ISID - Environmental (Billing Rate)
Indefinite-Scope, Indefinite-Delivery Contract
R 02/28/19



STATE OF MICHIGAN DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET

This contract authorizes the professional services contractor to provide professional services. (Authority: 1984 PA 431)

CONTRACT FOR PROFESSIONAL ENVIRONMENTAL SERVICES: Indefinite Scope-Indefinite Delivery

THIS CONTRACT, authorized this 17th day of February the year two-thousand and twenty-three (2023), by the Director, Department of Technology, Management and Budget, BETWEEN the STATE OF MICHIGAN acting through the STATE FACILITIES ADMINISTRATION, DESIGN AND CONSTRUCTION DIVISION of the DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET, 3111 W. St. Joseph Street, Lansing, Michigan, 48917, hereinafter called the Department, and

Soil and Materials Engineers. Inc. 43980 Plymouth Oaks Blvd. Plymouth, MI 48170

the Prime Professional Services Contractor, hereinafter called the

Professional. WHEREAS the Department proposes securing

professional services for:

Indefinite-Scope, Indefinite-Delivery Contract No. 00943 Index No. (To Be Established)

Contract Order No. Y (To Be Assigned)

File No. (To Be Assigned)

Department of Technology, Management and Budget, State Facilities Administration, Design and Construction Division, Professional Environmental Services Indefinite-Scope, Indefinite-Delivery Contract (ISID) for Minor Projects –

2023 Environmental ISID Services

Various State Departments and Facilities Various Site Locations, Michigan

NOW THEREFORE, the Department and the Professional in consideration of the covenants of this Contract agree as follows:

- The Professional shall provide primary environmental investigation/assessment/design/construction oversight services for the assigned projects to the extent authorized by the Department of Technology, Management and Budget State Facilities Administration (SFA), Design and Construction Division (DCD) [The Department] and be solely responsible for such professional services. The Professional's services shall be performed in strict accordance with the assigned Project scope of work.
- II. If authorized, the Professional shall provide environmental services for the regions and project types identified below.

	Regions							
Western UP	Eastern UP	Northern LP	Saginaw Bay	Western LP	Central LP	Southwestern LP	Southeastern LP	
		X	X	X	X	X	X	

Project Types and Services Offered													
Asbestos/Lead/Mold/Biohazard/Free Product Regulated Waste Survey/Abatement	Brownfield Development	Ecological Risk Assessment / Forestry and Land Management / Wetland Mitigation / Streams and Lakes Restoration	Environmental Investigation / Characterization / Pilot Tests / Feasibility Study	Environmental Roto Sonic Drilling / Well Abandonment	Ground Penetrating Radar (GPR) / Laser-Induced Fluorescence (LIF) Field Screening	Landfill Maintenance / Monitoring	Nuclear Waste Management / Disposal / Remediation	Per-& Polyfluoroalkyl Substances (PFAS) Sampling / Mitigation / Remediation	Phase I / Phase II / Baseline Environmental Assessments	Remediation Systems Design / Construction Oversight / O & M / Decommissioning	Specialty Sub-Surface / Utility Inspection / Sewer Camera / Cleaning	Underground / Aboveground Storage Tank (UST / AST) Removal / Demolition/ Soil Excavation / Closure	Vapor Intrusion Assessments / Risk Mitigation / Design / Installation / O & M Services
X	X	X	X	X	X	X		X	X	X	X	x	X

NOTE: Blackened box(es) indicate a service that the committee did not select for your firm.

III. The State of Michigan shall compensate the Professional for providing their professional services for the Project in accordance with the conditions of this Professional Services Contract.

IN WITNESS, WHEREOF, each of the parties has caused this Professional Services Contract to be executed by its duly authorized representatives on the dates shown beside their respective signatures, with the Contract to be effective upon the date on which the Professional received a copy executed by the authorized State of Michigan representative(s) by regular, registered, or certified mail or by delivery in person.

FOR THE PROFESSIONAL:

SME	CV002109			
Firm Name	SIGMA Vendor ID Number			
SIRCE	2/28/2023			
Signature	Date			
Vice President				
Title				
FOR THE STATE OF MICHIGAN:				
adn PLank	April 21, 2023			
Director, DTMB SFA Design and Construction	Date			

WHEREAS this Professional Services Contract constitutes the entire agreement as to the Project between the parties, any Contract Modification of this Contract and the Department's approved and attached Project/Program Statement scope of work requirements must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the State may require. No Contract Modification may be entered into to compensate the Professional for correcting, or for responding to final claims litigation for. the Professional firm's design Documents/architectural and engineering design errors, omissions, or neglect on the part of the Professional.

ARTICLE I PROFESSIONAL SERVICES SCOPE OF WORK

Provide professional environmental services, technical staff, and support personnel for ISID minor projects on an as-needed basis at various State/Client Agencies within the various site location areas as defined by the State of Michigan.

This Contract is for professional environmental investigation and/or design services for an unspecified number of ISID projects ("Assignment"). The scope of work for each assigned project will be defined at the time the project is awarded by the State to the Professional firm. The professional environmental services required for each of these assigned projects requested by the Department may include any or all of the Tasks included in the Phase 100 – Study through the Phase 900 – Operation and Maintenance Management.

The Professional firm's environmental services shall be performed in strict accordance with this Professional Services Contract and be in compliance with the Department's approved and attached Appendix I– Project/Program Statement.

This Contract does not warrant or imply to the Professional environmental firm, entitlement to perform any specific percentage (%) amount of environmental work during the life of this Contract.

This Contract will remain in effect for **three (3) years** from the date of this Contract award but may be unilaterally terminated by the State of Michigan at any time, for cause or its convenience, by written notification of the State, to the Professional. Furthermore, this Contract may be extended for **one (1) additional year**, at the sole option and discretion of the State upon the Department providing written notice to the Professional prior to the expiration of the original Contract time period. Any such time extension shall be subject to the terms and conditions of this Contract, including, but not limited to, the existing hourly billing rates included in this Contract for the Professional, their Consultant, and their employees or agents.

Please note that the Professional Services Contract ISID Contract No., as noted on page 1, must be provided on all Project correspondence and documents. Also, services are not to be provided or expenses incurred until individual ISID Projects are assigned to this Contract (see the Article II – Compensation and the Appendix 1 – Project/Program Statement).

Upon award of this Contract and each subsequent assignment, the Professional understands and agrees that time is of the essence. Failure to adhere to timely completion will be grounds for the Department, at its sole discretion, to terminate or limit future work under this Contract.

The Professional shall provide all professional services, technical staff, and support personnel necessary to complete the Project as described in its Project/Program Statement, in the best interest of the State, and within the Professional's fee(s) herein authorized by the State. Assigned project services shall comprise, without exception, every professional discipline and expertise necessary to meet all the requirements as described in the Project/Program Statement and in accordance with the accepted industry standards for professional practice and services. The Professional's services include attendance at all Project related meetings and conferences. Professional services for the assigned projects under this contract shall be provided in the Phase/Task sequence shown below and shall be rendered in accordance with the Professional's proposed and approved Project Study, Design, and Proposed Construction Schedule. The Professional's study, design, and proposed construction schedule shall be detailed, undated, and time sequence related for all Phase/Task services appropriate for the Project. The Professional shall field-check and verify the accuracy of all study/drawing and any data furnished by the Department, the State/Client Agency or any other Project related source. The Professional shall not employ or consult with any firms in completing the Professional's obligations herein who it anticipates will be a construction Bidder for the Project or any part thereof, unless specifically authorized, in writing, by the Department.

The Professional acknowledges that the Department is the first interpreter of the Professional's performance under this Contract.

The Professional acknowledges by signing this Professional Services Contract having a clear understanding of the requested professional environmental services required by the Department, and further agrees that the terms and conditions of this Professional Services Contract provide adequate professional fee(s) for the Professional to provide the requested Project scope of work requirements for each assigned project. No increase in compensation to the Professional will be allowed unless there is a material change made to the scope of work of the Assignment/Program Statement and the change is accepted and approved, in writing, by the State. Professional services shall not be performed, and no Project expenses shall be incurred by the Professional prior to the issuance of a written and signed Professional Services Contract and a Contract Order authorizing the Professional to start the Project work. Compensation for Department directed changes to the Project will be provided to the Professional by a Contract Modification and/or Contract Change Order signed by the Department and the Professional. The preparation of Bulletins and Contract Change Orders resulting from changes in the Project scope of work or previously unknown on-site field conditions will be compensated to the Professional, as approved by the Project Director/Agency Project Manager, on an hourly billing rate basis in accordance with this article. This compensation shall not exceed seven and half percent (7.5%) of the Construction Contractor's quotation for the Bulletin or Contract Change Order or an amount mutually agreed upon by the Professional and the Project Director/Agency Project Manager.

The Professional shall immediately inform the Department whenever it is indicated that the Professional's authorized not-to-exceed Budget for any of the assigned Projects may be exceeded. The Professional shall make recommendations to the Department for revisions to be implemented in order to not exceed the original authorized Budget. Any revision to the Project must be accepted and approved by the Department in writing.

The professional services may also include participation in legislative presentations as described in the "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" and as the legislature or the Department may prescribe.

No substitution of any "Key Personnel/Employee" essential for the successful completion of the Project and identified in the Professional's Organizational Chart will be allowed by the Professional for this Contract without the prior written consent from the Project Director/Agency Project Manager. Before any "Key Personnel/Employee" substitution takes place, the Professional shall submit a written request to the Project Director/Agency Project Manager, and this substitution request shall include the following information: (1) A request in writing for a No Cost Contract Modification; (2) Detailed written justification for this substitution; (3) The Professional's qualifications of any proposed "Key Principal Personnel/Employee" replacement; and (4) A written statement from the Professional assuring the Department that the Project scope of work will not be adversely affected by this substitution. This request to modify their Professional Services Contract must be accepted and approved in writing by the Project Director/Agency Project Manager and the Director of the Department.

The Department will designate individuals to serve as the Project Director and Agency Project Manager for the Project scope of work who shall be fully acquainted with the Project/Program Statement and have the authority to render Project decisions and furnish information promptly. Except in connection with issues under the Article XII - Contract Claims and Disputes text, the Project Director/Agency Project Manager will exercise general management and administration for the Professional's services in so far as they affect the interest of the State. The Professional shall indemnify, defend, and hold harmless the State against exposure to claims arising from delays, negligence, or delinquencies by the Professional for the professional services of this Contract.

During the Construction Administration Services Phase of the Project, the Professional is required to complete and submit, the on-site inspection record form, "DTMB-0452, The Professional's Inspection Record," for all on-site inspection visits to the Project site. The Inspection Record shall be completed and signed by the Professional and submitted monthly, with the original document sent to the Project Director/Agency Project Manager and copies sent to the Construction Contractor. The Inspection Record shall accompany the Professional's monthly payment request.

The "DTMB-0460, Project Procedures" contains Department forms which shall be used during the Construction Administration Phase of this Contract. All professional services will be consistent with the Department's current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" unless otherwise approved in writing by the Department.

The professional services required for each Phase of this Contract shall be performed by the Prime Professional and their Consultants in accordance with service descriptions in this article. The following service descriptions outlined in this Contract represent the Department's standard of care for the Professional's responsibilities for providing the professional services of this Contract; but by inclusion, or omission, the descriptions do not limit or exclude any regular or normal professional services necessary to accomplish the Project in accordance with the approved Project Budget and the industries accepted practice and standards for professional services. All of the services outlined in this Contract may not be applicable to the Project/Program Statement. The Professional shall determine and coordinate the interface of the services required for the Project and is responsible for identifying any additional services necessary to successfully complete the Project.

The professional shall execute the following PHASES upon written authorization from the Project Director.

PHASE 100 - ENVIRONMENTAL INVESTIGATION/STUDY SERVICES

Provide complete and comprehensive Environmental Investigation/Study Deliverables to meet the requirements of the Project/Program Statement. Upon completion of all field investigation, assessment, research, review and/or oversight, prepare a complete report with an executive summary, and in such detail, as the Project Director may prescribe. The services under this phase may include but not be limited to coordination, environmental assessments, drilling, field sampling/oversight, data/document review/management, feasibility study, and reporting as described in the Project/Program Statement. Project reports must be in accordance with Department/Client/Agency requirements and as outlined in the Project/Program Statement but shall include, as a minimum and as appropriate, the following items: (1) Problem; (2) Conclusion; (3) Recommendations; and (4) Discussion, details, and documentation.

PHASE 300—SCHEMATIC DESIGN

Prepare Schematic Design Deliverables consistent with the Project/Program Statement. The deliverables shall consist of conceptual remediation system, drawings, outline specifications, a Schematic Construction Cost Estimate, other related documentation, and shall diagrammatically depict the areas, scales, and relationships of the functions. The services under this phase may include but not be limited to coordination, construction codes and design reviews, civil/site staging investigation, schematic design and utilities review, drafting, and project cost/proposed construction schedule, as required by the Department/Client/Agency and as outlined in the Project/Program Statement. Acceptance of the Schematic Design by the Department/Client/Agency does not limit subsequent inclusion of minor, but essential, schematic or design details whose necessity and arrangement may best become apparent during subsequent Phases of the Project design. Revise design as necessary and obtain approval from the Department/Client/Agency.

PHASE 400—DESIGN DEVELOPMENT

Prepare Design Development Deliverables based on the Owner-accepted Schematic Design to depict the intent of the designed remediation system(s). The deliverables shall consist of draft drawings and specifications. Construction Cost Estimates and other related documentation to clearly establish the complete basis for further detail into final design drawings/specifications. The deliverables shall further define the Project by fixing and describing the Project size, character, site relationships, and other appropriate elements including the environmental, civil, structural, architectural, mechanical, electrical, and safety systems. The services under this phase may include but not be limited to coordination, draft drawings/specifications, site specific staging investigation, structural calculations and preliminary environmental/architectural/engineering design development/reviews of drawings/specifications, required by the Department/Client/Agency and as outlined in the Project/Program Statement.

PHASE 500—CONSTRUCTION DOCUMENTS AND BIDDING DOCUMENTS

Prepare Construction Documents that revise, refine, amplify, and depict, in detail, the Project. The documents shall set forth, in detail, quality levels of and requirements for the construction, and shall consist of final drawings/specifications that comply with applicable regulatory and construction code requirements, enacted at the time of completion of the one hundred percent (100%) Construction Documents. Prepare Bidding Documents in Phases/Bid packages appropriate to the Project requirements and funding. Incorporate the current edition of DTMB "MICHSPEC", "DCSPEC" or "50KSPEC", as adopted and modified by the State of Michigan. The Construction Documents shall contain all information necessary to bid and construct the Project. The services under this phase may include but not be limited to coordination, final drawings/specifications and bidding documents, civil/site staging design, final structural calculations, final environmental/architectural/engineering design development/reviews of drawings/specifications, construction testing program, hazardous materials, health and safety risks, final design correction procedures, design and construction budget, construction codes/permits and construction schedule, as required by the Department/Client/Agency and as outlined in the Project/Program Statement.

PHASE 600 - CONSTRUCTION ADMINISTRATION - OFFICE SERVICES

Provide all required construction oversight administration and timely professional review and administrative services, as the circumstances of the Construction may require, allowing the successful review/implementation of the Construction Documents into a completed remedial actions/abatement measures and/or for the use intended by the Department/Client/Agency. The services under this phase may include but not be limited to coordination, review and approval of shop drawings and submittals, reporting of construction progress, construction quality testing, construction contractor performance review, punch list procedures, claims, establishing close-out procedures and developing/review of as-built documents, as required by the Department/Client/Agency requirements and as outlined in the Project/Program Statement.

PHASE 700 - CONSTRUCTION ADMINISTRATION - FIELD SERVICES

Provide all required Construction Oversight and Field Services, including timely inspection and professional services, as the circumstances of the Construction may require, allowing the successful review/implementation of the Construction Documents into a completed remedial action/abatement measures and/or for the use intended by the Department/Client/Agency. The services under this phase may include but not be limited to coordination, field inspections, progress meetings and final project inspection, as required by the Department/Client/Agency requirements and as outlined in the Project/Program Statement.

PHASE 900 - OPERATION AND MAINTENANCE SERVICES - REMEDIATION FACILITY

Provide all required Operation and Maintenance (O&M) Services and perform, in a safe and secure environment, all functions, including timely inspection, sampling and professional services, necessary to maintain uninterrupted, effective and efficient facility/system components for the use intended by the Department/Client/Agency. The services under this phase may include but not be limited to coordination, general system operation/inspections, routine system/building/ground maintenance, sampling, spare replacement parts, consumable supplies, utilities, waste materials removal/treatment/disposal, non-routine emergency services, progress meetings and reporting, as required by the Department/Client/Agency requirements and as outlined in the Project/Program Statement.

ARTICLE II COMPENSATION

In consideration of the performance of this Contract, the Department agrees to pay the Professional, as compensation for professional services, an hourly billing rate for each employee providing a direct service to this Project, on a not-to-exceed basis as specified herein, subject to subsequent modifications mutually agreeable to the parties hereto; provided, however, the Professional may not incur costs, or bill the Department, for professional services in excess of the estimates established for this Project without the prior written agreement of the Department. The attached proposal prepared by the Professional in response to the Request for Proposal, by the Owner, may describe methodology, services, schedule, and other aspects of the work to be performed under the Contract but does not supersede the Contract.

Compensation to the Professional shall be on an hourly billing rate basis for professional services rendered by salaried and non-salaried professional, technical, and technical support employees, except for any authorized reimbursable expenses provided for in this Contract. Total compensation for any Phase shall not exceed the amount authorized for that Phase, unless authorized in writing by the Department's approved Contract Change Order. Professional services shall not be performed, and no Project expense shall be incurred by the Professional firm prior to the issuance of a written and signed Professional Services Contract and a DTMB Form 0402 - Contract Order by the Department to the Professional, authorizing the Professional to start the Project.

Compensation to the Professional for services and authorized technical and technical support employees performing a direct service for this Project shall be determined using the Professional firm's billing rates. The Professional firm's hourly billing rate shall be the actual amount paid for the employee services on the Project including fringe benefits, vacations, sick leave, other indirect costs, and profit. The Professional firm's hourly billing rates shall not change during the life of this Contract without written approval by the Department. See attached Appendix, **Overhead Items Allowed for the Professional Services Contractor Firm's Hourly Billing Rate Calculation**, for the guide to overhead items allowed for the professional services contractor firm's hourly billing rate calculation. Reimbursement for the Project/Program Statement scope of work requirements will be provided only for Department approved items authorized for reimbursement compensation in this Contract. The State will not reimburse the Professional for downtime, or for personnel involved in downtime due to mechanical problems or failure of Professional's or Subcontractor equipment.

The preparation of Bulletins and Contract Change Orders resulting from changes to the Project scope of work or previously unknown on-site field conditions will be compensated to the Professional, as approved by the Department on an hourly billing rate basis in accordance with this article. This compensation shall not exceed seven and one- half percent (7.5%) of the Construction Contractor's quotation for the Bulletin or Contract Change Order or an amount mutually agreed upon by the Professional and the Project Director/Agency Project Manager.

The Professional shall provide, but no additional monetary compensation shall be allowed for the services necessary to respond to and resolve all claims arising wholly or in part from the Professional's errors and/or omissions or other aspects of the Project's design or the Professional firm's performance which is inconsistent with the Professional or Construction Contract.

- 2.1 PREMIUM TIME/OVERTIME: This Contract anticipates that no premium or overtime is required to achieve the Project's scope of work. No compensation will be allowed to the Professional for any premium or overtime cost incurred to achieve the Project schedule of this Contract, unless directed in writing by the Project Director/Agency Project Manager and approved by the Department.
- 2.2 EMPLOYEE HOURLY BILLING RATES: Hourly billing rates will include all direct and indirect monetary costs to the State for the Professional's services under this Contract other than the authorized and approved reimbursements. Hourly billing rates shall be based on the Professional's documented historical operating expenses and adjusted for Project specific costs. In no case shall this documentation period include more than eighteen (18) months prior to the date of award of this Contract.

Lump-sum payments to employees are not allowed under this Contract. Billing rates for employees who perform professional services of a subordinate or of a position classification having a lower classification/pay range shall be accounted and paid for at the lower hourly billing pay rate. The hourly billing rate charge of any employee may be changed by the Professional with a written and Department approved Contract Modification to account for normal personnel pay increases.

Hourly billing rates include, but are not limited to: Overhead items such as employee fringe benefits, vacations, sick leave, insurance, taxes, pension funds, retirement plans, meals, lodging, and all Project related travel expenses for Projects <u>less than</u> one-hundred (100) miles in each direction from the Professional's nearest Michigan office, computer costs/operating costs, data entry, and time, telephone, telephone- related services, and all reproduction services (except Contract Bidding Documents/Deliverables).

The hourly billing rate also includes all reproduction costs for design interpretations, study/design clarifications and Bulletins related to design errors or omissions, construction code compliance (precipitating either from design code compliance and plan review, design interpretations, or construction on-site/field inspections), and all similar, or avoidable costs.

All incidental postage, mail, or other shipping or delivery services, acquisition, bad debts, previous business losses, employment fees, depreciation, and operating costs for equipment, including computer design and/or computer drafting systems, and any specialized testing equipment are to be included. The hourly billing rate shall include, without exception, secretarial, computer/typing/word processing, editing, and clerical services utilized in any way for the Project as well as other non-technical and/or employees providing indirect services. The hourly billing rate also includes all profit without regard to its form or distribution.

Items not allowable as part of the Professional's calculated hourly billing rate include but are not limited to: Any costs associated with litigation and settlements for the Professional, other liability suits, out-of-state offices and associated travel, bonuses, profit sharing, premium/overtime costs, public relations, entertainment, business promotion, contributions, and various speculative allowances.

The hourly billing rate for the Professional may not be applied to the work of the Professional's Sub- Consultant's staff. Each Sub-Consultant firm must submit a separate hourly billing rate with proper documentation for Sub-Consultant services provided as part of the Proposal. The hourly billing rate of the respective Consultant firm shall be used for that Consultant firm's personnel only. No mark-up to Consultant firm's charges will be allowed.

2.3 RANGE OF EMPLOYEE HOURLY BILLING RATES: The Professional shall identify the service being provided and include the Professional's or Consultant's employee(s) full names and position classifications for the Project and their current hourly billing rates at the beginning and at the anticipated end of the Project. This hourly billing rate range shall reflect any anticipated pay increases over the life of the Contract. The range of hourly billing rates for any employee position or classification may not be changed without an approved Contract Modification.

2.4 DIRECT COST REIMBURSEMENT ITEMS: The Professional's Consultant services and authorized reimbursable expenses shall be treated as an authorized reimbursable expense item at a direct cost. The Professional shall be responsible for the selection of the supplier of the professional services or materials; the coordination, adequacy, and application of the professional services, whether provided by the Professional's staff or provided by their Consultant, and any Project costs that exceed the budget for each Phase.

Project related travel expenses (mileage, meals, lodging) for Projects <u>more than</u> one-hundred (100) miles in one- way from the Professional's nearest office shall be treated as an authorized reimbursable expense at the State of Michigan's current travel rates.

Unless authorized elsewhere in this Contract, direct cost reimbursement items shall be limited to the actual cost of printing and reproduction of project deliverables such as Final Study Reports, Surveys, Bidding Documents, and U. S. Mail regular shipping postage of the project deliverables listed above. In addition, direct cost reimbursement items may include soil borings, site surveys and any required laboratory testing, Design Code Compliance and Plan Review Approval Fees by the licensing agency; reproduction of documents for legislative presentation, artistic productions, mobilization of testing equipment, laboratory costs for testing samples, per-linear-foot cost of soil borings and specialized inspections of the structural, mechanical, electrical, chemical or other essential components of the Project.

Compensation for this Contract shall not exceed the budget per Project Phase identified in the attached Contract Order unless authorized by a Department approved Contract Modification. It shall be the Professional's responsibility to carefully monitor Project costs, activities, and progress and to provide the Project Director/Agency Project Manager timely notification of any justifiable need to increase the authorized budget. The Professional may not proceed with professional services that have not been authorized by the Project Director/Agency Project Manager and shall immediately notify the Project Director/Agency Project Manager if such services have been requested or have become necessary.

Professional/Sub-Consultant staff and hourly billable rates are identified in the attached Professional's proposal.

ARTICLE III PAYMENTS

Payment for the professional services shall be based on the Professional's performance of authorized professional service(s) performed prior to the date of each submitted payment request. Payment requests shall be submitted monthly to the Project Director/Agency Project Manager on a payment request form (DTMB-440). Payment for each monthly submitted payment request shall be made within thirty (30) consecutive calendar days following the Department's approval of the payment request. Payment requests shall include signed certification by the Professional of the actual percentage of work completed as of the date of invoicing for each Phase and summarize the amounts authorized, earned, previously paid, and currently due for each Project Phase.

Payment requests shall be supported by itemized records or documentation in such form and detail as the Department may require.

Each of the Professional's Consultant's submitted payment request applications shall include similar information. This includes, but is not limited to:

- Phase Numbers for the professional services provided.
- Professional's personnel and position/classification providing service and hours worked.
 Current hourly billing rate charges for each individual position/classification.
- Copy of certified on-site visitation log or site visit report showing time on-site.
- Itemized invoices from each of the Professional's Consultant's documenting that firm's professional services charge and the Project work related services provided.
- Authorized reimbursable expense items provided with receipts and invoices.

The State has the right to withhold payment of any disputed amounts until the parties agree as to the validity of the disputed amount. The State will notify the Professional of any dispute within a reasonable time. Payment by the State will not constitute a waiver of any rights as to the Professional's continuing obligations, including claims for deficiencies or substandard Contract Activities. The Professional's acceptance of final payment by the State constitutes a waiver of all claims by the Professional against the State for payment under this Contract, other than those claims previously filed in writing on a timely basis and still disputed.

The State will only disburse payments under the Contract through Electronic Funds Transfer (EFT). Contractor must register with the State at to receive electronic funds transfer payments. If Contractor does not register, the State is not liable for failure to provide payment.

Without prejudice to any other right or remedy if may have, the State reserves the right to set off at any time any amount then due and owing to it by Contractor against any amount payable by the State to Contractor under this Contract

ARTICLE IV ACCOUNTING

The Professional shall keep current and accurate records of Project costs and expenses, hourly billing rates, authorized reimbursable expense items, and all other Project related accounting documents to support the Professional's monthly application for payment. Project records shall be kept on a generally recognized accounting basis. Such records shall be available to the Department for a period of ten (10) years after the Department's final payment to the Professional. The State of Michigan reserves the right to conduct, or have conducted, an audit and inspection of these Project records at any time during the Project or following its completion.

ARTICLE VINSURANCE

The Professional shall purchase, maintain and require such insurance that will provide protection from claims set forth below which may arise out of or result from the Professional firm's services under this Contract, whether such service is performed by the Professional or performed by any of the Professional firm's Consultant's or by anyone directly or indirectly employed by them, or by anyone for whose acts they may be liable. The following insurance policy limits described below are intended to be the minimum coverage acceptable by the State:

For the purpose of this Section, "State" includes its departments, divisions, agencies, offices, commissions, officers, employees, and agents.

- (a) The Contractor must provide proof that it has obtained the minimum levels of insurance coverage indicated or required by law, whichever is greater. The insurance must protect the State from claims that may arise out of or result from or are alleged to arise out of or result from the Contractor's or a Subcontractor's performance, including any person directly or indirectly employed by the Contractor or a Subcontractor, or any person for whose acts the Contractor or a Subcontractor may be liable.
- (b) The Contractor waives all rights against the State for the recovery of damages that are covered by the insurance policies the Contractor is required to maintain under this Section. The Contractor's failure to obtain and maintain the required insurance will not limit this waiver.
- (c) All insurance coverage provided relative to this Contract is primary and noncontributing to any comparable liability insurance (including self-insurance) carried by the State.
- (d) The State, in its sole discretion, may approve the use of a fully-funded self-insurance program in place of any specified insurance identified in this Section.
- (e) Unless the State approves, any insurer must have an A.M. Best rating of "A" or better and a financial size of VII or better, or if those ratings are not available, a comparable rating from an insurance rating agency approved by the State. All policies of insurance must be issued by companies that have been approved to do business in the State. To view the latest A.M. Best's Key Ratings Guide and the A.M. Best's Company Reports (which include the A.M. Best's Ratings) visit the A.M. Best Company internet web site at http://www.ambest.com.
- (f) Where specific coverage limits are listed in this Section, they represent the minimum acceptable limits. If the Contractor's policy contains higher limits, the State is entitled to coverage to the extent of the higher limits.

- (g) The Contractor must maintain all required insurance coverage throughout the term of this Contract and any extensions. However, in the case of claims-made Commercial General Liability policies, the Contractor must secure tail coverage for at least three (3) years following the termination of this Contract.
- (h) The minimum limits of coverage specified are not intended and may not be construed; to limit any liability or indemnity of the Contractor to any indemnified party or other persons.
- (i) The Contractor is responsible for the payment of all deductibles.
- (j) If the Contractor fails to pay any premium for a required insurance policy, or if any insurer cancels or significantly reduces any required insurance without the State's approval, the State may, after giving the Contractor at least 30 days' notice, pay the premium or procure similar insurance coverage from another company or companies. The State may deduct any part of the cost from any payment due the Contractor or require the Contractor to pay that cost upon demand.
- (k) In the event the State approves the representation of the State by the insurer's attorney, the attorney may be required to be designated as a Special Assistant Attorney General by the Michigan Attorney General.

The Professional firm's Errors and Omissions coverage shall include coverage for claims resulting from acts of forbearance that cause or exacerbate pollution and claims of bodily injury and property damage in the amount of \$1,000,000 minimum coverage per occurrence, \$3,000,000 annual aggregate. This insurance is required of all professional firms who conduct professional environmental services including, but not limited to, any of the following services:

- (i) Remedial System Design.
- (ii) Remediation Management.
- (iii) Feasibility Development and Implementation.
- (iv) Hydrogeological Evaluation.
- (v) Media Testing and Analysis.
- (vi) Subsurface and Geophysical Investigation.
- (vii) Other related activities as determined by the Department.

Degrained Limite	Additional Demoirements				
Required Limits	Additional Requirements				
Commercial General L	Liability Insurance				
Minimum Limits: \$1,000,000 Each Occurrence Limit \$1,000,000 Personal & Advertising Injury Limit \$2,000,000 General Aggregate Limit \$2,000,000 Products/Completed Operations	Professional must have their policy endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds using endorsement CG 20 10 11 85, or both CG 20 10 12 19 and CG 20 37 12 19.				
Umbrella or Excess	Liability Insurance				
Minimum Limits: \$2,000,000 General Aggregate	Professional must have their policy follow form.				
Automobile Liabi	lity Insurance				
Minimum Limits: \$1,000,000 Per Accident	Professional must have their policy: (1) endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds; and (2) include Hired and Non-Owned Automobile coverage.				
Workers' Compens	ation Insurance				
Minimum Limits: Coverage according to applicable laws governing work activities.	Waiver of subrogation, except where waiver is prohibited by law.				
Employers Liabil	ity Insurance				
Minimum Limits: \$500,000 Each Accident \$500,000 Each Employee by Disease \$500,000 Aggregate Disease.					
Professional Liability (Errors and Omissions) Insurance					
Minimum Limits: \$1,000,000 Each Occurrence \$2,000,000 Annual Aggregate Deductible Maximum: \$50,000 Per Loss					

Environmental and Pollution Liability (Errors and Omissions) ***

Minimum Limits:

\$1,000,000 Each Occurrence \$2,000,000 Annual Aggregate Professional must have their policy: (1) be applicable to the work being performed. including completed operations equal to or exceeding statute of repose; (2) not have exclusions or limitations related to Transportation (upset overturn, spills during loading or unloading, Hazardous Materials Handling, and Non-Owned disposal site liability; and (3) endorsed to add "the State of Michigan, its departments, division, agencies. offices. commissions. officers, employees, and agents" as additional insured.

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Contractual Liability insurance for claims for damages that may arise from the Professional's assumption of liability on behalf of the State under Article VI concerning indemnification for errors, omissions, or negligent acts in the course of the professional service or other provision within this Contract to the extent that such kinds of contractual liability are insurable in connection with and subject to limits of liability not less than for the general liability insurance and the professional liability insurance and set forth in subsections (c) and (d) above.

Except where the State has approved a subcontract with other insurance provisions, the Professional must require any Consultant/Subcontractor to purchase and maintain the insurance coverage required in this Article. Alternatively, the Contractor may include a Consultant/Subcontractor under the Professional's insurance on the coverage required in that Section. The failure of a Consultant/Subcontractor to comply with insurance requirements does not limit the Professional's liability or responsibility.

Certificate of Insurance documents, acceptable to the State, shall be provided and filed with the Department prior to commencement of the Professional's Project services, unless otherwise approved in writing, and not less than 20 days before the insurance expiration date every year thereafter. Facsimile copies of the Certificate of Insurance will not be accepted. Certificate of Insurance documents must be either submitted hard copy or portable document file (.pdf). The Certificate of Insurance documents must specify on oblong certificate rectangle labeled the in the space "Description Operations/Locations/Vehicles/Exclusions Added By Endorsement/Special Provisions/Special Items" the following items: (1) The ISID Title; (2) The ISID Contract Number; and (3) The State of Michigan must be named as an "Additional Insured on the General Liability and Automobile Insurance Policy." The Certificate of Insurance documents shall contain a provision that the Project insurance coverage afforded under the insurance policies for this Contract will not be modified or canceled without at least thirty (30) consecutive calendar days prior written notice, except for 10 days for non-payment of premium, to the State of Michigan, Department.

This Section is not intended to and is not to be construed in any manner as waiving, restricting, or limiting the liability of either party for any obligations under this Contract (including any provisions hereof requiring Professional to indemnify, defend and hold harmless the State).

The attached, Certificates of Insurance documents required for this Project shall be in force for this Project until the final payment by the State to the Professional is made and shall be written for not less than any limits of liability specified above. The Professional has the responsibility for having their consultant firms comply with these insurance requirements.

ARTICLE VI INDEMNIFICATION

- (a) To the extent permitted by law, the Professional shall indemnify, defend and hold harmless the State from liability, including all claims and losses, and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest, and penalties), accruing or resulting to any person, firm or corporation that may be injured or damaged by the Professional in the performance of this Contract and that are attributable to the negligence or tortious acts of the Professional or any of its Subcontractors/Consultants, or by anyone else for whose acts any of them maybe liable.
- (b) Employee Indemnification: In any and all claims against the State of Michigan, its departments, divisions, agencies, boards, sections, commissions, officers, employees and agents, by any employee of the Professional or any of its Subcontractors/Consultants, the indemnification obligation under this Contract shall not be limited in any way by the amount or type of damages, compensation or benefits payable by or for the Professional or any of its Subcontractors/Consultants under worker's disability compensation acts, disability benefit acts or other employee benefit acts. This indemnification clause is intended to be comprehensive. Any overlap in provisions, or the fact that greater specificity is provided as to some categories of risk, is not intended to limit the scope of indemnification under any other provisions.
- (c) Patent/Copyright Infringement Indemnification: To the extent permitted by law, the Professional shall indemnify, defend and hold harmless the State from and against all losses, liabilities, damages (including taxes), and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest, and penalties) incurred in connection with any action or proceeding threatened or brought against the State to the extent that such action or proceeding is based on a claim that any piece of equipment, software, commodity or service supplied by the Professional or its Subcontractors/Consultants, or the operation of such equipment, software, commodity or service, or the use of reproduction of any documentation provided with such equipment, software, commodity or service infringes any United States patent, copyright, trademark or trade secret of any person or entity, which is enforceable under the laws of the United States.

In addition, should the equipment, software, commodity, or services, or its operation, become or in the State's or Professional's opinion be likely to become the subject of a claim of infringement, the Professional shall at the Professional's sole expense (i) procure for the State the right to continue using the equipment, software, commodity or service or, if such option is not reasonably available to the Professional, (ii) replace or modify to the State's satisfaction the same with equipment, software, commodity or service of equivalent function and performance so that it becomes non-infringing, or, if such option is not reasonably available to Professional, (iii) accept its return by the State with appropriate credits to the State against the Professional's charges and reimburse the State for any losses or costs incurred as a consequence of the State ceasing its use and returning it.

Notwithstanding the foregoing, the Professional shall have no obligation to indemnify or defend the State for, or to pay any costs, damages or attorneys' fees related to, any claim based upon (i) equipment developed based on written specifications of the State; or (ii) use of the equipment in a configuration other than implemented or approved in writing by the Professional, including, but not limited to, any modification of the equipment by the State; or (iii) the combination, operation, or use of the equipment with equipment or software not supplied by the Professional under this Contract.

ARTICLE VII OWNERSHIP OF DOCUMENTS

All Project deliverables, including but not limited to: reports, Bidding Documents, Contract Documents, electronic documents and data, and other Project related documents, including the copyrights, prepared and furnished by the Professional shall become the property of the State of Michigan upon completion of the Project, completion and acceptance of the professional's work, or upon termination of the Contract. Project deliverables shall be delivered to the Department upon their request. The Professional shall have no claim for further employment or additional compensation as a result of this Contract requirement. The Professional may retain a copy of all Project documents for their files.

If the Professional is in default or breach of its obligations under this Contract, the State shall have full ownership rights of the Project deliverables, including Bidding Documents and Contract Documents, including all electronic data. If the Professional is in default or this Contract Agreement is terminated, the State shall not use the Contract Documents and deliverables of this Contract for completion of the Project by others without the involvement of other qualified Professionals who shall assume the professional obligations and liability for the Project work not completed by the Professional.

To the fullest extent allowed by law, the State releases the Professional, the Professionals Consultant(s) and the agents and employees of any of them from and against legal claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of the State's use of the Contract Documents other than in accordance with this Contract Agreement.

All Contract deliverables listed may be published or issued for informational purposes without additional compensation to the Professional. The Professional may not use any of the Contract Documents and Contract deliverables for any purpose that may misrepresent the professional services they provided.

The Professional shall retain full rights to the Contract Documents and deliverables and the right to reuse component information contained in them in the normal course of the Professional's professional activities.

The Contract deliverables, Contract Documents, or other documents produced under this Contract may be used by the Department, or others employed by the Department or State of Michigan, for reference in any completion, correction, remodeling, renovation, reconstruction, alteration, modification of or addition to the Project, without monetary compensation to the Professional.

The State of Michigan will not construct additional Projects or buildings based on the work of this Contract without notice to the Professional. Whenever renderings, photographs of renderings, photographs or models, or photographs of the Project are released by the State of Michigan for publicity, proper credit for design shall be given to the Professional, provided the giving of such credit is without cost to the State of Michigan.

ARTICLE VIII TERMINATION

The State may, by written notice to the Professional, terminate this Contract and/or any Assignments, in whole or in part at any time, either for the State's convenience or because of the failure of the Professional to fulfill their Contract obligations. Upon receipt of such notice, the Professional shall:

- Immediately discontinue all professional services affected (unless the notice directs otherwise), and
- b) Deliver to the State all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the Professional in performing this Contract, whether completed or in process.
- 8.1 If the termination is for the convenience of the State, an equitable adjustment in the Contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed professional services.
- 8.2 If the termination is due to the failure of the Professional to fulfill their Contract obligations, the State may take over the work and prosecute the same to completion by Contract or otherwise. In such case, the Professional shall be liable to the State for any additional cost occasioned to the State thereby.

- 8.3 If, after notice of termination for failure to fulfill Contract obligations, it is determined that the Professional had not so failed, the termination shall be deemed to have been affected for the convenience of the State. In such event, adjustment in the Contract price shall be made as provided in Section 8.1 of this article.
- 8.4 The rights and remedies of the State provided in this article are in addition to any other rights and remedies provided by law or under this Contract.

ARTICLE IX SUCCESSORS AND ASSIGNS

This Contract shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns; provided, however, that neither of the parties hereto shall assign this Contract without the prior written consent of the other.

ARTICLE X GOVERNING LAWS

This Contract shall be construed in accordance with the current laws of the State of Michigan. Some Assignments to this Contract will be funded wholly or in part by the Federal Government through grant agreements and/or federal programs. The Professional must comply with such funding requirements along with any current applicable federal regulations in performing the tasks described in the Scope of Work, including but not limited to the following current federal regulations. The absence of reference to any law or regulation does not preclude its applicability to this Contract.

- 1. The Comprehensive Environmental Response Compensation and Liability Act of 1980 as amended CERCLA (The Superfund Act);
- 2. Section 306 of the Clean Air Act (42 U.S.C. 1857 (h));
- 3. Section 508 of the Clean Water Act (33 U.S.C. 1368);
- 4. Public Law 98-473 as implemented in the Department of the Interior, Bureau of Indian Affairs;
- 5. Executive Order 11738; Office of Management and Budget Circular A-87, "Cost Principles for State, Local, and Indian Tribal Governments."
- 6. 25 CFR Part 20; Financial Assistance and Social Services Programs
- 7. 40 CFR Part 31; Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments
- 8. 40 CFR Part 32 Subpart F; Drug-Free Workplace
- 9. 40 CFR Part 33; Participation by Disadvantaged Business Enterprises in United States Environmental Protection Agency Programs
- 10. 40 CFR Part 35; State and Local Assistance

- 11. 40 CFR Part 35 Subpart 0; Cooperative Agreements and Superfund State Contracts for Superfund Response Actions
- 12. 48 CFR Chapter 1 Part 31 Subpart 31.2; Contracts with Commercial Organizations.

ARTICLE XI NONDISCRIMINATION

In connection with the performance of the Project under this, the Professional agrees as follows:

The Professional will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, age, sex (as defined in Executive Directive 2019-09), height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job or position. The Professional will provide equal employment opportunities to ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job or position.

Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

- b) The Professional will, in all solicitations or advertisements for employees placed by or on behalf of the Professional, state that all qualified applicants will receive equal employment opportunity consideration for employment without regard to race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job or position.
- c) The Professional or their collective bargaining representative will send to each labor union or representative of workers with which is held a collective bargaining agreement or other Contract or understanding, a notice advising the said labor union or workers' representative of the Professional's nondiscrimination commitments under this article.
- d) The Professional will comply with the Elliot-Larsen Civil Rights Act, 1976 PA 453, as amended, MCL 37.2201 et seq; the Michigan Persons with Disabilities Civil Rights Act, 1976 PA 220, as amended, MCL 37.1101 et seq; Executive Directive 2019-09; and all published rules, regulations, directives and orders of the Michigan Civil Rights Commission which may be in effect on or before the date of award of this Contract.
- e) The Professional will furnish and file nondiscrimination compliance reports within such time and upon such forms as provided by the Michigan Civil Rights

Commission; said forms may also elicit information as to the practices, policies, program, and employment statistics of the Professional and of each of their Consultant firms. The Professional will permit access to all books, records, and accounts by the Michigan Civil Rights Commission, and/or its agent, for purposes of investigation to ascertain nondiscrimination compliance with this Contract and with rules, regulations, and orders of the Michigan Civil Rights Commission relevant to Article 6, 1976 PA 453, as amended.

f) In the event that the Michigan Civil Rights Commission finds, after a hearing held pursuant to its rules, that the Professional has not complied with the contractual nondiscrimination obligations under this Contract, the Michigan Civil Rights Commission may, as part of its order based upon such findings, certify said findings to the State Administrative Board of the State of Michigan, which the State Administrative Board may order the cancellation of the Contract found to have been violated, and/or declare the Professional ineligible for future Contracts with the State and its political and civil subdivisions, departments, and officers, and including the governing boards of institutions of higher education, until the Professional complies with said order of the Michigan Civil Rights Commission.

Notice of said declaration of future ineligibility may be given to any or all of the persons with whom the Professional is declared ineligible to Contract as a contracting party in future Contracts. In any case before the Michigan Civil Rights Commission in which cancellation of an existing Contract is a possibility, the State shall be notified of such possible remedy and shall be given the option by the Michigan Civil Rights Commission to participate in such proceedings.

- g) The Professional shall also comply with the nondiscrimination provisions of 1976 PA 220, as amended, concerning the civil rights of persons with physical or mental disabilities.
- h) The Professional will include, or incorporate by reference, the nondiscrimination provisions of the foregoing paragraphs a) through g) in every subcontract or Contract Order unless exempted by the rules, regulations or orders of the Michigan Civil Rights Commission, and will provide in every subcontract or Contract Order that said nondiscrimination provisions will be binding upon each of the Professional's Consultant's or seller.

ARTICLE XII CONTRACT CLAIMS AND DISPUTES

In any claim or dispute by the Professional which cannot be resolved by negotiation, the Professional shall submit the claim or dispute for an administrative decision by the Department of Technology, Management and Budget, Director of State Facilities Administration within thirty (30) consecutive calendar days of the end of the disputed negotiations, and any decision of the Director of State Facilities Administration may be appealed to the Michigan Court of Claims within one (1) year of the issuance of the Director's decision.

The Professional agrees that the Department's appeal procedure to the Director of State Facilities Administration is a prerequisite to filing a suit in the Michigan Court of Claims.

ARTICLE XIII DEFINITION OF TERMS

The definition of terms and conditions of this Contract are described and outlined in the following Articles I through XIV and attached appendices. The capitalized defined terms used in this Professional Services Contract shall have the following definitions:

ADDENDA: Written or graphic numbered documents issued by the Department and/or the Professional prior to the execution of the Construction Contract which modify or interpret the Project Bidding Documents, including drawings, and specifications, by additions, deletions, clarifications or corrections. The Addenda shall: (1) Be identified specifically with a standardized format; (2) Be sequentially numbered; (3) Include the name of the Project; (4) Specify the Project Index No., Project File No., the Contract Order No. Y, and a description of the proposed Addenda; and (5) Specify the date of Addenda issuance. As such, the Addenda are intended to become part of the Project Contract Documents when the Construction Contract is executed by the Professional's recommended lowest responsive, responsible qualified Construction Contractor.

An Addendum issued after the competitive construction Bid opening to those construction Bidders who actually submitted a Bid, for the purpose of rebidding the Project work without re-advertising, is referred to as a post-Bid Addendum.

AGENCY PROJECT MANAGER: The assigned staff of the Department or the State/client Agency authorized by the State to represent and act on behalf of the Project Director on a given Project and to thereby provide direction and assistance to the Construction Contractor. The Agency Project Manager may designate in writing a person to act on behalf of the Agency Project Manager when they are unable to perform their required duties or is away from the office. In such cases, the Agency Project Manager must notify the Construction Contractor and the Project Director.

AGENCY FIELD INSPECTOR: An employee of the State of Michigan under the direction of the State/client Agency who provides the on-site, Inspection of construction Projects for compliance with the study/design intent of the Professional firm's Contract Documents/drawings and specification requirements and the building construction codes. The Agency Field Inspector is the liaison between the Construction Contractor, the Professional, and the Agency Project Manager. The Agency Project Manager, or their Agency Field Inspector, has the authority to require the Professional to respond to and resolve study/design related problems, construction on-site field problems and to attend Project related meetings.

BID: A written offer by a construction Bidder for the Department. Project construction work, as specified, which designates the construction Bidder's base Bid and Bid price for all alternates.

BIDDER: The person acting directly, or through an authorized representative, who submits a competitive construction Bid directly to the Department.

BIDDING DOCUMENTS: The Professional's Project Contract Documents as advertised, and all Addenda issued before the construction Bid opening, and after the construction Bid opening, if the Project construction work is rebid without re-advertising. Bidding Documents shall consist of the Phase 500 - Final Design drawings and specifications, any Addenda issued, special, general, and supplemental conditions of the Construction Contract, and modifications, if any, to standard forms provided by the Department. Such forms consist of the Project advertisement, the instructions to Bidders, the proposal forms, general, supplemental, and any special conditions of the Construction Contract, and the form of agreement between the Department and the Construction Contractor for the Project work requirements.

BID SECURITY: The monetary security serving as guarantee that the Bidder will execute the offered Construction Contract or as liquidated damages in the event of failure or refusal to execute the Construction Contract.

BUDGET: The maximum legislatively authorized Budget amount to be provided by the State of Michigan and available for a specific purpose or combination of purposes to accomplish the Project for this Contract.

BULLETIN: A standard document form (DTMB-0485, Bulletin Authorization No. and the DTMB-0489, Instructions to Construction Contractors for Preparation of Bulletin Cost Quotations for Contract Change Orders) used by the Department to describe a sequentially numbered change in the Project under consideration by the Department and the Professional and to request the Construction Contractor to submit a proposal for the corresponding adjustment in the Contract price and/or Contract time, if any. These standard document forms are a part of the "DTMB-0460, Project Procedures" documents package.

CONSTRUCTION CONTRACT: A separate written Contract agreement between the Construction Contractor and the Department for the construction, alteration, demolition, repair, or rebuilding of a State/Client Agency building or other State property.

CONSTRUCTION CONTRACTOR: Any construction firm under a separate Contract to the Department for construction services.

CONSTRUCTION INSPECTION SERVICES: The Professional's field Inspections of the Project during the construction Phase of this Contract which includes but is not limited to: (1) Documenting the quantity and quality of all Project construction work and verifying that the Project construction work is properly completed; (2) Resolve Project problems that are affecting the Project construction work, certify payment requests, process Bulletins, Contract Change Order recommendations, and requests for information (RFI's) in a timely manner as prescribed in the Department's, "MICHSPEC 2001 Edition of The Owner and Contractor Standard Construction Contract and General Conditions for Construction (Long Form)" or the current Department, DTMB Short Form 401 - Proposal and Contract/Front-End Package for Small Projects for Professional Services Contractors (PSC) with General Conditions for Construction and Instructions to Bidders" as adopted and modified by the State of Michigan and incorporated into the Construction Contract; and the (3) Inspection of Project construction work completed or in progress by the Construction Contractor to determine and verify to the Department's Project

Director/Agency Project Manager and their Department Field Representative that the Project construction work is in compliance with the Professional's design intent and that the Project has been completed by the Construction Contractor in accordance with the Professional's Phase 500 - Contract Documents/drawings and specifications requirements.

The Professional shall provide sufficient Inspections of the Project during the construction Phase to administer the construction Phase field and office services as directly related to the degree of Project complexity, up to and including full-time field Inspections. Construction field Inspections shall occur as the construction field conditions and the Project may require and during the regularly scheduled monthly progress and payment meetings.

The Professional shall use for their construction field Inspection services, only personnel having professional expertise, experience, authority, and compatibility with departmental procedures as the Department may approve. The Professional agrees that such characteristics are essential for the successful completion of the Project. Such individuals shall be replaced for cause where the Department determines and notifies the Professional, in writing, of their unacceptable performance.

CONSULTANT: Any individual, firm, or employee thereof, not a part of the Professional's staff, but employed by the Professional and whose professional service cost is ultimately paid by the State of Michigan, either as a direct cost or authorized reimbursement. This includes the recipient(s) of Contract Orders for material, support, and/or technical services. Also, included are persons and firms whose management and/or direction of services are assigned to the Prime Professional as may be provided elsewhere in this Contract.

CONTRACT CHANGE ORDER: A standard document form (DTMB-0403) issued and signed by the State of Michigan and signed by the Professional which amends the Project Design Professional's Contract Documents for changes in the Project/Program Statement or an adjustment in Contract price and/or Contract time, or both.

CONTRACT DOCUMENTS: The Professional's Phase 100 – Study, Final Report and Phase 500 - Final Design plans/drawings, specifications, Construction Contract, instructions to construction Bidders, proposal, Bidding Documents, agreement, conditions of the Contract, payment bond, performance/labor and material bond, prevailing wages, all Addenda, and attachments as may be necessary to comprise a Construction Contract for the Project. Specifications for this Contract will be prepared for Division 00 through 49, in the current version MasterFormat Outline by the Construction Specifications Institute (C.S.I.), as appropriate for the Project.

CONTRACT MODIFICATION: A form (DTMB-0410) amending the Contract signed by the Department and the Professional. The preparation of Bulletins and Contract Change Orders resulting from changes in the Project/Program Statement or previously unknown on-site field conditions as approved by the Department will be compensated to the Professional by way of the Contract Modification in accordance with the Article II, Compensation text of this Contract.

Any Contract Modification of this Professional Services Contract must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the Department may require. No Contract Modification will be approved to compensate the Professional for correcting, or for responding to claims or litigation for, the Professional's Phase 100 – Study, Final Report and Phase 500 - Contract Documents study/design errors, omissions or neglect on the part of the Professional.

CONTRACT ORDER: A form (DTMB-0402) issued and signed by the State of Michigan authorizing a Professional to: (1) Begin to incur Project expenses and proceed with the Project on-site; and (2) Provide professional services for the fee amount designated in the Phases of the Contract Order. Issuance of the DTMB-0402 certifies that: (1) The State will enter into a Professional Services Contract for the professional services described in the various Phases of this Contract; and that (2) The proper three (3) sets of Certificate of Insurance documents have been received and accepted by the State along with the approval and signing of the Professional's Professional Services Contract by the SFA, DCD Director.

DEPARTMENT: The Department of Technology, Management and Budget, Facilities and Business Administration, Design and Construction Division. The Department will represent the State of Michigan in all matters pertaining to this Project. This Professional Services Contract will be administered through the Department on behalf of the State of Michigan and The State/Client Agency.

DESIGN MANUAL: Provides the Professional with information regarding the Department's current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" review process requirements regarding the uniformity in Contract materials presented to it by the Professional and the State/Client Agency(ies). This manual contains the following noted standards, instructions, and procedures information for: (1) General instructions for planning documents from Phase 100-Study through Phase 500-Final Design; (2) Net and gross area/volume; (3) Project cost format; (4) Outline architectural and engineering specifications; (5) Specifications in documentation Phase; (6) Instructions for proposal; (7) Bidders questionnaire; and the (8) Project job sign.

DIRECTOR: The Director of the Department of Technology, Management and Budget or their authorized State of Michigan representative.

DIRECTOR-SFA: The Director of the Department of Technology, Management and Budget, State Facilities Administration or their authorized State of Michigan representative.

DEPARTMENT FIELD REPRESENTATIVE: An employee of the State under the direction of the Department who provides the Inspection of construction Projects for compliance with the design intent of the Professional's Phase 500 - Contract Documents/ architectural and/or engineering drawings and specification requirements and the building construction codes. The Department Field Representative is the liaison between the Construction Contractor, the Professional, and the Project Director/Agency Project Manager. The Project Director/Agency Project Manager, or their Department Field Representative, has the authority to require the Professional to respond to and resolve study/design related problems, construction field problems and to attend Project

meetings. Unless delegated by specific written notice from the Department, the Department Field Representative has no authority to order any changes in the Project scope of work or authorize any adjustments in Contract price or Contract time.

INSPECTION: The Professional and their Consultant firm's on-site and/or off-site examination of the Project construction work completed or in progress by the Construction Contractor to determine and verify to the Department's, Project Director/Agency Project Manager and their Department Field Representative that the quantity and quality of all Project construction work is in accordance with the design intent of the Professional's Phase 500 - Contract Documents/ drawings and specifications requirements.

KEY PRINCIPAL PERSONNEL/EMPLOYEE: An individual employee of a Professional who is essential for the successful completion of the Project.

NOTICE OF INTENT TO AWARD: A written notice to the Construction Contractor, by the Department accepting the Professional's written recommendation to award the construction Bid to the lowest responsive, responsible qualified construction Bidder. The Notice of Intent to Award letter will also designate the Contract price and itemize the alternates that the Department, at its sole discretion has accepted.

PHASE: A discretely distinguishable step necessary to produce the Project in the course of the Professional providing study, design and construction administration services.

PRIME PROFESSIONAL SERVICES CONTRACTOR/PROFESSIONAL: An individual, firm, partnership, corporation, association, or other legal entity who is legally permitted by law to sign and seal final design construction Contract Documents and licensed under the State of Michigan's professional licensing and regulation provisions of the Occupational Code (State Licensing Law), Act 299 of the Public Acts of 1980, Article 20, as amended, to practice architecture, engineering, environmental engineering, geology, civil, land surveying, or landscape architecture services in the State of Michigan.

The Prime Professional Services Contractor/Professional is also legally permitted by the State of Michigan's regulation provisions of the State Construction Code, Act 230 of the Public Acts of 1972, as amended, and designated in a Construction Contract by the Department to recommend construction progress payments to the Construction Contractor.

PROJECT: Any new construction, existing site, new utilities, existing building renovation, roof repairs and/or removal and replacement, additions, alteration, repair, installation, construction quality control and material testing services, painting, decorating, demolition, conditioning, reconditioning or improvement of public buildings, works, bridges, highways or roads authorized by the Department that requires professional study/design services as part of this Contract.

PROJECT COST: The total Project cost including, but not limited to, site purchase, site survey and investigation, hazardous material abatement, construction, site development, new utilities, telecommunications (voice and data), professional fees, construction quality control and material testing services, testing and balancing services, furnishings, equipment, plan(s)/drawing(s) design code compliance and plan review approval fees and all other costs associated with the Project.

PROJECT DIRECTOR: The professional licensed employee of the Department who is responsible for directing and supervising the Professional's services during the life of this Contract. The Project Director, or their Department Field Representative, has the authority to require the Professional to respond to and resolve study/design related problems, construction field problems and to attend Project related meetings.

PROJECT/PROGRAM STATEMENT: The Project/Program Statement is provided by the Department and defines the scope of the problem, describes why this Project is desirable, and provides a preferred resolution of the problem.

PROJECT TEAM: The Professional, the Project Director/Agency Project Manager, Department Field Representative, a representative of the State/Client Agency, and others as considered appropriate by the Department.

PUNCH LIST: A list of minor construction Project items to be completed or corrected by the Construction Contractor, any one of which do not materially impair the use of the Project work, or the portion of the Project work inspected, for its intended purpose. A Punch List shall be prepared by the Professional upon having made a determination that the Project work, or a portion of the Project construction work inspected, in concert with the Professional, the Construction Contractor, the Department, the Project Director/Agency Project Manager and their Department Field Representative, and any construction manager, is substantially complete and shall be attached to the respective DTMB-0455, Certificate of Substantial Completion form. This standard document form is a part of the "DTMB-0460, Project Procedures" documents package.

SOIL EROSION AND SEDIMENTATION CONTROL: The planning, design and installation of appropriate Best Management Practices (as defined by the most current version of the Department's Soil Erosion and Sedimentation Control Guidebook) designed and engineered specifically to reduce or eliminate the off-site migration of soils via water runoff, wind, vehicle tracking, etc. and comply with the Soil Erosion and Sedimentation Control in the State of Michigan as regulated under the 1994 Public Act 451, as amended – The Natural Resources Environmental Protection Act, Part 91 – Soil Erosion and Sedimentation Control. Soil Erosion and Sedimentation Control associated with this Contract will be monitored and enforced by the Department of Technology, Management and Budget, State Facilities Administration, Soil Erosion and Sedimentation Control Program.

STATE: The State of Michigan in its governmental capacity, including its departments, agencies, boards, commissions, officers, employees, and agents. Non-capitalized references to a state refer to a state other than the State of Michigan.

STATE/CLIENT AGENCY: A Department of the State of Michigan, for whose use the Project will ultimately serve, which requires professional design services.

SUBSTANTIAL COMPLETION: The form (DTMB-0445) stating that the Project work, or a portion of the Project work eligible for separate Substantial Completion, has been completed in accordance with the design intent of the Professional's Contract Documents to the extent that the Department and the State/Client Agency can use or occupy the entire Project work, or the designated portion of the Project work, for the use intended without any outstanding, concurrent work at the Project work site, except as may be required to complete or correct the Project work Punch List items.

SUSTAINABLE DESIGN: The Professional's use of a balance of appropriate materials, products and design methods that reduce the impact to the natural ecosystems and be within the Budget constraints of the Project. Sustainable Design shall be used wherever possible by the Professional in their Project design and an itemized list shall be provided with the Professional's Contract Documents that identifies the processes and products.

TASK: Shall mean the following: (1) A quantifiable component of design related professional study/design Task services required to achieve a Phase of the Project; (2) The most manageable sub-element within a study/design Phase; (3) A unique item of work within a study/design Phase for which primary responsibility can be assigned; and (4) Has a time related duration and a cost that can be estimated within a study, design, and construction Phase.

ARTICLE XIV COMPLETE AGREEMENT / MODIFICATION

This Professional Services Contract constitutes the entire agreement as to the Project between the parties. Any Contract Modification of this Contract and the Project/Program Statement scope of work requirements must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the State may require. No Contract Modification may be entered into to compensate the Professional for correcting, or for responding to claims or litigation for the Professional firm's final design Contract Documents/study/design errors, omissions or neglect on the part of the Professional.

APPENDIX 1

PROJECT/PROGRAM STATEMENT

PROJECT STATEMENT

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design and Construction Division
3111 West St. Joseph Street
Lansing, Michigan 48909

FILE NUMBER		PROPOSAL DUE DATE					
Various		Thursday, January 12.2023, at 2:00 p.m., EASTERN					
CLIENT AGENCY							
Department of Environment, Great Lakes, and Energy (EGLE)							
PROJECT NAME AND LOCATION							
2023 Environmental Indefinite Services Indefinite Delivery (ISID)							
PROJECT ADDRESS (if applicable)							
Various							
CLIENT AGENCY CONTACT		TELEPHONE NUMBER					
Bridget Walsh		(517) 420-6379					
DTMB - DCD PROJECT DIRECTOR	TELEPHONE NUMBER						
Indumathy Jayamani (517) 582-1089							
WALK-THROUGH INSPECTION DATE, TIME, A	NE	LOCATION:					
There is no Pre-Proposal Meeting required.							
☐ MANDATORY (Check box if Mandatory)							
_							
LEIN Check (Department of Corrections ONLY) All contractor / vendor representatives attending							
Preproposal Walk Through Meeting must submit a Vendor / Contractor LEIN Request form <u>five business</u>							
days prior to the meeting date (See the attached Vendor/Contractor LEIN Request Form). Send the LEIN							
Request form, filled and signed, by email to Daniel T. Smith at email address: smithD76@michigan.gov .							
The email "Subject" must include (facility name, project name, date, and time of Pre-Proposal Walk							
<u>Through Meeting</u>).							

PROJECT DESCRIPTION/SERVICES REQUESTED

Provide professional environmental ISID services for a variety of State or Federally funded cleanup sites. The professional will be required to effectively perform tasks at assigned contaminated and/or hazardous waste sites through appropriate screening/investigation and/or remedial/corrective action plan to abate human health or environmental risks or bring an assigned site to an acceptable closure in accordance with the applicable Part 201 or Part 213 of the Michigan Natural Resources and Environmental Protection Act (NREPA) Public Act 451 of 1994, as amended and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and other relevant state and federal statutes and requirements. The Professional is required to refer to State and Federal statutes, procedures, guidelines, and the administration rules when providing the services or entering contracts with sub-consultants / subcontractors to provide the services. The Professional MUST upload their proposal to the State of Michigan Procurement website (SIGMA VSS). The Professional must use the attached appropriate forms to indicate the billing rates and questionnaires. The Professional may check one or more of the project types that they are interested in providing services. The State of Michigan reserves the right not to award the contract(s) or award the contract(s) to one or more firms.

Please NOTE:

- Proposal responses MUST be uploaded to SIGMA VSS. Please enter the total cost for all phases as the bid amount.
- Firms should only submit one (1) attachment (being less than 6 MB) for proposal submission. The attachment is to be the technical and cost proposal combined.
- Do not wait until just before the 2:00 p.m. solicitation deadline to submit your proposal response. SIGMA VSS will not allow a proposal to be submitted after 2:00 p.m., even if a portion of the

proposal response has been uploaded.

- If you experience issues or have questions regarding your electronic submission, you must contact the SIGMA Help Desk for assistance prior to the 2:00 p.m., solicitation deadline. You may contact the SIGMA Help Desk by telephone at 517.284.0540 or toll-free at 888.734.9749. You may also email the SIGMA Help Desk at sigma-procurement-helpdesk@michigan.gov
- Please email the Design and Construction Contract Specialists if you are having SIGMA VSS issues. Please include your SIGMA ticket number and any supporting documentation (i.e., screenshots) to Anne Watros (<u>WatrosA@michigan.gov</u>) and Don Klein (<u>KleinD4@michigan.gov</u>).
- You may be asked by our contract specialists to email your proposal. Emailed submissions will require DCD approval and will be handled on a case-by-case basis.
- Approved emailed submissions MUST be received prior to 2:00 p.m. deadline to be considered responsive and responsible.
- Responses should not be emailed to the Project Director.

NIGP CODES

90629; 91842; 91843; 92535; 92577; 92615; 92623; 92629; 92630; 92645; 92652; 92658; 92678; 92683; 92685; 92690; 92691; 92693; 92696; and 96273

DESIRED SCHEDULE OF WORK

Dependent on the assigned project

ACCEPTING RFP QUESTIONS UNTIL:

Please do not submit online questions via SIGMA VSS. ALL questions should be emailed to Indumathy Jayamani at jayamanii1@michigan.gov address no later than 2:00 p.m., Eastern on December 16, 2022.

REFERENCE STANDARDS: This project will comply with all codes, standards, regulations, and workers' safety rules that are administered by federal agencies (EPA, OSHA, and DOT), state agencies (DHHS, EGLE, DNR, and MIOSHA), and any other local regulations and standards that may apply.

This form is required to be a part of the professional service contract. (Authority: 1984 PA 431)



MINOR STATE CAPITAL OUTLAY PROJECTS

REQUEST FOR PROPOSALS FROM PROFESSIONAL SERVICE CONTRACTORS

(Authority PA 431 of 1984)

For Indefinite Scope Indefinite Delivery Not-to-Exceed Fee, Billable-Rate

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET Request for Proposal for 2023 Indefinite Scope Indefinite Delivery (ISID) for Environmental Services Various Locations, Michigan

PROPOSAL DUE DATE: Thursday, January 12, 2023, 2:00 p.m., Eastern Time

ISSUING OFFICE

Department of Technology, Management & Budget State Facilities Administration Design and Construction Division



Minor State Capital Outlay Projects REQUEST FOR PROPOSALS

Part I - Technical Proposal
Part II - Cost Proposal

Professional Services for
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
2023 Indefinite Scope Indefinite Delivery (ISID) Contract
for Environmental Services
Various Locations, Michigan

SECTION I GENERAL INFORMATION

I-1 Purpose

This Request for Proposals invites the prospective professional service contractor (Professional) to prepare a qualifications statement and proposal for an Indefinite Scope Indefinite Delivery (ISID) contract. ISID contracts provide the State of Michigan with a simple and streamlined qualifications-based selection process for obtaining professional environmental services for minor, emergency and / or routine investigation and remediation projects. Professionals holding an ISID contract may be contacted by a Department of Technology, Management and Budget (DTMB), State Facilities Administration (SFA), Design and Construction (DCD) Project Director to provide a specific proposal of services and fees for a particular project, which, if found acceptable, will then be assigned to that Professional under their ISID contract. Services requested may include, but not be limited to investigate, evaluate, design and supervise the implementation of abatements / remedies at assigned sites of environmental contamination under Parts 201 and 213 of the Michigan Natural Resources and Environmental Protection Act (NREPA) Public Act 451 of 1994, as amended, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 (42 U. S. C. Chapter 103) and other relevant state / federal statutes and requirements. The services to be completed should encompass as a minimum the following phase(s) from DTMB's Sample Standard ISID Contract for Professional Environmental Services.

Projects will be located statewide, within both developed and undeveloped areas. Proposing firms must indicate regions and service areas in which they are willing to provide services, (refer to Questionnaire Articles 2 and 3, Project Types and Service Offered and Project Location, respectively).

The ISID contracts will supplement, but not replace, standard requests for proposals or qualifications as a method for obtaining professional services.

The 2023 Professional Environmental Services ISID contract will be limited to a term of three base years and one option year for assignments. A firm holding an ISID contract may not re-propose until their contract term is exhausted.

Firms with ISID contracts are eligible to participate in MIDeal, a cooperative purchasing program, local units of government, K-12 schools, state colleges and universities, and not for profit hospitals, may, if the firm agrees to participate, contract with an ISID contract holder at the billable rates specified in the ISID contract.

Please Note:

1. FIRMS HOLDING ISID CONTRACTS ARE NOT GUARANTEED ANY ASSIGNMENTS

If DTMB, Design and Construction Division (DCD) determines that a particular project is suited to the ISID contracting method, The DCD Project Director will select an ISID Professional to provide a specific proposal of services and fee for that project. If the proposal is acceptable, the project will be assigned to that Professional under their ISID contract.

DCD reserves the option of requesting such proposals from more than one professional for a particular project.

ISID contracts may include, but not be limited to, the following phase(s) from DTMB's attached Sample Standard ISID Contract for Professional Environmental services.

Phase-

- 100 Study
- 300 Schematic Design
- 400 Preliminary Design
- 500 Final Design
- 600 Construction Administration Office Services
- 700 Construction Administration Field Services
- 900 Operation and Maintenance Management Remediation Facility

The minimum professional qualifications to complete the scope of work for this project are demonstrated experience in the successful planning and execution of similar projects in full accordance with all applicable Local, State, and Federal regulations.

I-2 Project/Program Statement

See attached project/program statement for more detailed information. The Professional, by submitting a Technical (Part I) and Cost (Part II) Proposal to DTMB for evaluation, states that they can and will provide complete services when an individual project is assigned to them.

No increase in compensation to the Professional will be allowed unless there is a material change made to the scope of work of the project/program statement and the change to the project/program statement is approved in writing by DTMB, State Facilities Administration (SFA), Design and Construction Division (DCD).

I-3 Issuing Office

This RFP is issued by the Department of Technology, Management and Budget (DTMB), on behalf of the State of Michigan and its Client Agencies. <u>PROPOSALS SHALL BE RETURNED</u> TO THE ISSUING OFFICE via State of Michigan Procurement website – SIGMA VSS.

The point of contact for all other items in this Request for Proposal is:

Indumathy Jayamani, Project Director
Department of Technology, Management and Budget
State Facilities Administration, Design and Construction Division
Telephone Number: (517) 582-1089
Email: jayamanii1@michigan.gov

I-4 Contract Award

Professionals are requested to submit a two-part proposal, Technical Proposal - Part I, including a Qualifications Questionnaire, and Cost Proposal - Part II. Proposals will be evaluated by an Ad Hoc Advisory Committee based on the Technical Portion - Part I eighty percent (80%) and the Cost Proposal - Part II twenty percent (20%) with the following tentative percentage breakdown:

The Technical Portion will include the following breakdown:

30%
30%
30%
5%
5%

The Cost Portion will include the following breakdown:

Professional Billing Rates	75%
Billing Rate Increase	25%

The professional firm must complete the Professional Questionnaire (Appendix III) and select the Project Types and Project Locations they wish to be considered for. Provide attachments illustrating a minimum of three (3) examples, with references, of successful projects performed in the last five years for each item selected. Please include all the submitted resumes for all Project Types under one (1) appendix.

DTMB will offer a contract to several professional firms recommended by the Ad Hoc Advisory Committee after evaluation of the proposals. Recommendation is expected within forty-five (45) days following the due date of the proposal.

The Professional must include signed PSC Certification forms and the Addendum Acknowledgment form located at the end of this RFP as part of your proposal response.

I-5 Rejection of Proposals

The State of Michigan reserves the right to reject any or all proposals, in whole or in part, received because of this Request for Proposals.

I-6 Incurring Costs

The State of Michigan is not liable for any cost incurred by the Professional prior to acceptance of a proposal and the award and execution of a contract and issuance of the state's contract order.

I-7 Mandatory Pre- Proposal Meeting

NO MANDATORY PRE-PROPOSAL MEETING will be conducted by the Issuing Office for this Request for Proposal.

Questions that arise because of this RFP MUST BE EMAILED to Indumathy Jayamani at jayamanii1@michigan.gov to the issuing office no later than Friday, December 16, 2022, at 2:00 p.m., Eastern time (ET). If it becomes necessary to amend any part of this RFP, addenda will be posted on the SIGMA VSS website.

I-8 Responsibilities of Professional

The Professional will be required to assume responsibility for all professional services offered in their proposal whether they possess them within their organization or not. Further, the State of Michigan will consider the Professional to be the sole point of contact regarding contractual matters, including payment of all charges resulting from the contract. The prime professional shall possess a license to practice in the State of Michigan pursuant to the Occupational Code (PA 299 of 1980).

I-9 Proposals

The professional must submit a complete, straightforward response to this Request for Proposal. The proposal should describe the professional's ability to meet the requirements of the Request for Proposal.

The proposal must be submitted electronically through the State of Michigan Procurement System (SIGMA VSS). No other distribution of proposals will be made by the Professional. To be considered responsible and responsive, proposals must be uploaded to SIGMA VSS on or before 2:00 p.m., Eastern time (ET), on Thursday, January 12, 2022. The proposal must be signed by an official authorized to bind the professional firm to its provisions. NO FACSIMILES OR E-MAILS OF THE REQUEST FOR PROPOSAL WILL BE ACCEPTED.

The proposal and attachments must be fully uploaded and submitted prior to the proposal deadline. **Please do not wait until the last minute to submit a proposal**, as the SIGMA VSS system **will not** allow a proposal to be submitted after the proposal deadline identified in the solicitation, even if a portion of the proposal has been uploaded.

SIGMA has a maximum size limit on file uploads. When uploading, your attachment(s) the attachment must be 6mb or less.

Also, when entering proposal amount, please enter the total cost amount as \$1.00. Bidder's failure to submit a proposal as required may result in being deemed nonresponsive.

Questions on vendor registration, proposal submissions, or navigation in the SIGMA VSS system can be answered by contacting the SIGMA Help Desk either by telephone at 517.284.0540 or toll free at 888.734.9749 or by email at sigma-procurement-helpdesk@michigan.gov

SECTION II PROPOSAL FORMAT - PART I - TECHNICAL

The proposal must be submitted in the format outlined below. Paginate proposals and ensure that the proposals refer specifically to the project at hand. Proofread proposals for language and mathematical errors. The items shown below are considered in the Ad Hoc Committee proposal review of technical qualifications.

II-I General Information and Project Team

State the full name, address, and SIGMA Vendor Number of the organization and, if applicable, the branch office, consultants or other subordinate elements that will provide or assist in providing the service. Indicate whether you operate as an individual, partnership, or corporation. If a corporation, include the state in which you are incorporated. State whether you are licensed to operate and practice in the State of Michigan.

II-2 Understanding of Project and Tasks

The professional must demonstrate an understanding of the project being considered and the professional services needed to achieve the state's goal. State your understanding of the project requirements and summarize your plan for accomplishing the project. Outline your experience with similar projects, sites, and clients as examples.

Explain how your firm or project team is the best suited to provide the services required for this project and would provide the best value to the State of Michigan for this work.

II-3 Personnel

The professional must be able to staff a project team which has the qualifications and expertise necessary to undertake the project. Include the full names of all personnel by classification that will be employed in the project.

Indicate which of these individuals you consider to be "Key Personnel" for the successful completion of these project types, identify them by position and classification and provide their resumes.

The Professional must identify all Key Personnel that will be assigned to this contract in the table below which includes the following:

- a. Name and title of staff that will be designated as Key Personnel.
- b. Key Personnel years of experience in the current classification.

- c. Key Personnel's roles and responsibilities, as they relate to this RFP, if the Professional is successful in being awarded the Contract. Descriptions of roles should be functional and not just by title.
- d. Identify if each Key Personnel is a direct, or consultant employee.
- e. Identify where each Key Personnel staff member will be physically located (city and state) during the Contract performance.

The Professional must provide detailed, chronological resumes of all proposed Key Personnel, including a description of their work experience relevant to their proposed role as it relates to the RFP. Qualifications will be measured by education and experience with particular emphasis to experience on projects similar to that described in the RFP.

Provide an organization chart outlining authority and communication lines for each professional firm, including Key Personnel, including sub-consultants, client agency, and DTMB.

II-4 Management Summary, Work Plan, and Schedule

This is for reference only and will be required for future assignments, but not required at this time. The professional must outline their work plan and methodology so that it is understood what services and deliverables will be provided, and the quality of the services and deliverables as well. Describe in detailed narrative form your plan for accomplishing the project. Describe clearly and concisely each professional task, event, and deliverable required for project completion. Do not simply reiterate language and tasks from the DTMB Professional Services Contract. Describe your constructability review and quality control plan. Include a detailed time sequenced – related but undated schedule, showing each event, task, and phase in your work plan. Allow time in the assignment schedule for the Owner's review.

II-5 Questionnaire

The professional firm submitting a proposal must complete the Professional Questionnaire (refer to attached fillable form in Microsoft Word format). This questionnaire must be accompanied by a narrative addressing the items above.

NOTE: Any information provided in one location can be referenced as needed in other locations

II-6 References

Provide references, with contact information of previous clients, particularly for similar projects. Outline your experience with similar projects, sites, and contacts.

SECTION III PROPOSAL FORMAT - PART II - COST

III-1 Instructions and Information – Billable Rate

Outline the billable rates for the Professional's staff members who may be assigned to these projects. Specific proposals for individual projects will be obtained at the time of individual project assignment and shall correspond to all phases/tasks of the work plan requested at that time.

If sub-consultants are used for a particular assigned project, their fees shall be provided. **No mark-up** of the sub- consultants' fees or billing rates will be allowed.

Reimbursable Expenses: The State will reimburse the Professional for the actual cost of printing and reproduction of project deliverables such as surveys, reports, and bidding documents (drawings and specifications).

The State will also reimburse for U.S. Mail regular shipping or postage, soil borings, and any required laboratory testing. **No mark-up** of reimbursable expenses will be allowed.

The Professional firm's hourly billing rate shall be the actual amount paid for the employee services on the Project including fringe benefits, vacations, sick leave, other indirect costs, and profit. The Professional firm's hourly billing rates shall not change during the life of this Contract without written approval by the Department. See attached, **Overhead Items Allowed for the Professional Services Contractor Firm's Hourly Billing Rate Calculation**, for the guide to overhead items allowed for the professional services contractor firm's hourly billing rate calculation. Reimbursement for the Project/Program Statement scope of work requirements will be provided only for Department approved items authorized for reimbursement compensation in this Contract. The State will not reimburse the Professional for downtime, or for personnel involved in downtime due to mechanical problems or failure of Professional's or sub-consultant/subcontractor equipment.

Project related travel expenses (mileage, meals, lodging) for Projects <u>more than</u> one hundred (100) miles in one-way from the Professional's nearest office shall be treated as an authorized reimbursable expense at the State of Michigan's current travel rates based on DTMB's Vehicle and Travel Services Travel Rate.

III-2 Identification of Personnel and Estimated Compensation

Provide compensation information for the Professional as well as any Sub-consultants. Note that employees of a separate professional firm or consultant, if proposed, should also be included, and noted.

A. <u>Primary Professional and Sub-consultant(s) – Position, Classification and Employee Billable Rate Information</u>

Using the format of Form II-2-A (attached), identify the service being provided and the Professional's or Sub-consultant's employee(s) names and position classifications.

See Appendix II for guidelines for position classifications. For each employee, list the current hourly billable rate for each year covered under this proposal, Hourly billing rates shall include any anticipated pay increases over the life of the Professional's three-year ISID contract duration. Sub-consultant fees will be included in individually assigned project contracts as not-to-exceed reimbursable amounts.

For individual assigned projects, the proposal will identify the estimated cost for each task.

The total of all phases/tasks shall become the Professional's maximum not-to-exceed cost for the assigned project. Compensation for each phase will be in accordance with the attached sample contract Article II – Compensation.

The following items B, C, and D will be required only at the time a proposal for an individual assigned project is requested.

Forms II-2-B, II-2-C, and II-2-D are for reference only and will be required for future assignments. These forms are not required for this proposal at this time.

A. Fee with Anticipated Hours by Phase – for Individual Assigned Projects

Using the format of Form II-2-B, identify for each phase the estimated hours for each employee and include the billable rate for each employee. Provide totals.

B. Reimbursable Expenses – for Individual Assigned Projects

Using the format of Form II-2-C, identify the phase number, firm name, and description of sub-consulting services, and/or description of all reimbursable direct expenses expressed as a not-to-exceed amount (travel over 100 miles one-way, printing, tests, etc.). Provide totals.

C. Total, Summarized by Phase – for Individual Assigned Projects

Using the format of Form II-2-D, provide a total of the fees and reimbursable expenses, by phase, as outlined in items B and C above. The total of all phases shall become the Professional's maximum not-to-exceed contract for all design services. Compensation for each phase will be in accordance with the "Sample Standard ISID – Environmental Contract for Professional Services."

Use the attached forms to establish your total compensation and trade contract reimbursables.

The following instructions are to be used by the Professional Services Contractor firms to determine the hourly billing rate to use on State of Michigan Projects.

The Professional's Consultant must submit a separate hourly billing rate for the professional consultant services they will provide for State of Michigan Projects. No mark – up of the Professional's Consultant services hourly billing rates will be allowed.

The Department will reimburse the Professional for the actual cost of printing and reproduction of the Contract Bidding Documents, soil borings, surveys and any required laboratory testing services and use of field equipment. **No mark-up of these Project costs will be allowed if services are performed in house.**

2023 HOURLY BILLING RATE

Based on 2022 Expenses

OVERHEAD ITEMS ALLOWED FOR THE PROFESSIONAL SERVICES CONTRACTOR FIRM'S HOURLY BILLING RATE CALCULATION

SALARIES:	EMPLOYEE BENEFITS:	INSURANCE:
Principals (Not Project Related)	Hospitalization	Professional Liability Insurance
Clerical / Secretarial	Employer's Federal Insurance Contributions Act (FICA)Tax	Flight and Commercial Vehicle
Technical (Not Project Related)	Unemployment Insurance	Valuable Papers
Temporary Help Tax Technical Training Recruiting Expenses	Federal Unemployment Disability Worker's Compensation Vacation Holidays Sick Pay Medical Payments Pension Funds Insurance - Life Retirement Plans	Office Liability Office Theft Premises Insurance Key – Personnel Insurance Professional Liability Insurance
TAXES:	SERVICES (PROFESSIONAL)	EQUIPMENT RENTALS:
Franchise Taxes Occupancy Tax Unincorporated Business Tax	Accounting Legal Employment Fees	Computers Typewriter Bookkeeping
Single Business Tax Property Tax Income Tax	Computer Services Bond) Research Project / Contract Bond	Dictating Printing Furniture and Fixtures Instruments

OFFICE FACILITIES:

LOSSES:

FINANCIAL:

Depreciation

Rents and Related

Expenses Utilities

Cleaning and Repair

Bad Debts (net)

Uncollectible Fee Thefts (not covered by Project / Contract)

Forgeries (not covered by

Project / Contract)

SUPPLIES:

PRINTING AND DUPLICATION:

SERVICES (NONPROFESSIONAL):

Telephone and Telegram

Messenger Services

Postage

Specifications (other than Contract Bidding documents)

Drawings (other than

Contract Bidding documents)

Xerox / Reproduction

Photographs

General Office Supplies

Supplies

Library
Maps and Charts

Drafting Room

Magazine Subscriptions

TRAVEL:

MISCELLANEOUS:

All Project – Related

Travel*

Professional Organization Dues for Principals and

Employees Licensing Fees

II-2-A. Position, Classification and Employee Billing Rate Information

Firm Name
Yearly Hourly Billing Rate Increase

XYZ, Inc.

≈2%

Position/Classification				
	Year 2023	Year 2024	Year 2025	Year 2026
Principal/Project Manager**	\$100.00	\$105.00	\$110.00	\$116.00
Senior Architect	\$100.00	\$105.00	\$110.00	\$116.00
Quality Control/Assurance	\$100.00	\$105.00	\$110.00	\$116.00
Licensed Surveyor**	\$90.00	\$95.00	\$99.00	\$104.00
Project Engineer**	\$90.00	\$95.00	\$99.00	\$104.00
Mechanical Engineer**	\$90.00	\$95.00	\$99.00	\$104.00
Sr. Structural Engineer	\$80.00	\$84.00	\$88.00	\$92.00
Electrical Engineer	\$80.00	\$84.00	\$88.00	\$92.00
Scientist/Surveyor	\$65.00	\$68.00	\$71.00	\$75.00
Staff Engineer	\$65.00	\$68.00	\$71.00	\$75.00
Staff geologist	\$65.00	\$68.00	\$71.00	\$75.00
CAD Operator	\$75.00	\$79.00	\$83.00	\$87.00
Technician	\$65.00	\$68.00	\$71.00	\$75.00
Field Technician	\$50.00	\$53.00	\$56.00	\$59.00
Technical Support	\$35.00	\$37.00	\$39.00	\$41.00

^{*}Billing Rate will be in accordance with the attached guideline page for instructions regarding the "Overhead Items used for Professional Billing Rate Calculation," and the "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

^{**} Key Project Personnel

II-2-B. Fee with Anticipated Hours and Billing Rate

	TOTAL HOURS	BILLING RATE	TOTAL
POSITION/ CLASSIFICATION			
Principal/Project Manager	30	100.00	3,000.00
Senior Architect	17	100.00	1,700.00
Licensed Surveyor	9	90.00	810.00
Project Engineer	8	90.00	720.00
Mech. Engineer.	8	90.00	720.00
Sr. Structural Enginee	r 8	80.00	640.00
Electrical Engineer	22	80.00	1,760.00
Draftsperson	40	35.00	1,400.00
Quality Control	2	100.00	200.00
CAD Operator	42	35.00	1,470.00
SUBTOTA	L 186		\$10,667.50

II-2C. <u>Authorized Reimbursables -- Sub-consultants, Testing and Expenses</u>

*Firm's Mark-Up Percentage:_____

	·		
PHASE	NAME OF FIRM	DESCRIPTION OF SERVICES PROVIDED	TOTAL AMOUNT* (Including mark-up)
Phase 400	Forrest T. Arrea, Landscape Architect, Howell, Michigan	Design of Stormwater Management Rain Garden	500.00
Phase 500	XYZ Productions, Inc. Lansing, Michigan	Printing and reproduction of bidding documents	500.00
Phase 500	Forrest T. Arrea, Landscape Architect, Howell, Michigan	Design of Stormwater Management Rain Garden	500.00
	SUBTOTAL		\$ 1,500.00

III-2D. Total, Summarized by Phase

PHASE	Phase 300	Phase 400	Phase 500	Phase 600	Phase 700	TOTAL
Professional Fee	1,597.50	2,820.00	3,970.00	1,120.00	1,160.00	10,667.50
Reimbursable Expenses	0.00	750.00	1,250.00	0.00	500.00	1,500.00
SUB-TOTAL	1,597.50	3,570.00	5,220.00	1,120.00	1,660.00	
TOTAL CONTRACT AMOUNT						\$ 12,167.50

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DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET **State Facilities Administration Design & Construction Division**

Certification of a Michigan Based Business

(Information Required Prior to Contract Award for Application of State Preference/Reciprocity Provisions)

To qualify	as a Michigan business:					
Vendor must have, during the 12 months immediately preceding this bid deadline: or						
If the busi	ness is newly established, for the period the business has been in existence, it has:					
(Check all	that apply):					
	<u>Filed a Michigan single business tax return</u> showing a portion, or all the income tax base allocated or apportioned to the State of Michigan pursuant to the Michigan Single Business Tax Act, 1975 PA 228, MCL • ~208.1 – 208.145: or					
	<u>Filed a Michigan income tax return</u> showing income generated in or attributed to the State of Michigan; or					
	Withheld Michigan income tax from compensation paid to the bidder's owners and remitted the tax to the Department of Treasury; or					
nominal fili	It I have personal knowledge of such filing or withholding, that it was more than a ng for the purpose of gaining the status of a Michigan business, and that it indicates it business presence in the state, considering the size of the business and the nature ties.					
the criteria	the Michigan Department of Treasury to verify that the business has or has not met for a Michigan business indicated above and to disclose the verifying information to ng agency.					
Bidder sha	Il also indicate one of the following:					
E	Bidder qualifies as a Michigan business (provide zip code:)					
E	Bidder does not qualify as a Michigan business (provide name of State:).					
8	Principal place of business is outside the State of Michigan, however service/commodity provided by a location within the State of Michigan (provide zip code:)					

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DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET State Facilities Administration Design & Construction Division

Bidder: _	
_	Authorized Agent Name (print or type)
	Authorized Agent Signature & Date

Fraudulent Certification as a Michigan business is prohibited by MCL 18.1268 § 268. A BUSINESS THAT PURPOSELY OR WILLFULLY SUBMITS A FALSE CERTIFICATION THAT IT IS A MICHIGAN BUSINESS OR FALSELY INDICATES THE STATE IN WHICH IT HAS ITS PRINCIPAL PLACE OF BUSINESS IS GUILTY OF A FELONY, PUNISHABLE BY A FINE OF NOT LESS THAN \$25,000 and subject to debarment under MCL 18.264.



DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET State Facilities Administration Design & Construction Division

Responsibility Certification

The bidder certifies to the best of its knowledge and belief that, within the past three (3) years, the bidder, an officer of the bidder, or an owner of a 25% or greater interest in the bidder:

- (a) Has not been convicted of a criminal offense incident to the application for or performance of a contract or subcontract with the State of Michigan or any of its agencies, authorities, boards, commissions, or departments.
- (b) Has not had a felony conviction in any state (including the State of Michigan).
- (c) Has not been convicted of a criminal offense which negatively reflects on the bidder's business integrity, including but not limited to, embezzlement, theft, forgery, bribery, falsification, or destruction of records, receiving stolen property, negligent misrepresentation, price-fixing, bid rigging, or a violation of state or federal anti-trust statutes.
- (d) Has not had a loss or suspension of a license or the right to do business or practice a profession, the loss or suspension of which indicates dishonesty, a lack of integrity, or a failure or refusal to perform in accordance with the ethical standards of the business or profession in question.
- (e) Has not been terminated for cause by the Owner.
- (f) Has not failed to pay any federal, state, or local taxes.
- (g) Has not failed to comply with all requirements for foreign corporations.
- (h) Has not been debarred from participation in the bid process pursuant to Section 264 of 1984 PA 431, as amended, MCL 18.1264, or debarred or suspended from consideration for award of contracts by any other State or any federal Agency.
- (i) Has not been convicted of a criminal offense or other violation of other state or federal law, as determined by a court of competent jurisdiction or an administrative proceeding, which in the opinion of DTMB indicates that the bidder is unable to perform responsibly or which reflects a lack of integrity that could negatively impact or reflect upon the State of Michigan, including but not limited to, any of the following offenses under or violations of:
 - The Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.101 to 324.90106.
 - ii. A persistent and knowing violation of the Michigan Consumer Protection Act, 1976 PA 331, MCL 445.901 to 445.922.

R 08/20



DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET State Facilities Administration Design & Construction Division

- iii. 1965 PA 166, MCL 408.551 to 408.558 (law relating to prevailing wages on state projects) and a finding that the bidder failed to pay the wages and/or fringe benefits due within the period required.
- iv. Repeated or flagrant violations of 1978 PA 390 MCL 408.471 to 408.490 (law relating to payment of wages and fringe benefits).
- v. A willful or persistent violation of the Michigan Occupational Health and Safety Act, 1974, PA 154, MCL 408.10001 to 408.1094, including: a criminal conviction, repeated willful violations that are final orders, repeated violations that are final orders, and failure to abate notices that are final orders.
- vi. A violation of federal or state civil rights, equal rights, or non-discrimination laws, rules, or regulations.
- vii. Been found in contempt of court by a Federal Court of Appeals for failure to correct an unfair labor practice as prohibited by Section 8 of Chapter 372 of the National Labor Relations Act, 29 U. s. C. 158 (1980 PA 278, as amended, MCL 423.321 et seq).
- (j) Is NOT an Iran linked business as defined in MCL 129.312.

I understand that a false statement, misrepresentation, or concealment of material facts on this certification may be grounds for rejection of this proposal or termination of the award and may be grounds for debarment.

Bidder:	
	Authorized Agent Name (print or type)
	Authorized Agent Signature & Date
☐ I am unable to certify to the abov	ve statements. My explanation is attached.

R 08/20



DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET State Facilities Administration Design & Construction Division

ACKNOWLEDGMENT OF ADDENDUMS

PSC acknowl	edges receipt	of Addenda:	No	dated:	
No	dated:	No	_ dated: _		_



2023 Indefinite Scope Indefinite Delivery (ISID) Contract for Professional Environmental Consulting Services Scope of Work

SUMMARY

The State of Michigan is requesting the services of Professional Services Contractor(s) to provide high-quality environmental services to investigate, evaluate, design, and supervise the implementation of abatements/remedies at assigned sites of environmental contamination under Parts 201 and 213 of the Michigan Natural Resources and Environmental Protection Act (NREPA), 1994 P.A. 451, as amended; Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); and other relevant federal statutes and requirements. The State intends to form a list of firms for several project types. If the professional chooses to be considered for one or more of the project types, the Professionals must be able to perform tasks required by each checked project type to bring the assigned site(s) into compliance with current state and federal environmental requirements.

For the list, preference will be given to firms, in the State of Michigan, generally meeting the following requirements.

- Experience working at Parts 201 and 213 of NREPA 1994 P.A. 451, as amended sites.
- Experience working at CERCLA regulated sites.
- Experience in conducting effective environmental assessment, RI, and FS services.
- Experience in conducting effective vapor intrusion to indoor air assessments and mitigation of vapor intrusion risks to both residential and non-residential structures.
- Experience with the development of human health and ecological risk assessments.
- Experience with database development and management.
- Ability to perform sampling and provide technical review and Quality
 Assurance/Quality Control (QA/QC) of provided laboratory data.
- Ability to provide comprehensive professional services for the assigned projects.
- Accounting systems with capability to provide detailed cost documentation.

- Consideration will be given to the number and location of the satellite offices, record
 of past performance, and financial and technical resources.
- Expertise with the selected project type(s).

A number of contaminated sites have been identified in Michigan. This includes sites appearing on the list of contaminated sites authorized by Part 213 and Part 201 of the NREPA 1994 PA 451, as amended. Major steps in resolving the contamination problems at these sites are environmental assessment/investigation and abatement. The State, through review and evaluation of the responses to this RFP, anticipates selecting one or more Professionals to place on a list to provide environmental services on small, urgent, and simple projects. The professional will be required to provide professional environmental services, technical staff, and support personnel for the ISID minor projects on an as- needed basis for various State/Client Agencies within the State of Michigan.

The executed contract will be for professional environmental services for an unspecified number of ISID projects. The scope of work for each assigned project will be defined at the time the project is awarded by the State to the Professional. The professional environmental services required for each of these assigned projects requested by the Department may include any or all the Tasks included in the Phase 100 – Study through the Phase 900 – Operation and Maintenance Management as detailed in the attached SAMPLE contract.

SCOPE OF WORK

The typical environmental services to be performed at these sites under these ISID contracts may include but not be limited to:

- 1. Asbestos / Lead / Mold / Biohazard / Free Product / Regulated Waste Survey / Abatement
- 2. Brownfield Development
- Ecological Risk Assessment / Forestry and Land Management / Wetland Mitigation /
 Streams and Lakes Restoration
- 4. Environmental Investigation / Characterization / Pilot Tests / Feasibility Study
- 5. Environmental/ Roto Sonic Drilling / Well Abandonment
- Ground Penetrating Radar (GPR) / Laser-Induced Fluorescence (LIF) Field Screening
- 7. Landfill Maintenance / Monitoring
- 8. Nuclear Waste Management / Disposal / Remediation
- 9. Per-& Polyfluoroalkyl Substances (PFAS) Sampling / Mitigation / Remediation
- 10. Phase I / Phase II / Baseline Environmental Assessments
- 11. Remediation Systems Design / Construction Oversight / O&M / Decommissioning
- 12. Specialty Sub-Surface / Utility Inspection / Sewer Camera / Cleaning

- 13. Underground / Aboveground Storage Tank (UST/AST) Removal / Demolition / Soil Excavation / Closure
- 14. Vapor Intrusion Assessments / Risk Mitigation / Design / Installation / O&M Services

While performing this work, the consultant may be required to develop site specific project work plans, health, and safety plans (HASPs), quality assurance/quality control plans, bid specifications, and community relations plans.

In addition to these activities, the State may request the Professional to perform the following additional tasks, including but not limited to: assisting the State in acquiring site access; professional assistance for assessing potential uncontrolled hazardous material sites; obtain any permits which are required for the performance of the work; conduct work in a timely manner; ensure security of the site and equipment; comply with the State Environmental Policy Act and local, State and Federal permit requirements prior to conducting remedial actions; provide enforcement support, such as documentation of facts and information about a site and expert testimony during enforcement proceedings; and provide other program development and management assistance for the State departments/agencies. This assistance may include review of plans, drawings, specifications, proposals, technical reports, and other work products associated with a hazardous substance/contaminated site where a release has occurred or is likely to occur; the assessment of environmental and public health risks; record searches; historical reviews; research on technical issues; and personnel training.

ASSIGNMENTS

Services will be requested for an assigned project and will be in accordance with a cost proposal submitted and approved at that time. The professional is expected to have the costs of all required activities needed to complete the assignment.

Individual project assignments will be based on a written Statement of Objectives provided by the State and a proposal from the Professional to perform the scope of work. It is anticipated the assigned work will be completed before the expiration date of the Contract. However, assignments made during the period of the Contract may include work that will continue after the end date of the Contract period. If the State determines there is an imminent endangerment of human health or the environment, design of an emergency abatement system may be assigned under the Contract.

DISPOSAL OF WASTE

Any wastes generated during the performance of work under this Contract must be disposed of in conformance with all applicable state and federal laws, rules, and/or regulations. For all wastes being disposed under this Contract, it is the responsibility of the Professional to ensure compliance with this directive.

The Professional shall sign waste manifests on behalf of the State attesting to the accuracy and completeness of the manifest, when requested, at sites for which they are performing oversight. The State will retain generator status for these wastes. If necessary, the State will provide a letter to the Professional conveying this authority.

The Professional shall properly dispose of any samples they retain during site work upon written permission from the Agency Project Manager. Disposal of samples is not a billable expense but may be included in the Professional's overhead.

ENVIRONMENTAL DRILLING

The Professional shall competitively bid environmental drilling work to at least three (3) drilling contractors for each drilling assignment unless the Professional can demonstrate to the Agency Project Manager's satisfaction that there is only one qualified firm who can adequately perform the work as specified. If the Professional determines the services of a specific drilling firm are required, the Professional must state those reasons in writing to the Agency Project Manager for concurrence. The written request will address cost effectiveness, time constraints, geologic situations, and drilling methodologies.

The format and process used for bidding will be in accordance with industry standards and based upon a method chosen by the Professional that is most advantageous to the State. The frequency of bidding necessary within one project assignment will be decided upon between the Professional and the Agency Project Manager. Copies of all bid documents will be provided to the Agency Project Manager. Costs incurred by the subcontractor for environmental drilling shall be billed to the State as a reimbursement.

<u>Ineligible Costs</u> - The Professional cannot bill the State for the drilling subcontractor's time to develop work plans, prepare bid specifications for work plans, or to attend site safety meetings.

<u>Billing Rates</u> - If a drilling subcontractor provides other technical services such as geophysical testing, then the Professional must submit billing rates, fees, resumes, wages, and salary ranges for that Subcontractor.

<u>Downtime for Equipment and Supplies</u> - The Agency Project Manager has the option to purchase supplies and equipment. If the State purchases equipment for use at a site, the State is responsible for that equipment and may need to compensate the Professional for downtime or demobilization costs if the equipment does not function properly. If the Professional furnishes supplies and equipment that do not function properly and causes downtime, the State will not compensate the Professional for the downtime. Also, the State will not reimburse the Professional for backup supplies and equipment. The State will only reimburse the Professional for supplies and equipment used at the site or that must be available as indicated specifically by the health and safety or work plan.

LABORATORIES

The Professional may be required to obtain samples, prepare them for shipping, ship, and pick up samples or any other activity associated with sample collection and interpretation as determined necessary by the Agency Project Manager.

All laboratory analyses shall be performed by the EGLE lab, unless the Agency Project Manager approves use of a current ISID Environmental Laboratory contract holder, an EPA - CLP lab, or another lab as deemed necessary by the State. If a private lab, other than an ISID State Contract Lab, is to be used to perform the analyses, prior written permission by the Agency Project Manager is required.

The private lab must report data in a format consistent with the format used by the State and must include the same level of detail regarding QA/QC documentation and chain of custody records.

EQUIPMENT AND SUPPLY PURCHASES AND RENTAL PROCEDURES

Certain Agency procedures may apply to equipment, supplies, surveys, and other items as specified by the Project Director/Agency Project Manager and will be treated as reimbursements or Other Direct Costs (ODCs). Computers and computer related materials may be included as part of such procedures; however, prior written approval from the Department regarding computers and software must be secured.

If an item will be consumed or would be expected to be rendered unusable during the project assignment, then renting is not a viable alternative and purchasing the item is necessary. Examples of consumption are bags of cement and installed casing. Examples of items expected to be rendered unusable are tyveks and disposable bailers. If the rental price or price of using the Professional's equipment exceeds the purchase price the item shall be purchased.

If renting is an option, the cost shall be based upon the expected time of usage of that service or equipment or supply. The rental charge or charge for the Professional's equipment shall include maintenance, calibration, parts replacement, and service charges for the equipment. A table recording the costs incurred to date to rent equipment, or to use the Professional's equipment, shall be included in each monthly progress report. This table shall also include the purchase price for each piece of equipment. Each item required for the project shall be listed separately.

At the end of the project, the State has the OPTION to accept ownership of a purchased piece of equipment.

If an assignment must be modified to provide for additional scope of work, the cost effectiveness of purchasing, renting, or using the Professional's equipment must be determined for the additional work.

All deposit charges will be paid by the Professional and will not be reimbursed by the State.

HEALTH AND SAFETY PLANS (HASP)

The nature of the work to be performed under this Contract is hazardous.

In addition to Health and Safety Plan requirements noted in the Phase/Task section of the Contract the following will also apply:

The Professional shall satisfy **29 CFR 1910.120** and Section 24 of Act 154 PA 1974 as amended and corresponding rules and all federal, state, and local statutes, regulations, ordinances, etc., regarding health and safety **(40 CFR 35.6055(b))**.

Prior to executing any work at the assigned site, the Professional shall develop and submit all HASPs for the site to the Agency Project Manager for review, acceptance, and inclusion into the work plan.

The Professional shall arrange for all its employees that will be working on a contaminated site to attend a health and safety training course, and/or a personnel protection course. The Professional is responsible for all costs related to the training. When requested by the State, the Professional must provide proof of completion of health and safety training for each employee working on a site prior to the employee entering the site for any purpose.

The Professional will ensure that employees and sub-consultant's/subcontractor's employees wear protective clothing and use equipment specified in the site Health and Safety Plan at all times the employee is on the site.

Health and Safety Training and Medical Monitoring are not considered reimbursable items under this Contract. When working in any level of safety equipment, the level itself does not dictate additional costs, but the equipment costs above Level D are reimbursable.

INVOICING AND PAYMENT PROCEDURES

Documentation for payment will be submitted monthly per the requirements in the Contract. Project costs will be reimbursed to the Professional on an as-incurred basis in accordance with the terms of the Contract for Professional Services. Invoices received covering service periods for which the progress reports have not been received by the State will not be processed until the progress reports are received. These will be considered incomplete invoices.

Each invoice that includes labor will include a one-page summary sheet that lists by date the name of the individual providing the professional service, the individual's position/classification, hours worked that day, and hourly billing charge. Each invoice that includes reimbursable expenses will include a one-page summary with the following categories: Meals, Lodging, Travel, Shipping, Equipment Rental, Field Supplies/Equipment Purchase, sub-consultants, and Miscellaneous. Under Meals and Lodging categories, the date, name of the individual and total daily cost will be included. Under Travel category, the Professional will include the date, name of the individual, total mileage (above the allowed amount specified in the Contract), mileage rate, and total daily cost. Under Shipping, the Professional will include the date shipped, description of item shipped (e.g., tech memo, etc.) and the cost to ship the item. Under Equipment Rental, the Professional will include the range of dates equipment rented, description of equipment rented and rental cost. Under Field Supplies/Equipment Purchase and Miscellaneous categories, the Professional will include the date purchased, description and purpose of the item purchased and the cost. Under subconsultants/subcontractors, the Professional will list the date of the subconsultant/subcontractor work, name of the sub-consultant/subcontractor, description of work conducted, and the cost. The cost for each category will be totaled.

<u>Contract Close-Out</u> – Final payment shall be withheld until all deliverables have been received and accepted by the State. In addition, the Professional will be required to submit to the Agency Project Manager, an unconditional waiver, signed by an authorized representative of each subconsulting/subcontracting firm, used on the project, indicating that they have been paid in-full by the Professional for all work performed.

LITIGATION SUPPORT

The Professional's personnel and the personnel of its sub-consultants/subcontractors will be required, if requested by the Agency Project Manager on behalf of EGLE's attorneys, to provide assistance to the State in the form of participation in legal actions against alleged responsible parties for violation of state and/or federal environmental law or the recovery of public expenditures regarding any of the operations the Professional or its sub-consultants/subcontractors are involved in under this Contract. This assistance may include, but is not limited, to the preparation of reports and assisting state and/or federal attorneys in preparation of the government's case, including the preparation and execution of interrogatories, affidavits, and testimony as a fact witness.

The State will reimburse the Professional for such assistance as described above at the contractually approved rates for the Professional's personnel at the time services are required. The Professional shall insert an identical obligation to provide such assistance in all subconsultants/subcontractor agreements to perform work under this Contract. Failure to meet the requirement of this section shall be considered a breach of this Contract.

In addition, the Professional agrees that upon the Agency Project Manager request on behalf of the State attorney, that the Professional's personnel or the personnel of its subconsultants/subcontractor will appear at trial as an expert witness. If expert testimony is requested, the Professional and State mutually agree while the State cannot, due to Section 2164 of the Revised Judicature Act, guarantee to pay the Professional's personnel any sum in excess of the current per day expert witness fee, the State attorney may ask the court to permit the State to pay the Professional's personnel for the appearance as an expert witness on behalf of the State, at a rate equal to the rate of the employee's contractually approved rates at the time services are required, for the actual time of court appearance plus travel time and standard expenses as defined in the Contract. To the extent that the court grants such a request, the Professional agrees to reimbursement at such rates.

- 1. If the Professional receives a subpoena or if an Assistant Attorney General assigned to the site requests information regarding one of the Professional's assignments, the Professional may release that information without the Agency Project Manager's prior written permission. However, the Professional must provide, in writing, to the Agency Project Manager a letter documenting what information has been released, to whom and when. Any other requests to release information continue to require the Agency Project Manager prior written permission. The party requesting the information has an obligation to pay for any copying costs. If the State requests duplicate copies, the State will reimburse the Professional for copying costs.
- If a party other than the State requests the Professional provide testimony regarding an assignment for which they have performed work under this Contract, either through deposition or testimony in court, the State will <u>NOT</u> reimburse the Professional for that testimony. Depositions or testimony requested by parties other than the State are not covered by this Contract, and payment for a deposition or testimony may be prohibited by MCL 600.2164.

3. If a State Assistant Attorney General requests the Professional assist in preparation for litigation, i.e., answering interrogatories, preparing for trial via interviews, and discussions concerning the site, this time is reimbursable under this Contract.

PROJECT CONTROL REPORTS AND DELIVERABLES

Deliverables

The Professional shall provide electronic copies of all final reports, plans, specifications, drawings, and other significant deliverables in Microsoft Word, Excel, AutoCAD, and ArcGIS as applicable, as well as in separate PDF format, provided on one (1) portable media device. Reports that require submittal into RIDE shall be submitted by the Professional as applicable. In addition, the Professional shall provide one unbound, reproducible copy of each deliverable for each of the assigned projects or as specified in the assigned project scope of work. The Department/Agency will be responsible for obtaining access to the assigned sites, providing a map for the assigned sites, and where applicable, previous investigation/analytical results for work conducted at the assigned sites.

2. Project Control

- A. The Professional will carry out the assignments under this Contract under the direction of the Project Director and/or the Agency Project Manager.
- B. The Professional will submit brief written monthly (or any other interval deemed necessary by the State) progress reports that outline: the work accomplished during the reporting period including basis for significant decisions; work to be accomplished during the subsequent reporting period; daily field activity logs; problems, encountered or anticipated; notification of any significant deviation from the approved work plans; and budget/expenditure information including: project budget, cumulative expenses, projected expenses, and explanations of budget deviations for each major task. Staff time and costs to correct errors, omissions, and deficiencies in the work are not reimbursable. The Agency Project Manager may adjust the frequency of reports depending upon the nature of the project or phase of a particular project.

3. Reports

All project reports required as deliverables to this Contract will begin with an Executive Summary.

This will briefly outline the conditions encountered at the site, work performed at the site, conclusions drawn from this work, a list of the recommended alternatives for site remediation (where applicable), and a short description of any specifications prescribed by the report. The Executive Summary will be a synopsis of all information presented in the report and organized in logical manner to present an overview of the specific report. Each assignment will require specific reporting requirements.

The following are examples of reports that may be required from the Professional:

- A. Monthly progress reports.
- B. Draft and Final Preliminary Site Investigation Work Plans and assessment reports
- C. Draft and Final FS/RI Work Plans and reports
- D. RI technical memoranda for groundwater sampling, surface water sampling, soil/sediment sampling, air quality sampling, and site hazards assessment. The technical memoranda should summarize the data and collection techniques and include an evaluation of the data.
- E. Daily field logs which include equipment and supply charges and personnel on site. These shall be maintained and attached to the corresponding monthly-progress reports.

The following tasks may be required to produce reports/work products listed above:

- Community Relations
- FS (including Risk Assessment)
- Natural Resource Damage Assessment (NRDA)
- UST removal/closure and other Related Work
- Potentially Responsible Party (PRP) Identification
- Preliminary Site Investigation
- Risk-Based-Corrective-Action Activities
- RI and recommendations
- Baseline Environmental Assessments Review
- Contract Transition Tasks

All draft documents and communications with the State regarding guidance, input, acceptance, and approval shall be marked "DRAFT" and "Deliberative Process – FOIA Exempt". Information so designated shall not be provided in response to a Freedom of Information Act (FOIA) request.

4. The Professional and/or its sub-consultants/subcontractors shall follow the current edition of ASTM Standard D 5299-92 (Standard Guide for Decommissioning Ground Water Wells, Vadose Zone Monitoring Devices, Boreholes, and Other Devices for Environmental Activities) and other guidance as provided by the State as a performance standard for monitoring well, soil boring, and vadose zone monitoring device abandonment.

SELECTION CRITERIA

Responses to this RFP will be evaluated based upon the technical merit, conciseness, clarity, creativity, thoroughness of the proposal, understanding of the assignments and contract requirements. Also, evaluations of qualifications and experience will be conducted for each of the project types checked in the proposal.

Depending on available funding for cleanup activities, the State anticipates awarding contracts to one or more professionals meeting the requirements of the RFP and receiving the highest scores in the evaluation. The State reserves the right not to award the contract(s) or award contract(s) to one or more firms for the submitted proposals. The State may reject proposals in whole or in part and may waive any informality or technical defects if, in the judgment of the selection committee, the best interest of the State will be served.



Department of Technology, Management and Budget 2023 Indefinite-Scope Indefinite-Delivery – Request for Qualifications **Professional Environmental Consulting Services Questionnaire Various Locations, Michigan**

INSTRUCTIONS: Firms shall complete the following information in the form provided. A separate sheet may be used if additional space is needed; please key the continuation paragraphs to the questionnaire. Answer questions completely and concisely to streamline the review process. If you provide information in this questionnaire that is relevant to any other parts of the proposal, please reference the article numbers to avoid repetition.

Α

AR	TICLE 1: BUSINESS ORGANIZATION
1.	Full Name: Click or tap here to enter text. Address: Click or tap here to enter text. Telephone and Fax: Click or tap here to enter text. Website: Click or tap here to enter text. E-Mail: Click or tap here to enter text. SIGMA Vendor ID: Click or tap here to enter text. If applicable, state the branch office(s), partnering organization or other subordinate element(s) that will perform, or assist in performing, the work: Click or tap here to enter text.
	If awarded a contract and / or subsequent assignment(s), state the specific SIGMA business address which you would like associated for all communication (Contracts, Contract Order, Contract Modifications and Payments)? Click or tap here to enter text. Please list all person(s) authorized to receive and sign a resulting contract and / or subsequent assignment(s). Please include persons name, title, address, email and phone number. Click or tap here to enter text.
2.	Check the appropriate status: Individual firm Association Partnership Corporation, or Combination – Explain: Click or tap here to enter text.
	If you operate as a corporation, include the state in which you are incorporated and the date of incorporation: Click or tap here to enter text. Include a brief history of the Professional's firm: Click or tap here to enter text.
3.	Provide an organization chart depicting key personnel and their roles for a typical assigned project. Include generic supporting staff positions.

- 4. Has there been a recent change in organizational structure (e.g., management team) or control (e.g. merger or acquisition) of your company? If the answer is yes: (a) explain why the change occurred and (b) how this change affected your company. Click or tap here to enter text.
- 5. Provide a four year rate schedule per position.

ARTICLE 2: PROJECT TYPES AND SERVICES OFFERED

Identify the project types and professional services for which your firm is exceptionally qualified and experienced. Contractor should have the capability to form potential teams with adequate experience in environmental investigation and remediation services. Provide attachments illustrating a minimum of three examples, with references, of successful projects performed in the last five years for each item checked. Identification of specialties will assist the State project directors/managers in matching firms with projects.

☐ Asbestos / Lead / Mold / Biohazard / Free Product / Regulated Waste Survey /
Abatement
□ Brownfield Development
☐ Ecological Risk Assessment / Forestry and Land Management / Wetland
Mitigation / Streams and Lakes Restoration
☐ Environmental Investigation / Characterization / Pilot Tests / Feasibility Study
☐ Environmental/ Roto Sonic Drilling / Well Abandonment
☐ Ground Penetrating Radar (GPR) / Laser-Induced Fluorescence (LIF) Field
Screening
□ Landfill Maintenance / Monitoring
□ Nuclear Waste Management / Disposal / Remediation
□ Per-& Polyfluoroalkyl Substances (PFAS) Sampling / Mitigation / Remediation
☐ Phase I / Phase II / Baseline Environmental Assessments
□ Remediation Systems Design / Construction Oversight / O&M / Decommissioning
☐ Specialty Sub-Surface / Utility Inspection / Sewer Camera / Cleaning
□ Underground / Aboveground Storage Tank (UST/AST) Removal / Demolition /
Soil Excavation / Closure
□ Vapor Intrusion Assessments / Risk Mitigation / Design / Installation / O&M Services

ARTICLE 3: PROJECT LOCATION

		ons where your firm can most efficiently provide services. Assignments may gions checked, depending on the specialties and services required.
□ W	estern Uppe	er Peninsula (west of Marquette)
□ E	astern Uppe	er Peninsula (east of Marquette)
□ No	orthern Lowe	er Peninsula (north of Grayling)
□ Sa	iginaw Bay	area (east of 127, north of I-69 and M 57, south of Grayling)
□ We	estern Lowe	er Peninsula (west of 127, north of Muskegon, south of Grayling)
□Се	entral Lower	Peninsula (east of Battle Creek, west of Chelsea, south of M 46 and M 57)
□ So	uthwestern	Lower Peninsula (west of Battle Creek, south of Muskegon)
□ So	utheastern	Lower Peninsula (east of Chelsea, south of I-69)
ART	ICLE 4: C	ONTRACT UNDERSTANDING
		ms should be addressed on the assumption that your firm is awarded an Indefinite-Delivery contract. (See attached sample contract).
4.1		tood that your firm is required to respond to small projects (less than \$25,000) arger projects?
	Yes □	No □
4.2	Is it unders	tood that there is no guarantee of any work under this contract?
	Yes □ No	o 🗆
4.3		tood that your firm will be required to execute the attached standard State of ontract language for professional services?
	Yes □	No □
4.4		understood that professional liability insurance is required at the time of of the ISID contract? (See Article 5 of the attached Sample Contract.)
	Yes □	No □
4.5	Is it unders services?	tood that your firm must comply with State of Michigan law as it applies to your
	Yes □	No □

4.6	Does your firm have prior experience working with the State of Michigan?							
	Yes □ No □							
	If yes, explain: Click or tap here to enter text.							
ART	ARTICLE 5: CAPACITY AND QUALITY							
5.1	Briefly describe your firm's methods and procedures for quality control for your deliverables and services.							
	Click or tap here to enter text.							
5.2	Has your firm been involved in claims or suits associated with professional services errors and / or omissions?							
	Yes □ No □							
	If yes, explain: Click or tap here to enter text.							
5.3	Will there be a key person who is assigned to a project for its duration?							
	Yes □ No □							
5.4	Please present your understanding of the relationship between your firm, the DTMB Design and Construction Division, and the State Agency for whom a project will be completed.							
	Click or tap here to enter text.							
5.5	Describe your approach if a bidder proposes a substitution of a specified material during bidding.							
	Click or tap here to enter text.							
5.6 Describe your approach if a contractor proposes a substitution of a specified mate detail with shop drawing submittals or in construction.								
	Click or tap here to enter text.							
5.7	How will your firm provide consistent and continuous communication pertaining to project activities and project status to the State of Michigan during the progress of projects?							
	Click or tap here to enter text.							
5.8	Does your company have an FTP or similar site for quick posting and distribution of information, drawings, field inspection reports, and other communications? Yes \square No \square							

5.9	Describe your method of estimating construction costs and demonstrate the validity of the method.				
	Click or tap her	e to enter text.			
5.10	Describe your a	approach to minimizing construction cost over-runs.			
	Click or tap her	e to enter text.			
5.11	What percentage (office and field	ge of the construction cost should be devoted to construction administration)?			
	Click or tap her	e to enter text. %			
5.12		the assigned work will be performed with your staff and what portion will sub-consultants?			
	Click or tap her	e to enter text. %			
	assignment to st	project, what would be your response time, from the time receive a project arting investigation and design work? A typical project might be one I disciplines and in the neighborhood of a \$25,000 fee.)			
	Click or tap her	e to enter text. Days/Weeks			
5.14	How do you a	assess whether a construction bidder is responsive and responsible?			
	Click or tap her	e to enter text.			
5.15	Describe you	r experience with similar ISID contracts.			
	Click or tap her	e to enter text.			
5.16	•	r approach to a construction contractor's request for additional r a change in the project scope.			
	Click or tap her	e to enter text.			
5.17		f field activity logs detailing a 1-week period (from one of the three (3) prior) and a weekly report provided?			
	□Yes	□No			
AR	TICLE 6: PER	SONNEL STAFFING			
	•	onal chart that includes each person on your project team and their typical assigned project provided?			
	□Yes	□No			

6.2 Please fill out the following information regarding the personnel your firm considers key to the successful completion of the study or project scope of work:

Key Personnel 1

Name: Click or tap to enter text Job Title: Click or tap to enter text

Labor Classification: Click or tap to enter text College Degree(s): Click or tap to enter text

Has this individual successfully completed 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training with an up to date 8 hour HAZWOPER refresher training?

□Yes □No

Key Personnel 2

Name: Click or tap to enter text Job Title: Click or tap to enter text

Labor Classification: Click or tap to enter text College Degree(s): Click or tap to enter text

Has this individual successfully completed 40-hour HAZWOPER training with an up to date 8-hour HAZWOPER refresher training? □Yes □No

Key Personnel 3

Name: Click or tap to enter text Job Title: Click or tap to enter text

Labor Classification: Click or tap to enter text College Degree(s): Click or tap to enter text

Has this individual successfully completed 40-hour HAZWOPER training with an up to date 8-hour HAZWOPER refresher training? □Yes □No

Key Personnel 4

Name: Click or tap to enter text

Job Title: Click or tap to enter text

Labor Classification: Click or tap to enter text College Degree(s): Click or tap to enter text

Has this individual successfully completed 40-hour HAZWOPER training with an up to

date 8-hour HAZWOPER refresher training? □Yes □No

Key Personnel 5

Name: Click or tap to enter text Job Title: Click or tap to enter text

Labor Classification: Click or tap to enter text College Degree(s): Click or tap to enter text

Has this individual successfully completed 40-hour HAZWOPER training with an up to date 8-hour HAZWOPER refresher training? □Yes □No

6.3 Does the Professional Project Manager	(PM) have a	t least three years'	experience as
PM? □Yes □No			

6.4 Does the Professional PM have a minimum of 10 years' experience with similar projects? □Yes □No

6.5 Are the resumes for the key personnel provided?

□Yes □No

ARTICLE 7: SPECIAL FACTORS

Include a brief description of your firm's special qualifications such as awards, recognitions, innovations, etc. that would pertain to this RFP. (As examples: any awards or recognition received by the firm or individuals for similar work, special approaches or concepts developed by the firm appropriate to this project, financial capacity, etc. Respondents may say anything they wish in support of their qualifications). Click or tap here to enter text.

ARTICLE 8: EXPERIENCE

8.1 Provide a client reference and brief descriptions of at least three (3) projects in the last five years closely related to each of the project types and professional services requested in this RFP. Emphasis shall be placed on recent work at sites of environmental contamination:

Project 1 Reference Information

Project Name: Click or tap to enter text

Project Address: Click or tap to enter text

Key Personnel: Click or tap to enter text

Project City / State / Zip: Click or tap to enter text

Contact Name / Phone Number / Email Address: Click or tap to enter text

Project Description: Click or tap to enter text

Project 2 Reference Information

Project Name: Click or tap to enter text

Project Address: Click or tap to enter text

Key Personnel: Click or tap to enter text

Project City / State / Zip: Click or tap to enter text

Contact Name / Phone Number / Email Address: Click or tap to enter text

Project Description: Click or tap to enter text

Project 3 Reference Information

Project Name: Click or tap to enter text

Project Address: Click or tap to enter text

Key Personnel: Click or tap to enter text

Project City / State / Zip: Click or tap to enter text

Contact Name / Phone Number / Email Address: Click or tap to enter text

Project Description: Click or tap to enter text

GUIDELINES FOR POSITION CLASSIFICATIONS

The Professionals are required to use the following guidelines as the basis for classification of personnel to be assigned under their contracts. Changes in the key personnel under the contract must be done by Contract Modification. In addition, the Professionals must provide with their modification requests the names, hourly billing rates, and resumes for the new **Key Personnel** to be added to the contracts. A Key Personnel is any staff member of the Professional who is essential for the successful completion of the Project scope of work and authorized to make decisions affecting the work at the sites under the contracts.

1. PROFESSIONAL KEY PERSONNEL

A. Level 4 (P4) - Plans, conducts, and supervises projects of major significance, necessitating proven managerial skills and knowledge of hazardous waste sites. Must demonstrate ability to originate and apply new and/or unique methods and procedures. Supplies technical advice and council to other professionals. Generally, operates with wide latitude for independent action.

Typical Title:

National Manager, Project Leader, Chief Engineer, or Scientist.

Qualifications and Experience:

Ph.D. degree with 10 years or more experience.

MS degree with 12 years or more experience.

BS degree with 14 years or more experience.

Experience Factors:

Technical experience in discipline directly related to the requirements of this contract. Minimum of 4 years' experience in supervising multidisciplinary professionals and general office management including budgetary requirements.

B. Level 3 (P3) - Under general supervision of P4 Manager, plans, conducts and supervises assignments on a project- by-project basis. Estimates and schedules work to meet completion dates. Directs assistance, reviews progress and evaluates results; makes changes in methods, design or equipment are made where necessary. Responsible for safe and cost-effective approaches to achieve the objectives of the project.

Typical Title:

Regional Team Leader, Project Engineer.

Qualifications and Experience:

Ph.D. degree with 4 to 10 years' experience MS degree with 6 to 12 years' experience BS degree with 8 to 14 years' experience

Experience Factors:

Technical experience in disciplines directly related to the requirements of this contract. Minimum of 4 years' experience or equivalent. Must have demonstrated ability to manage group of interdisciplinary professionals.

2. PROFESSIONAL NON-KEY PERSONNEL

A. Level 2 (P2) - Under supervision of a senior or project leader, carries out assignments associated with projects. Work assignments are varied and require some originality and ingenuity. Applies training of professional discipline to assigned projects and translates technical guidance and training received into usable data products and reports. Evaluates data associated with various watersheds for use in developing digital flood insurance map production and development of updated flood data.

Typical Title:

Surveyor, Engineer, Construction Manager, Project Manager, Scientist, Analyst

Qualifications and Experience:

MS degree with 2 to 6 years' experience.

BS degree with 3 to 8 years' experience.

Experience Factors:

Minimum of 2 years in area directly related to contract requirements.

B. **Level 1** (P1) - Entry level for professional classification; works under supervision of team or project leader. Gathers and correlates basic data and performs routine tasks and other duties as assigned. Makes recommendations on work assignments and on variables which affect field operations. Assists field operations as directed, including manual tasks of equipment setup and maintenance. Performs other duties as assigned.

Typical title:

Junior Associate (Surveyor, Engineer, Scientist, Geologist, etc.)

Qualifications and Experience:

MS degree with 0 to 2 years' experience.

BS degree with 0 to 3 years' experience.

Experience Factor: None

3. TECHNICIAN NON-KEY PERSONNEL

A. <u>Level 3</u> (T3) - Performs non-routine and complex assignments. Works under general supervision of a surveyor, scientist or engineer. Performs experiments or tests which may require non-standard procedures and complex instrumentation. Records, computes and analyzes test data, prepares test reports. May supervise lower level technicians or trades personnel.

Typical Title:

Senior Technician

Qualifications and Experience:

6 years or more experience.

Experience Factor:

Related to scope of contract.

B. <u>Level 2</u> (T2) - Performs non-routine and complex tasks in addition to routine assignments. Works at the direction of the team or project leader. Gathers and correlates basic data and performs routine analyses. May also perform experiments or tests which may require non-standard procedures and complex instrumentation. May construct components or sub-assemblies or prototype models. May troubleshoot malfunctioning equipment and make simple repairs as authorized by team or project leader.

Typical Title:

Senior Technician

Qualifications and Experience:

Two to six years' experience or equivalent

Experience Factor:

Related to scope of contract.

C. Level 1 (T1) - Entry level; performs simple, routine tasks under supervision as established in chain-of- command procedures. Performs routine maintenance and may install, set up or operate field equipment of moderate complexity. Provides a wide variety of support functions during field operations.

Typical Title:

Junior Technician (field technician)

Qualifications and Experience:

0 to 2 years' experience.

Experience Factor:

None

4. TECHNICAL SUPPORT (TS) NON-KEY PERSONNEL

Performs project specific technical support work such as spreadsheet preparation, data entry, etc.

Typical Title:

Project Assistant, Data Entry Clerk, etc.

Qualifications and Experience:

0 to 2 years or more

POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION

PROFESSIONAL SERVICES - 2023 ENVIRONMENTAL ISID

Firm Name	
Yearly Percentage Billing Rate Increase	

LEVEL	CLASSIFICATION	1				
		Year 2023	Year 2024	Year 2025	Year 2026	Year 2027

^{*}Billing Rate will be in accordance with the attached guideline page for instructions regarding the "Overhead Items used for Professional Billing Rate Calculation," and the attached "Sample Standard Contract for Professional Services," Article II, Compensation.

^{**} Key Project Personnel



COST OR PRICE SUMMARY

(see accompanying instructions before completing this form)

Form approved OMB No. 2030-0011 Approval expires 10-31-86

PART I - GENERA	\L				
1. RECIPIENT		2.	2. ASSISTANCE IDENTIFICATION NO.		
3. NAME CONTRACTOR OR SUBCONTRACTOR		4.	. DATE OF PROPO	SAL	
5. ADDRESS OF CONTRACTOR OR SUBCONTRACTOR (Include ZIP Code)	6	î. TYP	E OF SERVICE TO	BE FURNISHED	
TELEPHONE NUMBER(Include Area Code)					
PART II - COST SUMM	/IARY				
7. DIRECT LABOR (specify labor categories)	ESTIM. HOU		HOURLY RATE	ESTIMATED COST	TOTALS
			\$	\$	
DIRECT LABOR TOTAL:				ESTIMATED	\$
8. INDIRECT COSTS (Specify indirect cost pool)	RA ⁻	TE	x BASE =	COST \$	
INDIRECT COSTS TOTAL:					\$
9. OTHER DIRECT COSTS				ESTIMATED	
a. TRAVEL (1) TRANSPORTATION				COST \$	
(2) PER DIEM				\$	
TRAVEL SUBTOTAL:				\$	
b. EQUIPMENT, MATERIALS, SUPPLIES (Specify categories)	QT	Υ	COST	ESTIMATED COST	
			\$	\$	
EQUIPMENT SUBTOTAL:					
c. SUBCONTRACTS				ESTIMATED COST	
				\$	
	•				
SUBCONTRACTS SUBTOTAL:				\$	
d. OTHER (Specify categories)				ESTIMATED COST	
				ψ	
OTHER SUBTOTAL:				\$	
e. OTHER DIRECT COSTS TOTAL:					\$
10.TOTAL ESTIMATED COST 11. PROFIT					\$
12. TOTAL PRICE					\$

PART III - PRICE SUMMARY				
13. COMPETITOR'S CATALOG	G LISTINGS, IN-HOUSE ESTIMATES, PRIOR QUOTES	MARKET	PROPOSED	
	ate basis for price comparison)	PRICE(S)	PRICE	
			-	
			-	
			\$	
	PART IV - CERTIFICATIONS		Ψ	
14 CONTRACTOR	TAKTIV CERTIFICATIONS			
	LY CERTIFIED STATE OR LOCAL AGENCY PERFORMED ANY REV	IEW OF YOUR AC	COUNTS OR	
RECORDS IN CONNECTION WITH ANY	OTHER FEDERAL ASSISTANCE AGREEMENT OR CONTRACT WITH	HIN THE PAST 12	MONTHS?	
YES NO (If "Yes" give name,	address, and telephone number of reviewing office)			
14b. THIS SUMMARY CONFORMS WITH THE	FOLLOWING COST PRINCIPLES			
14c. This proposal is submitted for use in connection with and in response to:				
(1)				
	ge and belief that the cost and pricing data summarized herein are	(2) D	ATE	
complete, current, and accurate as of:				
I futher certify that a finacial management capability exists to fully accurately account for the finacial transactions under this project. I further certify that I understand that the subagreement price may be subject to downward renegotiation and/or recoupment where the above cost and pricing data have been				
	e been complete, current, and accurate as of the date above.	above cost and pric	ing data have been	
(3) TITLE OF PROPOSER	SIGNATURE OF REVIEWER	DATI	E OF EXECUTION	
15. RECIPIENT REVIEWER		<u> </u>		
	summary set forth herein and the proposed cost/price appear acceptabl	e for subagreemer	nt award.	
TITLE OF PROPOSER	SIGNATURE OF REVIEWER		E OF EXECUTION	
		Ï		
16. EPA REVIEWER	CIONATURE OF REVIEWER	15,7		
TITLE OF PROPOSER	SIGNATURE OF REVIEWER	DATI	E OF EXECUTION	

PURPOSE AND APPLICABILITY

The purpose of this form is to provide a simple form for the display of cost and price data. 40 CFR 33.290 requires the recipient to perform cost or price analysis for every procurement action, including subagreement modifications. This form is not required by EPA, but may be used at the recipient's option. If the recipient currently uses a cost and price analysis form which accomplishes the same objectives as this form, the recipient may use its own form.

INSTRUCTIONS

If this form is used, CAREFULLY READ AND FOLLOW ALL INSTRUCTIONS. Many items are not self-explanatory. Attach additional sheets if necessary.

Use only the applicable portion of this form:

Part I is applicable to all subagreements.

Part II is applicable to all subagreements requiring a cost analysis pursuant to EPA procurement regulations.

Part III is applicable to all subagreements where review is based on price comparison (i.e., price analysis).

Part IV certification will be executed as required by the instructions for each block.

PART I - GENERAL

- **Item 1** Enter the name of the of the recipient as shown on the assistance agreement.
- **Item 2** Enter the assistance identification number shown on the assistance agreement (or assigned to the project, if no assistance agreement has yet been executed).
- **Item 3** Enter the name of the contractor or subcontractor with whom the subagreement is proposed to be executed.
- **Item 4** Enter the date of the contractor's or subcontractor's proposal to the recipient.
- **Item 5** Enter the full mailing address of the contractor or subcontractor. **Item 6** Give a brief description of the work to be performed under the proposed subagreement.

Part II - COST SUMMARY

This portion of the form is to be completed by the contractor (or his/her subcontractor) with whom a subagreement is a formally advertised, competitively bid, fixed price subagreement.

Nothing in the following discussion should be interpreted as recommending the inclusion as direct costs any items normally treated as overhead costs in the firm's accounting or estimating system. 40 CFR Part 30 identifies general cost principles applicable to subagreements under EPA assistance. Pursuant to that Part, all subagreements awarded to profit-making organizations are subject to cost principles of 48 CFR 31.2. Architect engineer and construction contracts are also subject to 48 CFR 31.105.

Item 7 - Direct Labor

Direct labor costs normally include salaries at a regular time rate. Overtime premiums should be identified separately on an attachment. Incurrence of unanticipated overtime costs requires the approval of the recipient at the time of incurrence. If significant overtime is known to be needed at the time of completion of the cost review form, the reasons therefore, labor categories, rates and hours should be identified on the attachment. Also included is the cost of partners' or principals' time when they are directly engaged in services to be rendered under the subagreement. In case the full time of any employee is not to be devoted to work to be performed under the subagreement, only the cost of actual time to be applied should be included. The compensation of a partner or principal shall be included as direct cost only for the time that she/he is expected to be engaged directly in the performance of work under the subagreement and only if it is the firm's normal practice to charge such time directly to all jobs. The rate of compensation of a partner or principal shall be commensurate with the cost of employing another qualified person to do such work, but the salary portion shall not exceed the actual salary rate of the individual concerned. Distribution of profits shall not be included in the rate of compensation.

Enter in block 7 the categories of professional or technical personnel necessary to perform each major element of work under the subagreement scope of services. Estimate hours worked for each category and extend them by the wage rates to be paid during the actual performance of the work. Current rates, adjusted for projected increases, if any should be useful for the actual categories of labor contemplated. All projected increases should be supported by recent experience or established personnel policy. Enter in the far right column the total estimated direct labor cost.

Supporting records to be maintained by the contractor and which must be submitted or made available to the recipient or EPA upon request include:

- a. The method of estimating proposed hours worked.
- b. The computation techniques used in arriving at proposed labor rates.
- c. The specific documents, books or other records used as factual source material to develop proposed hours worked and labor rates.
- d. Detailed rate computations which were used in computing the information submitted on the form.

If in block 14a, the contractor has checked "No," a brief narrative description of the methods used in arriving at items a though d above shall be included on an attached sheet.

Item 8- Indirect Costs

Indirect cost may consist of one or more pools of expenses which are grouped on the basis of the benefits accruing to the cost objectives represented by the distribution base or bases to which they are allocated. Since accounting practices vary, the use of particular groupings is not required. Neither is the use of any particular allocation base mandatory. However, it is mandatory that the method used results in an equitable allocation of indirect costs objectives which they support.

Normally, the firm's accounting system and estimating practices will determine the method used to allocate overhead costs. The firm's established practices, if in accord with generally accepted accounting principles and PROVIDED THEY PRODUCE EQUITABLE RESULTS IN THE CIRCUMSTANCES, will generally be accepted. Proposed overhead rates should represent the firm's best estimate of the rates to be experienced during the subagreement period. They should be based upon recent experience and be adjusted for known factors which will influence experienced trends.

Common overhead groupings are overhead on direct labor and general and administrative expenses. The first groupings usually include employment taxes, fringe benefits, holidays, vacation idle time, bonuses, applicable and direct labor, etc. The second generally includes the remaining costs, which, because of their incurrence for common or joint objectives, are not readily subject to treatment as direct costs. It is expected, however, that proposal groupings will correspond with the firm's normal method for accumulating indirect costs. (Under some accounting systems, the first grouping would be included instead under item 7.) No special categorization is required, provided the results are realistic and equitable.

Direct salaries are the normal distribution base for overhead cost but in some circumstances other bases produce more equitable results. As in the case of overhead cost groupings, the method to be used will depend upon the firm's normal practices and the equity of the results produced in the circumstances.

In the case of multibranch firms, joint ventures, or affiliates, it is expected that overhead costs applicable to specific location(s) where

work is to be based on cost data from the most recent fiscal periods updated to reflect changes in volume of business or operations.

Enter in block 8 the indirect cost pools normally used by the firm for allocation of indirect costs. Enter indirect cost rate for each pool and extend each one by the rate base to which it applies to arrive at the estimated indirect costs to be incurred during the actual performance of the work. If the indirect labor total from block 7 is not used as the rate base for any of the indirect cost pools, the rate base used must be explained on an attached sheet.

A brief narrative statement outlining the firm's policies and practices for accumulating indirect costs. Enter the indirect cost rate costs and the method used to compute the proposed rate or rates shall accompany the form. Include comment on the firm's policies regarding the pricing and costing of principals' time. The normal accounting treatment of principals' salaries, the annual amounts, and the hourly charge rate, if used, should be discussed.

Enter in the far right column the total estimated indirect costs.

Supporting records to be maintained by the contractor and which must be submitted or made available to the recipient or EPA upon request include:

- a. Detailed cost data showing overhead accounts, allocation bases, and rate computations for the preceding fiscal period. If more than six months of the current fiscal period have elapsed, cost data for this period should be included as one of the three period(s).
- b. Company budgets, budgetary cost data and overhead rates computations for future period(s).

Item 9 - Other Direct Costs

The following items are illustrative of costs normally included in this category of costs:

- a. Travel cost, including transportation, lodging, subsistence, and incidental expenses incurred by personnel or consultants while in travel status in connection with the performance of services required by the contract. The cost principles generally require the use of less than first class air accommodations and also limit the cost of private aircraft.
- b. Equipment, Materials, and Supplies
- (1) Long distance telephone calls, telegraph and cable expenses to be incurred in connection with the performance of services required in connection the subagreement.
- (2) Reproduction costs, including blueprints, black and white prints, ozalid prints, photographs, photostats, negatives; and express charges.
 - (3) Commercial printing, binding, artwork, and models.
 - (4) Special equipment.
- c. Subcontractors
- d. Other Direct costs, if any, not included above.

Enter in blocks 9a-d all other direct costs proposed. Travel costs entered must be supported by an attachment which identifies the number of staff trips proposed and the estimated cost per staff trip for both local and long distance transportation. The number of days and the rate per day must be provided to support the per diem shown. Each subcontract and consultant agreement must be identified separately in block 9c.

Enter in the far right column on line 9e the total of all other direct costs (9a-d).

Supporting data to be maintained by the contractor and which must be submitted or made available to the recipient or EPA upon request include:

- a. basis for other direct costs proposed.
- b. factual sources of costs, rates, etc., used in computing proposed amount of each cost element.

Item 10 - Total Estimated Cost

Enter the total of all direct labor, indirect costs and other direct costs from items 7, 8, and 9.

Item 11 - Profit

A fair and reasonable provision for profit cannot be made by simply applying a certain predetermined percentage to the total estimated cost. Rather, profit will be estimated as a dollar amount after considering:

- a. degree of risk.
- b. nature of the work to be performed.
- c. extent of firm's investment.
- d. subcontracting of work, and
- e. other criteria.

The Federal Acquisition Regulation cost principles applicable to subagreements with profit-making organizations (40 CFR 31.2 and 31.105) disallow certain types of costs which are sometimes incurred by firms in the normal conduct of their business. Examples of costs which are not allowable under these costs principles include, but are not limited to, entertainment, interest on borrowed capital, and bad debits. Because the Government considers "profit" to be the excess of price over allowable costs, such computation can indicate a higher profit estimate that the firm's experienced profit as it customarily computes it. The contractor may separately disclose to the recipient its customary computations.

Enter the dollar amount of profit in block 11.

Item 12 - Total Price

Enter the total of items 10 and 11.

Part III - PRICE SUMMARY

This portion of the form is for use by a recipient when price comparison, i.e., price analysis, is used subagreement review. It may also be used by a contractor when price comparison is used as a basis for award of a subcontract.

Item 13 - Competitor's Catalog Listings, In-House Estimates, Price Quotes

Enter sources of all competitive bids or quotes received, or catalogs used and their prices, or in-house estimates made, if appropriate, for comparison. Attach additional sheets if necessary, particularly for purchases of several different items.

Enter in the far right column the proposed price for the subagreement.

Part IV - CERTIFICATIONS

Item 14 - Contractor - FOR USE BY CONTRACTOR OR SUBCONTRACTOR ONLY.

Complete this block only if part II has been completed.

Enter the specific cost principles with which the costs summary of Part II conforms. Cost principles applicable to subagreements with various types or organizations are identified in 40 CFR Part 30.4010. Cost principles applicable to subagreements with profit-making organizations are those at 48 CFR 31.2 and, for architect-engineer or construction contracts, 48 CFR 31.105.

- c. (1) **Describe** the proposal, quotation, request for price adjustment, or other submission involved, giving appropriate identifying number (e.g., RFP No. ______).
- (2) Enter the date when the price negotiations were concluded and the contract price was agreed to. The responsibility of the subagreement is not limited by the personal knowledge of the contractor's negotiator if the time of agreement, showing that the negotiated price is not based on complete, current, and accurate data.
- (3) **Enter** the date of signature. This date should be as close as practicable to the date when the price negotiations were concluded and the subagreement price was agreed to (not to exceed 30 days).

Item 15 - Recipient Reviewer - FOR USE BY RECIPIENT ONLY.

If required by applicable assistance regulations, the recipient must submit the signed form for EPA review prior to execution of the subagreement.

Item 16 - EPA Reviewer - FOR USE BY EPA ONLY.

ISID - Environmental (Billing Rate)
Indefinite-Scope, Indefinite-Delivery Contract
R 02/28/19



STATE OF MICHIGAN

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET

This contract authorizes the professional services contractor to provide professional services.

(Authority: 1984 PA 431)

CONTRACT FOR PROFESSIONAL ENVIRONMENTAL SERVICES: Indefinite Scope-Indefinite Delivery

THIS CONTRACT, authorized this DATE day of MONTH the year two-thousand and twenty-three (2023), by the Director, Department of Technology, Management and Budget, BETWEEN the STATE OF MICHIGAN acting through the STATE FACILITIES ADMINISTRATION, DESIGN AND CONSTRUCTION DIVISION of the DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET, 3111 W. St. Joseph Street, Lansing, Michigan, 48917, hereinafter called the Department, and

PSC NAME MAILING ADDRESS CITY, STATE, ZIP

the Prime Professional Services Contractor, hereinafter called the

Professional. WHEREAS, the Department proposes securing

professional services for:

Indefinite-Scope, Indefinite-Delivery Contract No. 00XXX

Index No. (To Be Established)
Contract Order No. Y (To Be Assigned)

File No. (To Be Assigned)

Department of Technology, Management and Budget, State Facilities Administration, Design and Construction Division, Professional Environmental Services Indefinite-Scope, Indefinite-Delivery Contract (ISID) for Minor Projects –

2023 Environmental ISID Services

Various State Departments and Facilities Various Site Locations, Michigan

NOW THEREFORE, the Department and the Professional in consideration of the covenants of this Contract agree as follows:

- I. The Professional shall provide primary environmental investigation/assessment/design/construction oversight services for the assigned projects to the extent authorized by the Department of Technology, Management and Budget State Facilities Administration (SFA), Design and Construction Division (DCD) [The Department] and be solely responsible for such professional services. The Professional's services shall be performed in strict accordance with the assigned Project scope of work.
- II. If authorized, the Professional shall provide environmental services for the identified project types.

Regions	Project Types and Services Offered	
Eastern UP Northern LP Saginaw Bay Western LP Central LP Southwestern LP Southeastern LP		
	x x x x x x x x x x	

NOTE: Blackened box(es) indicate a service that the committee did not select for your firm.

III. The State of Michigan shall compensate the Professional for providing their professional services for the Project in accordance with the conditions of this Professional Services Contract.

IN WITNESS, WHEREOF, each of the parties has caused this Professional Services Contract to be executed by its duly authorized representatives on the dates shown beside their respective signatures, with the Contract to be effective upon the date on which the Professional received a copy executed by the authorized State of Michigan representative(s) by regular, registered, or certified mail or by delivery in person.

FOR THE PROFESSIONAL:	
Firm Name	SIGMA Vendor ID Number
Signature	Date
Title	
FOR THE STATE OF MICHIGAN:	
Director, DTMB SFA Design and Construction	Date

WHEREAS, this Professional Services Contract constitutes the entire agreement as to the Project between the parties, any Contract Modification of this Contract and the Department's approved and attached Project/Program Statement scope of work requirements must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the State may require. No Contract Modification may be entered into to compensate the Professional for correcting, or for responding to Professional design claims litigation for. the firm's final Documents/architectural and engineering design errors, omissions or neglect on the part of the Professional.

ARTICLE I PROFESSIONAL SERVICES SCOPE OF WORK

Provide professional environmental services, technical staff, and support personnel for ISID minor projects on an as-needed basis at various State/Client Agencies within the various site location areas as defined by the State of Michigan.

This Contract is for professional environmental investigation and/or design services for an unspecified number of ISID projects ("Assignment"). The scope of work for each assigned project will be defined at the time the project is awarded by the State to the Professional firm. The professional environmental services required for each of these assigned projects requested by the **Department may include any** or all of the Tasks included in the Phase 100 – Study through the Phase 900 – Operation and Maintenance Management.

The Professional firm's environmental services shall be performed in strict accordance with this Professional Services Contract and be in compliance with the Department's approved and attached Appendix I– Project/Program Statement.

This Contract does not warrant or imply to the Professional environmental firm, entitlement to perform any specific percentage (%) amount of environmental work during the life of this Contract.

This Contract will remain in effect for three (3) years from the date of this Contract award but may be unilaterally terminated by the State of Michigan at any time, for cause or its convenience, by written notification of the State, to the Professional. Furthermore, this Contract may be extended for **one** (1) additional year, at the sole option and discretion of the State upon the Department providing written notice to the Professional prior to the expiration of the original Contract time period. Any such time extension shall be subject to the terms and conditions of this Contract, including, but not limited to, the existing hourly billing rates included in this Contract for the Professional, their Consultant, and their employees or agents.

Please note that the Professional Services Contract ISID Contract No., as noted on page 1, must be provided on all Project correspondence and documents. Also, services are not to be provided or expenses incurred until individual ISID Projects are assigned to this Contract (see the Article II – Compensation and the Appendix 1 – Project/Program Statement).

Upon award of this Contract and each subsequent assignment, the Professional understands and agrees that time is of the essence. Failure to adhere to timely completion will be grounds for the Department, at its sole discretion, to terminate or limit future work under this Contract.

The Professional shall provide all professional services, technical staff, and support personnel necessary to complete the Project as described in its Project/Program Statement, in the best interest of the State, and within the Professional's fee(s) herein authorized by the State. Assigned project services shall comprise, without exception, every professional discipline and expertise necessary to meet all the requirements as described in the Project/Program Statement and in accordance with the accepted industry standards for professional practice and services. The Professional's services include attendance at all Project related meetings and conferences. Professional services for the assigned projects under this contract shall be provided in the Phase/Task sequence shown below and shall be rendered in accordance with the Professional's proposed and approved Project Study, Design, and Proposed Construction Schedule. The Professional's study, design, and proposed construction schedule shall be detailed, undated, and time sequence related for all Phase/Task services appropriate for the Project. The Professional shall field-check and verify the accuracy of all study/drawing and any data furnished by the Department, the State/Client Agency or any other Project related source. The Professional shall not employ or consult with any firms in completing the Professional's obligations herein who it anticipates will be a construction Bidder for the Project or any part thereof, unless specifically authorized, in writing, by the Department.

The Professional acknowledges that the Department is the first interpreter of the Professional's performance under this Contract.

The Professional acknowledges by signing this Professional Services Contract having a clear understanding of the requested professional environmental services required by the Department, and further agrees that the terms and conditions of this Professional Services Contract provide adequate professional fee(s) for the Professional to provide the requested Project scope of work requirements for each assigned project. No increase in compensation to the Professional will be allowed unless there is a material change made to the scope of work of the Assignment/Program Statement and the change is accepted and approved, in writing, by the State. Professional services shall not be performed, and no Project expenses shall be incurred by the Professional prior to the issuance of a written and signed Professional Services Contract and a Contract Order authorizing the Professional to start the Project work. Compensation for Department directed changes to the Project will be provided to the Professional by a Contract Modification and/or Contract Change Order signed by the Department and the Professional. The preparation of Bulletins and Contract Change Orders resulting from changes in the Project scope of work or previously unknown on-site field conditions will be compensated to the Professional, as approved by the Project Director/Agency Project Manager, on an hourly billing rate basis in accordance with this article. This compensation shall not exceed seven and half percent (7.5%) of the Construction Contractor's quotation for the Bulletin or Contract Change Order or an amount mutually agreed upon by the Professional and the Project Director/Agency Project Manager.

The Professional shall immediately inform the Department whenever it is indicated that the Professional's authorized not-to-exceed Budget for any of the assigned Projects may be exceeded. The Professional shall make recommendations to the Department for revisions to be implemented in order to not exceed the original authorized Budget. Any revision to the Project must be accepted and approved by the Department in writing.

The professional services may also include participation in legislative presentations as described in the "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" and as the legislature or the Department may prescribe.

No substitution of any "Key Personnel/Employee" essential for the successful completion of the Project and identified in the Professional's Organizational Chart will be allowed by the Professional for this Contract without the prior written consent from the Project Director/Agency Project Manager. Before any "Key Personnel/Employee" substitution takes place, the Professional shall submit a written request to the Project Director/Agency Project Manager, and this substitution request shall include the following information: (1) A request in writing for a No Cost Contract Modification; (2) Detailed written justification for this substitution; (3) The Professional's qualifications of any proposed "Key Principal Personnel/Employee" replacement; and (4) A written statement from the Professional assuring the Department that the Project scope of work will not be adversely affected by this substitution. This request to modify their Professional Services Contract must be accepted and approved in writing by the Project Director/Agency Project Manager and the Director of the Department.

The Department will designate individuals to serve as the Project Director and Agency Project Manager for the Project scope of work who shall be fully acquainted with the Project/Program Statement and have the authority to render Project decisions and furnish information promptly. Except in connection with issues under the Article XII - Contract Claims and Disputes text, the Project Director/Agency Project Manager will exercise general management and administration for the Professional's services in so far as they affect the interest of the State. The Professional shall indemnify, defend, and hold harmless the State against exposure to claims arising from delays, negligence, or delinquencies by the Professional for the professional services of this Contract.

During the Construction Administration Services Phase of the Project, the Professional is required to complete and submit, the on-site inspection record form, "DTMB-0452, The Professional's Inspection Record," for all on-site inspection visits to the Project site. The Inspection Record shall be completed and signed by the Professional and submitted monthly, with the original document sent to the Project Director/Agency Project Manager and copies sent to the Construction Contractor. The Inspection Record shall accompany the Professional's monthly payment request.

The "DTMB-0460, Project Procedures" contains Department forms which shall be used during the Construction Administration Phase of this Contract. All professional services will be consistent with the Department's current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" unless otherwise approved in writing by the Department.

The professional services required for each Phase of this Contract shall be performed by the Prime Professional and their Consultants in accordance with service descriptions in this article. The following service descriptions outlined in this Contract represent the Department's standard of care for the Professional's responsibilities for providing the professional services of this Contract; but by inclusion, or omission, the descriptions do not limit or exclude any regular or normal professional services necessary to accomplish the Project in accordance with the approved Project Budget and the industries accepted practice and standards for professional services. All of the services outlined in this Contract may not be applicable to the Project/Program Statement. The Professional shall determine and coordinate the interface of the services required for the Project and is responsible for identifying any additional services necessary to successfully complete the Project.

The professional shall execute the following PHASES upon written authorization from the Project Director.

PHASE 100 - ENVIRONMENTAL INVESTIGATION/STUDY SERVICES

Provide complete and comprehensive Environmental Investigation/Study Deliverables to meet the requirements of the Project/Program Statement. Upon completion of all field investigation, assessment, research, review and/or oversight, prepare a complete report with an executive summary, and in such detail, as the Project Director may prescribe. The services under this phase may include but not be limited to coordination, environmental assessments, drilling, field sampling/oversight, data/document review/management, feasibility study, and reporting as described in the Project/Program Statement. Project reports must be in accordance with Department/Client/Agency requirements and as outlined in the Project/Program Statement but shall include, as a minimum and as appropriate, the following items: (1) Problem; (2) Conclusion; (3) Recommendations; and (4) Discussion, details, and documentation.

PHASE 300—SCHEMATIC DESIGN

Prepare Schematic Design Deliverables consistent with the Project/Program Statement. The deliverables shall consist of conceptual remediation system, drawings, outline specifications, a Schematic Construction Cost Estimate, other related documentation, and shall diagrammatically depict the areas, scales, and relationships of the functions. The services under this phase may include but not be limited to coordination, construction codes and design reviews, civil/site staging investigation, schematic design and utilities review, drafting, and project cost/proposed construction schedule, as required by the Department/Client/Agency and as outlined in the Project/Program Statement. Acceptance of the Schematic Design by the Department/Client/Agency does not limit subsequent inclusion of minor, but essential, schematic or design details whose necessity and arrangement may best become apparent during subsequent Phases of the Project design. Revise design as necessary and obtain approval from the Department/Client/Agency.

PHASE 400—DESIGN DEVELOPMENT

Prepare Design Development Deliverables based on the Owner-accepted Schematic Design to depict the intent of the designed remediation system(s). The deliverables shall consist of draft drawings and specifications, Construction Cost Estimates and other related documentation to clearly establish the complete basis for further detail into final design drawings/specifications. The deliverables shall further define the Project by fixing and describing the Project size, character, site relationships, and other appropriate elements including the environmental, civil, structural, architectural, mechanical, electrical, and safety systems. The services under this phase may include but not be limited to coordination, draft drawings/specifications, site specific staging investigation, structural calculations and preliminary environmental/architectural/engineering design drawings/specifications, required development/reviews of as by the Department/Client/Agency and as outlined in the Project/Program Statement.

PHASE 500—CONSTRUCTION DOCUMENTS AND BIDDING DOCUMENTS

Prepare Construction Documents that revise, refine, amplify, and depict, in detail, the Project. The documents shall set forth, in detail, quality levels of and requirements for the construction, and shall consist of final drawings/specifications that comply with applicable regulatory and construction code requirements, enacted at the time of completion of the one hundred percent (100%) Construction Documents. Prepare Bidding Documents in Phases/Bid packages appropriate to the Project requirements and funding. Incorporate the current edition of DTMB "MICHSPEC", "DCSPEC" or "50KSPEC", as adopted and modified by the State of Michigan. The Construction Documents shall contain all information necessary to bid and construct the Project. The services under this phase may include but not be limited to coordination, final drawings/specifications and bidding documents, civil/site staging design, final structural calculations, final environmental/architectural/engineering design development/reviews of drawings/specifications, construction testing program, hazardous materials, health and safety risks, final design correction procedures, design and construction budget, construction codes/permits and construction schedule, as required by the Department/Client/Agency and as outlined in the Project/Program Statement.

PHASE 600 - CONSTRUCTION ADMINISTRATION - OFFICE SERVICES

Provide all required construction oversight administration and timely professional review and administrative services, as the circumstances of the Construction may require, allowing the successful review/implementation of the Construction Documents into a completed remedial actions/abatement measures and/or for the use intended by the Department/Client/Agency. The services under this phase may include but not be limited to coordination, review and approval of shop drawings and submittals, reporting of construction progress, construction quality testing, construction contractor performance review, punch list procedures, claims, establishing close-out procedures and developing/review of as-built documents, as required by the Department/Client/Agency requirements and as outlined in the Project/Program Statement.

PHASE 700 - CONSTRUCTION ADMINISTRATION - FIELD SERVICES

Provide all required Construction Oversight and Field Services, including timely inspection and professional services, as the circumstances of the Construction may require, allowing the successful review/implementation of the Construction Documents into a completed remedial action/abatement measures and/or for the use intended by the Department/Client/Agency. The services under this phase may include but not be limited to coordination, field inspections, progress meetings and final project inspection, as required by the Department/Client/Agency requirements and as outlined in the Project/Program Statement.

PHASE 900 - OPERATION AND MAINTENANCE SERVICES - REMEDIATION FACILITY

Provide all required Operation and Maintenance (O&M) Services and perform, in a safe and secure environment, all functions, including timely inspection, sampling and professional services, necessary to maintain uninterrupted, effective and efficient facility/system components for the use intended by the Department/Client/Agency. The services under this phase may include but not be limited to coordination, general system operation/inspections, routine system/building/ground maintenance, sampling, spare replacement parts, consumable supplies, utilities. waste materials removal/treatment/disposal, non-routine emergency services, progress meetings and reporting, as required by the Department/Client/Agency requirements and as outlined in the Project/Program Statement.

ARTICLE II COMPENSATION

In consideration of the performance of this Contract, the Department agrees to pay the Professional, as compensation for professional services, an hourly billing rate for each employee providing a direct service to this Project, on a not-to-exceed basis as specified herein, subject to subsequent modifications mutually agreeable to the parties hereto; provided, however, the Professional may not incur costs, or bill the Department, for professional services in excess of the estimates established for this Project without the prior written agreement of the Department. The attached proposal prepared by the Professional in response to the Request for Proposal, by the Owner, may describe methodology, services, schedule, and other aspects of the work to be performed under the Contract but does not supersede the Contract.

Compensation to the Professional shall be on an hourly billing rate basis for professional services rendered by salaried and non-salaried professional, technical, and technical support employees, except for any authorized reimbursable expenses provided for in this Contract. Total compensation for any Phase shall not exceed the amount authorized for that Phase, unless authorized in writing by the Department's approved Contract Change Order. Professional services shall not be performed, and no Project expense shall be incurred by the Professional firm prior to the issuance of a written and signed Professional Services Contract and a DTMB Form 0402 - Contract Order by the Department to the Professional, authorizing the Professional to start the Project.

Compensation to the Professional for services and authorized technical and technical support employees performing a direct service for this Project shall be determined using the Professional firm's billing rates. The Professional firm's hourly billing rate shall be the actual amount paid for the employee services on the Project including fringe benefits, vacations, sick leave, other indirect costs, and profit. The Professional firm's hourly billing rates shall not change during the life of this Contract without written approval by the Department. See attached Appendix, **Overhead Items Allowed for the Professional Services Contractor Firm's Hourly Billing Rate Calculation**, for the guide to overhead items allowed for the professional services contractor firm's hourly billing rate calculation. Reimbursement for the Project/Program Statement scope of work requirements will be provided only for Department approved items authorized for reimbursement compensation in this Contract. The State will not reimburse the Professional for downtime, or for personnel involved in downtime due to mechanical problems or failure of Professional's or Subcontractor equipment.

The preparation of Bulletins and Contract Change Orders resulting from changes to the Project scope of work or previously unknown on-site field conditions will be compensated to the Professional, as approved by the Department on an hourly billing rate basis in accordance with this article. This compensation shall not exceed seven and one- half percent (7.5%) of the Construction Contractor's quotation for the Bulletin or Contract Change Order or an amount mutually agreed upon by the Professional and the Project Director/Agency Project Manager.

The Professional shall provide, but no additional monetary compensation shall be allowed for the services necessary to respond to and resolve all claims arising wholly or in part from the Professional's errors and/or omissions or other aspects of the Project's design or the Professional firm's performance which is inconsistent with the Professional or Construction Contract.

- 2.1 PREMIUM TIME/OVERTIME: This Contract anticipates that no premium or overtime is required to achieve the Project's scope of work. No compensation will be allowed to the Professional for any premium or overtime cost incurred to achieve the Project schedule of this Contract, unless directed in writing by the Project Director/Agency Project Manager and approved by the Department.
- 2.2 EMPLOYEE HOURLY BILLING RATES: Hourly billing rates will include all direct and indirect monetary costs to the State for the Professional's services under this Contract other than the authorized and approved reimbursements. Hourly billing rates shall be based on the Professional's documented historical operating expenses and adjusted for Project specific costs. In no case shall this documentation period include more than eighteen (18) months prior to the date of award of this Contract.

Lump-sum payments to employees are not allowed under this Contract. Billing rates for employees who perform professional services of a subordinate or of a position classification having a lower classification/pay range shall be accounted and paid for at the lower hourly billing pay rate. The hourly billing rate charge of any employee may be changed by the Professional with a written and Department approved Contract Modification to account for normal personnel pay increases.

Hourly billing rates include, but are not limited to: Overhead items such as employee fringe benefits, vacations, sick leave, insurance, taxes, pension funds, retirement plans, meals, lodging, and all Project related travel expenses for Projects **less than** one-hundred (100) miles in each direction from the Professional's nearest Michigan office, computer costs/operating costs, data entry, and time, telephone, telephone- related services, and all reproduction services (except Contract Bidding Documents/Deliverables).

The hourly billing rate also includes all reproduction costs for design interpretations, study/design clarifications and Bulletins related to design errors or omissions, construction code compliance (precipitating either from design code compliance and plan review, design interpretations, or construction on-site/field inspections), and all similar, or avoidable costs.

All incidental postage, mail, or other shipping or delivery services, acquisition, bad debts, previous business losses, employment fees, depreciation, and operating costs for equipment, including computer design and/or computer drafting systems, and any specialized testing equipment are to be included. The hourly billing rate shall include, without exception, secretarial, computer/typing/word processing, editing, and clerical services utilized in any way for the Project as well as other non-technical and/or employees providing indirect services. The hourly billing rate also includes all profit without regard to its form or distribution.

Items not allowable as part of the Professional's calculated hourly billing rate include but are not limited to: Any costs associated with litigation and settlements for the Professional, other liability suits, out-of-state offices and associated travel, bonuses, profit sharing, premium/overtime costs, public relations, entertainment, business promotion, contributions, and various speculative allowances.

The hourly billing rate for the Professional may not be applied to the work of the Professional's Sub-Consultant's staff. Each Sub-Consultant firm must submit a separate hourly billing rate with proper documentation for Sub-Consultant services provided as part of the Proposal. The hourly billing rate of the respective Consultant firm shall be used for that Consultant firm's personnel only. No mark-up to Consultant firm's charges will be allowed.

2.3 RANGE OF EMPLOYEE HOURLY BILLING RATES: The Professional shall identify the service being provided and include the Professional's or Consultant's employee(s) full names and position classifications for the Project and their current hourly billing rates at the beginning and at the anticipated end of the Project. This hourly billing rate range shall reflect any anticipated pay increases over the life of the Contract. The range of hourly billing rates for any employee position or classification may not be changed without an approved Contract Modification.

2.4 DIRECT COST REIMBURSEMENT ITEMS: The Professional's Consultant services and authorized reimbursable expenses shall be treated as an authorized reimbursable expense item at a direct cost. The Professional shall be responsible for the selection of the supplier of the professional services or materials; the coordination, adequacy, and application of the professional services, whether provided by the Professional's staff or provided by their Consultant, and any Project costs that exceed the budget for each Phase.

Project related travel expenses (mileage, meals, lodging) for Projects **more than** one-hundred (100) miles in one- way from the Professional's nearest office shall be treated as an authorized reimbursable expense at the State of Michigan's current travel rates.

Unless authorized elsewhere in this Contract, direct cost reimbursement items shall be limited to the actual cost of printing and reproduction of project deliverables such as Final Study Reports, Surveys, Bidding Documents, and U. S. Mail regular shipping postage of the project deliverables listed above. In addition, direct cost reimbursement items may include soil borings, site surveys and any required laboratory testing, Design Code Compliance and Plan Review Approval Fees by the licensing agency; reproduction of documents for legislative presentation, artistic productions, mobilization of testing equipment, laboratory costs for testing samples, per-linear-foot cost of soil borings and specialized inspections of the structural, mechanical, electrical, chemical or other essential components of the Project.

Compensation for this Contract shall not exceed the budget per Project Phase identified in the attached Contract Order unless authorized by a Department approved Contract Modification. It shall be the Professional's responsibility to carefully monitor Project costs, activities, and progress and to provide the Project Director/Agency Project Manager timely notification of any justifiable need to increase the authorized budget. The Professional may not proceed with professional services that have not been authorized by the Project Director/Agency Project Manager and shall immediately notify the Project Director/Agency Project Manager if such services have been requested or have become necessary.

Professional/Sub-Consultant staff and hourly billable rates are identified in the attached Professional's proposal.

ARTICLE III PAYMENTS

Payment for the professional services shall be based on the Professional's performance of authorized professional service(s) performed prior to the date of each submitted payment request. Payment requests shall be submitted monthly to the Project Director/Agency Project Manager on a payment request form (DTMB-440). Payment for each monthly submitted payment request shall be made within thirty (30) consecutive calendar days following the Department's approval of the payment request. Payment requests shall include signed certification by the Professional of the actual percentage of work completed as of the date of invoicing for each Phase and summarize the amounts authorized, earned, previously paid, and currently due for each Project Phase.

Payment requests shall be supported by itemized records or documentation in such form and detail as the Department may require.

Each of the Professional's Consultant's submitted payment request applications shall include similar information. This includes, but is not limited to:

- Phase Numbers for the professional services provided.
- Professional's personnel and position/classification providing service and hours worked.
 Current hourly billing rate charges for each individual position/classification.
- Copy of certified on-site visitation log or site visit report showing time on-site.
- Itemized invoices from each of the Professional's Consultant's documenting that firm's professional services charge and the Project work related services provided.
- Authorized reimbursable expense items provided with receipts and invoices.

The State has the right to withhold payment of any disputed amounts until the parties agree as to the validity of the disputed amount. The State will notify the Professional of any dispute within a reasonable time. Payment by the State will not constitute a waiver of any rights as to the Professional's continuing obligations, including claims for deficiencies or substandard Contract Activities. The Professional's acceptance of final payment by the State constitutes a waiver of all claims by the Professional against the State for payment under this Contract, other than those claims previously filed in writing on a timely basis and still disputed.

The State will only disburse payments under the Contract through Electronic Funds Transfer (EFT). Contractor must register with the State at http://www.michigan.gov/SIGMAVSS to receive electronic funds transfer payments. If Contractor does not register, the State is not liable for failure to provide payment. Without prejudice to any other right or remedy if may have, the State reserves the right to set off at any time any amount then due and owing to it by Contractor against any amount payable by the State to Contractor under this Contract

ARTICLE IV ACCOUNTING

The Professional shall keep current and accurate records of Project costs and expenses, hourly billing rates, authorized reimbursable expense items, and all other Project related accounting documents to support the Professional's monthly application for payment. Project records shall be kept on a generally recognized accounting basis. Such records shall be available to the Department for a period of ten (10) years after the Department's final payment to the Professional. The State of Michigan reserves the right to conduct, or have conducted, an audit and inspection of these Project records at any time during the Project or following its completion.

ARTICLE V INSURANCE

The Professional shall purchase, maintain and require such insurance that will provide protection from claims set forth below which may arise out of or result from the Professional firm's services under this Contract, whether such service is performed by the Professional or performed by any of the Professional firm's Consultant's or by anyone directly or indirectly employed by them, or by anyone for whose acts they may be liable. The following insurance policy limits described below are intended to be the minimum coverage acceptable by the State:

For the purpose of this Section, "State" includes its departments, divisions, agencies, offices, commissions, officers, employees, and agents.

- (a) The Contractor must provide proof that it has obtained the minimum levels of insurance coverage indicated or required by law, whichever is greater. The insurance must protect the State from claims that may arise out of or result from or are alleged to arise out of or result from the Contractor's or a Subcontractor's performance, including any person directly or indirectly employed by the Contractor or a Subcontractor, or any person for whose acts the Contractor or a Subcontractor may be liable.
- (b) The Contractor waives all rights against the State for the recovery of damages that are covered by the insurance policies the Contractor is required to maintain under this Section. The Contractor's failure to obtain and maintain the required insurance will not limit this waiver.
- (c) All insurance coverage provided relative to this Contract is primary and noncontributing to any comparable liability insurance (including self-insurance) carried by the State.
- (d) The State, in its sole discretion, may approve the use of a fully-funded self-insurance program in place of any specified insurance identified in this Section.
- (e) Unless the State approves, any insurer must have an A.M. Best rating of "A" or better and a financial size of VII or better, or if those ratings are not available, a comparable rating from an insurance rating agency approved by the State. All policies of insurance must be issued by companies that have been approved to do business in the State. To view the latest A.M. Best's Key Ratings Guide and the A.M. Best's Company Reports (which include the A.M. Best's Ratings) visit the A.M. Best Company internet web site at http://www.ambest.com.
- (f) Where specific coverage limits are listed in this Section, they represent the minimum acceptable limits. If the Contractor's policy contains higher limits, the State is entitled to coverage to the extent of the higher limits.

- (g) The Contractor must maintain all required insurance coverage throughout the term of this Contract and any extensions. However, in the case of claims-made Commercial General Liability policies, the Contractor must secure tail coverage for at least three (3) years following the termination of this Contract.
- (h) The minimum limits of coverage specified are not intended and may not be construed; to limit any liability or indemnity of the Contractor to any indemnified party or other persons.
- (i) The Contractor is responsible for the payment of all deductibles.
- (j) If the Contractor fails to pay any premium for a required insurance policy, or if any insurer cancels or significantly reduces any required insurance without the State's approval, the State may, after giving the Contractor at least 30 days' notice, pay the premium or procure similar insurance coverage from another company or companies. The State may deduct any part of the cost from any payment due the Contractor or require the Contractor to pay that cost upon demand.
- (k) In the event the State approves the representation of the State by the insurer's attorney, the attorney may be required to be designated as a Special Assistant Attorney General by the Michigan Attorney General.

The Professional firm's Errors and Omissions coverage shall include coverage for claims resulting from acts of forbearance that cause or exacerbate pollution and claims of bodily injury and property damage in the amount of \$1,000,000 minimum coverage per occurrence, \$3,000,000 annual aggregate. This insurance is required of all professional firms who conduct professional environmental services including, but not limited to, any of the following services:

- (i) Remedial System Design.
- (ii) Remediation Management.
- (iii) Feasibility Development and Implementation.
- (iv) Hydrogeological Evaluation.
- (v) Media Testing and Analysis.
- (vi) Subsurface and Geophysical Investigation.
- (vii) Other related activities as determined by the Department.

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Required Limits	Additional Requirements
Commercial General L	lability insurance
Minimum Limits: \$1,000,000 Each Occurrence Limit \$1,000,000 Personal & Advertising Injury Limit \$2,000,000 General Aggregate Limit \$2,000,000 Products/Completed Operations	Professional must have their policy endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds using endorsement CG 20 10 11 85, or both CG 20 10 12 19 and CG 20 37 12 19.
Umbrella or Excess	Liability Insurance
Minimum Limits: \$2,000,000 General Aggregate	Professional must have their policy follow form.
Automobile Liabil	lity Insurance
Minimum Limits: \$1,000,000 Per Accident	Professional must have their policy: (1) endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds; and (2) include Hired and Non-Owned Automobile coverage.
Workers' Compensa	
Minimum Limits: Coverage according to applicable laws governing work activities.	Waiver of subrogation, except where waiver is prohibited by law.
Employers Liabil	ty Insurance
Minimum Limits: \$500,000 Each Accident \$500,000 Each Employee by Disease \$500,000 Aggregate Disease.	
Professional Liability (Er Insurar	rors and Omissions) ace
Minimum Limits: \$1,000,000 Each Occurrence \$2,000,000 Annual Aggregate Deductible Maximum: \$50,000 Per Loss	

Environmental and Pollution Liability (Errors and Omissions) ***

Minimum Limits:

\$1,000,000 Each Occurrence \$2,000,000 Annual Aggregate Professional must have their policy: (1) be applicable to the work being performed, including completed operations equal to or exceeding statute of repose; (2) not have exclusions or limitations related to Transportation (upset overturn, spills durina loading or unloading. Hazardous Materials Handling, and Non-Owned disposal site liability; and (3) endorsed to add "the State of Michigan, its departments, division, agencies. offices, commissions, officers, employees, and agents" as additional insured.

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Contractual Liability insurance for claims for damages that may arise from the Professional's assumption of liability on behalf of the State under Article VI concerning indemnification for errors, omissions, or negligent acts in the course of the professional service or other provision within this Contract to the extent that such kinds of contractual liability are insurable in connection with and subject to limits of liability not less than for the general liability insurance and the professional liability insurance and set forth in subsections (c) and (d) above.

Except where the State has approved a subcontract with other insurance provisions, the Professional must require any Consultant/Subcontractor to purchase and maintain the insurance coverage required in this Article. Alternatively, the Contractor may include a Consultant/Subcontractor under the Professional's insurance on the coverage required in that Section. The failure of a Consultant/Subcontractor to comply with insurance requirements does not limit the Professional's liability or responsibility.

Certificate of Insurance documents, acceptable to the State, shall be provided and filed with the Department prior to commencement of the Professional's Project services, unless otherwise approved in writing, and not less than 20 days before the insurance expiration date every year thereafter. Facsimile copies of the Certificate of Insurance will not be accepted. Certificate of Insurance documents must be either submitted hard copy or portable document file (.pdf). The Certificate of Insurance documents must specify on the certificate in the oblong rectangle space labeled "Description of Operations/Locations/Vehicles/Exclusions Added By Endorsement/Special Provisions/Special Items" the following items: (1) The ISID Title; (2) The ISID Contract Number; and (3) The State of Michigan must be named as an "Additional Insured on the General Liability and Automobile Insurance Policy." The Certificate of Insurance documents shall contain a provision that the Project insurance coverage afforded under the insurance policies for this Contract will not be modified or canceled without at least thirty (30) consecutive calendar days prior written notice, except for 10 days for non-payment of premium, to the State of Michigan, Department.

This Section is not intended to and is not to be construed in any manner as waiving, restricting, or limiting the liability of either party for any obligations under this Contract (including any provisions hereof requiring Professional to indemnify, defend and hold harmless the State).

The attached, Certificates of Insurance documents required for this Project shall be in force for this Project until the final payment by the State to the Professional is made and shall be written for not less than any limits of liability specified above. The Professional has the responsibility for having their consultant firms comply with these insurance requirements.

ARTICLE VI INDEMNIFICATION

- (a) To the extent permitted by law, the Professional shall indemnify, defend and hold harmless the State from liability, including all claims and losses, and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest, and penalties), accruing or resulting to any person, firm or corporation that may be injured or damaged by the Professional in the performance of this Contract and that are attributable to the negligence or tortious acts of the Professional or any of its Subcontractors/Consultants, or by anyone else for whose acts any of them may be liable.
- (b) Employee Indemnification: In any and all claims against the State of Michigan, its departments, divisions, agencies, boards, sections, commissions, officers, employees and agents, by any employee of the Professional or any of its Subcontractors/Consultants, the indemnification obligation under this Contract shall not be limited in any way by the amount or type of damages, compensation or benefits payable by or for the Professional or any of its Subcontractors/Consultants under worker's disability compensation acts, disability benefit acts or other employee benefit acts. This indemnification clause is intended to be comprehensive. Any overlap in provisions, or the fact that greater specificity is provided as to some categories of risk, is not intended to limit the scope of indemnification under any other provisions.
- (c) Patent/Copyright Infringement Indemnification: To the extent permitted by law, the Professional shall indemnify, defend and hold harmless the State from and against all losses, liabilities, damages (including taxes), and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest, and penalties) incurred in connection with any action or proceeding threatened or brought against the State to the extent that such action or proceeding is based on a claim that any piece of equipment, software, commodity or service supplied by the Professional or its Subcontractors/Consultants, or the operation of such equipment, software, commodity or service, or the use of reproduction of any documentation provided with such equipment, software, commodity or service infringes any United States patent, copyright, trademark or trade secret of any person or entity, which is enforceable under the laws of the United States.

In addition, should the equipment, software, commodity, or services, or its operation, become or in the State's or Professional's opinion be likely to become the subject of a claim of infringement, the Professional shall at the Professional's sole expense (i) procure for the State the right to continue using the equipment, software, commodity or service or, if such option is not reasonably available to the Professional, (ii) replace or modify to the State's satisfaction the same with equipment, software, commodity or service of equivalent function and performance so that it becomes non-infringing, or, if such option is not reasonably available to Professional, (iii) accept its return by the State with appropriate credits to the State against the Professional's charges and reimburse the State for any losses or costs incurred as a consequence of the State ceasing its use and returning it.

Notwithstanding the foregoing, the Professional shall have no obligation to indemnify or defend the State for, or to pay any costs, damages or attorneys' fees related to, any claim based upon (i) equipment developed based on written specifications of the State; or (ii) use of the equipment in a configuration other than implemented or approved in writing by the Professional, including, but not limited to, any modification of the equipment by the State; or (iii) the combination, operation, or use of the equipment with equipment or software not supplied by the Professional under this Contract.

ARTICLE VII OWNERSHIP OF DOCUMENTS

All Project deliverables, including but not limited to: reports, Bidding Documents, Contract Documents, electronic documents and data, and other Project related documents, including the copyrights, prepared and furnished by the Professional shall become the property of the State of Michigan upon completion of the Project, completion and acceptance of the professional's work, or upon termination of the Contract. Project deliverables shall be delivered to the Department upon their request. The Professional shall have no claim for further employment or additional compensation as a result of this Contract requirement. The Professional may retain a copy of all Project documents for their files.

If the Professional is in default or breach of its obligations under this Contract, the State shall have full ownership rights of the Project deliverables, including Bidding Documents and Contract Documents, including all electronic data. If the Professional is in default or this Contract Agreement is terminated, the State shall not use the Contract Documents and deliverables of this Contract for completion of the Project by others without the involvement of other qualified Professionals who shall assume the professional obligations and liability for the Project work not completed by the Professional.

To the fullest extent allowed by law, the State releases the Professional, the Professionals Consultant(s) and the agents and employees of any of them from and against legal claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of the State's use of the Contract Documents other than in accordance with this Contract Agreement.

All Contract deliverables listed may be published or issued for informational purposes without additional compensation to the Professional. The Professional may not use any of the Contract Documents and Contract deliverables for any purpose that may misrepresent the professional services they provided.

The Professional shall retain full rights to the Contract Documents and deliverables and the right to reuse component information contained in them in the normal course of the Professional's professional activities.

The Contract deliverables, Contract Documents, or other documents produced under this Contract may be used by the Department, or others employed by the Department or State of Michigan, for reference in any completion, correction, remodeling, renovation, reconstruction, alteration, modification of or addition to the Project, without monetary compensation to the Professional.

The State of Michigan will not construct additional Projects or buildings based on the work of this Contract without notice to the Professional. Whenever renderings, photographs of renderings, photographs or models, or photographs of the Project are released by the State of Michigan for publicity, proper credit for design shall be given to the Professional, provided the giving of such credit is without cost to the State of Michigan.

ARTICLE VIII TERMINATION

The State may, by written notice to the Professional, terminate this Contract and/or any Assignments, in whole or in part at any time, either for the State's convenience or because of the failure of the Professional to fulfill their Contract obligations. Upon receipt of such notice, the Professional shall:

- a) Immediately discontinue all professional services affected (unless the notice directs otherwise), and
- b) Deliver to the State all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the Professional in performing this Contract, whether completed or in process.
- 8.1 If the termination is for the convenience of the State, an equitable adjustment in the Contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed professional services.
- 8.2 If the termination is due to the failure of the Professional to fulfill their Contract obligations, the State may take over the work and prosecute the same to completion by Contract or otherwise. In such case, the Professional shall be liable to the State for any additional cost occasioned to the State thereby.

- 8.3 If, after notice of termination for failure to fulfill Contract obligations, it is determined that the Professional had not so failed, the termination shall be deemed to have been affected for the convenience of the State. In such event, adjustment in the Contract price shall be made as provided in Section 8.1 of this article.
- 8.4 The rights and remedies of the State provided in this article are in addition to any other rights and remedies provided by law or under this Contract.

ARTICLE IX SUCCESSORS AND ASSIGNS

This Contract shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns; provided, however, that neither of the parties hereto shall assign this Contract without the prior written consent of the other.

ARTICLE X GOVERNING LAWS

This Contract shall be construed in accordance with the current laws of the State of Michigan. Some Assignments to this Contract will be funded wholly or in part by the Federal Government through grant agreements and/or federal programs. The Professional must comply with such funding requirements along with any current applicable federal regulations in performing the tasks described in the Scope of Work, including but not limited to the following current federal regulations. The absence of reference to any law or regulation does not preclude its applicability to this Contract.

- 1. The Comprehensive Environmental Response Compensation and Liability Act of 1980 as amended CERCLA (The Superfund Act);
- 2. Section 306 of the Clean Air Act (42 U.S.C. 1857 (h));
- 3. Section 508 of the Clean Water Act (33 U.S.C. 1368);
- 4. Public Law 98-473 as implemented in the Department of the Interior, Bureau of Indian Affairs;
- 5. Executive Order 11738; Office of Management and Budget Circular A-87, "Cost Principles for State, Local, and Indian Tribal Governments."
- 6. 25 CFR Part 20; Financial Assistance and Social Services Programs
- 7. 40 CFR Part 31; Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments
- 8. 40 CFR Part 32 Subpart F; Drug-Free Workplace
- 9. 40 CFR Part 33; Participation by Disadvantaged Business Enterprises in United States Environmental Protection Agency Programs
- 10. 40 CFR Part 35; State and Local Assistance

- 11. 40 CFR Part 35 Subpart 0; Cooperative Agreements and Superfund State Contracts for Superfund Response Actions
- 12. 48 CFR Chapter 1 Part 31 Subpart 31.2; Contracts with Commercial Organizations.

ARTICLE XI NONDISCRIMINATION

In connection with the performance of the Project under this, the Professional agrees as follows:

a) The Professional will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, age, sex (as defined in Executive Directive 2019-09), height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job or position. The Professional will provide equal employment opportunities to ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job or position.

Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

- b) The Professional will, in all solicitations or advertisements for employees placed by or on behalf of the Professional, state that all qualified applicants will receive equal employment opportunity consideration for employment without regard to race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job or position.
- c) The Professional or their collective bargaining representative will send to each labor union or representative of workers with which is held a collective bargaining agreement or other Contract or understanding, a notice advising the said labor union or workers' representative of the Professional's nondiscrimination commitments under this article.
- d) The Professional will comply with the Elliot-Larsen Civil Rights Act, 1976 PA 453, as amended, MCL 37.2201 et seq; the Michigan Persons with Disabilities Civil Rights Act, 1976 PA 220, as amended, MCL 37.1101 et seq; *Executive Directive 2019-09*; and all published rules, regulations, directives and orders of the Michigan Civil Rights Commission which may be in effect on or before the date of award of this Contract.
- e) The Professional will furnish and file nondiscrimination compliance reports within such time and upon such forms as provided by the Michigan Civil Rights

Commission; said forms may also elicit information as to the practices, policies, program, and employment statistics of the Professional and of each of their Consultant firms. The Professional will permit access to all books, records, and accounts by the Michigan Civil Rights Commission, and/or its agent, for purposes of investigation to ascertain nondiscrimination compliance with this Contract and with rules, regulations, and orders of the Michigan Civil Rights Commission relevant to Article 6, 1976 PA 453, as amended.

f) In the event that the Michigan Civil Rights Commission finds, after a hearing held pursuant to its rules, that the Professional has not complied with the contractual nondiscrimination obligations under this Contract, the Michigan Civil Rights Commission may, as part of its order based upon such findings, certify said findings to the State Administrative Board of the State of Michigan, which the State Administrative Board may order the cancellation of the Contract found to have been violated, and/or declare the Professional ineligible for future Contracts with the State and its political and civil subdivisions, departments, and officers, and including the governing boards of institutions of higher education, until the Professional complies with said order of the Michigan Civil Rights Commission.

Notice of said declaration of future ineligibility may be given to any or all of the persons with whom the Professional is declared ineligible to Contract as a contracting party in future Contracts. In any case before the Michigan Civil Rights Commission in which cancellation of an existing Contract is a possibility, the State shall be notified of such possible remedy and shall be given the option by the Michigan Civil Rights Commission to participate in such proceedings.

- g) The Professional shall also comply with the nondiscrimination provisions of 1976 PA 220, as amended, concerning the civil rights of persons with physical or mental disabilities.
- h) The Professional will include, or incorporate by reference, the nondiscrimination provisions of the foregoing paragraphs a) through g) in every subcontract or Contract Order unless exempted by the rules, regulations or orders of the Michigan Civil Rights Commission, and will provide in every subcontract or Contract Order that said nondiscrimination provisions will be binding upon each of the Professional's Consultant's or seller.

ARTICLE XII CONTRACT CLAIMS AND DISPUTES

In any claim or dispute by the Professional which cannot be resolved by negotiation, the Professional shall submit the claim or dispute for an administrative decision by the Department of Technology, Management and Budget, Director of State Facilities Administration within thirty (30) consecutive calendar days of the end of the disputed negotiations, and any decision of the Director of State Facilities Administration may be appealed to the Michigan Court of Claims within one (1) year of the issuance of the Director's decision.

The Professional agrees that the Department's appeal procedure to the Director of State Facilities Administration is a prerequisite to filing a suit in the Michigan Court of Claims.

ARTICLE XIII DEFINITION OF TERMS

The definition of terms and conditions of this Contract are described and outlined in the following Articles I through XIV and attached appendices. The capitalized defined terms used in this Professional Services Contract shall have the following definitions:

ADDENDA: Written or graphic numbered documents issued by the Department and/or the Professional prior to the execution of the Construction Contract which modify or interpret the Project Bidding Documents, including drawings, and specifications, by additions, deletions, clarifications or corrections. The Addenda shall: (1) Be identified specifically with a standardized format; (2) Be sequentially numbered; (3) Include the name of the Project; (4) Specify the Project Index No., Project File No., the Contract Order No. Y, and a description of the proposed Addenda; and (5) Specify the date of Addenda issuance. As such, the Addenda are intended to become part of the Project Contract Documents when the Construction Contract is executed by the Professional's recommended lowest responsive, responsible qualified Construction Contractor.

An Addendum issued after the competitive construction Bid opening to those construction Bidders who actually submitted a Bid, for the purpose of rebidding the Project work without re-advertising, is referred to as a post-Bid Addendum.

AGENCY PROJECT MANAGER: The assigned staff of the Department or the State/client Agency authorized by the State to represent and act on behalf of the Project Director on a given Project and to thereby provide direction and assistance to the Construction Contractor. The Agency Project Manager may designate in writing a person to act on behalf of the Agency Project Manager when they are unable to perform their required duties or is away from the office. In such cases, the Agency Project Manager must notify the Construction Contractor and the Project Director.

AGENCY FIELD INSPECTOR: An employee of the State of Michigan under the direction of the State/client Agency who provides the on-site, Inspection of construction Projects for compliance with the study/design intent of the Professional firm's Contract Documents/drawings and specification requirements and the building construction codes. The Agency Field Inspector is the liaison between the Construction Contractor, the Professional, and the Agency Project Manager. The Agency Project Manager, or their Agency Field Inspector, has the authority to require the Professional to respond to and resolve study/design related problems, construction on-site field problems and to attend Project related meetings.

BID: A written offer by a construction Bidder for the Department. Project construction work, as specified, which designates the construction Bidder's base Bid and Bid price for all alternates.

BIDDER: The person acting directly, or through an authorized representative, who submits a competitive construction Bid directly to the Department.

BIDDING DOCUMENTS: The Professional's Project Contract Documents as advertised, and all Addenda issued before the construction Bid opening, and after the construction Bid opening, if the Project construction work is rebid without re-advertising. Bidding Documents shall consist of the Phase 500 - Final Design drawings and specifications, any Addenda issued, special, general, and supplemental conditions of the Construction Contract, and modifications, if any, to standard forms provided by the Department. Such forms consist of the Project advertisement, the instructions to Bidders, the proposal forms, general, supplemental, and any special conditions of the Construction Contract, and the form of agreement between the Department and the Construction Contractor for the Project work requirements.

BID SECURITY: The monetary security serving as guarantee that the Bidder will execute the offered Construction Contract or as liquidated damages in the event of failure or refusal to execute the Construction Contract.

BUDGET: The maximum legislatively authorized Budget amount to be provided by the State of Michigan and available for a specific purpose or combination of purposes to accomplish the Project for this Contract.

BULLETIN: A standard document form (DTMB-0485, Bulletin Authorization No. and the DTMB-0489, Instructions to Construction Contractors for Preparation of Bulletin Cost Quotations for Contract Change Orders) used by the Department to describe a sequentially numbered change in the Project under consideration by the Department and the Professional and to request the Construction Contractor to submit a proposal for the corresponding adjustment in the Contract price and/or Contract time, if any. These standard document forms are a part of the "DTMB-0460, Project Procedures" documents package.

CONSTRUCTION CONTRACT: A separate written Contract agreement between the Construction Contractor and the Department for the construction, alteration, demolition, repair, or rebuilding of a State/Client Agency building or other State property.

CONSTRUCTION CONTRACTOR: Any construction firm under a separate Contract to the Department for construction services.

CONSTRUCTION INSPECTION SERVICES: The Professional's field Inspections of the Project during the construction Phase of this Contract which includes but is not limited to: (1) Documenting the quantity and quality of all Project construction work and verifying that the Project construction work is properly completed; (2) Resolve Project problems that are affecting the Project construction work, certify payment requests, process Bulletins, Contract Change Order recommendations, and requests for information (RFI's) in a timely manner as prescribed in the Department's, "MICHSPEC 2001 Edition of The Owner and Contractor Standard Construction Contract and General Conditions for Construction (Long Form)" or the current Department, DTMB Short Form 401 - Proposal and Contract/Front-End Package for Small Projects for Professional Services Contractors (PSC) with General Conditions for Construction and Instructions to Bidders" as adopted and modified by the State of Michigan and incorporated into the Construction Contract; and the (3) Inspection of Project construction work completed or in progress by the Construction Contractor to determine and verify to the Department's Project

Director/Agency Project Manager and their Department Field Representative that the Project construction work is in compliance with the Professional's design intent and that the Project has been completed by the Construction Contractor in accordance with the Professional's Phase 500 - Contract Documents/drawings and specifications requirements.

The Professional shall provide sufficient Inspections of the Project during the construction Phase to administer the construction Phase field and office services as directly related to the degree of Project complexity, up to and including full-time field Inspections. Construction field Inspections shall occur as the construction field conditions and the Project may require and during the regularly scheduled monthly progress and payment meetings.

The Professional shall use for their construction field Inspection services, only personnel having professional expertise, experience, authority, and compatibility with departmental procedures as the Department may approve. The Professional agrees that such characteristics are essential for the successful completion of the Project. Such individuals shall be replaced for cause where the Department determines and notifies the Professional, in writing, of their unacceptable performance.

CONSULTANT: Any individual, firm, or employee thereof, not a part of the Professional's staff, but employed by the Professional and whose professional service cost is ultimately paid by the State of Michigan, either as a direct cost or authorized reimbursement. This includes the recipient(s) of Contract Orders for material, support, and/or technical services. Also, included are persons and firms whose management and/or direction of services are assigned to the Prime Professional as may be provided elsewhere in this Contract.

CONTRACT CHANGE ORDER: A standard document form (DTMB-0403) issued and signed by the State of Michigan and signed by the Professional which amends the Project Design Professional's Contract Documents for changes in the Project/Program Statement or an adjustment in Contract price and/or Contract time, or both.

CONTRACT DOCUMENTS: The Professional's Phase 100 – Study, Final Report and Phase 500 - Final Design plans/drawings, specifications, Construction Contract, instructions to construction Bidders, proposal, Bidding Documents, agreement, conditions of the Contract, payment bond, performance/labor and material bond, prevailing wages, all Addenda, and attachments as may be necessary to comprise a Construction Contract for the Project. Specifications for this Contract will be prepared for Division 00 through 49, in the current version MasterFormat Outline by the Construction Specifications Institute (C.S.I.), as appropriate for the Project.

CONTRACT MODIFICATION: A form (DTMB-0410) amending the Contract signed by the Department and the Professional. The preparation of Bulletins and Contract Change Orders resulting from changes in the Project/Program Statement or previously unknown on-site field conditions as approved by the Department will be compensated to the Professional by way of the Contract Modification in accordance with the Article II, Compensation text of this Contract.

Any Contract Modification of this Professional Services Contract must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the Department may require. No Contract Modification will be approved to compensate the Professional for correcting, or for responding to claims or litigation for, the Professional's Phase 100 – Study, Final Report and Phase 500 - Contract Documents study/design errors, omissions or neglect on the part of the Professional.

CONTRACT ORDER: A form (DTMB-0402) issued and signed by the State of Michigan authorizing a Professional to: (1) Begin to incur Project expenses and proceed with the Project on-site; and (2) Provide professional services for the fee amount designated in the Phases of the Contract Order. Issuance of the DTMB-0402 certifies that: (1) The State will enter into a Professional Services Contract for the professional services described in the various Phases of this Contract; and that (2) The proper three (3) sets of Certificate of Insurance documents have been received and accepted by the State along with the approval and signing of the Professional's Professional Services Contract by the SFA, DCD Director.

DEPARTMENT: The Department of Technology, Management and Budget, Facilities and Business Administration, Design and Construction Division. The Department will represent the State of Michigan in all matters pertaining to this Project. This Professional Services Contract will be administered through the Department on behalf of the State of Michigan and The State/Client Agency.

DESIGN MANUAL: Provides the Professional with information regarding the Department's current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" review process requirements regarding the uniformity in Contract materials presented to it by the Professional and the State/Client Agency(ies). This manual contains the following noted standards, instructions, and procedures information for: (1) General instructions for planning documents from Phase 100-Study through Phase 500-Final Design; (2) Net and gross area/volume; (3) Project cost format; (4) Outline architectural and engineering specifications; (5) Specifications in documentation Phase; (6) Instructions for proposal; (7) Bidders questionnaire; and the (8) Project job sign.

DIRECTOR: The Director of the Department of Technology, Management and Budget or their authorized State of Michigan representative.

DIRECTOR-SFA: The Director of the Department of Technology, Management and Budget, State Facilities Administration or their authorized State of Michigan representative.

DEPARTMENT FIELD REPRESENTATIVE: An employee of the State under the direction of the Department who provides the Inspection of construction Projects for compliance with the design intent of the Professional's Phase 500 - Contract Documents/ architectural and/or engineering drawings and specification requirements and the building construction codes. The Department Field Representative is the liaison between the Construction Contractor, the Professional, and the Project Director/Agency Project Manager. The Project Director/Agency Project Manager, or their Department Field Representative, has the authority to require the Professional to respond to and resolve study/design related problems, construction field problems and to attend Project

meetings. Unless delegated by specific written notice from the Department, the Department Field Representative has no authority to order any changes in the Project scope of work or authorize any adjustments in Contract price or Contract time.

INSPECTION: The Professional and their Consultant firm's on-site and/or off-site examination of the Project construction work completed or in progress by the Construction Contractor to determine and verify to the Department's, Project Director/Agency Project Manager and their Department Field Representative that the quantity and quality of all Project construction work is in accordance with the design intent of the Professional's Phase 500 - Contract Documents/ drawings and specifications requirements.

KEY PRINCIPAL PERSONNEL/EMPLOYEE: An individual employee of a Professional who is essential for the successful completion of the Project.

NOTICE OF INTENT TO AWARD: A written notice to the Construction Contractor, by the Department accepting the Professional's written recommendation to award the construction Bid to the lowest responsive, responsible qualified construction Bidder. The Notice of Intent to Award letter will also designate the Contract price and itemize the alternates that the Department, at its sole discretion has accepted.

PHASE: A discretely distinguishable step necessary to produce the Project in the course of the Professional providing study, design and construction administration services.

PRIME PROFESSIONAL SERVICES CONTRACTOR/PROFESSIONAL: An individual, firm, partnership, corporation, association, or other legal entity who is legally permitted by law to sign and seal final design construction Contract Documents and licensed under the State of Michigan's professional licensing and regulation provisions of the Occupational Code (State Licensing Law), Act 299 of the Public Acts of 1980, Article 20, as amended, to practice architecture, engineering, environmental engineering, geology, civil, land surveying, or landscape architecture services in the State of Michigan.

The Prime Professional Services Contractor/Professional is also legally permitted by the State of Michigan's regulation provisions of the State Construction Code, Act 230 of the Public Acts of 1972, as amended, and designated in a Construction Contract by the Department to recommend construction progress payments to the Construction Contractor.

PROJECT: Any new construction, existing site, new utilities, existing building renovation, roof repairs and/or removal and replacement, additions, alteration, repair, installation, construction quality control and material testing services, painting, decorating, demolition, conditioning, reconditioning or improvement of public buildings, works, bridges, highways or roads authorized by the Department that requires professional study/design services as part of this Contract.

PROJECT COST: The total Project cost including, but not limited to, site purchase, site survey and investigation, hazardous material abatement, construction, site development, new utilities, telecommunications (voice and data), professional fees, construction quality control and material testing services, testing and balancing services, furnishings, equipment, plan(s)/drawing(s) design code compliance and plan review approval fees and all other costs associated with the Project.

PROJECT DIRECTOR: The professional licensed employee of the Department who is responsible for directing and supervising the Professional's services during the life of this Contract. The Project Director, or their Department Field Representative, has the authority to require the Professional to respond to and resolve study/design related problems, construction field problems and to attend Project related meetings.

PROJECT/PROGRAM STATEMENT: The Project/Program Statement is provided by the Department and defines the scope of the problem, describes why this Project is desirable, and provides a preferred resolution of the problem.

PROJECT TEAM: The Professional, the Project Director/Agency Project Manager, Department Field Representative, a representative of the State/Client Agency, and others as considered appropriate by the Department.

PUNCH LIST: A list of minor construction Project items to be completed or corrected by the Construction Contractor, any one of which do not materially impair the use of the Project work, or the portion of the Project work inspected, for its intended purpose. A Punch List shall be prepared by the Professional upon having made a determination that the Project work, or a portion of the Project construction work inspected, in concert with the Professional, the Construction Contractor, the Department, the Project Director/Agency Project Manager and their Department Field Representative, and any construction manager, is substantially complete and shall be attached to the respective DTMB-0455, Certificate of Substantial Completion form. This standard document form is a part of the "DTMB-0460, Project Procedures" documents package.

SOIL EROSION AND SEDIMENTATION CONTROL: The planning, design and installation of appropriate Best Management Practices (as defined by the most current version of the Department's Soil Erosion and Sedimentation Control Guidebook) designed and engineered specifically to reduce or eliminate the off-site migration of soils via water runoff, wind, vehicle tracking, etc. and comply with the Soil Erosion and Sedimentation Control in the State of Michigan as regulated under the 1994 Public Act 451, as amended – The Natural Resources Environmental Protection Act, Part 91 – Soil Erosion and Sedimentation Control. Soil Erosion and Sedimentation Control associated with this Contract will be monitored and enforced by the Department of Technology, Management and Budget, State Facilities Administration, Soil Erosion and Sedimentation Control Program.

STATE: The State of Michigan in its governmental capacity, including its departments, agencies, boards, commissions, officers, employees, and agents. Non-capitalized references to a state refer to a state other than the State of Michigan.

STATE/CLIENT AGENCY: A Department of the State of Michigan, for whose use the Project will ultimately serve, which requires professional design services.

SUBSTANTIAL COMPLETION: The form (DTMB-0445) stating that the Project work, or a portion of the Project work eligible for separate Substantial Completion, has been completed in accordance with the design intent of the Professional's Contract Documents to the extent that the Department and the State/Client Agency can use or occupy the entire Project work, or the designated portion of the Project work, for the use intended without any outstanding, concurrent work at the Project work site, except as may be required to complete or correct the Project work Punch List items.

SUSTAINABLE DESIGN: The Professional's use of a balance of appropriate materials, products and design methods that reduce the impact to the natural ecosystems and be within the Budget constraints of the Project. Sustainable Design shall be used wherever possible by the Professional in their Project design and an itemized list shall be provided with the Professional's Contract Documents that identifies the processes and products.

TASK: Shall mean the following: (1) A quantifiable component of design related professional study/design Task services required to achieve a Phase of the Project; (2) The most manageable sub-element within a study/design Phase; (3) A unique item of work within a study/design Phase for which primary responsibility can be assigned; and (4) Has a time related duration and a cost that can be estimated within a study, design, and construction Phase.

ARTICLE XIV COMPLETE AGREEMENT / MODIFICATION

This Professional Services Contract constitutes the entire agreement as to the Project between the parties. Any Contract Modification of this Contract and the Project/Program Statement scope of work requirements must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the State may require. No Contract Modification may be entered into to compensate the Professional for correcting, or for responding to claims or litigation for the Professional firm's final design Contract Documents/study/design errors, omissions or neglect on the part of the Professional.

APPENDIX 1

PROJECT/PROGRAM STATEMENT

APPENDIX 2

PROFESSIONAL'S PROPOSAL

APPENDIX 3 PROFESSIONAL CERTIFICATION FORMS

APPENDIX 4

OVERHEAD ITEMS ALLOWED FOR THE PROFESSIONAL SERVICES CONTRACTOR FIRM'S HOURLY BILLING RATE CALCULATION

APPENDIX 5 CERTIFICATES OF INSURANCE





DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET State Facilities Administration Design and Construction Division

REQUEST FOR PROPOSAL ADDENDUM NO. 01

This form identifies an Addendum to a Request for Proposal for Professional Services, and incorporates
interpretations or clarifications, modifications, and other information into the Request for Proposals.
Addenda will be numbered by the Project Director and distributed through SIGMA Vendor VSS as an
attachment.

TO:	DATE ISSUED
ALL PROPOSERS	December 7, 2022
PROJECT NAME	FILE NUMBER
2023 Environmental Services ISID	N/A
PROJECT DIRECTOR	PROPOSAL DUE DATE:
Indumathy Jayamani	Thursday, January 12, 2023

ADDENDUM ITEMS: (attach additional sheets and drawings if required)

This addendum is to clarify the date for questions.

Questions are to be emailed to Indumathy Jayamani at jaymanii1@michigan.gov, no later 2:00 p.m., EASTERN than on Friday, December 16, 2022

APPROVED BY:

PROJECT DIRECTOR Indumathy Jayamani

DATE December 6, 2022

STATE OF MICHIGAN

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET State Facilities Administration

3111 W. St. Joseph Street Lansing, Michigan 48917

ADDENDUM NO. 2

To: All applicants and interested parties Date: December 21, 2022

Subject: Department of Technology, Management and Budget (DTMB)

2023 Environmental Remediation ISID RFP Professional Environmental Consulting Services

Various Locations, Michigan

Request for Proposal

Please acknowledge receipt of this Addendum in your proposal.

Questions and Answers:

The following questions have been compiled to clarify answers to questions regarding portions of the RFP package:

- Q1. Please confirm only one sample 1-week period of field activity logs and a sample weekly report must be provided with the proposal and not under each scope area.
- A1. Confirmed.
- Q2. Based on the RFP text that Section II-4 is "not required at this time." Please confirm DTMB is not expecting the consultant to provide an outline or any response to this requirement in the proposal at this time and it will only be "required at the time of future assignments"?
- A2. Confirmed.
- Q3. Please confirm which format is required for a proposal response: A) Only one questionnaire is required for the entire submission with the appropriate scope categories checked, regions checked, and applicable references/personnel for each desired scope; or B) A questionnaire is required for each scope category checked with applicable references/personnel for that desired scope (understanding there likely will be repetition across multiple questionnaires from a single company)?

A3. Only one questionnaire is required for the submission.

Q4. Please confirm whether or not a standalone document addressing Sections II-1 through II-6 of the RFP is required with the Questionnaire as part of this document (II-5) OR can just the Qualifications Questionnaire be submitted as the primary headings of Sections II-1 through II-6 are addressed within the Questionnaire?

A4. Yes, a written narrative addressing Section II-1 through Section II-6 (Section II-4 is for reference only, see A2), must accompany the questionnaire.

Q5. The RFP asks the respondent to provide "...at least three (3) projects in the last five years closely related to each of the project types". Is it acceptable for the respondent to provide a project example(s) that was completed while under the employ of another company?

A5. No, the project's provided as example should have been completed by the company responding to the RFP.

Q6. The Questionnaire and Proposal Format Part I – Technical, appear redundant. The RFP includes, "NOTE: Any information provided in one location can be referenced as needed in other locations." Please confirm that statements such as, "Refer to Questionnaire Response 5.1." or "Refer to Proposal Response II-4." is sufficient if a response is provided in one of the two documents. Or is the format intentionally redundant and EGLE requires a response in both locations, with a more expansive response provided in the proposal response narrative?

A6. For any information that is already provided in the questionnaire, referring that information is sufficient.

Q7. The billing rate document example provided as II-2-A. Position, Classification and Employee Billing Rate Information is similar, but differs from the MS Word document 2023 Environmental Fillable Position Class Billing Rate Worksheet (rev 221205). Please confirm the MS Word document is the format to include in the submittal.

A7. Confirmed.

Q8. Will EGLE include a list of sites and project types that will be included in the ISID contract in Year 1?

A8. No.

Q9. Is there a limit or targeted number of vendors the Department/Advisory Committee will offer a contract?

A9. No.

Q10. May respondents modify the 2023 Environmental Questionnaire to include additional project reference information (i.e., Project 4 Reference Information, Project 5 Reference Information)?

A10. Yes.

Q11. Page 9 of the proposal states, "The following items B, C, and D will be required only at the time a proposal for an individual assigned project is requested."; however, the statement is followed by bulleted items A, B, C. Please clarify.

A11. Typo noted. The Bullets should have been named B, C, and D.

Q12. Section I-9 of the RFP ("Proposals") states "when uploading, your attachment(s) the attachment must be 6mb or less." Can a bidder's proposal consist of more than one attachment, each being less then 6mb?

A12. Yes.

Q13. RFP, Section II, Part 1 Technical; Section II-3 Personnel. Please provide further detail regarding what is meant by chronological.

A13. Resumes of all proposed Key Personnel should include the period the experience occurred.

Q14. RFP, Section II, Part 1 Technical; II-5 Questionnaire? Please clarify what is meant by "narrative addressing the items above".

A14. See A4.

Q15. Questionnaire, Article 1, subsections 3, requests an organization chart depicting key personnel and their roles for a typical assigned project. The projects under this contract are anticipated to include a wide range of scopes and required skill sets. Please provide additional detail on what constitutes a typical assigned project for use in developing the requested organizational chart.

A15. The organizational chart should note the Key Personnel and staff needed for the project types and services identified in the questionnaire.

Q16. Questionnaire, Article 1, subsections 5, states "provide a four-year rate schedule per position". What is being asked for here? Is this different from II-2-A Position, Classification and Employee Billing Rate Information?

A16. The same information is being requested in both places.

Q17. Page 6 of the RFP states "when entering the proposal amount, please enter the total cost amount as \$1.00", but the Project Statement states, "please enter the total cost for all phases as the bid amount." Which method is preferred?

A17. Discrepancy noted. Please enter the bid amount as "\$1.00" as stated in the RFP.

Q18. In section II-2 of the RFP (page 6) states that the bidder should "Indicate which of these individuals you consider to be "Key Personnel" for the successful completion of these project types, identify them by position and classification and provide their resumes." Should resumes only be included for individuals that meet the "Professional Key Personnel" criteria in the "Guidelines for Position Classifications" or can we include resumes for personnel we consider key, but may be considered non-key in the position classification criteria?

A18. Yes.

Q19. Section II of the RFP (proposal format) states that the proposal must be submitted in the format outlined. However, in subsection II-4 "Management Summary, Work Plan, and Schedule," it is noted that this section is for reference only. May we omit this section heading from our proposal?

A19. See A2.

Q20. Question 4 in Article 1 of the questionnaire asks about recent changes in organizational structure (e.g., management team) or control of your company. Please define recent.

A20. Any changes within the past 12 months.

Q21. Several of the questionnaire questions, especially in Article 5, appear to request a singular number answer (as a percentage or number of days/weeks). We believe it may be helpful to provide more context for several of these questions. Will that type of response be accepted, or shall we limit our response to the singular, numerical answer only?

A21. At a minimum the percentage is required.

Q22. Article 6 of the questionnaire includes 5 Key Personnel. Should these include only the "Level 4" key personnel as described in the Guidelines for Position Classification or all Level 3 and Level 4 Key Personnel. If the latter, may we add an attachment for additional Key Personnel beyond the 5 spaces included in the questionnaire?

A22. See A18. Additional spaces can be added as needed.

- Q23. In Article 6 of the questionnaire, questions 6.3 and 6.4 refer to the Professional Project Manager. Can you define "Professional Project Manager." Can this be more than one person?
- A23. Please refer to the Guidelines for Position Classifications. Yes, Project Manager, can be more than one person.
- Q24. The RFP asks in II-2 for an "Outline your experience with similar projects, sites, and clients as examples." The ask for similar project descriptions is repeated in II-6 and in Article 8 of the questionnaire. Is there a preference for which section includes the project examples?
- A24. Responses are required for both parts. Also, see A6.
- Q25. Page 6 of the Scope of Work document indicates that the Professional shall arrange for all its employees that will be working on a contaminated site to attend a health and safety training course, and/or a personnel protection course. Can you specifically identify which safety training courses are required?
- A25. The professional, needs to identify all training required by State and Federal laws for personal working on a particular site type, and ensure that their employees working on that project/site have the necessary training.
- Q26. RFP Page 8 and 12, Table II-2-A: Do we input employee names on this table? And classification (from "Guidelines for Position Classifications")?

A26. Yes.

- Q27. Under Article 8 of the Questionnaire, is it expected we provide three references overall that encompass all the service areas we select or three references per service area.
- A27. Please ensure you provide a minimum of three references per service area.
- Q28. Please clarify the preference provisions for Michigan-based firms. Preference is not stated in the RFP document, but it is stated in the Scope of Work, and a certification form is attached to the RFP. If there is a preference, how is it applied?

A28. None.

Q29. Are there any preference provisions for Small Business Enterprises or Disadvantaged Business Enterprises?

A29. None.

Q30. The RFP states that "The ISID contracts will supplement, but not replace, standard requests for proposals or qualifications as a method for obtaining professional services." Please clarify how this contract will be used to supplement other methods for obtaining professional services.

A30. ISID contract is a standalone method in addition to the standard request for proposal process.

Q31. The RFP states that "DCD reserves the option of requesting ...proposals from more than one professional for a particular project." Please clarify the conditions, metrics or process for how the DCD decides whether to ask multiple ISID contract-holders to submit proposals for the same project.

A31. This will be decided on a case-by-case basis.

Q32. Are any terms of this (sample) contract negotiable, including, but not limited to, subjects of Indemnification, defend and hold harmless, and limitation of liability?

A32. No.

Q33. The scope of work states "The Professional's personnel and the personnel of its sub-consultants/subcontractors will be required, if requested by the Agency Project Manager on behalf of EGLE's attorneys, to provide assistance to the State in the form of participation in legal actions against alleged responsible parties... including the preparation and execution of interrogatories, affidavits, and testimony as a fact witness... "The State will reimburse the Professional for such assistance as described above at the contractually approved rates for the Professional's personnel at the time services are required." May respondents submit classification-based labor rates for litigation support with the schedule of Position, Classification, and Employee Billing Rate Information, to be approved in the contract? And similarly, for Expert Witness Fees?

A33. The hourly billing rates for these types of services can be included.

Q34. Are subcontractors bound to contract rates (provided in the rate sheet)?

A34. No.

Q35. Can a sub (contractor) do lumpsum on the task orders?

A35. Payment of subcontractors is determined between the contractor and subcontractor.

Q36. Experience (questionnaire) – Do project examples need to be Michigan-specific (extra points?) or countrywide?

A36. Can be either.

- Q37. Personnel (questionnaire) Michigan based personnel required or given extra points?
- A37. No.
- Q38. Do sub-consultants need to complete the Environmental questionnaire?
- A38. No.

APPENDIX 2

PROFESSIONAL'S PROPOSAL



2023 ENVIRONMENTAL INDEFINITE SERVICES INDEFINITE DELIVERY (ISID)

PART I - TECHNICAL PROPOSAL

January 12, 2023





The Kramer Building 43980 Plymouth Oaks Blvd. Plymouth, MI 48170-2584

T (734) 454-9900

www.sme-usa.com

January 12, 2023

Indumathy Jayamani
Project Director
Department of Technology, Management and Budget
Business Services Administration
Design and Construction Division
3111 W. St. Joseph Street
Lansing, MI 48917

RE: Request for Proposals from Professional Service Contractors

Department of Technology, Management and Budget

2023 Indefinite Scope Indefinite Delivery (ISID) for Environmental

Services

Various Locations, Michigan Submitted via SIGMA VSS

Dear Ms. Jayamani:

SME is a large, regional engineering and environmental consulting service firm providing services throughout Michigan since 1964. SME is highly qualified to investigate, evaluate, design, and manage the implementation of abatement and remediation at sites of environmental contamination under Parts 201 and 213 of the Michigan Natural Resources and Environmental Protection Act (NREPA), 1994 P.A. 451, as amended; Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); and other relevant state/federal statutes and requirements. We are well suited to provide these services with qualified staff in eight Michigan offices.

We look forward to serving you on these projects. Attached are our qualifications. Please let us know if you have any questions regarding this submittal.

Sincerely,

SME

Daniel R. Cassidy, CPG Vice President

Attachments: Part I – Technical Proposal

Part II - Cost Proposal

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TABLE OF CONTENTS

II-1 GENERAL INFORMATION AND PROJECT TEAM	1
II-2 UNDERSTANDING OF PROJECT AND TASKS	2
II-3 PERSONNEL	4
II-4 MANAGEMENT SUMMARY, WORK PLAN, AND SCHEDULE	6
II-5 REFERENCES	7
APPENDIX A - PROFESSIONAL ENVIRONMENTAL CONSULTING SERVICES	
QUESTIONNAIRE	8
APPENDIX B – ORGANIZATIONAL CHART	76
APPENDIX C – KEY PERSONNEL RESUMES	78
SAMPLE FIELD NOTES	108
CERTIFICATION OF MICHIGAN BASED BUSINESS	133
RESPONSIBILITY CERTIFICATION	136

PART I – TECHNICAL

SME is pleased to respond to the Department of Technology, Management and Budget (DTMB) 2023 Environmental Indefinite-Service, Indefinite-Delivery (ISID) Request for Proposals (RFP) issued December 7, 2022. SME has received RFP Addendum No. 1 that was issued on December 7, 2022 and Addendum No. 2 that was issued on December 21, 2022. SME's completed Professional Questionnaire is included in Appendix A.

II-1 GENERAL INFORMATION AND PROJECT TEAM

SME's completed Professional Questionnaire includes general business information about SME. SME operates as a corporation and was incorporated and licensed in the State of Michigan in 1964. SME is headquartered in Michigan, and we plan to utilize Michigan based staff on your projects. Services for the proposed professional environmental ISID contract will be provided from our eight Michigan offices. SME

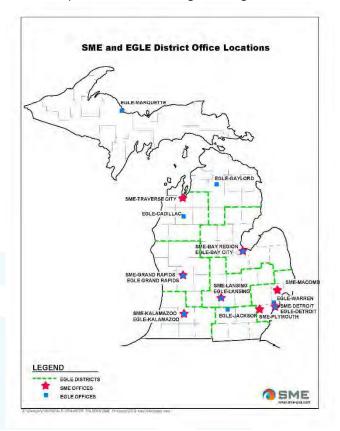
has offices located near each of the eight EGLE district office locations in Michigan's Lower Peninsula, which enables SME to effectively and efficiently cover the projects in these districts.

We have also partnered with the following subconsultants for specialized services: Worksmart, Inc. from Lawrence, Michigan, for geophysical services; A-Z Solutions, Inc. from North Canton, Ohio, for vapor intrusion remediation support; and Stock Drilling Inc., from Ida, Michigan for laser-induced fluorescence (LIF) services.

Daniel R. Cassidy, CPG will serve as the SME primary point of contact. His contact information is as follows:

Daniel R. Cassidy, CPG 43980 Plymouth Oaks Blvd. Plymouth, MI 48170-3584 phone: (734) 454-9900 mobile: (313) 960-7662

e-mail: dan.cassidy@sme-usa.com



A-Z SOLUTIONS, INC.

A-Z Solutions, Inc. has been the leader in vapor removal systems for over 10 years. They installed many of the first Sub-Slab Depressurization (SSD) Systems used for vapor removal in Ohio and have been successfully turning brown into green ever since. SSD technology provides a cost effective alternative for vapor intrusion mitigation as part of a site remediation, brownfield site cleanup, or superfund site cleanup. A-Z Solutions' research and development in SSD systems in the last ten years has enabled them to expand its use. SSD systems can be used to mitigate volatile organic compounds (VOC's) including methane, chlorinated solvents, and petroleum VOCs; radon; and other vapors from residential structures, commercial buildings, and industrial facilities. SSD systems can be installed with minimal disturbance to a building and its operation at a cost that is well below average for vapor intrusion remediation.

WORKSMART, INC.

Worksmart, Inc. is a ground penetrating radar (GPR System), surface penetrating radar (SPR), and electromagnetic (EM) company specializing in GPR and EM surveying and underground locating. Their state of the art GPR/EM equipment and trained GPR service specialists are experienced in locating underground storage tanks, voids, plastic pipes, and other underground objects as well as utility marking no matter the subsurface material composition.

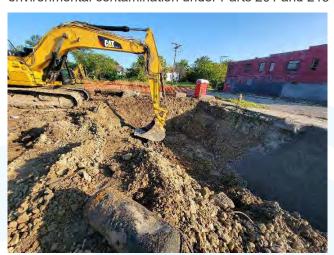
STOCK DRILLING, INC.

Stock Drilling is located in Ida, Michigan. Since its founding in 1996, Stock Drilling has worked diligently to provide all clients with professional, quality and reliable service. Stock Drilling Inc. provides environmental, geotechnical and residential drilling services. They are fully licensed and insured company with over 20 years experience in managing and performing all facets of environmental and geotechnical work.

Stock Drilling provides LIF direct imaging services utilizing Dakota Technologies UVOST® product. The UVOST LIF technique, in conjunction with direct push deployment, yields a detailed three-dimensional map of non-aqueous phase liquids (NAPL) distribution in real time.

II-2 UNDERSTANDING OF PROJECT AND TASKS

SME understands DTMB is requesting professional environmental services to investigate, evaluate, design, and manage the implementation of abatements/remedial activities at assigned sites of environmental contamination under Parts 201 and 213 of the Michigan Natural Resources and



Excavation of USTs and impacted soil at a former gas station.

Environmental Protection Act (NREPA), 1994 P.A. 451, as amended; Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); and other relevant state/federal statutes and requirements.

We understand the State anticipates selecting one or more professionals to be placed on a list to provide environmental services on small, urgent, and simple projects. We also understand the professional will be required to provide professional environmental services, technical staff, and support personnel for the ISID minor projects on an as-needed basis for various State/Client Agencies within the State of Michigan. The scope of work for each project will be defined at the time the project is awarded to the Professional.

We understand the typical environmental services to be performed at sites under the ISID contract may include but not be limited to:

- 1. Asbestos / Lead / Mold / Biohazard / Free Product / Regulated Waste Survey / Abatement
- 2. Brownfield Development
- 3. Ecological Risk Assessment / Forestry and Land Management / Wetland Mitigation / Streams and Lakes Restoration
- 4. Environmental Investigation / Characterization / Pilot Tests / Feasibility Study
- 5. Environmental/ Roto Sonic Drilling / Well Abandonment
- 6. Ground Penetrating Radar (GPR) / Laser-Induced Fluorescence (LIF) Field Screening
- 7. Landfill Maintenance / Monitoring

- 8. Nuclear Waste Management / Disposal / Remediation
- 9. Per-& Polyfluoroalkyl Substances (PFAS) Sampling / Mitigation / Remediation
- 10. Phase I / Phase II / Baseline Environmental Assessments
- 11. Remediation Systems Design / Construction Oversight / O&M / Decommissioning
- 12. Specialty Sub-Surface / Utility Inspection / Sewer Camera / Cleaning
- 13. Underground / Aboveground Storage Tank (UST/AST) Removal / Demolition / Soil Excavation / Closure
- 14. Vapor Intrusion Assessments / Risk Mitigation / Design / Installation / O&M Services

In the course of performing assigned projects, we expect that development of site-specific project work plans, health and safety plans (HASPs), quality assurance/quality control plans, and community relations plans may be required. In addition, we will be prepared to assist the State with assessing potential uncontrolled hazardous materials sites; asbestos/lead/mold/biohazard/regulated waste survey/abatement; obtaining required permits for the performance of the work; conducting work in a timely manner; confirming the security of the site and equipment; verifying compliance with the State Environmental Policy Act and local, State and Federal permit requirements prior to conducting remedial actions; providing enforcement support, such as documentation of facts and information about a site and expert testimony during enforcement proceedings; and



Dye tracing for stormwater outfall.

providing other program development and management assistance for the State departments/agencies. We understand this assistance may include review of plans, drawings, specifications, proposals, technical reports, and other work products associated with a hazardous substance/contaminated site where a release has occurred or is likely to occur; the assessment of environmental and public health risks; record searches; historical reviews; research on technical issues; and personnel training.



AST dismantling and cleaning.

SME has extensive knowledge and experience working with governmental clients on developing remediation/construction strategies, designing remedial investigations and remedial actions, preparing bid specifications, reviewing contractor responses to bids, assisting with contractor selection, and managing construction projects from start to finish. SME was awarded Environmental Services ISID contracts in 2015 and 2019. In connection with these two contracts, we have successfully completed more than 20 projects. Under these contracts, we have conducted remedial investigations for soil, groundwater, and soil gas; evaluated exposure risks and migration pathways; developed conceptual site models; and performed feasibility studies and cost analyses for selection of remedial actions at the various sites. We have prepared bid specifications for the removal of underground storage tanks and impacted soil, designed methane gas vents to mitigate subsurface methane gas, assisted EGLE with contractor oversight services, and collected verification of soil remediation

(VSR) samples. We have also performed MS4 Permit Services for five DTMB facilities. Our design and management of these projects have been completed on time and on budget. As needed, we have worked with contractors to resolve contract questions/disputes and have reviewed contactor submittals on behalf of our governmental clients.

In addition, SME has extensive capabilities in direct-push and hollow stem auger drilling for environmental investigations and monitoring/recovery/treatment well installation and abandonment. Since we have our own drill rigs and crews, we are intimately familiar with what it takes to properly evaluate sites. For this

ISID contract, drilling services will be selected through a bid process with three qualified contractors for each assignment. This will include selection of a contractor for rotosonic drilling, if required by the project.

We understand the EGLE laboratory or an overflow laboratory with an ISID contract will perform analytical testing unless the Agency Project Manager approves use of a current ISID Environmental Laboratory contract holder, an EPA – CLP lab, or another lab as deemed necessary by the State. Therefore, this proposal does not include SME-subcontracted analytical testing. If a private lab, other than an ISID State Contract Lab, is to be used to perform analyses, prior written permission by the Agency Project Manager will be obtained, and the private laboratory will be required to report data in a format consistent with the format used by the State and with the same level of detail regarding QA/QC documentation and chain or custody records.



Abandoned AST assessment prior to removal.

SME's completed Professional Questionnaire. located in **Appendix A**, provides information about SME's qualifications and experience with similar projects, sites. and clients. Article 1 of the Questionnaire provides SME's general business information. Article 2 identifies the project types and professional services for which SME is exceptionally qualified and experienced. Article 3 identifies the regions where SME can most efficiently provide services. Article 4 responds to our understanding of the contract, and Article 5 addresses SME's capacity and quality. Article 6 provides personnel information and Article 7 includes a list of SME's special qualifications that further demonstrate our expertise. Article 8 provides a client reference and brief descriptions of at least three projects in the last five years for each of the project types identified in Article 2.

SME has a current ISID contract (ISID Contract No. 000774) for environmental services, titled 2019 Environmental Services ISID, which is also for small,

simple, and urgent projects. SME also has a current contract for triage services (Contract No. 907) and is providing triage services in the Southeast, Jackson, Kalamazoo, Grand Rapids, and Bay City Districts. SME also provides services for DTMB through ISID contracts for professional design services as well as geotechnical and materials testing services. Many of our technical staff and accounting staff are very familiar with DTMB personnel and operating procedures.

II-3 PERSONNEL

SME has identified 11 key personnel to work on the ISID environmental projects. The key personnel team members are listed in Article 6 of the completed Professional Questionnaire. The project organization chart in **Appendix B** identifies the key personnel and illustrates authority and lines of communication. Resumes for each key staff member that show their education and specific project experience are included in **Appendix C**. The project organization chart also includes non-key personnel that have been tentatively identified for the project. The key and non-key personnel are listed on the Position, Classification and Employee Billing Rate Information in **Part II – Cost Proposal**.

As indicated on the project organization chart, **Daniel R. Cassidy**, **CPG** will be the primary point of contact and **Brian C. Berger**, **PE**, will be the program manager for the project. Brian will be assisted by **Sara I. Bals**, **EIT**, **Jason C. Lafayette**, **and Casey E. Smith**, **CPG**. Brian will act as principal engineer for the project and will be the lead for excavation, dewatering and off-site disposal projects. Sara Bals will provide quality assurance review and will be the lead for indoor air/vapor intrusion projects. Jason Lafayette will be the lead for abatement and demolition projects. Casey E. Smith, PG will serve as a project manager and provide additional technical expertise.



Daniel R. Cassidy, CPG is a Vice President and Principal with 25 years of experience. He leads SME's Environmental Services Business Unit including setting and implementing its business strategy, setting and executing its operational plan, providing senior technical project leadership, and risk management. Dan also advises public and private entities in the areas of urban and brownfield redevelopment strategies, environmental assessment of contaminated sites, remedial investigations, and environmental regulatory compliance and risk management. Dan also provides redevelopment financial

incentive support, has successfully written applications for over \$50 million in state and federal grant funding, assisted in acquiring a wide variety of financial incentives including tax credits, grants and loans. He has managed projects involving over \$250 million in state and federal incentives.



Brian C. Berger, PE manages investigations and assessments for a variety of environmental projects throughout Michigan. He has 25 years of experience designing and managing due diligence, due care, and remedial investigations for a variety of sites. He also provides industrial compliance services to clients throughout Michigan. Brian is experienced in the assessment and remediation of environmentally contaminated sites under Michigan's Part 201 (Environmental Remediation) and Part 213 (Leaking Underground Storage Tank) programs.



Sara I. Bals, EIT is a Senior Consultant at SME with 15 years of experience. She manages and provides consulting services for redevelopment projects, environmental due diligence services related to property acquisition, and liable party site investigations/monitoring and remediation. She manages SME's U.S. EPA brownfields grant program and coordinates preparation of and compliance with Quality Assurance Project Plans (QAPPs) for various grantee communities across Michigan, Indiana, and Ohio. She has assisted with the oversight and management of 10 assessment and revolving loan fund grants in the Michigan

including the development of QAPPs, HASPs, Sampling and Analysis Plans (SAPs), community outreach, cost tracking and budgeting, and reporting. Sara managed over \$500,000 in assessment of orphan LUST sites as part of the EGLE Expanded Triage project. She worked with EGLE staff to plan site work, coordinated geophysical surveys at each site, supervised completion of subsurface assessment and collection of soil and groundwater samples from each site, and prepared reports to document site assessment activities. She manages ongoing soil and groundwater assessment activities for a former manufactured gas plant (MGP, including oversight of semi-annual sampling, evaluation of exposure pathways, assessment of groundwater/ surface water interface potential, NAPL assessment and recovery, conceptual site model development, and regulatory reporting and has secured closure for multiple LUST sites. Sara also manages and works with senior staff to ensure that SME environmental group's standard operating procedures (SOPs) are up-to-date, accurate, and usable and provides internal SOP and QA/QC training.



Jason C. Lafayette serves as a Project Consultant in SME's environmental services group. He has more than 14 years of environmental experience performing and managing environmental due diligence and remediation projects throughout Michigan, Indiana and Ohio. He is an expert in assessment, design, and management of hazardous building materials and vapor intrusion risks. He works with developers, business owners, and prospective purchasers to understand their project objectives, identify their environmental and business risks, and design creative strategies to overcome development challenges and reduce project costs. Jason is accredited as an asbestos inspector and management

planner in Michigan and Ohio, and as an asbestos project designer in Michigan, Indiana, and Ohio. He has provided services on complex hazardous materials demolition projects, soil remediation excavation projects, and soil gas/methane mitigation projects to develop successful remediation strategies to facilitate safe and economical site redevelopment. He has a passion for building construction and

assisting with the redevelopment of abandoned, dilapidated, urban properties to provide safer areas, promote neighborhood beautification, and stimulate enriched and unified community growth. Since joining SME in 2005, Jason has transitioned from providing environmental field services to becoming a key resource for design of complex, subsurface, environmental investigation strategies, and managing asbestos and hazardous materials projects.



Casey E. Smith, CPG is a Senior Project Geologist with more than 15 years of experience. He provides services for various environmental due diligence, monitoring, assessment, and remediation projects. Casey has managed nearly 40 LUST site investigations as part of the EGLE Triage program and has prior experience with underground storage tank (UST) removal, assessment, and closure projects throughout lower Michigan. He is skilled at working with regulatory agencies, property owners, banks, industrial clients, developers, construction companies, real estate agents, and communities to address

environmental challenges associated with acquiring and developing property, and to fulfill liable party obligations, and navigate the complex regulatory requirements of Michigan's Natural Resources and Environmental Protection Act. Casey has specific experience with the Part 211 (Underground Storage Tanks) and Part 213 (Leaking Underground Storage Tanks) programs, and has extensive field experience with soil and groundwater sampling, monitoring well installation, environmental drilling methods, vapor intrusion assessments, and contractor oversight.

Other Key Personnel team members who will serve as project managers and/or consultants for the project are **Jeffrey R. Lanier**, **PE**, **Troy D. Helmick**, **CPG**, **Paul A. Glasser**, **CPG**, **Agnes R. Taylor**, **LPG**, **Sarah Wilson**, **and Jeff Evans**. The resumes attached in Appendix C provide detailed expertise and project information regarding each of these key personnel, as well as our subconsultants.

II-4 MANAGEMENT SUMMARY, WORK PLAN, AND SCHEDULE

As indicated in the request for proposals, a management summary, work plan, and schedule is not required for this submission. However, as stipulated in the request for proposals, we have included an outline of a work plan and methodology for projects assigned under this contract to provide a detailed understanding of services and deliverables to be provided. Our work plan will include:

- A detailed narrative for accomplishing the assigned project.
- A clear and concise description of each professional task, event, and deliverable required for project completion.
- Specific information for each project, versus a reiteration of language and task from the DTMB Professional Services Contract.
- A description of our constructability review and quality control plan.
- A detailed time sequenced-related undated schedule, showing each event, task and phase in the work plan, allowing time in the schedule for Owner's review.

Once a project is identified and SME is contracted, Daniel R. Cassidy, CPG will identify which of SME offices will provide staff for the project based on the project location, staff availability, and staff capability. He will then identify the project manager to be involved with the project and will engage them immediately to help address the appropriate scope and budget for services in accordance with the Statement of Work (SOW) provided by the State. SME will meet with EGLE or other State/Client Agency staff to discuss the scope of services. We will then prepare a budget and work plan for the project. Once the budget and work plan is approved by the State Project Manager, SME will submit a Professional Services Contract Modification to the DTMB. Upon our receipt of the Contract Change Order from the DTMB, SME will initiate services within 10 business days.

Each project will be assigned a separate project number to keep project information and billing separate. Progress reports will be prepared as required for individual projects. Deliverables will be provided in

electronic format and in hard copy, as requested. Invoices are normally prepared each month or following completion of the project.

II-5 REFERENCES

Article 8 in the completed Professional Questionnaires provide representative projects including references with contact information of previous clients for similar projects.

APPENDIX A

PROFESSIONAL ENVIRONMENTAL CONSULTING SERVICES QUESTIONNAIRE



Department of Technology, Management and Budget 2023 Indefinite-Scope Indefinite-Delivery – Request for Qualifications Professional Environmental Consulting Services Questionnaire Various Locations, Michigan

INSTRUCTIONS: Firms shall complete the following information in the form provided. A separate sheet may be used if additional space is needed; please key the continuation paragraphs to the questionnaire. Answer questions completely and concisely to streamline the review process. If you provide information in this questionnaire that is relevant to any other parts of the proposal, please reference the article numbers to avoid repetition.

ARTICLE 1: BUSINESS ORGANIZATION

Full Name: Soil and Materials Engineers, Inc. (dba SME)
 Address: 43980 Plymouth Oaks Blvd., Plymouth, MI 48170
 Telephone and Fax: (734) 454-9900 fax: (734) 454-0629

Website: www.sme-usa.com E-Mail: dan.cassidy@sme-usa.com

SIGMA Vendor ID: CV002109

If applicable, state the branch office(s), partnering organization or other subordinate element(s) that will perform, or assist in performing, the work: SME will support this work from regional offices in Saginaw, Detroit, Grand Rapids, Kalamazoo, Lansing, Traverse City, and Macomb, Michigan. We will also enlist help from our subconsultants, A-Z Solutions, Inc, Stock Drilling, and Worksmart, Inc.

If awarded a contract and / or subsequent assignment(s), state the specific SIGMA business address which you would like associated for all communication (Contracts, Contract Order, Contract Modifications and Payments)? 43980 Plymouth Oaks Blvd., Plymouth, MI 48170

Please list all person(s) authorized to receive and sign a resulting contract and / or subsequent assignment(s). Please include persons name, title, address, email and phone number. Daniel R. Cassidy, CPG, Vice President, 43980 Plymouth Oaks Blvd., Plymouth, MI 48170, (734) 454-9900, dan.cassidy@sme-usa.com. Louis J. Northouse, PE, Regional Vice President, 882 40th Street, Grand Rapids, MI 49508, (616) 406-1756, lou.norhthouse@sme-usa.com.

2.	Check the appropriate status:
	☐ Individual firm ☐ Association☐ Partnership☒ Corporation, or ☐ Combination –
	Explain: Click or tap here to enter text.

If you operate as a corporation, include the state in which you are incorporated and the date of incorporation: Michigan, March 3, 1964

Include a brief history of the Professional's firm: SME is a large, regional engineering and environmental consulting firm providing services throughout Michigan. SME has offices located near each of the eight EGLE district office locations in Michigan's Lower Peninsula. We also have offices in Indiana and Ohio. Our staff of professionals total more than 300 engineers, consultants, and technicians. Since 1964, our mission has been to add significant value to our clients' projects and become a trusted member of their project team. Our experts serve many markets in the built and natural environment, including state/local government, education, healthcare, commercial, development/redevelopment, energy, industrial, retail, telecommunications, transportation, and agriculture. The Engineering News Record (ENR) ranks our organization among the top 500 design firms within the United States. SME is highly qualified to provide environmental services under the ISID contract and scope of work. We have been a successful, growing, professional engineering consulting firm for 59 years; this could not have been accomplished without high quality, experienced, and knowledgeable staff and financial stability. During that time, we have provided professional environmental and engineering services at over 100,000 project sites. Our environmental services include remedial investigations, feasibility studies, environmental site assessments, hydrogeology, environmental remediation and response actions, and brownfield redevelopment. SME's environmental experience spans more than 30 years. Sites have included a variety of energy facilities (compressor stations, gas storage facilities, pipelines, energy production sites), manufactured gas plants, underground storage tank (UST) sites, gasoline service stations, dry cleaning facilities, commercial/retail establishments, educational facilities, municipal properties, urban brownfields, landfills, and manufacturing facilities. Contamination issues have included releases of petroleum products, solvents, coolants, metals, and PCBs, as well as impact from urban/industrial fill (e.g. metals and combustion products). Our environmental experience also includes hazardous materials services for assessment and abatement of asbestos, lead based paint, and other regulated wastes. It is not just our environmental knowledge and experience that sets SME apart – it is the skill in which we adapt practical approaches and solutions to environmental projects that will bring the greatest value to the State in providing quality services and assistance in bringing sites to closure and No Further Action (NFA) status. In addition, we have provided services for DTMB for over 40 years, and are familiar with DTMB processes. With our extensive DTMB experience, we are well versed in State of Michigan documentation and reporting requirements.

- 3. Provide an organization chart depicting key personnel and their roles for a typical assigned project. Include generic supporting staff positions. An organizational chart is provided in Appendix B.
- 4. Has there been a recent change in organizational structure (e.g., management team) or control (e.g. merger or acquisition) of your company? If the answer is yes: (a) explain why the change occurred and (b) how this change affected your company. SME has not had a recent change in organizational structure.
- 5. Provide a four year rate schedule per position. A four year rate schedule per position is provided in Part II Cost Proposal.

ARTICLE 2: PROJECT TYPES AND SERVICES OFFERED

Identify the project types and professional services for which your firm is exceptionally qualified and experienced. Contractor should have the capability to form potential teams with adequate experience in environmental investigation and remediation services. Provide attachments illustrating a minimum of three examples, with references, of successful projects performed in the last five years for each item checked. Identification of specialties will assist the State project directors/managers in matching firms with projects.



ARTICLE 3: PROJECT LOCATION

	tify the regions where your firm can most efficiently provide services. Assignments may from the regions checked, depending on the specialties and services required.
□ W	estern Upper Peninsula (west of Marquette)
□Е	astern Upper Peninsula (east of Marquette)
⊠ N	orthern Lower Peninsula (north of Grayling)
⊠ Sa	aginaw Bay area (east of 127, north of I-69 and M 57, south of Grayling)
⊠W	estern Lower Peninsula (west of 127, north of Muskegon, south of Grayling)
⊠ C	entral Lower Peninsula (east of Battle Creek, west of Chelsea, south of M 46 and M 57)
⊠ So	outhwestern Lower Peninsula (west of Battle Creek, south of Muskegon)
⊠ So	outheastern Lower Peninsula (east of Chelsea, south of I-69)
ART	TCLE 4: CONTRACT UNDERSTANDING
	following items should be addressed on the assumption that your firm is awarded an finite-Scope, Indefinite-Delivery contract. (See attached sample contract).
4.1	Is it understood that your firm is required to respond to small projects (less than \$25,000) as well as larger projects?
	Yes ⊠ No □
4.2	Is it understood that there is no guarantee of any work under this contract?
	Yes ⊠ No □
4.3	Is it understood that your firm will be required to execute the attached standard State of Michigan contract language for professional services?
	Yes ⊠ No □
4.4	Is it clearly understood that professional liability insurance is required at the time of execution of the ISID contract? (See Article 5 of the attached Sample Contract.)
	Yes ⊠ No □
4.5	Is it understood that your firm must comply with State of Michigan law as it applies to your services?
	Yes ⊠ No □

4.6

	Yes ⊠ No □
	If yes, explain: SME has provided services for the State of Michigan for over 40 years, including eight years of providing environmental ISID services under multiple contracts. SME has been providing services to DTMB/EGLE under various for more than five years. This successful relationship with the DTMB/EGLE, gives us a comprehensive understanding of DTMB/EGLE operations, design standards, construction, and contract administration. The map included in Part I Section II shows the locations of SME's offices throughout the EGLE districts. Our office locations allow us to to be responsive to projects across the Lower Penninsula.
ART	ICLE 5: CAPACITY AND QUALITY
5.1	Briefly describe your firm's methods and procedures for quality control for your deliverables and services.
	In order to provide quality, reliability, and excellence, SME has established a quality assurance program for the performance of our services. SME's quality assurance program includes licensure and certification of staff members, calibration of equipment, professional environmental and engineering review of data, and senior staff oversight and review. For major projects, SME establishes an in-depth quality assurance program, which identifies detailed responsibilities of staff, equipment needs, organizational structure for communication and responsibilities, as well as a thorough in-house review of anticipated services and procedures, providing continuous quality improvement to each project. The primary elements related to this project include communication through the Program Manager and Project Manager with review of deliverables by senior technical staff. For environmental services, we have developed and utilize standard operating procedures for environmental protocol, including following Quality Assurance Project Plans (QAPPs) to verify the quality, accuracy, and precision of analytical data generated as part of a project.
5.2	Has your firm been involved in claims or suits associated with professional services errors and / or omissions?
	Yes □ No ⊠
	If yes, explain: SME has not been involved in claims or suits associated with professional errors and/or omisions.
5.3	Will there be a key person who is assigned to a project for its duration?
	Yes ⊠ No □

Does your firm have prior experience working with the State of Michigan?

5.4 Please present your understanding of the relationship between your firm, the DTMB Design and Construction Division, and the State Agency for whom a project will be completed.

DTMB serves as the contract administrator, SME works directly for various state departments including MDOT, EGLE and MDNR through district project managers. SME has provided engineering and testing services directly to the State of Michigan on numerous projects for more than 40 years. We have also provided services as a subconsultant to a prime consultant under contract with the DTMB. We have provided environmental services for various departments within the State of Michigan government, such as MDNR and EGLE, using DTMB contracts.

5.5 Describe your approach if a bidder proposes a substitution of a specified material during bidding.

SME will notify the bidder that proposed substitutions will be reviewed with the design team and the Owner and an addendum will be issued if the proposed substitution is approved. In general, substitutions are not accepted unless they provide an advantage to the Owner (e.g. cost reduction or expedited schedule) while achieving the desired performance. If the substitution is not accepted and the request was made during the clarification period (normally ends one week before bid opening), a written response will be provided to all bidders.

5.6 Describe your approach if a contractor proposes a substitution of a specified material or detail with shop drawing submittals or in construction.

SME will review the technical merit of the proposed substitution with the design team. If the proposed substitution is considered technically feasible, then we will review the proposed substitution with the EGLE Project Manager to verify the proposed substitution is acceptable to the Owner. In general, substitutions are not accepted unless they provide an advantage to the Owner (e.g. cost reduction or expedited schedule) while achieving the desired performance.

5.7 How will your firm provide consistent and continuous communication pertaining to project activities and project status to the State of Michigan during the progress of projects?

SME uses a variety of tools to manage the flow of information throughout the various stages of a project. The nature of our services and the communication needs of the project team on each project are unique. Although the type of project controls can vary depending on the project, some typical communication tools include: phone conversations, face-to-face meetings, email (electronic communication), punchlists (record of work yet to be performed or work in non-conformance to be rectified), and video conference calls (Microsoft Teams or Zoom) with the project team and stakeholders involved in a respective project. Meetings are held as needed and/or as rquested by our clients. Documentation of meetings (e.g., meeting minutes and phone logs) are shared with appropriate team membes and are filed in the SME project file. We can also use Microsoft Outlook for scheduling and Microsoft Project for project planning monitoring of project status.

5.8 Does your company have an FTP or similar site for quick posting and distribution of information, drawings, field inspection reports, and other communications?

Yes ⋈ No □

5.9 Describe your method of estimating construction costs and demonstrate the validity of that method.

SME estimates construction costs by first developing a bid item list and calculating unit quantities for the particular project under consideration. In the case of remediation projects, unit quantities are dependent on the specific remedial method that is determined by a feasability analysis. Unit costs are then assigned to each bid item. The unit costs are typically estimated from costs received from recently bid projects, so the values reflect current market prices. We may also use MDOT Unit Pricing (where applicable), contractors, supplier unit pricing (where needed), and other sources (e.g., RS Means, etc). For unique work items or complex site conditions, we may request pricing assistance from specialty contractors. Unit quantities and pricing are tabulated by bid item and a select percentage of the total estimated construction costs are earmarked for contingencies. The contingency percentage varies by project, the level of design completed, etc. Construction cost estimates are subjected to an internal SME QA/QC review prior to issue. Historically, SME's engineering cost estimates have been in-line with bids received during the bidding process for a given project. This has allowed our clients to develop reasonable budgets that do not require revising after the reciept of bids.

5.10 Describe your approach to minimizing construction cost over-runs.

SME uses our technical knowledge and extensive project experience to develop thorough, well thought-out project bid documents. For remediation projects, we conduct site characterizations prior to the development of project bid documents to minimize the risk of a change in conditions during project execution. In addition, we provide effective construction monitoring and communication with the contractor and owner throughout the duration of the project to mitigate construction cost over-runs.

5.11 What percentage of the construction cost should be devoted to construction administration (office and field)?

The percentage of construction cost that should be devoted to construction administration can vary depending on project size, complexity, and duration. For projects to be performed for this ISID contract, the percentage of construction cost that should be devoted to construction administration are anticipated to range from 10% to 15%.

5.12 What portion of the assigned work will be performed with your staff and what portion will be provided by sub-consultants?

On a typical project, SME will perform 90% of the professional work and our subconsultants will perform 10%. The exception is for LIF assessments. For these projects, we may rely on our subconsultant Stock Drilling for a higher percentage of the work, depending on the project scope. This does not include reimbursable services performed by drilling subcontractors.

5.13 On a typical project, what would be your response time, from the time receive a project assignment to starting investigation and design work? A typical project might be one involving several disciplines and in the neighborhood of a \$25,000 fee.)

SME plans to initiate activities with EGLE within five business days of our receipt of authorization to proceed.

5.14 How do you assess whether a construction bidder is responsive and responsible?

SME regularly reviews submitted bids for our clients. The process typically includes review of the bidder's submission for completeness, appropriate signatures, and to verify that all requested documents have been fully completed and submitted as part of the bid, which typically also includes verifying the contractor has not modified the bid language. SME also reviews the contract values, unit rate items, and verifies the bidder's figures and totals are correct. This review may also include a review of how the bidder structured the bid, with a particular review of weighting of bid items, to look for irregularities. After review and approval of these several items, SME tabulates the various bids for review with the Owner. This review may also include insurance coverage, bond information, and preliminary construction schedules. SME may recommend that the bidders be short listed and brought in for interviews, if selection is not clear during the initial review process. When requested by the Owner, SME will also contact references provided by the bidder to obtain further qualification or past experience information. Upon conclusion of the bid review process, SME typically provides a written recommendation to the Owner for selection of the bidder. If requested by the Owner, SME will prepare a Notice of Intent to Award to the apparent awardable bidder and thank you letters for the non-selected bidders.

5.15 Describe your experience with similar ISID contracts.

SME currently provides services to DTMB through two ISID contracts: one for environmental services and another for specialized engineering and architectural design services. We are also providing environmental drilling and sampling services for EGLE Statewide Expanded Triage projects in the Southeast, Jackson, Kalamazoo, Bay City and Grand Rapids Districts. Many of our technical staff and accounting staff are very familiar with DTMB personnel and operating procedures.

5.16 Describe your approach to a construction contractor's request for additional compensation for a change in the project scope.

No out-of-scope work will be allowed without a written request and written approval. The requested scope change will be evaluated against the scope requested in the bid documents. A determination will be made as to whether the change should have been anticipated by the contractor based on the nature of the work. In addition, an evaluation will be made as to whether there was a material change in site conditions from those presented in the bid documents.

	experience site	of field activity logs detailing a 1-week period (from one of the three (3) pri s) and a weekly report provided? Please note, SME completes daily Field and does not typically prepare weekly reports.						
	⊠Yes	□No						
ARTICLE 6: PERSONNEL STAFFING								
6.1 Is an organizational chart that includes each person on your project team and their identified roles for a typical assigned project provided?								
	⊠Yes	□No						
		ne following information regarding the personnel your firm considers ul completion of the study or project scope of work:						
	Key Personnel 1							
	Name: Daniel R. Cassidy							
	Job Title: Vice President/Principal							
	Labor Classification: Level 4 (P4)							
	College Degree(s): Candidate for Juris Doctor, Wayne State University Law School							
	M.S., Business Administration, Wayne State University							
	B.S. with Honors, Environmental Geosciences, Michigan State University							
	Has this individual successfully completed 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training with an up to date 8 hour HAZWOPER refresher training? ⊠Yes □No							
	Key Personnel 2							
	Name: Brian C. Berger, PE							
	Job Title: Regional Leader/Senior Consultant							
	Labor Classification: Level 4 (P4)							
	College Degree(s): B.S., Geological Engineering, Michigan Technological University							
	Has this individual successfully completed 40-hour HAZWOPER training with an up to date 8-hour HAZWOPER refresher training? ⊠Yes □No							
	Key Personne	<u>3</u>						
	Name: Sara I.	als, EIT						
	Job Title: Seni	r Consultant						

Labor Classification: Level 4 (P4)

College Degree(s): M.S., Environmental Engineering, University of Notre Dame, B.S., Civil and Environmental Engineering, Northern Arizona University

Has this individual successfully completed 40-hour HAZWOPER training with an up to date 8-hour HAZWOPER refresher training? ⊠Yes □No

Key Personnel 4

Name: Jason C. Lafayette

Job Title: Senior Project Consultant Labor Classification: Level 3 (P3)

College Degree(s): B.S., Earth Science, Western Michigan University

Has this individual successfully completed 40-hour HAZWOPER training with an up to

date 8-hour HAZWOPER refresher training? ⊠Yes □No

Key Personnel 5

Name: Casey E. Smith, CPG

Job Title: Senior Project Geologist Labor Classification: Level 4 (P4)

College Degree(s): M.S., Earth Science (Hydrogeology and Environmental

Concentration), Western Michigan University; B.S., Natural Resource Biology and

Environmental Science, Central Michigan

Has this individual successfully completed 40-hour HAZWOPER training with an up to date 8-hour HAZWOPER refresher training? ⊠Yes □No

Key Personnel 6

Name: Jeffrey R. Lanier, PE Job Title: Senior Consultant

Labor Classification: Level 4 (P4)

College Degree(s): B.S., Civil and Environmental Engineering – Michigan State

University

Has this individual successfully completed 40-hour HAZWOPER training with an up to date 8-hour HAZWOPER refresher training? ⊠Yes □No

Key Personnel 7

Name: Troy D. Helmick, CPG Job Title: Project Consultant

Labor Classification: Level 3 (P3)

College Degree(s): B.A., Geological Sciences, Albion College

Has this individual successfully completed 40-hour HAZWOPER training with an up to

date 8-hour HAZWOPER refresher training? ⊠Yes □No

Key Personnel 8

Name: Paul A. Glasser, CPG Job Title: Project Geologist

Labor Classification: Level 3 (P3)

College Degree(s): M.S., Geology, Miami University B.S., Geological Sciences, Michigan State University

Has this individual successfully completed 40-hour HAZWOPER training with an up to date 8-hour HAZWOPER refresher training? ⊠Yes □No

Key Personnel 9

Name: Agnes R. Taylor, LPG Job Title: Project Geologist

Labor Classification: Level 3 (P3)

College Degree(s): M.S., Earth and Climate Sciences, Specialization in Geochemistry,

University of Maine

B.S., Earth and Environmental Sciences, Miami University of Ohio

Has this individual successfully completed 40-hour HAZWOPER training with an up to date 8-hour HAZWOPER refresher training? ⊠Yes □No

Key Personnel 10

Name: Sarah Wilson, EIT

Job Title: Senior Staff Engineer

Labor Classification: P3

College Degree(s): B.S., Civil Engineering, University of Tennessee – Martin

Has this individual successfully completed 40-hour HAZWOPER training with an up to

date 8-hour HAZWOPER refresher training? □Yes ⊠No

Key Personnel 11

Name: Jeff Evans, PS

Job Title: Senior Consultant

Labor Classification: Level 4 (P4)

College Degree(s): BBA, Business Administration, Cleary University

Has this individual successfully completed 40-hour HAZWOPER training with an up to

date 8-hour HAZWOPER refresher training? □Yes ⊠No

6.3 Does the Professional Project Manager (PM) have at least three years' experience as a PM? ⊠Yes □No

6.4 Does the Professional PM have a minimum of 10 years' experience with similar projects?

⊠Yes □No

6.5 Are the resumes for the key personnel provided?

⊠Yes □No

ARTICLE 7: SPECIAL FACTORS

Include a brief description of your firm's special qualifications such as awards, recognitions, innovations, etc. that would pertain to this RFP. (As examples: any awards or recognition received by the firm or individuals for similar work, special approaches or concepts developed by the firm appropriate to this project, financial capacity, etc. Respondents may say anything they wish in support of their qualifications).

SME has received numerous awards for environmental projects at the national, state, and local levels over the last 10 years including the following:

USEPA Phoenix Award (national brownfield excellence):

- limmy John's Field Utica, MI (2017)
- Accident Fund Insurance Headquarters Lansing, MI (2012)

AGC of Michigan - Build Michigan Environmental Award

M1 Concourse Development (2017)

Brownfield Renewal Award (national brownfield excellence):

- Riverwalk Redevelopment Rock Hill, SC (2013)
- Ventower Industries Monroe, MI (2012)
- Mason Run New Urbanism Residential Neighborhood Monroe, MI (2009)
- River Raisin National Battlefield Park Monroe, MI (2009)

ACEC Michigan Engineering Excellence – Eminent Conceptor Award (state level engineering excellence):

• Jimmy John's Field – Utica, MI (2017)

ACEC Michigan Engineering Excellence - Engineering Honorable Conceptor Award (Environmental)

- Beekman on Broadway Ann Arbor, MI (2022)
- Frank Rewold & Sons, Inc. Headquarters Rochester, MI (2021)
- Jimmy John's Field Utica, MI (2017)

Crew-Detroit – Special Impact Award (local level development excellence):

• Jimmy John's Field – Utica, MI (2016)

SME is recognized among ENR's Top 500 Design Firms, ranked #307 nationwide and #35 in the Midwest.

ARTICLE 8: PRIOR EXPERIENCE

PROVIDE A CLIENT REFERENCE AND BRIEF DESCRIPTIONS OF AT LEAST THREE (3) PROJECTS IN THE LAST FIVE YEARS CLOSELY RELATED TO EACH OF THE PROJECT TYPES AND PROFESSIONAL SERVICES REQUESTED IN THIS RFP. EMPHASIS SHALL BE PLACED ON RECENT WORK AT SITES OF ENVIRONMENTAL CONTAMINATION.

1. ASBESTOS / LEAD / MOLD / BIOHAZARD / FREE PRODUCT / REGULATED WASTE SURVEY / ABATEMENT

Project Name: Former K-Mart Battle Creek

Project Address: 200 Capital Avenue SW

Key Personnel: <u>Davin Ojala and Jason Lafayette</u>
Project City/State/Zip: Battle Creek, Michigan, 49017

Contact Name and Telephone #: Joe Sobieralski (269) 962-7526

Project 1 Description: SME was retained to conduct environmental due diligence activities to support the acquisition and potential redevelopment of the 10-acre parcel developed with an approximately 95,000 square-foot vacant store building and approximately 7,500 square-foot vacant automotive repair building (the Property). Historically the Property was developed with a residential neighborhood, including various roads, by 1902 until the 1960s when the residences and roadways were demolished and the two existing buildings and associated paved parking areas were constructed. The buildings were occupied by a K-Mart store and associated automotive repair center from the 1960s to the 2010s, when the buildings were vacated.

As part of the environmental due diligence activities SME conducted a hazardous materials assessment of the buildings for asbestos, lead-bearing and cadmium-bearing paints. Following the assessment, SME designed asbestos abatement/demolition technical specifications for inclusion into the construction manager's Base Bid document. SME also conducted abatement/demolition project administration and monitoring, including on-site air sampling and regulatory compliance monitoring services during the project abatement.

Project Name: <u>Bronson Hospital – Multiple Residences Demolition</u>

Project Address: Multiple Residences on Dutton Street, Rose Court and Rose Street

Key Personnel: <u>Davin Ojala and Jason Lafayette</u> Project City/State/Zip: Kalamazoo, Michigan, 49007

Contact Name and Telephone #: Greg Milliken (269) 341-7044

Project 2 Description: SME was retained to conduct pre-demolition hazardous materials assessment of six residences in downtown Kalamazoo to support demolition of the structures and facilitate future hospital expansion. Each of the structures consisted of a vacant, single-family residences that ranged in size from approximately 1,000 square-feet to 2,500 square-feet and were constructed on basement foundations. We conducted assessment activities to assist with the identification of asbestos-containing materials (ACMs), potential lead-bearing and cadmium-bearing paints, and other regulated materials and universal waste items.

Following the assessment, SME designed an abatement/demolition project for the structures. Because there were multiple structures and schedule constraints, SME's design included a phased approach to ensure that the project was completed by a specific date. SME prepared project abatement/demolition specifications, provided abatement/demolition contract bidding services and assisted in selecting a contractor. SME conducted abatement/demolition project administration and monitoring, including onsite air sampling and regulatory compliance monitoring services during the project abatement, demolition, and site restoration.

Project Name: Northland Mall

Project Address: <u>Eight Mile Road</u> Key Personnel: <u>Jason Lafayette</u>

Project City/State/Zip: Southfield, Michigan, 48033

Contact Name and Telephone #: Mr. Matt Slicker (HRC) / Mr. Al Aceves (City of Southfield), 248-454-6379
Project 3 Description: SME was retained by Hubbel, Roth, and Clark (HRC) to assist the City of
Southfield with hazardous materials consulting services for the former Northland Mall property. The
Northland Mall consisted of approximately 2 million square feet of enclosed retail development that
the City had acquired by tax foreclosure. Previous hazardous materials assessment had been
conducted in the mall, bid specifications for abatement and demolition were prepared, and a
significant hazardous materials abatement was initiated. Oversights in the previous assessment and
specification process, resulted in change orders totaling approximately three times the original
contract bid issued by the abatement contractor. HRC and the City contacted SME to assist in
rectifying the deficiencies of the previous assessment and bid design. SME conducted a detailed
review the previous assessment reports, specifications, and contractor payment applications; and
designed and executed a supplemental hazardous materials assessment of the mall
building. Subsequent to the completion of the supplemental assessment, SME prepared hazardous
materials abatement design and bid specifications, met with regulatory authorities, and assisted the
City with re-bidding of the project.

2. BROWNFIELD DEVELOPMENT

Project Name: Former Sakthi Automotive Site Redevelopment

Project Address: 6451 West Fort Street

Key Personnel: Paul Roberts

Project City/State/Zip: Detroit, Michigan

Contact Name and Telephone #: Fort Street Company Trio LLC, Bryan Wallick, CHMM, 313-774-1364

Project 1 Description: A commercial/industrial real estate developer requested SME's assistance with the assessment and remediation of a historical PCB release at a 1.2-million-square-foot, former automotive parts manufacturing office/warehouse building in Detroit. SME was already assisting the developer with the design and installation of an active sub-slab vapor depressurization system. The brownfield redevelopment consisted of improvements to the current building by constructing a connector building, underground storm retention system, and new utilities. The developer had an aggressive construction schedule in order to meet a strict deadline so that the tenant could move in and install manufacturing equipment (strict=if schedule not met, deal could fall apart).

We quickly reviewed large amounts of historical environmental data to develop a plan for subsurface delineation of PCB impacts. We also quickly coordinated with the EPA Region 5 TSCA coordinator to obtain approval of a Risk-Based Disposal Application for type-II landfill disposal of soils contaminated with PCBs under 40 CFR §761.61(c). We mobilized multiple drilling rigs and team members to advance over 60 borings and collected hundreds of soil samples within and adjacent to the existing building to help quide concurrent remedial excavation. We were monitoring the remedial excavation and assessing the extent of contamination to minimize disruptions to the construction schedule. Additional value was added by having field team members cross-trained to provide backfill-compaction testing services. We also obtained a permit to discharge treated construction dewatering effluent to the municipal sewer system. Brownfield redevelopment construction activities were able to continue mostly as planned and on schedule despite the PCB setback. We are in the process of finalizing a 40 CFR §761.61(c) closure application that will be submitted to EPA for review/approval.

Project Name: Livonia West Commerce Center 2 Redevelopment (LWCC2)

Project Address: 12950 and 13100 Eckles Road

Key Personnel: Mark Quimby, Anita Ketola

Project City/State/Zip: Livonia, ML

Contact Name and Telephone #: Mark Quimby, Ashley Capital, 734-394-1900

Project 2 Description: Ashley Capital, LLC, SME, The RACER Trust, and the City of Livonia worked together to redevelop southwest and northeast portions of the former GM and Delco Chassis Plant (an area of approximately 38.51 acres). The brownfield site was subject to RCRA corrective action and land and resource use restrictions were filed for the site. Prior corrective actions included the installation of a slurry wall to prevent the migration of impacted groundwater from leaving the site. The southwest portion of the site was developed with a high-quality distribution warehouse building and northeast portion was redeveloped with additional trailer parking areas. With help from the State of Michigan and the United States Environmental Protection Agency (USEPA), SME and the rest of the brownfield redevelopment team secured funding to address environmental challenges associated with the former automotive platting and other spills and releases associated with past automotive operations.

To facilitate this development, the existing building slab, foundations, pits, and utilities needed to be demolished and removed while maintaining the integrity of the previously installed remedial slurry wall. LWCC2 contracted extensive geotechnical, structural, and constructability evaluations to assess the viability of leaving the former concrete building slab in place; however, the risk of differential settlement was determined to be unacceptably high due to variable slab thickness, inconsistent fill thickness and placement, potential for voids, and the unknown nature of historical utilities. SME worked with RACER Trust to develop a material management plan to manage on-site soils, to characterize the former concrete building slab, and to properly place and re-use impacted and non-impacted concrete as engineered fill.

In addition, a portion of the brownfield site included a former automotive plant basement area that had been filled with unknown materials. The presence of unconsolidated fill materials presented a significant challenge for construction of the building in this area and posed a higher risk of settlement. Because the building was to be constructed over the fill material that was left in place to limit project costs, a more complex foundation design was developed to prevent foundation settlement and cracking. This portion of the building was supported by Geopiers, which consisted of aggregate piers installed on a grid that provide load bearing capacity while also improving the surrounding soils during installation. The method does not generate spoils when the holes for the piers are installed using a reverse auger method. Therefore, this methodology also alleviated the need to excavate and dispose of contaminated fill during the foundation construction process. This created a suitable platform upon which to construct this portion of building and limited the amount of additional impacted soil that needed to be exported to a landfill.

Throughout construction, SME staff were on site to provide environmental and construction monitoring services including ambient air screening services, health and safety and due care plan communication, brownfield incentive documentation, geopier installation oversight, and concrete and pavement testing.

Project Name: Tri-County Commerce Center 2 and 3

Project Address: 1420 and 1430 East 10 Mile Road

Key Personnel: Mark Quimby, Anita Ketola

Project City/State/Zip: Hazel Park, Michigan 48030

Contact Name and Telephone #: Mark Quimby, Ashley Capital, 734-394-1900

Project 3 Description: Ashley Capital, LLC, SME and the City of Hazel Park worked together to redevelop a former unregulated landfill brownfield site (most recently the Hazel Park Raceway) and construct two high-quality distribution warehouse buildings in metro Detroit. With help from the State of Michigan, SME and the rest of the redevelopment the team secured funding to address environmental challenges and constructability issues associated with building on a landfill.

Redeveloping the approximately 96-acre unregulated landfill brownfield site posed many challenges, including dealing with 6 feet to 14 feet of waste material that was buried at the site, dewatering a 3-acre aesthetic pond, and other dewatering to removed perched groundwater for utility installation under a GLWA Special Discharge Permit. Another challenge was establishing an area for building construction. Simply grading the site and removing waste material was not an option due to the costs associated with disposing the waste at a licensed landfill. SME led the team to evaluate numerous grading and foundation scenarios to reduce the impact of contamination and settlement risks. The final plan incorporated geopier foundations for site structures in a grid that provided load bearing capacity while also improving the surrounding soils during installation and confine the waste and soil that was to remain on site.

SME also designed environmental response measures to protect the future warehouse occupants and the environment from the waste materials and related contamination hazards including methane gas. We worked closely with the EGLE, contractors, and suppliers to design and monitor a passive methane and VOC mitigation system beneath enclosed building spaces to collect and vent methane gas away from the buildings. The mitigation system includes 1) passive sub-slab venting with vent risers, 2) vapor-barrier system, 3) sub-barrier pressure ports to document post-installation connectivity of the venting systems, and 4) methane alarms installed within building that are connected to the fire alarm system. The pavements and landscaped areas included demarcation barriers of a geotextile fabric layer to cover the waste materials, and prevent direct contact of landfill soils, with clean topsoil and pavements.

Throughout construction, SME staff were on site to provide environmental and construction monitoring services including ambient air screening services, health and safety and due care plan communication, brownfield incentive documentation, geopier installation oversight, concrete and pavement testing, and vapor mitigation system installation. SME also conducts the post-installation inspection of the methane mitigation system.

3. ECOLOGICAL RISK ASSESSMENT / FORESTRY AND LAND MANAGEMENT / WETLAND MITIGATION / STREAMS AND LAKES RESTORATION

Project Name: Sheboygan River and Harbor Superfund Site

Project Address: 428 Cleveland Street

Key Personnel: Keith Egan

Project City/State/Zip: Sheboygan Falls, Wisconsin

Contact Name and Telephone #: Mark Mathers (Assured Administration dba PRS), 513-518-2762

Project 1 Description: Located on the western shore of Lake Michigan, approximately 55 miles north of Milwaukee, Wisconsin, the Sheboygan River and Harbor Superfund site includes the lower 14 miles of the Sheboygan River from Sheboygan Falls to the Sheboygan Harbor. Industrial activities along the Sheboygan River released polychlorinated biphenyls (PCBs), heavy metals, and oil residues within the waterway and the surrounding environment. The former Tecumseh Product Co. plant in Sheboygan Falls, located on the upper river, is considered the primary source of PCB contamination in the river sediment. PCBs have been detected in fish, wildlife, surface water, sediments in the harbor and river, and in floodplain soils. As a result, in 1987 the U.S. EPA designated the lower 14 miles of the Sheboygan River a Superfund Site. The U.S. EPA and the Wisconsin Department of Natural Resources are overseeing cleanup of the contaminants in the river system.

Pollution Risk Services has been tasked with implementing the cleanup in accordance with Superfund regulatory requirements. It's not uncommon that when faced with such a daunting task requiring in-depth knowledge of the regulatory maze that will drive the project, owners and responsible parties become quickly overwhelmed. Pollution Risk Services turned to SME to help them wade through the regulations and prepare a plan that was both compliant and sensible. Based on our unique knowledge of the site history, our in-depth understanding of applicable regulatory requirements, and our record for negotiation and collaboration with the U.S. EPA, SME was retained to manage the mammoth on-going monitoring and remediation oversight and regular discussions with the U.S. EPA, the ultimate project goal is to achieve a Remediation Complete Certificate from the U.S. EPA.

Since 2015, SME has been working to restore the site to its pre-impacted condition, negotiating remediation and monitoring strategies with the U.S. EPA, and monitoring the post remedial reduction of PCBs in the river through sediment and fish sampling. We annually monitor groundwater and provide recommendations about how groundwater might impact the river. We prepare annual reports to summarize the project status for review by the U.S. EPA and Wisconsin DNR. We also perform sediment sampling along the entire river every five years until the sediment concentrations are safe for wildlife and humans.

We worked with the U.S. EPA to revise the Record of Decision to no longer require breakwater inspection and maintenance for outdated remedial requirements, which resulted in more efficient and timely remediation and reduced overall costs. Ongoing monitoring will continue for fish and river sediment until they reach regulatory target levels or 2043, whichever comes first.

Project Name: Former Rogell Golf Course

Project Address: 18600 and 18601 Berg Road

Key Personnel: Paul Glasser

Project City/State/Zip: Detroit, Michigan

Contact Name and Telephone #: City of Detroit General Services Department, Jeff Klein, PLA, ASLA,

313-400-5014

Project 2 Description: The City of Detroit plans to convert a former golf course into a public park, natural area, and event space. The park will include walking paths, pedestrian bridges, lawn areas, and vistas for nature viewing. The Site's topography consists of many natural hills, swales, and wetland areas. During the nearly 100 years of golf course operations, portions of the property became contaminated with arsenic, lead, mercury and pesticides due to the historical application of pesticides, herbicides, and fungicides. The presence of contaminated soil presented a design and construction challenge for the proposed park. A key question was whether it would be feasible/safe to construct the park and open access to the Site by the public if contamination was too widespread/severe.

We conducted multiple phases of environmental activities, including due diligence and remedial assessment. Our project team developed and implemented assessment strategies in coordination with EGLE and the City of Detroit to support due care planning for the future park. Through detailed review of historical Site information, targeted soil assessment conducted by SME (hundreds of samples analyzed), soil-type specific analyses, use of statistics (95% UCLs), and our experience having assessed other historical golf course sites, we were able to conclude that contamination posing due care concerns were concentrated almost exclusively in the former putting green areas; this meant much of the Site was not impacted and the City could essentially build the park the way they hoped to, rather than making significant design changes due to contamination.

With respect to wetlands/sediments, arsenic in soil/sediment presented the biggest potential challenge for feasibly building the park. We prepared a technical memorandum to comprehensively summarize information to facilitate EGLE's review/approval of site-specific arsenic criteria for soil. In response to SME's memo, EGLE approved a site-specific arsenic value, which eliminated the need for costly and undesirable design features (e.g. fencing all wetlands).

We are still actively working with EGLE and the City on this project. We have received EGLE comments on a draft Response Activity Plan to Comply with Section 20107a(1)(b) and we will be submitting the final plan to EGLE in Q1 2023.

Project Name: 21700 Novi Road – Wetland Assessment

Project Address: 21700 Novi Road

Key Personnel: Alexander Kriebel, Sarah Wilson, and Jeff Evans, PS

Project City/State/Zip: Novi. Michigan

Contact Name and Telephone #: Gordon Kolb, Jr. 504-866-7300

Project 3 Description: Located in Novi, Michigan adjacent to Thornton Creek, the project site is the former Novi Bowl and Lounge property. The client plans to redevelop the approximately 4-acre property for a self-storage facility. As part of the planning process, the client asked SME to perform a wetland delineation and tree survey.

SME conducted field and office work to assess and delineate the possible wetlands. For the work, internet research as well as field surveying was conducted to determine the presence and approximate boundary of any present wetland on the proposed project boundary.

The initial project boundary information was provided by the client prior to the survey work beginning. SME utilized available online resources, including available U. S. Geological (USGS) topographic quadrangle maps, U.S. Department of Agriculture Soil Survey Online Database maps, Michigan Department of Environment, Great Lakes, and Energy (EGLE) wetland maps, historical aerials, and county maps. These maps were used to assist in the development of a field investigation plan. Data from sampling locations throughout the survey area were collected to intersect plant community cover, changes in soil type, and other developed areas of interest from historical aerial and satellite imagery.

SME Survey Specialist reviewed the area of interest in accordance with the U.S. Army Corps of Engineers standards for delineation. This involved looking at the hydrologic features, soil types, and fauna and flora found on site to determine the presence or absence of wetlands.

Based upon the data, criteria, and evidence noted, SME determined there were two contiguous wetlands on site. The wetlands were designated and flagged as Wetland A and Wetland B. There were areas along the rear of the asphalt parking lot on site that had phragmites growing from cracks. The tar had peeled up and there was heavy evidence of standing water in the area. This area was included in the wetland survey area as the parking lot abruptly ended right in the emergent marsh and had strong indications of having been or trying to return to its natural wetland state.

SME submitted a request to EGLE for wetland identification through the Wetland Identification Program (WIP). This program provides applicants with a jurisdictional guarantee of wetlands and wetland boundaries within an identified area of land. The WIP report and maps will be guaranteed for three years from the date of the report and allow for the client to obtain required permitting to develop the site.

4. ENVIRONMENTAL INVESTIGATION / CHARACTERIZATION / PILOT TESTS / FEASIBILITY STUDY

Project Name: Confidential Solar Field project

Project Address: Approximately 1,750 acres of land

Key Personnel: Casey Smith, Sara Bals, Megan Schaner

Project City/State/Zip: Calhoun County, Michigan

Contact Name and Telephone #: Confidential – will provide on request

Project 1 Description: SME's client is planning on leasing or acquiring approximately 1,750 acres of rural land to support construction of multiple solar farms. The area has an extensive history of oil and gas production activities as well as over 100 years of agricultural activities. A Phase I ESA completed by another consultant identified potential concerns associated with the current and historical oil and gas production activities including six active wells, over 35 plugged or abandoned wells, and numerous aboveground storage tanks (ASTs); an onsite natural gas pipeline; a reported "explosion" that occurred near an oil well; a reported oil well blowout that blew crude oil into the bedrock formation in the area; the reported release of crude oil from an oil well that flowed into a drain tile and drainage ditch; the long term storage or pesticides and herbicides associated with agricultural operations; and known impact on several of the included parcels of land.

SME was contracted to conduct an initial assessment of the potential concerns to assist the client with solar farm development planning and evaluation of their due care obligations. The assessment include completion of 28 soil borings, installation of numerous temporary monitoring wells across the site, and collection of soil and groundwater samples for analysis. Due to the potential use of firefighting foam for the reported explosion, the assessment included the collection of samples for analysis of per- and polyfluoroalkyl substances (PFAS). The field work for the assessment has been completed and the soil and groundwater results compiled. SME is currently working with the client to evaluate the results, determine what additional assessment may be needed, and develop a plan for meeting due care obligations and liability protections for ownership.

Project Name: Former BE Morrow Site

Project Address: 6800 East Michigan Avenue

Key Personnel: Sara Bals, Aaron Lammers, Megan Schaner

Project City/State/Zip: Comstock Township, Michigan 49048

Contact Name and Telephone #: Mr. Brian A. Trent, PE., Consumers Energy, 517-788-2160 Project 2 Description: The Site was purchased by Consumers Energy in 1937 and developed with a power plant that began operations in 1939. The power plant was initially fueled by coal and was converted to natural gas fuel in 1959, and oil fuel in 1968. In July 1982, Consumers Energy ceased operation of the power plant. STS Hydropower (STS) purchased the site in 1983 to build a hydroelectric plant associated with the Morrow Lake dam. Consumers Energy has maintained ownership of the substation and natural gas peaker unit areas that adjoin the Site. During the late 1980s and early 1990s, various groundwater monitoring wells were installed on the Site to evaluate potential impact on the Site associated with historical underground storage tank (UST) releases as well as a diesel fuel spill from a locomotive engine in the onsite diesel house that occurred in 1957. These wells were sampled by various entities in the 1980s and early 1990s and were also sampled as part of the UST assessment activities in 1994 and 1995. The Site went through various ownership changes between the 1990s and 2014, with the primary use of the Site being a salvage and storage yard for all kinds of equipment, building materials, vehicles and vehicle parts, and scrap materials. For much of the late 1990's and early 2000's, Consumers was seldom granted access by past property owners. By 2014, the site had come under new private ownership, and Consumers was allowed access to conduct additional assessment.

Between 2019 and 2020, in an effort to further delineate current soil and groundwater contamination at the site, SME performed additional subsurface investigation and sampling activities. SME advanced 12 soil borings in the areas of previously identified impact, collected soil samples from these locations, and converted most of the borings to permanent groundwater wells. SME then collected groundwater samples from these new wells as well as the accessible permanent wells that remained from the historical onsite activities. Groundwater samples were collected for three consecutive quarters. Based on these results, it was determined that impact remained in the area below the diesel house (the location of the 1957 locomotive diesel spill). The Site owner demolished the diesel house in early 2020 and left the building concrete floor slab and below-grade pit (pit was historically used to by service workers to get under diesel locomotive and complete repairs). In December 2020, Consumers Energy then had the concrete floor slab and below-grade pit demolished and petroleum impacted soil excavated from below the building footprint. A fourth quarterly groundwater sampling event was conducted after the demolition and soil removal activities to support preparation of a closure report for the various onsite releases.

Project Name: The Yard

Project Address: 615 South Main Key Personnel: Troy Helmick, CPG

Project City/State/Zip: Ann Arbor, MI 48104

Contact Name and Telephone #: Collegiate Development Group, Tim VanMatre, 314.488.4477;

Campus Apartments, Stephen MacBeth, 215.243.7860

Project 3 Description: <u>Capitalizing on a prime location near downtown Ann Arbor, Collegiate Development Group and Campus Apartments developed an urban apartment community at the corner of South Main and East Mosley called The Yard.</u>

The property's history dates back to before 1900, when its first uses included a feed mill, residence, carriage maker, and blacksmith shop. Over the span of the next century, the site was used for a variety of industrial and commercial activities, including vehicle repair and storage, commercial laundry and dry cleaning, gasoline service station, commercial distribution, automotive parts manufacturing, and retail sales. The various past activities all involved the use of hazardous materials and petroleum products.

SME conducted multiple environmental investigations that revealed the presence of severely contaminated soil and groundwater. Tetrachloroethene and degradation products, volatile aromatic and polycyclic aromatic hydrocarbon components of gasoline, arsenic, mercury, selenium and lead. Contamination on the site posed a threat to future occupants of the development and the adjoining underground Allen Creek Drain, a major stormwater conduit through Ann Arbor to the Huron River.

SME's project team performed the environmental investigations and due diligence for property acquisition and assisted in designing a redevelopment plan that complied with Michigan's Part 201 due care obligations and included: a development-compatible mitigation approach for solvent vapor intrusion; procedures to remove and dispose more than 80,000 tons of contaminated soil and 4 million gallons of contaminated dewatering effluent; cleaning and removal of one known and three discovered USTs; and geotechnical design of an auger-cast pile barrier wall to prevent commingling of contaminant plumes from an adjacent gasoline station site and provide shoring for garage excavation. SME also developed remediation plans for addressing off-site contamination in adjoining road rights of way.

SME coordinated with the design and construction team to provide a clear understanding of the required environmental tasks, respond to discoveries of three previously-unknown USTs, and monitored site activities during excavation and dewatering activities. The new development was successfully completed.

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Project Name: Former Kalamazoo Manufactured Gas Plant (MGP) Site - Consumers Energy

Project Address: <u>South Pitcher Street and East Lovell Street</u>
Key Personnel: Sara Bals, Aaron Lammers, Megan Schaner

Project City/State/Zip: Kalamazoo, Michigan 49007

Contact Name and Telephone #: Mr. Brian A. Trent, PE., Consumers Energy, 517-788-2160

Project 1 Description: Since the 1990s, SME has conducted remedial investigations, defined the extent of residual and non-aqueous phase liquids (NAPL), performed risk evaluations, developed a conceptual site model (CSM), evaluated remedial alternatives, and implemented selected remedies at the former Kalamazoo MGP site. A primary component of this work has been the installation of over 65 groundwater monitoring wells on the former MGP site and various adjoining sites. These wells have varied in depth from approximately 5 feet to over 125 feet.

The most recent well installation activities were completed in 2018 and 2022. They included the installation of three, shallow, semi-permanent wells along South Pitcher Street to evaluate potential GSI concerns associated with the nearby Portage Creek, the installation of three nested well sets and one single deep well, and the installation of three, shallow, permanent wells along an onsite building to further delineate groundwater impact and assess vapor intrusion concern. The semi-permanent wells were installed in the road right-of-way using direct-push equipment. SME negotiated a right-of-way permit with the City of Kalamazoo to support the installation of these wells. The three nested well sets each included multiple depth wells installed adjacent to one another. These wells were installed on property owned by the Kalamazoo Nature Center that is adjacent to Portage Creek. The Nature Center recently worked to support the restoration of this area back to its more natural state (removing creek bank and other area debris, replanting the areas along the creek, and creating a trail along and lookout over the area); therefore, as part of the well installation activities, all equipment used had to be cleaned prior to site entry to prevent transfer of invasive species and all drilling spoils and ground water had to be collected and properly disposed at an off-site facility. Furthermore, the wells had to be installed with flush mounts to minimize their impact on area aesthetics. It is anticipated that all these wells will be used to define the final "edge" of the MGP related impacted groundwater and allow Consumers Energy to begin preparing a No Further Action (NFA) submittal for the site.

Project Name: Engineering Tube Specialties – ISID project

Project Address: <u>85 Myron Street</u> Key Personnel: <u>Troy Helmick, CPG</u> Project City/State/Zip: Ortonville, MI

Contact Name and Telephone #: Terri Golla, MDEQ-RRD Project Manager, 586-753-3813

Project 2 Description: <u>SME provided environmental services to investigate a release of trichloroethene</u> (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE) from the site. <u>SME was retained by MDEQ using our ISID contract #545.</u> <u>SME's environmental team conducted multiple investigative services that included:</u>

- vertical aquifer profiling of the groundwater collected discrete groundwater samples from selected intervals starting at 60 feet below ground surface (bgs) up to 5 feet bgs;
- <u>soil classification and grain size analysis conducted continuous soil classification to 60 feet bgs and provided laboratory services to conduct soil sieve analysis of a selected soil interval;</u>
- groundwater monitoring well installation and low-flow groundwater sampling provided oversight
 of the installation of monitoring well installation and conducted low-flow groundwater sampling of
 selected monitoring wells;
- soil gas monitoring point installation and soil gas sampling provided oversight of the installation of a soil gas monitoring point and conducted soil gas sampling;
- evaluation of groundwater and soil gas sample laboratory results evaluated the laboratory results for comparison to Part 201 generic clean-up criteria and volatilization to indoor air interim action screening level exceedances;
- <u>elevation survey of groundwater and groundwater flow direction conducted a groundwater elevation survey of selected monitoring wells and developed a groundwater flow map of the shallow water-bearing unit; and</u>
- <u>waste characterization for determination of waste disposal options collected composite soil samples for determination of hazardous or non-hazardous waste disposal protocols associated with potential chlorinated VOC contaminated soils collected during assessment activities.</u>

Project Name: Calhoun County Road Commission (CCRC) Battle Creek Facility

Project Address: 1040 South Raymond Road

Key Personnel: Sara Bals, Davin Ojala, Aaron Lammers, Megan Schaner

Project City/State/Zip: Emmett Township, Michigan 49014

Contact Name and Telephone #: John Midgley, Calhoun County Road Department, 269-781-0034

Project 3 Description: Since the mid-2000s, SME has been assisting the CCRC with the assessment of sodium and chloride impact in groundwater at their Battle Creek Road Commission Facility. We have also assisted with the reevaluation of a historic release associated with a former onsite underground storage tank (UST). The main component of this work has been the compilation and evaluation of historical groundwater data and the planning and installation of new groundwater wells to support delineation of the onsite impact and evaluation of potential offsite migration of the groundwater impact.

The site is partially wooded land located in a rural area in Calhoun County and there are variations in the ground surface elevation of over 25 feet. These site features make the installation of wells logistically challenging and have historically resulted in well locations that do not provide adequate coverage of the site. SME's most recent well installation activities were completed in December 2019. They included the installation of one shallow, permanent well near the area of salt storage and four sets of nested wells (two or three wells in each set) near the site boundaries and near the onsite operations building, In order to determine the best depths to set the well screens for the nested well sets, we conducted vertical groundwater profiling during drilling using a chloride probe. The wells were installed at depths ranging from approximately 20 feet to 75 feet below ground surface. Based on the results of the initial sampling of the newly installed wells, the extent of onsite sodium and chloride impact appears to be delineated and the area of potential offsite migration has been identified. Sampling of all the onsite monitoring wells is ongoing as the CCRC evaluates how to best proceed with determining the extent of offsite concerns and how they relate to area drinking water wells.

6. GROUND PENETRATING RADAR (GPR) / LASER-INDUCED FLUORESCENCE (LIF) FIELD SCREENING

Project Name: Blodgett Hospital UST Replacement and Primary Electric Feed GPR Survey

Project Address: 1840 Wealthy Street SE

Key Personnel: Casey Smith

Project City/State/Zip: East Grand Rapids, Michigan

Contact Name and Telephone #: Bruce DeVrou, CGM, Corewell Health, 616-450-7500

Project 1 Description: Corewell Health and Diekema Hamann Engineering are working on designing a new aboveground storage tank (AST) system for Blodgett Hospital's backup generator system. The generators are currently fed through two, 10,000-gallon diesel underground storage tanks (USTs). SME is working with Corewell Health and Diekema Hamann to plan for UST system removal and for placement of the new ASTs. The new AST system will be located in an area outside the hospital with approximately 18 feet of vertical ground elevation change within the proposed work area. The area is also the location some of the hospital's primary electrical feeds.

SME, in conjunction with WorkSmart, Inc. of Paw Paw, Michigan, conducted a geophysical survey using ground penetrating radar (GPR) and two different electromagnetic (EM) utility locaters to search for the primary electric feeder lines and associated duct bank. The results of the geophysical survey identified a linear anomaly indicative of the primary electric feeder lines in an area in close proximity to those shown on drawings for the hospital. The selected earthwork contractor for the project will be instructed to soft dig in the area to expose the duct bank that carries the primary electric feeds in order to definitively identify the linear anomaly, properly position the new AST system away from the electric lines, and protect workers conducting excavations in the area of the new ASTs from electric hazards.

Project Name: 207 and 211 Upton Avenue

Project Address: 207 and 211 Upton Avenue

Key Personnel: Davin Ojala

Project City/State/Zip: Battle Creek, Michigan

Contact Name and Telephone #: Krista Trout-Edwards, Calhoun County Land Bank Authority, 269-781-

0777

Project 2 Description: The Calhoun County Land Bank Authority (CCLBA) acquired the parcel at 207 Upton in 2014 and the 211 Upton parcel in 2010. Both parcels (the Property) were acquired from the Calhoun County Treasurer through the tax foreclosure process following the State of Michigan, General Property Tax Act, Act 206 of 1893, Section 211.78m(7). This was an involuntary acquisition as provided under CERCLA 101(20)(D). The parcels were residential land from at least 1919 to circa 1950 when they were developed with a filling station that operated from approximately 1950 to the 1970s. Tax records identified three underground storage tanks (USTs) and a dispenser island. Contents of the USTs, nor records of removal, were not identified in tax records. After the filling station closed, the building on the Property was used for automotive repair until the 2000s.

The CCLBA, along with the City of Battle Creek, desired to market this Property located along an important corridor in an economically depressed area of the City. The Property is located in a mixed use area of residential and commercial businesses so redevelopment of the vacant building into a commercial use would provide encouragement for others to invest in redevelopment of the area and return an underutilized building into a tax generating business.

The results of the GPR survey indicated the presence of multiple potential USTs adjacent to the building. Test pits were conducted after the GPR and confirmed the presence of five USTs. The CCLBA contacted the Michigan Department of Environment, Great Lakes and Energy (EGLE) to inquire whether any financial assistance was available for the removal of the USTs. EGLE was able to remove the USTs, collect assessment samples, and backfill the UST excavations with clean fill.

Project Name: Statewide Expanded Triage

Project Address: Various sites

Key Personnel: Sara Bals, Casey Smith, Aaron Lammers

Project City/State/Zip: Various cities across Michigan

Contact Name and Telephone #: Randall L. Roth, MDEQ, (989)705-3416

Project 3 Description: From 2013 through 2023, SME has been retained by the State of Michigan to perform expanded triage services at over 240 leaking underground storage tank (LUST) sites located across the State of Michigan. The triage sites were located in the Upper Peninsula, Southeast Michigan, Grand Rapids, Kalamazoo, and Jackson Districts. Project work included meeting with EGLE staff to discuss site work, preparation of workplans, coordination of ground penetrating radar (GPR) and electro-magnetic (EM) geophysical surveys at each site, completion of a direct push soil borings, collection of soil samples and groundwater samples from each site, and coordination of sample shipment to the EGLE laboratory. Activities at each site were documented in separate site reports.

7. LANDFILL MAINTENANCE / MONITORING

Project Name: Werkner Road Landfill

Project Address: 8027 Werkner Road

Key Personnel: Sara Bals, Megan Schaner, Aaron Lammers

Project City/State/Zip: Chelsea, Michigan 48118

Contact Name and Telephone #: John Hannifan, City Manager, City of Chelsea, 734-475-1771

Project 1 Description: The site covers approximately 76.4 acres and is developed with two closed landfills; a leachate basin, a City of Chelsea soil waste transfer station, a Western Washtenaw Recycling Authority recycling station; and a 911 communication system tower. The eastern portion of the site is a wetlands area that periodically has standing water. The northern portion of the site is wooded and grass-covered land.

The City of Chelsea operated a landfill at the site from approximately 1960 to approximately 1993. The original landfill (referred to as the "old landfill") was opened in 1960, and a second landfill (referred to as the "new landfill") was opened on the site pursuant to Act 641 in 1985. The original landfill is an unlined landfill and was closed in 1990. The Act 641 landfill is lined and was closed in 1993. Landfilling operations have not occurred at the site since 1993.

Numerous site assessments were completed by SME and others from the late 1980s through the 1990s. Groundwater at the site has been monitored by SME and others on a quarterly or semi-annual basis since 1983. Surface water has been monitored on a semi-annual basis since 2011. SME currently prepares the semi-annual groundwater and surface water monitoring reports using data collected by a second consultant. In addition, SME prepared a Remedial Action Plan (RAP) that summarizes the results of environmental assessment and monitoring activities conducted at the site, presents evaluations of risks posed by the existing environmental conditions, and presents additional response activities that will be undertaken to further delineate the extent of groundwater and surface water impact and, if needed, support the development of risk mitigation strategies. The RAP included time-series analysis of groundwater data collected over the past 30 years and development of a Compliance Monitoring and Contingency Plan and Operation and Maintenance Plan.

SME has been retained by the City of Chelsea to begin additional site investigation activities needed to delineate the residual impact associated with the former landfill areas. This includes collection of surface water and sediment samples from the wetland area near the landfill and installation of additional groundwater monitoring wells to further evaluate if impacted groundwater is migrating towards nearby residential wells. The additional site investigations have also included sampling of groundwater, surface water, and area drinking water wells for PFAS (discussed in a separate project summary).

Project Name: Westland Central City Park

Project Address: South of Ford Road, West of Carlson, Westland MI 48185

Key Personnel: Paul Glasser, Jason Lafayette

Project City/State/Zip: Westland, MI 48185

Contact Name and Telephone #: <u>Jim Fausone</u>, <u>Fausone Bohn</u>, <u>LLP (Attorney for City of Westland)</u>, (248) 380-1818

Project 2 Description: Central City Park in Westland, Michigan was closed after testing revealed high levels of lead, methane and other contaminants. Considered the jewel of the suburban Detroit community, the park was frequented by resident adults and children who daily used its various amenities.

The road leading to closing began when the U.S. Environmental Protection Agency was investigating old unlicensed landfills and asked the Michigan Department of Environmental Quality (MDEQ) to test the park site. The testing showed higher than acceptable levels of lead, and the park was declared a brownfield. Historical review revealed that from the mid-1940s to early 1970s, sand mining was conducted on the site and the excavation resulting from the sand mining was used for disposal of the City's storm sewer catch basin sediments, street sweepings, and trees removed from road rights of way. During the 1950s and 1960s, the site was also used for landfilling of municipal solid waste.

SME was hired by the County just prior to the park's closing and began the long process of reopening the park and bringing it back to life. Later, SME was hired by the City.

SME conducted a remedial investigation focusing on the contaminated soil, groundwater and methane; performed a remedial action feasibility study; designed remedial responses; participated as part of a multi-disciplined project team in the preparation of bid plans and specifications for retention of a remediation contractor; provided resident engineering services during the construction of the remedial responses; collaborated with the MDEQ, and assisted in community outreach.

Investigation results revealed two exposure pathways of concern: 1) human direct contact with lead-impacted soil and 2) fire and explosion risks posed by methane in soil gas. SME prepared an Interim Response Plan to mitigate the human health risks associated with these pathways. The plan called for the park to be divided into two areas based on proposed uses: a 12-acre recreation area redeveloped with new soccer fields and other recreational amenities; and a restricted-access area that would remain undeveloped and be securely fenced to prevent public access.

To prevent direct contact with the contaminated soil, SME used a cost-effective geotextile membrane throughout the park, capped with a 12-inch layer of clean soil. To control methane migration, a passive ventilation trench was installed along the park's northern boundary to aid in gas dissipation. Vapor barriers and passive ventilation systems were installed under new buildings. Monitoring along the park's northern and eastern boundary is a key component of the Interim Response Plan. For stormwater management, the project team incorporated aesthetically-pleasing bioswales, ponds, and other drainage features into the design.

The new, redesigned, and safe-to-use park includes soccer fields, walking paths, play areas, and a new multiuse building constructed that is home to the City's farmers market. Special care was taken to enhance the existing adjacent Tattan Park and to create connectivity within the entire park. A pavilion was constructed to enhance the farmers market and public use of the park. SME continues to monitor methane perimeters wells and conduct O&M inspections of the passive ventilation trench. In addition, a topographic survey of the top of the clean soil cover is conducted every five years.

Project Name: Ford Allen Park Clay Mine

Project Address: Various addresses in Allen Park

Key Personnel: Dan Cassidy, Troy Helmick, Paul Glasser

Project City/State/Zip: Allen Park, Michigan 48101

Contact Name and Telephone #: Various, will be provided on request

Project 3 Description: The area as agricultural land until the mid-1960s, when the Ford Motor Company began using the area as its Ford Allen Park Clay Mine. The clay mining excavations were backfilled with waste generated from the Ford Rouge Plant. Clay mining activities ceased in the late 1980s, and landfilling activities ceased in 2004. The Allen Park Clay Mine Landfill was primarily permitted for the disposal of Type II industrial waste (non-hazardous solid waste); however, there were areas permitted for disposal of Type 1 wastes (hazardous). In the early 2000s, the majority of the former landfill cells were redeveloped into the current Fairlane Green shopping mall development. Since the early 2000s, various outlots within the mall development area have been redeveloped with numerous commercial operations. As part of the Ford Allen Park Clay Mine Post-Closure Plan, there are land use restrictions and requirements for notifications for any activities that may impact the landfill cap.

SME has been retained by various clients to support their acquisition and redevelopment of various lots located within the landfill footprint. This has included completion of Phase I ESAs, preparation of Work Plans for EGLE review and approval for completion of subsurface assessments, completion of Phase II ESA including the evaluation of known methane concerns, and providing environmental and geotechnical consulting as it relates to the challenges of construction over landfills (e.g., foundation and settlement concerns, maintaining the integrity of the existing landfill cap, and addressing methane concerns for structures).

9. PER-& POLYFLUOROALKYL SUBSTANCES (PFAS) SAMPLING / MITIGATION / REMEDIATION

Project 1 Reference Information:

Project Name: Riveridge Produce Marketing - Moore Farms Sanitary Wastewater Lagoon Closure

Project Address: 12560 Ferris Street

Key Personnel: Casey Smith

Project City/State/Zip: Grant, MI, 49327

Contact Name and Telephone #: Justin Finkler 616-813-0981

Project 1 Description: <u>SME was retained by Riveridge Produce Marketing, Inc. to provide environmental consulting services for the closure of their sanitary wastewater lagoons at a commercial apple orchard operation in Grant, Michigan. The site had a septic system with a lagoon drain field that was installed prior to the 1980s and served a farmhouse and several farm worker residential buildings. The lagoons were permitted under an EGLE Groundwater Discharge Permit. EGLE did not renew the permit because the Newaygo County Health Department required a more modern septic system and drain field. Prior to implementation of the new system, the existing septic settling tanks and lagoons required decommissioning. As part of the decommissioning process, EGLE required SME prepare a Work Plan for their approval. Once the Work Plan was approved, SME conducted lagoon sludge sampling, soil sampling, and groundwater sampling. Analytes for various media included phosphorus, ammonia, nitrate, metals, and per- and polyfluoroalkyl substances (PFAS).</u>

Lagoon solids/sludge and soil were excavated from the lagoons and transported to a licensed landfill facility as part of the closure process. SME coordinated with the owner, their contractors, and the selected landfill to characterize the waste and provide documentation of the removal and disposal activities. SME also provided environmental monitoring during solids/sludge removal activities. SME and our subcontractor, Fibertec Environmental Services, installed and sampled four groundwater monitoring wells near the lagoons to monitor groundwater concentrations of target compounds. Concentration of PFAS, manganese, and ammonia were measured in groundwater above the Part 201 Generic Residential Cleanup Criteria during initial assessment. SME is continuing to work with Riveridge Produce Marketing, Inc. and EGLE in 2023 to evaluate and monitor phosphorus, ammonia, nitrate, metals, and PFAS in the lagoon area as they work toward closure.

Project 2 Reference Information:

Project Name: Ithaca Sanitary Landfill PFAS Contamination

Project Address: West Washington Road, City of Ithaca, Gratiot County, Michigan

Key Personnel: <u>Larry Shook and Agnes Taylor</u> Project City/State/Zip: Ithaca, Michigan 48847

Contact Name and Telephone #: Jamey Conn, City Manager (989) 875-3200

Project 2 Description: SME was retained by the City of Ithaca (the City) to provide environmental and consulting services to evaluate per- and polyfluoroalkyl substances (PFAS) contamination at the Project Site as related to the City's due care obligations. The Project Site was purchased by the City of Ithaca in 1957 and used as a source of sand that was sold to the Michigan State Highway Department to support the construction of Interstate-127 in 1958. The Project Site was then used as a landfill from the 1960s through the 1970s for the disposal of municipal and industrial waste. Wolverine World Wide, a shoe manufacturer, sent treated leather waste from their manufacturing operations to the Project Site for disposal during this time. Landfill operations ceased between 1973 and 1975. The Project Site is currently comprised of wooded and grass-covered land with marshy areas located on the central and south portions and a ditch located along the east Project Site boundary. PFAS contaminated groundwater and surface water was first identified at the Project Site by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) in 2018.

SME's role included a regulatory file review, preparation of an Interim Response Work Plan that was reviewed by EGLE, advancement of soil borings, installation of groundwater monitoring wells, soil classification, groundwater gauging and sampling, data evaluation and interpretation, and preparation of a summary report. Through SME's initial investigation, the vertical extent of PFAS contaminated groundwater was identified at the Project Site. In addition, groundwater flow on the Project Site was evaluated and shed light on migration of the PFAS contaminated groundwater. SME continues to work with the City to further evaluate their due care obligations association with the PFAS contamination.

Project 3 Reference Information:

Project Name: Werkner Road Landfill

Project Address: 8027 Werkner Road

Key Personnel: Sara Bals, Megan Schaner, Aaron Lammers

Project City/State/Zip: Chelsea, Michigan 48118

Contact Name and Telephone #: John Hannifan, City Manager, City of Chelsea, 734-475-1771

Project 3 Description: The site covers approximately 76.4 acres and is developed with two closed landfills; a leachate basin, a City of Chelsea soil waste transfer station, a Western Washtenaw Recycling Authority recycling station; and a 911 communication system tower. The eastern portion of the site is a wetlands area that periodically has standing water. The northern portion of the site is wooded and grass-covered land.

The City of Chelsea operated a landfill at the site from approximately 1960 to approximately 1993. The original landfill (referred to as the "old landfill") was opened in 1960, and a second landfill (referred to as the "new landfill") was opened on the site pursuant to Act 641 in 1985. The original landfill is an unlined landfill and was closed in 1990. The Act 641 landfill is lined and was closed in 1993. Landfilling operations have not occurred at the site since 1993. Numerous site assessments were completed by SME and others from the late 1980s through the 1990s. Groundwater at the site has been monitored by SME and others on a quarterly or semi-annual basis since 1983. Surface water has been monitored on a semi-annual basis since 2011. SME currently prepares the semi-annual groundwater and surface water monitoring reports using data collected by a second consultant.

SME was retained by the City of Chelsea for additional site investigation activities needed to delineate the residual PFAS impact associated with the former landfill areas. In 2019, EGLE requested the City of Chelsea collect samples from monitoring wells and leachate at the landfill and submit those samples for analysis of PFAS. This sampling confirmed the presence of PFAS in the area of the landfill; however, the concentrations were below then-applicable criteria. In 2020, the PFAS criteria were updated and EGLE subsequently requested that the City complete a full assessment of PFAS in their onsite monitoring wells as well as in nearby residential wells. SME prepared workplans for the landfill and residential well assessments, secured EGLE approval for these workplans, and conducted the assessment activities described in the workplans. SME also participated in the MPART/local health department public meeting to present the site as a potential PFAS site of concern. SME worked with landfill staff to conduct the onsite sampling using correct protocols to limit potential crosscontamination. SME also coordinated with nearby homeowners to collect samples from their onsite drinking water wells. The results of the assessment activities were provided to the City, EGLE, and the Michigan Department of Health and Human Services. The state agencies provided the results to the area residents. The sampling of old groundwater monitoring wells with unknown construction materials as well as accessing/sampling residential wells during a pandemic were both project challenges. SME was able to develop adequate sampling procedures to collect samples from the onsite wells with minimal impact from potential cross-contamination and worked with residents to find acceptable sampling times and locations. SME continues to provide PFAS sampling of onsite groundwater monitoring wells and has worked with landfill to install additional onsite wells to support further delineation of the PFAS impact.

10.	DUVCEI	/ DUACE II	/ DACELINE		:ΝΤΛΙ Λ	SSESSMENTS
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Project 1 Reference Information:

Project Name: Amplify Grand Rapids

Project Address: 17 Sites in Southeast Grand Rapids, Michigan

Key Personnel: <u>Casey Smith, Aaron Lammers</u> Project City/State/Zip: Grand Rapids, MI 49507

Contact Name and Telephone #: Mr. Jeff Edwards, Rockford Construction, 616-285-6933

Project 1 Description: Amplify GR is a non-profit organization that seeks to help residents and businesses in a historically depressed area of Southeast Grand Rapids thrive. The organization focuses on affordable housing, education, community, jobs, and entrepreneurship. Between 2015 and 2021, Amplify GR purchased several blighted and/or under-utilized properties in the target area and began redevelopment planning. The sites range from small, former automotive repair shops to large, former manufacturing facilities. SME was retained by Rockford Construction and Amplify GR to assist with environmental services to determine site environmental conditions and plan for cleanup and re-use. SME conducted environmental due diligence (Phase I and II ESAs and Baseline Environmental Assessments); removal of underground storage tanks (USTs); evaluation of due care obligations; and soil gas and indoor air evaluations. To date, SME has completed the following assessment and evaluations to support the mission of Amplify GR:

- <u>Completed Phase I and II environmental site assessments at 17 sites to document site</u> subsurface environmental conditions and identify areas for further evaluation prior to site reuse.
- Prepared Baseline Environmental Assessments (BEAs) for 17 sites in accordance with the Natural Resources and Environmental Protection Act (NREPA), Public Act 451 of 1994. The BEAs were submitted to the Michigan Department of Environmental Quality for disclosure of the environmental conditions of the sites at the time of acquisition.
- Managed and conducted oversight of removal of a former heating oil UST at a former metal plating facility. We solicited contractor bids, oversaw the contractor, and monitored the UST removal and site restoration activities.
- Conducted preliminary due care evaluations at all sites for the Owner's compliance with Michigan's Part 201 and recommended interim measures to comply with due care during the period between site acquisition and redevelopment. SME is also assisting the client with conceptual planning for due care during and after site redevelopment for several of the sites.
- Conducted soil gas and indoor air evaluations at five sites with documented sources of chlorinated volatile organic compounds (VOCs). Investigations included collection of sub-slab soil gas samples and indoor air samples to evaluate the volatilization to indoor air inhalation pathway.

Project 2 Reference Information:

Project Name: EPA Brownfield Assessment Grant Management

Project Address: Multiple sites in Michigan, Indiana, and Ohio

Key Personnel: Sara Bals, Brian Berger, Jeff Lanier, Dan Cassidy, Casey Smith, Jason Lafayette

Project City/State/Zip: Multiple sites in Michigan, Indiana, and Ohio

Contact Name and Telephone #: Krista Trout-Edwards - Executive Director, Calhoun County Land Bank Authority, 269-781-0859 (current grantee); other grantee contacts can be provided on request Project 2 Description: Since the inception of the USEPA Brownfields program, SME has prepared over 105 successful EPA brownfield grant applications and actively managed in excess of \$88 million in EPA Brownfields Grants for over 60 communities and coalitions in Michigan, Indiana, and Ohio. Over 30 of these grants have been managed within the past 3 years. SME has worked with the each of the communities on developing their brownfields program, securing EPA grants, and managing these grants and other brownfield financing sources to support redevelopment in key areas of each One of the key components to the grants is completing site assessments in the community. communities. SME has completed over a thousand AAI Phase I Environmental Site Assessments (ESAs), Phase II ESAs, Baseline Environmental Assessments, and/or Due Care Assessments and documentation using grant funds. The sites that have been assessed include manufacturing plants, gas stations, tool and die shops, machine shops, steel fabricators, dry cleaners, printing shops, paint shops, auto repair shops, farms, marinas, greenhouses, landfills, asphalt plants, former coal yards, scrap yards, lumber yards, and shooting ranges in addition to more typical small-scale commercial sites. In addition to gaining extensive experience in the technical aspects of Phase I ESAs, Phase II ESAs, and BEAs, we have learned how to apply our multi-disciplined knowledge (brownfield redevelopment and brownfield financing, environmental assessment and remediation, geotechnical engineering, and construction services) to provide the technical expertise needed to complete site assessments and clean-up planning and bring an understanding of how these assessments can support a community's vision for the future.

A current grant example is a redevelopment project in Battle Creek funded by a USEPA Assessment Grant. SME was brought in under the grant to assist with environmental services related to the acquisition of a vacant commercial building. SME conducted a Phase I ESA and based on our experience with the identified historical uses at the site, we recommended the completion of a Phase II ESA. As a result of the Phase II ESA sampling, SME identified the presence of tetrachloroethene in soil gas at concentrations that could impact redevelopment of the building for the desired use. Working with the potential owner, the owner's project team (including their financial institution that would be utilizing a United States Small Business Administration loan and EGLE), SME identified a plan that would allow the potential owner to comply with their Part 201 due care obligations and satisfy their financial partners. SME designed an active sub-slab vapor mitigation system that could be installed with minimal damage to the existing building. SME also prepared a Response Activity Plan that was submitted to EGLE for their approval to further satisfy the owner's financial partners. Upon approval of the Response Activity Plan, a BEA will be prepared.

Project 3 Reference Information:

Project Name: M1 Concourse

Project Address: 200 South Boulevard Key Personnel: Jeff Lanier, Paul Glasser

Project City/State/Zip: Pontiac, MI, 48341

Contact Name and Telephone #: Brad Oleshansky – 248-259-0053

Project 3 Description: SME was retained by M1 Concourse to provide brownfield redevelopment consulting for a planned \$60 million mixed-use facility in Pontiac, Michigan. This 80-acre former GM site was transformed into an automotive complex with a focus on providing amenities to collectors of classic and luxury cars. The M1 Concourse project includes 15 luxury car condominium storage buildings, 1.5 mile vehicle test track, and outdoor fairgrounds area. Future phases will include a track-side restaurant/event center and various commercial tenants.

The extensive industrial history of the site (circa-1908) presents extensive environmental and construction challenges for the planned development. The site is under RCRA Corrective Action status, which poses significant legal, acquisition, and redevelopment concerns. SME continues to work closely with the EPA and RACER Trust to coordinate the environmental conditions and potential human health risks, on-going cleanup and monitoring activities, and restrictions for land use (institutional controls). Our consulting role included the facilitation of project discussions to present strategies for managing potential environmental liability, human exposure, and construction considerations. SME completed an approximately \$130,000 preliminary environmental and geotechnical investigation for the proposed purchase of redevelopment of the former GM site. Our services included preliminary geotechnical evaluations, environmental file review, Phase I ESA, Baseline Environmental Assessment (BEA), and a due care-focused Phase II ESA investigation. Based on our project experience, two environmental issues posed significant restrictions and costs to the redevelopment project: 1) an area of residual hydrocarbon consisting of light non-aqueous phased liquid (LNAPL) located in the south-central area of the site, and 2) vapor intrusion concerns for future buildings. Therefore, SME conducted an extensive Phase II ESA consisting of evaluating high-risk environmental concerns (e.g. LNAPL) and proposed building locations. Data from dozens of direct-push borings, temporary wells, and soil gas vapor implants was used to evaluate subsurface conditions and develop a site conceptual model for due care planning. The results were also used to modify the proposed site plan layout and specify recommendations for vapor intrusion mitigation. To date, the findings of the preliminary subsurface assessments resulted in a project cost savings of approximately \$400,000.

Construction initiated in 2015 with site demolition, grading, and infrastructure activities. Over 1.5M square-feet of existing industrial plant floor slabs, asphalt parking areas, and other concrete structures were excavated, pulverized on site, and re-used as engineered fill SME provided daily environmental due care monitoring and construction testing services throughout the earthwork, utility, and construction phases. Our services also included monitoring well abandonment, tracking eligible brownfield expenses, managing encountered environmental conditions, coordinating UST removal activities, coordinating PCB-impacted soil removal, and monitoring the installation of environmental engineering controls.

Since 2015, SME has been responsible for scheduling, preparing, and managing the submittal of numerous BEAs for purchasers of individual garage units at the M1 Concourse development. Due to the longevity of this project and the significant number of purchasers, SME met with EGLE and developed a streamlined BEA submittal process. SME is responsible for submitting an updated BEA every 6 months, coordinating BEA forms with the M1 Concourse team and condo purchasers, and submitting signed BEA forms to EGLE by the required timeframe under Part 201. To date, SME has successfully recorded 19 BEA reports and at least 290 signed BEA forms to EGLE for this project.

11. REMEDIATION SYSTEMS DESIGN / CONSTRUCTION OVERSIGHT / O&M / DECOMMISSIONING

Project 1 Reference Information:

Project Name: Lower Town Redevelopment

Project Address: Formerly 1140 Broadway Street; now 999, 1100, and 1200 Broadway Street

Key Personnel: Jeffrey Lanier, PE and Agnes Taylor, LPG

Project City/State/Zip: Ann Arbor, MI 48105

Contact Name and Telephone #: Morningside Development Group, Ron Mucha, 312-804-2134

Project 1 Description: Morningside is redeveloping an approximately 6.5-acre brownfield property in the historic Lower Town area of Ann Arbor, Michigan. At the time the project site was acquired, it was comprised of vacant, grass-and tree-covered land, residual pavements, and two vegetated soil piles. Morningside's redevelopment vision includes transforming the underutilized project site into a mixeduse, residential complex consisting of three multi-story buildings, parking, and two new roadways. Once completed the redevelopment will offer 530 rental units, 86 for sale condominiums, approximately 4,600 square feet of commercial/retail space, a new roundabout in Broadway Street, and 16,000 square feet of improvements to Broadway Street.

Historical environmental assessments identified chlorinated volatile organic compound (cVOC) contamination (primarily tetrachloroethene [PCE]), in soil, groundwater, and soil gas at the project site. Concentrations up to 4,400,000 parts per billion (ppb) were identified in soil located near the footprint of a historical laundromat in the southwest portion of the project site (the source area). The contamination extended from the ground surface to at least 40 feet below grade. The contamination was documented in soil and groundwater stretching from the source area across the project site to the east boundary and beyond, toward the Huron River.

SME's services for the project have included: performing environmental due diligence and geotechnical assessments; securing brownfield incentives; conducting extensive investigations to characterize and delineate the cVOC contamination; retain and collaborate with a remediation subcontractor to evaluate, design, and implement an appropriate remediation approach for the soil and groundwater impact; design due care measures such as vapor mitigation systems and utility controls to prevent exacerbation of and human exposure to the contamination; and provide construction due care monitoring.

SME evaluated numerous remediation options for the cVOC contamination by soliciting and reviewing contractor bids/designs. The selected approach consisted of: 1) intercepting and reducing PCE concentrations in the contaminant plume at the down-gradient property boundary, reducing off-site migration to decrease human exposure and ecological risks and 2) reducing the source-area contribution of contaminants into the groundwater. SME worked with the Michigan Department of Environment, Great Lakes, and Energy (EGLE) to collaboratively to conduct extensive investigations and hydrogeological assessments of the site to further delineate the areas of soil and groundwater contamination and collect the detailed site conditions data needed to verify the PRB strategy and support its design. The first task consisted of completing a Remedial Design Characterization (RDC) assessment to delineate the vertical and horizontal extent of PCE and develop a Site Conceptual Model. The RDC was a high-density investigation consisting 79 soil borings, installation of 46 monitoring wells, and collecting and analyzing 1,120 soil samples and 185 groundwater samples in the area of the PCE plume. The RDC study was divided into three areas: the source area, the mid-plume area, and the PRB area. Soil samples were analyzed for cVOCs, and groundwater samples were analyzed for cVOCs, inorganic anions, and dissolved gases. SME decommissioned the numerous temporary and permanent groundwater monitoring wells at the site when the assessment was completed.

Based on the historical and RDC data, the final remediation design included two permeable reactive barriers (PRB1 and PRB2) and a source area treatment. PRB2 is comprised of an iron impregnated carbon product (BOS 100®) that is designed to intercept and reduce the concentrations of PCE at the property boundary through oxidation-reduction reactions supported by surficial adsorption. The source area treatment and PRB1 (located mid-plume) were designed to decrease the high PCE load that the BOS100® PRB will manage to extend its longevity and efficacy. The source area treatment and PRB1 consisted of a mixture of BOS 100®, a suite of bacteria, yeast, and starch (CAT 100®) to boost the remedial capacity of the treatments.

From December 2018 through February 2019, SME and their remediation subcontractor conducted a Pilot Study in the source area to evaluate the efficacy of the CAT100® product given real project site conditions and the planned in-situ injection methodology. The Pilot Study field work consisted of installing monitoring wells, injecting the CAT 100® slurry to discreate depths and intervals in the source area, performing 90 days of groundwater monitoring, verification soil borings/soil sampling, and data analysis. SME was able to identify the reduction of the cVOC contamination by abiotic and biotic processes and verify the proposed injection methodology resulted in sufficient coverage of the pilot study area. The information gathered was used to adjust the final design to maximize the intended treatment per dollar spent. This approach allowed for the design a remediation plan customized to known site contamination instead of relying on geochemical and hydrogeological models to estimate the location of contamination and the anticipated response to the injections.

EGLE approved the design plan for full scale injections and SME worked with their remediation subcontractor to install the source area treatment, PRB1, and PRB2. The entire treatment train was installed between March and June 2019; a process that was challenged by the concurrent redevelopment of the project site. SME provided daily field oversight of the remediation contractor; planned and communicated with the redevelopment team to ensure construction and treatment processes did not interfere with one another; installed and developed a network of nested monitoring wells to evaluate the efficacy of the treatment train; provided post-injection groundwater monitoring services; and produced various technical memorandums and reports to document the work and findings. The treatment train reached it's goal of an 80% reduction in PCE concentrations at the east site boundary within 6 months of the full scale injections. As of December 2021, PCE concentrations in groundwater were reduced to 98%-100% (not detected above laboratory reporting limits) of pre-treatment concentrations. Daughter product generation was identified, as expected, however, as of December 2021, total cVOC concentrations in the source area and at PRB2 were reduced by 92% and 83% of pre-treatment concentrations, respectively.

Summaries of this work have been accepted as platform presentations at the 2019 Great Lakes Remediation and Redevelopment Conference, the 2022 Battelle Chlorinated Conference, and the 2022 American Institute of Professional Geologists (AIPG) Michigan Section Workshop.

Project 2 Reference Information:

Project Name: New Wayne County Criminal Justice Complex

Project Address: SW Corner of East Ferry Street and Russell Street

Key Personnel: Paul Roberts, Paul Glasser

Project City/State/Zip: Detroit, MI 48211

Contact Name and Telephone #: Joe Orlich, Project Director, Bedrock, 313-774-0790

Project 2 Description: The project consisted of demolition of former structures (DPW buildings) and mass removal of urban fill across the approximately 12-acre site to construct a new state of the art criminal justice complex. The site was an assemblage of many historical parcels with various industrial/commercial uses. It also contained abandoned streets and alleyways, so the subsurface was highly variable with buried fill and remnant substructures. SME provided a dual role for Bedrock as both environmental observer and specialty geotechnical observation/as-needed testing during earthwork activities.

During mass excavation for new foundations/utilities, a section of questionable soil (dark in color, containing woody debris, and having obvious chemical odor) was flagged by SME and the earthwork contractor and the area was isolated from further work until SME could evaluate the material. The results of our testing indicated the presence of polychlorinated biphenyls (PCB) at concentration > 50 ppm, which triggered a TSCA issue. Given that continued excavation in this area was a high priority and critical path for the construction, SME quickly mobilized the needed resources to communicate with EPA Region 5 TSCA coordinator and the construction team conduct urgent assessment activities to delineate the PCB impact and plan for the appropriate cleanup activities. We observed/sampled from numerous test pits and collected hundreds of surface soil samples for delineation purposes. Through the various in-situ and ex-situ testing performed, we were ultimately able to segregate PCB-impacted soils into two categories, one smaller portion that would require disposal at a TSCA facility and a second larger portion that could be disposed at a type II landfill if EPA approval was obtained.

We prepared a PCB Notification and Certification letter pursuant to 40 CFR 761.61(a)(3)(i) and obtained approval from the EPA for the disposal of the soils with PCB concentrations < 50 ppm in a licensed type II landfill. SME helped the general contractor, their subcontracted environmental vendor (Young's Environmental Cleanup, Inc.), navigate the logistics of adequate temporary containment of impacted soils on the busy construction site, pending their ultimate legal disposal.

Although there were significant cost and schedule impacts as a result of the PCB discovery, we used our knowledge of TSCA regulations, relationships with regulators, and our experience managing environmental cleanups in the context of redevelopment to minimize what could have been significant additional delays.

As of early 2023, the new criminal justice complex is nearing the final stages of construction.

Project 3 Reference Information:

Project Name: Former Bay City Manufactured Gas Plant

Project Address: 9th Street, Bay City, Michigan

Key Personnel: Larry Shook, Cam Place

Project City/State/Zip: Bay City, MI 48708

Contact Name and Telephone #: Consumers Energy Company, Andrew Santini, 517-740-9206

Project 3 Description: The Bay City Manufactured Gas Plant (MGP) started manufacturing gas in 1892 and the plant was retired in 1942. The MGP site consists of two parcels of land located in downtown Bay City adjacent to the Saginaw River. Remedial response activities have been performed at the site from 1992 through 2020. These activities have defined the horizontal and vertical limits of MGP impacted soil. Soil excavations were conducted between 2001 and 2013 to remove soil impacted with residual MGP contaminants include dense non-aqueous liquid (DNAPL). Approximately 25,000 tons of soil was excavated and properly disposed in a Type II landfill. In 2017, soil borings were conducted to evaluate the extent of MGP impact extending into and south of 9th Street. Soil analytical results indicated that residual DNAPL was present and extended onto another property where a high voltage underground electrical duct bank was to be installed. Additional soil borings were drilled to further evaluate the extent of contamination and evaluate soil conditions to assist with design of an earth retention and dewatering system to allow for remedial excavation and in-situ soil stabilization in the location of the high voltage underground electrical duct bank.

SME's services for the project included: performing environmental due diligence and geotechnical assessment prior to remedial excavation; design of the earth retention system and in-situ soil stabilization; preparation of bid specifications to allow for procurement of the remediation contractor, and remediation oversight monitoring.

The earth retention system consisted of a steel sheet pile cofferdam installed on the south side of 9th Street. The cofferdam was 190 feet long by 40 feet wide. The steel sheets were about 60 feet long. The excavation depth was about 22 feet below the existing ground surface, or about 18 feet below the groundwater table. The excavation was dewatered to allow excavation in a dry condition using sump/pumps and dewatering wells. Approximately 4,700,000 gallons of groundwater was recovered, treated on site with an activated carbon system, and discharged to the City of Bay City Wastewater Treatment Plant (WWTP). Approximately 13,500 tons of soil was excavated and sent to Republic Services Whitefeather Landfill located in Pinconning, Michigan.

The in-situ soil stabilization was conducted in 9th Street and consisted of in place mixing of the soil with Portland cement. Before stabilization, about 6,900 tons of soil was excavated and sent to the landfill. The stabilization area was then subdivided into 12 cells, each over a depth interval of about 5 feet to 22 feet. Each cell was mixed with 7 to 10% Portland cement by volume. Upon completion of mixing, SME molded 4 inch by 8 inch cylinders of the stabilized soil for compressive strength and permeability testing. To meet performance targets, the test cylinders were to have a minimum compressive strength of 50 pounds per square inch (psi) and a maximum permeability of 1x10-6 centimeters per second (cm/s). The test cylinders met the minimum compressive strength and had permeability's less than 1x10-6 cm/s. These test results indicated the soil had been sufficiently stabilized.

12. SPECIALTY SUB-SURFACE / UTILITY INSPECTION / SEWER CAMERA / CLEANING

Project 1 Reference Information:

Project Name: TODA America, Inc.

Key Personnel: <u>Sara Bals and Davin Ojala</u> Project Address: <u>4750 West Dickman Road</u>

Project City/State/Zip: Battle Creek, Michigan 49037

Contact Name and Telephone #: Joe Sobieralski, President Battle Creek Unlimited /

Administrator Battle Creek Brownfield Redevelopment Authority (BCBRA) (269) 962-7526

Project 1 Description: The project site was historically part of the Fort Custer military base and was developed with a military fire station, vehicle repair operations, grease rack, oil house, and wash rack. After closure of the military base in 1964, the buildings were no longer used. They were demolished by the early 1980s; however, the utilities and building foundations were left in place. In 2009, Toda America, Inc. (TODA), a Japanese-owned company that is a leading manufacturer of metal oxide powders, expressed interest in leasing and redeveloping the site with a 65,000 square-foot manufacturing facility to be used to manufacture powders used in the production of lithium-ion batteries for hybrid gasoline-electric automobiles.

SME completed a Phase I ESA and an extensive Phase II ESA to support preparation of a Baseline Environmental Assessment (BEA), evaluation of remedial options, and assessment of Toda's due care obligations. For due care, an isolation zone composed of clean soil was placed over the majority of the site to provide a way for Toda to demonstrate that future releases of chemicals associated with their operations had not impacted the environment at actionable levels. TODA invested over \$50 million in the building construction and machinery/equipment for the production of powders for lithium-ion batteries.

In 2017 through 2019, SME supported TODA in the evaluation of the performance of the isolation zone in the areas of the on-site storm water retention basins. In addition, SME supported TODA as they evaluated a potential process and storm-water management system failure. SME was retained to design and manage a comprehensive cleaning of the storm water drainage system that included the building exterior roof drains and storm lines leading to the on-site retention ponds. SME retained a subcontractor and implemented a multiple phase approach that utilized multiple cleaning methods including manual power washing, jet hose nozzle sprayers, and vacuuming. The storm lines were televised to determine the adequacy of the cleaning. Post-cleaning rinse water samples were collected after each cleaning event. SME also assisted with the characterization and forensic analysis of wastes identified in the storm drains. The comprehensive cleaning was completed in coordination with additional assessment of the existing isolation zone material in the on-site basins, identification of areas of the basins that needed to be removed/replaced, and preparation of bid specifications to support this work.

Project 2 Reference Information:

Project Name: Former Consumers Energy St. Johns Manufactured Gas Plant Site

Project Address: 200 East Railroad Street

Key Personnel: Casey Smith

Project City/State/Zip: St. Johns, Michigan

Contact Name and Telephone #: Brian Trent, PE 517-788-2160

Project 2 Description: SME was retained by Consumers Energy Company (Consumers Energy) to provide environmental consulting services for a former Manufactured Gas Plant (MGP) in St, Johns, Michigan, which operated from 1897 to 1934. SME has completed various environmental assessment activities on the site since 1997, culminating in a remedial excavation of the former MGP site in 2019. Contamination remained present along the outside of the excavation along an existing 36-inch storm sewer. Following completion of the remedial excavation, SME conducted additional assessment activities to evaluate the potential for contamination infiltrating the storm sewer and migrating through the storm sewer to the surface water outfall location.

SME, in conjunction with the City of St. Johns Department of Public Works and Michigan Department of Environment, Great Lakes, and Energy (EGLE), completed a tracer dye study of the municipal storm sewer to determine the storm sewer flow path from the area of the former MGP to the outfall location. The storm sewer extended beneath a large former manufacturing facility located between the former MGP and the assumed outfall location. SME introduced a fluorescein dye to the manhole located nearest the former MGP site and observed a storm sewer manhole located downstream of the former manufacturing facility and the assumed outfall location in a county drainage ditch.

The tracer dye study showed that the storm sewer flow path followed the assumed storm sewer pathway and discharged to the county drainage ditch. The tracer dye study results were used to aid in determining stormwater sample locations in the storm sewer system and the appropriate outfall location to sample for surface water compliance. Ongoing storm water monitoring at the manholes and outfall along the flow path demonstrated the contamination emanating from the former MGP site was not adversely affecting storm water conditions at the outfall location to surface water in the county drainage ditch.

Project 3 Reference Information:

Project Name: Amrhein Road 72-inch Storm Sewer

Project Address: Approximately 1,000 feet west of 39000 Amrhein Road southwest property boundary

Key Personnel: <u>Troy Helmick, CPG</u>

Project City/State/Zip: Livonia, MI 48150

Contact Name and Telephone #: Ashley Capital, Allen Dresselhouse, 734-394-1900

Project 3 Description: SME provided environmental and engineering services related to the presence of nickel in storm water from a 72-inch private storm sewer. The private storm sewer adjoined the southwestern portion of a former automotive manufacturing site. Discovery of nickel in water in the storm sewer effluent indicated that the storm sewer may be a pathway for contaminated groundwater on the former manufacturing property to migrate to Newburgh Lake. The purpose of this project was to identify and mitigate the source(s) of contaminants and verify effluent compliance with applicable environmental regulations. SME's environmental team conducted multiple services that included:

- Conducting multiple visual inspection and surveys of the private storm sewer. The SME team member was a certified National Association of Sewer Service Companies (NASSCO) inspector;
- Assisted in the identification of routes of contaminant infiltration into the storm sewer;
- Storm sewer sampling collected discrete storm water samples from selected storm sewer manholes and at receiving water body discharge locations;
- <u>Calculation of Generic Facility-Specific Part 201 Groundwater Surface Water Interface (GSI)</u>
 Criteria for nickel;
- Evaluation of storm water laboratory results evaluated the laboratory results for comparison to Part 201 Facility-Specific GSI criteria exceedances;
- Evaluation of the effectiveness of multiple storm sewer maintenance and repair activities undertaken to mitigate contaminant infiltration via:
 - o sediment removal,
 - o identifying and grouting illicit storm sewer connections,
 - o sealing storm sewer pipe connections; and
 - exterior grout-sealing.
- Conducting a storm water elevation and flow survey oversaw a six-week in-sewer data logger that measured relative storm water elevations and flow rates at the terminus of the private storm sewer;
- Evaluation of storm water survey data defined how high-flow and low-flow storm water conditions compare to nickel concentrations in storm water;
- Development of remedial storm sewer water divergent options to allow a controlled storm water flow path during high-flow and hold storm water during low-flow;
- Assisting Ashley Capital with selection of storm sewer slip-lining technologies; and
- Preparation of a post-installation NASSCO certified visual inspection schedule and storm water analysis plan for Ashley Capital and the RACER Trust.

13. UNDERGROUND / ABOVEGROUND STORAGE TANK (UST/AST) REMOVAL / DEMOLITION / SOIL EXCAVATION / CLOSURE

Project 1 Reference Information:

Project Name: Millennium Park AST Removal – ISID Project

Project Address: 2983 Veterans Memorial Drive SW

Key Personnel: Sara Bals, Aaron Lammers, Megan Schaner

Project City/State/Zip: Grand Rapids, Michigan 49534

Contact Name and Telephone #: Nancy Johnson, EGLE, 616-550-0996

Project 1 Description: The area of the Site was used for production of crude oil from the Walker Oil Field since the 1930s. Multiple oil wells and aboveground storage tanks (ASTs) are present in the area of the Site. The history of the Site is not fully known. However, based on aerial photographs, it appears that an AST had been present at the Site since at least the 1940s. The AST appeared to be abandoned and no longer actively used for oil storage and transport by the 1990s. No records regarding the historical operation of the AST or previous soil sampling or assessment activities were readily available. The AST and associated containment berm were located approximately 80 feet southeast of Veterans Memorial Drive SW. The area around the AST was densely wooded and part of a wetlands area. The AST was approximately 30 feet in diameter and 16 feet high. The surrounding containment berm, which was centered on the AST, was approximately 70 feet in diameter with an exterior berm that was approximately 3 feet high. Piping that was historically used to transfer fuel into the AST was present in the containment berm area and extended into the subsurface. Areas of residual petroleum product were visible within the berm.

SME was retained by EGLE in 2019 (work was completed in 2021 after delays associated with the COVID pandemic) using our ISID contract #774, to develop a plan to remove the AST and associated piping, deconstruct the berm, and remove soil from below the AST while minimizing impact to the surrounding wetlands area. SME prepared remediation plans and specifications for remedial response activities to be conducted at the Site. SME then coordinated the competitive bid process that led to the selection of MKC Group, Inc. (MKC)) to perform the AST removal and site restoration. This included a design for timber matting for the access road and staging area to limit heavy equipment's impact on the wetlands area and soil erosion and sedimentation controls that complied with the Water Resources Division permit for work within a wetland and floodplain area. Prior to the start of the activities, SME prepared a project Health and Safety Plan and coordinated waste characterization sampling and landfill waste approval for the oily sludge in the AST and the excavated soil.

SME conducted on-site observation during the AST removal, soil excavation, and site restoration activities. SME also conducted air-monitoring activities in accordance with the Air Monitoring Plan. Ambient air in the work areas and breathing zones was screened with a photoionization detector (PID) for VOCs. Ambient air in the work area and breathing zones was screened at least once per 15-minute interval during excavation activities. Ambient air in the work area and breathing zones was screened at least two times a day during backfilling activities. SME then prepared a Construction Completion Report that documented the remedial activities, SME's on-site observations and monitoring results, and the results of the soil verification sampling.

Project 2 Reference Information:

Project Name: Former Salzburg Cleaners

Project Address: 1906 Erie Street

Key Personnel: Brian Berger, Kent Rugenstein, Joseph L. Noykos, Cam Place

Project City/State/Zip: Bay City, Michigan 48706

Contact Name and Telephone #: Melissa Yuvan, EGLE, (989)891-6087

Project 2 Description: From 2018 through 2019, SME provided interim remedial action services at the former Salzburg Cleaners in Bay City, Michigan on behalf of the Department of Environment, Energy and Great Lakes (EGLE) to address soil contaminated. The contaminants of concern consisted of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOVs). The dry cleaner had been in operation from about 1950 to 1984. SME provided the following scope of service:

- Evaluated the extent of soil contamination
- Prepared bid specifications and selected a contractor to conduct asbestos abatement, building demolition, contaminated soil excavation and site restoration
- Provided excavation observation, excavation backfill compaction testing and verification of soil remediation (VSR) sampling following excavation
- Prepared a report documenting the IRA

Following asbestos abatement and building demolition, the contractor excavated about 5,000 tons of contaminated soil. The soil was disposed in a state licensed landfill. During excavation an orphaned UST was discovered with an estimated volume of about 1,000 gallons. The UST was emptied and properly disposed. Site restoration activities included backfilling the excavation with compacted granular fill and surfacing the site with about 6-inches of crushed limestone.

The cost of building demolition, remedial excavation and site restoration was about \$390,000. This was about \$170,000 less than the contractors bid price.

Project 3 Reference Information:

Project Name: Surplus, Inc. Interim Response

Project Address: 777 West Houghton Lake Drive, Prudenville, Michigan

Key Personnel: Agnes Taylor, Brian Berger, Kent Rugenstein

Project City/State/Zip: Prudenville (Denton Township), Michigan 48651

Contact Name and Telephone #: Bob Spaulding, Denton Township Supervisor (989) 366-5913

Project 3 Description: SME was initially retained by the Michigan Department of Technology, Management, and Budget (DTMB) to assist (EGLE)-Remediation and Redevelopment Division (RRD) to assess and address contamination associated with two leaking underground storage tanks (USTs) located at the Project Site. As information was gleaned through assessment, the scope expanded to include observation/documentation of the abatement of hazardous building materials, building and pavement demolition, soil excavation, site restoration, and groundwater monitoring services.

The Project Site is located in Prudenville, Michigan at the intersection of Michigan Highways M-55 and M-18. The Project Site is located within a few hundred feet of Houghton Lake. The Project Site was developed was three buildings, a garage, an access drive, and paved parking. The east portion of the Project Site supported gasoline filling station operations from the 1930s until an unknown point in time when it was converted to support automobile repair operations. The west portion of the Project Site was used for automobile repair operations and storage until the late 2000s. EGLE identified two USTs and contamination at the Project Site during a Triage investigation. One of the USTs was located underneath a public sidewalk and adjoined the foundation of the east exterior wall. The soil contamination also appeared to extend below the floor slab of at least the eastern building. At the time DTMB contract SME, the buildings were in a state of extreme disrepair and regarded as physical hazards and as an eyesore in a high traffic/tourist area. In addition, the migration of impacted groundwater from the Project Site toward Houghton Lake was poorly understood.

SME's role included a regulatory file review, survey of the Project Site, conduct of a supplemental hazardous materials assessment, and preparation of bid specifications for hazardous materials abatement, building demolition, contamination soil excavation, removal of the USTs, abandonment of on-site water wells, and site restoration. After the bid specifications were released SME worked with EGLE and DTMB to evaluate the bid responses and procure suitable trade contractors. SME provided oversight of the abatement and demolition contractors as the buildings and pavements were demolished in 2021. Once the buildings were demolished, the trade contractor was able to expose and remove the USTs. During excavation activities a third UST was encountered and removed. SME worked with the trade contractor to excavated impacted soil at the Project Site and effort that was challenged by the presence of two adjoining public highways, onsite infrastructure, and set temporary hauling routes. SME collected verification of soil remediation (VSR) samples from the excavation sidewalls and floors. In total three USTs, 121 tons of contaminated soil, and 975-gallons of UST sludge and cleaning liquids were removed from the Project Site. The Project Site was then restored with Class II sand, topsoil, and grass seed in June 2021.

Following the interim action, SME installed groundwater monitoring wells on- and off-site to evaluate the efficacy of the UST removal and soil excavation. SME performed four quarters of groundwater monitoring from October 2021 through July 2022 and collected supplemental hand auger soil samples to further evaluate the vapor intrusion pathway. Currently, SME is working with EGLE to obtain site closure based on the VSR sampling results and the groundwater monitoring results. Prudenville intends to use the revitalized site as a veteran's memorial park to add greenspace for locals and tourists.

14. VAPOR INTRUSION ASSESSMENTS / RISK MITIGATION / DESIGN / INSTALLATION / O&M SERVICES

Project 1 Reference Information:

Project Name: CD12

Project Address: 128 and 162 East Water Street and 139 North Edwards Street

Key Personnel: Sara Bals, Davin Ojala, Megan Schaner

Project City/State/Zip: Kalamazoo, Michigan 49008

Contact Name and Telephone #: Patti Owens – Vice President & Managing Director, Catalyst Development Co., L.L.C., 269-492-6810

Project 1 Description: <u>SME assisted Catalyst Development CD12</u>, L.L.C., with a new \$70M mixed use development in downtown Kalamazoo. The development includes a seven-story, mixed-use building that will incorporate educational, non-profit, commercial, and residential uses. The project also included three supported levels of parking incorporated inside the building enclosure. The project will change the landscape of downtown Kalamazoo and develop an area that has been underutilized for more than 30 years.

SME was retained to provide environmental consulting services as the history of the site would pose construction challenges. SME completed due diligence (Phase I ESA, Phase II ESA, Baseline Environmental Assessment, Plan to Comply with Due Care) to assist with acquisition of the impacted site. Historical industrial and/or manufacturing uses at the site included a blacksmith, stock/sewing/cutting room for the Kalamazoo Pants & Overall Company, manufacturing chemists, sheet metal manufacturing, printing, and auto repair. A subsurface assessment identified the presence of various volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), and metals in soil and/or groundwater above Part 201 Generic Residential Cleanup Criteria, including chlorinated-VOCs at concentrations greater than soil screening levels for vapor intrusion. SME successfully identified and procured a Clean Michigan Initiative (CMI) grant (\$182,000) to fund excavation of a portion of the impacted soils. However, not all of the impacted soil was removed requiring SME to design a sub-slab vapor mitigation system for the building to mitigate the vapor intrusion exposure pathway.

The sub-slab vapor mitigation system design needed to reflect a complicated foundation system and included coordination with the project architect, civil engineer, structural engineer, and construction manager. Both active and passive systems were evaluated to mitigate vapors. Due to the occurrence of chlorinated solvents in the subsurface, site conditions, and the building design, an active system was selected and designed. SME designed an active mitigation system for the building (two separate systems to account for unenclosed parking decks in central area of building) that included a sub-slab perforated vent mat network, roll-out barrier, vertical collection pipes, roof-mounted blowers, and post installation monitoring ports and pressure gauges. SME assisted with contractor selection and review of shop drawings pertaining to the sub-slab vapor mitigation system. SME also monitored the installation of the sub-slab vapor mitigation system, which was completed in multiple phases due to construction limitations. Construction of the building began in fall 2018, and was completed in 2021 after being halted by the COVID pandemic.

Project 2 Reference Information:

Project Name: <u>Tapestry Square Senior Living – The Southgate</u>

Project Address: 438 Division Avenue South

Key Personnel: Casey Smith, Aaron Lammers, Sara Bals

Project City/State/Zip: Grand Rapids, MI

Contact Name and Telephone #: Jan van der Woerd, ICCF Community Homes, (616) 336-9333 x204

Project 2 Description: The redevelopment of 438 Division Avenue South for ICCF Community Homes'
Southgate senior living complex includes a four-story, mixed-income, senior housing building in Grand
Rapids that is located on a transformed city block that formerly housed a gasoline filling station and
multiple commercial businesses. The buildings were removed over the past 20 years; however, the site
was left with buried foundations, petroleum contamination, and a significant amount of contaminated,
urban fill material. VOCs, PAHs, and various metals were found in soil and groundwater, and VOCs
and PAHs were found in soil gas. The potential for vapor intrusion associated with these contaminants
and the potential for direct contact with impacted soil were the main human exposure pathways of
concern. The project was awarded a \$1M EGLE brownfields cleanup grant for environmental response
activities, which included installation of a vapor mitigation system.

SME services included soil, groundwater, and soil gas investigations, design of a direct contact exposure barrier and vapor mitigation system, and daily field monitoring of environmental mitigation activities. SME designed an active mitigation system for the building that included a sub-slab vapor collection and extraction system, a heat-welded membrane liner, vertical collection pipes, roof-mounted blower fans, and post installation monitoring ports and pressure gauges routed to a central monitoring panel. SME is currently assisting the owner with post-installation monitoring, flow adjustments, and documentation of due care compliance.

Project 3 Reference Information:

Project Name: Lower Town Redevelopment

Project Address: Formerly 1140 Broadway Street; now 999, 1100, and 1200 Broadway Street

Key Personnel: <u>Jeffrey Lanier</u>, <u>PE and Agnes Taylor</u>, <u>LPG</u>

Project City/State/Zip: Ann Arbor, MI 48105

Contact Name and Telephone #: Morningside Group, Ronald Mucha, 312-804-2134

Project 3 Description: Morningside is redeveloping an approximately 6.5-acre brownfield property in the historic Lower Town area of Ann Arbor, Michigan. At the time the project site was acquired, it was comprised of vacant, grass-and tree-covered land, residual pavements, and two vegetated soil piles. Morningside's redevelopment vision includes transforming the underutilized project site into a mixed-use, residential complex consisting of three multi-story buildings, parking, and two new roadways. Once completed the redevelopment will offer 530 rental units, 86 for sale condominiums, approximately 4,600 square feet of commercial/retail space, a new roundabout in Broadway Street, and 16,000 square feet of improvements to Broadway Street. Lower Town is in the heart of Ann Arbor's medical center and the University of Michigan's North Campus. Historical environmental assessments revealed the presence of hazardous levels of chlorinated volatile organic compound (cVOCs) contamination in soil near the location of former laundromat operations on the southwest portion of the project site. Hazardous levels of PCE were also identified in a groundwater plume that extended from the source area to the eastern project site boundary and beyond, toward the Huron River. Among other services, Morningside retained SME to evaluate the vapor intrusion pathway and design vapor mitigation systems for the proposed development.

The footprint of the three buildings are located in areas with known cVOC contaminated soil and/or groundwater. SME conducted a soil gas investigation that included the installation and sampling of numerous soil gas wells. The soil gas data demonstrated all three buildings required active vapor intrusion mitigation systems (VIMS) to fulfill the developer's due care responsibility of preventing exposures to building occupants or visitors. SME worked with a VIMS subcontractor to develop design drawings and specifications for active VIMS that were installed beneath the building that has been constructed (Beekman on Broadway – 1200 Broadway Street) and the building that is currently under construction (1100 Broadway Street).

The VIMS designs included roof-mounted blowers that are connected to a venting system located below the building floor slabs to depressurize the sub-slab. The depressurization process creates a negative pressure gradient and preferential pathway for vapor collection and venting to the atmosphere. The active VIMS were designed with the following components: a gas-permeable aggregate (venting layer); network of low-profile, interconnecting, venting pipes or strips to convey the negative pressure gradient and facilitate venting of soil gas from the subslab; vapor barrier consisting of a seven-layer ethylene vinyl alcohol copolymer (EVOH) membrane; a vertical piping network connected to exhaust blowers; and subslab monitoring ports, gauges, and valves for system monitoring and adjustments. SME is also providing Morningside with VIMS performance monitoring and documentation.

APPENDIX B

ORGANIZATIONAL CHART

ORGANIZATIONAL CHART

* Indicates Key Personnel Resumes included in Appendix C

DTMB – EGLE OTHER STATE AGENCIES

*Daniel R. Cassidy, CPG (P4)
Point of Contact

Mark A. Halloway, OHST (P4)

Corporate Safety Director

*Brian C. Berger, PE (P4)
Program Manager

*Sara I. Bals, EIT (P4)
QA Review/ Technical Resource

Regional Team Leadership

Bay City/Cadillac/ Gaylord Districts

Grand Rapids/ Lansing/ Kalamazoo Districts *Sara I. Bals, EIT (P4) *Casey E. Smith (P4)

Jackson/Detroit/ Warren Districts *Paul Glasser (P3)
*Sarah Wilson (P3)
*Jeffrey Evans, PS (P4)

*Jeffrey R. Lanier, PE (P4)
*Jason C. Lafayette (P3)
*Troy D. Helmick, CPG (P3)

Technical Staff

Christina Villerot (P2)
Percy Richards (T2)
Andrew Smigelski (T2)
Brendan Huehn (P1)
Myles Jackman (P1)

Kent Rugenstein (P2) Aaron Lammers (P3) Tony Hosbein (T3) Jacob Lindsay (P1)

Subconsultants

A to Z Solutions, Inc. Vapor Intrusion Remediation

Worksmart, Inc. Geophysical Services

Stock Drilling LIF Services P04905.22+011223 77

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APPENDIX C

KEY PERSONNEL RESUMES





DANIEL R. CASSIDY, CPG

VICE PRESIDENT/PRINCIPAL

(734) 637-0058



dan.cassidy@sme-usa.com

- **Brownfield Redevelopment**
- Financial Incentive Support
- Liability Management
- **Project Director**

BACKGROUND

Dan is a Vice President and Principal with 25 years of experience. He leads SME's Environmental Services Business Unit including setting and implementing its business strategy, setting and executing its operational plan, providing senior technical project leadership, and risk management. Dan also advises public and private entities in the areas of urban and brownfield redevelopment strategies, environmental assessment of contaminated sites, remedial investigations, and environmental regulatory compliance and risk management. Dan also provides redevelopment financial incentive support, has successfully written applications for over \$50 million in state and federal grant funding, assisted in acquiring a wide variety of financial incentives including tax credits, grants and loans. He has managed projects involving over \$250 million in state and federal incentives.

RELATED PROJECT EXPERIENCE

Project Manager for Detroit's \$44 million mixed use development, The Corner Redevelopment project. Services for the former Tiger Stadium included environmental due diligence, redevelopment consulting, and brownfield incentives consulting.

Project Manager for Detroit's \$150 million Elton Park Redevelopment project. Services for the project included environmental due diligence and remedial design consulting.

Project Director for Detroit's largest residential development in decades. Bedrock Detroit's \$100M City Modern project will transform 8.4 acres of Detroit Brush Park neighborhood into a 24 building, 410-unit, mixed-use development with 22,000 square feet of retail space. Services included assisting the project team obtain over \$20M in brownfield funds, remedial investigations, safe use (due care) consulting, and construction materials testing.

Project Director and Client Manager for SME's consulting services supporting the \$60M redevelopment of the former 80-acre General Motors Pontiac Validation Center into the M1 Concourse, an auto collector's condominium and event center located on America's first highway (M1) and ground zero for the Woodward Dream Cruise. Services included brownfield incentive acquisition and consulting, pre-acquisition environmental due diligence assessments, vapor intrusion mitigation design, geotechnical assessment and design, and general redevelopment strategy consulting.



RELATED PROJECT EXPERIENCE CONT.

Project Director for SME's consulting services supporting the \$13M redevelopment of a former municipal dump into a minor league baseball stadium in Utica, Michigan. Services for **Jimmy John's Field** included brownfield incentive acquisition and consulting, pre-acquisition environmental due diligence assessments, vapor intrusion mitigation design, geotechnical assessment and design, civil engineering, construction testing and general redevelopment strategy consulting.

Project Manager for the \$12.8M redevelopment of Henry Ford's first job location, the 1890s former marine engine repair facility, into the **Michigan DNR Outdoor Adventure Center** in Detroit, Michigan. Provided brownfield incentives consulting, managed pre-acquisition environmental due diligence services, and provided federal environmental compliance consulting services.

Project Manager for the \$20M **mixed-used redevelopment** project along Lake Erie in Port Clinton, Ohio. Project revitalized the downtown and linked the city's key asset, Lake Erie, to the community and businesses. Provided environmental and geotechnical services to support site acquisition and redevelopment strategy. Also provided USEPA grant management and consulting services to Ottawa County Ohio, who supported the redevelopment with brownfield grant funding.

Project Manager for SME's consulting services supporting the \$145M redevelopment of the former GM Argonaut Building into the 11-story **College for Creative Studies** in Detroit, Michigan. Provided environmental, geotechnical, construction testing and materials consulting services to assist the project team in capturing over \$11M in brownfield incentives for the project.

Project Manager for SME's consulting services supporting the redevelopment of a former auto service station into the five-story, mixed-use **Greenleaf Trust** building identified as a downtown catalyst project in downtown Birmingham, Michigan. Provided environmental, geotechnical, construction testing and materials consulting services for the \$25M redevelopment project. Also assisted project team in capturing over \$3 M in brownfield incentives for the project.

EDUCATION

Candidate for Juris Doctor, Wayne State University Law School M.S., Business Administration, Wayne State University B.S. with Honors, Environmental Geosciences, Michigan State University Fellow, Larson Center for Leadership

REGISTRATIONS AND CERTIFICATIONS

Certified Professional Geologist – American Institute of Professional Geologists (AIPG) OSHA HAZWOPER, Standard 29 CFR 1910.120(e)

AFFILIATIONS

Urban Land Institute Michigan, Advisory Board, Programs Chair
Geoprofessional Business Association, Vice Chair of Business Practices Committee
Detroit Downtown Partnership
American Institute of Professional Geologists (AIPG)
Michigan Association of Environmental Professionals (MAEP)
Woodward Avenue Action Association
International Council of Shopping Centers
Michigan Economic Development Association
Geoprofessionals Business Association





BRIAN C. BERGER, PE REGIONAL LEADER/SENIOR CONSULTANT

(989) 205-2808



brian.berger@sme-usa.com

- **Environmental Site Evaluations**
- **Industrial Compliance Services**
- Asbestos Assessments and Sampling
- Certified Storm Water Operator
- **Exposure Monitoring**

BACKGROUND

Brian manages investigations and assessments for a variety of environmental projects throughout Michigan. He has 22 years of experience designing and managing due diligence, due care, and remedial investigations for a variety of sites. He also provides industrial compliance services to clients throughout Michigan. Brian is experienced in the assessment and remediation of environmentally contaminated sites under Michigan's Part 201 (Environmental Remediation) and Part 213 (Leaking Underground Storage Tank) programs.

RELATED PROJECT EXPERIENCE

Project Manager for the former Sebewaing Dry Cleaners and Sebewaing Industries property in Sebewaing, Michigan. Services include environmental site investigation and characterization, hazardous material surveys, preparation of feasibility studies, remediation design, preparation of bid specifications, construction oversight, and overall project oversight.

Project Manager for Nexteer Automotive in Saginaw, Michigan. Performed review and update of client's Spill Prevention Control & Countermeasure (SPCC), Pollution Incident Prevention Plan (PIPP), Storm Water Pollution Prevention Plan (SWPPP) and Integrated Contingency Plan. Provided environmental assessment services for removal of a 20,000-gallon methanol underground storage tank (UST), including submission of required MDEQ forms prior to removal, collection of soil and groundwater samples for analytical testing, report preparation to document excavation activities. Also presented the analytical results.

Project Manager for a proposed half-acre site on Westervelt Road in Zilwaukee, Michigan, Services included environmental investigation and site characterization. remediation design, preparation of bid specifications, review of contractor qualifications, underground storage tank removal, soil excavation, construction oversight, and overall project oversight.

Project Manager for remedial evaluation services for a site on Holland Road in Buena Vista Township. Services for this engineering contract have included environmental sampling and consulting, construction materials testing (CMS), and above-ground storage tank inspections.

Project Manager for EPA Assessment Grants for communities in Michigan. Provides consulting services for hazardous substance and petroleum grants. Services include preparation of Quality Assurance Project Plans (QAPPs), site eligibility documents, Sampling and Analysis Plans, Health and Safety Plans, performance of environmental assessments, and grant management activities.



RELATED PROJECT EXPERIENCE CONT.

Provided project management and inspection related to soil erosion and sedimentation control projects throughout Michigan.

Maintained an air sparging/soil vapor extraction remediation system at a **natural gas compressor station** in northern Michigan. Remediation system consisted of 195 sparging and extraction wells divided into five treatment areas.

Participated in field evaluation activities for in-situ chemical oxidation and ozone injection pilot tests at **natural gas compressor station** in northern Michigan.

Provided evaluation activities for **manufactured gas plant (MGP)** sites. Services have included soil and groundwater investigations, evaluation of extent of impact, pathway evaluations, and preparation of assessment reports.

Performed asbestos assessments for numerous commercial/retail, industrial and educational facilities in Michigan.

Completed **environmental site assessments** throughout Michigan. Projects involved soil and groundwater sampling, determining source and extent of soil and groundwater contamination, and potential remediation activities.

Prepared Soil Prevention Controls and Countermeasures (SPCC), Pollution Incident Prevention (PIP), and Storm Water Pollution Prevention plans for manufacturing facilities, airplane maintenance facilities, and petroleum bulk storage facilities.

Provided maintenance and collected groundwater and vapor samples for a vacuum enhanced groundwater pumping system.

EDUCATION

B.S., Geological Engineering, Michigan Technological University
Fundamentals of Professional Practice, Geoprofessional Business Association (GBA)

REGISTRATIONS AND CERTIFICATIONS

Professional Engineer – Michigan
Certified Storm Water Operator (CSWO) for Construction and Industrial Sites
Certified Asbestos Building Inspector
OSHA HAZWOPER, Standard 29 CFR 1910.120(e)
OSHA Respiratory Protection, Standard 29 CFR 1910.134
OSHA Lead in Construction Awareness
Cadmium Hazard Awareness, MIOSHA Cadmium Standard

AFFILIATIONS

Michigan Society of Professional Engineers (MSPE)





SARA I. BALS, EIT SENIOR CONSULTANT

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- **Environmental Services**
- **Brownfield Redevelopment Incentives**
- Federal and State Grant Applications
- Phase I and II Environmental Site Assessments

BACKGROUND

Sara is a Senior Consultant with 16 years of experience in the acquisition of brownfield incentives for commercial and industrial redevelopments. She provides consulting services for redevelopment projects, environmental due diligence related to property acquisition, and liable party site investigations/monitoring and remediation. Sara performs a broad range of tasks related to brownfield grant acquisition and grant management, securing and utilizing Michigan brownfields incentives, site investigation planning and implementation, regulatory reporting, and air emissions and Toxic Release Inventory (TRI) reporting. Sara manages SME's U.S. EPA brownfields grant program and coordinates preparation of and compliance with Quality Assurance Project Plans (QAPPs) for various grantee communities across Michigan, Indiana, and Ohio. This includes managing and maintaining SME environmental group's standard operating procedures (SOPs) and quality assurance/quality control practices. She is an Environmental Professional (EP) as defined by U.S. EPA 40 CFR Part 213, Standards and Practices for All Appropriate Inquiries.

RELATED PROJECT EXPERIENCE

Manages ongoing soil and groundwater assessment activities for a former manufactured gas plant (MGP) in Kalamazoo, Michigan, including oversight of semiannual sampling, evaluation of exposure pathways, assessment of groundwater/ surface water interface potential, NAPL assessment and recovery, conceptual site model development, and regulatory reporting.

Assisted with preparation of brownfield plans and Act 381 Work Plans for Jimmy John's Field minor league baseball stadium, 800-space parking lot, and community playground on two unregulated landfills in downtown Utica, Michigan. Helped secure millions of dollars in financing to support this redevelopment effort.

Supported the \$60M redevelopment of the former 80-acre General Motors Pontiac Validation Center into the M1 Concourse, an auto collector's condominium and event center located on America's first highway (M1) and ground zero for the Woodward Dream Cruise. Assisted with preparation of brownfield plans and Act 381 Work Plans, and helped to secure millions of dollars in financing.

Completed successful Energy Efficiency and Conservation Block Grant (EECBG) applications for the cities of Battle Creek and Wayne, Michigan, and assisted with associated grant implementation and management activities.



RELATED PROJECT EXPERIENCE CONT.

Assisted with development of Brownfield Plans and Act 381 Work Plans to support the **W.K. Kellogg Institute expansion**, a Toda America, Inc. project, and the former GM Grand Rapids Metal Stamping Plant decommissioning and demolition, including working with municipalities and developers to identify available incentives and eligible activities, the development of bidding documents for associated demolition and environmental response activities, and financial tracking and management.

Tracks and reviews costs for the above-listed brownfield projects as well as other brownfields projects for various municipalities throughout Michigan, provides cost tracking and payment application preparation for multiple Renew Michigan grant/loan projects, and provides third-party reviews of payment submittals for additional municipal clients including the Detroit Brownfield Redevelopment Authority.

Completed successful **U.S. EPA Assessment, Revolving Loan, and/or Cleanup Grant applications** for Buchanan, Battle Creek, Albion, Allegan, and Calhoun County, Michigan; and Goshen, Noblesville, Kokomo, Huntington and Gary/Hammond/East Chicago, Indiana; and DeKalb, Madison, and Howard and Hamilton Counties, Indiana.

Manages SME's **U.S. EPA brownfields grant program** and assists/assisted with oversight and implementation of the Calhoun County, Buchanan, Albion, Battle Creek, Goshen, and Allegan Assessment Grants, and the Gary/Hammond/East Chicago RLF Grant, including development of Quality Assurance Project Plans (QAPPs), Health and Safety Plans (HASPs), Sampling and Analysis Plans (SAPs), community outreach, cost tracking and budgeting, and required reporting, and development of a conceptual site models to support assessment and redevelopment planning.

Project Manager for over \$600,000 in assessment of orphan LUST sites as part of the **EGLE Expanded Triage** project. She worked with EGLE staff to plan site work, coordinated geophysical surveys at each site, supervised completion of subsurface assessment and collection of soil and groundwater samples from each site, and prepared reports to document site assessment activities.

Project Manager for the remedial actions at **multiple former manufacturing sites** in Goshen, Indiana. Following completion of remediation, secured Comfort Letters from the Indiana Department of Environmental Management (IDEM) supporting the redevelopment of sites for various municipal and commercial uses.

Performed over 250 Phase I ESAs, Phase II ESAs and BEAs in Michigan and Indiana for individuals, corporations, and lending institutions in association with properties ranging from residential/commercial to industrial usages.

EDUCATION

M.S., Environmental Engineering, University of Notre Dame B.S., Civil and Environmental Engineering, Northern Arizona University

REGISTRATIONS AND CERTIFICATIONS

Engineer-in-Training (EIT) – Michigan 40-Hour HAZWOPER Training and 8-Hour Refresher, Health and Safety

AFFILIATIONS

Air & Waste Management Association (A&WMA)
Tau Beta Pi – Engineering Honor Society





AGNES R. TAYLOR, LPG

PROJECT GEOLOGIST

(248) 308-6290



agnes.taylor@sme-usa.com

- **Environmental Services**
- Brownfield Incentives and Redevelopment
- Site Characterization and Remediation
- Vapor Intrusion Evaluation and Mitigation

BACKGROUND

Agnes Taylor is a Project Geologist affiliated with our Bay Region and Traverse City offices to provide environmental consulting services to the northern, mid, thumb, and southeast regions of Michigan. Agnes brings seven years of consulting experience in the due diligence, site characterization, remediation/mitigation, and brownfield redevelopment fields. She has managed numerous projects for developers, communities, and other stakeholders on projects in rural, urban, agricultural, and industrial settings. Agnes' project experience runs the gamut in complexity from multistory mixed used redevelopments to small town commercial businesses. Agnes is also a member of SME's brownfield incentives team and has demonstrated experience with acquisition, execution, and management of brownfield grants, loans, and tax incremental financing. Agnes joined SME in 2015 after the completion of her Master of Science degree in Earth and Climate Sciences with a focus in Geochemistry.

RELATED PROJECT EXPERIENCE

Management and implementation of three US EPA Brownfield Assessment grants (community-wide and coalition) awarded to communities in the northern and thumb regions of Michigan. Project work included due diligence assistance to the communities, private developers, and property owners through the completion of Phase I and Phase II Environmental Site Assessments, Vapor Intrusion Evaluations, and cleanup planning. Other responsibilities include budget and schedule tracking, site identification and prioritization, the preparation of Quality Assurance Project Plans (QAPPs), Sampling and Analysis Plans (SAPs), Health and Safety Plans (HASPs), and technical reports.

Assists with the preparation of Brownfield Plans and Act 381 Work Plans for Michigan Brownfield redevelopment projects. Some of her notable projects include the 1140 Broadway redevelopment of the Lower Town site in Ann Arbor, The Corner redevelopment of Old Tiger Stadium in Detroit, and the redevelopment of three city blocks in Dearborn - a joint effort between the City of Dearborn and Ford Motor Land Development Corporation.

Currently manages various projects funded by the State of Michigan including the Department of Environment, Great Lakes, and Energy (EGLE) brownfield grants and loans and the Department of Technology, Management, and Budget - Indefinite Scope Indefinite Delivery (DTMB-ISID) programs. Specific projects in this category include brownfield redevelopments, Part 213 sites, and Part 201 sites located in the northern, thumb, and southeast regions of Michigan.

Provides on-site environmental expertise for in-situ and dig-and-haul remediation projects. Agnes' in-situ remediation experience includes soil mixing, source area injections, and permeable reactive barrier (PRB) installation.



EDUCATION

M.S., Earth and Climate Sciences, Specialization in Geochemistry, University of Maine B.S., Earth and Environmental Sciences, Miami University of Ohio

LICENSE AND CERTIFICATIONS

Licensed Professional Geologist, Indiana #2634
OSHA 40-Hour HAZWOPER Course and Annual 8-Hour Refresher
A-1i Storm Water Management – Industrial Sites
Geo-Seal Installation Inspector
American Red Cross First Aid

RECENT PRESENTATIONS

"Treatment of a Chlorinated Groundwater Plume Using Iron Impregnated Carbon", Eleventh Annual AIPG Michigan Section Technical Workshop, June 2022.

"At the Intersection of Construction, Engineering, and Geoscience: Treatment of a PCE Groundwater Plume", Twelfth International Conference on the Remediation of Chlorinated and Recalcitrant Compounds, May 2022.

"Chlorinated Solvent Remediation Design Using a High-Density Site Characterization Approach", Great Lakes Remediation and Redevelopment Conference, October 2019.





CASEY E. SMITH, CPG

SENIOR PROJECT GEOLOGIST

(616) 293-8472



casey.smith@sme-usa.com

- **Environmental Services**
- **Hazardous Materials Inspections**
- **Environmental Site Assessments**
- **Project Manager**

BACKGROUND

Casey provides environmental consulting project management, including site assessment and monitoring, environmental due diligence, storm water, remediation, and brownfield redevelopment. He has nearly 20 years of experience working with property owners, banks, industrial clients, developers, construction companies, real estate agents, attorneys, and communities to address environmental challenges associated with acquiring and developing/redeveloping property, repurposing brownfield sites, fulfilling liable party obligations, and navigating complex state and federal regulatory requirements. He is also experienced in redevelopment projects involving Phase I and II Environmental Site Assessments (ESAs), Baseline Environmental Assessments (BEAs), Due Care documentation, and financial incentive programs such as tax increment financing (TIF), Michigan EGLE's brownfield grant and loan program, and the U.S. EPA's brownfields program. Casey has significant field experience with soil, groundwater, soil gas, and indoor air, and storm water sampling; monitoring well installation; environmental drilling methods; asbestos, lead paint and hazardous materials inspections; and contractor oversight.

RELATED PROJECT EXPERIENCE

Managed multiple soil and groundwater remediation projects ranging in size from small soil remediation projects to projects involving removal of over 50,000 tons of contaminated soil from historical gas station sites, manufactured gas plant (MGP) sites, and other sites of contamination in Michigan. Responsible for complying with state and municipal requirements for associated dewatering compliance monitoring involving multiple contaminants, including PFAS chemicals.

Provided project administration, management, and field services for multiple brownfield redevelopment projects funded through Michigan EGLE's brownfield grant and loan program. Assisted developers and communities with preparing multiple grant applications and securing over \$3M in funding for site assessment, demolition, site cleanup, and other redevelopment activities for repurposing abandoned gas stations, dry cleaning facilities, automotive repair, and manufacturing sites throughout Michigan.

Investigated and managed dozens of environmentally contaminated sites with vapor intrusion (VI) concerns. Worked with public and private clients and EGLE to assess, design, and mitigate VI risks at sites with existing and new buildings ranging from under 10,000 square feet to 250,000 square feet. Conducted oversight and operation and maintenance (O&M) testing of EGLE-approved VI mitigation systems at multiple redevelopment sites.



RELATED PROJECT EXPERIENCE CONT.

Prepared **Brownfield Plans** and **Act 381 Work Plans** for \$14 million in TIF reimbursable costs for a \$60 million mixed-use redevelopment with affordable and market rate housing, offices, and a parking deck in Grand Rapids, Michigan; prepared a Brownfield Plan and Act 381 Work Plan for \$1 million in TIF reimbursement related to a manufacturing facility expansion in Charlotte, Michigan; and prepared a Brownfield Plan and Act 381 Work Plan for over \$1M in TIF reimbursement related to the removal and redevelopment of a 250,000 square-foot manufacturing facility in Grand Rapids, Michigan. Also, assisted on several other Brownfield Plan and Act 381 Work Plan projects throughout Michigan.

Performed Phase I and II ESAs for **residential**, **commercial**, **and industrial sites** including site visits, project team and subcontractor scheduling, environmental sampling, and report preparation.

Managed environmental issues related to demolition of the 2.2 million square-foot **General Motors Stamping Plant** in Wyoming, Michigan. Responsible for preparation of a self-implementing cleanup plan for PCBs, a soil erosion and sedimentation control plan, and a storm water permit. Managed and provided field representation for storm water monitoring, PCB remediation, oversight of plant cleaning and demolition, and characterization and management of hazardous and nonhazardous waste streams.

Planned and implemented investigations and cleanups at **contaminated sites and leaking underground storage tank sites** (Parts 201 and 213 of Act 451) throughout Michigan to identify, evaluate, and mitigate contaminant migration and human exposure pathways and contaminant source areas. Activities included mapping of utilities, soil borings; monitoring well installation; soil, groundwater, soil gas, sediment, and storm water sampling; removal of impacted soil, NAPL, and groundwater; and regulatory reporting. The investigations focused on cost-effective investigation and remediation strategies and solutions for clients.

EDUCATION

B.S., Natural Resource Biology and Environmental Science, Central Michigan UniversityM.S., Earth Science (Hydrogeology and Environmental Concentration), Western Michigan University

Risk-Based Corrective Action at Petroleum Sites, 2011 – American Society for Testing and Materials (ASTM)

Understanding Asset Management, 2018 – Environmental Finance Center Network Environmental Risk Management Workshop: Emerging Contaminants & Pathways, 2018 – American Institute of Professional Geologists

REGISTRATIONS AND CERTIFICATIONS

Certified Professional Geologist – American Institute of Professional Geologists Asbestos Inspector – Michigan

EGLE Certified Construction and Industrial Storm Water Operator EGLE Soil Erosion and Sedimentation Control Plan Reviewer and Designer 40-Hour HAZWOPER Course with Current Annual Refresher

AFFILIATIONS

American Institute of Professional Geologists Air and Waste Management Association Commercial Alliance of Realtors of West Michigan – Affiliate Member of the Year, 2021





JEFFREY R. LANIER, PE

SENIOR CONSULTANT

(586) 405-3521



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- **Environmental Services**
- Site Acquisition
- Brownfield Redevelopment
- **Project Manager**

BACKGROUND

Jeff has more than 25 years of experience and provides project management and engineering expertise in the areas of site acquisition and brownfield redevelopment, landfill redevelopment, vapor intrusion investigation and mitigation system design, and engineering controls to mitigate exacerbation of contamination and human health concerns. He has completed over 300-site acquisition projects involving due diligence, liability management, and/or brownfield incentives. Jeff specializes in understanding redevelopment challenges of urban sites and landfills, identifying construction costs, providing development solutions and alternatives, and securing financial incentives.

RELATED PROJECT EXPERIENCE

Project Manager and Lead Client Manager for the construction of Jimmy John's Field minor league baseball stadium, 800-space parking lot, and community playground on two unregulated landfills in downtown Utica, Michigan. Secured financial incentives, designed environmental controls and mitigation measures, provided Due Care and HASP consulting, and coordinated with MDEQ, County and City agencies. Worked closely with engineers, architect and product manufacturers to design and coordinate installation of a sub-slab methane gas barrier and ventilation system tailored to the unique grade beam layout. Also designed site perimeter methane gas monitoring and vents, specs for utility and conduit seals, and a new post-construction verification method using helium gas and injection ports. Successfully secured \$1,000,000 Clean Michigan Initiative Loan; \$700,000 USEPA Brownfield Revolving Loan Fund grant and loan; and \$800,000 Surface Water Quality Initiation Fund grant. Project received the 2017 Phoenix Award for Community Impact and the 2016 CREW-Detroit "Special Impact" award for best overall design and impact.

Project Manager and Lead Client Manager for the construction of the M1 Concourse car condominium and vehicle test track development on an 80-acre, former GM validation facility in Pontiac, Michigan. Project services included: performing extensive environmental investigations; coordinating with RACER Trust, MDEQ, EPA, and legal counsel; managing services for environmental liability protection and due care (prevention of human exposure and contamination exacerbation); and securing brownfield plan approval for reimbursement of \$21M of eligible activities.

Project Manager and Lead Client Manager for the construction of Frank Rewold and Son's mixed-use redevelopment at a former mill and industrial facility along Paint Creek in downtown Rochester, Michigan. The development included a 5-story luxury condominium structure, 4-story Rewold headquarters office building, and a future commercial structure (TBD). Managed and coordinated multiple SME services including civil engineering, geotechnical and environmental investigations, groundwater plume modeling, and design of engineering controls to prevent exacerbation and potential human health exposure to pre-existing contamination. Negotiated



RELATED PROJECT EXPERIENCE CONT.

redevelopment strategies, Restrictive Covenant requirements, and brownfield incentives with various parties including the City, MDEQ, and liable party. Secured the City's first approved brownfield plan and obtained \$2,000,000 Clean Michigan Initiative grant and loan to offset brownfield costs.

Project Manager for brownfield redevelopment project that transformed a contaminated, methane-producing landfill into a public safety training complex containing a fire training tower. Obtained an Environmental Protection Agency (EPA) assessment grant to fund the subsurface investigation and liability management documents. Provided design, monitoring and engineering control solutions to mitigate human exposure concerns and exacerbation of underlying waste. Designed and coordinated the installation of an impermeable PVC membrane beneath a five-acre storm water basin positioned above the landfill.

Project Manager and technical consultant for the subsurface investigation of a 1 million square-foot automotive plant constructed in the 1950s. Activities included obtaining a \$150,000 EPA assessment grant to fund the subsurface investigation and liability management documents; developing an investigation scope tailored to the developer's plans/needs; orchestrating multiple field crews and contractors; and providing practical solutions and alternatives to the developer for reducing costs associated with demolition, earthwork, and various due care and exacerbation restrictions.

Project Manager for the acquisition and demolition of the former 3.4 million square-foot GM Pontiac East Assembly plant. Reviewed over 10,000 pages of environmental documentation and investigations associated with the Resource Conservation and Recovery Act (RCRA) correction action enforcement. Prepared due diligence, liability management and due care documents for the purchaser. Assisted demolition contractor with sampling the concrete slabs of electric substations for polychlorinated biphenyls (PCBs); collected waste characterization samples for disposal; provided underground storage tank (UST) removal notices; and attended progress meetings and managed the removal of three USTs. Obtained Michigan Department of Environmental Quality (MDEQ) closure by demonstrating the residual impact of the UST excavation was associated with a previously reported release from an historic UST system.

EDUCATION

B.S., Civil and Environmental Engineering – Michigan State University
Fundamentals of Professional Practice – Geoprofessional Business Association (GBA)
Fellow, Larson Center for Leadership
Board Member – ACE Mentor of Michigan

REGISTRATIONS AND CERTIFICATIONS

Professional Engineer – Michigan
OSHA 8-Hour Hazardous Waste Operations and Emergency Response Course
OSHA 8-Hour Confined Space Entry Course
Certified Storm Water Operator (CSWO)
Certified Soil Erosion Sedimentation Control (SESC) Inspector
Certified Underground Storage Tank (UST) Professional – MDEQ





JASON C. LAFAYETTE

SENIOR PROJECT CONSULTANT

(734) 891-6277 a jason.lafayette@sme-usa.com

- Hazardous Materials Demolition/Remediation Design
- Asbestos, Lead, and Hazardous Materials Assessment
- Occupational Safety Compliance Services
- Environmental Services

BACKGROUND

Jason serves as a Senior Project Consultant for SME's environmental group. He has 18 years of experience providing services for environmental due diligence, monitoring, assessment, and remediation projects. He specializes in assessment, design, abatement, and contractor bidding and administration for asbestos and hazardous materials projects; and manages and provides technical support for SME's industrial hygiene services. He works with property owners, lending institutions, developers, construction companies, communities, and corporations to address environmental challenges associated with acquiring and redeveloping properties. Jason is also experienced with soil and groundwater sampling, environmental drilling methods, groundwater monitoring well installation, vapor intrusion assessment, environmental due care and corrective action, and storm water compliance.

RELATED PROJECT EXPERIENCE

Project manager and Asbestos Designer for assessment and design services to facilitate the redevelopment of a variety of project sites in Michigan, Indiana, and Ohio. Project services included technical review of site plans and documents, oversight of staff assessment for hazardous materials, preparation of design specifications for hazardous materials removal, contractor bidding and procurement assistance, and management of air clearance sampling and regulatory compliance monitoring during the abatement effort. Relevant project examples include:

- The former 2,000,000 square-foot Northland Mall structure and associated in Southfield, Michigan.
- Kalamazoo Gazette newspaper headquarters buildings in Kalamazoo, Michigan.
- The defunct HK Porter Friction Materials asbestos brake pad and clutch plate manufacturing facility in Huntington, Indiana.
- Operational four-story Henry Ford Cottage Hospital, in Grosse Pointe, Michigan.
- Two Consumers Energy service centers in Livonia and Pontiac, Michigan.
- The former Legion Villa veteran's facility in Springfield, Michigan.
- Several blight-removal, residential block demolitions in Kalamazoo, Battle Creek, Ann Arbor, and Detroit, Michigan.



RELATED PROJECT EXPERIENCE CONT.

Team assessment inspector for over 200 hazardous materials assessments in Michigan, Indiana, and Ohio. Relevant project examples include:

- Former 1,000,000 square-foot K-Mart Headquarters building in Troy, Michigan.
- Cobo Arena and Cobo Hall, comprising over 3,000,000 square feet of convention area space in Detroit, Michigan.
- The former General Motors Argonaut Building, a 230,000 square-foot, 12-story, commercial/industrial building in Detroit, Michigan.
- Summit Place Mall, comprising over 1,000,000 square-feet of floor space in Waterford, Michigan.
- The former American Sunroof Company headquarters building in Southgate, Michigan, consisting of over 119,000 square-feet of floor space.

Managed and performed environmental due diligence assessments for an approximate **80-acre retail development** project in Hartland, Michigan. Project included performance of multiple Phase I ESAs, Phase II ESAs, BEAs and due care plans for multiple parcels and outlots of the development area. Project also included discovery, removal and reporting for abandoned underground storage tanks, and assistance with soil and groundwater management during construction activities.

Performed vapor intrusion assessment for **F.C. Mason Expansion** project in St. Johns, Michigan. Project included a 256,000 square foot manufacturing facility on 10.9 acres and was funded with a \$1 million MDEQ Brownfield Redevelopment Clean Michigan Initiative grant.

Assisted in project management of the **Lansing Marketplace Development** project in Lansing, Michigan. Project included the remediation of a former industrial site for development of a hotel and residential apartments, and was funded with a \$1 million MDEQ Brownfield Redevelopment Clean Michigan Initiative grant.

Performed over 200 Phase I and Phase II ESAs in Michigan for various developers, corporations and lending institutions.

EDUCATION

B.S., Earth Science, Western Michigan University

CERTIFICATIONS AND PROFESSIONAL TRAINING

Asbestos Project Designer – Michigan

Asbestos Inspector – Michigan

Asbestos Management Planner – Michigan

Asbestos Contractor/Supervisor – Michigan

Asbestos Hazard Evaluation Specialist – Ohio

Asbestos Hazard Abatement Project Designer - Ohio

Asbestos Project Designer - Indiana

NIOSH 582 Method for Fiber Counting

Certified Lead Inspector and Risk Assessor – Michigan

OSHA 40-Hour HAZWOPER Training

ASTM Risk-Based Corrective Action at Petroleum Release Sites Training

PSMJ Project Management Bootcamp





TROY D. HELMICK, CPG

PROJECT CONSULTANT

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troy.helmick@sme-usa.com

- **Environmental Services**
- Regulatory Compliance and Due Diligence
- Site Assessments and Audits
- **Project Management**

BACKGROUND

Troy is a Project Consultant and Certified Professional Geologist (CPG) in SME's Plymouth office. As a member of our Environmental Services group, he manages a variety of projects including environmental due diligence, compliance and regulatory requirements associated with petroleum remediation and emergency response activities, underground and aboveground storage tank (UST/AST) assessments and removals, and groundwater and soil contaminant investigations. Troy has more than 20 years of experience providing comprehensive environmental consulting. His expertise includes onsite vapor, groundwater and soil contaminant investigations.

RELATED PROJECT EXPERIENCE

Project Manager for a high-profile redevelopment of a former automotive manufacturing facility. Environmental services include: comprehensive Phase I Environmental Site Assessment (ESA) of the 101 acre property, Phase II ESA, Baseline Environmental Assessment (BEA), Plan to Comply with Due Care (PCDC), due care assessments, coordination of disposal of hazardous materials, successful implementation of groundwater discharge permit, regulatory management and closure of found subsurface structures, and risk based guidance of environmental conditions during construction. The Phase II ESA scope of services have included the collection of soil, groundwater and soil gas samples at a variety of former manufacturing areas including plating, metal cutting, electrical transformers, machine repair, and hazardous materials storage. The PCDC was developed and distributed to the contractors for reference during construction. Conducted follow-up due care assessments to evaluate the former manufacturing areas for potential hazardous material exposure during construction.

Provided environmental services to support the Michigan Department of Environmental Quality with an investigation of a release of trichloroethene (TCE) and cis-1,2dichloroethene. Environmental services include: vertical aquifer profiling of the groundwater, groundwater monitoring well installation and low-flow groundwater sampling, soil gas monitoring point installation and soil gas sampling, soil classification and grain size analysis, elevation survey of groundwater and groundwater flow direction determination, soil, groundwater, and soil gas laboratory results comparison to Part 201 generic clean-up criteria, and volatilization to indoor air interim action screening level exceedances, and waste characterization for determination of waste disposal options of potential chlorinated VOC contaminated soils and groundwater collected during assessment activities.



RELATED PROJECT EXPERIENCE CONT.

Project Manager for a high-profile redevelopment of a former historical retail establishment. Environmental services include: comprehensive Phase I Environmental Site Assessment (ESA), Phase II ESA, due care assessments, coordination of disposal of hazardous materials, successful implementation of groundwater discharge permit, and risk based guidance of environmental conditions during construction (due care). The Phase II ESA and due care assessment scope of services have included the collection of soil, and groundwater samples at a variety of former retail operation areas including dry cleaning, electrical transformers, machine repair, and former basement fill materials. The required groundwater discharge permit parameter testing identified mercury, pH, and Per- and Poly-fluoroalkyl Substances (PFAS) exceeded discharge limits. A groundwater treatment trailer was installed to adjust the pH and remediate the mercury and PFAS contaminated groundwater. Follow-up due care assessments and testing of the treated groundwater for mercury and PFAS are on-going during construction.

Consultant and Project Manager responsible for preparing detailed site assessment and remediation models for client sites regarding environmental regulatory compliance and regulatory closure; and maintaining ongoing relationships with regulatory officers to facilitate regulatory compliance and gain a thorough understanding of the current regulatory climate.

Consultant and Project Manager for diverse oil and gas clients. Responsible for regulatory body compliance reporting; environmental compliance auditing, site inspections and audits; contractor oversight; and safety performance monitoring and reporting. Corrective action experience includes working with soil vapor extraction, air sparge, pump and treat, product skimmers and multi-phase recovery systems. Successfully developed and implemented activities to achieve regulatory No Further Action or Closure.

Project manager for environmental emergency response/remediation modeling projects. Supervised, coordinated and performed environmental spill emergency response activities for multiple petroleum pipeline and toxic chemical releases throughout the country. Provided oversight and coordination of subcontractors during various environmental remedial activities such as remediation system and monitoring well installations, and UST/AST removals, excavations and site decommissioning.

EDUCATION

B.A., Geological Sciences, Albion College

REGISTRATIONS AND CERTIFICATIONS

Certified Professional Geologist - American Institute of Professional Geologists

PROFESSIONAL DEVELOPMENT

American Petroleum Institute WorkSafe Certified
Hazard Recognition Plus™
HAZWOPER 40-Hour Training Course
HAZWOPER 8-Hour Refresher Training Course
First Aid/CPR/AED Certified – American Heart Association





PAUL A. GLASSER, CPG

PROJECT GEOLOGIST

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- Environmental Due Diligence
- Stormwater Permitting & Compliance
- Subsurface Investigations & Vapor Intrusion
- Brownfield Redevelopment

BACKGROUND

Paul is a Project Geologist with more than eight years of experience conducting and managing environmental due diligence (Phase I and II ESAs, BEAs, and Due Care Plans) on a variety of sites in the Midwest to identify and address potential environmental hazards prior to demolition, new construction, and redevelopment. He prepares Act 381 Brownfield Plans and Work Plans in order to secure brownfield tax incentives for redevelopment projects. He also conducts stormwater permitting and environmental compliance on industrial and municipal (MS4) sites. Previously he performed soil, soil gas, groundwater, wastewater, and surface water sampling, monitored contractor activities (such as well installation tank removal, and excavation activities), and input soil and water quality data.

RELATED PROJECT EXPERIENCE

Experienced with City of Detroit permitting requirements related to right-of-entry/right-ofway access, Detroit People Mover work access, and Great Lakes Water Authority wastewater discharge.

Performed a pilot mercury vapor assessment in conjunction with EGLE at a mixed-use redevelopment site in Detroit.

Performed subsurface investigation, delineation, and remediation of two multi-media, TSCA-level, PCB contaminated sites for a proposed mixed-use redevelopment and proposed industrial redevelopment.

Assisted with characterization and obtaining disposal of non-hazardous and hazardous waste, including hexavalent chromium and PCBs.

Performed evaluations of soil backfill reuse for the City of Detroit's Demolition Program.

Performed environmental assessment activities for a major Michigan energy company, including monitoring well installation and low-flow groundwater monitoring/sampling for underground storage tank (UST) releases at natural gas compressor station sites.

Performed environmental assessment activities on residential and commercial sites related to the construction of an international bridge.

Performed low-flow groundwater and soil gas sampling as part of response actions at former manufactured gas plant (MGP) sites.

Deployed microbial sampling equipment to evaluate biodegradation of groundwater contaminated by MGP residuals.



RELATED PROJECT EXPERIENCE CONT.

Conducted Phase I ESAs and BEAs for individuals, corporations and lending institutions to identify and assess potential environmental liabilities. Assignments included vacant land, vacant/active industrial sites, and other commercial facilities.

Responded to emergency natural gas releases and a microbial-induced pipeline corrosion investigation.

Monitored methane and potential off-site migration at the perimeter of former landfills.

Assisted with installation, oversight and inspection of new and retrofit active and passive vapor mitigation systems on residential, mixed-use, and industrial sites.

Assisted with MS4 stormwater compliance for several public school districts and state governmental departments.

EDUCATION

M.S., Geology, Miami University B.S., Geological Sciences, Michigan State University

CERTIFICATIONS AND SAFETY TRAINING

American Institute of Professional Geologists, CPG-1206
OSHA 40-Hour and 8-Hour HAZWOPER Certified
OSHA Respiratory Protection Certified
American Red Cross First Aid/CPR/AED Certified
EGLE Certified Industrial Storm Water Operator
EGLE Certified Construction Storm Water Operator and Soil Erosion and Sedimentation
Control Inspector
Geo-Seal Vapor Intrusion Barrier Certified Inspector
Miss Dig 811 Certification Program

AFFILIATIONS

Michigan Association of Environmental Professionals, Board Member Michigan Urban Land Institute, Associate Member American Institute of Professional Geologists





SARAH B. WILSON, EIT

SENIOR STAFF ENGINEER

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- Survey & Civil Engineering
- Water Resources Engineering
- Environmental Compliance

BACKGROUND

Sarah is a Senior Staff Engineer in SME's Plymouth office. With more than 10 years of experience, her specialties include water resources engineering, environmental compliance, and survey/civil engineering. She is a Certified Stormwater Management Operator and Certified Professional in Erosion and Sediment Control. Sarah has had the opportunity to work extensively on research and development of proprietary best management practices where comparative assessments were performed between the proprietary product and conventional products, both on a small and large-scale basis.

RELATED PROJECT EXPERIENCE

Grab sampled and continuously monitored construction-related runoff from active Tennessee Department of Transportation (TDOT) construction sites for the **TDOT Turbidity Testing** contract. Eleven sites across the state were monitored to quantify average daily turbidity readings from various outfalls with conventional and polymerenhanced TDOT-specified BMP treatment trains. Responsibilities included installation, bi-weekly downloads of turbidity testing equipment, maintenance of all equipment and data compilation in the office. (*)

Performed **SESC/EPSC inspections** involving bi-weekly erosion prevention and sediment control inspections of active TDOT projects and construction projects in Southeast Michigan. (*)

Lead monthly/bi-monthly **TDOT quality assurance/quality control project assessments** for fifteen active TDOT roadway projects. Projects included educating site personnel on an on-going basis about SWPPP implementation and permit compliance. Responsibilities included authoring photo journals and assessment reports, documenting erosion and sediment control measures in place throughout construction, and providing comments to facilitate the project's implementation of erosion control measures. (*)

Involved in the water balance and porous flow study of the **Williamson County Landfill Bioreactor** in Tennessee. The project included the installation of multiple pressure transducers into key components of the bioreactor system in order to record and assess the water balance of the bioreactor system. Information obtained also determined how long it took for injected leachate to move through the internal bioreactor system. This data was used to determine and improve the efficiency of the bioreactor system.

Performed regulatory compliance sampling and analysis of groundwater, surface water, and leachate at **Williamson County Class I and III/IV landfills** in Tennessee. (*)



RELATED PROJECT EXPERIENCE

Aided in the design, review, and modification of **stormwater pollution prevention plans**. Compiled data including soils information, curve number determination, and outfall mapping. Developed plans in accordance with the NPDES Construction General Permit.

Assisted client with the renewal of their **NPDES permit and Soil Erosion and Sediment Control Plan**. Worked as a liaison for the client, MDEQ, and City of Coldwater, MI. (*)

Assisted client with the renewal of their **NPDES permit** and with permit changes due to revisions to the PA-DEP General Permit.

Onsite environmental engineer for the **AK Steel** facility in Dearborn, Michigan. Performed air permitting and environmental compliance as an embedded member of the Environmental Affairs Department. (*)

Managed and performed monthly sampling and analysis of groundwater for the **US Steel GLW-Double Eagle** project. Performed weekly inspections of the facility's hazardous waste storage. (*)

Managed and performed quarterly sampling and analysis of groundwater for **Hillsdale Industrial Drive** in Hillsdale, Michigan. Managed and performed weekly sampling of the site's SVE system. (*)

Performed various tests on potentially new erosion control device. Performed comparative assessment by analyzing sediment retention device performance versus new product performance based on suspended sediment concentration reduction, turbidity reduction, product durability, and ease of installation. Examines filter efficiencies of new product fill materials and outer fabric. Performed on a small and large-scale basis. Field-testing includes, but is not limited to, implementation of ISCO automatic samplers, ISCO flow meters, multi-parameter water quality sondes, and Solinst pressure transducers.

Assists manufacturing clients with the development and marketing of BMP products. This service includes, but is not limited to, providing services associated with the application process for QPL/APL approvals, with multiple state agencies, including state DOTs.

Assists project engineers with the processing of survey data to create topographic survey drawings, site plans, boundary documents, and ALTA/NSPS Land Title Surveys. Assist field crews with creating and processing survey data and computed points for construction staking projects in AutoCAD Civil 3D.

*Projects completed prior to SME

EDUCATION

B.S., Civil Engineering, University of Tennessee – Martin

REGISTRATIONS AND CERTIFICATIONS

Certified Professional in Erosion and Sediment Control MI Certified Construction Storm Water Operator #18326 MI Certified Industrial Storm Water Operator #13998 40-Hour OSHA HAZWOPER Training





JEFFREY S. EVANS, PS

SENIOR CONSULTANT

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- Land Surveying
- Civil Engineering
- Pavement Design and Management
- Nondestructive Pavement Testing and Evaluation
- Geotechnical and Materials Sampling

BACKGROUND

Jeff is a dynamic leader with more than 25 years of building client relationships based on trust. A professional surveyor in 12 states, he has served as a project manager and group leader for survey in infrastructure improvement projects across the Midwest. In 2009, he started his own consulting company providing land surveying, civil engineering, GIS, land management and ecological services to energy clients. Jeff joined SME in 2019 and is working with our civil engineering and land surveying teams to develop strong client relationships.

RELATED PROJECT EXPERIENCE

Project Manager for survey services for multiple GM Ultium Cell Battery plants.

Ford Blue Oval

REV

Marshall Megasite Marshall Michigan Megasite project located in Marshall Township, Michigan. The site is considered one of the largest contiguous sites within the State of Michigan that was being marketed for development. The project consisted of performing a preliminary geotechnical evaluation for over 1,500 acres to assess the buildability of the project area. The project included over 70 borings totaling over 2,500 linear feet of drilling.

Project Manager for survey and civil engineering services at the Grobbel's Cold Storage Facility located in Detroit, Michigan. Performed ALTA Land Title surveys with boundary and topography along with land entitlement services, including site planning, construction plans, and permitting for the project.

Project Manager for survey and civil engineering services for the Lansing Economic Area Partnership (LEAP) - Sumbal Site Revelopment project in Lansing, Michigan. Services included ALTA Land Title survey with boundary and topography. Aerial photography was used to map approximately 50 acres. Jeff conducted a preliminary wetland assessment to assist in determining the presence of an on-site wetland. Mapping information was used to prepare a site engineering drawing and to evaluate the feasibility of the proposed improvements based upon the proposed upland areas of the site that could be used for development.



RELATED PROJECT EXPERIENCE, CONT.

Project Manager for survey services for a confidential project located in Ohio. Due to significant grade changes along the heavily vegetated project area, a topographic survey of the area was prepared. This included 1-foot contour intervals, visible manmade features, spot elevations on 50-foot square grid, tree lines, bearings based on the Ohio State Plane Coordinate System, and locations of existing utilities.

Project Manager for the **Rewold – Rochester Grain Elevator** project located in Rochester, Michigan. Services will include topographic survey and ALTA Land Title Survey.

Founder/Chief Executive Officer of consulting company providing land surveying, civil engineering, GIS, land management and ecological services to energy clients. Completed the first year in operation with five offering only Surveying and Civil Engineering, completing primarily land development projects and construction layout. Over the next 10 years, grew the company to over 80 employees working out of 5 offices located in Plymouth, Traverse City, Highland Park, Cincinnati and Chicago, offering Land Surveying, Civil Engineering, GIS, Land Management and Ecological Services primarily for Energy Clients (Pipeline, Wind, Solar and Transmission) across the country. Responsibilities as CEO included project and client management of several top clients as well as leading all strategic planning, business planning and business drafters, and research personnel, establish budgets, write proposals, implement and establish standard operating procedures, client coordination, project management, business development and corporate strategic planning.*pnsisting of surveyors,

Office Manager/Group Leader for a branch office in Naperville, IL. Group Leader of Cellular Communications groups in IL & MI. Supervising survey operations and implementing standard operating procedures, project management, GPS coordinator and business development.*

*Roles previous to joining SME.

EDUCATION

BBA, Business Administration, Cleary University

REGISTRATIONS AND CERTIFICATIONS

Professional Surveyor – Michigan, Arkansas, Florida, Illinois, Kansas, Kentucky, Mississippi, Missouri, North Dakota, Oklahoma, South Dakota, Tennessee



T 330.915.2654 E TONY@VAPORREMOVAL.COM SOIL GAS MITIGATION PROFESSIONAL

- SSD Systems
- Design/Installation
- Commercial/Residential
- New Construction/Retrofit

LICENSES

- Ohio Mitigation Specialist: RS110
- Indiana Mitigation Specialist: RTM00852

CERTIFICATIONS

- National Radon Proficiency Program Measurement Specialist: 108169
- National Radon Proficiency Program Mitigation Specialist: 107330
- OSHA 40-Hour HAZWOPPER
- OSHA 8- Hour HAZWOPPER Annual refresher

LEADERSHIP

- Vice President, Board of Directors American Association of Radon Scientists and Technologists. 2017 – Present.
- Member. Board of Directors –
 American Association of Radon
 Scientists and Technologists. 201 –
 Present.
- Committee Member and Vapor Intrusion Mitigation Expert –
 ANSI/AARST SGM-SF, Soil Gas Mitigation Standards for Existing Homes. 2015 –
 Present.

TONY MCDONALD

PRESIDENT OF OPERATIONS PROJECT DIRECTOR

BACKGROUND

Over the past 24 years, Tony has designed, installed and maintained thousands of Sub Slab Depressurization (SSD) system to mitigate a wide range of soil air contaminates. Tony's leadership and innovative SSD system designs have enabled A-Z Solutions, Inc. to become a well-respected presence in the vapor intrusion mitigation industry.

In addition to his work in the field, Tony has gained a solid reputation as teacher, lecturer and policy advocate. Tony sits on the executive board of the American Association of Radon Scientists and Technologist (AARST), the largest trade organization in the mitigation industry. In this role, he works to shape vapor intrusion remediation guidelines nationwide. Tony is widely regarded as an expert in his field and has been an invited speaker/educator for environmental professionals, health departments, non-profit groups and public interest forums throughout the US.

LEAD ROLES

A-Z SOLUTIONS, INC - NORTH CANTON, OH

SEPTEMBER 2006 - PRESENT Vice President of Operations Project Director.

Design/Build/Maintain Commercial Sub Slab Depressurization Systems for Vapor Intrusion, Methane and Radon Gas.

A-Z RADON SERVICES, LLC - NORTH CANTON, OH

MARCH 1993 – PRESENT Vice President of Operations.

Design/Build/Maintain Residential Sub Slab Depressurization Systems for Vapor Intrusion, Methane and Radon Gas.

NOTABLE PRESENTATIONS

VAPOR INTRUSION MITIGATION SYSTEMS: AN INTRODUCTION TO SYSTEM DESIGN, INSTALLATION AND LONG-TERM STEWARDSHIP OEPA CERTIFIED PROFESSIONALS TRAINING — COLUMBUS, OH — NOVEMBER 16, 2017

MITIGATION HUBRIS: DON'T LET YOUR PRIDE GET IN THE WAY OF YOU COMPANY.

INTERNATIONAL RADON SYMPOSIUM – SAN DIEGO, CA – SEPTEMBER 21, 2016

EAST BANK OF THE FLATS; A LESSON IN VAPOR INTRUSTION MITIGATION FOR LARGE SCALE BUILDINGS

GEORGIA BROWFIELD CONFERENCE - ATLANTA, GA -

EDUCATION

MOUNT UNION UNIVERSITY, ALLIANCE, OH - BACHELOR OF SCIENCE

Major in Information Systems. Minor in Sociology.

ST. THOMAS AQUINAS HIGH SCHOOL, LOUISVILLE, OH

REFERENCES

MATT KNECHT

PRESIDENT

HZW ENVIRONMENTAL CONSULTANTS, LLC

800.804.8484

mknecht@HZWEnv.com

JOHN GARVEY

VICE PRESIDENT OF BROWNFIELD AND REMEDIATION SERVICES PARTNERS' ENVIRONMENTAL

800.763.1363

JGarvey@PartnersEnv.com

MIKE MCKIM

PROGRAM MANAGER, BROWNFIELD AND ENVIRONMENTAL SERVICES

AECOM

216.622.2459

Mike.McKim@aecom.com

worksmart, inc.

The Subsurface Imaging Company

To Whom it may concern:

I, Michael P. McGarry founded Worksmart, Inc. in 1998 through a partnership with Lounsbury Excavating of Paw Paw Michigan. We started the business to provide private utility locating and ground penetrating radar geophysical services. In 2004 I became the sole owner of Worksmart, Inc.. I have been responsible for all aspects of the business since the start. We complete on average five major projects each week year around.

In addition to my twenty years experience a brief history of my back ground and related experiences include:

ERA TECHNOLOGIES, London, England - Advance studies graduate in Surface Penetrating Radar (SPR) applications, methodology and subsurface radar sciences.

USRADAR, Mattawan, New Jersey – SPR data interpretation training and sciences.

Worksmart, Inc. is the primary utility locating service for many critical infrastructure facilities all over Michigan including D.C.Cook and Palisades Nuclear Power Plants. We have provided Geotechnical services for hundreds of Michigan DEQ triage sites. These sites included locating clandestine underground storage tanks as well as clearing utilities at bore locations.

Worksmart, Inc. scanned approximately 34000 lineal feet for an automotive manufacturer in Warren Michigan. The objective of this project was to locate utilities in advance of a complete site lighting upgrade. New wiring was directionally drilled, trenched and open cut. Not a single existing utility was damaged.

Worksmart, Inc. has provided GPR and utility locating services for many high profile projects included for the Gordie Howe International Bridge in Detroit. Clandestine underground storage tanks were located as well as bore locations cleared of utilities.

We are the first company in the Midwest United States to use a vehicle mounted GPR system and to provide Google Earth documentation of our scanning results. Boat mounted GPR as well as our other under water capability has yet to be matched. Most of our equipment is designed and built in house and is truly state of the art. Our GPR systems utilize a triple frequency antenna operating at 1GHz, 500MHz and 250MHz all simultaneously. This allows us to scan for shallow, midrange and deep targets with one pass. A single frequency antenna can not reach the level reliability we can. Our utility locating equipment includes Radiodetection RD8100 using up to 24 frequencies ranging from 512Hz to 200KHz allowing us to locate the broadest range of utilities. On the average site we will scan with two different EM based utility locators on four different frequencies.

Among other certifications I'm currently:

OSHA Construction Safety and Health trained. 40 Hour Hazwoper and 8 Hour Refresher trained. Confined Space trained.

industrial - environmental - construction

Po Box 442 - Paw Paw, Michigan 49079 Voice: 800-565-3347 - 269-341-9529 Facsimile: 269-341-9530 <u>WWW.Worksmartinc.net</u> - <u>radar01@voyager.net</u>



Stock Drilling, Inc. P.O. Box 186 Ida, Michigan 48140 734-279-2059

734-279-2059 734-279-2076 Fax

JONATHAN WILEY - Direct Imaging Manager

Stock Drilling – May 2009 to Present

Specific Job Duties

Office

- Provide estimates to customers
- Schedule projects
- Monitors & order inventory
- Conducts health & safety meetings
- Publicity

Direct Imaging & Drill Crews

- Manages Direct Imaging and Drill Crews
- Oversees on-site operations and safety protocol and performs site audits
- Guide and train helpers to perform tasks safely and efficiently

Operation and Maintenance of Direct Imaging, Drilling & Support Equipment

Direct Imaging Equipment	Drilling Equipment	Support Equipment
UVOST/LIF	CME 45	pressure washer
Ultra Violet Optical Screening Tool	CME 55	mud pump
Laser Induce Flourescence	CME 55LC	grout pump
MIP	Geoprobe 5400	loaders
Membrane Interface Probe	Geoprobe 7720/7730	skid steers
HPT	Simco EP200	off road equipment
Hydraulic Profiling Tool		air knife
OIP		
Optical Imaging Profiler		
EC		
Electric Conductivity		
Direct Imaging Logging Tools		
LLMIP		
Low Level Membrane Interface Probe		
MIHPT		
MIP/Hydraulic Profiling Tool		
OIHPT		
OIP/Hydraulic Profiling Tool		

- Experience in direct push, hollow stem auger, wire line, direct, air, mud rotary and drilling and sampling methods
- Pump repair and diagnostic /PLC systems
- Performs regular maintenance and rebuilding of direct imaging equipment

Licenses and Qualifications

- Indiana Well Drilling License since 2012, yearly renewal with 6 hours of continuing education every two years
- CDL License Class A
- Direct Imaging Logging Tools MIP-HPT & OIP, May 2-5, 2016 Classroom & Field Work
- OSHA 10 Hour Construction, October 20, 2015/June 22, 2012
- Direct Imaging Logging Tools 7 Hour Course, April 23, 2014
- Geoprobe Equipment & Tools, 3 Hour Workshop, April 24, 2014
- 8 Hour Supervisor, Hazardous Waste and Emergency Response course, January 4, 2013
- Ultra Violet Optical Screening Tool Training Course May 3, 2012
- Direct Image Logging Tools 24 Hour Training Course, April 5, 2012
- Classification Course for Geotechnical Logging of Soil and Rock Spectrum, University of Akron, March 20, 2012
- FHWA-NHI-132079 Subsurface Investigation Qualifications by National Drilling Association, February 29, 2012
- OSHA 40 Hour Hazwoper Course, May 8, 2009 and 8 Hour Yearly Refresher last completed on January 2, 2019
- 8 Hour Supervisor, Hazardous Waste and Emergency Response course, January 4, 2013
- A.A.S. Industrial Electricity & Electronics

Yearly, Biennial, & Triennial Trainings – All Trainings Current

API Worksafe e-RAILSAFE Badge – CN/Norfolk & Southern
Antea – COW RM Trainings First Aid, CPR with AED
CN On-Track Training Life Saving Rules - Shell

L&S Training - Marathon Loss Prevention System – ExxonMobil

Drilling Experience

Jonathan has been in the drilling industry for over ten years. Jonathan has been trained in hollow stem auger methods, direct push drilling methods and air knife operation. Jonathan performs 2D & 3D data visualization services using RockWorks software. He maintains, repairs, operates all direct imaging equipment. Jonathan is responsible for training all new field personnel in the proper operation, quality control and field maintenance of Direct Imaging tools and manages all Direct Imaging projects and staff. Jonathan has also worked closely with Richard Stock in marketing and performing educational seminars at client offices and at trade shows on the advantages of DI services for rapid delineation of contaminant plumes.

Previous Work Experience: Aviation electronics and repair & customer service



Stock Drilling, Inc. P.O. Box 186 Ida, Michigan 48140 734-279-2059

734-279-2059 734-279-2076 Fax

MICHAEL COOPER -Direct Imaging Specialist/Driller Helper

Stock Drilling – July 2012 to Present

Specific Job Duties

Operation and Maintenance of Direct Imaging, Drilling & Support Equipment

Direct Imaging Equipment UVOST/LIF Ultra Violet Optical Screening Tool Laser Induce Flourescence MIP Membrane Interface Probe HPT Hydraulic Profiling Tool OIP Optical Imaging Profiler EC Electric Conductivity Direct Imaging Logging Tools LLMIP Low Level Membrane Interface Probe MIHPT MIP/Hydraulic Profiling Tool	Drilling Equipment CME 45 CME 55 CME 55LC Geoprobe 5400 Geoprobe 7720/7730 Simco EP200	Support Equipment pressure washer mud pump grout pump loaders skid steers off road equipment air knife
MIP/Hydraulic Profiling Tool		
OIHPT OIP/Hydraulic Profiling Tool		

- Pump repair and diagnostic/PLC systems
- Performs regular maintenance and rebuilding of direct imaging equipment
- Assist driller in all aspects of drilling
- Maintain and work on equipment
- Experience in direct push, hollow stem auger drilling and sampling methods
- Contributes to health and safety trainings and meetings

Qualifications

- Geoprobe Equipment & Tools, 6 Hour Training Course, April 26, 2018
- Direct Image Logging Tools, MIP with HPT/EC, 5 Hour Training Course, April 25, 2018
- Direct Imaging Logging Tools MIP-HPT & OIP, May 2-5, 2016 Classroom & Field Work
- Geoprobe Equipment & Tools, 7 Hour Training Course, April 24, 2014
- Direct Imaging Logging Tools, 7 Hour Training Course, April 23, 2014
- OSHA 10 Construction, January 24, 2014
- Ultra Violet Optical Screening Tool Training Course January 16, 2014
- OSHA 40 Hour Hazwoper Course, July 19, 2012 and 8 Hour Yearly Refresher last completed on January 2, 2019
- 8 Hour Supervisor, Hazardous Waste and Emergency Response Course, January 4, 2013
- 40 Credit Hours of Electronics

Yearly, Biennial, & Triennial Trainings – All Trainings Current

API Worksafe e-RAILSAFE Badge – CN/Norfolk & Southern

Antea – COW RM Trainings First Aid, CPR with AED CN On-Track Training Life Saving Rules - Shell

L&S Training - Marathon Loss Prevention System - ExxonMobil

Drilling Experience

Mike has worked in the drilling industry for over 7 years. Mike assist the driller in all aspects of drilling and is a trained Direct Imaging Specialist. He has been operating the direct imaging equipment for over five years.

Previous Work Experience

Prior to working at Stock Drilling Mike worked 12 years at Meijer stocking inventory, taking deliveries, assisted in remodeling of store, assisted the NCR technician in electronics of installing new cash registers and HVAC technician. Mike was also on several support teams opening new store in Michigan and Ohio. Prior to working at Meijer, Mike worked at a dairy farm.

SAMPLE FIELD NOTES



Project: 2983 Veterans Memorial Drive AST Removal

Site: 2983 Veterans Memorial Drive, Walker, MI 49543

Area of Work AST area and roadway Date 11/29/2021 Field Representative Arrival Time Jacob Lindsay, Megan Schaner 08:16 Type of Work Departure Time AST Removal 16:00 Site sketch produced? YES Contractor MKC Group, Inc (MKC) Weather Cloudy

General Notes:

Visitors

Visitor	Representing	Arrival Time	Departure Time
	CRC	12:14	

Equipment

Equipment being used	Model type	Calibration (if applicable)	Calibration Date (if applicable)	Calibration Time (if applicable)
Skid steer (JSS)	Deere 333G			
Brush hog/mulcher (JSS)	Fecon			

Site Observations

Time	Notes
08:16	Arrived on site
08:20	Met with Steve with JSS
08:43	Walked around tank and took pictures
08:45	Megan arrived on site
09:35	Attended Contractor Health and Safety meeting
09:45	Nancy with EGLE approved of widening the clearing for truck path to make room for silt fence.
10:01	Contractor began unloading crane mats
10:50	Contractorbegan clearing brush for truck path
10:54	Contractor finished unloading crane mats
11:49	Contractor began knocking down portion of berm for truck path
12:15	Contractor finished knocking down berm
13:33	Contractor stopped for lunch
13:54	Contractor continued clearing brush
14:12	Contractor noted that the pipes leading to tank had been cut

Powered by: ONUPY Feb 14, 2022, 7:53 PM 109

Project Number: 082440.00



Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543

Notes Contractor cleared brush from SE side of tank		
Contractor cleared brush from SE side of tank	1	Notes
	Contractor cleared brush from SE side of tank	

Project Number: 082440.00

Completed by:

Jacob Lindsay, Megan Schaner

Contractor and SME left site

Contractor completed brush removal from work area

Reviewed by:

Time

14:48

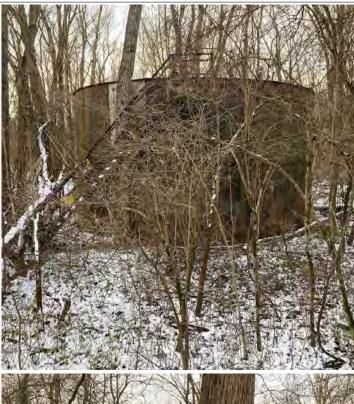
15:30

16:00



Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543

Project Number: 082440.00



Caption: View of AST



Caption: View of bermed area around the AST.



Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543

Project Number: 082440.00

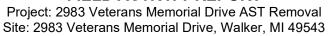


Caption: View of the AST.



Caption: View of the bermed area around the AST.







Caption: View of the AST.

Project Number: 082440.00



Caption: View of piping on the AST.



Project: 2983 Veterans Memorial Drive AST Removal

Site: 2983 Veterans Memorial Drive, Walker, MI 49543

Area of Work	AST area and roadway	Date	11/30/2021	
Field Representative	Jacob Lindsay	Arrival Time	08:00	
Type of Work	AST removal	Departure Time	17:10	
Site sketch produced?	YES	Contractor	MKC Group, Inc (MKC)	
Weather	Snow, Clear			

General Notes:

MKC is the prime contractor for the project. MKC sub-contracted Job Site Services (JSS) for site activities.

Visitors

Visitor	Representing	Arrival Time	Departure Time
Nick	FMCI	12:01	12:30

Equipment

Equipment being used	Model type	Calibration (if applicable)	Calibration Date (if applicable)	Calibration Time (if applicable)
Trencher (JSS)	Ditch Witch c16x			
Skid Steer (JSS)	Deere 333G			
Excavator (JSS)	PC 210 LC			

Site Observations

Time	Notes
08:00	Arrived on site
08:15	Contractor had completely cleared brush from trucking path
08:17	Contractor began cutting down larger trees with chainsaw
08:28	Contractor said that they would only be cutting down 7 of the 11 trees permitted to be cut
08:42	Contractor trencher arrived to install silt fence
09:21	Contractor began making trench for silt fence along truck path
09:58	Contractor finished trenching and installing silt fence
10:08	Contractor truck arrived and dropped off excavator
10:40	Contractor began laying wooden truck mats
12:01	Nick with FMCI (utility locator) arrived on site to locate underground pipes
12:32	Nancy (EGLE) approved changed plans for temporary access road and temporary staging area.
12:40	Contractor began cutting tank and measured ambient air in the work area with a photoionization detector (PID)
13:00	Contractor took lunch

Feb 14, 2022, 7:52 PM 114

Project Number: 082440.00



Project Number: 082440.00

Project: 2983 Veterans Memorial Drive AST Removal	
Site: 2983 Veterans Memorial Drive, Walker, MI 49543	

Time	Notes
13:45	Contractor began laying out more wooden mats
13:46	Spoke to Contractor about future plans
14:08	Contractor resumed cutting tank with excavator
14:10	Contractor resumed PID screening of the work area
14:45	Contractor completed construction of the truck path
16:31	Contractor finished AST demo for the day and began installing security fence
17:10	SME and Contractor Left site

Completed by: Reviewed by:

Jacob Lindsay

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Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543

Project Number: 082440.00



Caption: Truck access pathway.



Caption: Cleared AST area.



Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543

Project Number: 082440.00



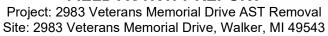
Caption: Cleared AST area.



Caption: Cleared AST area.

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Caption: Tree removal in AST area

Project Number: 082440.00



Caption: Tree removal in AST area

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Project: 2983 Veterans Memorial Drive AST Removal

Site: 2983 Veterans Memorial Drive, Walker, MI 49543

Area of Work	AST area and roadway	Date	12/01/2021	
Field Representative	Jacob Lindsay	Arrival Time	07:50	
Type of Work	AST removal	Departure Time	16:00	
Site sketch produced?	YES	Contractor	MKC Group, Inc (MKC)	
Weather	Cloudy Cold			Π

General Notes:

MKC is the prime contractor for the project. MKC sub-contracted Job Site Services (JSS) for site activities.

Visitors

Visitor	Representing	Arrival Time	Departure Time

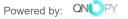
Equipment

Equipment being used	Model type	Calibration (if applicable)	Calibration Date (if applicable)	Calibration Time (if applicable)
Skid steer (JSS)	Deere 333G			
Excavator (JSS)	Komatsu PC 210 LC			

Site Observations

Time	Notes
07:50	Arrived on site
08:00	Contractor began mixing powder absorbent with sludge in bottom of the AST to solidify for landfill
08:00	SME began taking PID screenings
08:01	Contractor had begun continuing demolition of AST
08:25	Scrap metal truck dropped off dumpster
08:48	Contractor truck dropped off dumpster and completed manifests
09:15	Contractor waiting on 2 more bags of powder absorbent
12:00	Contractor took lunch
12:16	Contractor truck came to drop off saw dust/wood chips to mix in with sludge
12:29	Contractor began mixing saw dust/wood chips into sludge to solidify. Nancy (EGLE) approved use of saw dust/wood chips for solidification.
14:28	Contractor truck arrived with second load of saw dust/wood chips
14:59	Contractor began loading first truck with oily sludge mixed with saw dust/wood chips
15:20	Gave Contractor truck driver signed manifest (manifest #1129100)
15:32	Contractor truck left site to transport loaded truck (RT-1100) to landfill

Feb 14, 2022, 7:52 PM 119



Project Number: 082440.00



Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543

Project Number: 082440.00

Time Notes 16:00 Left site

Completed by: Reviewed by:

Jacob Lindsay

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Feb 14, 2022, 7:52 PM 120



Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543





Caption: AST remaining at start of the day



Caption: Continued AST demolition



Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543

Project Number: 082440.00



Caption: Continued AST demolition



Caption: Continued AST demolition



Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543





Caption: Sludge preparation for solidification



Caption: Sludge preparation for solidification



Project: 2983 Veterans Memorial Drive AST Removal

Site: 2983 Veterans Memorial Drive, Walker, MI 49543

Area of Work	AST removal and roadway	Date	12/02/2021
Field Representative	Jacob Lindsay	Arrival Time	09:00
Type of Work	AST Removal	Departure Time	16:45
Site sketch produced?	YES	Contractor	MKC Group, Inc (MKC)
Weather	Clear, Cold		

General Notes:

MKC is the prime contractor for the project. MKC sub-contracted Job Site Services (JSS) for site activities.

Visitors

	Visitor	Representing	Arrival Time	Departure Time
_				

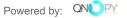
Equipment

Equipment being used	Model type	Calibration (if applicable)	Calibration Date (if applicable)	Calibration Time (if applicable)
Skid steer (JSS)	Deere 333 G			
Excavator (JSS)	Komatsu PC 210 LC			

Site Observations

Time	Notes
09:00	Arrived on site
09:15	Contractor truck was loaded with filled dumpster
09:22	Collected previous manifest (manifest #1129100) and gave new manifest (manifest #1129101) to Contractor driver
11:10	Contractor truck arrived to drop off dumpster and pick up second loaded dumpster
11:27	Collected previous manifest (manifest #1129101) and gave new manifest (manifest #1129102) to Contractor driver
11:40	Contractor loaded truck (RT-1100) left site to bring load to landfill
11:57	Contractor began filling new dumpster with oily sludge
12:30	Contractor took lunch
13:24	Contractor truck dropped off dumpster
13:35	Collected previous manifest (manifest #1129102) and gave new manifest (manifest #1129103) to Contractor driver
14:00	Contractor began filling fourth dumpster with sludge
14:12	Contractor began scraping sludge out inside tank with shovels
15:15	Contractor truck dropped off new dumpster and pick up loaded one
15:19	Collected previous manifest (manifest #1129103) and gave new manifest (manifest #1129104) to Contractor driver

Feb 14, 2022, 7:52 PM 124



Project Number: 082440.00



Project Number: 082440.00

Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543

Time	Notes
15:53	Contractor began loading scrap metal into dumpster
16:35	Contractor finished loading scrap metal
16:45	Left site

Completed by: Reviewed by:

Jacob Lindsay

Powered by: QNOPY Feb 14, 2022, 7:52 PM 125



Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543



Project Number: 082440.00



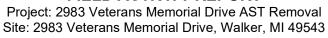
Caption: Sludge removal from AST



Caption: Sludge removal from AST

Powered by: ONUPY Feb 14, 2022, 7:52 PM







Caption: Removed solidified sludge materials

Project Number: 082440.00



Caption: Sludge removal from AST

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Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543





Caption: Dumpster of removed sludge materials



Caption: AST after sludge removal

Feb 14, 2022, 7:52 PM Powered by: ONO PY



Project: 2983 Veterans Memorial Drive AST Removal

Site: 2983 Veterans Memorial Drive, Walker, MI 49543

Area of Work	AST area and roadway	Date	12/03/2021
Field Representative	Jacob Lindsay	Arrival Time	08:00
Type of Work	AST removal	Departure Time	13:13
Site sketch produced?	YES	Contractor	MKC Group, Inc (MKC)
Weather	Cloudy, Cold, Snow		

General Notes:

MKC is the prime contractor for the project. MKC sub-contracted Job Site Services (JSS) for site activities.

Visitors

Visitor		Representing	Arrival Time	Departure Time
		1 0		

Equipment

Equipment being used	Model type	Calibration (if applicable)	Calibration Date (if applicable)	Calibration Time (if applicable)
Skid steer (JSS)	Deere 333G			
Excavator (JSS)	Komatsu PC 210 LC			

Site Observations

Time	Notes
08:00	Arrived on site
08:13	Contractor began unloading steam cleaning equipment
09:00	Contractor began steam cleaning interior of AST
09:09	Contractor used vaccum pump in AST to removal out all contaminated water
10:48	Contractor finished steam cleaning of interior of AST
10:48	Contractor began taking apart bottom half of AST
11:05	Contractor began steam cleaning equipment
11:20	AST completely disassembled
11:24	Contractor began packing up vacuum equipment
11:26	Contractor vacuum truck and equipment truck left site (waste tracking number JSS 269198)
12:23	Contractor began loading scrap metal into dumpster
13:13	Left site

Completed by: Jacob Lindsay

Reviewed by:

Powered by: ONOPY Feb 14, 2022, 7:51 PM 129

Project Number: 082440.00



Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543



Project Number: 082440.00



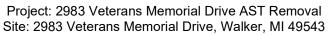
Caption: Steam cleaning equipment



Caption: Removal/demolition of AST

Feb 14, 2022, 7:51 PM Powered by: ONO PY







Caption: Removal/demolition of AST

Project Number: 082440.00



Caption: Removal/demolition of AST

Powered by: ONUPY Feb 14, 2022, 7:51 PM



Project: 2983 Veterans Memorial Drive AST Removal Site: 2983 Veterans Memorial Drive, Walker, MI 49543



Project Number: 082440.00



Caption: Removal/demolition of AST



Caption: Removal/demolition of AST

Feb 14, 2022, 7:51 PM Powered by: ONO PY 132

CERTIFICATION OF MICHIGAN BASED BUSINESS



DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET State Facilities Administration Design & Construction Division

Certification of a Michigan Based Business

(Information Required Prior to Contract Award for Application of State Preference/Reciprocity Provisions)

	or exact reconstructions, reconstructions,				
To qualify	as a Michigan business:				
	Vendor must have, during the 12 months immediately preceding this bid deadline:				
o r If the bus	iness is newly established, for the period the business has been in existence, it has:				
(Check a	I that apply):				
	Filed a Michigan single business tax return showing a portion, or all the income tax base allocated or apportioned to the State of Michigan pursuant to the Michigan Single Business Tax Act, 1975 PA 228, MCL • ~208.1 – 208.145: or				
X	Filed a Michigan income tax return showing income generated in or attributed to the State of Michigan; or				
X	Withheld Michigan income tax from compensation paid to the bidder's owners and remitted the tax to the Department of Treasury; or				
nominal fil	at I have personal knowledge of such filing or withholding, that it was more than a ing for the purpose of gaining the status of a Michigan business, and that it indicates nt business presence in the state, considering the size of the business and the nature ities.				
the criteria	the Michigan Department of Treasury to verify that the business has or has not met for a Michigan business indicated above and to disclose the verifying information to ing agency.				
Bidder sha	all also indicate one of the following:				
X	Bidder qualifies as a Michigan business (provide zip code: 48170)				
	☐ Bidder does not qualify as a Michigan business (provide name of State:).				
	Principal place of business is outside the State of Michigan, however service/commodity provided by a location within the State of Michigan (provide zip code:)				



DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET State Facilities Administration Design & Construction Division

Bidder: SME

Andrew J. Emmert, CPA
Authorized Agent Name (print or type)

Authorized Agent Signature & Date

Fraudulent Certification as a Michigan business is prohibited by MCL 18.1268 § 268. A BUSINESS THAT PURPOSELY OR WILLFULLY SUBMITS A FALSE CERTIFICATION THAT IT IS A MICHIGAN BUSINESS OR FALSELY INDICATES THE STATE IN WHICH IT HAS ITS PRINCIPAL PLACE OF BUSINESS IS GUILTY OF A FELONY, PUNISHABLE BY A FINE OF NOT LESS THAN \$25,000 and subject to debarment under MCL 18.264.

RESPONSIBILITY CERTIFICATION



DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET State Facilities Administration Design & Construction Division

Responsibility Certification

The bidder certifies to the best of its knowledge and belief that, within the past three (3) years, the bidder, an officer of the bidder, or an owner of a 25% or greater interest in the bidder:

- (a) Has not been convicted of a criminal offense incident to the application for or performance of a contract or subcontract with the State of Michigan or any of its agencies, authorities, boards, commissions, or departments.
- (b) Has not had a felony conviction in any state (including the State of Michigan).
- (c) Has not been convicted of a criminal offense which negatively reflects on the bidder's business integrity, including but not limited to, embezzlement, theft, forgery, bribery, falsification, or destruction of records, receiving stolen property, negligent misrepresentation, price-fixing, bid rigging, or a violation of state or federal anti-trust statutes.
- (d) Has not had a loss or suspension of a license or the right to do business or practice a profession, the loss or suspension of which indicates dishonesty, a lack of integrity, or a failure or refusal to perform in accordance with the ethical standards of the business or profession in question.
- (e) Has not been terminated for cause by the Owner.
- (f) Has not failed to pay any federal, state, or local taxes.
- (g) Has not failed to comply with all requirements for foreign corporations.
- (h) Has not been debarred from participation in the bid process pursuant to Section 264 of 1984 PA 431, as amended, MCL 18.1264, or debarred or suspended from consideration for award of contracts by any other State or any federal Agency.
- (i) Has not been convicted of a criminal offense or other violation of other state or federal law, as determined by a court of competent jurisdiction or an administrative proceeding, which in the opinion of DTMB indicates that the bidder is unable to perform responsibly or which reflects a lack of integrity that could negatively impact or reflect upon the State of Michigan, including but not limited to, any of the following offenses under or violations of:
 - The Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.101 to 324.90106.
 - ii. A persistent and knowing violation of the Michigan Consumer Protection Act, 1976 PA 331, MCL 445.901 to 445.922.



DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET State Facilities Administration Design & Construction Division

- iii. 1965 PA 166, MCL 408.551 to 408.558 (law relating to prevailing wages on state projects) and a finding that the bidder failed to pay the wages and/or fringe benefits due within the period required.
- iv. Repeated or flagrant violations of 1978 PA 390 MCL 408.471 to 408.490 (law relating to payment of wages and fringe benefits).
- v. A willful or persistent violation of the Michigan Occupational Health and Safety Act, 1974, PA 154, MCL 408.10001 to 408.1094, including: a criminal conviction, repeated willful violations that are final orders, repeated violations that are final orders, and failure to abate notices that are final orders.
- vi. A violation of federal or state civil rights, equal rights, or non-discrimination laws, rules, or regulations.
- vii. Been found in contempt of court by a Federal Court of Appeals for failure to correct an unfair labor practice as prohibited by Section 8 of Chapter 372 of the National Labor Relations Act, 29 U. s. C. 158 (1980 PA 278, as amended, MCL 423.321 et seq).
- (j) Is NOT an Iran linked business as defined in MCL 129.312.

I understand that a false statement, misrepresentation, or concealment of material facts on this certification may be grounds for rejection of this proposal or termination of the award and may be grounds for debarment.

Bidder: SME	Andrew J. Emmert, CPA
	Authorized Agent Name (print or type)
	December 12, 2022 Authorized Agent Signature & Date
I am unable to certify to the above stateme	ents. My explanation is attached.



Passionate People Building and Revitalizing our World





2023 ENVIRONMENTAL INDEFINITE SERVICES INDEFINITE DELIVERY (ISID)

PART II - COST PROPOSAL

January 12, 2023



PART II - COST

III-1 BILLABLE RATE

SME services will be provided on a unit fee basis using the schedule of fees located in Attachment I, as Form II-2-A. This form contains the billable rates for key and non-key SME personnel as well as our three professional subcontractors. Drilling services will be selected through a bid process with three qualified contractors. Subcontractor services will not be marked up. We understand the EGLE laboratory or an overflow laboratory with an ISID contract will perform analytical testing. Therefore, this proposal does not include SME-subcontracted analytical testing.

SME will propose estimated fees for the individual assigned projects. The total fee for any assigned project will be our maximum not-to-exceed fee for all services. Compensation for each project phase will be in accordance with the ISID – Environmental Contract for Professional Services, Article II – Compensation.

If a project site is more than 100 miles one-way from the office of our staff, SME will provide an estimated allowance of reimbursable costs for travel expenses to the project site at the State of Michigan per diem, lodging, and mileage rates. Overtime (weekends, holidays, over 8 hours per day, night work) required to meet project needs will be invoiced at 1.5 times the listed rates. If staff are promoted, their billable rate will change to match the listed staff technical titles. We included an escalation rate of about 1.95 percent for services provided in years subsequent to 2023 for all services.

ATTACHMENT I - FORM II-2-A

II-2-A. <u>POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION</u> 2019 ENVIRONMENTAL INDEFINTIE SCOPE INDEFINITE DELIVERY (ISID) RFP

Firm Name Yearly Percentage Billing Rate increase SME 1.95%

	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027
PROFESSIONAL KEY PERSONNEL LEVEL 4 (P4)					
Daniel R. Cassidy, CPG	\$225	\$229	\$233	\$237	\$241
Sara I. Bals, EIT	\$225	\$229	\$233	\$237	\$241
Jeffery R. Lanier, PE	\$225	\$229	\$233	\$237	\$241
Brian C. Berger, PE	\$225	\$229	\$233	\$237	\$241
Jeffrey S. Evans, PS	\$225	\$229	\$233	\$237	\$241
Casey E. Smith, CPG	\$189	\$192	\$195	\$198	\$201
PROFESSIONAL KEY PERSONNEL LEVEL 3 (P3)					
Paul A. Glasser	\$150	\$153	\$156	\$159	\$162
Jason C. Lafayette	\$150	\$153	\$156	\$159	\$162
Troy D. Helmick, CPG	\$150	\$153	\$156	\$159	\$162
Aaron J. Lammers, EIT	\$150	\$153	\$156	\$159	\$162
Agnes R. Taylor, LPG	\$150	\$153	\$156	\$159	\$162
Sarah B. Wilson, EIT	\$150	\$153	\$156	\$159	\$162
PROFESSIONAL NON-KEY STAFF LEVEL 2 (P2)					
Kent J. Rugenstein	\$115	\$117	\$119	\$121	\$123
Kelsey Pohl, PE	\$115	\$117	\$119	\$121	\$123
Christina Villerot, PE	\$115	\$117	\$119	\$121	\$123
Marc Rasmussen, PE	\$115	\$117	\$119	\$121	\$123
PROFESSIONAL NON-KEY STAFF LEVEL 1 (P1)					
Jacob Lindsay	\$95	\$97	\$98	\$100	\$102
Myles G. Jackman	\$95	\$97	\$98	\$100	\$102
Brendan Huehn	\$95	\$97	\$98	\$100	\$102

	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027
TECHNICAL NON-KEY PERSONNEL					
Anthony J. Hosbein	\$86	\$88	\$90	\$92	\$94
Percy C. Richards	\$76	\$88	\$90	\$92	\$94
Andrew Brucki	\$76	\$88	\$90	\$92	\$94
Andrew Smigelski	\$76	\$88	\$90	\$92	\$94
TECHNICAL SUPPORT NON-KEY PERSONNEL					
Xue Xiong	\$76	\$77	\$79	\$81	\$83
Wendy Jurkowski	\$76	\$77	\$79	\$81	\$83
Jennifer Crump	\$76	\$77	\$79	\$81	\$83
Sarah Yang	\$76	\$77	\$79	\$81	\$83
Danielle DeBoer	\$76	\$77	\$79	\$81	\$83
Kaitlyn Hugo	\$76	\$77	\$79	\$81	\$83
Katie Darling	\$76	\$77	\$79	\$81	\$83
Julie Blake	\$86	\$88	\$90	\$92	\$94
Jose Rios	\$86	\$88	\$90	\$92	\$94
Matt Nowak-Rochford	\$86	\$88	\$90	\$92	\$94
Cindy Rocha-Ceron	\$86	\$88	\$90	\$92	\$94
Samantha Paradise	\$86	\$88	\$90	\$92	\$94
SUBCONSULTANT - A-Z SOLUTIONS, INC.					
Tony McDonald – Sr. Project Manager	\$195	\$199	\$203	\$207	\$211
Project Coordinator	\$149	\$152	\$155	\$158	\$161
CAD Draftsperson	\$85	\$87	\$89	\$91	\$93
SUBCONSULTANT – WORKSMART, INC.					
GPR Professional	Lump Sum** \$1,800	Lump Sum** \$1,889	Lump Sum** \$1,982	Lump Sum** \$2,080	Lump Sum** \$2,182

SUBCONSULTANT – STOCK DRILLING, INC.					
UVOST and Geoprobe rig 2 man crew	Day	Day	Day	Day	Day
	Rate***	Rate***	Rate***	Rate***	Rate***
	\$4,050	\$4,129	\$4,210	\$4,292	\$4,376

^{*}Billing Rate will be in accordance with the instructions regarding the "Overhead Items used for Professional Billing Rate Calculation," and the attached "Sample Standard Contract for Professional Services," Article II, Compensation.

^{**}Lump sum assumes the site to be surveyed is one acre or less in size. Lump sum includes cost for field work and report preparation.

^{***} Day Rate for a UVOST and Geoprobe rig and 2-man crew and assumes 10 hours/day.



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APPENDIX 3 PROFESSIONAL CERTIFICATION FORMS

(See pages 263 - 267)

APPENDIX 4

OVERHEAD ITEMS ALLOWED FOR THE PROFESSIONAL SERVICES CONTRACTOR FIRM'S HOURLY BILLING RATE CALCULATION

DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET, VEHICLE AND TRAVEL SERVICES SCHEDULE OF TRAVEL RATES FOR CLASSIFIED AND UNCLASSIFIED EMPLOYEES Effective January 1, 2023

MICHIGAN SELECT CITIES*

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	\$85.00	
Breakfast	\$11.75	\$14.75
Lunch	\$11.75	\$14.75
Dinner	\$28.00	\$31.00

MICHIGAN IN-STATE ALL OTHER

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	\$85.00	
Breakfast	\$9.75	\$12.75
Lunch	\$9.75	\$12.75
Dinner	\$22.00	\$25.00
Lodging	\$51.00	
Breakfast	\$9.75	
Lunch	\$9.75	
Dinner	\$22.00	
Per Diem Total	\$92.50	_

OUT-OF-STATE SELECT CITIES*

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	Contact Conlin Travel	
Breakfast	\$15.00	\$18.00
Lunch	\$15.00	\$18.00
Dinner	\$29.00	\$32.00

OUT-OF-STATE ALL OTHER

<u> </u>	<u> </u>	
	Individual	Group Meeting (pre-arranged and approved)
Lodging**	Contact Conlin Travel	
Breakfast	\$11.75	\$14.75
Lunch	\$11.75	\$14.75
Dinner	\$27.00	\$30.00
Lodging	\$51.00	
Breakfast	\$11.75	
Lunch	\$11.75	
Dinner	\$27.00	
Per Diem Total	\$101.50	•

Incidental Costs Per Day (with overnight stay) \$5.00

Mileage RatesCurrentPremium Rate\$0.655 per mileStandard Rate\$0.440 per mile

^{*} See Select Cities Listing

^{**} Lodging available at State rate, or call Conlin Travel at 877-654-2179 or www.somtravel.com

SELECT CITY LIST SCHEDULE OF TRAVEL RATES FOR CLASSIFIED AND UNCLASSIFIED EMPLOYEES Effective January 1, 2023

Michigan Select Cities/Counties							
The state of the s	CITIES	COUNTIES					
	Ann Arbor, Auburn Hills, Beaver Island, Detroit, Grand Rapids, Holland,						
	Leland, Mackinac Island, Petoskey, Pontiac, South Haven, Traverse City	-					
	Letana, Mackinae Islana, i etoskey, i ontiae, south navell, mavelse eity						
Out of State Select	Cities/Counties						
STATE	CITIES	COUNTIES					
Alaska	All locations						
Arizona	Phoenix, Scottsdale, Sedona						
California	Arcata, Edwards AFB, Eureka, Los Angeles, Mammoth Lakes,	Los Angeles, Mendocino, Orange,					
	McKinleyville, Mill Valley, Monterey, Novato, Palm Springs, San Diego						
	San Francisco, San Rafael, Santa Barbara, Santa Monica, South Lake						
	Tahoe, Truckee, Yosemite National Park						
Colorado	Aspen, Breckenridge, Grand Lake, Silverthorne, Steamboat Springs,						
	Telluride, Vail						
Connecticut	Bridgeport, Danbury						
District of Columbia	Washington DC (See also Maryland & Virginia)						
Florida	Boca Raton, Delray Beach, Fort Lauderdale, Jupiter, Key West, Miami						
Georgia	Brunswick, Jekyll Island						
Hawaii	All locations						
Idaho	Ketchum, Sun Valley						
Illinois	Chicago	Cook, Lake					
Kentucky	Kenton						
Louisiana	New Orleans						
Maine	Bar Harbor, Kennebunk, Kittery, Rockport, Sandford						
Maryland	Baltimore City, Ocean City	Montgomery, Prince George					
Massachusetts	Boston, Burlington, Cambridge, Martha's Vineyard, Woburn	Suffolk					
Minnesota	Duluth, Minneapolis, St. Paul	Hennepin, Ramsey					
Nevada	Las Vegas						
New Mexico	Santa Fe						
New York	Bronx, Brooklyn, Lake Placid, Manhattan, Melville, New Rochelle,	Suffolk					
	Queens, Riverhead, Ronkonkoma, Staten Island, Tarrytown, White						
	Plaines						
Ohio	Cincinnati						
Pennsylvania	Pittsburgh	Bucks					
Puerto Rico	All locations						
Rhode Island	Bristol, Jamestown, Middletown, Newport, Providence	Newport					
Texas	Austin, Dallas, Houston, L.B. Johnson Space Center						
Utah	Park City	Summit					
Vermont	Manchester, Montpelier, Stowe	Lamoille					
Virginia	Alexandria, Fairfax, Falls Church	Arlington, Fairfax					
Washington	Port Angeles, Port Townsend, Seattle						
Wyoming	Jackson, Pinedale						

APPENDIX 5

CERTIFICATES OF INSURANCE



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 4/20/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed.

	SUBROGATION IS WAIVED, subject is certificate does not confer rights t							require an endorsement.	A sta	itement on
_	DUCER	O tile	CCIT	neate noider in nea or se	CONTAC) <u>•</u>			
Ca	mden Insurance Agency. Inc.				NAME: PHONE	212.06	0600	FAX		
	Nish Group Inc.				(A/C, No	, Ext): 313-965 ss: certs@mo	0-90UZ	(A/C, No):		
	900 Ryan Road Suite A troit MI 48212				ADDRES					
					RA: Amerisur		RDING COVERAGE		NAIC # 19488	
INSURED SOIL&-			SOIL&-2		ка: Amerisui кв: Amerisui				11050	
SM	IE .						e railileis ili	15. CO.		11030
So	il and Materials Engineers, Inc 980 Plymouth Oaks Blvd.				INSURE					
	mouth MI 48170-2584				INSURE					
,					INSURE					
<u></u>	VERAGES CER	TIFIC	`ATE	NUMBER: 514033955	INSURE	KF:		REVISION NUMBER:		
	HIS IS TO CERTIFY THAT THE POLICIES				/E BEE	N ISSUED TO			E POLI	CY PERIOD
IN	DICATED. NOTWITHSTANDING ANY RE	QUIF	REME	NT, TERM OR CONDITION	OF ANY	CONTRACT	OR OTHER I	DOCUMENT WITH RESPECT	T TO V	VHICH THIS
	ERTIFICATE MAY BE ISSUED OR MAY XCLUSIONS AND CONDITIONS OF SUCH								ALL T	HE TERMS,
INSR	TYPE OF INSURANCE	ADDI	SUBR			POLICY EFF	POLICY EXP	LIMITS	:	
LTR A	X COMMERCIAL GENERAL LIABILITY	INSD	WVD	POLICY NUMBER CPP13230562401		(MM/DD/YYYY) 1/1/2023	1/1/2024		\$ 1,000.	000
	CLAIMS-MADE X OCCUR							DAMAGE TO RENTED	\$ 1,000, \$ 300,00	
	X Contractual							T TEIMIOLO (La cocarronco)	\$ 10,000	
	X XCU Included							() = = [= = ,	\$ 1,000 \$ 1,000	
	GEN'L AGGREGATE LIMIT APPLIES PER:								\$ 2,000,	
	POLICY X PRO- LOC								\$ 2,000,	
	OTHER:								\$ <u>2,000,</u> \$	000.
В	AUTOMOBILE LIABILITY			CA20261582005		1/1/2023	1/1/2024	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,	,000.
	X ANY AUTO								\$	
	OWNED SCHEDULED							BODILY INJURY (Per accident)	\$	
	AUTOS ONLY AUTOS HIRED NON-OWNED AUTOS ONLY AUTOS ONLY							PROPERTY DAMAGE (Per accident)	\$	
	AUTOS ONLY AUTOS ONLY								\$	
Α	X UMBRELLA LIAB X OCCUR			CU20261592101		1/1/2023	1/1/2024	EACH OCCURRENCE	\$ 2,000.	.000.
	EXCESS LIAB CLAIMS-MADE								\$ 2,000.	
	DED X RETENTION \$ 0								\$	
Α	WORKERS COMPENSATION			WC21138570301		1/1/2023	1/1/2024	X PER OTH-ER	•	
	AND EMPLOYERS' LIABILITY ANYPROPRIETOR/PARTNER/EXECUTIVE								\$ 1,000,	,000
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A						E.L. DISEASE - EA EMPLOYEE	\$ 1,000,	,000
	If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIMIT	\$ 1,000,	,000
	CRIPTION OF OPERATIONS / LOCATIONS / VEHIC				le, may be	attached if more	space is require	ed)		
	D RFQ 2023 SME Project # P04905.22 23 Environmental Services ISID Number		act #	00943						
Ge	neral Liability, Pollution Liability and Aut partments, divisions, agencies, offices, c	o Lial	oility i	nclude the following Additions officers appleaded and	onal Ins	ured as requi	red by writter	n contract: The State of Mic	chigan,	its
uer	dartifiertis, divisions, agencies, offices, c	OIIIIII	155101	s, officers, employees, and	ayeni	s. Walvel Ol S	oubiogation a	s required by written contro	act.	
CERTIFICATE HOLDER CANCELLATION										
					SHO	III D ANV OF T	THE AROVE D	ESCRIBED POLICIES BE CA	NCELL	ED REFORE
					THE	EXPIRATION	I DATE THE	EREOF, NOTICE WILL BI		
	DTMB – SFA – Design and	1 Ca	netrii	ction	ACC	ORDANCE WI	TH THE POLIC	Y PROVISIONS.		
	3111 West St. Joseph Stre		เอแน	GUOTI	ALITY	17FD DEDD=2-	NT A TIV (T			
	Lansing MI 48917	-				RIZED REPRESEI				
			LD a ma o							

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CONTRACTOR'S BLANKET ADDITIONAL INSURED ENDORSEMENT - FORM A

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

Policy Number CPP13230562401	Agency Number 0165233	Policy Effective Date 01/01/2023
Policy Expiration Date 01/01/2024	Date	Account Number 11008642
Named Insured SOIL AND MATERIAL ENGINEERS, INC.	Agency CAMDEN INS AGCY INC	Issuing Company AMERISURE INSURANCE COMPANY

- a. SECTION II WHO IS AN INSURED is amended to add as an additional insured any person or organization:
 - (1) Whom you are required to add as an additional insured on this policy under a written contract or written agreement relating to your business; or
 - (2) Who is named as an additional insured under this policy on a certificate of insurance.
 - **b.** The written contract, written agreement, or certificate of insurance must:
 - (1) Require additional insured status for a time period during the term of this policy; and
 - (2) Be executed prior to the "bodily injury", "property damage", or "personal and advertising injury" leading to a claim under this policy.
 - c. If. however:
 - (1) "Your work" began under a letter of intent or work order; and
 - (2) The letter of intent or work order led to a written contract or written agreement within 30 days of beginning such work; and
 - (3) Your customer's customary contracts require persons or organizations to be named as additional insureds;

we will provide additional insured status as specified in this endorsement.

- **2.** The insurance provided under this endorsement is limited as follows:
 - **a.** That person or organization is an additional insured only with respect to liability caused, in whole or in part, by:
 - (1) Premises you:
 - (a) Own;
 - (b) Rent;
 - (c) Lease; or
 - (d) Occupy;
 - (2) Ongoing operations performed by you or on your behalf. Ongoing operations does not apply to "bodily injury" or "property damage" occurring after:

- (a) All work to be performed by you or on your behalf for the additional insured(s) at the site of the covered operations is complete, including related materials, parts or equipment (other than service, maintenance or repairs); or
- **(b)** That portion of "your work" out of which the injury or damage arises is put to its intended use by any person or organization other than another contractor working for a principal as a part of the same project.
- (3) Completed operations coverage, but only if:
 - (a) The written contract, written agreement, or certificate of insurance requires completed operations coverage or "your work" coverage; and
 - **(b)** This coverage part provides coverage for "bodily injury" or "property damage" included within the "products-completed operations hazard".

However, the insurance afforded to such additional insured only applies to the extent permitted by law.

- **b.** If the written contract, written agreement, or certificate of insurance:
 - (1) Requires "arising out of" language; or
 - (2) Requires you to provide additional insured coverage to that person or organization by the use of either or both of the following:
 - (a) Additional Insured Owners, Lessees or Contractors Scheduled Person Or Organization endorsement CG 20 10 10 01; or
 - **(b)** Additional Insured Owners, Lessees or Contractors Completed Operations endorsement CG 20 37 10 01:

then the phrase "caused, in whole or in part, by" in paragraph 2.a. above is replaced by "arising out of".

- c. If the written contract, written agreement, or certificate of insurance requires you to provide additional insured coverage to that person or organization by the use of:
 - (1) Additional Insured Owners, Lessees or Contractors Scheduled Person Or Organization endorsement CG 20 10 07 04 or CG 20 10 04 13; or
 - (2) Additional Insured Owners, Lessees or Contractors Completed Operations endorsement CG 20 37 04 or CG 20 37 04 13; or
 - (3) Both those endorsements with either of those edition dates; or
 - (4) Either or both of the following:
 - (a) Additional Insured Owners, Lessees or Contractors Scheduled Person Or Organization endorsement CG 20 10 without an edition date specified; or
 - **(b)** Additional Insured Owners, Lessees or Contractors Completed Operations endorsement CG 20 37 without an edition date specified;

then paragraph 2.a. above applies.

- **d.** Premises, as respects paragraph **2.a.(1)** above, include common or public areas about such premises if so required in the written contract or written agreement.
- **e.** Additional insured status provided under paragraphs **2.a.(1)(b)** or **2.a.(1)(c)** above does not extend beyond the end of a premises lease or rental agreement.
- f. The limits of insurance that apply to the additional insured are the least of those specified in the:
 - (1) Written contract;
 - (2) Written agreement;
 - (3) Certificate of insurance; or
 - (4) Declarations of this policy.

The limits of insurance are inclusive of and not in addition to the limits of insurance shown in the Declarations.

- **g.** The insurance provided to the additional insured does not apply to "bodily injury", "property damage", or "personal and advertising injury" arising out of an architect's, engineer's, or surveyor's rendering of, or failure to render, any professional services, including but not limited to:
 - (1) The preparing, approving, or failing to prepare or approve:
 - (a) Maps;
 - (b) Drawings;
 - (c) Opinions;
 - (d) Reports;
 - (e) Surveys;
 - (f) Change orders;
 - (g) Design specifications; and
 - (2) Supervisory, inspection, or engineering services.
- h. SECTION IV COMMERCIAL GENERAL LIABILITY CONDITIONS, paragraph 4. Other Insurance is deleted and replaced with the following:
 - 4. Other Insurance.

Coverage provided by this endorsement is excess over any other valid and collectible insurance available to the additional insured whether:

- a. Primary;
- **b.** Excess:
- c. Contingent; or
- d. On any other basis;

but if the written contract, written agreement, or certificate of insurance requires primary and non-contributory coverage, this insurance will be primary and non-contributory relative to other insurance available to the additional insured which covers that person or organization as a Named Insured, and we will not share with that other insurance.

i. If the written contract, written agreement, or certificate of insurance as outlined above requires additional insured status by use of CG 20 10 11 85, then the coverage provided under this CG 70 48 endorsement does not apply except for paragraph **2.h. Other Insurance**. Additional insured status is limited to that provided by CG 20 10 11 85 shown below and paragraph **2.h. Other Insurance** shown above.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS (FORM B)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART.

SCHEDULE

Name of Person or Organization: Blanket Where Required by Written Contract, Agreement, or Certificate of Insurance that the terms of CG 20 10 11 85 apply

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

WHO IS AN INSURED (Section II) is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" for that insured by or for you.

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Terra Insurance Company (A Risk Retention Group) Two Fifer Avenue, Suite 100 Corte Madera, CA 94925



DATE 03/08/23

CERTIFICATE OF INSURANCE

CERTIFICATE HOLDER

Michigan Department of Technology Management and Budget 7150 Harris Road Lansing, MI 48909

This certifies that the "claims made" insurance policy (described below by policy number) written on forms in use by the Company has been issued. This certificate is not a policy or a binder of insurance and is issued as a matter of information only, and confers no rights upon the certificate holder. This certificate does not alter, amend or extend the coverage afforded by this policy.

The policy of insurance listed below has been issued to the insured named above for the policy period indicated. Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policy described herein is subject to all the terms, exclusions and conditions of such policy. Aggregate limits shown may have been reduced by paid claims.

TYPE OF INSURANCE	Professional/Environmental Liability	
POLICY NUMBER 223057	EFFECTIVE DATE 01/01/23	EXPIRATION DATE 12/31/23
LIMITS OF LIABILITY	\$1,000,000 EACH CLAIM \$2,000,000 ANNUAL AGGREGATE	

PROJECT DESCRIPTION

ISID RFQ 2023 Contract # 00943.00 SME Project # P04905.22

CANCELLATION: If the described policy is cancelled by the Company before its expiration date, the Company will mail written notice to the certificate holder thirty (30) days in advance, or ten (10) days in advance for non-payment of premium. If the described policy is cancelled by the insured before its expiration date, the Company will mail written notice to the certificate holder within thirty (30) days of the notice to the Company from the insured.

NAME AND ADDRESS OF INSURED

SME 43980 Plymouth Oaks Blvd. Plymouth, MI 48170 **ISSUING COMPANY:**

TERRA INSURANCE COMPANY

(A Risk Retention Group)

President



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 4/20/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed.

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).										
PRODUCER Camden Insurance Agency. Inc.	to the	cert	incate holder in fied of si	CONTACT NAME: PHONE (A/C, No, Ext): 313-965-9602 FAX (A/C, No, Ext): (A/C, No):						
17900 Ryan Rd Ste A				(A/C, No	o, Ext): 313-96	5-9602		(A/C, No):		
Detroit MI 48212				E-MAIL ADDRESS: certs@mcnish.com						
							RDING COVERAGE			NAIC#
INSURED			SOIL&-2			ie National In	surance Compar	ny		
SME			00.124.2	INSURE						
43980 Plymouth Oaks Blvd.				INSURE						
Plymouth MI 48170-2584				INSURE						
				INSURE						
COVERAGES CEF	TIFI	CATE	E NUMBER: 819873669	INSURE	KF:		REVISION NUM	MRED:		
THIS IS TO CERTIFY THAT THE POLICIES				VE BEE	N ISSUED TO				HE POL	ICY PERIOD
INDICATED. NOTWITHSTANDING ANY R CERTIFICATE MAY BE ISSUED OR MAY EXCLUSIONS AND CONDITIONS OF SUCH	EQUIF PERT	REME AIN,	NT, TERM OR CONDITION THE INSURANCE AFFORD	OF AN' ED BY	Y CONTRACT THE POLICIES	OR OTHER I	DOCUMENT WITH	H RESPEC	OT TO	WHICH THIS
INSR TUBE OF HIGHER AND	ADDL	SUBR		DEEINF	POLICY EFF	POLICY EXP	· 			
COMMERCIAL GENERAL LIABILITY	INSD	WVD	POLICY NUMBER		(MM/DD/YYYY)	(MM/DD/YYYY)	EAGU GOOLIDDEN	LIMIT		
CLAIMS-MADE OCCUR							DAMAGE TO RENT PREMISES (Ea occi	ED	\$	
							MED EXP (Any one	person)	\$	
							PERSONAL & ADV	INJURY	\$	
GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREC	SATE	\$	
POLICY PRO- JECT LOC							PRODUCTS - COM	P/OP AGG	\$	
OTHER:							COMPINED CINIOLS	LINALT	\$	
AUTOMOBILE LIABILITY							COMBINED SINGLE (Ea accident)		\$	
ANY AUTO OWNED SCHEDULED							BODILY INJURY (Pe		\$	
AUTOS ONLY AUTOS NON-OWNED							PROPERTY DAMAGE		\$	
AUTOS ONLY AUTOS ONLY							(Per accident))L	\$	
UMPRELLALIAN									\$	
UMBRELLA LIAB OCCUR EXCESS LIAB CLAIMS MADE							EACH OCCURRENCE	CE	\$	
CLAIMS-MADE	-						AGGREGATE		\$ \$	
DED RETENTION \$ WORKERS COMPENSATION							PER STATUTE	отн-	\$	
AND EMPLOYERS' LIABILITY ANYPROPRIETOR/PARTNER/EXECUTIVE Y / N							E.L. EACH ACCIDE	ER	\$	
OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A						E.L. DISEASE - EA I			
If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POL		\$	
A Pollution Liability			K81205231AEM		1/1/2023	1/1/2024	Each/ AggLimit	-	2,000	
							Ded		5,000) .
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) ISID RFQ 2023 SME Project # P04905.22 Contract # 00943 2023 Environmental Services ISID Number 943 General Liability, Pollution Liability and Auto Liability include the following Additional Insured as required by written contract: The State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents. Waiver of Subrogation as required by written contract.						, its				
CERTIFICATE HOLDER CANCELLATION										
SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELL THE EXPIRATION DATE THEREOF, NOTICE WILL BE DEL ACCORDANCE WITH THE POLICY PROVISIONS. DTMB – SFA – Design and Construction										
3111 West St. Joseph Str Lansing MI 48917					RIZED REPRESE					
				ı →	20 a.a	(1/)) (/				

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

CONTRACTOR'S BLANKET ADDITIONAL INSURED ENDORSEMENT - FORM A

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

Policy Number CPP13230562401	Agency Number 0165233	Policy Effective Date 01/01/2023
Policy Expiration Date 01/01/2024	Date	Account Number 11008642
Named Insured SOIL AND MATERIAL ENGINEERS, INC.	Agency CAMDEN INS AGCY INC	Issuing Company AMERISURE INSURANCE COMPANY

- a. SECTION II WHO IS AN INSURED is amended to add as an additional insured any person or organization:
 - (1) Whom you are required to add as an additional insured on this policy under a written contract or written agreement relating to your business; or
 - (2) Who is named as an additional insured under this policy on a certificate of insurance.
 - **b.** The written contract, written agreement, or certificate of insurance must:
 - (1) Require additional insured status for a time period during the term of this policy; and
 - (2) Be executed prior to the "bodily injury", "property damage", or "personal and advertising injury" leading to a claim under this policy.
 - c. If. however:
 - (1) "Your work" began under a letter of intent or work order; and
 - (2) The letter of intent or work order led to a written contract or written agreement within 30 days of beginning such work; and
 - (3) Your customer's customary contracts require persons or organizations to be named as additional insureds;

we will provide additional insured status as specified in this endorsement.

- **2.** The insurance provided under this endorsement is limited as follows:
 - **a.** That person or organization is an additional insured only with respect to liability caused, in whole or in part, by:
 - (1) Premises you:
 - (a) Own;
 - (b) Rent;
 - (c) Lease; or
 - (d) Occupy;
 - (2) Ongoing operations performed by you or on your behalf. Ongoing operations does not apply to "bodily injury" or "property damage" occurring after:

- (a) All work to be performed by you or on your behalf for the additional insured(s) at the site of the covered operations is complete, including related materials, parts or equipment (other than service, maintenance or repairs); or
- **(b)** That portion of "your work" out of which the injury or damage arises is put to its intended use by any person or organization other than another contractor working for a principal as a part of the same project.
- (3) Completed operations coverage, but only if:
 - (a) The written contract, written agreement, or certificate of insurance requires completed operations coverage or "your work" coverage; and
 - **(b)** This coverage part provides coverage for "bodily injury" or "property damage" included within the "products-completed operations hazard".

However, the insurance afforded to such additional insured only applies to the extent permitted by law.

- **b.** If the written contract, written agreement, or certificate of insurance:
 - (1) Requires "arising out of" language; or
 - (2) Requires you to provide additional insured coverage to that person or organization by the use of either or both of the following:
 - (a) Additional Insured Owners, Lessees or Contractors Scheduled Person Or Organization endorsement CG 20 10 10 01; or
 - **(b)** Additional Insured Owners, Lessees or Contractors Completed Operations endorsement CG 20 37 10 01:

then the phrase "caused, in whole or in part, by" in paragraph 2.a. above is replaced by "arising out of".

- c. If the written contract, written agreement, or certificate of insurance requires you to provide additional insured coverage to that person or organization by the use of:
 - (1) Additional Insured Owners, Lessees or Contractors Scheduled Person Or Organization endorsement CG 20 10 07 04 or CG 20 10 04 13; or
 - (2) Additional Insured Owners, Lessees or Contractors Completed Operations endorsement CG 20 37 04 or CG 20 37 04 13; or
 - (3) Both those endorsements with either of those edition dates; or
 - (4) Either or both of the following:
 - (a) Additional Insured Owners, Lessees or Contractors Scheduled Person Or Organization endorsement CG 20 10 without an edition date specified; or
 - **(b)** Additional Insured Owners, Lessees or Contractors Completed Operations endorsement CG 20 37 without an edition date specified;

then paragraph 2.a. above applies.

- **d.** Premises, as respects paragraph **2.a.(1)** above, include common or public areas about such premises if so required in the written contract or written agreement.
- **e.** Additional insured status provided under paragraphs **2.a.(1)(b)** or **2.a.(1)(c)** above does not extend beyond the end of a premises lease or rental agreement.
- f. The limits of insurance that apply to the additional insured are the least of those specified in the:
 - (1) Written contract;
 - (2) Written agreement;
 - (3) Certificate of insurance; or
 - (4) Declarations of this policy.

The limits of insurance are inclusive of and not in addition to the limits of insurance shown in the Declarations.

- **g.** The insurance provided to the additional insured does not apply to "bodily injury", "property damage", or "personal and advertising injury" arising out of an architect's, engineer's, or surveyor's rendering of, or failure to render, any professional services, including but not limited to:
 - (1) The preparing, approving, or failing to prepare or approve:
 - (a) Maps;
 - (b) Drawings;
 - (c) Opinions;
 - (d) Reports;
 - (e) Surveys;
 - (f) Change orders;
 - (g) Design specifications; and
 - (2) Supervisory, inspection, or engineering services.
- h. SECTION IV COMMERCIAL GENERAL LIABILITY CONDITIONS, paragraph 4. Other Insurance is deleted and replaced with the following:
 - 4. Other Insurance.

Coverage provided by this endorsement is excess over any other valid and collectible insurance available to the additional insured whether:

- a. Primary;
- **b.** Excess:
- c. Contingent; or
- d. On any other basis;

but if the written contract, written agreement, or certificate of insurance requires primary and non-contributory coverage, this insurance will be primary and non-contributory relative to other insurance available to the additional insured which covers that person or organization as a Named Insured, and we will not share with that other insurance.

i. If the written contract, written agreement, or certificate of insurance as outlined above requires additional insured status by use of CG 20 10 11 85, then the coverage provided under this CG 70 48 endorsement does not apply except for paragraph **2.h. Other Insurance**. Additional insured status is limited to that provided by CG 20 10 11 85 shown below and paragraph **2.h. Other Insurance** shown above.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS (FORM B)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART.

SCHEDULE

Name of Person or Organization: Blanket Where Required by Written Contract, Agreement, or Certificate of Insurance that the terms of CG 20 10 11 85 apply

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

WHO IS AN INSURED (Section II) is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" for that insured by or for you.

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