

**MASTER SERVICES AGREEMENT FOR PROFESSIONAL SERVICES
BY AND BETWEEN
BARR ENGINEERING COMPANY
AND
CITY OF DULUTH**

THIS MASTER SERVICES AGREEMENT, effective as of the date of attestation by the City Clerk (the "Effective Date"), is made by and between the CITY OF DULUTH, a municipal corporation under laws of the State of Minnesota, hereinafter referred to as "City," and BARR ENGINEERING COMPANY, located at 325 South Lake Avenue, Suite 700, Duluth, MN 55802, hereinafter referred to as "Consultant," for the purpose of rendering services to the City.

WHEREAS, the City desires to utilize Consultant's environmental consulting services on a non-exclusive, project by project basis to support the support the investigation and assessment of contaminated or potentially contaminated sites in Duluth; and

WHEREAS, Consultant has represented that it is qualified and willing to perform services set forth in its proposal;

NOW, THEREFORE, in consideration of the mutual covenants and conditions hereinafter contained, the parties hereto agree as follows:

I. Services

Consultant will provide, upon written request of the city manager in the form of a Statement of Work or similar documentation (each a "SOW"), the services identified in the Consultant's proposal dated January 15, 2020 and attached hereto as "**Exhibit A.**" The Consultant's testing fee schedule labeled Fee Schedule—2020 is attached hereto as "**Exhibit B.**" In the event of a conflict between the provisions of Exhibit A or Exhibit B and this Agreement, the terms and conditions of this Agreement shall be deemed to be controlling.

II. Fees

It is agreed between the parties that Consultant's maximum annual fee for the term of this Agreement shall not exceed the sum of One Hundred Thousand and no/100 Dollars (\$100,000.00), payable from 255-020-5319. All invoices for services rendered shall be submitted monthly to the project manager, or his/her designee, and shall be accompanied by such documentation as the City shall reasonably expect. Upon receipt of said request and

appropriate documentation, the City shall reimburse Consultant up to the amount set forth above.

III. General Terms and Conditions

1. Amendments.

Any alterations, variations, modifications or waivers of terms of this Agreement shall be binding upon the City and Consultant only upon being reduced to writing and signed by a duly authorized representative of each party.

2. Assignment.

Consultant represents that it will utilize only its own personnel in the performance of the services set forth herein; and further agrees that it will neither assign, transfer or subcontract any rights or obligations under this Agreement without prior written consent of the City.

3. Data and Confidentiality.

- a. The City agrees that it will make available all pertinent information, data and records under its control for Consultant to use in the performance of this Agreement, or to assist Consultant wherever possible to obtain such records, data and information.
- b. All reports, data, information, documentation and material given to or prepared by Consultant pursuant to this Agreement will be confidential and will not be released by Consultant without prior authorization from the City.
- c. Consultant agrees that all work created by Consultant for the City is a “work made for hire” and that the City shall own all right, title, and interest in and to the work, including the entire copyright in the work (“City Property”). Consultant further agrees that to the extent the work is not a “work made for hire” Consultant will assign to City ownership of all right, title and interest in and to the work, including ownership of the entire copyright in the work. Consultant agrees to execute, at no cost to City, all documents necessary for City to perfect its ownership of the entire copyright in the work. Consultant represents and warrants that the work created or prepared by Consultant will be original and will not infringe upon the rights of any third party, and Consultant further represents that the work will not have been previously assigned, licensed or otherwise encumbered.
- d. Records shall be maintained by Consultant in accordance with requirements prescribed by the City and with respect to all matters covered by this Agreement.

Such records shall be maintained for a period of six (6) years after receipt of final payment under this Agreement.

- e. Consultant will ensure that all costs shall be supported by properly executed payrolls, time records, invoices, contracts, vouchers, or other official documentation evidencing in proper detail the nature and propriety of the charges. All checks, payrolls, invoices, contracts, vouchers, orders, or other accounting documents pertaining in whole or in part to this Agreement shall be clearly identified and readily accessible.
 - f. Consultant shall be responsible for furnishing to the City records, data and information as the City may require pertaining to matters covered by this Agreement.
 - g. Consultant shall ensure that at any time during normal business hours and as often as the City may deem necessary, there shall be made available to the City for examination, all of its records with respect to all matters covered by this Agreement. Consultant will also permit the City to audit, examine, and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment, and other data relating to all matters covered by this Agreement.
4. Standard of Performance.

Consultant represents and warrants that:

- a. Consultant and all personnel to be provided by it hereunder has sufficient training and experience to perform the duties set forth herein and are in good standing with all applicable licensing requirements.
- b. Consultant and all personnel provided by it hereunder shall perform their respective duties in a professional and diligent manner in the best interests of the City and in accordance with the then current generally accepted standards of the profession for the provisions of services of this type.
- c. Consultant has complied or will comply with all legal requirements applicable to it with respect to this Agreement. Consultant will observe all applicable laws, regulations, ordinances and orders of the United States, State of Minnesota and agencies and political subdivisions thereof.
- d. The execution and delivery of this Agreement and the consummation of the transactions herein contemplated do not and will not conflict with, or constitute a breach of or a default under, any agreement to which the Consultant is a party or

by which it is bound, or result in the creation or imposition of any lien, charge or encumbrance of any nature upon any of the property or assets of the Consultant contrary to the terms of any instrument or agreement.

- e. There is no litigation pending or to the best of the Consultant's knowledge threatened against the Consultant affecting its ability to carry out the terms of this Agreement or to carry out the terms and conditions of any other matter materially affecting the ability of the Consultant to perform its obligations hereunder.
 - f. The Consultant will not, without the prior written consent of the City, enter into any agreement or other commitment the performance of which would constitute a breach of any of the terms, conditions, provisions, representations, warranties and/or covenants contained in this Agreement.
5. Agreement Period.

The term of this Agreement shall commence on the Effective Date and shall continue until December 31, 2022, unless terminated earlier as provided for herein.

Either party may, by giving written notice, specifying the effective date thereof, terminate this Agreement in whole or in part without cause. In the event of termination, all property and finished or unfinished documents and other writings prepared by Consultant under this Agreement shall become the property of the City and Consultant shall promptly deliver the same to the City. Consultant shall be entitled to compensation for services properly performed by it to the date of termination of this Agreement. In the event of termination due to breach by Consultant, the City shall retain all other remedies available to it, and the City shall be relieved from payment of any fees in respect of the services of Consultant which gave rise to such breach.

6. Independent Contractor.

- a. It is agreed that nothing herein contained is intended or should be construed in any manner as creating or establishing the relationship of copartners between the parties hereto or as constituting Consultant as an agent, representative or employee of the City for any purpose or in any manner whatsoever. The parties do not intend to create any third party beneficiary of this Agreement. Consultant and its employees shall not be considered employees of the City, and any and all claims that may or might arise under the Worker's Compensation Act of the State of Minnesota on behalf of Consultant's employees while so engaged, and any and all claims whatsoever on behalf of Consultant's employees arising out of employment shall in no way be the responsibility of City. Except for compensation provided in Section II of this Agreement, Consultant's employees shall not be entitled to any

compensation or rights or benefits of any kind whatsoever from City, including without limitation, tenure rights, medical and hospital care, sick and vacation leave, Worker's Compensation, Unemployment Insurance, disability or severance pay and P.E.R.A. (Public Employee Retirement Association). Further, City shall in no way be responsible to defend, indemnify or save harmless Consultant from liability or judgments arising out of Consultant's intentional or negligent acts or omissions of Consultant or its employees while performing the work specified by this Agreement.

- b. The parties do not intend by this Agreement to create a joint venture or joint enterprise, and expressly waive any right to claim such status in any dispute arising out of this Agreement.
 - c. Consultant expressly waives any right to claim any immunity provided for in Minnesota Statutes Chapter 466 or pursuant to the official immunity doctrine.
7. Indemnity.

To the extent allowed by law, Consultant shall defend, indemnify and hold City and its employees, officers, and agents harmless from and against any and all cost or expenses, claims or liabilities, including but not limited to, reasonable attorneys' fees and expenses in connection with any claims resulting from the Consultant's a) breach of this agreement or b) its negligence or misconduct or that of its agents or contractors in performing the Services hereunder or c) any claims arising in connection with Consultant's employees or contractors, or d) the use of any materials supplied by the Consultant to the City unless such material was modified by City and such modification is the cause of such claim. This Section shall survive the termination of this Agreement for any reason.

8. Insurance.

Consultant shall obtain and maintain for the Term of this Agreement the following minimum amounts of insurance from insurance companies authorized to do business in the State of Minnesota.

- a. Public Liability and Automobile Liability Insurance with limits not less than **\$1,500,000** Single Limit, shall be in a company approved by the city of Duluth; and shall provide for the following: Liability for Premises, Operations, Completed Operations, and Contractual Liability. **City of Duluth shall be named as Additional Insured by endorsement** under the Public Liability and Automobile Liability, or as an alternate, Consultant may provide Owners-Contractors Protective policy, naming himself and City of Duluth. **Upon execution of this Agreement,** Consultant shall provide Certificate of Insurance evidencing such coverage with

30-days' notice of cancellation, non-renewal or material change provisions included.

- b. Professional Liability Insurance in an amount not less than \$1,500,000 Single Limit; provided further that in the event the professional malpractice insurance is in the form of "claims made," insurance, 60 days' notice prior to any cancellation or modification shall be required; and in such event, Consultant agrees to provide the City with either evidence of new insurance coverage conforming to the provisions of this paragraph which will provide unbroken protection to the City, or, in the alternative, to purchase at its cost, extended coverage under the old policy for the period the state of repose runs; the protection to be provided by said "claims made" insurance shall remain in place until the running of the statute of repose for claims related to this Agreement.
 - c. Consultant shall also provide evidence of Statutory Minnesota Workers' Compensation Insurance.
 - d. A certificate showing continued maintenance of such insurance shall be on file with the City during the term of this Agreement.
 - e. The City of Duluth does not represent or guarantee that these types or limits of coverage are adequate to protect the Consultant's interests and liabilities.
9. Notices.

Unless otherwise expressly provided herein, any notice or other communication required or given shall be in writing and shall be effective for any purpose if served, with delivery or postage costs prepaid, by nationally recognized commercial overnight delivery service or by registered or certified mail, return receipt requested, to the following addresses:

City: City of Duluth
411 W First Street
City Hall Room #160
Duluth MN 55802
Attn: Ben VanTassel

Consultant: Barr Engineering Company
325 South Lake Avenue, Suite 700
Duluth, MN 55802
Attn: Eric Dott, PG

10. Civil Rights Assurances

Consultant, as part of the consideration under this Agreement, does hereby covenant and agree that:

- a. No person on the grounds of race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, sexual orientation, and/or disability shall be excluded from any participation in, denied any benefits of, or otherwise subjected to discrimination with regard to the work to be done pursuant to this Agreement.
- b. That all activities to be conducted pursuant to this Agreement shall be conducted in accordance with the Minnesota Human Rights Act of 1974, as amended (Chapter 363), Title 7 of the U.S. Code, and any regulations and executive orders which may be affected with regard thereto.

11. Laws, Rules and Regulations

Consultant agrees to observe and comply with all laws, ordinances, rules and regulations of the United States of America, the State of Minnesota and the City with respect to their respective agencies which are applicable to its activities under this Agreement.

12. Applicable Law

This Agreement, together with all of its paragraphs, terms and provisions is made in the State of Minnesota and shall be construed and interpreted in accordance with the laws of the State of Minnesota.

13. Force Majeure

Neither party shall be liable for any failure of or delay in performance of its obligations under his Agreement to the extent such failure or delay is due to circumstances beyond its reasonable control, including, without limitation, acts of God, acts of a public enemy, fires, floods, wars, civil disturbances, sabotage, accidents, insurrections, blockades, embargoes, storms, explosions, labor disputes, acts of any governmental body (whether civil or military, foreign or domestic), failure or delay of third parties or governmental bodies from whom a party is obtaining or must obtain approvals, franchises or permits, or inability to obtain labor, materials, equipment, or transportation. Any such delays shall not be a breach of or failure to perform this Agreement or any part thereof and the date on which the party's obligations hereunder are due to be fulfilled shall be extended for a period equal to the time lost as a result of such delays.

14. Severability

In the event any provision herein shall be deemed invalid or unenforceable, the remaining

provision shall continue in full force and effect and shall be binding upon the parties to this Agreement.

15. Entire Agreement

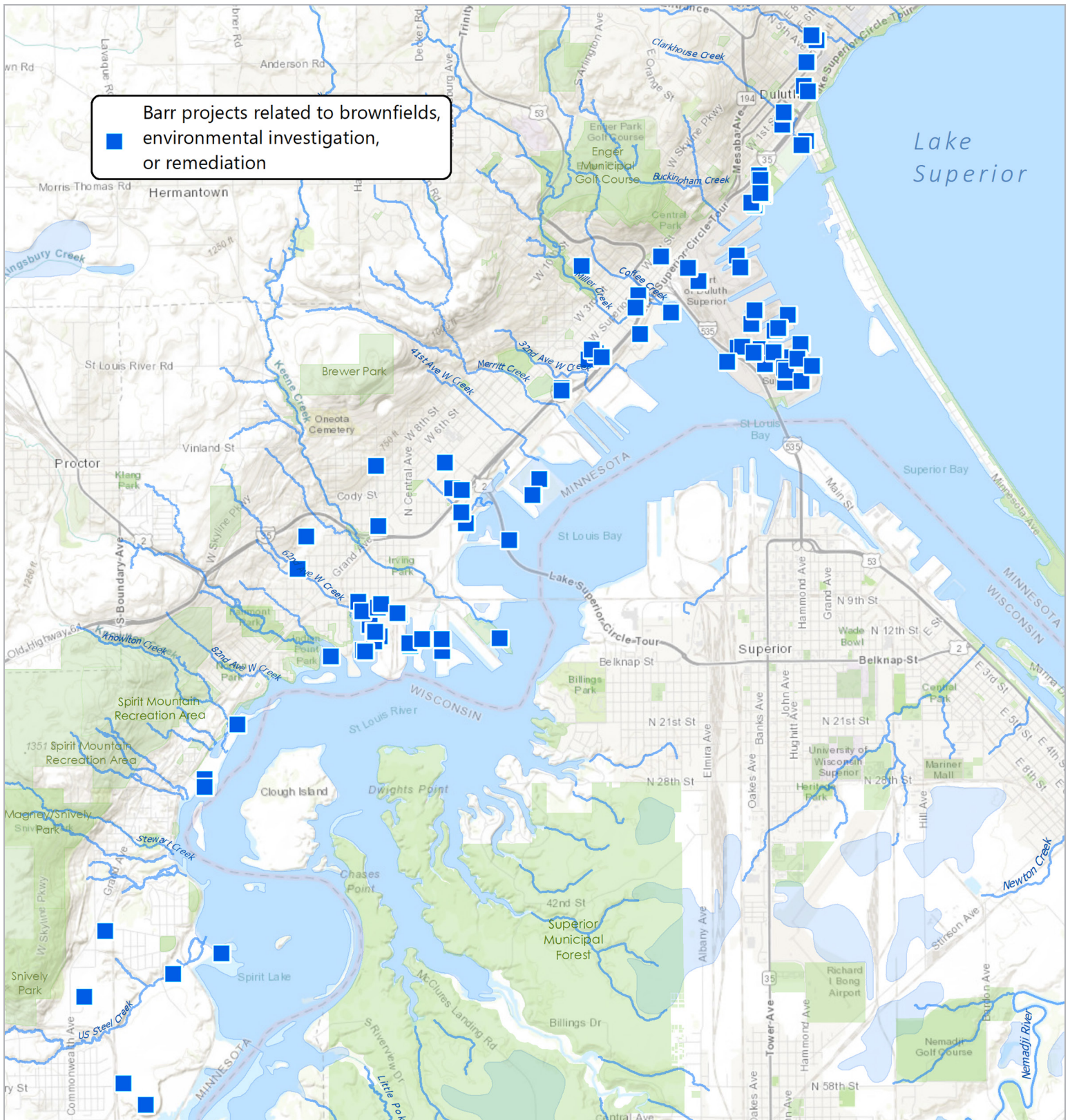
It is understood and agreed that the entire agreement of the parties including all exhibits is contained herein and that this Agreement supersedes all oral agreements and negotiations between the parties relating to the subject matter hereof. Any amendment to this Agreement shall be in writing and shall be executed by the same parties who executed the original agreement or their successors in office.

16. Counterparts

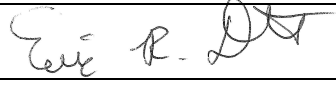
This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original as against any party whose signature appears thereon, but all of which together shall constitute but one and the same instrument. Signatures to this Agreement transmitted by facsimile, by electronic mail in “portable document format” (“.pdf”), or by any other electronic means which preserves the original graphic and pictorial appearance of the Agreement, shall have the same effect as physical delivery of the paper document bearing the original signature.

EXHIBIT A

statement of qualifications for City of Duluth brownfield assessment and cleanup RFP No. 19-28AA



**APPENDIX A - PROPOSAL COVER SHEET
CITY OF DULUTH
RFP# 19-28AA**

Bidder Information:	
Bidder Name	Barr Engineering Company
Mailing Address	325 South Lake Avenue, Suite 700, Duluth, Minnesota 55802
Contact Person	Eric Dott, PG
Contact Person's Phone Number	218-529-8234
Contact Person's E-Mail Address	edott@barr.com
Federal ID Number	41-0905995
Authorized Signature	
Title	Vice President, Senior Hydrogeologist

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personnel and materials fee schedules..... attachment A

Addendum 1 attachment B

January 15, 2020

City of Duluth
ATTN: Purchasing Division
City Hall, Room 120
411 West First Street
Duluth, MN 55802

Re: Statement of Qualifications for Brownfield Assessment and Cleanup (RFP No. 19-28AA)

Dear Purchasing Staff:

Barr is pleased to present our qualifications and fee schedules to the City of Duluth for consultant services for brownfield assessment and cleanup under its grant from the U.S. Environmental Protection Agency (EPA). By supporting your brownfield projects, Barr can help the City sustain strong economic development because our:

- **Knowledge of the City of Duluth, its brownfield development history, and its needs provides efficient support.** Barr has been working with the City on its brownfields program since 2003, when Duluth received its first EPA brownfields assessment grant. Our 17 years of collaboration on these EPA projects means we know the local setting and understand what makes projects successful. Our institutional knowledge allows us to plug in immediately to help your grant projects be successful. Additionally, our experience aligns well with your stated preferences in a consultant. In the *relevant projects* section that follows, we have indicated the skill requirements (A through I) that were involved with each of our selected project examples. Finally, we know the City cares about sustainable development principles, and we used green and sustainable remediation best practices to increase efficiency and reduce costs on aspects of the former Atlas Cement plant remediation.
- **Deep bench of local staff helps move multiple projects forward at the same time.** Accommodating a developer's schedule often requires a quick response by the City and its consultant. Barr has the bench strength to be responsive to you and your developer partners and can assemble multiple teams at the same time, if necessary, to take advantage of opportunities. More than 30 of our 125 local staff members have experience with the assessment, investigation, and cleanup of brownfields, including many with whom the City has already worked. In addition, our local staff includes a historical cultural resources specialist, geotechnical engineers, stormwater specialists and other technical experts who may be needed as a project progresses.
- **Insights about the U.S. EPA and MPCA maximize grant dollars.** Barr's experience with the EPA and Minnesota Pollution Control Agency (MPCA) means we know the angles, exceptions, and special approaches that help keep projects moving forward. For example, in 2019, Barr was able to quickly prepare a quality assurance project plan (QAPP) and get it approved by the EPA. We understand that you want to get the most progress possible with your grants. Our background and understanding of the

City, the EPA brownfield program, and the MPCA allows Barr projects to be expedient and efficient with the City's grant funds. Not only do we understand your current grant, but we can advise on future grant funding as well; we have helped clients win and administer more than \$27 million in federal, state, and local brownfields grants. When you reach the point where your current grant can no longer fund progress, Barr can help evaluate and potentially leverage alternative funding sources to keep redevelopment opportunities moving ahead. As experienced advisors, we also are adept at helping educate developers about regulatory programs and potential grant-funding tools.

Firm information: Barr Engineering Co.
325 South Lake Avenue, Duluth, MN 55802
Email: askbarr@barr.com
Phone: 218-529-8200
Fax: 218-529-8202
Federal EIN: 41-09055995
Minnesota Tax ID: 9471635

**Point of contact/
project manager:** Sheryl Filby Williams
325 South Lake Avenue, Duluth, MN 55802
Email: swilliams@barr.com
Phone: 218-529-8211
Fax: 218-529-8202

Project team: Our qualified team includes Barr and its subconsultant partners—**HTB Project Navigation, LLC, Arrowhead Consulting & Testing, Historical Information Gatherers (HIG),** and **Legend Technical Services Inc.,** an analytical testing laboratory. Our team has the qualifications and experience necessary to complete Duluth's EPA-funded brownfield assessments project. In addition, HTB Project Navigation, HIG, Arrowhead, and Legend qualify as **woman-owned businesses (WBEs)** within the Federal System for Award Management (SAM) database. Legend is a Certified Minnesota Department of Administration (MDA) Targeted WBE Vendor, and Arrowhead will file its WBE paperwork by the time your projects begin. Furthermore, Barr has reached out to a local Minnesota Unified Certification Program **minority business enterprise (MBE)** - Mission Trucking / Mission Earthwork and Environmental, Inc., a local, native-owned construction company who can provide test pit or earthwork assistance during Phase II investigations.

When the scope calls for additional specialty services, these firms have committed to joining our team to help the City meet its WBE and MBE utilization goals. Historically, Barr has helped our clients meet the MBE and/or WBE obligations and as in past engagements, we will continue to seek, evaluate, and include other potential WBE- or MBE-certified subcontractors as scope and needs arise.

By submitting this proposal, we understand, represent, and acknowledge that we have met the disclosure items listed in the RFP.

We look forward to continuing to work with Duluth on its redevelopment efforts. If you have any questions about our proposal, please contact me at 218-529-8234 or edott@barr.com.

Sincerely,



Eric Dott, PG
Vice President

relevant projects

client

Duluth Economic Development Authority

neighborhood

Western St. Louis River Corridor

**services provided (RFQ skill #)**

- QAPP (B)
- Phase II assessment (C)
- Hazardous building survey (D)
- RAP and implementation (E)
- Bid specifications (F)
- Cleanup oversight (G)
- Grant assistance (I)

grants

- helped secure 2008 Department of Employment and Economic Development (DEED) Cleanup Grant of \$579,000.
- helped secure 2011 DEED Supplemental Cleanup Grant of \$750,000.
- utilized EPA Targeted Brownfields Assistance (TBA) grant funding. Barr helped scope and direct EPA's contractor who performed groundwater investigation activities to assist the City's evaluation of high pH water management.

environmental support - Atlas Cement site

In March 2008, the City of Duluth hired Barr to assist with the redevelopment of an 11-acre sub-parcel of the 60-acre former Atlas Cement Plant site on the western edge of Duluth. Developed in the early 1900s, the Atlas site operated until the early 1980s. The plant included cement storage silos, cement kilns, bulk storage areas, and a large network of railroad tracks.

Initially, the project focused on developing the southwestern portion of the property for construction of a 33,000-square-foot production facility for IKONICS Corporation. Barr assisted with planning response actions that could be implemented in conjunction with site grading and construction work. We helped the City to secure and maximize state-brownfield-grant funding for these cleanup activities. Based on previous site data and our experience working with the state brownfield grant program and the Minnesota Pollution Control Agency (MPCA) Voluntary Investigation and Cleanup (VIC) program, Barr recommended methods for screening and managing soils on the development parcel to minimize offsite disposal costs and associated environmental impacts. Barr also secured a second grant and assisted with the subsequent facility expansion project.

Since the IKONICS development, Barr has continued to work on the site to support future development, using both EPA and Department of Employment and Economic Development (DEED) funding. Barr has assisted with: the development of sampling and analysis plans and a QAPP; assisted with the environmental portion of construction specifications and prepared site grading plans; developed material management plans; and collaborated with the EPA, the MPCA, and construction and environmental contractors; and prepared reports for each phase of work.

Field activities included: pre-construction environmental sampling; environmental oversight of site filling, grading, and road and utility construction; site investigation and clean-up oversight; and surface water and ground water monitoring.

Barr has also helped the City address high pH water at the site. Associated projects have included: water monitoring; water treatment bench and pilot tests; design and construction oversight of vegetated stormwater ponds and swales to filter and attenuate water onsite; design of site-wide capping and grading to drain surface water and reduce exposure to cement waste material; and planning and oversight of the removal of a historical conduit associated with a high pH groundwater seep.

client

Duluth Seaway Port Authority

neighborhood

Lincoln Park / Rice's Point
Western St. Louis River Corridor



services provided (RFQ skill #)

- Phase I assessment (A)
- QAPP (B)
- Phase II assessment (C)
- Hazardous building survey (D)
- RAP and implementation (E)
- Bid specifications (F)
- Cleanup oversight (G)
- Grant assistance (I)

recognition

The Clure Public Marine Terminal Expansion Project was a 2018 Minnesota Brownfields ReScape Award finalist in the *economic impact* category.

grants

- helped prepare winning \$990,000 Department of Employment and Economic Development (DEED) contamination cleanup grant for the Clure Public Marine Terminal Expansion Project.
- helped prepare winning \$300,000 U.S. EPA Brownfield Assessment Grant for the following target neighborhoods Rice's Point / Lincoln Park and Morgan Park / Gary New Duluth

brownfield assessments – Duluth Seaway Port Authority

Since 2007 Barr has assisted the Duluth Seaway Port Authority (DSPA) with a range of brownfield assessment services.

When the DSPA was awarded a U.S. EPA Brownfield Assessment Grant in 2018, Barr was selected as one of two consultants to provide assessment assistance. Our work involves advising the DSPA; conducting Phase I ESAs; developing EPA-approved quality assurance project plans (QAPPs); eligibility determinations; sampling and analysis plans; investigations; and preparing RAPs for select sites.

Brownfields assessment project highlights

Clure Public Marine Terminal Expansion: Barr assisted the DSPA with the rehabilitation of the 26-acre former shipping dock site in the Duluth harbor. The industrial site has held a former lumber mill, grain elevators, transportation infrastructure, and a coal-fired electricity-generating powerhouse. Barr completed Phase I and II ESAs and developed a RAP, construction contingency plan, and environmental plans and specifications for the pier and adjacent slip. Unique to this project, we were able to coordinate and permit transportation of sediment for reuse at two other local brownfield redevelopment projects. Completed in 2016, the operational dock allowed the DSPA to expand its Clure Public Terminal, which now serves several industries crucial to the Midwest and boosts regional economic potential.

Garfield and Elm Development Property: To accommodate the expansion of a long-term DSPA tenant, Barr helped with a Phase I ESA, Phase II investigation and RAP at an industrial property along Garfield Avenue. Through a partnership with the City of Duluth, the DSPA was also able to obtain financial assistance from the City's U.S. EPA-funded brownfield grant.

Hallet Dock 7: When Hallet Dock, located within the St. Louis River Corridor, was removed from formal Superfund designation and became available for redevelopment, Barr assisted the DSPA in evaluating the environmental conditions associated with the former industrial property along with covenants related to remediation completed in the adjacent slip.

client

Duluth Economic Development Authority

location

Downtown

**services provided (RFQ skill #)**

- Phase I ESA (A)
- EPA-approved QAPP (B)
- Phase II investigation (C)
- environmental mitigation plans (E)
- bidding specifications (F)
- grant assistance (I)

grants

- utilized EPA Assessment Grant funding

environmental support - Temple Opera Block

In December 2017, the City of Duluth hired Barr to assist with a Phase I Site Assessment on the Temple Opera Block Building, in support of a pending sale. The assessment revealed an environmental condition associated with a nearby historical cleaner. Based on adjacent property information and histories, Barr recommended a Phase II sub-slab vapor investigation.

In January 2018, Barr completed the sub-slab vapor investigation and detected solvent concentrations exceeded MPCA Soil Vapor risk-screening criteria in one of the sampling locations.

Based on the elevated vapor analyte detections, Barr worked with the City to notify the appropriate state agencies, initiate a second phase of investigation that included resampling the previously identified sub-slab contaminated area, conducting ambient air sampling in the building, testing the integrity of the basement floor, and working with the MPCA to identify appropriate next steps regarding additional investigation and tenant notification.

The subsequent sub-slab and ambient air investigations confirmed that the elevated solvent concentrations were isolated beneath one corner of the building and did not impact the ambient air.

Based on these findings, the MPCA agreed to a path forward for continued building occupancy, including a short-term solution, quarterly ambient air sampling, as well as a long-term solution, installation of a sub-slab vapor-mitigation system. The MPCA also issued a No Association Determination letter and Draft No Further Action determination to the potential buyer.

In addition, Barr teamed with a vapor mitigation specialist to provide the City with estimated costs and pros and cons of multiple sub-slab vapor-mitigation options before and/or during the property redevelopment.

DEDA has since successfully sold the property to a local developer.

client
City of Duluth

neighborhood
Downtown



services provided (RFQ skill #)

- Phase I assessment (A)
- QAPP (B)
- Phase II assessment (C)
- RAP and implementation (E)
- Bid specifications (F)
- Cleanup oversight (G)

environmental support - Superior Street reconstruction

The City of Duluth is entering the final stage of a three-year reconstruction of 11 blocks of Superior Street through the heart of downtown Duluth. Before the detailed design for the project was completed, Barr was engaged to complete Phase I and II environmental assessments of the entire project corridor. The Phase II investigation work required coordination with the geotechnical driller in order to complete the environmental drilling and soil sampling in concert with the geotechnical work. This was a benefit as it helped minimize disruption of downtown traffic from the drilling work needed for the project planning and design.

As part of the project design, Barr developed an environmental response action plan (RAP) and construction contingency plan for managing impacted soils during the construction project. Beginning in summer 2018, Barr field staff were on-site during work in areas pre-determined to have soil impacts. Working with the project contractor, Barr oversaw the contractor's soil removal and disposal work to assure the Minnesota Pollution Control Agency-approved RAP was properly implemented. Barr field staff also collected the required confirmation soil samples and waste disposal characterization samples in support of this work.

In addition, the Barr team was on-call to handle contingency findings, of which a few examples include: discovery of unknown liquid fuel storage tanks which had to be managed, potential asbestos-containing materials which had to be tested and managed, previously un-identified soil impacts or suspect debris encountered during construction

Working closely with the City's project manager and the contractor team, Barr performed most of our confirmation sampling in advance of construction work in certain areas. This allowed for laboratory results to be received in advance, so the limits of soil removal were already established once the contractor was ready to dig each area. This allowed the contractor and City to avoid expensive down-time waiting on environmental results.

The third and final stage of the Superior Street construction begins spring 2020 and Barr's field staff will again work with the contractor to complete the required environmental management steps.

clients

IPS Cranes, HDPE, Loll-Epicurean - all partnered with City of Duluth

neighborhood

Irving/Fairmount



services provided (RFQ skill #)

- Phase I assessment (A)
- QAPP (B)
- Phase II assessment (C)
- Hazardous building survey (D)
- RAP and implementation (E)
- Bid specifications (F)
- Cleanup oversight (G)
- Grant assistance (I)



grants

- 2012: Helped HDPE secure \$304,000 Department of Employment and Economic Development (DEED) cleanup grant
- 2017: For IPS Cranes, secured a \$50,000 DEED investigation grant
- Loll-Epicurean assessment utilized EPA Assessment grant funding.

multi-site environmental support - Waseca industrial corridor

The Waseca Industrial Road area of the Irving/Fairmount neighborhood was an industrial hub with a complex history involving iron making, coke making, manufactured gas plant operations, and tar-refining facilities. These operations led to presence of historical contamination and a portion of this area being named a Superfund site (the St. Louis River/Interlake/Duluth Tar site).

The City of Duluth has committed to revitalizing the Waseca Corridor and its surrounding neighborhood. The objective is to spur investment in new industry, businesses, and housing by winning EPA grant funding for community planning, assessment, and cleanup; partnering with developers to win Minnesota Department of Employment and Economic Development (DEED) grant funding for assessment and cleanup; and improving infrastructure and accessibility.

During this revitalization work, Barr has served as a trusted partner to both the City and local developers on several projects. We have assisted with successful grant applications, the navigation of Minnesota Pollution Control Agency (MPCA) Brownfield Voluntary Investigation and Cleanup (VIC) program, and the challenging logistical hurdles that come with developing sites with a long industrial legacy.

IPS Cranes wanted to purchase land on the Interlake site to facilitate the expansion of its manufacturing business. Barr worked with the City and IPS to secure a DEED grant for assessment work, completed Phase I and Phase II assessment activities, and prepared a Response Action Plan (RAP) for the planned manufacturing facility. Barr also worked closely with IPS and the MPCA Brownfield program to ensure that the proposed expansion meets regulatory standards and will be logistically and financially feasible for the client. Further, Barr completed a geotechnical investigation to help plan the expansion.

Other Waseca Industrial Corridor projects where Barr successfully worked with the City and a local business to develop historically contaminated properties include the HDPE and the Loll-Epicurean manufacturing sites.

client

Clyde Industrial Park, Inc.

neighborhood

Lincoln Park

**services provided (RFQ skill #)**

- Phase I assessment (A)
- QAPP (B)
- Phase II assessment (C)
- Hazardous building survey (D)
- RAP and implementation (E)
- Bid specifications (F)
- Cleanup oversight (G)
- Historic Preservation Act requirements (H)
- Grant assistance (I)

recognition

- This project was a 2012 Minnesota Brownfields ReScape Award winner in the *community impact* category.

grants

- helped secure a 2004 Department of Employment and Economic Development investigation grant of \$45,000.
- helped City secure a \$400,000 community assessment grant utilized for part of the assessment and historical cultural site documentation.
- helped secure a DEED cleanup grant of \$1,047,000 and a 2008 supplemental cleanup grant of \$333,000.
- helped prepare successful \$875,000 DEED redevelopment grant used for public utility work.

Clyde Iron Works redevelopment

One of the properties investigated under the City of Duluth's 2003 brownfields assessment pilot grant was the former Clyde Iron Works property. The property is 10 acres and had approximately 19 industrial buildings. Issues identified by the investigation included elevated metals, polynuclear aromatic hydrocarbon concentrations, former underground storage tanks, and an adjacent bulk-petroleum-storage facility.

Barr helped Clyde Industrial Park, Inc., the owner and developer, and the Duluth Economic Development Authority prepare a winning Minnesota Department of Employment and Economic Development (DEED) brownfields assessment grant application in 2004 for \$45,000. This grant was used for additional site investigation work and a response action plan (RAP) to address site impacts during redevelopment. Concurrent with the investigation, Barr performed a geotechnical site evaluation.

Following RAP development, Barr helped Duluth and the developer obtain additional DEED grants (\$1.04 million for environmental cleanup and \$875,000 for parking lot and street construction and public utilities). Barr's knowledge of the U.S. EPA brownfield grant program helped gain approval for using EPA funds for supplemental Phase I and Phase II assessments, historical review, and mitigation measures to support redevelopment.

The response actions occurred during the site redevelopment activities, and Barr provided construction observation for soil excavation and management, both on-site and off-site, as well as vapor intrusion controls. Barr also helped obtain a "no association" determination letter.

Phase I of the development concluded in 2009, including construction of a multi-use sports pavilion and 1,400-seat hockey arena. As pavilion construction was wrapping up, Barr once again helped the city and the developer win a supplemental DEED cleanup grant for \$333,000 to manage contamination encountered during renovation of a former machine shop into a restaurant, bar, and event center.

resumes



ERIC DOTT, PG

Vice President, Senior Hydrogeologist

Eric Dott has 30 years of experience as a hydrogeologist and environmental professional performing Phase I environmental assessments, Phase II investigations, remediation, and brownfields redevelopment projects for a variety of clients. Eric's clients have included industrial, developer, property management, legal, county, municipal, tribal, and nonprofit group clients. Before Barr, he worked at the Minnesota Pollution Control Agency, where his responsibilities included investigation and remediation of industrial chemical-release sites throughout Minnesota and involvement in the development of MPCA's risk-based site-evaluation guidance. Eric has extensive grant-writing and -administrative experience.

Role

Co-Principal

Education

MS, Geology

MS, Water
Resources
Management

BS, Biology /
Environmental
Studies

Registration

Professional
Geologist

City of Duluth experience

- Serving as senior project manager for the cleanup of an 11-acre portion of the former Atlas Cement site. Helped prepare a winning site-cleanup grant that secured \$579,000 in grant funding for the cleanup work.
- Managing the investigation and implementation oversight of Barr's remediation plan for the redevelopment of the former Clyde Iron Works site in Duluth. Prepared or helped prepare five brownfield grants totaling over \$2.6 million for assessment, cleanup, and redevelopment of the former Clyde Iron Works site.
- Managing successful completion of multiple EPA-funded brownfields assessment projects in Duluth, Minnesota, over 17 years, including more than 15 Phase I assessments, three quality assurance project plans (QAPPs) with multiple updates, more than eight Phase II investigations, and four response action plans. Provided support to city for reporting and administrative documentation to the EPA. Additionally, Eric has worked with four other cities on EPA assessment grant programs.
- Helping the city of Duluth prepare winning EPA community-wide brownfields assessment grant applications worth \$400,000 in 2004.
- Helping the city of Duluth for more than 15 years and the Duluth Seaway Port Authority for 12 years with public outreach and promoting grant tools, working with their development partners, and serving as a liaison on technical matters to regulatory agencies and grant funders.

Other project experience

- Serving as principal in charge or senior brownfields specialist working on soil remediation projects at brownfields sites in the Twin Cities, Duluth, and northeastern, Minnesota. Helped prepare numerous successful State or Federal brownfield assessment and cleanup grants totaling more than \$20 million in grant funding secured since 2000. Provided oversight of more than 15 remediation projects and served as client contact.
- Managing on-going contaminated sediment site investigations, risk evaluations and remediation work on sites in the Great Lakes.



SHERYL FILBY WILLIAMS, PG

Vice President, Senior Hydrogeologist

Sheryl has more than 18 years of experience with environmental and hydrogeologic consulting and project management with a master's degree in hydrogeology from the University of Minnesota.

Role

co-principal

Education

MS, Geology
BA, Geology

Registration

Professional
Geologist

City of Duluth project experience

- Managing multiple brownfield redevelopment projects in Duluth including the former Atlas Cement Plant and the DWP projects. Since 2010, project activities for Atlas have included assistance with grant writing to obtain funding for the project, sampling and analysis plan (SAP) development, quality assurance project plan (QAPP) development, field investigation, and development and implementation of a response action plan that included multiple addenda during utility construction activities. This project is part of the Minnesota Pollution Control Agency's Voluntary Investigation and Cleanup (VIC) program and has used funding from the U.S. Environmental Protection Agency and Minnesota Department of Employment and Economic Development. In 2014, the DWP project included compiling previous data on the site, developing a SAP, using a QAPP, completing a field investigation, and completing a voluntary response action plan for submittal to the MPCA.
- Serving as project principal for aspects of the Temple Opera Block project. Work included completing a Phase I ESA, a Phase II vapor investigation, and evaluating potential vapor mitigation system options. Utilized EPA Assessment Grant funds.
- Serving as task manager for the Bayfront Redevelopment project.
- Serving as field geologist for the Clyde, Rice's Point, and Loll redevelopment projects.

Other project experience

- Managing a long-term assessment and remediation project at a former manufactured gas plant site in Michigan. Project activities have included product recovery, regular groundwater sampling, rotasonic drilling, groundwater flow and solute transport modeling, project management, and feasibility studies for remediation options.
- Managing a long-term assessment and remediation project at an industrial facility in Iowa. Project activities have included project management, groundwater modeling, regular groundwater sampling, vapor intrusion investigations, source area remediation evaluation, and annual reporting.
- Performing numerous field investigations using push-probe technology, test trenching, hollow-stemmed auger drilling, mud rotary drilling, and rotasonic drilling and vertical aquifer profile sampling.



LYNETTE CARNEY, PG

Senior Geologist

Lynette has 25 years of environmental consulting experience working as a geologist and project manager on industrial and petroleum-release sites and landfills for public, private, and industrial clients throughout Minnesota.

Lynette has extensive experience in project scoping, work plan development, sampling and analysis plans, field program management, technical review of project data, and preparation of deliverables for regulatory review. Her experience includes all phases of environmental due diligence and brownfield site redevelopment. Lynette meets the definition of an “environmental professional” under the ASTM standard (E 1527-13) for Phase I environmental property assessments.

Role

co-project manager

Education

MS, Geology

BS, Geology

Registration

Professional
Geologist

City of Duluth project experience

- Serving as environmental project manager for the investigation, RAP development and construction monitoring related to the City of Duluth’s Superior Street reconstruction project. Worked with City engineers to combine the investigation and geotechnical study and to incorporate the MPCA- approved RAP into overall project design plans and specifications.
- Serving as environmental project manager for the Phase I environmental site assessment (ESA) Phase II investigation for the City of Duluth’s Waseca Street Extension project.
- Served as environmental project manager for the City of Duluth’s gas service upgrade project and underground storage tank (UST) closure along the 4th street corridor in front of Hemlock Garage.

Other project experience

- Serving as project manager for the investigation and remedial action plan (RAP) development related to the Duluth Seaway Port Authority Clure Public Marine Terminal Expansion dock rehabilitation project. Worked with project engineers to develop and incorporate environmental remediation plans and specifications into overall project design. Helped prepare winning investigation and cleanup grant application from DEED in 2014 (\$990,000). This project was a Minnesota Brownfields ReScape Award Finalist in 2018.
- Assisted with the City of Duluth's EPA-funded communitywide assessment grant and Central Iron Range Initiative (CIRI) EPA-funded coalition grant projects in 2013-2018. Work included environmental inventory, edibility determinations, Phase I ESAs, Phase II investigations and RAPs. Provided support for EPA reporting and administrative documentation.
- Serving a project manager under Barr’s current statewide MnDOT pre-qualifications contract for Limited Phase I ESAs, Phase II Investigations and Construction Monitoring projects. This work involves projects where property acquisition decisions and negotiations are highly dependent on data from our work and where interaction with contractors is required for environmental construction management during construction.



RYAN ERICKSON, PG

Senior Geologist

Ryan has 12 years of experience as an environmental consultant and a master's degree in geology from the University of Minnesota Duluth. He has significant environmental project experience as both a field technician and a project manager on brownfield redevelopment sites and pipeline environmental sites.

Role

co-project manager

Education

MS, Geology

BA, Geology and
Geography

Registration

Professional
Geologist

City of Duluth project experience

- Managing the IPS Cranes redevelopment project with regard to its due diligence and site investigation activities. Work included completing a Phase I Environmental Site Assessment (ESA), a Phase II soil and vapor investigation, and preparation of a Response Action Plan. IPS partnered with the City to successfully win and implement a DEED Assessment Grant.
- Managing the Temple Opera Block project. Work included completing a Phase I ESA, a Phase II vapor investigation, and evaluating potential vapor mitigation system options. Utilized EPA Assessment Grant funds.
- Managing the Brewery Creek Apartments site evaluation. Project tasks included completing a Phase I ESA, a Phase II soil and vapor boring investigation, and preparation of a Response Action Plan. One Roof Housing partnered with the City to utilize EPA Assessment Grant funds.
- Serving as geologist, task manager and project manager for the Atlas Industrial Park project. Has worked on the site since 2008. Project tasks have included coordination and management of field activities, soil and water sampling, drilling investigations, contractor oversight, on-site and off-site waste management coordination, stormwater assessment and management coordination, pilot stormwater pond design and construction oversight, client and regulatory agency communications, and reporting. The project has used funds from the EPA Assessment Grant, the DEED Assessment and Cleanup Grant, and the EPA Targeted Brownfield Assessment (TBA) program.
- For the DWP redevelopment project, planning and managing the Phase II Investigation field activities and produced the investigation summary for the U.S. EPA. EPA Assessment Grants were utilized for this work.
- Field and project management support to the City at numerous sites including: the Bayfront Pier B and Lot D sites, West Superior Street site, the Clyde Industrial Park site, and other local properties.

Other project experience

- Performing Phase I and Phase II environmental site assessments (ESAs) at industrial sites and commercial sites.
- Serving as an environmental project manager and field responder for multiple fuels clients. Project tasks have included: release response, site assessments, and material management.



KAITLIN JOHNSON

Geologist

Kaitlin Johnson works on projects involving environmental site assessment related to sediment and groundwater contamination. Kaitlin's project work has included environmental site assessments; onsite investigations of contaminated soil, sediment, groundwater, surface water, and vapor; construction observation; ArcGIS support and data management; and preparation of drilling logs, geologic maps, cross-sections, and technical reports.

Role

Field work, Phase II investigations

Education

BS, Geological Sciences

MS, Geology

Relevant project experience

- Overseeing cleanup oversight and collecting water samples during the Superior Street reconstruction and underground tank abandonment for the City of Duluth.
- Overseeing Geoprobe drilling, collecting sediment and water samples, and classifying soil using ASTM 2488 and soil Munsell charts for Phase II investigations.
- Overseeing monitoring well installation using Air Rotary and Rotasonic drilling techniques and documented monitoring well construction.
- Managing tasks for water sampling for emerging contaminate per- and polyfluoralkyl substances (PFAS).
- Serving as a graduate research assistant at Boston College's Graduate School of the Morrissey College of Arts and Sciences. Her master's thesis, "Quantifying milldam legacy sediment storage in valley bottoms of two New England watersheds," used ArcGIS to map the extent and thickness of valley-bottom material.
- Serving as a graduate teaching assistant while pursuing her master's degree. In this role, Kaitlin coordinated research projects for 20 students of a river restoration and management course.
- Serving as an undergraduate researcher while pursuing her bachelor's degree at the University of Minnesota Duluth. Her research work included investigating bluff erosion along a creek in Duluth using terrestrial laser scanning and aerial LiDAR (light detection and ranging) data.



MARTIN BEVIS, PG

Geologist

Martin Bevis has three years of experience as an assessment and remediation professional working on projects involving the investigation, evaluation, and remediation of contaminated sites. His project work includes environmental site assessments; investigations of contaminated soil, sediment, groundwater, surface water, and vapor; aquifer test performance and analysis; construction observation; and preparation of drilling logs, geologic maps, cross-sections, and technical reports. Prior to joining Barr, Martin worked as a staff geologist for a consulting firm in Duluth.

Role

Phase I and II investigations, reporting

Education

MS, Geological Sciences

BA, Geology

Registration

Professional Geologist

City of Duluth project experience

- Preparation of Response Action Plan (RAP) for the IPS Cranes redevelopment project.
- Completion of Phase II investigation and RAP for the Brewery Creek Apartments site.
- Phase I Environmental Site Assessment (ESA) and Phase II investigation for Hallett Dock.
- Phase I ESA for the Duluth Seaway Port Authority (DSPA) Garfield and Elm Expansion.
- Completion of Phase II investigation for the City's Waseca Street Reconstruction project.
- Environmental Evaluation of the DSPA's warehouse at 1240 Port Terminal Rd.
- Excavation oversight, observation of underground storage tank abandonment, soil sampling, and onsite waste management for the City's the Superior Street Reconstruction project.
- Soil and water sampling and contractor oversight at the Atlas Industrial Park Project.
- Subslab vapor sampling at the Temple Opera Block.

Other project experience

- Performing Phase I and Phase II environmental site assessments at industrial sites and commercial sites.
- Environmental site investigation and remediation tasks including installation of monitoring wells, soil and water sampling, borehole and core logging, and report preparation.
- Working with drillers, excavators, and other contractors to help ensure jobs are completed safely and on schedule.



TRISTAN BEASTER

Environmental Engineer

Tristan has eight years of experience providing environmental investigation and analysis for projects related to the evaluation and remediation of contaminated sites. His work includes onsite investigations of contaminated soil, sediment, and groundwater; construction observation; engineering calculations; remedial design; bench and pilot-scale testing; construction cost estimates; plans and specifications; and technical reports.

Role

project engineer

Education

BS, Environmental Science

MS, Environmental Engineering

City of Duluth project experience

- Engineering support for the Atlas Industrial Park. Tasks included: conducting oversight of test pit excavations to document subsurface conditions; performing site water monitoring activities; and executing the design, operation, and monitoring of a CO₂ sparge system pilot test to treat high pH water.
- Supporting a Phase II vapor investigation for the Temple Opera Block Project. Tasks included sub-slab vapor sampling, sub-slab diagnostic testing, ambient air sampling, and report writing.
- Performing field engineering support for the IPS Cranes Project. Tasks included overseeing and documenting test pit excavations, collecting soil gas samples, and summarizing findings of the investigation in a Phase II Environmental Investigation Report.

Other project experience

- Conducting field oversight of environmental and geotechnical investigations; including test pit excavations, direct-push soil borings, hollow-stem and rotasonic borings; and installation of temporary and permanent monitoring wells and piezometers.
- Collecting environmental samples; including ground water, soil, surface water, sediment, sub-slab vapor, soil gas, and ambient air.
- Performing environmental data collection with a variety of instruments, including Trimble GPS, YSI 556 water quality meter, photo-ionization detector, 4-gas meter, In Situ and HOB0 water level loggers, water level indicator, oil-water interface probe, Hach field chemistry kits, anemometer, and acoustic doppler velocimeter.
- Participating in the design, operation, maintenance, sampling, and analysis of environmental remediation systems, including LNAPL recovery, air sparging and stripping, permeable reactive barriers, and bioreactors.
- Coordinating transportation, storage, and proper management of investigation-derived wastes.



JULIE KLOSS MOLINA

Senior Environmental Permitting Specialist

Julie has more than 10 years of experience serving federal, state, tribal, and industrial clients in natural-resource-management projects. In her current role, she works as part of an oil transmission client's tribal engagement team to develop and complete engagement strategies and implement those strategies with tribal communities. Her work includes serving as the primary point of contact for tribal representatives, overseeing the logistics of all projects on reservation lands, identifying opportunities for tribal member involvement in projects off of reservation lands, and identifying and facilitating opportunities for engagement.

For Barr as well as for a previous firm, Julie has worked on a variety of environmental permitting projects, including Section 7 of the Endangered Species Act; Sections 10, 401, and 404 of the Clean Water Act; National Pollutant Discharge Elimination Systems permitting; state water appropriations permitting; Federal Energy Regulatory Commission (FERC) filings, and various state and local government permitting. She has practiced archaeology and cultural resource management throughout the Midwest and eastern United States and has produced numerous professional reports.

Relevant project experience

- Managing a Phase I archaeological survey on behalf of the City of Duluth in support of Section 106 compliance for the Lincoln Park Redevelopment Project.
- Serving as an on-call historical archaeologist to provide construction monitoring and documentation during the Pier B Development Project in Duluth.
- Providing Section 106 compliance support for the City of Duluth in support of the William A. Irvin move project.
- Serving as an on-call archaeologist to provide construction monitoring during the demolition of the Minnesota Slip wall in Duluth.
- Managing an environmental investigation on behalf of the Red Cliff Band of Lake Superior Chippewa to assess potential impacts to tribal lifeways associated with historic military dumping in Lake Superior. Work included serving as a tribal liaison between Red Cliff Band, the U.S. Army Corps of Engineers, the states of Minnesota and Wisconsin, public interest groups, environmental activists, and the media.
- Managing cultural resources subcontractors and drafting the cultural resources sections of multiple EISs and EAWs (Environmental Assessment Worksheets) for a variety of clients.
- Serving as project manager and principal investigator compiling documentation on a historic mining site in Itasca County, Minnesota. Provided historic documentation of the mine shaft and foundations of the Bennett Mine.

Role

Historical site evaluations, tribal engagement

Education

MS, Industrial Heritage and Archaeology

BA, Anthropology



JAMES TARALDSEN

Data Quality Specialist

James Taraldsen has 35 years of experience conducting environmental laboratory testing and working with analytical laboratory data. He provides a variety of services involved with data-quality management and reporting. His project work includes coordinating laboratory services, performing data validation and assessment, providing sampling advice to project teams, preparing cost estimates for data collection, collecting soil and water samples, and ordering analytical sample kits. James also prepares sampling and analysis plans, quality-assurance project plans, and other quality assurance/quality control documents and reports. Prior to joining Barr, James managed an analytical laboratory in Duluth, Minnesota, for 22 years.

Role

Data quality, QAPP

Education

BS, Biology

Relevant project experience

- Developing and updating EPA-approved QAPPs for multiple clients.
- Managing laboratory, maintaining its certification, and supervising laboratory staff. Served as project manager for laboratory and field projects involving soil, wastewater, and clean-lake studies.
- Reporting test results to clients and state regulatory agencies. Completed all types of analytical testing on water, soil, sludge samples, and work with other laboratories.
- Providing instrument maintenance and record keeping for internal and external laboratory audits. Prepared Standard Operating Procedures for analytical analysis completed at the laboratory. Maintained and documented records pertaining to laboratory hazardous waste. Included regular communication with accrediting agencies and clients.

James also served as biologist and project manager at an aquatic toxicity testing laboratory in southern Wisconsin. His responsibilities included marketing the lab's testing services, completing projects for a variety of industries and federal agencies, and providing written reports.



KAITLIN WERNER, PE

Civil Engineer

Kaitlin Werner has 15 years of experience working on civil and water resources engineering projects. Her project experience includes site design for industrial, commercial, and residential development, project management and civil engineering design for industrial pipeline and facility improvements, stormwater management design, preparation of construction plans and specifications, stream modeling using HEC-RAS software, dam safety inspections, and technical writing.

Role

Civil Engineering

Education

BS, Civil and
Environmental
Engineering

Registration

Professional
Engineer

Relevant project experience

- Managing teams of engineers and scientists on multidisciplinary projects for a variety of client types in various industry sectors..
- Performing civil engineering site design and stormwater management design for residential, municipal, commercial, and industrial sites.
- Overseeing stream stabilization design projects involving hydrologic and hydraulic modeling, stream realignment, grading design, erosion control, and revetment design.
- Conducting hydrologic and hydraulic analyses and dam safety inspections.
- Designing streets, grading plans, storm sewer, sanitary sewer, water main, and stormwater management features for residential subdivisions and commercial sites.

**attachment A:
personnel and materials fee schedules**

EXHIBIT B



Fee Schedule—2020

Rev. 12/28/19

Description	Rate* (U.S. dollars)
Principal.....	\$145-295
Consultant/Advisor	\$185-250
Engineer/Scientist/Specialist IV	\$155-180
Engineer/Scientist/Specialist III.....	\$125-150
Engineer/Scientist/Specialist II.....	\$95-120
Engineer/Scientist/Specialist I.....	\$65-90
Technician III.....	\$125-150
Technician II.....	\$95-120
Technician I.....	\$60-90
Support Personnel II	\$95-150
Support Personnel I	\$50-90

Rates for litigation support services will include a 30% surcharge.

A ten percent (10%) markup will be added to subcontracts for professional support and construction services to cover overhead and insurance surcharge expenses.

Invoices are payable within 30 days of the date of the invoice. Any amount not paid within 30 days shall bear interest from the date 10 days after the date of the invoice at a rate equal to the lesser of 18 percent per annum or the highest rate allowed by applicable law.

For travel destinations within the continental U.S. (CONUS) and Canada, meals will be reimbursed on a per diem basis. The per diem rate will be as published by the U.S. Internal Revenue Service (IRS) based on the High-Low method. Full day per diem rates will be pro-rated on travel days. For travel destinations outside the continental U.S. (CONUS) and Canada, meals will be reimbursed based on actual expenses incurred.

All other reimbursable expenses including, but not limited to, costs of transportation, lodging, parking, postage, shipping and incidental charges will be billed at actual reasonable cost. Mileage will be billed at the IRS-allowable rate.

Materials and supplies charges, printing charges, and equipment rental charges will be billed in accordance with Barr's standard rate schedules.

Principal category includes consultants, advisors, engineers, scientists, and specialists who are officers of the company.

Consultant/Advisor category includes experienced personnel in a variety of fields. These professionals typically have advanced background in their areas of practice and include engineers, engineering specialists, scientists, related technical professionals, and professionals in complementary service areas such as communications and public affairs.

Engineer/Scientist/Specialist categories include registered professionals and professionals in training (e.g. engineers, geologists, and landscape architects), and graduates of engineering and science degree programs.

Technician category includes CADD operators, construction observers, cost estimators, data management technicians, designers, drafters, engineering technicians, interns, safety technicians, surveyors, and water, air, and waste samplers.

Support Personnel category includes information management, project accounting, report production, word processing, and other project support personnel.

*Rates do not include sales tax on services that may be required in some jurisdictions.



Rental Equipment Rate Schedule—2020

Rev. 12/28/19

(Alphabetized)

Sheet 1 of 8

(see general and end notes)

Description

(U.S. dollars)

	Rate	Unit
Non-Expendable Equipment		
<i>Air Quality</i>		
Air-Cooled M5 Probe/Oven Assembly	300.00	Day
Ambient SO ₂ Monitor.....	100.00	Day
Analytical Balance (each usage).....	6.00	Use
Analyzer Filter Oven.....	15.00	Day
Analyzer Support Kit (a.)	400.00	Day
Anemometer.....	50.00	Day
CO Analyzer.....	250.00	Day
CO Cal Gases (set of 2).....	40.00	Day
CO/O ₂ /CO ₂ Regulators (set of 2)	20.00	Day
Data Logger	40.00	Day
Delta Calibrator	100.00	Day
Digital Calibrator.....	30.00	Day
Dilution Calibrator.....	200.00	Day
Dual Pen Strip Chart	50.00	Day
EPA 6 SO ₂ Analysis Kit.....	60.00	Day
EPA Method 25 (TGNMO) Sampling Train	250.00	Day
EPA Method 202.....	130.00	Test
EPA Method 3 ORSAT Analyzer.....	25.00	Day
EPA Method 30B Probe	50.00	Day
EPA Method 4	270.00	Day
EPA Method 5 Sampling Train.....	400.00	Day
EPA Method 5 Wet Test Meter Calibrator.....	240.00	Day
Gas Chromatograph Model 302.....	367.00	Day
Gas Conditioner	60.00	Day
Heated Sample Line (100').....	100.00	Day
Heated Sample Line (150')	100.00	Day
Heated Sample Line (50').....	60.00	Day
Hivol Ambient Sampler Calibration Kit.....	25.00	Day
Hydrocarbon Calibration Gases	60.00	Day
Hydrocarbon Regulator Set.....	30.00	Day
Meteorological Station.....	1,000.00	Month
Met Station Calibration Kit.....	120.00	Day
Midget Impinger Sample Line	50.00	Day
Midget Impinger Sampling Train	40.00	Day
MKS Multi-Gas Analyzer	1,100.00	Day
NCASI Method 8A Train.....	250.00	Day
NCASI Sample Train.....	50.00	Day
NO _x Analyzer	260.00	Day
NO _x Cal Gases (set of 2)	40.00	Day
NO _x /SO ₂ Regulators (set of 2)	25.00	Day
O ₂ /CO ₂ Analyzer	250.00	Day
O ₂ /CO ₂ Cal Gases (set of 2)	40.00	Day
PM ₁₀ /2.5 In. Stack Separators.....	100.00	Day
Ohio Lumex Mercury Analyzer.....	1,500.00	Day
PM ₁₀ BAM-1020	370.00	Month



Rental Equipment Rate Schedule—2020

(Alphabetized)

(see general and end notes)

Rev. 12/28/19

Sheet 2 of 8

Description (U.S. dollars)

	Rate	Unit
PM ₁₀ HiVol.....	120.00	Month
Portable Oxygen Analyzer	40.00	Day
Primary Standard Flow.....	60.00	Day
Single Pen Strip Chart Recorder.....	35.00	Day
SO ₂ Analyzer.....	300.00	Day
SO ₂ Calibration Gas	40.00	Day
Testo 350 Portable Analyzer.....	270.00	Day
Total Hydrocarbon Analyzer.....	400.00	Day
TRS Kit.....	100.00	Day
TSP Hi-Vol Sampler	30.00	Day
Unheated Sample Line (100 ft.)	40.00	Day
Universal Control Console (Vost Meter).....	200.00	Day
Volumetric Air Flow Measurement Kit.....	60.00	Day
Field Equipment		
1½-inch Submersible Purge Pump	35.00	Day
360 Degree Camera.....	18.00	Day
Alpha Water Bottle (each usage)	3.00	Use
Arc Flash Label Printer.....	5.00	Use
Area/Velocity Flow Meter	35.00	Day
Automatic Sampler with Depth Sensor and Flow Meter.....	60.00	Day
Automatic Sampler.....	30.00	Day
Bladder Pump w/Controller	125.00	Day
Conductivity Meter	17.50	Day
Current Meter Suspension Kit.....	55.00	Day
Data Transfer System (DTU)	22.00	Day
Depth Sensor/Flow Meter Only.....	30.00	Day
Differential Pressure Datalogger.....	18.00	Day
Dissolved Oxygen Meter	29.00	Day
Dissolved Oxygen Sensor/Data Logger System.....	30.00	Day
Dissolved Oxygen/Conductivity Meter	38.25	Day
Ekman Dredge	6.00	Day
Electric Vacuum Pump.....	10.00	Day
Electromagnetic Flowmeter.....	65.00	Day
Environmental Equipment Shelter.....	2.75	Day
Field Rugged Laptop or Pocket PC.....	25.00	Day
Fluorometer Kit, Model 10-AU.....	240.00	Day
GEM 2000 Landfill Gas Analyzer.....	87.00	Day
Gas Centrifugal Pump.....	26.75	Day
Gas Generator	29.00	Day
Gator Diesel Air Compressor	60.00	Day
Go-Pro Camera.....	20.00	Day
Hand Vacuum Pump.....	2.30	Day
Hand-held Velocity Flow Meter	40.50	Day
Heavy-Duty Weed/Brush Trimmer	17.00	Day
HOBO Weather Station.....	21.00	Day
Kemmerer Vertical Bottle Sampler.....	33.50	Use
Level Troll Water Level/Temp Transducer	45.00	Day
LR-24 Electro-Fisher	200.00	Day



Rental Equipment Rate Schedule—2020

(Alphabetized)

(see general and end notes)

Rev. 12/28/19

Sheet 3 of 8

Description

(U.S. dollars)

	Rate	Unit
Measurement and Control Datalogger	13.00	Day
Oil, Water Interphase Probe.....	60.00	Day
Orbital Shaker Table	105.00	Day
Peristaltic Pump	35.00	Day
Petite Ponar Dredge.....	14.50	Day
pH Meter	27.75	Day
Phipps & Bird Jar Tester	30.00	Day
Pneumatic Slug Kit.....	9.00	Day
Portable Colorimeter	34.75	Day
Portable Doppler or TT Ultrasonic Flow Meter	69.00	Day
Portable Field Scale	15.00	Day
Portable Greenhouse Gas Analyzer	200.00	Day
Portable SVE Blower.....	29.00	Day
Power Cable for Sodar Equipment.....	167.00	Month
Radon Monitor.....	62.00	Day
RST Single-Channel Vibrating Wire Data Logger	4.00	Day
Sediment Corer (per sample).....	5.75	Use
Seisgun	60.00	Day
Shear Cell	419.00	Day
Sodar Trailer (3-month minimum)	3,000.00	Month
Soil Core Sampler/ Bucket Auger	29.00	Day
Soil Vapor Extraction System with Trailer	135.00	Day
Solar Panel Module w/Charge Controller.....	12.00	Day
Sontek ADV (Acoustic Doppler Velocimeter)	128.00	Day
Spectrometer UV/VIS Ocean Optics	115.00	Day
Spill Containment Kit.....	10.00	Day
Split Tube Soil Probe/Hand Auger	12.00	Day
StreamPro ADCP	450.00	Day
Submersible Pump (SS w/controller)	125.00	Day
Sub-Slab Vapor Sampling Kit.....	50.00	Use
Temperature Datalogger	1.50	Day
Temperature, Level, Conductivity Meter (Solinst)	45.00	Day
Tent	15.00	Day
Turbidimeter	25.00	Day
Turbidity Sensor w/Cable, DTS-12.....	43.00	Day
Underwater Viewing Camera	60.00	Day
Unmanned Aircraft System (UAS)	160.00	Day
UV Organics Monitor.....	22.00	Day
Vapor Sampling Manifold	4.00	Use
Vibra-coring System (for Jon Boat)	150.00	Day
Vibra-coring System (for Pontoon).....	500.00	Day
VW Piezometer/Data Logger Combo.....	200.00	Use
Water Quality Meter (YSI ProDSS)	150.00	Day
Water Quality Meter (YSI 556 MPS)	85.00	Day
Well Level Indicator.....	22.00	Day
WTW 1970i Conductivity Meter.....	85.00	Day
Zooplankton Net.....	7.00	Day
Zooplankton	145.00	Day



Rental Equipment Rate Schedule—2020

Rev. 12/28/19

(Alphabetized)

Sheet 4 of 8

(see general and end notes)

Description

(U.S. dollars)

	Rate	Unit
<i>GSHM Hardware and Software</i>		
900 MHz Base Station	250.00	Month
AMTS Protective Enclosure	523.00	Month
AMTS Solar Power Package.....	500.00	Month
Cellular Modem	100.00	Month
Cellular Modem Antenna.....	25.00	Month
Chemcad.....	38.00	Hour
Geomos Alarm Package	250.00	Month
GNSS Sensing Base Station.....	500.00	Month
GNSS Sensing Receiver.....	500.00	Month
I-Site Software.....	63.00	Hour
In-Place Inclinometer (IPI) System.....	21.00	Day
IPI System Data Acquisition Auxiliary Station w/Radio	7.00	Day
IPI System Data Acquisition Base Station w/Cell and Radio	8.00	Day
Metsim.....	35.00	Hour
MineSight Software	50.00	Hour
Multi Channel 900 MHz Logger.....	100.00	Month
Prism – 360 Degree (c)	50.00	Use
Prism – Long Range (c)	35.00	Use
Prism – Short Range (c).....	25.00	Use
Single Channel 900 MHz Logger	50.00	Month
Tablet Computer	15.00	Day
Vibration System	1,000.00	Day
Vista Data Vision, Presentation Software	150.00	Month
Vista Data Vision Site License	150.00	Each
Vulcan Software	50.00	Hour
VW Readout.....	25.00	Day
Weekly AMTS Active Monitoring.....	1,000.00	Week
Weekly AMTS Inactive Monitoring	250.00	Week
Wireless Vibration Sensor.....	700.00	Month
Wireless Vibration Sensor Communication Hub	1,200.00	Month
<i>Materials and Testing</i>		
Borehole Camera System	140.00	Day
Brass Sieve Set.....	6.00	Day
Chlorophyll a (CHL a).....	60.00	Day
Coarse Sieve Set	10.00	Day
Concrete Air Meter	36.00	Day
Concrete Test Hammer.....	40.50	Day
Cyre Sampler	150.00	Day
Cyre Sampler Push Frame.....	100.00	Day
DL Plus Ultrasonic Kit (37DL, 36DL, 26XTDL).....	62.00	Day
Double Ring Infiltrometer	65.00	Day
Dual-Mass Dynamic Cone Penetrometer.....	50.00	Day
Dye Penetrant Kit.....	22.00	Day
Filter Press.....	160.00	Day
Flat Plate Dilatometer.....	500.00	Day
GeoKon Black Handheld VW Reader	20.00	Day
Geomil VST Electrical Vane Tester.....	50.00	Test



Rental Equipment Rate Schedule—2020

(Alphabetized)

(see general and end notes)

Rev. 12/28/19

Sheet 5 of 8

Description (U.S. dollars)

Description	Rate	Unit
Hand Vane Shear.....	98.50	Day
Heavy-Duty Balance	16.00	Day
Horizontal Sample Ejector.....	29.50	Day
Kessler Field Moisture Oven	45.00	Day
Liquid Limit Set.....	7.50	Day
Load Plate Apparatus.....	230.00	Day
Magnetic Crawler	48.00	Day
Magnetic Particle Kit	38.00	Day
Manual Extensometer (Slideminder).....	32.00	Day
Metal Thickness Gauge	50.00	Day
Minimate Plus Blast Monitor.....	100.00	Day
MPD Infiltrometer – Triple Kit.....	61.00	Test
Paint Thickness Gauge	15.00	Day
Phytoplankton	145.00	Day
Platform Beam Scale	14.75	Day
Point Load Testing System	78.00	Day
Portable CPT.....	200.00	Day
Power Auger	43.00	Day
Proctor Set	4.50	Day
Proving Ring Penetrometer.....	36.00	Day
Resistivity Meter (Ultra Mini-Res).....	110.00	Day
SAA Field Power Unit.....	25.00	Day
Sample Splitter.....	5.00	Day
Sand Cone Set.....	10.00	Day
SINCO Inclinometer Probe.....	200.00	Day
Silverwing Crawler	400.00	Day
Soluble Reactive Phosphorus	28.00	Day
Steel Inspection Kit #1	100.00	Day
Steel Inspection Kit #2	300.00	Day
Thermal Imaging Camera, Flir E60	170.00	Day
Torvane Shear Device	2.50	Day
Total Dissolved Phosphorus	30.00	Day
Total Nitrogen (TN)	40.00	Day
Total Phosphorus (TP).....	23.00	Day
Vane Inspection Kit	19.00	Day
Vertex CPT Equipment	593.00	Day
Vibrating Wire Logger SINCO VW2104	24.00	Day
Water Treatment Lab	200.00	Day
Weld Inspection Equipment	12.00	Day
Safety		
3M PAPR (powered Air Purifying Respirator)	19.00	Day
Emergency Escape Breathing Device.....	18.00	Day
Aerosol/Dust Monitor (PDR-1000)	67.75	Day
Automatic External Defibrillator (AED)	14.00	Day
Calibration Gas Kit	8.75	Day
CO Monitor (ISC T82)	36.00	Day
Confined Space Rescue Retrieval Equipment	295.00	Day
Confined Space Ventilator	54.75	Day



Rental Equipment Rate Schedule—2020

(Alphabetized)

(see general and end notes)

Rev. 12/28/19

Sheet 6 of 8

Description (U.S. dollars)

	Rate	Unit
Detector Tube Pump	15.00	Day
Diesel Particulate Monitor Kit FLIR	200.00	Day
Dry Cell Air Flow Calibrator.....	50.00	Day
Flame Ionization Detector TVA1000	133.00	Day
Flotation Worksuit	19.75	Day
Full-Face Respirator.....	8.00	Day
H ₂ S Meter (I.S.C. T40)	27.00	Day
Half-Face Respirator	6.00	Day
Helium Detector	55.00	Day
InReach Satellite Communication Device	10.75	Day
MX4 – O ₂ , LEL, H ₂ S, and CO ₄ Gas Meter.....	45.00	Day
Personal Air Sampling Pump (SKC)	38.00	Day
Photoionization Detector (10.6eV Lamp)	110.00	Day
Photoionization Detector (11.8eV Lamp)	130.00	Day
RKI Eagle-2 Multi-gas Monitor	105.00	Day
Satellite Phone	13.35	Day
Self-Retracting Lifeline (30').....	56.00	Day
Sound Level Meter	48.75	Day
Spot Messenger Device	5.85	Day
Supplied Air Breathing System with SCBA	75.50	Day
Traffic Control Signs.....	2.10	Day
UltraRAE 3000 Photoionization Detector	150.00	Day
Survey		
Aquatic Invasive Species Decon System.....	170.00	Day
Bathymetry Survey System - Odom.....	524.00	Day
Canoe.....	32.00	Day
Centimeter Grade Differential GPS System (Trimble)	145.00	Day
Chain Saw.....	23.00	Day
Communication Radios (set).....	17.75	Day
Differential GPS System (Trimble)	110.00	Day
Garmin GPS.....	12.00	Day
GPS Camera Kit (Ricoh 500SE)	22.00	Day
Hand Ice Auger	7.00	Day
Iron Locator	17.50	Day
iPad with R1 GPS Receiver	50.00	Day
Jon Boat & Trailer	62.00	Day
Kayak	44.00	Day
Laser Range Finder	87.00	Day
LCD Depth Locator	11.50	Day
Leica HDS ScanStation P20 or P40.....	125.00	Hour
Leica Scanner RTC 360.....	68.00	Hour
Leica Structural Monitoring AMTS	97.00	Day
Outboard Motor	46.50	Day
Pontoon Boat Coring Platform	240.00	Day
Power Ice Auger.....	30.00	Day
Robotic Total Station.....	45.00	Hour
Real-Time Kinematic (RTK) GPS Survey System (4-hour minimum)	55.00	Hour
Side Scanning Depth Finder	75.00	Day



Rental Equipment Rate Schedule—2020

(Alphabetized)

(see general and end notes)

Rev. 12/28/19

Sheet 7 of 8

Description (U.S. dollars)

	Rate	Unit
Spectra Laser Level	25.00	Day
Survey Set (Level, Tripod and Rod)	20.75	Day
Total Station Survey Set – Complete	116.50	Day
Trolling Motor and Battery	48.00	Day
Utility Locator	41.00	Day
Z-Boat Bathymetry Survey System	150.00	Hour
Vehicles and Trailers		
4WD All-Terrain Vehicle (Ranger).....	89.50	Day
Air Sampling Trailer.....	110.00	Day
Heavy Trailer Towing Mileage (in addition to vehicle mileage at IRS rate).....	0.25	Mile
Utility Trailer	35.00	Day
Vehicle – 2WD Field.....	72.50	Day
Vehicle – 4WD/AWD Field	90.00	Day
Vehicle – Cube Truck.....	88.00	Day
Vehicle – Personal (b).....	58.00	Day
Vehicle Mileage (company and personal)	IRS Rate	
Yakima Canoe Trailer	35.00	Day
Communications and Imaging		
Digital Camera	12.00	Day
Video Camera	20.00	Day
Expendable Field Supplies		
¼-Inch Bladder Pump Tubing	1.50	Foot
¼-Inch ID PVC Tubing	0.30	Foot
¼-Inch ID Silicone Pump Tubing.....	2.60	Foot
¼-Inch Teflon Tubing for Vapor Manifold.....	4.80	Foot
1-Liter Hazmat Cooler Packaging	90.70	Each
2-Liter Hazmat Cooler Packaging	118.70	Each
250-ml Disposable Filtration Apparatus	13.50	Each
3/8-Inch I.D. PVC Tubing	0.40	Foot
3/8-Inch I.D. Silicone Pump Tubing	7.80	Foot
3/8-Inch Teflon Tubing for Vapor Manifold.....	8.10	Foot
3M Airstream P100 PAPR Filter.....	49.50	Each
3M Versaflo P100 PAPR Filter.....	61.30	Each
4-mil Quart Recloseable Bag (pack of 50)	5.40	Pack
5-Gallon Hazmat Packaging	40.80	Each
500-ml Disposable Filtration Apparatus	22.70	Each
Compressed Nitrogen (84 cf “Q Tank”).....	20.84	Each
Core Tubing – 3” Aluminum	4.00	Foot
Detector Tubes	16.30	Each
Distilled Water (1 gal.).....	0.80	Each
Dot Gloves	1.60	Pair
Encore Sampler - 25 Gram	10.00	Each
Fabric Soil Sample Bag.....	1.40	Each
Fence Post & Hardware for Stream Gages.....	14.70	Each
Field Book/Construction Diary (large)	26.90	Each
Field Book/Construction Diary (small).....	8.50	Each
Five Gallon Pail with Lid.....	11.10	Each
Hydrochloric Acid (per liter).....	7.40	Each



Rental Equipment Rate Schedule—2020

Rev. 12/28/19

(Alphabetized)

Sheet 8 of 8

(see general and end notes)

Description (U.S. dollars)

Description	Rate	Unit
Ice	2.50	Bag
In-Line Groundwater Filter	23.20	Each
Knit Glove, Nitrile Coated.....	3.80	Pair
Knit Glove, Nitrile Coated, Insulated	7.70	Pair
Latex Boot Covers.....	7.30	Pair
Lath, 4' (bundle of 50)	40.40	Bundle
Leather Gloves.....	6.70	Pair
Lock	15.80	Each
Nitrile Gloves – Heavy Duty	2.20	Pair
Paper Towels	2.40	Roll
Pin Flagging (bundle of 100).....	20.20	Bundle
Poly-Coated Tyvek Coverall	10.60	Each
Polyethylene Tubing for Bladder Pump, ¼"	0.20	Foot
Powder Pillow Pack for Colorimeter.....	1.90	Test
PVC-Coated Heavy Winter Gloves	15.90	Pair
RAE-Sep Benzene Separation Tube	11.00	Each
Replacement Bladder Kit for QED Pump	21.70	Each
Respirator Cartridges – OVAG.....	31.90	Pair
Respirator Cartridges – Particulate	14.50	Pair
Rock Chip Tray	4.50	Each
Roll Flagging (150').....	3.40	Each
Saranex Tyvek Coverall	30.60	Each
Snap Top Sediment Container (8 oz.).....	1.10	Each
Spray Paint	4.80	Each
Staff Gauge	57.50	Each
Stakes (bundle of 50).....	17.20	Bundle
Surgical Gloves – Thin Nitrile.....	0.20	Pair
Tyvek Boot Covers.....	1.00	Pair
Tyvek/Kleenguard Coverall	3.50	Each
Vapor Pin – Permanent Install Kit	91.90	Each
Versaflo OVAG/P100 PAPR Filter	156.80	Each
Weighted Disposable Bailer	5.90	Each
Whirl-Pak Headspace Bags (per 50 bags).....	14.30	Pack
Winter Glove Liner, Blue Knit	2.50	Pair
Zooplankton Bottle	2.20	Each

General Notes: Applicable to all Equipment Listed on this Schedule

- 1.) Minimum rental period is 0.5 days unless noted.
- 2.) Rental charges begin on the first day the equipment is used on a project.
- 3.) Rental charges end on the last day the equipment is used on a project.
- 4.) A 25 percent weekly rate discount will apply to equipment rented on a daily basis for 5 or more days
- 5.) A 40 percent monthly discount will apply to equipment rented on a daily basis for 20 or more days.
- 6.) Equivalent equipment/models may be substituted for the items listed.

End Notes: Applicable to Only the Equipment Noted

- a.) Analyzer Support Kit includes the following: Airflow Kit, Heated Sample Line (50'), Heated Sample Line (100'), Gas Conditioner, Heated Filter Box, Single Pen Recorder, Dual Pen Strip Chart, Data Logger, C3/C4 Cal Gases (set), NO_x/SO₂ Cal Gases (set), CO Cal Gases (set), CO₂/O₂ Cal Gas (set of 2), SO₂ Cal Gas (set of 2), C3 Regulator Set, NO_x/SO₂ Regulators (set of 2), and CO/CO₂/O₂ Regulators (set of 2)
- b.) Employee personal vehicles subjected to field, off-site, transport or other severe duty.
- c.) Used prisms.



Copy Production Rate Schedule—2020

Companywide
Rev. 12/28/19
Sheet 1 of 1

Description	Rate (U.S. dollars)
Reproduction	
Photocopies (8½ x 11, 8½ x 14, 11 x 17)	0.07
Color Copies (8½ x 11, 8½ x 14, 11 x 17).....	0.50
Large-Format B&W Copies/Plots (22 x 34, 24 x 36, etc.)	1.00
Printing/Plotting	
Color Prints (8½ x 11, 8½ x 14, 11 x 17).....	0.50
Large-Format Color Plots (22 x 34, 24 x 36, etc.)	
Bond.....	2.00/sq. ft.
Photo Grade.....	4.00/sq. ft.
Other	
Binding (dependent on size)	2.00-24.00
CD Holders.....	0.85
Tabs	0.50
Laminate Pocket Sheets	0.50
Webex	
Audio-only calls (per minute, per caller, plus sales tax).....	0.09
Video calls (per minute, per caller, plus sales tax)	0.20

attachment B:
Addendum 1



CITY OF DULUTH
PURCHASING DIVISION
Room 120 City Hall
411 West First Street
Duluth, Minnesota 55802-1199
218/730-5340
purchasing@duluthmn.gov

Addendum #1
File # 19-28AA
RFQ – BROWNFIELD ASSESSMENT & CLEANUP

This addendum serves to notify all bidders of the following answers to submitted questions:

1. In regards to Part III – Criteria for Selection, what will each of the 7 sections be weighted for proposal scoring purposes?

Each of the seven sections is weighted equally.

2. Is the Grant Work Plan available for review?

Yes – a copy of the Grant Work Plan is attached.

3. Who will be the City of Duluth's Project Manager for this project?

Ben VanTassel is the City Project Manager for this project.

Please acknowledge receipt of this Addendum by including a copy with your proposal.

Posted: **1/10/2020**

Brownfield Assessment Grant Work Plan - FY2019

City of Duluth

Work Plan for Community-wide Assessment Grant Cooperative Agreement

Project Contact: Ben VanTassel,
411 West First Street
(218)

bvantassel@duluthmn.gov

Project Period: October 1, 2019 – September 30, 2022

CFDA: 66.818 Brownfields Assessment, Cleanup and Multi-Purpose Agreements

CERCLA Authority:104(k)(2)&(3)

DCN: STX

Budget: FY20

Appropriation: E4

Budget Org: 05

Object Class: 4114

Program Results Code (PRC):Hazardous Substance and Petroleum – **402D79EBP**

This project directly addresses EPA Strategic Plan:

Goal 1: Deliver real results to provide Americans with Clean Air, land, and water, and ensure chemical safety.

Objective 1.3: Revitalize Land and Prevent Contamination

1. Project Overview and Goals:

The Small Business Liability Relief and Brownfields Revitalization Act (SBLRBRA) was signed into law on January 11, 2002. The Act amends the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, by adding Section 104(k). Section 104(k) authorizes the U.S. Environmental Protection Agency (EPA) to provide funding to eligible entities to inventory, characterize, assess, conduct cleanup and reuse planning, remediate, or capitalize revolving loan funds to remediate, eligible Brownfields sites. Entities are selected from proposals prepared in accordance with the “Proposal Guidelines for Brownfield Assessment, Revolving Loan Fund, and Cleanup Grants,” and submitted in a national competition. The City of Duluth, Minnesota, a general *purpose unit of local government*, was awarded Assessment funding in the FY 2014 competition. The grant consists of \$150,000 for the assessment of properties contaminated or potentially contaminated by hazardous substances, and \$150,000 for the assessment of properties contaminated or potentially contaminated with petroleum substances.

Duluth, Minnesota is situated at the western tip of Lake Superior into which the St. Louis River flows, forming the world's largest freshwater estuary. Fundamental to our cultural history is the Ojibwa migration of the mid-1 700s that resulted in settlements, missions, sugar camps and burial grounds along the waterfront. A century later, Duluth became the quintessential industrial port city due to the growth of the lumber industry, the expansion of railways, and the discovery of iron ore. Its historic economic base was comprised of Great Lakes shipping, linked rail transport, and steel and associated manufacturing, while its Downtown boasted architectural wonders-with a vast inventory of theaters and luxury hotels. However, the loss of major industrial employers in the 1960s and 70s left Duluth's industrial waterfront neighborhoods and its Downtown vacant and blighted. Intractably related is the designation of the St. Louis River as a "Great Lakes Area of Concern (AOC)" by the U.S.-Canada Great Lakes Water Quality Agreement due to legacy contamination from past industrial practices.

The City will use this grant to implement its newly updated Comprehensive Plan. "Imagine Duluth 2035: Forward Together" was a two-year community engagement process resulting in an updated land use plan adopted by the City Council on June 25, 2018. Driven by 14 Governing Principles such as: "Reuse previously developed lands"; "Promote reinvestment in neighborhoods"; and "Take actions that enhance the environment, economic and social well-being of the community", it focused upon five issue areas: Economic Development, Energy & Conservation, Housing, Open Space and Transportation. The process also identified nine "Transformational Opportunities", three of which are directly linked to our brownfields redevelopment strategy: "Identify and invest in 12 Core Investment Areas (CIAs) "; "Carry out previously identified Downtown plans and investments" and "Preserve and expand opportunities within Duluth's industrial waterfront". The following is a closer review of the city's land use and revitalization plans and their intersection with brownfield redevelopment: within Duluth's industrial waterfront".

The City will use this grant to revitalize various neighborhoods including downtown Duluth, Lincoln Park, Irving/Fairmount, and the Western St. Louis River Corridor Neighborhoods. This will be an expansion of the areas previously focused on. The inclusion of downtown Duluth is a key addition given the growth that this area is experiencing and the potential for large amounts of redevelopment. The city has made considerable progress in previous assessment grants and will continue with efforts to revitalize and clean-up the entire St. Louis River Corridor. The Corridor features the space and setting to offer opportunities for park and trail features, world-class outdoor recreation, industrial sector resurrection and associated job growth, and much-needed expanded market-rate housing for the growing workforce. The pathway to this grand vision is through making our long-neglected Corridor neighborhoods more successful. Their success is hindered by the presence of vacant industrial properties, outdated infrastructure, sub-standard housing, and by poor connectivity. Brownfields are at the core of each of these barriers. This grant, by clarifying the degree of contamination and associated cleanup needs at brownfield sites within the Corridor, paves the way for the City to realize its goals.

These goals will be accomplished by site-specific and non-site-specific assessment activities. Non-site-specific tasks include obtaining consultant and contractor services to provide technical assistance. Site-specific tasks include performing site screening activities and assessments (# Phase Is, #Phase IIs), preparing response action plans, and site-specific revitalization plans or market studies.

2. FUNDING: \$150,000 Hazardous Substances; \$150,000 Petroleum

3. BUDGET

	Task 1 – Community Engagement	Task 2 – Brownfields Planning	Task 3 - Site Assessments	Task 4 – Cleanup Planning	Task 5 – Programmatic Activities	Total
Hazardous Substance Grant						
Travel	0	0	0	0	4500	4500
Contractual	0	25000	106950	10000	2200	144150
Mtg Expenses	1350					1350
Total:	1350	25000	106950	10000	6700	\$150,000
Petroleum Grant						
Travel	0	0	0	0	4500	4500
Contractual	0	25000	106950	10000	2200	144150

	Task 1 – Community Engagement	Task 2 – Brownfields Planning	Task 3 - Site Assessments	Task 4 – Cleanup Planning	Task 5 – Programmatic Activities	Total
Mtg Expenses	1350					1350
Total:	1350	25000	106950	10000	6700	\$150,000

Notes: Meeting expenses will include costs for space rental, refreshments, material production, and other incidental meeting costs. The travel amounts are based upon the cost to travel to a national brownfields conference or other brownfield related training conferences. Travel costs include meals, hotel, rental car or mileage and airfare. Staff time will be paid for by the City. No grant funds will be spent on **administrative costs**.

4. WORKPLAN TASKS

4.1 Task 1: Community Engagement

Task 1: Community Engagement Subtasks	Anticipated Outputs (projected activities, deliverables, reports) and Anticipated Outcomes (projected results, effects, improvements)	Anticipated Accomplishment Date(s) (Month/Year)	Actual Accomplishment Date(s)
A. Internal Engagement <ul style="list-style-type: none"> Internal engagement with city departments to identify sites for parks, trails, infill housing, economic development, or other community needs. 	Outputs: <ul style="list-style-type: none"> Informed decision-making and insurances that community priorities/needs are being met. Outcomes: Obtain valuable and targeted input into opportunities, potential sites, needs of industrial sector development	<ul style="list-style-type: none"> Internal engagement will be ongoing (Sept/2022) 	
B. External Engagement Network: <ul style="list-style-type: none"> Identify existing community engagement efforts surrounding land-use issues near the target sites and utilize these opportunities to engage the community on potential sites. Attend regular scheduled meetings of the SLR Technical Advisory 	Outputs: <ul style="list-style-type: none"> List of key community engagement groups and efforts in quarterly report. Report of meeting attendance, and of any project-related subject matter presented at meetings in quarterly reports. 	<ul style="list-style-type: none"> List of engagement opportunities/stakeholders (Dec/2019) Relevant results of engagement will be 	

Task 1: Community Engagement Subtasks	Anticipated Outputs (projected activities, deliverables, reports) and Anticipated Outcomes (projected results, effects, improvements)	Anticipated Accomplishment Date(s) (Month/Year)	Actual Accomplishment Date(s)
<p>Committee, business groups, mayor’s economic development coalition and other meetings/opportunities that may arise.</p> <ul style="list-style-type: none"> • Planning & Economic Development Department engagement with developers and partners resulting in a pipeline of sites 	<p>Outcomes:</p> <ul style="list-style-type: none"> • Maintenance of an active and engaged, relevant community, building upon the history and momentum of existing groups and on the network of involved individuals within the community. 	<p>included in quarterly reports (Ongoing)</p>	

4.2 Task 2: Brownfield Planning

Task 2: Brownfield Planning	Anticipated Outputs (projected activities, deliverables, reports) and Anticipated Outcomes (projected results, effects, improvements)	Anticipated Accomplishment Date(s) (Month/Year)	Actual Accomplishment Date(s)
<p>A. Review Imagine Duluth 2035 Plan</p> <ul style="list-style-type: none"> • Review all chapters of the plan including Economic Development, Housing, Open Space, Energy and Conservation, Transportation, and Transformative Opportunities and identify key community priorities that can be met with this program. • Use these findings as a guide for Site assessment and prioritization <p>A. Site Planning</p> <ul style="list-style-type: none"> • Conduct at least two brownfield planning site activities that are identified through community engagement and review of priorities. These will be revitalization plans and/or market studies depending on the site needs/opportunities. 	<p>Outputs:</p> <ul style="list-style-type: none"> • Summary and recommendations report that identifies potential brownfield sites for assessment <p>Outcomes:</p> <ul style="list-style-type: none"> • A unified and targeted vision for how this this program will improve the community 	<p>March/2020</p>	

4.3 Task 3: Site Assessment

Task 3: Site Assessment	Anticipated Outputs (projected activities, deliverables, reports) and Anticipated Outcomes (projected results, effects, improvements)	Anticipated Accomplishment Date(s) (Month/Year)	Actual Accomplishment Date(s)
<p>A. Downtown site inventory</p> <ul style="list-style-type: none"> • Conduct a site inventory near downtown and medical district 	<p>Outputs:</p> <ul style="list-style-type: none"> • One site inventory report <p>Outcomes:</p> <ul style="list-style-type: none"> • The outputs of this task will lead to a valuable set of information that can be utilized to determine the needs for future Phase I’s and II’s. 	<p>June/2020</p>	

<p>B. Conduct up to ten Phase I ESA's</p> <ul style="list-style-type: none"> • Conduct planning meeting with consultant to discuss approved sites • Prepare Eligibility Determinations and submit to EPA for review and concurrence • Consultant coordinates with City and property owner(s) to obtain access agreement and performs Phase I investigation • Consultant submits draft Phase I report to city staff • City staff reviews draft Phase I • Consultant submits final Phase I report to city • City enters Phase I data into ACRES • Phase I Reports are submitted to USEPA via FTP download site. • City fills out /signs and submits the Phase I checklist to US EPA. 	<p>Outputs:</p> <ul style="list-style-type: none"> • Up to 10 Phase I ESA reports • Updated ACRES database <p>Outcomes:</p> <ul style="list-style-type: none"> • Increased assessed acres of Phase I in Duluth • Information that will assist in the consideration of future development opportunities. 	March/2021	
<p>C. Prepare Quality Assurance Program Plan(s)</p> <ul style="list-style-type: none"> • Pre-meet with EPA staff and selected consultant(s) regarding QAPP (Data Management Meeting with EPA) • Draft QAPP(s) for submittal to EPA. • Revisions of QAPP(s) as necessary to meet new QAPP requirements 	<p>Outputs:</p> <ul style="list-style-type: none"> • Two approved QAPP documents <p>Outcomes:</p> <p>The QAPPs will outline the procedures the projects will use to ensure the data collected meets all federal requirements.</p>	June 2021	
<p>D. Conduct four (or more) Phase II ESA's</p> <ul style="list-style-type: none"> • Select sites for Phase II Assessment • Meet with consultant to Plan Phase II • Prepare and submit to EPA a draft Sampling and Analysis Plan for Phase II for review and approval. H&SP is also be submitted to EPA for Review only. • No field work will be conducted without EPA approval of SAP 	<p>Outputs:</p> <ul style="list-style-type: none"> • Up to 4 Phase II ESA reports • 4 Phase II Sampling and Analysis Plans <p>Outcomes:</p> <ul style="list-style-type: none"> • Priority sites identified • Information that will assist in the consideration of future development opportunities. 	Dec/2021	

<ul style="list-style-type: none"> • Encourage consultants to maximize efficiencies and minimize negative impacts of site assessments by incorporating green and sustainable remediation (GSR) techniques that are applicable to Phase II assessment activities • Digital photographs of site will be collected and provided to EPA 			
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4.4 Task 4: Cleanup Planning

Task 4 – Cleanup Planning Subtasks	Anticipated Outputs (projected activities, deliverables, reports) and Anticipated Outcomes (projected results, effects, improvements)	Anticipated Accomplishment Date(s) (Month/Year)	Actual Accomplishment Date(s)
A. Cleanup Planning for 2 (or more) sites <ul style="list-style-type: none"> • (One petroleum, one hazardous substance) • Clean-up plans will include the evaluation of redevelopment configurations and remediation alternatives • Clean-up and reuse planning will include a community input process 	Outputs: <ul style="list-style-type: none"> • Two clean-up and reuse plans • updated ACRES database Outcomes: <ul style="list-style-type: none"> • 2 property assessed through cleanup and (ideally) reuse planning, and ready for cleanup and redevelopment • Acres ready for cleanup & redevelopment 	Sept 2022	

4.5 Task 5: Programmatic Activities

Task 5: Programmatic Activities Subtasks	Anticipated Outputs (projected activities, deliverables, reports) and Anticipated Outcomes (projected results, effects, improvements)	Anticipated Accomplishment Date(s) (Month/Year)	Actual Accomplishment Date(s)
A. Reporting: <ul style="list-style-type: none"> • Prepare quarterly reports, MBE/WBE semi-annually, and FFR form at the end of the reporting period • Enter site data in ACRES • Include pictures of projects assessed in reports • Prepare final report and grant closeout material 	Outputs: <ul style="list-style-type: none"> • Quarterly reports and other forms; updated ACRES database; final report and closeout forms Outcomes: <p>Regular communication of project status and next steps; current database for congressional reporting</p>	<ul style="list-style-type: none"> • Quarterly reporting • MBE/WBE forms 3/30 & 9/30 • ACRES updated quarterly, when site activities occur. 	
B. Records: <ul style="list-style-type: none"> • Maintain grant files • Maintain site project files • Maintain financial records 	Outputs: <ul style="list-style-type: none"> • Accurate and complete files suitable for audit purposes Outcomes: <ul style="list-style-type: none"> • High quality project records reflective of the work performed 	Ongoing	

Task 5: Programmatic Activities Subtasks	Anticipated Outputs (projected activities, deliverables, reports) and Anticipated Outcomes (projected results, effects, improvements)	Anticipated Accomplishment Date(s) (Month/Year)	Actual Accomplishment Date(s)
C. Requests for Reimbursements or Advances	Outputs: • Payment Requests	Ongoing	
D. Training/Travel: Attend EPA Brownfields Conferences and other related workshops: 2 city staff persons will attend the 2019 and 2021 National Brownfield Conferences	Outputs: • Attend Brownfields conference Outcomes: Improve Brownfields knowledge and expand networking opportunities	2019 & 2021 Conferences	

5. PRE-AWARD COSTS

- The City of Duluth is requesting the approval of pre-award costs for this cooperative agreement. The city will undertake a procurement process to select environmental consultants for the environmental work under this grant. This will not require any of the grant funds – all procurement activities will be conducted with City of Duluth funds and follow adopted procurement procedures.