved summaries from each Project Coordinator. The Master Invoice shall be the total of all project summaries. From each monthly Master Invoice, the Engineer will prepare an Interim Payment Certificate.

4. METHOD OF PAYMENT:

At the end of each month the successful Consultant must submit to the Engineer a cost summary for each project that work is being done on. Similar cost summaries must be submitted for each project location as work is completed for Development projects. The cost summaries must include the following:

a. The Unique Project Number assigned by the Consultant;
b. A description of the Work carried out;
c. Breakdown of costs for labour, materials and third party supplies; and
d. Supporting documents including daily time and expense cards, approvals for change in scope/extra work.

The successful Consultant is to submit to the Engineer a Master Invoice as a summary of all individual cost summaries for the month and must include:

a. The project locations and unique project numbers;
b. The signature of an authorized representative of the company;
c. The cost summary of the Work carried out for each project; and
d. Total amount invoiced for the month.

No part of the contingency allowance shall be expended without the written direction of the Engineer, and any part not so expended shall be deducted from the contingency allowance.

5. TERMINATION OF CONTRACT:

The City will reserve the right to terminate the Contract with the Consultant (Engineering Firm) by written notice at any time during the course of the Work. In such an event, payment will be made only for the work completed up to the time of termination.

6. CONTENT OF PROPOSAL:

The Consultant shall confirm a clear understanding of the Work to be undertaken as described in the Scope of Work. The Proposal must demonstrate that the Consultant and Consultant Staff (team) have recent and significant experience with this type of Work. When noting examples of experience gained on similar projects, the proposal must also note which current staff members worked on each project and what their role was. The Proposal must specifically address all requirements of the required Work and any matters related to its successful implementation. The Proposal must indicate what role each of the Consultant's team will be carrying out for the Project. The Consultant may not substitute the Project team members noted in the Proposal without permission of the City. Clarity, style, organization, visual impact and scope are factors that shall be considered in its presentation. Proposals are to be submitted in two distinct and separate parts: a "Technical Proposal" and a "Financial Proposal" as outlined hereunder.

Part A: TECHNICAL PROPOSAL:

Technical proposals shall be structured using the following format:

- Table of Contents.
- Work Plan and Schedule.
- Project Team.
- Experience with Similar Projects.
- Supporting Information.

Part B: FINANCIAL PROPOSAL:

The Consultant shall complete the attached Proposal Form and submit this Proposal Form as the Financial Proposal in a separate properly identified sealed envelope. Payment will be made to the Consultant in accordance with the amounts provided in the Proposal Form based on the actual quantities of work acceptably performed. The Costs/pricing to include any additional costs associated with COVID-19 measures.

7. EVALUATION CRITERIA:

For the purposes of this Request for Proposal, submissions will be evaluated on the following criteria:

- QUALITY AND COMPLETENESS – Has the Proposal addressed all of the needs raised? Is the Proposal presented in an organized and professional manner? (Criteria weight = 10 points)

- CONSULTANT'S EXPERIENCE – Has the Proposal demonstrated a level of expertise in keeping with the requirements of this Project? (Include references for projects of a similar nature.) (Criteria weight = 25 points)

- EXPERIENCE OF EMPLOYEES/SUB-CONSULTANTS – Has the Proposal demonstrated a level of expertise for the employees of the Consultant and Sub-Consultants listed? (Criteria weight = 35 points)

- METHODOLOGY – Does the approach to the Project outlined in the Proposal address, in a realistic sense, attainable goals and is it in keeping with the City's expectations for the Project? (Criteria weight = 80 points)

- COST – Cost will be a factor, however not the only factor to be considered. (Criteria weight = 50 points)

Consultants are advised that Proposals will be evaluated solely on the basis of information submitted in accordance with the Request for Proposals. The City reserves the right, if deemed necessary, to short-list the Proposals and to request an additional verbal presentation from each short-listed proponent. The Consultant may supplement their presentation with a summary in written format to clarify points raised during the process.

8. INSURANCE REQUIREMENTS:

The consulting engineering firm shall obtain and keep in force, during the full duration of this contract, an Errors and Omissions Liability Policy with a minimum limit of two million dollars, and one million dollars per claim. The Policy shall include a clause stating that thirty days notice of cancellation of this Policy will be given to the City of Saint John, by the Insurers. Provide evidence of this policy.

The Consultant must provide proof of current coverage from WorkSafeNB prior to the start of the work.

The Consultant must provide evidence of the following insurance coverage:

General Liability with minimum limits of two million dollars per occurrence. The Policy shall include:

- operations of the Consultant in connection with this Project;
- products and completed operations coverage;
- contractual liability with respect to this Project;
- the City of Saint John added as an additional insured;
- a cross liability clause;
- non-owned automobile;
- thirty days notice of cancellation of this Policy will be given to the City of Saint John, by the insurers;

- Standard automobile insurance for owned automobiles with at least the minimum limits allowed by law.

9. COVERING LETTER:

All proposal submissions to the City of Saint John are to be prefaced with a covering letter which contains an original signature of the individual authorized by the Consultant to submit proposals on their behalf.

10. STANDARD TERMS AND CONDITIONS:

Addenda

Periodically, the City of Saint John is required to issue notification of changes or corrections to a bid document by way of addenda. Normally these notifications will have direct bearing on the cost of a project and will influence the way you bid. Therefore, it is important that the City have assurances that you in-fact received the notification.

Proponents are responsible for obtaining all addenda issued by the City. Addenda may be obtained from the City's website (www.saintjohn.ca) under the menu option "Tender and Proposals".

Bidders are required to sign and include all addenda with their bid submission.

Failure to include a copy of all signed addenda with the bid submission, may result in rejection of your bid regardless of whether the changes noted in the addendum are included in the bid submission or not.

Advisory Notice

Periodically, the City of Saint John is required to issue clarification notices to a bid document in the form of an Advisory Notice. Normally these notifications will not have direct bearing on the cost of a project and will not influence the way you bid.

Proponents are responsible for obtaining all advisory notice(s) issued by the City. Advisory Notice(s) may be obtained from the City's website (www.saintjohn.ca) under the menu option "Tender and Proposals".

Bidders are instructed to sign the Advisory Notice and return it either by fax to (506) 658-4742 or email to chris.roberts@saintjohn.ca prior to the closing date.

Failure to comply with the instructions on an advisory may result in rejection of your bid.

Review of Proposals

The evaluation committee may invite proponents to meet with the review committee to make an oral/visual presentation in support of their proposal. The City will provide the meeting venue at its cost. The proponent shall bear its own costs related to such meeting.

Additional Information from Proponents

The City of Saint John reserves the right during evaluation of the bids to seek further information from any proponent and to utilize that information in evaluation and award without becoming obligated to seek further information from any other proponents.

Clarification of Bids

The City of Saint John reserves the right in its sole discretion to clarify any bid after close of bidding without becoming obligated to clarify any other bid.

Negotiation

The City reserves the right in its sole discretion to negotiate the final terms and conditions of the engagement contract with the most probable candidate for award prior to award of the engagement.

Inconsistency between Paper and Electronic Form

If there is any inconsistency between the paper form of a document issued by or on behalf of the City to proponents and the digital, electronic or other computer readable form, the paper form of the document prevails.

Acceptance, Revocation and Rejection of Proposals

The proposal constitutes an offer which shall remain open and irrevocable until 90 days after the date of the proposal opening.

Reserved Rights

The City reserves the right to:

a) Reject an unbalanced Proposal. For the purpose of this section, an unbalanced Proposal is a Proposal containing a unit price which deviates substantially from, or does not fairly represent, reasonable and proper compensation for the unit of work bid or one that contains prices which appear to be so unbalanced as to adversely affect the interests of the City. The City reserves the right to use Proposals submitted in response to other like or similar Requests for Proposals as a guideline in determining if a bid is unbalanced.

b) Amend or modify the scope of a project, and/or cancel or suspend the Bid Solicitation at any time for any reason.

c) Require proponents to provide additional information after the Closing Date for the Bid Solicitation to support or clarify their bids.

d) Not accept any or all bids.

e) Not accept a bid from a bidder who is involved in litigation, arbitration or any other similar proceeding against the City.

f) Reject any or all bids without any obligation, compensation or reimbursement to any bidder or any of its team members.

g) Withdraw a Bid Solicitation and cancel or suspend the Bid Solicitation process.

h) Extend, from time to time, any date, any time period or deadline provided in a Bid Solicitation (including, without limitation, the Bid Solicitation Closing Date), upon written notice to all bidders.

i) Assess and reject a bid on the basis of
   i. information provided by references;
   ii. the bidder's past performance on previous contracts;
   iii. information provided by a bidder pursuant to the City exercising its clarification rights under the Bid Solicitation process;
   iv. the bidder's experience with performing the type and scope of work specified including the bidder's experience;
   v. other relevant information that arises during a Bid Solicitation process.

j) Waive formalities and accept bids which substantially comply with the requirements of the Bid Solicitation.

k) Verify with any bidder or with a third party any information set out in a bid.

l) Disqualify any bidder whose bid contains misrepresentations or any other inaccurate or misleading information.

m) Disqualify any bidder who has engaged in conduct prohibited by the Bid Solicitation documents.

n) Make changes including substantial changes to the bid documents provided that those changes are issued by way of an advisory notice in the manner set out in the Bid Solicitation documents.

o) Select any bidder other than the bidder whose bid reflects the lowest cost to the City.

p) Cancel a Bid Solicitation process at any stage.

q) Cancel a Bid Solicitation process at any stage and issue a new Bid Solicitation for the same or similar deliverable.

r) Accept any bid in whole or in part.

And these reserved rights are in addition to any other express rights or any other rights which may be implied in the circumstances and the City shall not be liable for any expenses, costs, losses or any direct or indirect damages incurred or suffered by any bidder or any third party resulting from the City exercising any of its express or implied rights under a Bid Solicitation.

Limitation of Liability and Waiver

In every Bid Solicitation, the City shall draft the documents such that each bidder, by submitting a bid, agrees that:

a) Neither the City nor any of its employees, agents, advisers or representatives will be liable, under any circumstances, for any claims arising out of a Bid Solicitation process including but not limited to costs of preparation of the bid, loss of profits, loss of opportunity or any other claim.

b) The bidder waives any claim for any compensation of any kind whatsoever including claims for costs of preparation of the bid, loss of profit or loss of opportunity by reason of the City's decision to not accept the bid submitted by the bidder, to award a contract to any other bidder or to cancel the Bid Solicitation process, and the bidder shall be deemed to have agreed to waive such right or claim.

11. TERM OF AGREEMENT:

The term of this contract will be for a period of two years with year two contingent on the approval of funds by Common Council. (2021, 2022)

There is no guaranteed minimum amount of work in this agreement. Quantities listed on the "Schedule of Quantities" page are estimated yearly quantities and the City reserves the right to purchase more or less of the units specified.

12. SUBMITTALS:

When preparing the Agreement for Engineering Services, the Engineering Firm (Consultant) is required to submit a "Business Corporation Act Certificate" to the Engineer.

13. INQUIRIES:

All inquiries regarding this Request for Proposal shall be submitted in writing, before 4:00 p.m., local time, Wednesday, March 31, 2021, only to the attention of:

Chris Roberts, SCMP, CPPB
Supervisor
Supply Chain Management
Fax: (506) 658-4742
chris.roberts@saintjohn.ca

Responses to inquiries will be in the form of addenda and/or advisories where applicable (see section 10). Verbal information shall not be binding upon the City. Inquiries received after the above noted time will not receive a response.

14. ATTACHMENTS:

The attached Appendix provides the Following Forms:

1. Superpave Mix Design Submission Report
2. Asphalt Paving Daily Report
3. Street Surface Preparedness Inspection
4. Asphalt Concrete Compaction Test Report
5. Aggregate Gradation, Asphalt Cement Content, and Superpave Properties Test Report
6. Non-Conformance Report
7. Concrete Work Pour Approval
8. Concrete Testing Summary

15. OTHER RELEVANT DOCUMENT:

The following document is available on the City website www.saintjohn.ca under Corporate Administration->Purchasing & Materials Management:

2020 City of Saint John General Specifications.pdf

16. SUBMISSION OF PROPOSALS:

Consultants shall deliver six (6) copies of the Technical Proposal and supporting information, six (6) copies of the Financial Proposal and one (1) electronic version of both the Technical and Financial Proposals (on a flash drive) no later than 4:00 pm, local time, Thursday, April 8, 2021, clearly indicating the Consultant's name and address and marked "Proposal 2021-091301P: Materials Testing and Construction Inspection Services", to the attention of:

Chris Roberts, SCMP, CPPB
Supervisor
Materials Management
City of Saint John
175 Rothesay Avenue
Saint John, NB, E2J 2B4

Notes:

1. Late proposals or proposals submitted by facsimile will be rejected.
2. The City assumes no responsibility for improperly addressed or delivered proposals.
3. The City of Saint John does not, by virtue of this proposal call, commit to an award of this bid, nor does it commit to accepting the lowest or any proposal submitted, but

reserves the right to award this proposal in any manner deemed to be in the best interest of the City.

4. The Financial Proposal is to be submitted in the Consultant's package in a separate sealed envelope, clearly marked as "Financial Proposal: Materials Testing and Construction Inspection Services", with the Consultant's name and address.
5. Consultants must propose on the entire project – incomplete proposals will be rejected.

Due to the ongoing pandemic, there will be no public opening.

APPENDIX

FORMS

1. Superpave Mix Design Submission Report
2. Asphalt Paving Daily Report
3. Street Surface Preparedness Inspection
4. Asphalt Concrete Compaction Test Report
5. Aggregate Gradation, Asphalt Cement Content, and Superpave Properties Test Report
6. Non-Conformance Report
7. Concrete Work Pour Approval
8. Concrete Testing Summary
9. Proposal Form

SUPERPAVE MIX DESIGN SUBMISSION REPORT

Transportation & Environment Services

SAINT JOHN

ENGINEERING FIRM: _____
TELEPHONE: _____
EMAIL: _____

CONTRACT NUMBER: _____ CONTRACTOR: _____
CONTRACT NAME: _____

SUPERPAVE MIX INFORMATION:

Date of Submission: _____
Mix Type: _____
Design ESAL's: _____
Asphalt Plant: _____
QC Laboratory: _____

THE ABOVE SUBMISSION HAS BEEN REVIEWED BY THE QUALITY ASSURANCE (QA) CONSULTANT

☐	This report is confirmation that the above submission conforms to the requirements of the Contract and City of Saint John General Specifications and therefore the use of this mix for this Contract is approved. The approval of this Superpave Hot-Mix Asphalt (HMA) by the Consultant shall not alleviate the Contractor from full responsibility for the quality and applicability of the mix design and hot-mix asphalt throughout the work.
☐	The above submission **does not conform** to the Contract and City of Saint John General Specifications requirements for the following specific reasons:
☐	A new submission for the Superpave Hot-Mix Asphalt Mix Design is Required.

GENERAL COMMENTS

CONSULTANT ENGINEER'S SIGNATURE: _____

DATE: _____

Original To: Project Coordinator Copy To: Contractor's Representative FORM: SPMA

ASPHALT PAVING DAILY REPORT

Transportation & Environment Services

SAINT JOHN

ENGINEERING FIRM: _____ QA TECHNOLOGIST: _____

TELEPHONE: _____ HOURS WORKED: _____

EMAIL: _____ MILEAGE (KM): _____

CONTRACT NUMBER: _____ CONTRACTOR: _____ PROJECT ID: _____

CONTRACT NAME: _____

LOCATION: _____

QC REPRESENTATIVE: _____ WEATHER: _____

QC Reports Received from Contractor:	Completed QA Test Reports:

Attach Copies of Reports and List Here with Non-Conformances/Comments

HOT-MIX PLANT QA INSPECTION

Inspection Completed: ☐ Yes ☐ No Date: _____ Time: _____

Comments:

ASPHALT PAVING SITE QA ACTIVITIES

Time	Mix Type	Lift	Temp °C	Location or Lane	Tonnes	Station		Distribution Calculation kg/m^2				
						Start	Finish	Length (m)	Width (m)	Area (m^2)	Desired	Actual

Attach Copy of Day's "Aggregate Gradation, Asphalt Cement Content and Superpave Properties Test Report", "Asphalt Concrete Compaction Test Report", and Summary of Truck Weight Tickets.

GENERAL COMMENTS

CONSULTANT'S QA REPRESENTATIVE SIGNATURE: _____

DATE: _____

Original To: Project Coordinator Copy To: Consultant's Engineer FORM: APDR

City of Saint John
Asphalt Resurfacing Program

City of Saint John

Street Surface Preparedness Inspection Form

Contractor: _____

Contract Number: _____ Date: _____

Location: _____

This form certifies that the following surface conditions have been completed prior to paving operations as directed by the Engineer or Engineer's representative and inspected. Asphalt resurfacing shall take place within fourteen (14) calendar days upon issuing this form.

CONDITION	ACCEPTED	N/A	COMMENTS
Longitudinal & transverse slope control (grades)	❑	❑	_____
All manhole covers and valve boxes raised to specified elevation?	❑	❑	_____
Is surface milled off entirely?	❑	❑	_____
Asphalt padding completed?	❑	❑	_____
Is entire road surface, including vertical surfaces, tacked with bituminous tack coat?	❑	❑	_____
Is entire road surface broomed and debris free?	❑	❑	_____
Other: (Specifiy) _____	❑	❑	_____

This form does not release the contractor from deficiencies that may arise during completion of this project. Further inspections will take place upon completion of the resurfacing operation.

_____ _____

ENGINEER'S REPRESENTATIVE CONTRACTOR'S REPRESENTATIVE

City of Saint John
Asphalt Resurfacing Program

City of Saint John

Underground Structures Inspection Form

Contractor: _____

Contract Number: _____ Date: _____

Location: _____

This form certifies that the following City owned underground structures have been rebuilt and/or adjusted as directed by the Engineer or Engineer's representative and that this operation was done to City standards.

STRUCTURE	NUMBER	N/A	COMMENTS
Water Chamber	_____	☐	_____
Water Service Box	_____	☐	_____
Sanitary Sewer Manhole	_____	☐	_____
Storm Sewer Manhole	_____	☐	_____
Catch Basin	_____	☐	_____
Other: (Specify)	_____	☐	_____

This form does not release the contractor from deficiencies that may arise during the completion of this project. Further inspections will take place upon completion of the resurfacing operation.

_____ _____

ENGINEERING DIVISION REPRESENTATIVE CONTRACTOR'S REPRESENTATIVE

ASPHALT CONCRETE COMPACTION TEST REPORT

Transportation & Environment Services

SAINT JOHN

ENGINEERING FIRM: _____ QA TECHNOLOGIST: _____
TELEPHONE: _____
EMAIL: _____

CONTRACT NUMBER: _____ CONTRACTOR: _____ PROJECT ID: _____
CONTRACT NAME: _____
LOCATION: _____
QC REPRESENTATIVE: _____ QA LAB TECHNOLOGIST: _____

ASPHALT HOT-MIX INFORMATION

Hot-Mix Asphalt Type: _____ Asphalt Pavement Lift: _____ Design ESAL's: _____
Date/Time Hot-Mix Asphalt Tested Was Placed: _____
Traffic on Asphalt Pavement Following Placement: ☐ YES ☐ NO
General Appearance of Asphalt Pavement: _____

Coring or Nuclear Density Testing Date/Time: _____
Date/Time Cores Received at QA Laboratory: _____
Date/Time Testing Completed: _____

TEST RESULTS

Test No.	Test Type	Test Location	Lift Thickness (mm)	Compacted Density (kg/m^3)	Corrected Compacted Density (kg/m^3)	Maximum Relative Density (kg/m^3)	Compaction Percent	A/B/R
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Test Type:
C – Core
N – Nuclear Density Gauge
Calibrated: ☐ YES ☐ NO
Calibration Factor: _____

Compaction Specification:
Percent Maximum Relative Density (MRD)
A – Acceptable: _____
B – Borderline: _____
R – Rejectable: _____

GENERAL COMMENTS

CONSULTANT QA REPRESENTATIVE'S SIGNATURE: _____
DATE: _____

Original To: Project Coordinator Copy To: Consultant's Engineer FORM: ACCT

AGGREGATE GRADATION, ASPHALT CEMENT CONTENT AND SUPERPAVE PROPERTIES TEST REPORT

Transportation & Environment Services

SAINT JOHN

ENGINEERING FIRM: _____ QA TECHNOLOGIST: _____

TELEPHONE: _____ EMAIL: _____

CONTRACT NUMBER: _____ CONTRACTOR: _____ PROJECT ID: _____

CONTRACT NAME: _____

LOCATION: _____

QC REPRESENTATIVE: _____ QA LAB TECHNOLOGIST: _____

Hot-Mix Asphalt Type: _____ Asphalt Pavement Lift: _____ Design ESAL's: _____

Date/Time Samples Received at QA Lab: _____ Date/Time Testing Completed: _____

No.	Mix Type	Date	Time	"tonne" t	Location	Plate or Bulk	Mix/Surface/Air Temperature °C	Mat Thickness (mm)	Mat Appearance
1									
2									
3									
4									
5									

GRADATION TEST RESULTS, PERCENT PASSING

Sieve Size	JMF	Tolerances		Sample #1		Sample #2		Sample #3		Sample #4		Sample #5	
		± B	± R		A/B/R		A/B/R		A/B/R		A/B/R		A/B/R
25.0 mm													
19.0 mm													
16.0 mm													
12.5 mm													
9.5 mm													
4.75 mm													
2.36 mm													
1.18 mm													
600 µm													
300 µm													
150 µm													
75 µm													
PGAC Content %													

Testing Comments: 1. Calibrated Ignition Oven Method Used 2. Tolerances (A/B/R) to also be Applied for DLS.

VOLUMETRIC PROPERTIES

Test	Specification		Sample #1		Sample #2		Sample #3		Sample #4		Sample #5	
MRD, G_{mm}												
BRD, G_{mb}												
Air Voids, AV %												
VMA, %												
VFA, %												
$\%G_{mm}$ @ N_{des}												
Dust Proportion												

Testing Comments: 1. *Out of Specification 2. G_{sb} (Mix Design) Used for VMA

GENERAL COMMENTS

CONSULTANT QA REPRESENTATIVE'S SIGNATURE: _____

DATE: _____

Original To: Project Coordinator Copy To: Consultant's Engineer FORM: GACS

NON-CONFORMANCE REPORT
Transportation & Environment Services

SAINT JOHN

ENGINEERING FIRM: _____
TELEPHONE: _____
EMAIL: _____

CONTRACT NUMBER: _____ CONTRACTOR: _____ PROJECT ID: _____
CONTRACT NAME: _____
LOCATION: _____

A NON-CONFORMANCE OCCURRED ON THIS PROJECT ON: DATE: _____ TIME: _____

- ☐ Non-Conformance for a Required Submission
- ☐ Non-Conformance for a Quality Control (QC) Performance Requirement
- ☐ Non-Conformance for Construction Equipment or Method
- ☐ Deficient Material or Workmanship

Identification and Description of the Non-Conformance, Including Specific Contract and General Specification Requirements:

Extent of the Non-Conformance and its Impact on Pavement Performance:

Proposed Corrective Action:

NOTE: THIS PROPOSED CORRECTIVE ACTION IS SUBJECT TO THE ENGINEER'S REVIEW AND APPROVAL. ANY DISPUTES SHALL BE RESOLVED AS PER THE PROCEDURES SET OUT IN THE CONTRACT SPECIFICATIONS.

Non-Conformance Identified By: _____ Date: _____

QA CONSULTANT ENGINEER'S SIGNATURE: _____

DATE: _____

Original To: Project Coordinator Copy To: Contractor's Representative FORM: GNCR

MUNICIPAL OPERATIONS & ENGINEERING

City of Saint John

CONCRETE WORK POUR APPROVAL FORM

CONTRACT INFORMATION				
Contract No.:		**Contractor:**		
Contract Name:				
Location:		**Date:**		
Inspector:				
Weather Conditions:		**Temperature:**		**Time of Pour:**
No.	**Description**	**Accepted**	**Rejected**	**Comments**
1	**Sub-grade Conditions**			
2	**Compaction**			
3	**Grades & alignment**			
4	**Driveway layout**			
5	**Manholes, catch basins, service boxes**			
6	**Reinforcing steel**			
7	**Formwork**			
8	**Fire hydrants, telephone poles, traffic signs**			
9	**Accessibility ramps**			
10				
11				
City Representative			**Contractor's Representative**	
Date			**Date**	

City of Saint John

MUNICIPAL OPERATIONS
& ENGINEERING

CONCRETE TESTING SUMMARY

CONTRACT NO: _____

CONTRACT NAME: _____

CONTRACTOR: _____

LOCATION: _____

APPLICATION:	CURB	SIDEWALK	CURB/GUTTER	RETAINING WALL
METHOD:	FORM	SLIP-FORM	OTHER (SPECIFY):	

Concrete Specifications (Division 23 - Portland Cement Concrete):

Air: 5-8%; **Slump:** Curb 40 mm ± 10 mm; S/W 80 mm ± 20 mm; **Max. Size Aggregate** 19mm; **Strength:** 32 MPa @ 28 days
Conc. Temp. > 10 °C and < 35 °C; **Air Temp.** > 5 °C and < 27°C

CONCRETE SUPPLIER _____ TICKET NO. _____

WEATHER _____ TRUCK NO. _____

TEST NO.	LIMITS OF CONCRETE POUR (From/To)	TIME		AIR %	SLUMP (mm)	TEMPERATURE		WATER ADDED* (Litres)	LOAD SIZE (m^3)
		BATCH	TEST			AIR °C	CONC. °C		

*Water is not to be added to the concrete other than at the batching plant without permission of the Engineer.

CONCRETE TEST CYLINDERS: CYLINDERS TAKEN ON TEST NUMBER: _____

REMARKS: _____

_____

_____

_____

_____ _____

DATE ENGINEER'S REPRESENTATIVE

Copies: 1. Engineer; 2. Inspector; 3. Consultant

PROPOSAL FORM

PROPOSAL FORM

PROPOSAL NUMBER:2021-091301P

TITLE: MATERIALS TESTING & CONSTRUCTION INSPECTION SERVICES
ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE & SOILS COMPACTION

UNIT PRICE TO BE EITHER TYPEWRITTEN OR PRINTED NUMERICALLY

ITEM NO.	DESCRIPTION	UNIT	2021			2022		
			EST. QTY.	BID PRICE	TOTAL ($)	EST. QTY.	BID PRICE	TOTAL ($)
A	**ASPHALT CONCRETE TESTING AND INSPECTION**							
a)	Engineering Technologists for providing testing and inspection at the plant, paving site and laboratory, as specified in the Terms of Reference	Hr	4,300			3,300		
b)	Senior Engineering Technologists for project management and consultation, as required	Hr	450			450		
c)	Professional Engineer for submission review, report review, non-conformance review, and consultation as required.	Hr	66			66		
d)	Mileage (to and from plant, work site, and laboratory)	km	9,600			9,600		
e)	Calibrated nuclear density test (including nuclear density gauge and not including Engineering Technologist time).	Ea	215			215		

PROPOSAL NUMBER:2021-091301P

TITLE: MATERIALS TESTING & CONSTRUCTION INSPECTION SERVICES
ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE & SOILS COMPACTION

UNIT PRICE TO BE EITHER TYPEWRITTEN OR PRINTED NUMERICALLY

ITEM NO.	DESCRIPTION	UNIT	2021			2022		
			EST. QTY.	BID PRICE	TOTAL ($)	EST. QTY.	BID PRICE	TOTAL ($)
	ASPHALT CONCRETE TESTING AND INSPECTION - CONT'D							
f)	Laboratory Testing							
i)	QA Superpave mix PGAC content, aggregate gradation, and volumetric properties by Superpave gyratory compactor (G_{mb}, G_{mm}, AV, VMA, VFA, $\%G_{mm}@N_{design}$, DR). Visual verification for the presence of any deleterious fibres or materials	Ea	215			215		
ii)	QA pavement cores thickness, BRD, MRD from i), and percent compaction	Ea	215			215		
iii)	Ignition oven calibration, basic no aggregate correction factors	Ea	14			14		
iv)	PGAC compliance verification of the nominal grade of an asphalt binder	Ea	6			6		
v)	Verification of Superpave mix design with aggregate consensus properties, specific gravity and absorption of aggregates, preparation, and testing to verify mix properties using two specimens taken to N_{design}	Ea	6			6		
vi)	Superpave Tensile Strength Ratio (TSR)	Ea	6			6		

PROPOSAL NUMBER:2021-091301P

TITLE: MATERIALS TESTING & CONSTRUCTION INSPECTION SERVICES
ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE & SOILS COMPACTION

UNIT PRICE TO BE EITHER TYPEWRITTEN OR PRINTED NUMERICALLY

ITEM NO.	DESCRIPTION	UNIT	2021			2022		
			EST. QTY.	BID PRICE	TOTAL ($)	EST. QTY.	BID PRICE	TOTAL ($)
	ASPHALT CONCRETE TESTING AND INSPECTION - CONT'D							
vii)	Superpave aggregate consensus properties							
1	Fractured particles in coarse aggregate	Ea	6			6		
2	Flat and elongated particles in coarse aggregate	Ea	6			6		
3	Uncompacted void content of fine aggregate	Ea	6			6		
4	Sand equivalent of fine aggregate	Ea	6			6		
viii)	Aggregate gradation and asphalt cement content of RAP sample	Ea	6			6		
viiii)	Micro-Deval (coarse or fine aggregate)	Ea	9			9		
x)	Specific gravity and absorption (coarse or fine aggregate)	Ea	9			9		
xi)	Gradation (sieve) analysis	Ea	15			15		
	Note: Item f) above is inclusive of all Engineering Technologist's time, testing equipment, and consumables required for each test.							

PROPOSAL FORM

PROPOSAL NUMBER:2021-091301P

TITLE: MATERIALS TESTING & CONSTRUCTION INSPECTION SERVICES
ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE & SOILS COMPACTION

UNIT PRICE TO BE EITHER TYPEWRITTEN OR PRINTED NUMERICALLY

ITEM NO.	DESCRIPTION	UNIT	2021			2022		
			EST. QTY.	BID PRICE	TOTAL ($)	EST. QTY.	BID PRICE	TOTAL ($)
	ASPHALT CONCRETE TESTING AND INSPECTION-CONT'D							
g)	Contingency Allowance	LS	1	60,000.00	60,000.00	1	60,000.00	60,000.00
	AMOUNT "A" (ASPHALT CONCRETE TESTING AND INSPECTION)	----	----	----		----		

PROPOSAL NUMBER:2021-091301P

TITLE: MATERIALS TESTING & CONSTRUCTION INSPECTION SERVICES
ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE & SOILS COMPACTION

UNIT PRICE TO BE EITHER TYPEWRITTEN OR PRINTED NUMERICALLY

ITEM NO.	DESCRIPTION	UNIT	2021			2022		
			EST. QTY.	BID PRICE	TOTAL ($)	EST. QTY.	BID PRICE	TOTAL ($)
B	**PORTLAND CEMENT CONCRETE TESTING AND INSPECTION**							
a)	Engineering Technologists for providing construction supervision, inspection, and testing for new installation of concrete curb and sidewalk, sampling of concrete, carrying out field testing including air content, slump, temperature, and casting specimens for compressive strength tests. In addition, the Engineering Technologists shall carry out curing, capping of concrete test samples, and reporting of field and laboratory test results, as required, as specified in the Terms of Reference.	Hr	2250			2,250		
b)	Compressive strength of concrete including the supply of molds, per cylinder	Ea	330			330		

PROPOSAL FORM

PROPOSAL NUMBER:2021-091301P

TITLE: MATERIALS TESTING & CONSTRUCTION INSPECTION SERVICES
ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE & SOILS COMPACTION

UNIT PRICE TO BE EITHER TYPEWRITTEN OR PRINTED NUMERICALLY

ITEM NO.	DESCRIPTION	UNIT	2021			2022		
			EST. QTY.	BID PRICE	TOTAL ($)	EST. QTY.	BID PRICE	TOTAL ($)
	PORTLAND CEMENT CONCRETE TESTING AND INSPECTION - CONT'D							
c)	Mileage (to and from work site and laboratory)	km	9600			9,600		
d)	Contingency Allowance	LS	1	$20,000.00	$20,000.00	1	$20,000.00	$20,000.00
	AMOUNT "B" (PORTLAND CEMENT CONCRETE)	----	----	----		----		

PROPOSAL FORM

PROPOSAL NUMBER:2021-091301P

TITLE: MATERIALS TESTING & CONSTRUCTION INSPECTION SERVICES
ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE & SOILS COMPACTION

UNIT PRICE TO BE EITHER TYPEWRITTEN OR PRINTED NUMERICALLY

ITEM NO.	DESCRIPTION	UNIT	2021			2022		
			EST. QTY.	BID PRICE	TOTAL ($)	EST. QTY.	BID PRICE	TOTAL ($)
C	**SOILS COMPACTION TESTING AND INSPECTION**							
a)	Engineering Technologist for providing field testing of in-place density of compacted granular materials and laboratory testing of base and subbase aggregates, as required, as per the Terms of Reference	Hr	172			172		
b)	Professional Geotechnical Engineer for providing consultation, as requested.	Hr	27			27		
c)	Mileage to and from the laboratory and work site	km	330			330		
d)	Laboratory and Site Testing (not including Engineering Technologist time)							
i)	Sieve analysis	Ea	15			15		
ii)	Moisture/density relationship	Ea	15			15		

PROPOSAL FORM

PROPOSAL NUMBER:2021-091301P

TITLE: MATERIALS TESTING & CONSTRUCTION INSPECTION SERVICES
ASPHALT CONCRETE, PORTLAND CEMENT CONCRETE & SOILS COMPACTION

UNIT PRICE TO BE EITHER TYPEWRITTEN OR PRINTED NUMERICALLY

ITEM NO.	DESCRIPTION	UNIT	2021			2022		
			EST. QTY.	BID PRICE	TOTAL ($)	EST. QTY.	BID PRICE	TOTAL ($)
	SOILS COMPACTION TESTING AND INSPECTION - CONT'D							
iii)	Nuclear Density (including nuclear density gauge).	Each	60			60		
e)	Contingency Allowance	LS	1	$10,000.00	$10,000.00	1	$10,000.00	$10,000.00
	AMOUNT "C" (SOILS COMPACTION TESTING AND INSPECTION)	----	----	----	----	----	----	----
	SUB-TOTALS (ITEMS A+B+C)	----	----	----	----	----	----	----
	HARMONIZED SALES TAX (HST) 15%	----	----	----	----	----	----	----
	TOTALS INCLUDING HST	----	----	----	----	----	----	----
	TOTAL FOR 2021 AND 2022 INCLUDING HST							