



City Council Memorandum

To: Mayor Fasbender & City Council Members
From: Ryan Stempski – Public Works Director/City Engineer
Date: July 1, 2024
Item: Accept Proposal and Authorize Work – 2025 Neighborhood Infrastructure Improvements Geotechnical Investigation

Council Action Requested:

The Council is requested to authorize the Engineering Department to enter a contract with Braun Intertec for the purpose of investigating subsurface conditions for the proposed 2025 Neighborhood Infrastructure Improvements Project.

Background Information:

On May 6, 2024, the City Council authorized the Engineering Department to begin collecting field data as part of the feasibility analysis for the 2025 Neighborhood Infrastructure Improvements Project. Geotechnical investigation is a key component of this data collection process as it enables staff to make informed decisions on the existing conditions of these roadways and the corrections necessary to improve them.

Three proposals were solicited from qualified vendors to provide geotechnical investigation services as well as an accompanying report of recommendations. A summary of the three proposals provided are as follows:

- **Braun Intertec – \$22,014**
- American Engineering Testing (AET) – \$32,087
- WSB – \$46,630

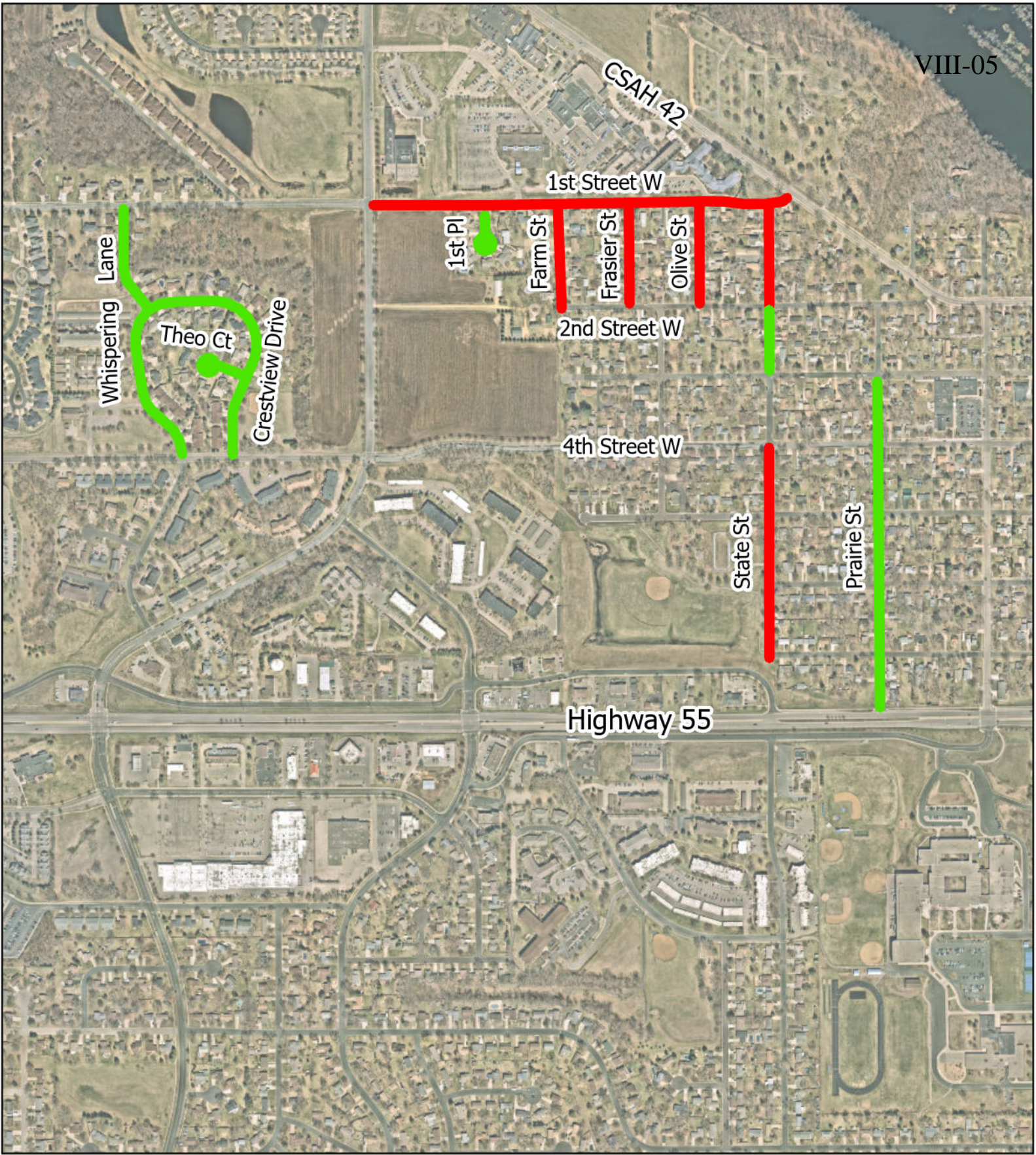
After detailed review of these proposals for completeness, Braun Intertec provided the best value to perform all services requested. Braun Intertec has completed several geotechnical investigations for City infrastructure projects in the past and is well qualified to complete this work.

Financial Impact:

The estimated cost of these services at \$22,014 falls within the anticipated administrative costs for the 2025 Neighborhood Infrastructure Improvements Project. This project, if authorized for bidding/construction following preparation of the Feasibility Report, will ultimately be paid for utilizing bonded debt, enterprise funds, and private assessments.

Attachments:

- Proposed 2025 Neighborhood Infrastructure Improvements Project Map
- Braun Intertec Proposal - Geotechnical Investigation of 2025 Neighborhood Infrastructure Improvements Project



2025 Neighborhood Infrastructure Improvements Project Area Map



 **Reconstruct**  **Reclaim**

AGREEMENT FOR SERVICES
Pavement and Geotechnical Evaluation
2025 Infrastructure Improvement Projects

THIS AGREEMENT ("Agreement") is made and executed this ____ day of _____, 2024 by and between the City of Hastings, 101 4th Street, Hastings, Minnesota 55033, ("City") and Braun Intertec Corporation, 1826 Buerkle Road, St. Paul, MN 55100 ("Contractor," hereinafter defined as Consultant providing professional services).

WHEREAS, the City has accepted the proposal of the Contractor for certain Services; and

WHEREAS, Contractor desires to perform the Services for the City under the terms and conditions set forth in this Agreement.

NOW THEREFORE, in consideration of the mutual consideration contained herein, it is hereby agreed as follows:

1. SERVICES.

- a. City agrees to engage Contractor as an independent contractor for the purpose of performing certain Services ("Services"), as defined in the following documents:

- i. A proposal dated May 29, 2024, incorporated herein as Exhibit A;

(Hereinafter "Exhibit.") Where terms and conditions of this Agreement and those terms and conditions included in the Exhibit specifically conflict, the terms of this Agreement shall apply.

- b. Contractor covenants and agrees to provide Services to the satisfaction of the City in a timely fashion, as set forth in the Exhibit, subject to Section 9 of this Agreement.
- c. Contractor agrees to comply with all federal, state, and local laws and ordinances applicable to the Services to be performed under this Agreement, including all safety standards. The Contractor shall be solely and completely responsible for conditions of the job site, including the safety of all its persons and property during the performance of the Services. The Contractor represents and warrants that it has the requisite training, skills, and experience necessary to provide the Services and is appropriately licensed and has obtained all permits from all applicable agencies and governmental entities.

2. PAYMENT.

- a. City agrees to pay the Contractor and the Contractor agrees to receive and accept payment for Services as set forth in the Exhibit.

- b. Any changes in the scope of the work of the Services that may result in an increase to the compensation due the Contractor shall require prior written approval by the authorized representative of the City or by the City Council. The City will not pay additional compensation for Services that do not have prior written authorization.
 - c. Contractor shall submit itemized bills for Services provided to City on a monthly basis, unless otherwise stated in the Exhibit. Bills submitted shall be paid in the same manner as other claims made to City.
 - d. Prior to payment, the Contractor will submit evidence that all payrolls, material bills, subcontractors and other indebtedness connected with the Services have been paid as required by the City.
3. TERM. The term of this Agreement is identified in the Exhibit. This Agreement may be extended upon the written mutual consent of the parties for such additional period as they deem appropriate, and upon the same terms and conditions as herein stated.
4. BONDS. If the Services provided by Contractor as set forth in the Exhibit and this Agreement exceeds \$100,000, Contractor shall furnish performance and payments bonds covering faithful performance of all the Contractor's obligations, including without limitation warranty obligations, and of all payment of obligations arising under this Agreement.
5. TERMINATION AND REMEDIES.
- a. Termination for Convenience. This Agreement may be terminated by either party upon 30 days' written notice delivered to the other party at the addresses listed in Section 15 of this Agreement. Upon termination under this provision, if there is no default by the Contractor, Contractor shall be paid for Services rendered and reimbursable expenses through the effective date of termination.
 - b. Termination Due to Default. This Agreement may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement. The non-performing party shall have thirty (30) calendar days from the date of the termination notice to cure or to submit a plan for cure that is acceptable to the other party.
 - c. Remedies. Notwithstanding the above, the Contractor shall not be relieved of liability to the City for damages sustained by the City as a result of any breach of this Agreement by the Contractor. The City may, in such event:
 - i. Withhold payments due to the Contractor for the purpose of set-off until such time as the exact amount of damages due to the City is determined.
 - ii. Perform the Services, in which case, the Contractor shall within 30 days after written billing by the City, reimburse the City for any costs and expenses incurred by the City.

The rights or remedies provided for herein shall not limit the City, in case of any default by the Contractor, from asserting any other right or remedy allowed by law, equity, or by statute.

- d. Upon termination of this Agreement, the Contractor shall furnish to the City copies or duplicate originals of all documents or memoranda prepared for the City not previously furnished.
6. SUBCONTRACTORS. Contractor shall not enter into subcontracts for any of the Services provided for in this Agreement without the express written consent of the City, unless specifically provided for in the Exhibit. The Contractor shall pay any subcontractor involved in the performance of this Agreement within the ten (10) days of the Contractor's receipt of payment by the City for undisputed services provided by the subcontractor.
7. STANDARD OF CARE. In performing its Services, Contractor will use that degree of care and skill ordinarily exercised, under similar circumstances, by reputable members of its profession in the same locality at the time the Services are provided.
8. INSPECTION OF WORK. All materials and workmanship will be subject to inspection, examination, and testing by the City, who will have the right to reject non-conforming material and workmanship or require its correction.
9. DELAY IN PERFORMANCE. Neither City nor Contractor shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the nonperforming party. For purposes of this Agreement, such circumstances include, but are not limited to, abnormal weather conditions; floods; earthquakes; fire; epidemics; war, riots, and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage; judicial restraint; and inability to procure permits, licenses or authorizations from any local, state, or federal agency for any of the supplies, materials, accesses, or services required to be provided by either City or Contractor under this Agreement. If such circumstances occur, the nonperforming party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement. Contractor will be entitled to payment for its reasonable additional charges, if any, due to the delay.
10. CITY'S REPRESENTATIVE. The City has designated Cody Mathisen to act as the City's representative with respect to the Services to be performed under this Agreement. He or she shall have complete authority to transmit instructions, receive information, interpret, and define the City's policy and decisions with respect to the Services covered by this Agreement.
11. PROJECT MANAGER AND STAFFING. The Contractor has designated Amy Grothaus to be the primary contact for the City in the performance of the Services. The primary contact shall be assisted by other staff members as necessary to facilitate the completion of

the Services in accordance with the terms established herein. Contractor may not remove or replace the designated staff without the approval of the City.

12. INDEMNIFICATION.

- a. Contractor and City each agree to defend, indemnify, and hold harmless each other, its agents and employees, from and against legal liability for all claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are caused by its negligent acts, errors, or omissions. In the event claims, losses, damages, or expenses are caused by the joint or concurrent negligence of Contractor and City, they shall be borne by each party in proportion to its own negligence.
- b. Contractor shall indemnify City against legal liability for damages arising out of claims by Contractor's employees or subcontractors, including all liens. City shall indemnify Contractor against legal liability for damages arising out of claims by City's employees or subcontractors.

13. INSURANCE. During the performance of the Services under this Agreement, Contractor shall maintain the following insurance:

- a. Commercial General Liability Insurance, with a limit of \$1,500,000 for any number of claims arising out of a single occurrence, pursuant to Minnesota Statutes, Section 466.04, or as may be amended;
- b. Workers' Compensation Insurance in accordance with statutory requirements.
- c. Automobile Liability Insurance, with a combined single limit of \$1,000,000 for each person and \$1,000,000 for each accident.
- d. Professional Liability Insurance, with a \$1,500,000 limit per claim and in the aggregate.

Contractor shall furnish the City with certificates of insurance, which shall include a provision that such insurance shall not be canceled without written notice to the City. The City shall be named as an additional insured on the Commercial General Liability Insurance policy.

14. WARRANTIES. Contractor warrants and guarantees that title to all work, materials, and equipment covered by any invoice, will pass to City no later than the Completion Date. Contractor warrants that all work and that all materials will meet the Standard of Care. ALL WARRANTIES OF ANY NATURE MADE BY CONTRACTOR ARE SET FORTH IN THIS ARTICLE, AND CONTRACTOR DISCLAIMS ALL STATUTORY, ORAL, EXPRESS OR IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR PERFORMANCE OF SERVICES IN A GOOD AND WORKMANLIKE MANNER.

15. NOTICES. Notices shall be communicated to the following addresses:

If to City: City of Hastings
101 4th Street
Hastings, MN 55033
Attention: Cody Mathisen
Or e-mailed: cmathisen@hastingsmn.gov

If to Contractor: Braun Intertec
1826 Buerkle Road
St. Paul, MN 55100
Attention: Amy Grothaus

Or emailed: agrothaus@braunintertec.com

16. INDEPENDENT CONTRACTOR STATUS. All services provided by Contractor, its officers, agents and employees pursuant to this Agreement shall be provided as employees of Contractor or as independent contractors of Contractor and not as employees of the City for any purpose.

17. RESPONSIBLE CONTRACTOR.

- a. In accordance with Minnesota Statutes, Section 16C.285, Contractor is hereby advised that the City cannot award a construction contract in excess of \$50,000 unless Contractor is a "responsible contractor" as defined in Minnesota Statutes, Section 16C.285, subdivision 3. Contractor must complete a Responsible Contractor Certificate verifying compliance with the minimum criteria specified in Minnesota Statutes, Section 16C.285, subdivision 3, to be eligible to provide the Services outlined in this Agreement. A Responsible Contractor Certificate must be signed under oath by an owner or officer of Contractor. Contractor is responsible for obtaining the required verifications of compliance with Minnesota Statute, Section 16C.285, subdivision 3 from all subcontractors, using a form provided by the City. Contractor must submit signed verifications from subcontractors upon the City's request.
- b. Contractor or subcontractor who does not meet the minimum criteria established in Minnesota Statutes, Section 16C.285, subdivision 3, or who fails to verify compliance with the minimum requirements of this statute, will not be considered a "responsible contractor" and will be ineligible to provide the Services under this Agreement or otherwise work on the project in any capacity. Contractor and any subcontractor are advised that making any false statements verifying compliance with Minnesota Statutes, Section 16C.285 will render the Contractor or subcontractor ineligible to perform the Services of this Agreement and may result in termination of this Agreement by the City.
- c. Contractor shall not sublet, sell, transfer, delegate or assign the Services or any portion of the Services of this Agreement without abiding by the applicable

provisions of the Minnesota Department of Transportation Standard Specifications for Construction, Section 1801.

18. GENERAL PROVISIONS.

- a. Assignment. This Agreement is not assignable without the mutual written agreement of the parties.
- b. Waiver. A waiver by either City or Contractor of any breach of this Agreement shall be in writing. Such a waiver shall not affect the waiving party's rights with respect to any other or further breach.
- c. Nondiscrimination. Contractor agrees that in the hiring of employees to perform Services under this Agreement, Contractor shall not discriminate against any person by reason of any characteristic protected by state or federal law.
- d. Governing Law. This Agreement shall be construed in accordance with the laws of the State of Minnesota and any action must be venued in Dakota County District Court.
- e. Amendments. Any modification or amendment to this Agreement shall require a written agreement signed by both parties.
- f. Severability. If any term of this Agreement is found be void or invalid, such invalidity shall not affect the remaining terms of this Agreement, which shall continue in full force and effect.
- g. Data Practices Compliance. All data collected by the City pursuant to this Agreement shall be subject to the Minnesota Government Data Practices Act, Minnesota Statutes, Chapter 13.
- h. Entire Agreement. This Agreement constitutes the entire agreement of the parties and supersedes all prior communications, understandings and agreements relating to the subject matter hereof, whether oral or written.
- i. Waiver of Consequential Damages. Neither party hereto shall be responsible or held liable to the other for punitive, indirect, incidental, consequential, or liquidated damages, or liability for loss of use, loss of business opportunity, loss of profit or revenue, loss of product or output, or business interruption.

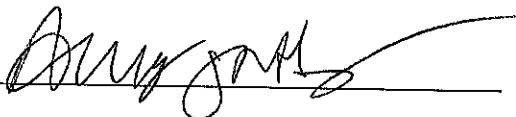
[The remainder of this page has been intentionally left blank]

CITY OF HASTINGS

By: _____
Mary Fasbender
Mayor

By: _____
Kelly Murtaugh
City Clerk

BRAUN INTERTEC

By: 

Its: Senior Engineer

May 29, 2024

Proposal QTB197191

Cody Mathisen, P.E.
City of Hastings
1225 Progress Drive
Hastings, MN 55033

Re: Proposal for a Pavement and Geotechnical Evaluation
City of Hastings 2025 Infrastructure Improvement Projects
Various City Streets
Hastings, MN

Dear Mr. Mathisen:

Braun Intertec Corporation appreciates the opportunity to provide this proposal to complete a pavement and geotechnical evaluation for the City of Hastings 2025 Infrastructure Improvement Projects located in Hastings, Minnesota.

Project Information

Per the RFP provided by you and dated May 16, 2024, we understand the proposed project will include improvements to several city streets. The streets are planned for either full reconstruction that will include underground public utility repair of water main and sanitary sewer or full-depth reclamation (FDR).

As part of our work, it is requested that Ground Penetrating Radar (GPR) testing, pavement coring and hand auger borings, and Falling Weight Deflectometer (FWD) testing be performed on streets planned for FDR, which total about 1 mile in length. Soil borings are requested for streets planned for full reconstruction and the repair of utilities. Additionally, soil borings are requested for a potential stormwater quality project.

Purpose

The purpose of GPR, pavement coring, hand auger borings, and FWD testing will be to provide existing in-place structural information for streets planned for FDR. The purpose of our geotechnical evaluation will be to characterize subsurface geologic conditions at selected boring locations, evaluate their impact on the project, and provide geotechnical recommendations for the design and construction of the streets.

Scope of Services

We propose the following tasks to help achieve the stated purpose. If we encounter unfavorable or unforeseen conditions during the completion of our tasks that lead us to recommend an expanded scope of services, we will contact you to discuss the conditions before resuming our services.

Ground Penetrating Radar (GPR) Testing

As requested, we will perform GPR testing on City streets planned for FDR which includes Whispering Lane, Crestview Drive, Theo Court, 1st Place, Prairie Street, and State Street (from 2nd Street to 3rd Street). GPR data provides a continuous estimate of pavement layer thicknesses and will be performed in both travel direction. GPR measurements will be tied to GPS coordinates for mapping and reference purposes.

An air-coupled GPR unit can be expected to penetrate approximately 2 feet under ideal conditions, and is capable of detecting differentiation between bituminous pavement layers and underlying aggregate base layers, if present.

Data obtained from the GPR testing will be used in the analysis of FWD data and will also be used to assist with the planned FDR repair recommendations.

Pavement Coring and Hand Auger Borings

At locations selected by Braun Intertec using the GPR data, we will perform a total of 18 pavement cores and hand auger borings on streets planned for FDR. Pavement cores and hand auger borings will be used to confirm and calibrate the GPR data and to help characterize the in-place pavement layer thicknesses.

The cores will be submitted to our lab for total thickness measurements and will be examined for any material deficiencies. The cores will be retained for any additional laboratory testing that may be useful.

Falling Weight Deflectometer (FWD) Testing and Analysis

On streets planned for FDR, we will perform non-destructive Falling Weight Deflectometer (FWD) testing with a Dynatest 8002E model FWD. The FWD is a non-destructive testing device specifically designed for evaluating pavements and operates by measuring pavement surface deflections from an applied wheel-simulating impulse load. Four impulse loads (two at 6,000 lbs and two at 9,000 lbs) will be applied at each test point using a testing rate of approximately one test every 200 feet. Testing will be performed in a both directions of travel.

Deflection data will be utilized to estimate effective R-values, pavement structural capacity, effective GE, and required 9-ton and 10-ton overlay thicknesses. Furthermore, the FWD data will assist in the discussion of the planned repair, as well as assisting in identifying areas where possible soil corrections may be warranted.

Site Access

Based on the map and site photographs provided, it appears that the site is accessible to a truck drill rig. However, one of the borings may require an off-road drill rig. This can be better determined during our site review. Should an off-road be warranted, additional fees may be incurred.

We assume there will be no cause for delays in accessing the boring locations. Depending on access requirements, ground conditions or potential utility conflicts, our field crew may alter the boring locations from those proposed to facilitate accessibility.

Staking

As the requested locations, we will stake prospective subsurface exploration locations so that GPS coordinates and elevations can be obtained.

Utility Clearance

Prior to drilling, we will contact Gopher State One Call and arrange for notification of the appropriate utility vendors to mark and clear the boring locations of public underground utilities. You, or your authorized representative, are responsible to notify us before we begin our work of the presence and location of any underground objects or private utilities that are not the responsibility of public agencies.

Penetration Test Borings

As requested, we will drill a total of 24 standard penetration test borings for the project. Six borings will be performed to a depth of 12 feet each, 15 borings will be performed to a depth of 14 feet each, and three borings will be performed to a depth of 20 feet. Borings will be performed at the approximate locations noted in the RFP. For each of the borings, we will perform standard penetration tests at 2 1/2-foot vertical intervals to the depth of termination.

If the borings encounter groundwater during or immediately after drilling of each boring, we will record the observed depth on the boring logs.

If the intended boring depths do not extend through unsuitable material, we will extend the borings at least 5 feet into suitable material at greater depths. If we identify a need for deeper (or additional) borings, we will contact you prior to increasing our total estimated drilled footage and submit a Change Order summarizing the anticipated additional effort and the associated cost, for your review and authorization.

MDH Sealing Record

We are planning the deepest borings to be at least 15 feet and less than 25 feet. Therefore, the Minnesota Statutes require us to complete a Sealing Record after our completion of the borings. Our proposal includes the fees for the Minnesota Department of Health (MDH) Sealing Record.

In the event we extend our borings to a depth of 25 feet or greater, the MDH requires us to complete and submit a Sealing Notification Form for the project. The submission of the Sealing Notification Form will require a signature from the property owner (or agent). If we extend our borings to a depth of 25 feet or greater, we will forward on to you a copy of the form for signature and increase our total fees by \$100.

Borehole Abandonment

We will backfill our boring locations immediately after completing the drilling at each location. Minnesota Statutes require sealing temporary borings that are 15 feet deep or deeper. Based on our proposed subsurface characterization depths, we will seal 60 linear feet with grout.

Sealing boreholes with grout will prevent us from disposing of auger boring cuttings in the completed boreholes. Unless you direct us otherwise, we intend to thin-spread the cuttings around the boreholes. If we cannot thin-spread cuttings, we will put them in a container left on site. We can provide off-site disposal of the cuttings for an additional fee.

Upon backfilling boring locations, we will fill holes in pavements with a temporary patch. Over time, subsidence of borehole backfill may occur, requiring releveling of surface grades or replacing bituminous patches. We are not assuming responsibility for re-leveling or re-patching after we complete our fieldwork.

Sample Review and Laboratory Testing

We will return recovered samples to our laboratory, where a geotechnical engineer will visually classify and log them. To help classify the materials encountered and estimate the engineering properties necessary to our analyses, we anticipate performing 20 moisture content tests, 4 sieve-hydrometers, 4 mechanical analyses (through a #200 sieve only) and 6 organic content tests. We will adjust the actual number and type of tests based on the results of our borings.

Traffic Control

Pavement coring, FWD testing and penetration test borings require our crews to perform work within the street. Based on the map provided, the streets appear to be low-volume residential streets. To protect our crews and alert motorists of our work within the street, we will use traffic control signs and flags. The cost for traffic control has been incorporated into our cost estimate. If additional traffic control is needed, such as flaggers, we will hire a subconsultant to perform that work and will submit a Change Order for those fees.

Engineering Analyses

We will use data obtained from our testing and drilling to evaluate the subsurface profile and groundwater conditions, and to perform engineering analyses related to pavement design and performance.

Report

We will prepare a report including:

- A CAD sketch showing the project area and exploration locations
- Results of GPR testing, including graphical data
- Results of pavement coring and hand auger borings, as well as photographs of the pavement cores
- Results of FWD analysis, including our recommendations for design R-values
- Logs of the Borings describing the materials encountered and presenting the results of our groundwater measurements and laboratory tests
- A summary of the subsurface profile and groundwater conditions
- Estimated infiltrations rates for storm water ponds/features

- Recommendations for design and construction of the streets, including recommendations related to the planned repairs. We understand 1st Street is to be designed to a 10-ton roadway and that all other streets require a 7-ton design.

We will submit an electronic copy of our report.

Schedule

We anticipate performing our work according to the following schedule.

- GPR Testing – within about two weeks of written authorization.
- Pavement coring and hand auger borings – within about one week of analyzing the GPR data.
- FWD testing – FWD testing will be completed after analysis of the GPR data and the pavement coring and hand auger borings.
- Drill rig mobilization – we anticipate drilling can be performed within about 6 weeks of project authorization and that the work will take about 3 to 4 days to complete. We will do our best, however, to move this up in the schedule as other projects progress and fluctuate.
- Classification and laboratory testing – within 1 week after completion of field exploration.
- Final report submittal – we understand the final report is requested by August 30, 2024.

If we cannot complete our proposed scope of services according to this schedule due to circumstances beyond our control, we may need to revise this proposal prior to completing the remaining tasks.

Fees

We will furnish the services described in this proposal for an estimated fee of \$22,014. We are attaching a tabulation showing hourly and/or unit rates associated with our proposed scope of services.

Our work may extend over several invoicing periods. As such, we will submit partial progress invoices for work we perform during each invoicing period.

General Remarks

We will be happy to meet with you to discuss our proposed scope of services further and clarify the various scope components.

We appreciate the opportunity to present this proposal to you. Please sign and return a copy to us in its entirety.

We based the proposed fee on the scope of services described and the assumptions that you will authorize our services within 30 days and that others will not delay us beyond our proposed schedule.

We include the Braun Intertec General Conditions, which provide additional terms and are a part of our agreement.

To have questions answered or schedule a time to meet and discuss our approach to this project further, please contact Amy Grothaus at 651.261.7122 or (agrothaus@braunintertec.com).

Sincerely,

BRAUN INTERTEC CORPORATION



Amy J. Grothaus, PE
Senior Manager, Senior Engineer



Matthew Ruble, PE
Vice President, Principal Engineer

Attachments:

Tabular Cost Estimate
General Conditions (1/1/18)

The proposal is accepted, and you are authorized to proceed.

Authorizer's Firm

Authorizer's Signature

Authorizer's Name (please print or type)

Authorizer's Title

Date



The Science You Build On.

Project Proposal

VIII-05

QTB197191

City of Hastings 2025 Infrastructure Improvement Projects

Client: City of Hastings Cody Mathisen 101 4th St E Hastings, MN 55033 (651) 480-2350	Work Site Address: Various City Streets Hastings, MN	Service Description: Geotechnical and Pavement Evaluation
---	---	---

	Description	Quantity	Units	Unit Price	Extension
Phase 1	Pavement Evaluation				
Activity 1.1	GPR Testing, Pavement Coring and Hand Auger Borings				\$2,899.50
259	Ground penetrating radar, per hour	2.00	Hour	200.00	\$400.00
8640	GPR Mobilization	50.00	Each	3.75	\$187.50
252	Bituminous Coring and Hand Auger Borings	10.00	Hour	200.00	\$2,000.00
1555	Bit wear and patch material, per core	18.00	Each	15.00	\$270.00
1861	CMT Trip Charge	1.00	Each	42.00	\$42.00
Activity 1.2	FWD Testing				\$587.50
8620	Falling Weight Deflectometer (FWD) Testing	2.00	Each	200.00	\$400.00
1087	FWD Mobilization	50.00	Each	3.75	\$187.50
Phase 1 Total:					\$3,487.00

Phase 2	Geotechnical Evaluation				
Activity 2.1	Site Layout - Staking - Utility Clearance - CADD				\$1,990.00
205	Site layout and utility clearance	8.00	Hour	110.00	\$880.00
288	Project Assistant	2.00	Hour	94.00	\$188.00
371	CADD/Graphics Operator	2.00	Hour	136.00	\$272.00
1862	UTIL Trip Charge	1.00	Each	42.00	\$42.00
5099	Trimble R8 Rover (horizontal and vertical), per hour	8.00	Each	76.00	\$608.00
Activity 2.2	Drilling Services				\$10,580.00
9000	Truck Mounted Drilling Services, per hour	26.00	Each	400.00	\$10,400.00
9730	Grout with bentonite, materials per foot	60.00	Each	3.00	\$180.00
Activity 2.3	Laboratory Testing				\$1,940.00
1152	Moisture content, per sample	20.00	Each	14.00	\$280.00
1166	Loss by Washing Through #200 Sieve, per sample	4.00	Each	86.00	\$344.00
1174	Organic Content, per sample	6.00	Each	86.00	\$516.00
1172	Hydrometer - Sieve Analysis, per sample	4.00	Each	200.00	\$800.00
Phase 2 Total:					\$14,510.00

Phase 3	Analysis and Engineering				
Activity 3.1	Consulting Labor				\$4,017.00
138	Project Assistant	4.00	Hour	94.00	\$376.00
126	Project Engineer	14.00	Hour	180.00	\$2,520.00
128	Senior Engineer	4.00	Hour	210.00	\$840.00
125	Project Manager	1.00	Hour	145.00	\$145.00
371	CADD/Graphics Operator	1.00	Hour	136.00	\$136.00
Phase 3 Total:					\$4,017.00

Section 1: Agreement

1.1 Our agreement with you consists of these General Conditions and the accompanying written proposal or authorization ("Agreement"). This Agreement is the entire agreement between you and us. It supersedes prior agreements. It may be modified only in a writing signed by us, making specific reference to the provision modified.

1.2 The words "you," "we," "us," and "our" include officers, employees, and subcontractors.

1.3 In the event you use a purchase order or other documentation to authorize our scope of work ("Services"), any conflicting or additional terms are not part of this Agreement. Directing us to start work prior to execution of this Agreement constitutes your acceptance. If, however, mutually acceptable terms cannot be established, we have the right to terminate this Agreement without liability to you or others, and you will compensate us for fees earned and expenses incurred up to the time of termination.

Section 2: Our Responsibilities

2.1 We will provide Services specifically described in this Agreement. You agree that we are not responsible for services that are not expressly included in this Agreement. Unless otherwise agreed in writing, our findings, opinions, and recommendations will be provided to you in writing. You agree not to rely on oral findings, opinions, or recommendations without our written approval.

2.2 In performing our professional services, we will use that degree of care and skill ordinarily exercised under similar circumstances by reputable members of our profession practicing in the same locality. If you direct us to deviate from our recommended procedures, you agree to hold us harmless from claims, damages, and expenses arising out of your direction. If during the one year period following completion of Services it is determined that the above standards have not been met and you have promptly notified us in writing of such failure, we will perform, at our cost, such corrective services as may be necessary, within the original scope in this Agreement, to remedy such deficiency. Remedies set forth in this section constitute your sole and exclusive recourse with respect to the performance or quality of Services.

2.3 We will reference our field observations and sampling to available reference points, but we will not survey, set, or check the accuracy of those points unless we accept that duty in writing. Locations of field observations or sampling described in our report or shown on our sketches are based on information provided by others or estimates made by our personnel. You agree that such dimensions, depths, or elevations are approximations unless specifically stated otherwise in the report. You accept the inherent risk that samples or observations may not be representative of things not sampled or seen and further that site conditions may vary over distance or change over time.

2.4 Our duties do not include supervising or directing your representatives or contractors or commenting on, overseeing, or providing the means and methods of their services unless expressly set forth in this Agreement. We will not be responsible for the failure of your contractors, and the providing of Services will not relieve others of their responsibilities to you or to others.

2.5 We will provide a health and safety program for our employees, but we will not be responsible for contractor, owner, project, or site health or safety.

2.6 You will provide, at no cost to us, appropriate site safety measures as to work areas to be observed or inspected by us. Our employees are authorized by you to refuse to work under conditions that may be unsafe.

2.7 Unless a fixed fee is indicated, our price is an estimate of our project costs and expenses based on information available to us and our experience and knowledge. Such estimates are an exercise of our professional judgment and are not guaranteed or warranted. Actual costs may vary. You should allow a contingency in addition to estimated costs.

Section 3: Your Responsibilities

3.1 You will provide us with prior environmental, geotechnical and other reports, specifications, plans, and information to which you have access about the site. You agree to provide us with all plans, changes in plans, and new information as to site conditions until we have completed Services.

3.2 You will provide access to the site. In the performance of Services some site damage is normal even when due care is exercised. We will use reasonable care to minimize damage to the site. We have not included the cost of restoration of damage in the estimated charges.

3.3 You agree to provide us, in a timely manner, with information that you have regarding buried objects at the site. We will not be responsible for locating buried objects at the site. *You agree to hold us harmless, defend, and indemnify us from claims, damages, losses, penalties and expenses (including attorney fees) involving buried objects that were not properly marked or identified or of which you had knowledge but did not timely call to our attention or correctly show on the plans you or others furnished to us.*

3.4 You will notify us of any knowledge or suspicion of the presence of hazardous or dangerous materials present on any work site or in a sample provided to us. You agree to provide us with information in your possession or control relating to such materials or samples. If we observe or suspect the presence of contaminants not anticipated in this Agreement, we may terminate Services without liability to you or to others, and you will compensate us for fees earned and expenses incurred up to the time of termination.

3.5 Neither this Agreement nor the providing of Services will operate to make us an owner, operator, generator, transporter, treater, storer, or a disposal facility within the meaning of the Resource Conservation Recovery Act, as amended, or within the meaning of any other law governing the handling, treatment, storage, or disposal of hazardous substances. *You agree to hold us harmless, defend, and indemnify us from any damages, claims, damages, penalties or losses resulting from the storage, removal, hauling or disposal of such substances.*

3.6 Monitoring wells are your property, and you are responsible for their permitting, maintenance, and abandonment unless expressly set forth otherwise in this Agreement.

3.7 You agree to make all disclosures required by law. In the event you do not own the project site, you acknowledge that it is your duty to inform the owner of the discovery or release of contaminants at the site. *You agree to hold us harmless, defend, and indemnify us from claims, damages, penalties, or losses and expenses, including attorney fees, related to failures to make disclosures, disclosures made by us that are required by law, and from claims related to the informing or failure to inform the site owner of the discovery of contaminants.*

Section 4: Reports and Records

4.1 Unless you request otherwise, we will provide our report in an electronic format.

4.2 Our reports, notes, calculations, and other documents and our computer software and data are instruments of our service to you, and they remain our property. We hereby grant you a license to use the reports and related information we provide only for the related project and for the purposes disclosed to us. You may not transfer our reports to others or use them for a purpose for which they were not prepared without our written approval. *You agree to indemnify, defend, and hold us harmless from claims, damages, losses, and expenses, including attorney fees, arising out of such a transfer or use.*

4.3 If you do not pay for Services in full as agreed, we may retain work not yet delivered to you and you agree to return to us all of our work that is in your possession or under your control.

4.4 Samples and field data remaining after tests are conducted and field and laboratory equipment that cannot be adequately cleansed of contaminants are and continue to be your property. They may be discarded or returned to you, at our discretion, unless within 15 days of the report date you give us written direction to store or transfer the materials at your expense.

4.5 Electronic data, reports, photographs, samples, and other materials provided by you or others may be discarded or returned to you, at our discretion, unless within 15 days of the report date you give us written direction to store or transfer the materials at your expense.

Section 5: Compensation

5.1 You will pay for Services as stated in this Agreement. If such payment references our Schedule of Charges, the invoicing will be based upon the most current schedule. An estimated amount is not a firm figure. You agree to pay all sales taxes and other taxes based on your payment of our compensation. Our performance is subject to credit approval and payment of any specified retainer.

5.2 You will notify us of billing disputes within 15 days. You will pay undisputed portions of invoices upon receipt. You agree to pay interest on unpaid balances beginning 30 days after invoice dates at the rate of 1.5% per month, or at the maximum rate allowed by law.

5.3 If you direct us to invoice a third party, we may do so, but you agree to be responsible for our compensation unless the third party is creditworthy (in our sole opinion) and provides written acceptance of all terms of this Agreement.

5.4 Your obligation to pay for Services under this Agreement is not contingent on your ability to obtain financing, governmental or regulatory agency approval, permits, final adjudication of any lawsuit, your successful completion of any project, receipt of payment from a third party, or any other event. No retainage will be withheld.

5.5 If you do not pay us in accordance with this Agreement, you agree to reimburse all costs and expenses for collection of the moneys invoiced, including but not limited to attorney fees and staff time.

5.6 You agree to compensate us in accordance with our Schedule of Charges if we are asked or required to respond to legal process arising out of a proceeding related to the project and as to which we are not a party.

5.7 If we are delayed by factors beyond our control, or if project conditions or the scope or amount of work changes, or if changed labor conditions result in increased costs, decreased efficiency, or delays, or if the standards or methods change, we will give you timely notice, the schedule will be extended for each day of delay, and we will be compensated for costs and expenses incurred in accordance with our Schedule of Charges.

5.8 If you fail to pay us in accordance with this Agreement, we may consider the default a total breach of this Agreement and, at our option, terminate our duties without liability to you or to others, and you will compensate us for fees earned and expenses incurred up to the time of termination.

5.9 In consideration of our providing insurance to cover claims made by you, you hereby waive any right to offset fees otherwise due us.

Section 6: Disputes, Damage, and Risk Allocation

6.1 Each of us will exercise good faith efforts to resolve disputes without litigation. Such efforts will include, but not be limited to, a meeting(s)

attended by each party's representative(s) empowered to resolve the dispute. Before either of us commences an action against the other, disputes (except collections) will be submitted to mediation.

6.2 *Notwithstanding anything to the contrary in this Agreement, neither party hereto shall be responsible or held liable to the other for punitive, indirect, incidental, or consequential damages, or liability for loss of use, loss of business opportunity, loss of profit or revenue, loss of product or output, or business interruption.*

6.3 You and we agree that any action in relation to an alleged breach of our standard of care or this Agreement shall be commenced within one year of the date of the breach or of the date of substantial completion of Services, whichever is earlier, without regard to the date the breach is discovered. Any action not brought within that one year time period shall be barred, without regard to any other limitations period set forth by law or statute. We will not be liable unless you have notified us within 30 days of the date of such breach and unless you have given us an opportunity to investigate and to recommend ways of mitigating damages. You agree not to make a claim against us unless you have provided us at least 30 days prior to the institution of any legal proceeding against us with a written certificate executed by an appropriately licensed professional specifying and certifying each and every act or omission that you contend constitutes a violation of the standard of care governing our professional services. Should you fail to meet the conditions above, you agree to fully release us from any liability for such allegation.

6.4 *For you to obtain the benefit of a fee which includes a reasonable allowance for risks, you agree that our aggregate liability for all claims will not exceed the fee paid for Services or \$50,000, whichever is greater. If you are unwilling to accept this allocation of risk, we will increase our aggregate liability to \$100,000 provided that, within 10 days of the date of this Agreement, you provide payment in an amount that will increase our fees by 10%, but not less than \$500, to compensate us for the greater risk undertaken.* This increased fee is not the purchase of insurance.

6.5 *You agree to indemnify us from all liability to others in excess of the risk allocation stated herein and to insure this obligation. In addition, all indemnities and limitations of liability set forth in this Agreement apply however the same may arise, whether in contract, tort, statute, equity or other theory of law, including, but not limited to, the breach of any legal duty or the fault, negligence, or strict liability of either party.*

6.6 This Agreement shall be governed, construed, and enforced in accordance with the laws of the state in which our servicing office is located, without regard to its conflict of laws rules. The laws of the state of our servicing office will govern all disputes, and all claims shall be heard in the state or federal courts for that state. Each of us waives trial by jury.

6.7 No officer or employee acting within the scope of employment shall have individual liability for his or her acts or omissions, and you agree not to make a claim against individual officers or employees.

Section 7: General Indemnification

7.1 *We will indemnify and hold you harmless from and against demands, damages, and expenses of others to the comparative extent they are caused by our negligent acts or omissions or those negligent acts or omissions of persons for whom we are legally responsible. You will indemnify and hold us harmless from and against demands, damages, and expenses of others to the comparative extent they are caused by your negligent acts or omissions or those negligent acts or omissions of persons for whom you are legally responsible.*

7.2 To the extent it may be necessary to indemnify either of us under Section 7.1, you and we expressly waive, in favor of the other only, any immunity or exemption from liability that exists under any worker compensation law.

7.3 You agree to indemnify us against losses and costs arising out of claims of patent or copyright infringement as to any process or system that is specified or selected by you or by others on your behalf.

Section 8: Miscellaneous Provisions

8.1 We will provide a certificate of insurance to you upon request. Any claim as an Additional Insured shall be limited to losses caused by our negligence.

8.2 You and we, for ourselves and our insurers, waive all claims and rights of subrogation for losses arising out of causes of loss covered by our respective insurance policies.

8.3 Neither of us will assign or transfer any interest, any claim, any cause of action, or any right against the other. Neither of us will assign or otherwise transfer or encumber any proceeds or expected proceeds or compensation from the project or project claims to any third person, whether directly or as collateral or otherwise.

8.4 This Agreement may be terminated early only in writing. You will compensate us for fees earned for performance completed and expenses incurred up to the time of termination.

8.5 If any provision of this Agreement is held invalid or unenforceable, then such provision will be modified to reflect the parties' intention. All remaining provisions of this Agreement shall remain in full force and effect.

8.6 No waiver of any right or privilege of either party will occur upon such party's failure to insist on performance of any term, condition, or instruction, or failure to exercise any right or privilege or its waiver of any breach.