

**MINNESOTA DEPARTMENT OF TRANSPORTATION
JOINT POWERS CONTRACT
FOR PROFESSIONAL AND TECHNICAL SERVICES**

State Project Number (SP): 6217-51

Trunk Highway Number (TH): 3

Project Identification: Robert Street Reconstruction Project

This contract is between the State of Minnesota, acting through its Commissioner of Transportation (“State”) and City of St. Paul acting through its, City Council (“Governmental Unit”).

Recitals

1. Minnesota Statutes §15.061 authorizes State to engage such assistance as deemed necessary.
2. Minnesota Statutes §471.59 authorizes State and Governmental Unit to enter into this contract.
3. State is in need of design engineering and community engagement services for the Robert Street Reconstruction project.
4. Governmental Unit represents that it is duly qualified and agrees to perform all services described in this contract to the satisfaction of State.

Contract

1. Term of Contract; Survival of Terms; Incorporation of Exhibits

- 1.1. **Effective Date:** This contract will be effective on the date State obtains all required signatures under Minnesota Statutes Section §16C.05, subdivision 2. The Governmental Unit must not begin work under this contract until this contract has been fully executed and the Governmental Unit has been notified by State’s Authorized Representative to begin work.
- 1.2. **Expiration Date:** This contract will expire on **July 31, 2025**, or when all obligations have been satisfactorily fulfilled, whichever occurs first.
- 1.3. **Survival of Terms:** All clauses which impose obligations continuing in their nature and which must survive in order to give effect to their meaning will survive the expiration or termination of this contract, including, without limitation, the following clauses: 6. Indemnification; 7. State Audits; 8. Government Data Practices; 9. Intellectual Property Rights; and 10. Venue.
- 1.4. **Exhibits:** Exhibits A through E are attached and incorporated into this contract.

2. Scope of Work and Deliverables

- 2.1. The Governmental Unit will complete the duties and provide the deliverables listed in Exhibit A.

3. Payment

- 3.1. **Consideration.** State will pay for all services performed by the Governmental Unit under this contract as follows:
 - 3.1.1. **Compensation.** State will pay the Governmental Unit on an Actual Cost basis according to the costs shown in Exhibit B.
 - 3.1.2. **Budget Details.** See Exhibit B for Budget Details on Governmental Unit and its subcontractors.
 - 3.1.3. **Direct Costs.** Allowable direct costs include project specific costs listed in Exhibit B. Any other direct costs not listed in Exhibit B must be approved, in writing, by State’s Project Manager prior to expenditure.

- 3.1.4. **Travel Expenses.** The Governmental Unit will be reimbursed for travel and subsistence expenses in the same manner and in no greater amount than provided in the current “Minnesota Department of Transportation Travel Regulations.” The Governmental Unit will not be reimbursed for travel and subsistence expenses incurred outside the State of Minnesota unless it has received prior written approval from State for such out of state travel. State of Minnesota will be considered the home base for determining whether travel is “out of state.” See Exhibit C for the current Minnesota Department of Transportation Reimbursement Rates for Travel Expenses.
- 3.1.5. **Total Obligation.** The total obligation of State for all compensation and reimbursements to the Governmental Unit will not exceed **\$2,323,115.01**.

3.2. Terms of Payment

- 3.2.1. **Invoices.** The Governmental Unit must submit invoices electronically for payment, using the format set forth in Exhibit D. The Governmental Unit will submit invoices for payment on a monthly basis.
- 3.2.2. **Progress Reports.** The Governmental Unit must submit a monthly progress report, using the format set forth in Exhibit E showing the progress of work in work hours according to the tasks listed in Article 2 Scope of Work.
- 3.2.3. **State’s Payment Requirements.** State will promptly pay all valid obligations under this contract as required by Minnesota Statutes §16A.124. State will make undisputed payments no later than 30 days after receiving the Governmental Unit’s invoices and progress reports for services performed. If an invoice is incorrect, defective or otherwise improper, State will notify the Governmental Unit within 10 days of discovering the error. After State receives the corrected invoice, State will pay the Governmental Unit within 30 days of receipt of such invoice. State reserves the right to audit all invoices, at State’s discretion.
- 3.2.4. **Invoice Package Submittal.** The Governmental Unit must submit the signed invoice, the signed progress report and all required supporting documentation, for review and payment, to State’s Consultant Services Section, at ptinvoices.dot@state.mn.us. Invoices will not be considered “received” within the meaning of Minnesota Statutes §16A.124 until the signed documents are received by State’s Consultant Services Section.
- i. Each invoice must contain the following information: MnDOT contract Number, the Governmental Unit invoice number (sequentially numbered), the Governmental Unit billing and remittance address, if different from business address, and the Governmental Unit signature attesting that the invoiced services and costs are new and that no previous charge for those services and goods has been included in any prior invoice.
 - ii. Except for Lump Sum contracts, direct nonsalary costs allocable to the work under this contract, must be itemized and supported with invoices or billing documents to show that such costs are properly allocable to the work. Direct nonsalary costs are any costs that are not the salaried costs directly related to the work of the Governmental Unit. Supporting documentation must be provided in a manner that corresponds to each direct cost.
 - iii. Except for Lump Sum contracts, the Governmental Unit must provide, upon request of State’s Authorized Representative, the following supporting documentation:
 - iv. Direct salary costs of employees’ time directly chargeable for the services performed under this contract. This must include a payroll cost breakdown identifying the name of the employee, classification, actual rate of pay, hours worked and total payment for each invoice period; and
 - v. Signed time sheets or payroll cost breakdown for each employee listing dates and hours worked. Computer generated printouts of labor costs for the project must contain the project number, each employee’s name, hourly rate, regular and overtime hours and the dollar amount charged to the project for each pay period.

3.2.5. **Federal funds.** If federal funds are used, the Governmental Unit is responsible for compliance with all federal requirements imposed on these funds and accepts full financial responsibility for any requirements imposed by the Governmental Unit's failure to comply with federal requirements.

4. Authorized Representatives

4.1. State's Authorized Representative will be:

Name: Augustine Kamprath
Address: Minnesota Department of Transportation
1500 West County Road B2
Roseville, MN 55113
Telephone: 651-234-7682
E-Mail: augustine.kamprath@state.mn.us

State's Authorized Representative, or his/her successor, will monitor Contractor's performance and has the authority to accept or reject the services provided under this contract.

4.2. State's Project Manager will be:

Name: Carolyn Adamson
Address: Minnesota Department of Transportation
1500 West County Road B2
Roseville, MN 55113
Telephone: 651-440-4219
E-Mail: carolyn.adamson@state.mn.us

State's Project Manager, or his/her successor, has the responsibility to monitor Contractor's performance and progress. State's Project Manager will sign progress reports, review billing statements, make recommendations to State's Authorized Representative for acceptance of Contractor's good or services and make recommendations to State's Authorized Representative for certification for payment of each invoice submitted for payment.

4.3. The Governmental Unit's Authorized Representative will be:

Name: Don Pflaum
Address: City of St. Paul Public Works 900 City Hall Annex
25 West Fourth Street
Saint Paul, MN 55102-1660
Telephone: 651-266-9147
E-Mail: Don.Pflaum@ci.stpaul.mn.us

5. Assignment, Amendments, Waiver, Contract Complete, and Electronic Records and Signatures

- 5.1. **Assignment.** The Governmental Unit may neither assign nor transfer any rights or obligations under this contract without the prior consent of State and a fully executed Assignment Agreement, executed and approved by the same parties who executed and approved this contract, or their successors in office.
- 5.2. **Amendments.** Any amendment to this contract must be in writing and will not be effective until it has been executed and approved by the same parties who executed and approved the original contract, or their successors in office.
- 5.3. **Waiver.** If State fails to enforce any provision of this contract, that failure does not waive the provision or its right to subsequently enforce it
- 5.4. **Contract Complete.** This contract contains all negotiations and contracts between State and the Governmental Unit. No other understanding regarding this contract, whether written or oral, may be used to bind either party.

- 5.5. **Electronic Records and Signatures.** The parties agree to contract by electronic means. This includes using electronic signatures and converting original documents to electronic records.

6. Indemnification

- 6.1. In the performance of this contract by the Governmental Unit, or the Governmental Unit's agents or employees, and to the extent permitted by law, the Governmental Unit must indemnify, save, and hold State, its agents, and employees harmless from any and all claims or causes of action, including reasonable attorney's fees incurred by State, to the extent caused by the Governmental Unit's: 1) intentional, willful, or negligent acts or omissions; 2) breach of contract or warranty; or 3) breach of the applicable standard of care. The indemnification obligations of this section do not apply if the claim or cause of action is the result of State's sole negligence. This clause will not be construed to bar any legal remedies the Governmental Unit may have for State's failure to fulfill its obligation pursuant to this contract.

7. State Audits

- 7.1. Under Minnesota Statutes §16C.05, subdivision 5, the Governmental Unit's books, records, documents and accounting procedures and practices relevant to this contract are subject to examination by the State and the State Auditor or Legislative Auditor, as appropriate, for a minimum of six years from the end of this contract.

8. Government Data Practices

- 8.1. The Governmental Unit and State must comply with the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, as it applies to all data provided by State under this contract, and as it applies to all data created, collected, received, stored, used, maintained or disseminated by the Governmental Unit under this contract. The civil remedies of Minnesota Statutes §13.08 apply to the release of the data referred to in this clause by either the Governmental Unit or State.

9. Intellectual Property Rights

- 9.1. **Intellectual Property Rights.** State owns all rights, title and interest in all of the intellectual property rights, including copyrights, patents, trade secrets, trademarks and service marks in the Works and Documents created and paid for under this contract. "Works" means all inventions, improvements, discoveries (whether or not patentable), databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes and disks conceived, reduced to practice, created or originated by the Governmental Unit, its employees, agents and subcontractors, either individually or jointly with others in the performance of this contract. Works includes Documents. "Documents" are the originals of any databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes, disks or other materials, whether in tangible or electronic forms, prepared by the Governmental Unit, its employees, agents or subcontractors, in the performance of this contract. The Documents will be the exclusive property of State and the Governmental Unit upon completion or cancellation of this contract must immediately return all such Documents to State. To the extent possible, those Works eligible for copyright protection under the United States Copyright Act will be deemed to be "works made for hire." The Governmental Unit assigns all right, title and interest it may have in the Works and the Documents to State. The Governmental Unit must, at the request of State, execute all papers and perform all other acts necessary to transfer or record State's ownership interest in the Works and Documents

9.2. Obligations

- 9.2.1. **Notification.** Whenever any invention, improvement or discovery (whether or not patentable) is made or conceived for the first time or actually or constructively reduced to practice by the Governmental Unit, including its employees and subcontractors, in the performance of this contract, the Governmental Unit will immediately give State's Authorized Representative written notice thereof, and must promptly furnish State's Authorized Representative with complete information and/or disclosure thereon.

9.2.2. **Representation.** The Governmental Unit must perform all acts, and take all steps necessary to ensure that all intellectual property rights in the Works and Documents are the sole property of State, and that neither the Governmental Unit, nor its employees, agents nor subcontractors retain any interest in and to the Works and Documents. The Governmental Unit represents and warrants that the Works and Documents do not and will not infringe upon any intellectual property rights of other persons or entities. Notwithstanding Clause 6, the Governmental Unit will indemnify, defend, to the extent permitted by the Attorney General, and hold harmless State, at the Governmental Units expense, from any action or claim brought against State to the extent that it is based on a claim that all or part of the Works or Documents infringe upon the intellectual property rights of others. The Governmental Unit will be responsible for payment of any and all such claims, demands, obligations, liabilities, costs and damages, including but not limited to, attorney fees. If such a claim or action arises, or in the Governmental Unit's or State's opinion is likely to arise, the Governmental Unit must, at State's discretion, either procure for State the right or license to use the intellectual property rights at issue or replace or modify the allegedly infringing Works or Documents as necessary and appropriate to obviate the infringement claim. This remedy of State will be in addition to and not exclusive of other remedies provided by law.

10. Venue

10.1. Venue for all legal proceedings out of this contract, or its breach, must be in the appropriate state or federal court with competent jurisdiction in Ramsey County, Minnesota.

11. Termination; Suspension

- 11.1. **Termination.** State or the Commissioner of Administration may terminate this contract at any time, with or without cause. Upon termination, Governmental Unit will be entitled to payment, determined on a pro rata basis, for services satisfactorily performed.
- 11.2. **Termination for Insufficient Funding.** State may immediately terminate this contract if it does not obtain funding from the Minnesota Legislature, or other funding source; or if funding cannot be continued at a level sufficient to allow for the payment of the services covered here. Termination must be by written or fax notice to the Governmental Unit. State is not obligated to pay for any services that are provided after notice and effective date of termination. However, the Governmental Unit will be entitled to payment, determined on a pro rata basis, for services satisfactorily performed to the extent that funds are available. State will not be assessed any penalty if the contract is terminated because of the decision of the Minnesota Legislature, or other funding source, not to appropriate funds. State must provide the Governmental Unit notice of the lack of funding within a reasonable time of State's receiving that notice.
- 11.3. **Suspension.** State may immediately suspend this contract in the event of a total or partial government shutdown due to failure to have an approved budget by the legal deadline. Work performed by the Governmental Unit during a period of suspension will be deemed unauthorized and undertaken at risk of non-payment.

12. E-Verify Certification (In accordance with Minnesota Statutes §16C.075).

12.1. For services valued in excess of \$50,000, the Governmental Unit certifies that as of the date of services performed on behalf of State, the Governmental Unit and all its subcontractors will have implemented or be in the process of implementing the federal E-Verify program for all newly hired employees in the United States who will perform work on behalf of State. The Governmental Unit is responsible for collecting all subcontractor certifications and may do so utilizing the E-Verify Subcontractor Certification Form available at <http://www.mmd.admin.state.mn.us/doc/EVerifySubCertForm.doc>. All subcontractor certifications must be kept on file with the Governmental Unit and made available to State upon request.

13. Plain Language; Accessibility Standards

13.1. **Plain Language.** Except for designs, plans, layouts, maps and similar documents, the Governmental Unit must provide all deliverables in “Plain Language”. Executive Order 14-07 requires the Office of the Governor and all Executive Branch agencies to communicate with Minnesotans using Plain Language. As defined in Executive Order 14-07, Plain Language is a communication which an audience can understand the first time they read or hear it. To achieve that, the Governmental Unit will take the following steps in the deliverables:

- Use language commonly understood by the public;
- Write in short and complete sentences;
- Present information in a format that is easy-to-find and easy-to-understand; and
- Clearly state directions and deadlines to the audience.

13.2. **Accessibility Standards.** Except for designs, plans, layouts, maps and similar documents, the Governmental Unit agrees to comply with the State of Minnesota’s Accessibility Standard (https://mn.gov/mnit/assets/Stnd_State_Accessibility_tcm38-61585.pdf) for all deliverables under this contract. The State of Minnesota’s Accessibility Standards entail, in part, the Web Content Accessibility Guidelines (WCAG) 2.0 (Level AA) and Section 508 of the Rehabilitation Act, as amended. The Governmental Unit’s compliance with the State of Minnesota’s Accessibility Standard includes, but is not limited to, the specific requirements as follows:

- All videos must include closed captions, audio descriptions and a link to a complete transcript;
- All documents, presentations, spreadsheets and other material must be provided in an accessible format. In addition, the Governmental Unit will provide native files in an editable format. Acceptable formats include InDesign, Word and Excel; and
- All materials intended for downloading and printing such as promotional brochures, must be labeled as such and the content must additionally be provided in an accessible format.

14. Subcontractor Reporting

14.1. The State of Minnesota is committed to diversity and inclusion in public procurement. If the total value of this contract may exceed \$500,000.00, including all extension options, the Governmental Unit must track and report, on a quarterly basis, the amount spent with diverse small businesses. When this applies, the Governmental Unit will be provided free access to a portal for this purpose, and the requirement will continue as long as the contract is in effect.

15. Title VI/Non-discrimination Assurances.

15.1. The Governmental Unit agrees to comply with all applicable US DOT Standard Title VI/Non-Discrimination Assurances contained in DOT Order No. 1050.2A, and in particular Appendices A and E, which can be found at: https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=11149035. The Governmental Unit will ensure the appendices and solicitation language within the assurances are inserted into contracts as required. State may conduct a review of the Governmental Unit’s compliance with this provision. The Governmental Unit must cooperate with State throughout the review process by supplying all requested information and documentation to State, making the Governmental Unit’s staff and officials available for meetings as requested, and correcting any areas of non-compliance as determined by State.

16. Additional Provisions.

16.1 **Counterparts.** The parties may sign this Agreement in counterparts, each of which constitutes an original, but all of which together constitute one instrument.

16.2 **Electronic Signatures.** The parties agree that the electronic signature of a party to this Agreement shall be as valid as an original signature of such party and shall be effective to bind such party to this Agreement. The parties further agree that any document (including this Agreement and any attachments or exhibits to this Agreement) containing, or to which there is affixed, an electronic signature shall be deemed (i) to be “written” or “in writing,” (ii) to have been signed and (iii) to constitute a record established and maintained in the ordinary course of business and an original written record when printed from electronic files. For purposes hereof, “electronic signature” also means a manually signed original signature that is then transmitted by any electronic means, including without limitation a faxed version of an original signature or an electronically scanned and transmitted version (e.g., via PDF) of an original signature. Any party’s failure to produce the original signature of any electronically transmitted signature shall not affect the enforceability of this Agreement.

STATE ENCUMBRANCE VERIFICATION

Individual certifies that funds have been encumbered as required by Minnesota Statutes §16A.15 and §16C.05.

Signed:

Date:

DEPARTMENT OF TRANSPORTATION (with delegated authority)

Signed:

Title:

Date:

GOVERNMENTAL UNIT

Governmental Unit certifies that the appropriate person(s) have executed the contract on behalf of Governmental Unit as required by applicable resolutions, ordinances or charter provisions.

COMMISSIONER OF ADMINISTRATION

Signed:

Date:

By: _____
Director of Public Works

Date: _____

By: _____
Assistant City Attorney

Date: _____

By: _____
Director of Financial Services

Date: _____

By: _____
Mayor

Date: _____

General Statement of Scope of Work	2
Summary and Background	2
Standards	3
Tasks	3
1 Project Purpose and Description	3
1.1 Project Purpose	3
1.2 Project Description	3
2 Project Scope	3
2.1 The deliverables/tasks for this project include (All deliverables become city property):	3
3 Project Timeline	4
3.1 Project Timeline	4

THE BALANCE OF THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK

General Statement of Scope of Work

State and Governmental Unit are entering into a Joint Powers Agreement (JPA) in which the State intends to participate in the cost of the design for the delivery of the reconstruction for Trunk Highway (TH) 3/Robert Street from Kellogg Boulevard to the I-94 bridge in Downtown St. Paul.

Summary and Background

The purpose of this contract is to perform preliminary engineering, environmental, and final design services between 2021 and 2025 for the Robert Street Reconstruction project. This 2025-2026 federally funded project will reconstruct Robert Street from Kellogg Boulevard to the I-94 bridge in Downtown St. Paul and involves reconstruction of the entire right-of-way (ROW). It is expected that the design Contractor will work with the construction engineering Contractor as needed (under a separate city contract) to answer questions and provide technical support while the project is being constructed. Due to State funding requirements a separate city contract will be established to accomplish this.

Construction work includes utility work, grading, curb and gutter work, sidewalks, pedestrian ramps, driveways, installation of stormwater management treatments, paving, signage/stripping, lighting, signal work, landscaping, and bus stop enhancements.

This contract will require preliminary engineering, design, and community engagement services which include, but are not limited to project memorandum development, survey, plan set development, writing specifications/special provisions, community engagement, conducting agency reviews, utilities coordination, preparing and submitting federal project paperwork to the State, assisting with ROW issues, and coordinating work with city staff. This work must be done in the prescribed timeline. The selected firm must be versed in the federal Delegated Contract Process (DCP) and must have experience administering federal projects. St. Paul Regional Water Services (SPRWS) has a significant amount of work that will need to be incorporated into the plans and must be coordinated. Local watershed requirements also dictate how a project is designed and constructed.

Community engagement will be a significant part of this contract. It is expected that key consultant community engagement staff attend and assist the city project manager to coordinate monthly Technical Advisory Committee (TAC) meetings and quarterly Policy Advisory Committee (PAC) meetings. In addition, consulting staff will assist with meetings with property/business owners and other stakeholders (including residents and modal groups) throughout the duration of the design and construction phases. Non-traditional community engagement techniques are welcomed with the goal of reaching out to demographic groups that are often underrepresented at open houses or community meetings.

There will need to be coordination with the Gold Line Bus Rapid Transit (BRT) project, the Capital City Bikeway Project, the future G-Line (Rice/Robert) project, and the Rush Line BRT Project. The Gold Line intersects the Robert Street corridor at 5th and 6th streets and the Rush Line alignment is on Robert Street between I-94 and 5th Street with a planned transit station at 10th Street. The Capital City Bikeway project is located on the north side of Kellogg Boulevard between Jackson Street and St. Peter Street. The grant application and preliminary layout show a Business Access and Transit (BAT) lane for this project-ready concept north of 5th Street, such that the proposed roadway geometry is ready to accept the Rush Line BRT Project when it is ready for implementation. The Gold Line is expected to be constructed between 2022 and 2024 with operations in late 2024 (pending federal funding). The Rush Line BRT Project is expected to be constructed between 2024 and 2026 with operations in late 2026 (pending federal funding). The Capital City Bikeway will be constructed in 2023 and the design for that project will be underway in 2021. The consultant for the Capital City Bikeway project will need to work with the Robert Street design team to design the Kellogg/Robert intersection such that new infrastructure removals are minimized.

Project agency stakeholders for this project include State, Metro Transit, Ramsey County (Rush Line BRT Project), the Gold Line Project Office, and St. Paul Regional Water Services. State, St. Paul, and SPRWS are the financial partners

on the project and St. Paul Public Works will be the client for this work. The design work is being funded by State through a Joint Powers agreement with the City of St. Paul.

The Governmental Unit will be hiring a consultant, and they will work collaboratively to complete the tasks and submit the deliverables described below.

Standards

Comply with all State, Federal, and local standards, laws and regulations related to the scope of work and project area.

Tasks

1 Project Purpose and Description

1.1 Project Purpose

The purpose of this project is to reconstruct Robert Street with the goal to provide a more multi-modal corridor, to address an aging asset, and to provide modern accommodations. While this is currently a State trunk highway, the intent is to turn back this corridor to the city, which is why the city is taking the design and construction lead. State is funding much of this project with some City of St. Paul funding in addition to federal funding, which was secured in the latest round of the Metropolitan Council's regional solicitation. SPRWS is funding their work and will present their plans as part of the design process. Full roadway reconstruction along this segment will occur with an expectation that both public and private utilities will need to be upgraded or moved.

1.2 Project Description

The project will include the following elements:

- 1) A BAT lane-ready design that will accommodate existing and future transit service and stops.
- 2) A new sidewalk/boulevard along both sides of the corridor.
- 3) Low level pedestrian lighting on both sides of the corridor.
- 4) Installation of stormwater management, retention treatments, relocated catch basins, and new curb and gutter.
- 5) Utility and full intersection/roadway work along the entire corridor in accordance with the grant funded layout.
- 6) New trees and improved green space.
- 7) Signal work including Americans with Disabilities Act (ADA) compliant infrastructure improvements.
- 8) New ADA compliant sidewalks and pedestrian ramps.

2 Project Scope

2.1 The deliverables/tasks for this project include (All deliverables become city property):

- 1) Conduct a preliminary survey.
- 2) Complete and submit an environmental document meeting the requirements of all funding sources by the required deadline.
- 3) Refine the existing Synchro traffic model (done for the Rush Line Corridor) to show the entire corridor to Kellogg (the existing model does not go south of 5th Street) how any geometric changes impact traffic movement.
- 4) Perform traffic modeling of the signalized intersections along Robert Street. The modeling will be conducted utilizing VISSIM to accurately model the intricate behavior of pedestrians, bicycles, buses, and vehicles at these highly multimodal intersections.
- 5) Assist with other traffic related tasks including a safety analysis and a signal timing plan.
- 6) Preparation of a signed engineered plan set including a statement of estimated quantities (SEQ). Submit project for State review to meet required deadlines. The plans will need to include a detailed construction phasing plan and a detailed traffic control plan.
- 7) Cost estimates at 30%, 60%, and 90% design intervals and a final engineer's estimate (100% design). Estimates will be broken down two dimensionally by cost item and funding source. Assembly unit allowances, rather than pay items, are expected for the 30% level estimate.

- 8) Coordinate and lead utility discussions for all public and private utilities. Subsurface Utility Engineering (SUE) is expected to minimize conflicts, and a utility coordination plan and proposed construction schedule will be needed.
- 9) Lead community engagement efforts between 2021 and 2024, including public meetings (with the possibility they will still be virtual). Four public open houses are expected with an additional 40 meetings with individual property owners/stakeholders expected, requiring exhibits capable of answering questions and illustrating potential impacts. As mentioned earlier, this corridor serves a diverse community where language or cultural barriers may exist. Proposals should discuss how their team can reach out to those individuals.
- 10) Coordinate reviews and facilitate meetings between partner agencies including PAC and TAC meetings. Coordinate meetings by facilitating, sending out agendas, and taking meeting minutes. It is expected that there will be TAC meetings every month and quarterly PAC meetings for a 4-year period. Two coordination meetings per month are expected between stakeholder agencies when the final design process is underway.
- 11) Create special provisions and specifications for bidding.
- 12) Assist the city with independent plan review via team's Quality Assurance / Quality Control (QA/QC) process at 0%, 30%, 60%, and 90% design intervals and securing necessary approvals from the state. Facilitate the internal and external review process by tracking comments and their reconciliation.
- 13) Secure any needed permits, especially with the state and watershed.
- 14) Assist with any ROW issues such as construction easements or permanent easements.
- 15) Complete, submit, and obtain a MnDOT ROW certificate.
- 16) Lead and facilitate the pre-construction meeting.
- 17) Attend weekly construction meetings.
- 18) Assist with community concerns and complaints as they arise.
- 19) Review any needed shop drawings or plan adjustments as proposed by the construction engineering firm. Work with the construction engineering firm to provide any needed civil engineering design expertise that may arise from a problem discovered during project construction.
- 20) Assist the construction engineering firm to prepare record drawings (as-built drawings). Final Computer-aided design (CAD) drawings and surveys will become property of the city and must be turned over to the construction engineering firm to help develop record drawings.
- 21) All documents must be submitted in word or Portable Document Format (pdf), unless directed otherwise by the city project manager.

3 Project Timeline

3.1 Project Timeline

A signed plan set, and special provisions/specifications must be completed by December 31, 2024. Bids for the construction project will be let in Winter 2024-2025 and a contract will be awarded before construction begins in May 2025. Contractor will be required to prepare and present a detailed schedule to the project team showing when each task will be performed. As previously mentioned, this project must be substantially completed by October 15, 2026 with a completion of October 31, 2026. This contract is expected to begin in the month January, 2022 and expire on July 31, 2025.

THE REMAINDER OF THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK

Kimley-Horn and Associates, Inc.
(Prime Contractor)

MnDOT Contract No. 1046603
Exhibit B - Budget Details

Work Tasks	Project Manager/QA/	Task Lead	Staff Engineer or Planner	Graduate Engineer or	CAD/Graphics Designer	Admin	Totals
Administration and Project Management	280	132	0	0	0	100	512
Agency Involvement	156	240	0	120	0	0	516
Outreach and Engagement	106	118	102	0	0	0	326
Traffic Analysis	28	140	240	400	0	0	808
Preliminary Engineering	74	166	324	812	438	0	1814
Environmental Documentation	4	26	20	72	4	8	134
Utility and Areaway Coordination	12	24	44	0	64	0	144
Final Engineering	230	538	1116	1750	1082	12	4728
Bid Preparation	10	24	72	44	12	24	
Construction Administration	24	48	0	100	0	0	
Total Hours	924	1456	1918	3298	1600	144	8982
Hourly Rate	\$75.00	\$65.00	\$45.00	\$32.75	\$48.00	\$23.00	
Direct Labor Costs	\$69,300.00	\$94,640.00	\$86,310.00	\$108,009.50	\$76,800.00	\$3,312.00	\$438,371.50
Overhead Costs @ 170.0% of Direct Labor Costs							\$745,231.55
Fixed Fee @ 12.0% of (Direct Labor Costs + Overhead Costs)							\$142,032.37
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>					\$10,650.00
Printing/Reproduction Costs	1000	\$4.00				\$4,000.00	
Postage	1000	\$0.50				\$500.00	
Mileage	2500	\$0.56				\$1,400.00	
Parking	2500	\$0.50				\$1,250.00	
Online Engagement/Social Media/Event Feeds	60	\$50.00				\$3,000.00	
Courier/Deliveries	25	\$20.00				\$500.00	
Subtotal							\$1,336,285.42
Subcontractors							\$986,829.59
Alliant (page 2)		\$511,077.28					
Zan (page 3)		\$257,097.00					
Henning (page 4)		\$45,932.00					
AET (page 5)		\$20,527.00					
T2 Utility Engineers (page 6)		\$54,458.51					
Sambatek (page 7)		\$97,737.80					
Total Contract Amount							\$2,323,115.01

Work Tasks	Task Lead	Staff Engineer or Planner	Graduate Engineer or	Totals
Administration and Project Management	40	0	0	40
Agency Involvement	48	0	0	48
Traffic Analysis	160	250	340	750
Utility and Areaway Coordination	360	120	220	700
Final Engineering	540	774	1010	2324
Construction Administration	6	16	28	50
Total Hours	1154	1160	1598	3912
Hourly Rate	\$60.00	\$45.00	\$32.75	
Direct Labor Costs	\$69,240.00	\$52,200.00	\$52,334.50	\$173,774.50
Overhead Costs @ 158.60% of Direct Labor Costs				\$275,606.36
Fixed Fee @ 13.5% of (Direct Labor Costs + Overhead Costs)				\$60,666.42
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>		\$1,030.00
Postage	1000	\$0.50	\$500.00	
Parking	500	\$0.50	\$250.00	
Mileage	500	\$0.56	\$280.00	
Total Contract Amount				\$511,077.28

Work Tasks	Task Lead/Preside	Senior Associate	Associate/Admin	Graphics	Totals
Administration and Project Management	60	0	0	0	60
Agency Involvement	72	72	80	0	224
Outreach and Engagement	294	340	724	492	1850
Total Hours	426	412	804	492	2134
Fixed Hourly Rate**	\$184.60	\$124.65	\$79.60	\$97.10	
Direct Labor Costs	\$78,639.60	\$51,355.80	\$63,998.40	\$47,773.20	\$241,767.00
**Fixed Hourly Rate includes Overhead and profit					
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>			\$15,330.00
Printing/Reproduction Costs	2000	\$4.00		\$8,000.00	
Postage	4000	\$0.50		\$2,000.00	
Mileage	3000	\$0.56		\$1,680.00	
Parking	3000	\$0.50		\$1,500.00	
Online Engagement/Social Media/Event Feeds	10	\$50.00		\$500.00	
Open House Supplies/Refreshments	3	\$550.00		\$1,650.00	
Total Contract Amount					\$257,097.00

Work Tasks	Task Lead/President	ROW Specialist	Totals
Final Engineering	24	136	160
Total Hours	24	136	160
Fixed Hourly Rate**	\$155.00	\$117.00	
**Fixed Hourly Rate includes Overhead and profit			
Direct Labor Costs	\$3,720.00	\$15,912.00	\$19,632.00
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>	\$26,300.00
Printing/Reproduction Costs	200	\$4.00	\$800.00
Postage	1000	\$0.50	\$500.00
Appraisals/Appraisal Reviews	5	\$5,000.00	\$25,000.00
Total Contract Amount - Henning Professional Services			\$45,932.00

Work Tasks	Task Lead	Staff Engineer or Scientist	Totals
Preliminary Engineering	14	48	62
Environmental Documentation	8	18	26
Total Hours	22	66	88
Fixed Hourly Rate**	\$180.00	\$157.00	
**Fixed Hourly Rate includes Overhead and profit			
Direct Labor Costs	\$3,960.00	\$10,362.00	\$14,322.00
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>	\$6,205.00
Testing Fees (see attached rate sheet)	1	\$2,825.00	
Vehicle Fees/Expenses (see attached rate sheet)	1	\$3,380.00	
Total Contract Amount			\$20,527.00

Work Tasks	Task Lead	Subsurface Utility Engineer/Designer	Totals
Utility and Areaway Coordination	60	360	420
Total Hours	60	360	420
Hourly Rate	\$53.55	\$35.00	
Direct Labor Costs	\$3,213.00	\$12,600.00	\$15,813.00
Overhead Costs @ 170.0% of Direct Labor Costs			\$26,882.10
Fixed Fee @ 12.0% of (Direct Labor Costs + Overhead Costs)			\$5,123.41
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>	\$6,640.00
Vac Truck (hourly)	16	\$415.00	\$6,640.00
Total Contract Amount			\$54,458.51

Work Tasks	Task Lead	Engineer or Field/CAD Tech	Survey Crew Member	Totals
Preliminary Engineering	32	160	440	632
Utility and Areaway Coordination	8	8	80	96
Final Engineering	100	260	0	360
Total Hours	140	428	520	1088
Hourly Rate	\$53.00	\$30.00	\$24.00	
Direct Labor Costs	\$7,420.00	\$12,840.00	\$12,480.00	\$32,740.00
Overhead Costs @ 170.0% of Direct Labor Costs				\$55,658.00
Fixed Fee @ 10.0% of (Direct Labor Costs + Overhead Costs)				\$8,839.80
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>		\$500.00
Postage	1000	\$0.50	\$ 500.00	
Total Contract Amount				\$97,737.80

Kimley-Horn and Associates, Inc.
(Prime Contractor)

MnDOT Contract No. 1046603
Exhibit B - Budget Details

Work Tasks	Project Manager/QA/	Task Lead	Staff Engineer or Planner	Graduate Engineer or	CAD/Graphics Designer	Admin	Totals
Administration and Project Management	280	132	0	0	0	100	512
Agency Involvement	156	240	0	120	0	0	516
Outreach and Engagement	106	118	102	0	0	0	326
Traffic Analysis	28	140	240	400	0	0	808
Preliminary Engineering	74	166	324	812	438	0	1814
Environmental Documentation	4	26	20	72	4	8	134
Utility and Areaway Coordination	12	24	44	0	64	0	144
Final Engineering	230	538	1116	1750	1082	12	4728
Bid Preparation	10	24	72	44	12	24	
Construction Administration	24	48	0	100	0	0	
Total Hours	924	1456	1918	3298	1600	144	8982
Hourly Rate	\$75.00	\$65.00	\$45.00	\$32.75	\$48.00	\$23.00	
Direct Labor Costs	\$69,300.00	\$94,640.00	\$86,310.00	\$108,009.50	\$76,800.00	\$3,312.00	\$438,371.50
Overhead Costs @ 170.0% of Direct Labor Costs							\$745,231.55
Fixed Fee @ 12.0% of (Direct Labor Costs + Overhead Costs)							\$142,032.37
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>					\$10,650.00
Printing/Reproduction Costs	1000	\$4.00				\$4,000.00	
Postage	1000	\$0.50				\$500.00	
Mileage	2500	\$0.56				\$1,400.00	
Parking	2500	\$0.50				\$1,250.00	
Online Engagement/Social Media/Event Feeds	60	\$50.00				\$3,000.00	
Courier/Deliveries	25	\$20.00				\$500.00	
Subtotal							\$1,336,285.42
Subcontractors							\$986,829.59
Alliant (page 2)	\$511,077.28						
Zan (page 3)	\$257,097.00						
Henning (page 4)	\$45,932.00						
AET (page 5)	\$20,527.00						
T2 Utility Engineers (page 6)	\$54,458.51						
Sambatek (page 7)	\$97,737.80						
Total Contract Amount							\$2,323,115.01

Work Tasks	Task Lead	Staff Engineer or Planner	Graduate Engineer or	Totals
Administration and Project Management	40	0	0	40
Agency Involvement	48	0	0	48
Traffic Analysis	160	250	340	750
Utility and Areaway Coordination	360	120	220	700
Final Engineering	540	774	1010	2324
Construction Administration	6	16	28	50
Total Hours	1154	1160	1598	3912
Hourly Rate	\$60.00	\$45.00	\$32.75	
Direct Labor Costs	\$69,240.00	\$52,200.00	\$52,334.50	\$173,774.50
Overhead Costs @ 158.60% of Direct Labor Costs				\$275,606.36
Fixed Fee @ 13.5% of (Direct Labor Costs + Overhead Costs)				\$60,666.42
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>		\$1,030.00
Postage	1000	\$0.50	\$500.00	
Parking	500	\$0.50	\$250.00	
Mileage	500	\$0.56	\$280.00	
Total Contract Amount				\$511,077.28

Work Tasks	Task Lead/Preside	Senior Associate	Associate/Admin	Graphics	Totals
Administration and Project Management	60	0	0	0	60
Agency Involvement	72	72	80	0	224
Outreach and Engagement	294	340	724	492	1850
Total Hours	426	412	804	492	2134
Fixed Hourly Rate**	\$184.60	\$124.65	\$79.60	\$97.10	
Direct Labor Costs	\$78,639.60	\$51,355.80	\$63,998.40	\$47,773.20	\$241,767.00
**Fixed Hourly Rate includes Overhead and profit					
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>			\$15,330.00
Printing/Reproduction Costs	2000	\$4.00		\$8,000.00	
Postage	4000	\$0.50		\$2,000.00	
Mileage	3000	\$0.56		\$1,680.00	
Parking	3000	\$0.50		\$1,500.00	
Online Engagement/Social Media/Event Feeds	10	\$50.00		\$500.00	
Open House Supplies/Refreshments	3	\$550.00		\$1,650.00	
Total Contract Amount					\$257,097.00

Work Tasks	Task Lead/President	ROW Specialist	Totals
Final Engineering	24	136	160
Total Hours	24	136	160
Fixed Hourly Rate**	\$155.00	\$117.00	
**Fixed Hourly Rate includes Overhead and profit			
Direct Labor Costs	\$3,720.00	\$15,912.00	\$19,632.00
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>	\$26,300.00
Printing/Reproduction Costs	200	\$4.00	\$800.00
Postage	1000	\$0.50	\$500.00
Appraisals/Appraisal Reviews	5	\$5,000.00	\$25,000.00
Total Contract Amount - Henning Professional Services			\$45,932.00

Work Tasks	Task Lead	Staff Engineer or Scientist	Totals
Preliminary Engineering	14	48	62
Environmental Documentation	8	18	26
Total Hours	22	66	88
Fixed Hourly Rate**	\$180.00	\$157.00	
**Fixed Hourly Rate includes Overhead and profit			
Direct Labor Costs	\$3,960.00	\$10,362.00	\$14,322.00
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>	\$6,205.00
Testing Fees (see attached rate sheet)	1	\$2,825.00	
Vehicle Fees/Expenses (see attached rate sheet)	1	\$3,380.00	
Total Contract Amount			\$20,527.00

Work Tasks	Task Lead	Subsurface Utility Engineer/Designer	Totals
Utility and Areaway Coordination	60	360	420
Total Hours	60	360	420
Hourly Rate	\$53.55	\$35.00	
Direct Labor Costs	\$3,213.00	\$12,600.00	\$15,813.00
Overhead Costs @ 170.0% of Direct Labor Costs			\$26,882.10
Fixed Fee @ 12.0% of (Direct Labor Costs + Overhead Costs)			\$5,123.41
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>	\$6,640.00
Vac Truck (hourly)	16	\$415.00	\$6,640.00
Total Contract Amount			\$54,458.51

Work Tasks	Task Lead	Engineer or Field/CAD Tech	Survey Crew Member	Totals
Preliminary Engineering	32	160	440	632
Utility and Areaway Coordination	8	8	80	96
Final Engineering	100	260	0	360
Total Hours	140	428	520	1088
Hourly Rate	\$53.00	\$30.00	\$24.00	
Direct Labor Costs	\$7,420.00	\$12,840.00	\$12,480.00	\$32,740.00
Overhead Costs @ 170.0% of Direct Labor Costs				\$55,658.00
Fixed Fee @ 10.0% of (Direct Labor Costs + Overhead Costs)				\$8,839.80
Direct Expenses	<u>No. of Units</u>	<u>Unit Cost</u>		\$500.00
Postage	1000	\$0.50	\$ 500.00	
Total Contract Amount				\$97,737.80

Employee Personnel Rates		
Service Item	Unit	Rate
Administrative Assistant	Hour	\$72.00
Architect, Principal	Hour	\$220.00
Chemist, Principal	Hour	\$220.00
Chemist, Senior	Hour	\$180.00
Draftsperson/Designer	Hour	\$148.00
Draftsperson/GIS Technician Level I	Hour	\$93.00
Draftsperson/GIS Technician Level II	Hour	\$124.00
Drilling Crew Assistant	Hour	\$93.00
Drilling Crew Chief	Hour	\$114.00
Drilling Technician	Hour	\$106.00
Engineering Assistant, Senior	Hour	\$141.00
Engineer, Field / EIT	Hour	\$93.00
Engineer, Level I	Hour	\$137.00
Engineer, Level II	Hour	\$157.00
Engineer, Principal	Hour	\$220.00
Engineer, Senior	Hour	\$180.00
Expert Witness-Deposition or Court Time (4-hour minimum)	Hour	\$392.00
Expert Witness-Litigation Preparation	Hour	\$315.00
Field Radiography (2-person crew)	Hour	\$203.00
Geologist, Level I	Hour	\$137.00
Geologist, Level II	Hour	\$157.00
Geologist, Principal	Hour	\$220.00
Geologist, Senior	Hour	\$180.00
Geotechnical Technician	Hour	\$106.00
GIS Technician Level I	Hour	\$93.00
GIS Technician Level II	Hour	\$124.00
NDT Technician, Level I	Hour	\$87.00
NDT Technician, Level II	Hour	\$109.00
NDT Technician, Level II CWI/ICC/API 653 Certified	Hour	\$120.00
NDT Technician, Level III	Hour	\$121.00
Petrographer, Level I	Hour	\$157.00
Petrographer, Level II	Hour	\$168.00
Petrographer, Principal	Hour	\$220.00
Petrographer, Senior	Hour	\$180.00
Principal of Firm	Hour	\$240.00
Project Manager, Level I	Hour	\$137.00
Project Manager, Level II	Hour	\$157.00
Project Manager, Principal	Hour	\$220.00
Project Manager, Senior	Hour	\$180.00
Scientist, Level I	Hour	\$137.00
Scientist, Level II	Hour	\$157.00

Scientist, Principal	Hour	\$220.00
Scientist, Senior	Hour	\$180.00
Technician, Level I	Hour	\$80.00
Technician, Level II	Hour	\$93.00
Technician, Level III, Senior	Hour	\$114.00
Technician, Level IV, Engineering Assistant	Hour	\$132.00
Equipment Rental		
Service Item	Unit	Rate
Air Infiltration/Water Penetration Equipment	Day	\$210.00
Bubble Testing for Air Barrier	Day	\$150.00
Campbell Scientific Data Logger	Day	\$200.00
Color Camera w/DVR	Day	\$350.00
Concrete Chainsaw Use	Day	\$300.00
Concrete Mold Rental	Mold	\$40.00
Copper Half Cell	Day	\$70.00
Core Drill	Hour	\$50.00
Crack Gauge, 2-way Floor	Each	\$70.00
Crack Gauge, Corner	Each	\$45.00
Crack Gauge, Straight	Each	\$36.00
Fiber Optic Scope	Day	\$250.00
GPR Rental	Day	\$350.00
Impact-Echo	Day	\$130.00
Infrared Camera	Day	\$350.00
Load Cell/Readout	Day	\$150.00
Mobile Construction Materials Laboratory	Day	\$180.00
PMI Analyzer	Day	\$1,000.00
Rebound Hammer	Day	\$65.00
Scissors Lift	Day	\$150.00
Seismograph Equipment	Day	\$130.00
Seismograph Equipment	Week	\$600.00
Seismograph Equipment	Month	\$1,500.00
Slab Moisture Emission Kit	Each	\$40.00
Slab Moisture RH/Temp Probe	Each	\$70.00
Ultrasonic Pulse Velocity	Day	\$200.00
Project Direct Expenses		
Service Item	Unit	Rate
4x8-in. Plastic Cylinder Molds	Case of 36	\$75.00
6x12-in. Cylinder Molds	Case of 20	\$75.00
AET Lab Minimum of \$200	Project	\$200.00
Concrete Portable Coring Equipment Use	Hour	\$50.00
Cube Mold Rental	Day	\$50.00
Film (14 x 17 inch)	Each	\$17.00
Film (4.5 x 10 inch)	Each	\$6.50
Film (4.5 x 17 inch)	Each	\$7.00
Film (7 x 17 inch)	Each	\$10.00
Individual Plastic Cylinder Molds (one-time use)	Each	\$3.00

Vehicle Mileage		
Service Item	Unit	Rate
1 or 2 Ton Auxiliary Truck	Mile	\$1.15
1 Ton Truck with Drill Rig	Mile	\$1.20
1/2 or 3/4 Ton Auxiliary Truck	Mile	\$1.00
1-1/2 to 2-1/2 Ton Truck with Drill Rig	Mile	\$1.35
20 Ton CPT Truck Rig	Mile	\$1.60
Dark Room Truck	Mile	\$1.20
Personal Automobile/Truck	Mile	\$0.75
Tractor with Lowboy Trailer	Mile	\$1.80
Truck with Coring Equipment	Mile	\$1.10
Truck with Warning Sign/Crash Trailer	Mile	\$1.20
Aggregate		
Service Item	Unit	Rate
AASHTO T 103 Aggregate Freeze-Thaw Procedure A	Test	\$425.00
AASHTO T 103 Aggregate Freeze-Thaw Procedure B or C	Test	\$695.00
AASHTO T 326 Coarse Aggregate Angularity	Test	\$125.00
AASHTO T 330 Methylene Blue	Test	\$250.00
ACI 211.2 Specific Gravity and Absorption of Lightweight Aggregate	Test	\$205.00
Aggregate Crushing	Hour	\$110.00
ASTM C117 Materials Finer Than No. 200 Sieve	Test	\$55.00
ASTM C123 Lightweight Particles in Coarse Aggregate @ 2.0	Test	\$150.00
ASTM C123 Lightweight Particles in Coarse Aggregate @ 2.4	Test	\$215.00
ASTM C123 Lightweight Particles in Fine Aggregate @ 2.0	Test	\$120.00
ASTM C123 Lightweight Particles in Fine Aggregate @ 2.4	Test	\$195.00
ASTM C1252/AASHTO T 304 Fine Aggregate Angularity Method A	Test	\$125.00
ASTM C1252/AASHTO T 304 Fine Aggregate Angularity Method B	Test	\$125.00
ASTM C1252/AASHTO T 304 Fine Aggregate Angularity Method C	Test	\$125.00
ASTM C127 Specific Gravity and Absorption of Coarse Aggregate	Test	\$100.00
ASTM C128 Specific Gravity and Absorption of Fine Aggregate	Test	\$110.00
ASTM C131 Los Angeles Abrasion	Test	\$110.00
ASTM C136 Sieve Analysis of Fine Aggregate (includes ASTM C117 #200 wash)	Test	\$110.00
ASTM C136 Sieve Analysis Unwashed Coarse	Test	\$55.00
ASTM C142 Clay Lumps and Friable Particles in Coarse Aggregate	Test	\$115.00
ASTM C142 Clay Lumps and Friable Particles in Fine Aggregate	Test	\$90.00
ASTM C144 Specification for Aggregate for Masonry Mortar (Gradation and Quality)	Sample	\$750.00
ASTM C146 Chemical Analysis of Glass Sand	Sample	\$450.00
ASTM C1777 Methylene Blue	Sample	\$250.00
ASTM C231 Aggregate Correction Factor	Test	\$225.00
ASTM C289 Potential Reactivity of Aggregates-Chemical Method	Test	\$1,000.00
ASTM C29 Unit Weight of Coarse Aggregate (Loose or Rodded)	Test	\$80.00
ASTM C29 Unit Weight of Fine Aggregate (Loose or Rodded)	Test	\$75.00

ASTM C295 Petrographic Analysis of Aggregate for Concrete-Coarse	Test	\$1,800.00
ASTM C295 Petrographic Analysis of Aggregate for Concrete-Fine	Test	\$1,800.00
ASTM C295 Petrographic Analysis of Rock	Test	\$450.00
ASTM C33 Standard Spec for Concrete Aggregate-Coarse	Test	\$1,300.00
ASTM C33 Standard Spec for Concrete Aggregate-Fine	Test	\$1,200.00
ASTM C40 Organic Impurities in Fine Aggregate	Test	\$75.00
ASTM C535 Los Angeles Abrasion	Test	\$150.00
ASTM C641 Staining of Lightweight Aggregate	Sample	\$500.00
ASTM C87 Organic Impurities in Fine Aggregate	Test	\$1,200.00
ASTM C88 Soundness of Aggregates (5 cycles on 2 pans)	Test	\$225.00
ASTM C88 Soundness of Aggregates (5 cycles on 3 pans)	Test	\$240.00
ASTM C88 Soundness of Aggregates (5 cycles on 4 pans)	Test	\$270.00
ASTM C88 Soundness of Aggregates (5 cycles on 5 pans)	Test	\$305.00
ASTM D2419 Sand Equivalent of Fine Aggregate	Test	\$225.00
ASTM D3042 Insoluble Residue in Carbonate Aggregates	Test	\$1,250.00
ASTM D3042 Insoluble Residue in Carbonate Aggregates-AET Modified	Test	\$300.00
ASTM D3042 Insoluble Residue in Carbonate Aggregates – Kentucky Method 64-265-08	Test	\$500.00
ASTM D3042 Insoluble Residue in Carbonate Aggregates-MnDOT	Test	\$500.00
ASTM D3744/AASHTO T 210 Aggregate Durability Index	Test	\$300.00
ASTM D4791 Flat and Elongated Particles	Test	\$185.00
ASTM D5821 Percent Fractured Particles in Coarse Aggregate	Test	\$185.00
ASTM D6928 Resistance of Coarse Aggregate to Degradation by Micro Deval	Test	\$255.00
ASTM D7012 Compressive Strength of Intact Rock Cores	Test	\$150.00
ASTM D7428 Resistance of Fine Aggregate to Degradation by Micro Deval	Test	\$255.00
Chemical Composition of Carbonate Aggregates -TGA & XRF	Test	\$500.00
CRD C130 Scratch Hardness of Aggregate	Test	\$200.00
Electrical Resistivity Coarse Aggregate – Substation Yard Surfacing	Test	\$500.00
EN 933-9 Methylene Blue	Sample	\$250.00
Field Gradation of Rip Rap Material	Quote	
FLH T508 Flakiness Index of Aggregate	Test	\$180.00
Mill Abrasion	Test	\$260.00
MnDOT 1209 Visual Method Total Spall of Coarse Aggregate	Test	\$185.00
USACE Deleterious Series CA +3/4" (200 lbs)	Test	\$5,900.00
USACE Deleterious Series CA -3/4" (25 lbs)	Test	\$5,000.00
USACE Deleterious Series FA (10 lbs)	Test	\$1,900.00
Aggregate - Rip Rap		
Service Item	Unit	Rate
ASTM D4992 Petrographic Analysis of Rock to be Used for Erosion Control	Test	\$800.00
ASTM D5312/CRD-C 144 Durability of Rock for Erosion Under Freezing and Thawing	Test	\$1,000.00

ASTM D5313/CRD-C 169 Durability of Rock for Erosion Under Wetting and Drying	Test	\$1,500.00
ASTM D6473 Absorption and Specific Gravity	Test	\$200.00
CRD-C148 Expansive Breakdown on Soaking in Ethylene Glycol of Stone	Test	\$650.00
Sample Preparation	Hour	\$100.00
Air Monitoring Equipment Rental		
Service Item	Unit	Rate
40L Tedlar Bag	Each	\$30.00
ACM Air Monitoring Kit	Day	\$150.00
ACM Hi Volume Air Sampling Pumps	Day	\$10.00
ACM Phase Contrast Microscope Kit	Day	\$100.00
Air Flow Measurement Instrumentation	Day	\$125.00
Air Velocity Meter	Day	\$100.00
Ambient Noise Monitor with Outdoor Enclosure	Week	\$600.00
Ambient Particulate Monitor with Outdoor Enclosure	Week	\$650.00
EPA Method 10 Analyzer	Day	\$325.00
EPA Method 201A Sampling Train	Day	\$475.00
EPA Method 23 Sampling Train	Day	\$575.00
EPA Method 25A Analyzer	Day	\$375.00
EPA Method 25A Methane Cutter Analyzer	Day	\$400.00
EPA Method 26A Sampling Train	Day	\$325.00
EPA Method 29 Sampling Train	Day	\$575.00
EPA Method 3A Analyzers	Day	\$325.00
EPA Method 4 Sample Train	Day	\$250.00
EPA Method 5 17 Sampling Train	Day	\$425.00
EPA Method 6C Analyzer	Day	\$325.00
EPA Method 7E Analyzer	Day	\$325.00
EPA Method18NCASI Sample Train	Day	\$250.00
Extractive FTIR Analyzer	Week	\$3,200.00
Gas Meter LEL-O2-H2S-CO	Day	\$115.00
Green Eye Monitoring CO2-Temp-RH	Day	\$20.00
Heated Sample Line Assembly	Day	\$150.00
Hi and Lo Volume Pump Calibration Equipment	Day	\$20.00
Hi Lo Volume Air Sampling Pumps	Day	\$10.00
Landtec Methane Meter	Day	\$275.00
LEL Meter	Day	\$100.00
Methane Meter	Day	\$100.00
Mobile Air Lab	Day	\$85.00
Photoionization Detector	Day	\$125.00
Sample Gas Conditioner	Day	\$100.00
Tedlar Bag Vacuum Sample Train	Day	\$100.00
Type 1 Sound Level Meter	Day	\$100.00
Odor Meter	Day	\$75.00
Alkali Reactivity		
Service Item	Unit	Rate
AASHTO T 303 Potential ASR Coarse Aggregate	Test	\$875.00

AASHTO T 303 Potential ASR Fine Aggregate	Test	\$825.00
ASTM C1260 Potential ASR Aggregate Combination	Test	\$950.00
ASTM C1260 Potential ASR Coarse Aggregate	Test	\$775.00
ASTM C1260 Potential ASR Fine Aggregate	Test	\$725.00
ASTM C1293 Potential Reactivity of Coarse Aggregate	Test	\$1,350.00
ASTM C1293 Potential Reactivity of Fine Aggregate	Test	\$1,250.00
ASTM C1567 Potential ASR Aggregate Combination	Test	\$950.00
ASTM C1567 Potential ASR Coarse Aggregate	Test	\$775.00
ASTM C1567 Potential ASR Fine Aggregate	Test	\$725.00
ASTM C227 Potential ASR Coarse Aggregate	Test	\$775.00
ASTM C227 Potential ASR Fine Aggregate	Test	\$725.00
ASTM C441 Potential ASR (using Pyrex glass)	Test	\$800.00
ASTM C586 Potential ACR of Quarry Stone	Test	\$980.00
CRD-C 662-10 Potential ASR Mitigation with Lithium Admixture	Test	\$950.00
Bituminous		
Service Item	Unit	Rate
AASHTO PP28-95/TP4-93 Superpave Level 1 Mix Design	Quote	
AASHTO T 324 (MnDOT Modified) Hamburg Wheel Track Testing of Compacted Asphalt Mixtures	Set	\$820.00
AASHTO T 378 Dynamic Modulus and Flow No. for Asphalt Mixtures Using AMPT	Set of 3	\$1,600.00
ASTM D1461 Moisture or Volatile Distillates in Asphalt Mixtures	Test	\$325.00
ASTM D2041 Specific Gravity and Density of Bituminous Paving Mixture	Test	\$120.00
ASTM D2172 Quantitative Extraction of Asphalt Binder (with gradation)	Test	\$270.00
ASTM D2172 Quantitative Extraction of Asphalt Binder (without gradation)	Test	\$230.00
ASTM D2726 Specific Gravity and Density of Non-Absorptive Asphalt	Core	\$46.00
ASTM D6926 Preparation of Asphalt Mixture Specimens Using Marshall Apparatus	Test	\$325.00
ASTM D6927 Marshall Stability and Flow of Asphalt	Test	\$60.00
ASTM D7313 (MnDOT Modified) Fracture Energy of Asphalt-Aggregate Mixtures Using DSCT	Puck	\$125.00
ASTM D7313 Fracture Energy of Asphalt-Aggregate Mixtures Using DSCT	Set	\$450.00
Cold In-Place Recycling (CIR) Mix Design	Quote	
Fabricate TSR Specimen - Gyratory	Puck	\$90.00
Fabricate TSR Specimen - Marshall	Puck	\$90.00
Field Process Control Testing (QM and/or QA)	Quote	
Full-Depth Reclamation (FDR) Mix Design	Quote	
Gyratory Mix Properties (Suite of Tests)	Test	\$515.00
Laboratory Mix Design	Quote	
Mix Design Verification	Quote	
Saw Trimming of Core Lifts	Core	\$20.00
Seal Coat Compatibility	Test	\$125.00

Seal Coat Design	Mix	\$515.00
Semi-Circular Bending (SCB) Test for Cold Mix Asphalt	Quote	
Semi-Circular Bending (SCB) Test for Hot Mix Asphalt (3 notches depths/4 samples per notch)	Set of 12	\$825.00
TSR Test	Puck	\$40.00
Cement/Cementitious		
Service Item	Unit	Rate
ASTM C1012 Mortar Bar Sulfate Expansion 12 months	Test	\$1,100.00
ASTM C1012 Mortar Bar Sulfate Expansion 18 months	Test	\$1,300.00
ASTM C1012 Mortar Bar Sulfate Expansion 6 months	Test	\$850.00
ASTM C1038 Expansion of Cement Mortar Bars in Water	Test	\$350.00
ASTM C1072 Masonry Flexural Bond Strength	Sample	\$1,200.00
ASTM C109 Mortar Cube Compressive Strength three ages	Test	\$350.00
ASTM C114 Acid Soluble Chloride Analysis of Cement	Test	\$100.00
ASTM C114 Acid Soluble Chloroform Analysis of Cement	Test	\$400.00
ASTM C114 Acid Soluble Sulfate Analysis of Cement	Test	\$250.00
ASTM C114 Frankie Free Lime Analysis of Cement	Test	\$600.00
ASTM C114 Insoluble Residue Analysis of Cement	Test	\$150.00
ASTM C114 Loss on Ignition Analysis of Cement	Test	\$100.00
ASTM C114 Modified Loss on Ignition (LOI) Analysis of Slag-Cement	Test	\$300.00
ASTM C114 Modified Water-Soluble Sulfate Analysis of Cement	Test	\$300.00
ASTM C114 Sulfide Sulfur Analysis of Cement	Test	\$400.00
ASTM C114 Sulfide Sulfur Analysis of Cement with XRD	Test	\$750.00
ASTM C114 Total Alkali Analysis of Cement	Test	\$300.00
ASTM C114 Water-Soluble Alkali Analysis of Cement	Test	\$350.00
ASTM C1240 Silica Fume Table 1 Chemical Requirements, SiO ₂ , Moisture and LOI	Sample	\$350.00
ASTM C1240 Specification for Silica Fume Physical Testing	Series	\$850.00
ASTM C150 Cement Table 1 Chemical Requirements; XRF, LOI and Insoluble Residue	Test	\$350.00
ASTM C150 Specification for Cement Physical Testing	Sample	\$1,260.00
ASTM C151 Autoclave Expansion of Cement	Test	\$300.00
ASTM C1602 Specification for Mixing Water in Concrete Physical Testing	Quote	
ASTM C1702 Isothermal Calorimetry 3 and 7 Days	Test	\$650.00
ASTM C1702 Isothermal Calorimetry 28 Days	Test	\$650.00
ASTM C1797 Specification for Ground Calcium Carbonate, Physical Testing	Quote	
ASTM C185 Air Content of Cement	Test	\$210.00
ASTM C186 Heat of Hydration of Portland Cement 7 Day	Test	\$800.00
ASTM C186 Heat of Hydration of Portland Cement 7 and 28 Day	Test	\$1,000.00
ASTM C186 Heat of Hydration of Portland Cement and SCM(s) Laboratory Blending	Test	\$400.00
ASTM C186 Heat of Hydration of Slag Cement 7and 28 Day	Test	\$1,400.00
ASTM C188 Density of Hydraulic Cement	Test	\$100.00
ASTM C191 Time of Setting by Vicat Needle	Test	\$300.00

ASTM C204 Blaine Fineness of Cement	Test	\$100.00
ASTM C25 Calcium Carbonate Equivalent	Sample	\$400.00
ASTM C25 Chemical Analysis of Limestone & Hydrated Lime - Free Lime	Sample	\$400.00
ASTM C25 Chemical Analysis of Limestone & Hydrated Lime – Al, Ca, Fe, Si, Mg, Mn and P by XRF, Moisture and LOI	Sample	\$400.00
ASTM C25 Chemical Analysis of Limestone & Hydrated Lime - pH	Sample	\$100.00
ASTM C25/C593 Chemical Analysis of Limestone & Hydrated Lime – Available Lime Index	Sample	\$400.00
ASTM C265 Water-Extractable Sulfate in Cement Mortar	Test	\$400.00
ASTM C266 Time of Setting by Gillmore Needle	Test	\$300.00
ASTM C270 Standard Specification for Mortar for Unit Masonry (Mix Design)	Mix	\$345.00
ASTM C348 Flexural Strength of Mortar three ages	Test	\$400.00
ASTM C311 Fly Ash or Natural Pozzolans for Use in Portland-Cement Concrete – Available Alkalis	Test	\$350.00
ASTM C311 Fly Ash or Natural Pozzolans for Use in Portland-Cement Concrete – Chemical Oxides, Moisture, LOI	Test	\$350.00
ASTM C359 Early Stiffening of Cement (Mortar Method)	Test	\$350.00
ASTM C430 Fineness of Cement by No. 325 Sieve	Test	\$50.00
ASTM C451 Early Stiffening of Cement	Test	\$225.00
ASTM C452 Potential Expansion of Mortar Bars Exposed to Sulfate	Test	\$400.00
ASTM C471 Chemical Analysis of Gypsum	Sample	\$2,800.00
ASTM C471 Modified Chemical Analysis of Gypsum by XRF	Sample	\$900.00
ASTM C471 Section 10 Insoluble Residue of Gypsum	Sample	\$200.00
ASTM C471 Section 14 Gravimetric SO ₃ of Gypsum	Sample	\$250.00
ASTM C471 Section 15 Acid-Soluble Chloride of Gypsum	Sample	\$150.00
ASTM C472 Testing of Gypsum, Gypsum Plasters and Gypsum Concrete	Quote	
ASTM C563 Optimum SO ₃ in Cement	Test	\$400.00
ASTM C595 Specification for Blended Cements Methylene Blue of Limestone	Sample	\$250.00
ASTM C596 Drying Shrinkage of Mortar Bars	Test	\$400.00
ASTM C618 Specification for Fly Ash and Pozzolan Physical Testing	Series	\$1,075.00
ASTM C618/ASTM C311 Autoclave Soundness	Test	\$300.00
ASTM C618/ASTM C311 Density	Test	\$115.00
ASTM C618/ASTM C311 Strength Activity Index (SAI)	Test	\$450.00
ASTM C618/ASTM C311 Water Requirement	Test	\$160.00
ASTM C91 Specification for Masonry Cement	Quote	
ASTM C989 Slag Cement Chemical Requirements	Sample	\$400.00
ASTM C989 Slag Cement Composition by XRF	Sample	\$400.00
ASTM C989 Specification for Slag Cement Physical Testing	Series	\$935.00
ASTM D5239 Chemical Characterization of Fly Ash for Soil Stabilization	Sample	\$800.00
ASTM D5239 Physical Characterization of Fly Ash in Soil Stabilization	Quote	

ASTM D806 Cement Content of Soil Cement Mixtures by Wet Chemistry Methods	Test	\$1,400.00
ASTM D806 Cement Content of Soil Cement Mixtures by XRF	Test	\$1,200.00
British Iodometric Method of Free Lime Content	Test	\$400.00
Foam Index	Test	\$150.00
Chemical Admixtures		
Service Item	Unit	Rate
Admixture Presence and Content of Air Entrainers	Test	\$1,800.00
Admixture Presence and Content of Chemical Retarders (Sugars)	Test	\$1,800.00
Admixture Presence and Content of Nitrite – NC DOT #C-20.0	Test	\$800.00
Admixture Presence and Content of Other Admixtures	Quote	
Admixture Presence and Content of Water Reducers	Test	\$1,600.00
ASTM C1017 Standard Specification for Chemical Admixtures for Use in Producing Flowing Concrete – IR, Residue, Specific Gravity	Samples	\$1,000.00
ASTM C1141 Specification for Shotcrete Admixtures, Physical Testing	Sample	\$400.00
ASTM C1582 Specification for Corrosion Inhibiting Admixtures Chemical Testing	Sample	\$1,400.00
ASTM C1582 Specification for Corrosion Inhibiting Admixtures Physical Testing (without ASTM G109) – 1st Admix	Sample	\$7,000.00
ASTM C1582 Specification for Corrosion Inhibiting Admixtures Physical Testing – 2 nd Admix	Sample	\$5,000.00
ASTM C233 Air-Entraining Admixtures for Concrete Physical Testing – 1st Admix	Sample	\$7,000.00
ASTM C233 Air-Entraining Admixtures for Concrete Physical Testing – 2 nd Admix	Sample	\$4,000.00
ASTM C260 Specification for Air-Entraining Admixtures for Concrete Chemical Uniformity Testing	Test	\$1,400.00
ASTM C260 Specification for Air-Entraining Admixtures – 1st Admix	Sample	\$7,000.00
ASTM C260 Specification for Air-Entraining Admixtures – 2 nd Admix	Sample	\$4,000.00
ASTM C494 Specification for Chemical Admixtures for Concrete Chemical Uniformity Testing	Sample	\$1,400.00
ASTM C494 Specification for Chemical Admixtures for Concrete Physical Testing	Sample	\$7,700.00
ASTM C979 Section 8.1 Water Wettability of Pigments in Concrete	Sample	\$75.00
ASTM C979 Section 8.2 Alkali Resistance of Pigments in Concrete	Sample	\$300.00
ASTM C979 Section 8.3 Percentage of Sulfates for Pigments in Concrete	Sample	\$250.00
ASTM C979 Section 8.4 Water Solubility of Pigments in Concrete	Sample	\$150.00
ASTM C979 Section 8.6 Light Resistance of Pigments for Concrete	Quote	
ASTM C979 Section 8.7 Effects of Pigments in Concrete	Sample	\$1,500.00
ASTM C979 Section 8.8 Color Match of Pigments in Concrete	Sample	\$500.00
ASTM C979 Specification for Pigments in Concrete	Quote	
ASTM D1208 Common Properties of Certain Pigments	Quote	
ASTM G109 Corrosion Inhibiting Admix for Embedded Steel, 1st Set	Set	\$5,200.00

ASTM G109 Corrosion Inhibiting Admix for Embedded Steel, additional Set	Set	\$2,700.00
ASTM G109 Corrosion Inhibiting Admix for Embedded Steel, each year past first year	Set	\$1,000.00
ASTM G180 Alternate Corrosion Inhibiting Admix for Steel	Test	\$4,000.00
Chemical Admixtures for Concrete Infrared Spectroscopy (FTIR) by ATF	Test	\$350.00
Chemical Admixtures for Concrete – pH only	Test	\$100.00
Chemical Admixtures for Concrete – Residue by oven-drying only	Test	\$400.00
Chemical Admixtures for Concrete – Specific gravity only	Test	\$250.00
EN 480-10 Chemical Admixtures for Concrete – Chlorides only	Sample	\$200.00
Chemistry		
Service Item	Unit	Rate
A.E.T. Chloride Sample Preparation	Test	\$50.00
AASHTO T 260 Acid-Soluble Chloride Ion in Concrete and Concrete Raw Materials (when submitted as -50 powder)	Test	\$60.00
AASHTO T 260 Water-Soluble Chloride Ion in Concrete and Concrete Raw Materials (when submitted as -50 powder)	Test	\$60.00
AASHTO T 267 Organic Content in Soils by Loss on Ignition	Sample	\$100.00
AASHTO T 289 Standard Method of Test for Determining pH of Soil for Use in Corrosion Testing	Test	\$75.00
AASHTO T 290 Determining Water-Soluble Sulfate Ion Content in Soil	Test	\$300.00
AASHTO T 291 Determining Water-Soluble Chloride Ion Content in Soil	Test	\$300.00
APHA Method 2540B Total Dissolved Solids Dried	Test	\$150.00
APHA Method 2540B Total Solids Dried	Test	\$150.00
APHA Method 4500CL Chloride in Water	Test	\$150.00
APHA Method 4500H+ pH	Quote	
ASTM C1152 Acid-Soluble Chloride in Mortar and Concrete (when submitted as -20 powder)	Test	\$60.00
ASTM C1218 Water-Soluble Chloride in Mortar and Concrete (when submitted as -20 powder)	Test	\$60.00
ASTM C1524 (Soxhlet) Water-Extractable Chlorides in Aggregate	Test	\$450.00
ASTM C1580 Water-Soluble Sulfate in Soil	Sample	\$350.00
ASTM C1602/C1603 Specification for Mixing Water in Concrete Chemical Testing – Chloride, Sulfate, Alkalies and Total Solids	Sample	\$500.00
ASTM C618 Specification for Fly Ash and Pozzolan Chemical Testing – Table 1	Test	\$350.00
ASTM C618 Evaluation of Fly Ash and Pozzolan for Non Standard Analysis	Quote	
ASTM D4458 Chloride Ions in Brackish Water, Seawater, and Brines	Sample	\$150.00
FTIR Infrared Spectroscopy Scan Only	Test	\$300.00
Scanning Electron Microscope (SEM) Photography with EDS	Hour	\$400.00
Thermogravimetric Analysis (TGA)	Quote	
X-Ray Diffraction (XRD) Analysis	Test	\$350.00

Concrete		
Service Item	Unit	Rate
AASHTO T 259/T 260 Penetration of Chloride Ion into Concrete by Ponding, AET Cast	Project	\$2,100.00
AASHTO T 259/T 260 Penetration of Chloride Ion into Concrete by Ponding, Client Cast	Project	\$1,500.00
AASHTO T 336 Coefficient of Thermal Expansion	Test	\$525.00
AASHTO T 358 Surface Resistivity-1st Test Charge	Test	\$150.00
AASHTO T 358 Surface Resistivity-Additional Run on Same Day	Test	\$50.00
ACI 207 Thermal & Volume Effects on Cracking of Mass Concrete	Quote	
ACI 211 Concrete Mix Design (previously designed)	Mix	\$100.00
ACI 211 Heavy Weight Concrete Mix Design	Mix	\$215.00
ACI 211 Lightweight Concrete Mix Design	Mix	\$325.00
ACI 211 Normal Weight Concrete Mix Design	Mix	\$215.00
ASTM C1084 Portland Cement Content of Concrete	Test	\$1,800.00
ASTM C1105 Potential ACR of Concrete	Test	\$1,350.00
ASTM C1140 – Shotcrete Panel Coring (6 cores)	Panel	\$155.00
ASTM C1202/AASHTO T 277 Resistance to Rapid Chloride-Ion Penetration	Set of 2	\$550.00
ASTM C1202/AASHTO T 277 Resistance to Rapid Chloride-Ion Penetration-Additional Slices run on Same Day	Test	\$150.00
ASTM C1543 Penetration of Chloride Ion into Concrete by Ponding, AET Cast	Project	\$2,100.00
ASTM C1543 Penetration of Chloride Ion into Concrete by Ponding, Client Cast	Project	\$1,500.00
ASTM C1556 Apparent Chloride Diffusion Coefficient – Chloride Results for Nine Test Depths	Test	\$2,200.00
ASTM C157 (modified) Length Change of Concrete (Drying Shrinkage) (35 day test)	Set of 3	\$500.00
ASTM C157 Length Change of Concrete (Drying Shrinkage) (56 day test)	Set of 3	\$500.00
ASTM C1579 Early Age Shrinkage (one control, one test)	Test	\$3,000.00
ASTM C1581 Age at Cracking (Ring Test)	Project	\$7,000.00
ASTM C1585 Rate of Absorption of Water by Concrete	Test	\$1,500.00
ASTM C1760 Bulk Electrical Conductivity	Test	\$400.00
ASTM C1761 Specification for Lightweight Aggregates	Quote	
ASTM C1803/C1353/C241 Taber Abrasion	Set of 3	\$500.00
ASTM C1876 Standard Test Method for Bulk Electrical Resistivity of Bulk Conductivity of Concrete	Test	\$250.00
ASTM C192 Making Concrete in the Laboratory (< 2 cu.ft.)	Mix	\$500.00
ASTM C192 Making Concrete in the Laboratory (> 2 cu.ft.)	Project	\$700.00
ASTM C232 Bleeding of Concrete	Test	\$200.00
ASTM C293 Concrete Flexural Strength (center point loading)	Test	\$65.00
ASTM C330 Specification for Lightweight Aggregates	Quote	
ASTM C331 Specification for Lightweight Aggregates	Quote	
ASTM C39 Concrete Compressive Strength 4x8 cylinder	Test	\$30.00
ASTM C39 Concrete Compressive Strength 6x12 cylinder	Test	\$40.00
ASTM C39 Concrete Compressive Strength HPC	Test	\$50.00

ASTM C39 cylinder end prep	Each	\$25.00
ASTM C39 lapping (grinding) of cylinder	Each	\$55.00
ASTM C403 Concrete Time of Set (< 6 hrs.)	Test	\$200.00
ASTM C403 Concrete Time of Set (> 6 hrs.)	Hour	\$109.00
ASTM C418 Abrasion Resistance of Concrete by Sandblasting	Quote	
ASTM C42 Section 7 Concrete Core Compressive Strength	Test	\$105.00
ASTM C42 Section 8 Concrete Core Splitting Tensile Strength	Test	\$155.00
ASTM C457 Hardened Air Content	Test	\$525.00
ASTM C469 Modulus of Elasticity – 1st Test	Test	\$525.00
ASTM C469 Modulus of Elasticity – Additional Test	Test	\$275.00
ASTM C496 Concrete Splitting Tensile Strength	Test	\$85.00
ASTM C512 Creep of Concrete in Compression	Per Age of Loading	\$5,000.00
ASTM C567 Lightweight Concrete Unit Weight	Set of 3	\$350.00
ASTM C642 Density Absorption and Voids in Concrete	Sample	\$225.00
ASTM C666 Procedure A Freezing & Thawing in Water	Set of 3	\$1,200.00
ASTM C672 Scaling Resistance of Concrete	Set of 2	\$800.00
ASTM C78 Concrete Flexural Strength (third point loading)	Test	\$65.00
ASTM C856 Petrographic Analysis of Concrete - Fire Damage Assessment	Test	\$800.00
ASTM C856 Petrographic Analysis of Concrete - Limited Microscopic Observations	Test	\$500.00
ASTM C856 Petrographic Analysis of Concrete – Premium with SEM	Test	\$2,250.00
ASTM C856 Petrographic Analysis of Concrete with ASTM C457 and Thin Section	Test	\$1,750.00
ASTM C856 Petrographic Analysis of Concrete with Thin Section	Test	\$1,250.00
ASTM C873 Cast-In-Place-Punch-Out Cylinder Compressive Strength	Test	\$65.00
ASTM C873 CIPPOC molds	Each	\$55.00
ASTM D5385 Hydrostatic Pressure Resistance of Waterproofing Membranes on Concrete	Quote	
ASTM E1155 Floor Flatness	Quote	
Carbonation Analysis Additional Test Charge	Test	\$150.00
Carbonation Analysis-1st Test Charge	Test	\$300.00
Concrete Air Meter Calibration	Each	\$125.00
Concrete Cylinders curing & handling of non-tested specimens	Each	\$25.00
Concrete Cylinders pickup/delivery	Set	\$80.00
Maturity Puck	Each	\$75.00
NT Build 492 Chloride Diffusion Coefficient	Test	\$1,600.00
NYSDOT 502-3P Concrete Freeze-Thaw of Cores/Cylinders	Set of 3	\$750.00
Polymer Identification by FTIR Infrared Spectroscopy	Sample	\$400.00
Presence of Water Proofing Additives / Integral Water Proofing Agents	Sample	\$800.00
Profilograph Rental	Day	\$160.00
Shotcrete Core Compression Test	Test	\$65.00
Thin Section Analysis	Test	\$750.00

Condition Assessment		
Service Item	Unit	Rate
AAMA 501.2 Water Leakage	Quote	
Architectural Design	Quote	
ASTM D4541 Coatings Pull-Off Strength	Quote	
ASTM E1105 Water Penetration	Quote	
ASTM E783 Air Leakage	Quote	
Bond Tests	Quote	
Coatings Inspections (NACE)	Quote	
Density Tests (f.o.b. laboratory)	Test	\$85.00
Ground Penetrating Radar (GPR)	Quote	
Instrumentation	Quote	
Load Testing	Quote	
Material Evaluations	Quote	
Moisture/Humidity Testing	Quote	
Pre- and Post- Construction Condition Surveys	Quote	
Rebar Locator	Day	\$125.00
Roofing Observations	Quote	
Schmidt Rebound Hammer	Day	\$65.00
Sounding	Quote	
Structural Design	Quote	
Structural Evaluation	Quote	
Vibration Monitoring	Quote	
Water Infiltration Investigation	Quote	
Windsor Pin	Quote	
Windsor Probe	Quote	
Flooring/Adhesives		
Service Item	Unit	Rate
ASTM D5040 Ash Content of Adhesives	Sample	\$100.00
Concrete Flooring Moisture Mitigation Alkali Two Depths	Sample	\$500.00
Concrete Flooring Moisture Mitigation Organic Three Depths	Sample	\$800.00
Concrete Flooring Moisture Mitigation Organic Two Depths	Sample	\$600.00
Flooring Failure Analysis	Quote	
Gypcrete Flooring Analysis	Project	\$1,800.00
IC test Suite – Sodium, Potassium, Chloride, and Sulfate (Water-Soluble) at Two Depths	Sample	\$800.00
Pre-Application Moisture Mitigation Assessment	Sample	\$2,200.00
Pre-Installation Flooring Evaluation Chemistry and Petrography	Test	\$1,800.00
Presence of Unreacted Alkali Silicate Product	Test	\$1,400.00
Frac Sand Testing		
Service Item	Unit	Rate
API RP 56 Acid Solubility	Test	\$500.00
API RP 56 Bulk Density	Test	\$100.00
API RP 56 Mineralogical	Test	\$350.00
API RP 56 Sieve Analysis (one stack of screens up to 6 screens)	Test	\$130.00
API RP 56 Sieve Analysis (three stacks of screens 13-18 screens)	Test	\$230.00
API RP 56 Sieve Analysis (two stacks of screens 7-12 screens)	Test	\$180.00

API RP 56 Sphericity and Roundness	Test	\$250.00
Geotechnical Equipment Rental		
Service Item	Unit	Rate
1 or 2 Ton Auxiliary Truck	Hour	\$25.00
1/2 or 3/4 Ton Auxiliary Truck	Hour	\$25.00
20 Ton CPT Rig	Hour	\$163.00
Bore Hole Permeability HQ Wireline Packer	Day	\$350.00
Bore Hole Permeability Open End Casing Method	Day	\$140.00
Borehole Pressuremeter	Hour	\$80.00
Calibrated SPT Rod	Day	\$230.00
Diamond Bit Metamorphic and Igneous Rock B and NQ	Foot	\$22.00
Diamond Bit Metamorphic and Igneous Rock HQ	Foot	\$25.00
Diamond Bit Sedimentary Rock B and NQ	Foot	\$16.00
Diamond Bit Sedimentary Rock HQ	Foot	\$16.00
Double Rig Infiltrometer	Day	\$275.00
Electronic Cone or Piezocone with Computer	Hour	\$50.00
Field Electrical Resistivity Wenner 4 Pin	Day	\$265.00
Field Seismic Refraction	Day	\$435.00
Field Vane Shear	Day	\$335.00
GPS Mapping System	Hour	\$20.00
Inclinometer Reading Equipment	Day	\$350.00
Iowa Borehole Shear Tester	Day	\$335.00
Pile Driving Analyzer	Day	\$750.00
Pile Integrity Test	Day	\$360.00
Pneumatic Transducer Reading Equipment	Day	\$180.00
Portable, Non-Rotary Rig	Hour	\$92.00
Rotary Drill on 2WD 1-1/2 to 2-1/2-Ton Truck	Hour	\$92.00
Rotary Drill on 4WD 1-1/2 to 2-1/2-Ton Truck	Hour	\$95.00
Rotary Drill on 4WD 1-Ton Truck	Hour	\$82.00
Rotary Drill on All-Terrain Vehicle	Hour	\$125.00
Soil Sampler	Hour	\$8.00
Trailer	Hour	\$12.00
Truck with Coring Equipment	Hour	\$61.00
Truck with Warning Sign Crash Trailer	Hour	\$45.00
Water Sampler	Hour	\$22.00
Groundwater Monitoring Equipment Rental		
Service Item	Unit	Rate
2-inch Pump Assembly	Day	\$110.00
Bailers-Polypropylene	Each	\$15.00
Bailers-Teflon	Each	\$30.00
Conductivity Meter	Day	\$25.00
Dissolved Oxygen Meter	Day	\$50.00
Groundwater Filter Nalgene	Each	\$25.00
Groundwater Modeling Software	Hour	\$25.00
Oil Water Interface Sensor	Day	\$90.00
Peristaltic Assembly	Day	\$60.00
pH Meter	Day	\$25.00

Redox Potential Meter	Day	\$25.00
Turbidity Meter	Day	\$50.00
Water Level Probe	Day	\$50.00
Well Rate of Recovery Equipment	Day	\$150.00
YSI Multi Parameter Meter	Day	\$150.00
Grout/Repair Products		
Service Item	Unit	Rate
ASTM C1019 Sampling and Testing Grout	Test	\$70.00
ASTM C1090 Measuring Changes in Height of Cement Grout	Set of 2	\$800.00
ASTM C1107 Specification for Packaged Dry Non-Shrink Grout, per temp.	Quote	
ASTM C387 Specification for Packaged Dry Repair Materials	Quote	
ASTM C827 Change in Height at Early Ages	Test	\$1,200.00
ASTM C881 Specification for Epoxy-Resin Bonding Systems	Quote	
ASTM C882 Bond Strength of Epoxy-Resin Systems by Slant Shear two ages	Test	\$950.00
ASTM C928 Specification for Packaged Dry Repair Materials	Sample	\$2,900.00
Compressive Strength of 2x4 Cylinders, 2x2 Cubes	Test	\$30.00
Masonry		
Service Item	Unit	Rate
ASTM C1324 Hardened Masonry Mortar-Historic or Modern	Test	\$1,900.00
ASTM C1324 Masonry Plaster (Stucco) - Brown and Scratch Coats)	Test	\$2,800.00
ASTM C1324 / C856 Petrographic Analysis of Grout	Test	\$1,750.00
Color LAB Values Mortar/Acid Insoluble Sand	Test	\$125.00
Iron Oxide Pigment Content of Mortar	Test	\$150.00
Masonry Expert Interpretation of ASTM C1324 Data/Results	Test	\$350.00
Masonry Fiber Content (Polymer or Steel)	Test	\$600.00
Masonry Unit Weight (Density)	Test	\$150.00
Sieve Analysis of ASTM C1324 Acid Insoluble Sand	Test	\$250.00
Masonry/CMU		
Service Item	Unit	Rate
ASTM C1194 Compressive Strength of Architectural Cast Stone	Set	\$255.00
ASTM C1195 Absorption of Architectural Cast Stone	Set	\$255.00
ASTM C1262 Freeze-Thaw Durability of Retaining Wall Units and Related Units (100 Cycles)	Set of 3	\$750.00
ASTM C1314 Compressive Strength of Masonry Prisms (field fabrication and test)	Each	\$125.00
ASTM C1314 Compressive Strength of Masonry Prisms (lab fabrication and test)	Set	\$500.00
ASTM C1314 Compressive Strength of Masonry Prisms (if cells are filled)	Sample	\$100.00
ASTM C1353 Abrasion Resistance of Dimension Stone Using a Rotary Platform Abraser	Set	\$400.00
ASTM C1372 Specification for Dry-Cast Segmental Retaining Wall Units (compressive strength & absorption)	Set	\$290.00

ASTM C1372 Specification for Dry-Cast Segmental Retaining Wall Units (compressive strength only)	Set	\$195.00
ASTM C140 Section 7 Compressive Strength of Concrete Masonry Units	Set of 3	\$160.00
ASTM C140 Section 8 Absorption of Concrete Masonry Units	Set of 3	\$115.00
ASTM C1645 Freeze-Thaw Durability of Solid Concrete Interlocking Paving Units	Set of 3	\$600.00
ASTM C170 Compressive Strength of Dimension Stone	Each	\$25.00
ASTM C1721 Petrographic Analysis of Dimension Stone-Failure Analysis	Quote	
ASTM C1721 Petrographic Analysis of Dimension Stone-Pre Installation	Test	\$800.00
ASTM C241 Abrasion Resistance of Stone	Quote	
ASTM C426 Linear Shrinkage of Concrete	Set of 3	\$1,000.00
ASTM C55 Specification for Concrete Building Block	Set of 6	\$195.00
ASTM C67 Section 11 Efflorescence of Brick and Structural Clay Tile	Set of 10	\$155.00
ASTM C67 Section 13 & 14 Measurement of Size and Warpage of Brick and Structural Clay Tile	Set of 10	\$250.00
ASTM C67 Section 6 Modulus of Rupture of Brick and Structural Clay Tile	Set of 5	\$225.00
ASTM C67 Section 7 Compressive Strength of Brick and Structural Clay Tile	Set of 5	\$225.00
ASTM C67 Section 8 & 10 Absorption and Initial Rate of Absorption of Brick and Structural Clay Tile	Set of 5	\$180.00
ASTM C67 Section 9 Freezing and Thawing of Brick and Structural Clay Tile (Method B)	Set of 5	\$510.00
ASTM C67 Testing Brick and Structural Clay Tile (suite of tests not including F-T)	Set of 5	\$725.00
ASTM C880 Flexural Strength of Dimension Stone	Each	\$30.00
ASTM C90 Fire Rating of Loadbearing Concrete Masonry Units	Set	\$125.00
ASTM C90 Specification for Loadbearing Concrete Masonry Units	Set of 6	\$225.00
ASTM C936 Specification for Solid Concrete Interlocking Paving Units (aspect ratio between 0.6 and 1.2)	Set of 6	\$215.00
ASTM C936 Specification for Solid Concrete Interlocking Paving Units (aspect ratio lower than 0.6 or greater than 1.2)	Set of 6	\$260.00
ASTM C936 Specification for Solid Concrete Interlocking Paving Units (compressive strength only)	Set of 3	\$175.00
ASTM C952 Bond Strength of Mortar to Masonry Units	Set of 5	\$500.00
ASTM C97 Section 7 Absorption, Bulk Specific Gravity and Density of Dimension Stone	Each	\$50.00
ASTM C99 Modulus of Rupture of Dimension Stone	Each	\$30.00
ASTM E303 Surface Frictional Properties Using the British Pendulum Tester	Quote	
ASTM E518 Flexural Bond Strength of Masonry	Test	\$200.00
Efflorescence of Mortar, Cement, Lime and Sand	Each	\$352.00
NBS RP1320 Water Transmission	Project	
Sample Preparation of Dimension Stone	Hour	\$100.00

Mass Concrete		
Service Item	Unit	Rate
AASHTO TP 119 Electrical Resistivity of Concrete in Uniaxial Resistance (Bucket Test)	Quote	
ASTM C1074 Maturity (Single Sample Per Mix)	Test	\$350.00
ASTM C1074 Maturity (Multiple Samples Per Mix)	Test	\$500.00
ASTM D5334 Thermal Conductivity/Resistivity of Concrete (Dry Out Curve)	Test	\$3,000.00
ASTM D5334 Thermal Conductivity/Resistivity of Concrete (Single Point)	Test	\$400.00
ASTM D5334 Thermal Conductivity/Resistivity of Concrete (Specimen Prep)	Each	\$50.00
Finite Element Software for Thermal Analysis	Hour	\$100.00
Mass Concrete Thermal Control Plan Report	Each	\$900.00
Thermal Property Testing for Mass Concrete	Test	\$4000.00
Non-Destructive Testing		
Service Item	Unit	Rate
Bolted Connection Observations	Quote	
Charpy Impact Test	Each	\$300.00
Computed Radiography	Hour	\$220.00
Dye Penetrant Testing	Quote	
Electromagnetic Scan (Profometer)	Quote	
Magnetic Particle Testing	Quote	
Phased Array Ultrasonic	Hour	\$115.00
Radiographic Testing	Quote	
Ultrasonic Testing	Quote	
Visual Weld Observations	Quote	
Welder Qualification	Each	\$125.00
Pavement Equipment Rental		
Service Item	Unit	Rate
Ground Penetrating Radar with Truck (travel) either ½ or full day	Day	\$375.00
Ground Penetrating Radar (travel)	Hour	\$50.000
Ground Penetrating Radar with Truck (testing) either ½ or full day	Day	\$725.00
Falling Weight Deflectometer with Truck (testing)	Hour	\$205.00
Falling Weight Deflectometer with Truck (testing) either ½ or full day	Day	\$1,600.00
Falling Weight Deflectometer with Truck (travel)	Hour	\$105.00
Falling Weight Deflectometer with Truck (travel) either ½ or full day	Day	\$800.00
Lightweight Deflectometer	Day	\$250.00
High Speed Inertial Profiler (testing)	Day	\$825.00
High Speed Inertial Profiler (travel)	Day	\$425.00
HD Camera	Day	\$120.00
Geoprobe Direct Push Sampling System (sampling)	Hour	\$110.00
Geoprobe Direct Push Sampling System (travel)	Hour	\$60.00

Sealers/Coatings		
Service Item	Unit	Rate
AASHTO T 259/T 260 Penetration of Chloride Ion into Concrete by Ponding, Each Additional Sealer	Sample	\$2,300.00
AASHTO T 259/T 260 Penetration of Chloride Ion into Concrete by Ponding, Sealers	Sample	\$3,000.00
Alberta BT001 Each Additional Product	Sample	\$3,500.00
Alberta BT001 Vapor Transmission, Waterproofing and Hiding Power of Concrete Sealers	Sample	4,500.00
ASTM C1315 Section 8.7.6 Yellowing Resistance of Liquid Membrane-Forming Compounds	Sample	\$1,000.00
ASTM C1315 Section 8.7.7 Acid Alkali Resistance of Liquid Membrane-Forming Compounds	Sample	\$150.00
ASTM C1315 Section 8.8 Adhesion of Liquid Membrane-Forming Compounds	Sample	\$950.00
ASTM C1315 Specification for Liquid Membrane-Forming Compounds Type 1	Sample	\$3,450.00
ASTM C1315 Specification for Liquid Membrane-Forming Compounds Type 2	Sample	\$3,600.00
ASTM C140 Sampling and Testing Concrete Masonry Units and Related Units, Each Additional Sealer	Sample	\$350.00
ASTM C140 Sampling and Testing Concrete Masonry Units and Related Units, Sealers	Sample	\$675.00
ASTM C1543 Penetration of Chloride Ion into Concrete (test through 12 months)	Sample	\$1,500.00
ASTM C1543 Penetration of Chloride Ion into Concrete (test through 6 months)	Sample	\$1,200.00
ASTM C1543 Penetration of Chloride Ion into Concrete by Ponding, Each Additional Sealer	Sample	\$2,450.00
ASTM C1543 Penetration of Chloride Ion into Concrete by Ponding, Sealers	Sample	\$3,350.00
ASTM C156 Water Loss Through Liquid Membrane-Forming Curing Compounds	Sample	\$900.00
ASTM C309 Section 5 Deleterious Reaction of Liquid Membrane-Forming Compounds	Sample	\$100.00
ASTM C309 Section 7 Daylight Reflectance of Type 2 Liquid Membrane-Forming Compounds	Sample	\$150.00
ASTM C309 Section 8 Drying Time Requirement of Liquid Membrane-Forming Compounds	Sample	\$250.00
ASTM C309 Specification for Liquid Membrane-Forming Compounds Type 1	Sample	\$1,350.00
ASTM C309 Specification for Liquid Membrane-Forming Compounds Type 2	Sample	\$1,500.00
ASTM C666 Procedure A Freezing and Thawing in Water, Each Additional Sealer	Sample	\$1,400.00
ASTM C666 Procedure A Freezing and Thawing in Water, Sealers	Sample	\$2,950.00
ASTM C672 Scaling Resistance of Concrete, Each Additional Sealer	Sample	\$1,500.00

ASTM C672 Scaling Resistance of Concrete, Sealers	Sample	\$2,950.00
ASTM C97 Test Methods for Bulk Specific Gravity and Density of Dimension Stone, Each Additional Sealer	Sample	\$350.00
ASTM C97 Test Methods for Bulk Specific Gravity and Density of Dimension Stone, Sealers	Sample	\$675.00
ASTM D1309 Settling Properties of Traffic Paints During Storage	Sample	\$100.00
ASTM D1475 Density of Liquid Coatings	Sample	\$100.00
ASTM D1653 Water Vapor Transmission of Organic Coating Films	Sample	\$650.00
ASTM D1653 Water Vapor Transmission of Organic Coating Films, Additional Test	Sample	\$330.00
ASTM D2369 Volatile Content of Coatings	Samples	\$100.00
ASTM D6489 Water Absorption of Hardened Concrete Treated with a Water Repellent Coating	Set of 3	\$900.00
ASTM D6489 Water Absorption of Hardened Concrete Treated with a Water Repellent Coating, Additional	Set of 3	\$450.00
ASTM E514 Water Penetration and Leakage Through Masonry, Sealers	Quote	
ASTM E96 Water Vapor Transmission of Materials, Additional Test	Sample	\$2,000.00
ASTM E96 Water Vapor Transmission of Materials, Sealers	Sample	\$4,500.00
ASTM G154 UV Exposure Testing, Each Additional Sealer	Sample	\$875.00
ASTM G154 UV Exposure Testing, Sealers	Sample	\$1,500.00
Federal Specification SS-W-110C Each Additional Sealer	Sample	\$630.00
Federal Specification SS-W-110C Water Repellent, Colorless, Silicone Resin Base	Sample	\$945.00
FTIR Infrared Spectroscopy of Vehicle Solids MnDOT	Sample	\$200.00
NCHRP Report 244 Series II Each Additional Product	Sample	\$2,500.00
NCHRP Report 244 Series II Water Absorption, Water Vapor Transmission and Chloride Intrusion	Sample	\$3,400.00
NCHRP Report 244 Series IV Each Additional Product	Sample	\$3,000.00
NCHRP Report 244 Series IV Laboratory Accelerated Weathering Test, Southern Exposure	Sample	\$4,500.00
Revision of Report for Product Name Change	Project	\$500.00
Rilem Test II.4 Water Absorption Under Low Pressure	Sample	\$250.00
Software Use Rates		
Service Item	Unit	Rate
CAPWAP	Hour	\$50.00
Finite Element Seepage or Soil Deformation	Hour	\$85.00
Groundwater Modeling	Hour	\$35.00
LPILE or Group	Hour	\$35.00
Settlement FoSSA	Hour	\$35.00
Slope Stability	Hour	\$35.00
Stabilized Earth Slopes and Walls	Hour	\$35.00
Wave Equation WEAP	Hour	\$35.00

Soil and Earthwork Testing		
Service Item	Unit	Rate
AASHTO Soil Suite – Sulfate, Chloride and pH	Sample	\$500.00
AASHTO T 288 Determination of Minimum Laboratory Soil Resistivity	Test	\$107.00
AASHTO T 289 Standard Method of Test for Determining pH of Soil for Use in Corrosion Testing	Test	\$78.00
AASHTO T 95 MnDOT Proctor	Test	\$150.00
ASTM C136 Sieve Analysis of Aggregate (Coarse and Fine)	Test	\$112.00
ASTM C3080 Direct Shear of Cohesive Soils (proctor also needed)	Test	\$535.00
ASTM C3080 Direct Shear of Granular Soils Residual Strength with 3 Normal Loads (proctor also needed)	Test	\$480.00
ASTM C3080 Direct Shear of Granular Soils with 3 Normal Loads (proctor also needed)	Test	\$480.00
ASTM C427 Shrinkage Limit	Test	\$125.00
ASTM C854 Specific Gravity of Mineral Soil	Test	\$150.00
ASTM C854 Specific Gravity of Organic Soil	Test	\$175.00
ASTM D1557 Modified Proctor, 4" (Method A)	Test	\$160.00
ASTM D1557 Modified Proctor, 6" (Method B)	Test	\$160.00
ASTM D1557 Modified Proctor, 6" (Method C or D)	Test	\$175.00
ASTM D1883 California Bearing Ratio of Cohesive Soils (3 pt, 1 moisture content) (proctor also needed)	Test	\$740.00
ASTM D1883 California Bearing Ratio of Granular Soils (proctor also needed)	Test	\$650.00
ASTM D2166 Unconfined Compressive Strength of Cohesive Soil	Test	\$110.00
ASTM D2435 Consolidation Properties of Soils (up to 32 tsf with P-e and Time Curves)	Test	\$630.00
ASTM D2435 Consolidation Properties of Soils (up to 32 tsf with P-e Curve Only)	Test	\$510.00
ASTM D2844 R-value of Compacted Soils by Hveem Stabilometer	Test	\$410.00
ASTM D2850 Unconsolidated Undrained Triaxial Compression of Cohesive Soils	Point	\$255.00
ASTM D2974 Test Methods for Moisture, Ash and Organic Matter of Peat and Other Organic Soils	Test	\$78.00
ASTM D422 Particle Size Analysis of Soils (includes gradation)	Test	\$215.00
ASTM D4318 Atterberg Liquid Limit or Plastic Limit	Test	\$110.00
ASTM D4318 Atterberg Plasticity Index	Test	\$125.00
ASTM D4373 Rapid Determination of Carbonate Content of Soils	Test	\$200.00
ASTM D4767 Consolidated Undrained Triaxial Compression of Cohesive Soils	Point	\$365.00
ASTM D5084 Hydraulic Conductivity of Clay by Flexible Wall Permeater	Test	\$390.00
ASTM D5334 / IEEE 442 Thermal Conductivity of Soil, as received and oven dried	Test	\$1,000.00
ASTM D5334 / IEEE 442 Thermal Conductivity of Soil, Dry Out Curve	Test	\$1,245.00
ASTM D5856 Rigid Clay Permeability Test (includes dry density)	Test	\$285.00
ASTM D698 Standard Proctor, 4" (Method A)	Test	\$150.00

ASTM D698 Standard Proctor, 4" (Method B)	Test	\$150.00
ASTM D698 Standard Proctor, 6" (Method C)	Test	\$160.00
ASTM D7263 Laboratory Determination of Dry Density of Soil (includes water content)	Test	\$60.00
ASTM Soil Suite – Sulfate, Chloride and pH	Sample	\$500.00
Caltrans Soil Suite – Sulfate, Chloride and pH	Sample	\$500.00
Dial Indicator Gauges	Day	\$35.00
Dynamic Cone Penetrometer	Day	\$112.00
Dynamic Cone Penetrometer (non MnDOT)	Test	\$25.00
Dynamic Cone Penetrometer (MnDOT)	Test	\$50.00
Expansive Soil Testing	Test	\$150.00
Florida DOT Soil Suite – Sulfate, Chloride and pH	Sample	\$500.00
Hand Penetrometer/Torvane	Test	\$15.00
MnDOT 3877 Topsoil Borrow Test	Test	\$300.00
MnDOT Relative Moisture	Test	\$40.00
Nuclear Gauge Rental	Trip	\$50.00
One Point Proctor Check	Test	\$75.00
Proctor Sample Preparation	Hour	\$80.00
Soil Oxidation Reduction Potential	Test	\$77.00
Test Charge, Nuclear and Sand-Cone (at AET's option)	Test	\$30.00
Test Charge, Sand-Cone (when required by client)	Test	\$55.00
Water Content	Test	\$13.00
Soil Sampling Equipment Rental		
Service Item	Unit	Rate
ACM Kit	Day	\$50.00
ACM Roof Sampling Kits	Day	\$5.00
Coliwassa Sampler	Each	\$15.00
Cordless Power Tools	Day	\$10.00
Geoprobe Direct Push Sampling System	Hour	\$108.00
Hammer Drill	Day	\$25.00
HEPA Vacuum	Day	\$10.00
Ladders	Day	\$5.00
Level A-B-C Protective Gear	Quote	
Magnetic Locator	Day	\$25.00
Portable Generator 220 Volt	Day	\$25.00
Power Auger	Day	\$65.00
Site Trailer	Day	\$85.00
Soil Auger Assembly	Day	\$50.00
Soil Vapor Pilot System	Day	\$300.00
Steam Cleaner	Day	\$140.00
Steam Cleaning Down Hole Drill Tools	Each	\$210.00
Steam Cleaning Drill Rigs and Tools	Each	\$315.00
Vacuum Blower	Quote	
Vapor Pins	Each	\$100.00
XRF Analyzer	Day	\$550.00

Wastewater Monitoring Equipment Rental		
Service Item	Unit	Rate
Chlorine Residual Meter	Day	\$45.00
Confined Space Entry Equipment	Day	\$140.00
DR2000 Spectrophotometer	Day	\$85.00
Flow Meter	Day	\$85.00
Ice Auger	Day	\$50.00
ISCO Autosampler	Day	\$55.00
Kemmerer Type Sampler	Day	\$45.00
Liquid Level Recorder	Day	\$50.00
Recording pH Meter	Day	\$45.00
Refrigerated ISCO Autosampler	Day	\$100.00
Weir Materials	Day	\$40.00

**MINNESOTA DEPARTMENT OF TRANSPORTATION
REIMBURSEMENT RATES FOR TRAVEL EXPENSES**

Subject	Conditions/Mileage	Rate
Personal Car	(1)	Current IRS Rate
Commercial Aircraft	(2)	Actual Cost
Personal Aircraft	(1)	Current IRS Rate
Rental Car	(2)	Actual Cost
Taxi	(3)	Actual Cost

Subject	Meals	Rate
Breakfast	(1) (5)	\$9.00/person
Lunch	(1) (5)	\$11.00/person
Dinner	(1) (5)	\$16.00/person

Subject	Lodging	Rate
Motel, Hotel, etc.	(2) (4) (6)	Actual Cost
Laundry/Dry Cleaning (After seven continuous days in Travel Status)	(1) (3)	\$16.00/week
Telephone, Personal	(1)	\$3.00/day

Travel Status

- More than 35 miles from Home Station and/or stay overnight at commercial lodging (motel, etc.).
- Leave home in travel status before 6 a.m. for breakfast expense that day.
- In travel status after 7 p.m. for supper expense that day.
- On travel status and/or more than 35 miles from Home Station for lunch expense that day.

Restrictions

1. A maximum rate shown or a lesser rate per actual reimbursement to an employee.
2. Include receipt or copy of receipt when invoicing. (Coach class for aircraft, standard car size, and standard room (not to exceed \$150.00)).
3. Include receipt or copy of receipt when more than \$10.00.
4. Reasonable for area of a stay.
5. The gratuity is included in maximum cost.
6. To be in Travel Status and at a commercial lodging.

INVOICE NO. _____

Estimated Completion: __% (from Column 6 Progress Report)

Final Invoice? Yes No

Invoice Instructions:

Contractor must:

1. Complete the invoice and, if applicable, the progress report, in their entirety
2. Sign the invoice and progress report
3. Attach supporting documentation
4. Scan the entire invoice package*, **in the following order:**
 - a. Completed, Signed Invoice Form
 - b. Completed, Signed Progress Report Form (if applicable)
 - c. Supporting Documentation

Note: Whenever possible, convert landscape pages to portrait pages and optimize the document to decrease the size.
5. E-mail the invoice package, in .pdf, to ptinvoices.dot@state.mn.us

MnDOT Contract Number: 1046603
 Contract Expiration Date: July 31, 2025
 SP Number: 6217-51 TH Number: 3

Billing Period: From _____ to _____
 Invoice Date: _____

	Total Contract Amount	Total Billing to Date	Amount Previously Billed	Billed This Invoice
1. Actual Costs Billed: (Attach Supporting Documentation)	\$2,323,115.01			
Net Earning Totals:	\$2,323,115.01			
Total Amount due this invoice:				\$

Contractor: Complete this table when submitting an invoice for payment

Source Type	Total Billing to Date	Amount Previously Billed	Billed This Invoice
1250			
Total**			

I certify that the statements contained on this invoice, and its supporting documents, are true and accurate and that I have not knowingly made a false or fraudulent claim, or used a false or fraudulent record in connection with this Invoice. I understand that this invoice is subject to audit.

Contractor: _____

Signature: _____

Print Name: _____

Title: _____

*If you are unable to support electronic submission of Invoices, you must contact the Authorized Representative for possible alternatives.

For Invoice No.: _____

Progress Report Instructions:

1. Contractor must complete the progress report form, in its entirety.
2. Contractor must sign the progress report.
3. Contractor must include the completed, signed progress report as part of the invoice package, and submit it as instructed (see Contract and/or invoice form for further details).

(Note: Whenever possible, convert landscape pages to portrait pages and optimize the document to decrease the size.)

MnDOT Contract No. 1046603
 Contract Expiration Date: July 31, 2025
 SP Number: 6217-51 TH Number: 3

Billing Period: from _____ to _____
 From: Kimley-Horn

Task	% of Total Contract	ENGINEERING ESTIMATE				Hours Budget	Hours Accrued This Period	Total Hours Accrued To Date	*% of Budget Hours Used
		% Work Completed This Period	% Work Completed To Date	Weight % Completed This Period	Weight % Work Completed to Date				
1	2	3	4	5	6	7	8	9	10
TOTALS:									

***Note: If Budgeted Hours Used for any task exceeds 100%, Contractor must attach an explanation to the invoice package.**

I certify that the above statement is correct, and certify that I have not knowingly made a false statement or used a false record in the preparation of this form:

 Contractor's Project Manager Date