



PART I PRIMARY LIST PROPOSAL

Minor State Capital Outlay Projects

Proposal for:

Professional Services for
Indefinite – Service, Indefinite – Delivery Contracts
Department of Technology, Management and Budget
2013 Expanded Environmental Remediation ISID
Professional Environmental Consulting Services
Various Locations, Michigan

Prepared for:

Department of Technology, Management and Budget
Facilities and Business Services Administration
Design and Construction Division
Attention: Melissa Sambiagio
530 West Allegan Street
Second Floor, Stevens T. Mason Building
Lansing, Michigan 48933

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Prepared by:

Environmental Consulting & Technology, Inc.
3125 Sovereign Drive, Suite 9E
Lansing, Michigan 48911
517-272-9200

Authorized Signature:

Charles (Curt) Wolf, PE, CUSTP
Vice President and Regional Manager



PROFESSIONAL
QUESTIONNAIRE FOR PART I
ENCLOSED AS APPENDIX C

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1.0 GENERAL INFORMATION AND PROJECT TEAM (Selection Criterion #1: Business Organization)

1.1 General Information

Environmental Consulting & Technology, Inc. (ECT) is a Michigan-licensed professional engineering and scientific services organization incorporated under the laws of the State of Delaware. The Company was founded in 1988 and its clients include private sector businesses, engineering firms and contractors, and all levels of government. Significant among these is the State of Michigan, with whom ECT has been privileged to serve as a Professional Service Contractor (PSC) to the Michigan Department of Environmental Quality (MDEQ) under two Project Management (PM) Contracts, as well as two multi-year Indefinite Delivery/Indefinite Quantity (IDIQ) Level of Effort (LOE) Contracts and two Discretionary Indefinite Service/Indefinite Delivery (ISID) Contracts with the Department of Technology, Management and Budget (DTMB).

Principal Contact - Questions pertaining to this proposal may be directed to:

Charles (Curt) Wolf, PE, CUSTP
Vice President and Regional Manager
Environmental Consulting & Technology, Inc.
2200 Commonwealth Boulevard, Suite 300
Ann Arbor, Michigan 48105
Telephone: 734-769-3004
cwolf@ectinc.com

With seven Michigan offices, including Lansing, Ann Arbor, Detroit, Benton Harbor, Clinton Township, Bay City and Traverse City, ECT is comprised of more than 200 highly qualified scientists, engineers, and support staff, and has successfully provided multidisciplinary environmental consulting and engineering design services on more than 22,000 projects throughout the United States and world. Ranked by Engineering News Record among the top 200 environmental engineering firms in the country for each of the past 17 years, ECT's expertise covers a broad range of scientific, engineering, planning, and construction management services, which are grouped among three integrated practices.

Site Restoration

Due Diligence
Characterization
Engineering/Remedial Design
Storage Tank Compliance/Closure
Demolition and Reclamation Management
Brownfield Redevelopment
Contaminated Sediment Management

Natural Resource Management

Natural Resource Policy
Water Quality Monitoring and TMDLs
Ecological Restoration
Natural Resource Damage Assessment
Stormwater and Sustainable Design
Watershed Management Planning
Modeling

Regulatory Compliance

Air Quality
Environmental Health
Environmental Management Systems
Green Services and Sustainability
Hazardous Materials Management
Land Use
Siting, Licensing and Permitting

Office Locations - The ECT offices that will provide services under this proposed ISID Contract include:

Lansing, Ingham County (ISID Program Mgmt. Office)
3125 Sovereign Drive, Suite 9E
Lansing, Michigan 48911

Detroit, Wayne County (Branch Office)
719 Griswold Street, Suite 820
Detroit, Michigan 48226

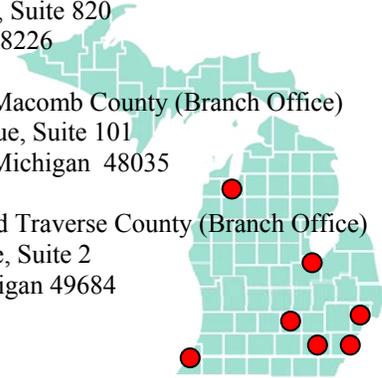
Ann Arbor, Washtenaw County (Branch Office)
2200 Commonwealth Boulevard, Suite 300
Ann Arbor, Michigan 48108

Clinton Township, Macomb County (Branch Office)
33900 Harper Avenue, Suite 101
Clinton Township, Michigan 48035

Benton Harbor, Berrien County (Branch Office)
115A West Main Street
Benton Harbor, Michigan 49022

Traverse City, Grand Traverse County (Branch Office)
3622 Veterans Drive, Suite 2
Traverse City, Michigan 49684

Bay City, Bay County (Branch Office)
3933 Monitor Road
Bay City, Michigan 48706



ECT’s Lansing office will serve as the primary ISID program management office, and is located only a short distance from the Stevens T. Mason building and Constitution Hall.

Corporate Certifications - ECT is certified to operate in the State of Michigan under corporate identification no. 652-102. ECT is also a Michigan Qualified Underground Storage Tank Consultant (QC No. Z0062). The firm’s Certificate of Awardability, Certification Regarding Debarment, Suspension, and Other Responsibility Matters; Professional/Contractor Demographics, Statistics, and Certification; and, Certification of a Michigan Based Business are each available and will be provided upon request.

Project Distribution - More than 50 percent of ECT’s projects pertain to preliminary assessments, remedial investigations/feasibility studies, engineering design, construction management, preparation of health and safety plans, regulatory permitting, Quality Assurance/Quality Control (QA/QC) and data management, risk assessments, and other areas of interest referenced in the DTMB’s Request for Proposals (RFP). In addition, more than 85 percent of ECT’s projects are conducted for repeat clients, attesting to the firm’s commitment to the highest levels of quality, technical service, safety, and client satisfaction.

1.2 Project Team

As an existing IDIQ LOE and Discretionary ISID Contract holder, ECT offers the State and DTMB Client Agencies a talented and integrated project team unmatched in its experience and ability to simultaneously coordinate and complete multiple work tasks, together with its ability to carry out assignments that are complex, large in scope, and affecting a variety of stakeholders, within an accelerated time-frame, and to ensure that all deliverables and billings are prepared in a timely and accurate manner. In fact, the key personnel identified for this particular DTMB Contract each possess an average of 28 years of experience in the successful planning and execution of comprehensive and professional environmental services throughout the State of Michigan.

Led by an experienced Program Manager who has successfully managed two MDEQ (Environmental Response Division and Storage Tank Division) PM Contracts, two LOE Contracts, and two DTMB Discretionary ISID Contracts, ECT’s project team is comprised of dedicated and carefully selected staff from across each of the firm’s seven Michigan offices, and represents demonstrated experience and ability in each of the DTMB-identified technical fields

Advantages of ECT's ISID Project Team

- ☑ Key personnel and Site Managers having an average of 28 years of experience in the Michigan environmental services industry;
- ☑ A seasoned PM, LOE, and DTMB ISID Program Manager;
- ☑ Extensive experience working together on State-funded projects and a commitment to exceeding the expectations of the DTMB and its Client Agencies, with particular emphasis on cost, schedule, and budget;
- ☑ Eight Certified Underground Storage Tank Professionals (CUSTPs);
- ☑ Twelve Michigan-licensed Professional Engineers and Six Certified Professional Geologists;
- ☑ Staff possessing a multitude of other pertinent certifications and registrations (see Section 3.3);
- ☑ Current State of Michigan/DTMB and Client Agency PSC (MDEQ, Department of Military and Veterans Affairs [DMVA], Michigan State Housing Development Authority [MSHDA], and Michigan Department of Transportation [MDOT]);
- ☑ Seven Michigan offices, strategically located throughout the state, including its Lansing ISID Program Management Office;
- ☑ A corporate QA/QC program with proven experience in the development of EPA-approved Quality Assurance Project Plans (QAPPs);
- ☑ Distinguishing and award-winning, Michigan-based environmental capabilities not often found in other consulting firms (i.e., overall site restoration including habitat and wetlands restoration, sediment remediation, lake and stream restoration, surface water/wet weather sampling, unique remedial approaches, public outreach programs, watershed management planning, etc.); and,
- ☑ An outstanding reputation within the MDEQ and among local communities throughout the state.

Minority Business Status - ECT qualifies as a small business under certain federal procurement scenarios. Under state and local governmental contracts, however, it is qualified as neither a small nor minority business. Therefore, to demonstrate its support of local businesses, together with the government's goal of supporting disadvantaged business enterprises with public funds, ECT routinely seeks opportunities to include qualified Small Business Enterprise (SBE), Disadvantaged Business Enterprise (DBE), Woman's Business Enterprise (WBE), Minority-owned Business Enterprise (MBE) and/or Service Disabled Veteran Owned Small Business partnering subcontractors among its project teams, on a task-specific basis.

Local Partnering Subcontractors - In order to provide the DTMB and its various State/Client Agencies a broad geographic coverage for required subcontractor services, thereby reducing travel and per diems, and maximizing the time- and cost-effectiveness of project budgets, ECT's pool of partnering subcontractors includes qualified companies from all areas of the state. However, information and project references pertaining to key subcontractors with whom ECT has long and established relationships under various DTMB contracts, and who are most likely to provide services under this particular DTMB ISID Contract, is provided in Article 6 of the Professional Questionnaire for Part I, which has been appended to this proposal. In the case of remedial investigations, these include drilling and geophysical assessment subcontractors, and those offering land surveying and investigation-derived waste management services.

TASKS	REPRESENTATIVE SUBCONTRACTORS (Michigan Locations)
Drilling/Probing	Stearns Drilling (Dutton)
Drilling/Probing	Fibertec (Holt)
Drilling/Probing	North American Probing (Elsie)
IDW Management	Schultz, Inc. (Lansing)
IDW Management	The Environmental Quality Company (Belleville)
IDW Management	EMES (Lansing)
Land Surveying	Geodetic Designs (Lansing)
Land Surveying	Fitzgerald Henne & Associates, Inc. (Lansing)
Geophysics	Worksmart, Inc. (Lawrence)

Drilling Subcontractors - While factors such as geology, accessibility, and project location will influence the selection process, ECT has identified several drilling companies that can provide multiple drilling methods for projects approved under this ISID Contract. These contractors were not only selected for their diverse capabilities, including hydraulic probing, rotary hollow-stem, rotary mud, sonic and horizontal bore drilling, but also for their demonstrated expertise and experience in having supported ECT in the successful completion of other state-funded LOE and ISID projects across the state.

Geophysical Subcontractors - ECT's geophysical services subcontractors offer a full range of high quality data acquisition, analysis, and presentation methods including direct current resistivity, induced polarization, spontaneous polarization, electromagnetic induction, magnetometry, ground penetrating radar, seismic refraction and reflection, gravimetry, metal detection, and downhole geophysical logging to facilitate site characterizations, contaminant plume mapping, landfill investigations, the location of subsurface obstacles such as USTs, or to identify other conditions critical to an investigation.

Land Surveying Subcontractors - Michigan-licensed Professional Surveyors will often assist ECT in the production of detailed site diagrams tied to horizontal and vertical controls established by the U.S. Geological Survey and State of Michigan. These diagrams will typically include the location of underground utilities, existing and newly performed/established monitoring points, property boundaries, legally recorded easements, and physical facility features and other elements applicable to the types of studies contemplated in this DTMB RFP, and will help depict the environmental distribution of identified contaminants at a selected site. With respect to soil/groundwater sampling activities specifically, the horizontal location of each soil boring location will be determined in reference to an existing building and/or other permanent site feature, which provides a means for developing reliable base maps.

Investigation-derived Waste Management Subcontractors - Investigation-derived Waste (IDW) generated during drilling/monitoring well installation activities will typically be temporarily placed in containment units and/or 55-gallon steel drums and staged on-site until waste characterization analyses and disposal arrangements can be appropriately coordinated, and the IDW can be transported under manifest by appropriately-licensed waste haulers.

2.0 UNDERSTANDING OF PROJECT AND TASKS (Selection Criterion #2: Past Performance/Environmental Experience)

Having already served as a PSC to the MDEQ under two PM Contracts, and as the recipient of two multi-year IDIQ LOE Contracts and two Discretionary ISID Contracts from the DTMB, ECT's program staff has extensive experience working for the DTMB on LOE and other Discretionary ISID Contract assignments, and offers a solid understanding of the project and tasks identified in this particular DTMB RFP. Further, the distribution of ECT's state-funded project work covers all areas of interest to the DTMB with regard to high-quality environmental services for minor and/or routine design and construction projects involving the implementation of abatements/remedies at assigned sites of environmental contamination under Parts 201 and 213 of the Natural Resources and Environmental Protection Act (NREPA), 1994 P.A. 451, as amended, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and other relevant federal statutes and requirements.

2.1 Experience with Governmental Clients

As a state PSC under the former PM Program, a Michigan LOE contractor since 2006, and the current holder of two DTMB Discretionary ISID Contracts, ECT has a demonstrated ability and skill in working with the DTMB and various State/Client Agencies. This experience stems largely from having successfully coordinated, managed, and conducted dozens of large scale demolition, environmental remediation, and construction-related projects throughout the state, on behalf of multiple divisions within the MDEQ, including Remediation and Redevelopment, Storage Tank, and Land and Water Management, as well as the DMVA, and other State/Client Agencies on which substantial progress milestones have been non-negotiable.

Accordingly, the firm has established strong working relationships with various state and DTMB Client Agency personnel, and thoroughly understands the expectations and project requirements necessary to meet their collective quality assurance, technical, community involvement, and reporting objectives.

Representative DTMB LOE/ISID Project Experience

Project Name	Agency Contact/District	Project Effort	Contract Type	Facility Location
Jaco Plating	Lori Aronoff MDEQ Jackson	Groundwater Sampling and Monitoring	LOE	Jackson
North 34 th Street	Mark DuCharme MDEQ Kalamazoo	Subsurface Drilling, Groundwater Monitoring, and Recovery System Installation	LOE	Kalamazoo
Arbor Wash	Terry Hiske MDEQ Jackson	LUST Investigations	LOE	Ann Arbor
Gene Carr	John Pawloski MDEQ Grand Rapids	LUST Investigations	LOE	Lake Odessa
Arsenic Background	Eric Wildfang MDEQ Lansing	Regional Risk Assessment	LOE	Southeast Michigan
MARD	Kameron Jordan MDEQ Kalamazoo	Wetland Evaluation	LOE	Van Buren County

Representative DTMB LOE/ISID Project Experience

Project Name	Agency Contact/District	Project Effort	Contract Type	Facility Location
*Jimmie's Service	Terry Hiske MDEQ Jackson	LUST Investigations	LOE	Saline
*Jimmie's Service	Terry Hiske MDEQ Jackson	LUST Remediation	ISID	Saline
MI Center, Inc.	Terry Hiske MDEQ Jackson	LUST Investigations	LOE	Ypsilanti
Jenny Enterprises	James LeBar MDEQ SE Michigan	LUST Investigations	LOE	Highland
*S&S Shell	Terry Hiske MDEQ Jackson	LUST Investigations	LOE	Saline
*S&S Shell	Terry Hiske MDEQ Jackson	LUST Remediation	ISID	Saline
Performance Paper	Mark DuCharme MDEQ Kalamazoo	Demolition Site Services	LOE	Kalamazoo
*Evelyn Gibbons	Terry Hiske MDEQ Jackson	LUST Investigations	LOE	Superior Township
*Evelyn Gibbons	Terry Hiske MDEQ Jackson	LUST Remediation	ISID	Superior Township
Great Northern Packaging	John Pawloski MDEQ Grand Rapids	LUST Investigations	LOE	Wyoming
Taber's Oil	Dwight Cummings MDEQ Lansing	LUST and UST Removal/Site Assessment	LOE	Flint
Flint Odyssey House	Dwight Cummings MDEQ Lansing	LUST and UST Removal/Site Assessment	LOE	Flint
Clark #767	Steven Beukema MDEQ Kalamazoo	LUST and Free Product Investigation	LOE	Marshall
*Central Distributors	Dwight Cummings MDEQ Lansing	LUST Groundwater Monitoring	ISID	Flushing
*Central Distributors	Dwight Cummings MDEQ Lansing	LUST Groundwater Monitoring	LOE	Flushing
Bay Petroleum	Abby Leinbach MDEQ Lansing	LUST and Free Product Investigation	LOE	Lansing
Spartan Express	Barbara Cowles MDEQ Lansing	LUST Investigation	LOE	Flint
Action Auto #10	Dwight Cummings MDEQ Lansing	LUST Investigation	LOE	Flint
*Bob's Marathon	Abby Leinbach MDEQ Lansing	LUST Groundwater Monitoring	LOE	Grand Ledge

Representative DTMB LOE/ISID Project Experience

Project Name	Agency Contact/District	Project Effort	Contract Type	Facility Location
*Total #2542 (Huron Mini Mart)	Terry Hiske MDEQ Jackson	LUST Groundwater Monitoring	LOE	Ypsilanti
Fred's Country Sunoco	Terry Hiske MDEQ Jackson	LUST Investigation	LOE	Dexter
Portage Creek Toxic Substance	Mark DuCharme MDEQ Kalamazoo	Part 201 Assessment Activities	LOE	Portage
Oil & Water Separator Cleanout Phase I	Gary Hoffmaster Michigan DMVA Lansing	Regulatory O&M	LOE	Various Counties
Oil & Water Separator Cleanout Phase II	Gary Hoffmaster Michigan DMVA Lansing	Regulatory O&M	LOE	Various Counties
Camp Grayling	Edward Hallenbeck Michigan DMVA Lansing	Paving Engineering and Design/Construction Management	ISID	Camp Grayling
Camp Grayling	Edward Hallenbeck Michigan DMVA Lansing	Water System Engineering and Design/Construction Management	ISID	Camp Grayling
Americhem Corporation "North Plume"	Kimberly Sakowski MDEQ Lansing	Part 201 Site Investigations and Remedial Pilot Study	LOE	Mason
Americhem Corporation "South Plume"	Kimberly Sakowski MDEQ Lansing	Part 201 Site Investigations and Remedial Pilot Study	LOE	Mason
Anmas Incorporated	Pewu Bah-Deh MDEQ SE Michigan	UST Removal/Site Investigations & Facility Demolition	LOE	Detroit
Allied Paper Portage Creek Superfund	Paul Bucholtz MDEQ Lansing Superfund	River Sediment Assessment Activities	Sub to CDM	Otsego

* Designates projects conducted under more than one contract vehicle

In addition to its work with the State of Michigan, ECT's record also includes multiple active contract vehicles and extensive experience (over 100 projects) working within the federal sector for a variety of other governmental agencies, including:

- U.S. Environmental Protection Agency
- U.S. Air Force
- U.S. Department of the Interior
- U.S. Department of Fish and Wildlife
- U.S. Environmental Protection Agency
- U.S. Geological Survey
- U.S. Postal Service
- U.S. Forestry Service
- U.S. Army Corps of Engineers

U.S. Army Toxic and Hazardous Materials Agency
U.S. Department of the Treasury
U.S. Marshall's Office
U.S. Air Force 45th Space Wing
National Aeronautic and Space Administration
National Oceanic and Atmospheric Administration

Combined, these achievements reflect ECT's demonstrated experience in the successful planning and execution of local, state, and federally-funded projects having contract values ranging from a few thousand dollars to agency response allocations of more than \$300 million.

2.2 Experience in Helping Governmental Clients Overcome Challenges

ECT is experienced in working with state environmental agencies, local government staff, and economic development boards to overcome the challenges of remediation and construction-related abatement projects at sites of environmental contamination, where approval of the end use is contingent upon compliance with Parts 201 and 213 of the NREPA 1994 P.A. 451, as amended, the CERCLA, and other relevant federal statutes and requirements. ECT's success in this regard is based on its demonstrated ability to understand an agency's or community's vision for a given site, and its effective application of engineering controls, institutional controls, and restrictive covenants. ECT has a long and proven record of consensus-building among stakeholder groups and matching community and governmental visions with attainable remedies, which are based on practical engineering solutions that can be easily managed/maintained over time so as to ensure the project's success, sustainability, and the health, safety and welfare of future users.

PROVEN SUCCESS



An example of this is demonstrated by ECT's work on behalf of a national conservation group for a project involving a former General Motors property currently managed by the Racer Trust. In this case, the conservation group is interested in ultimately acquiring the property, provided that the opportunities for ecological restoration, fish and wildlife habitat creation, and recreation are not overly burdened by the presence of legacy contamination, or requirements for long term maintenance and monitoring. ECT is facilitating negotiations between the two parties and helping them work through complex technical, regulatory and sometimes political issues to help make this project a success.

Construction Strategy Consulting - Within the environmental remediation and construction sector, ECT's success with respect to helping governmental clients overcome key challenges has been due to its development and implementation of safe, efficient and environmentally sound approaches to reduce overall project costs and eliminate rather than perpetuate or transfer the risk. The foundation of ECT's construction project strategy is to first conduct a comprehensive environmental review and assessment of a facility in order to compile information relevant to the preparation of engineering specifications designed to abate the physical/environmental hazards, and facilitate property use/reuse in accordance with the objectives of the stakeholders. In the development of these specifications, ECT often uses a combination of lump sum and unit rates for those items where quantities are not readily discernible at bid time. This method reduces the need for contingency monies in the contractors' bids, which would otherwise tend to inflate overall project costs. State-funded projects where this method has been used in conjunction with technical specifications and quantities prepared by ECT have consistently been performed on time and within the budget.

Special instructions to bidders have also been successfully used by ECT as a strategy for limiting the bidding field to only those contractors with adequate qualifications and acceptable safety records. Further, the incorporation of special conditions in the bid documents themselves have been used by ECT to require additional site control and documentation to assure proper handling of materials and site work, avoid commingling of disparate waste materials, and minimize contract disputes and associated scheduling delays.



Based on its construction project strategy experience, ECT was retained by a local unit of government to implement a Resource Conservation and Recovery Act, Remedial Action Plan (RCRA-RAP) as part of an EPA Consent Order that required the abatement, demolition and disposal of a former municipally-owned incinerator building that was historically reported to contain hazardous levels of dioxins and heavy metals. A previous national consultant had prepared a feasibility study as part of the RCRA-RAP and determined that supporting the unstable structure and removing the interior incinerators was the preferred abatement method at an estimated cost of approximately \$1,200,000. However, based on the results of its initial waste characterization, shop drawing review and structural evaluation, ECT proposed an alternate approach, which consisted of dissecting the exterior portions of the building, while securing the interior incinerator boxes until the exterior portions of the building could be managed as non-hazardous waste or recyclable materials.

As a result, 77.1% of the debris were recycled, 13% were classified as nonhazardous debris, and only 9.9% of the debris were required to be disposed of at a hazardous waste treatment facility. ECT's overall construction strategy resulted in a 56% (\$675,000) reduction in the prior consultant's estimated cost.

Other examples of how ECT staff has successfully applied its knowledge of other innovative, sustainable and safe construction strategies to help governmental and institutional clients overcome certain challenges of site remediation and closure include:

- *Flint - Remediation plans incorporating innovative remediation technologies as an EPA demonstration project and potentially enhancing environmental job training at a large urban site.*
- *Flint - The identification and understanding of environmental factors contributing to the attenuation of multiple contaminants and the development and implementation of strategies to enhance that attenuation while facilitating site redevelopment.*
- *Traverse City - The incorporation of contaminated soil into the geotechnical solution for building and shoreline stability.*
- *Ypsilanti - The use of existing contaminated concrete as a road sub-base for the new development on site, thereby eliminating the need to landfill the concrete.*
- *Ypsilanti - The use of contaminated soils for land balancing of low areas requiring fill material, rather than importing expensive top soil.*
- *Mancelona - The preparation of tarry soils for transport and energy recovery in a utility boiler facility.*
- *Kalamazoo - The recovery of valuable materials from demolition debris for reuse and recycling.*
- *Allen Park - The use of innovative stormwater collection systems including green roofs and rain gardens for both treatments of stormwater and site energy savings.*
- *Ypsilanti - The design and construction of building slabs, roadways, sidewalks and driveways as due care exposure barriers.*

- *Traverse City - The use of auger cast piles and spread footings on unstable contaminated soils to eliminate the need to remove and dispose of the soils in an offsite landfill.*
- *Ypsilanti - The use of vapor barriers enabling the construction and occupancy of buildings over sources of contaminant vapors.)*

2.3 Scheduling

ECT understands that the time-efficient and effective completion of the work contemplated in the DTMB's RFP will often serve as the linchpin on which subsequent time-critical elements of a design and construction project will be dependent. Therefore, given its implication on the economic and social framework of communities across Michigan, ECT is pleased to offer the DTMB the services of a firm with a proven record for attaining the successful completion of similar assignments, and the ability to offer the institutional knowledge and rapport required to accelerate performance and successful project completion. ECT has extensive experience in state-funded assessment, restoration and construction-related initiatives of all sizes, and has proven its ability under multiple PM, IDIQ LOE and ISID contracts to adhere to accelerated completion schedules and deadlines, and provide professional and clearly-written reports. Having staff and equipment distributed among seven Michigan offices also allows for short travel and response times to project sites throughout the state, and affords a high degree of value and responsiveness to the state and DTMB Client Agencies.

2.4 Why ECT's Project Team is the Most Qualified and Best Value

Current LOE and DTMB PSC - ECT has served as a PSC to the MDEQ under two PM Contracts, has been the recipient of two multi-year IDIQ LOE Contracts, and has received two Discretionary ISID Contracts from the DTMB to provide comprehensive environmental consulting services associated with the investigation and abatement of physical/environmental hazards and human health risks at state-funded project sites throughout Michigan. Designation as a state LOE since 2006 and the current holder of two DTMB Discretionary ISID Contracts affirms ECT's strengths in a variety of skill sets applicable to this particular DTMB RFP, including environmental investigations, risk assessments, feasibility studies, response activity design, demolition design, construction oversight, and operation, maintenance and monitoring at sites that are the responsibility of the State/Client Agencies.

As a result of ECT's long-standing service to the DTMB, there will be virtually no learning curve with regards to program initiation and startup. This and other special factors illustrating why ECT is the most qualified and best value are further described in the following paragraphs.

Ability to Perform - As a State LOE and Discretionary ISID Contract holder, ECT maintains an active and integrated team of talented and experienced personnel offering demonstrated experience in the successful planning and execution of comprehensive and professional environmental services to the state and DTMB Client Agencies. Specifically, ECT offers the following advantages to the DTMB and its ISID program:

- An experienced Program Manager who has successfully managed two (Environmental Response Division and Storage Tank Division) MDEQ PM Contracts, two LOE Contracts, and two DTMB Discretionary ISID Contracts;
- A project team with extensive experience working together on state-funded projects and a commitment to exceeding the expectations of the DTMB and its Client Agencies, with particular emphasis on cost, schedule, and budget;
- Eight CUSTPs;
- Twelve Michigan-licensed Professional Engineers and Six Certified Professional Geologists;
- Staff possessing a multitude of other pertinent certifications and registrations (see Section 3.3);

- Current State of Michigan/DTMB and Client Agency PSC (MDEQ, DMVA, MSHDA, and MDOT);
- Seven Michigan offices strategically located throughout the state, including a Lansing ISID Program Management Office;
- Corporate QA/QC program with proven experience in the development of EPA-approved QAPPs;
- Distinguishing and award-winning, Michigan-based environmental capabilities not often found in other consulting firms (i.e., overall site restoration including habitat and wetlands restoration, sediment remediation, lake and stream restoration, surface water/wet weather sampling, unique remedial approaches, public outreach programs, watershed management planning, etc.);
- Outstanding reputation within the MDEQ and local communities throughout the state; and,
- Demonstrated ability to assist in securing alternative funding sources on behalf of the state and local units of government (over \$170 million in the past five years).

ECT has extensive experience managing level-of-service type contracts for various state, federal, and local governmental agencies, including the DTMB, MDEQ and DVMA. ECT believes that a key element to its success in these programs is in having a dedicated and experienced Michigan-based team directed by an experienced Michigan-based program manager. Accordingly, and as described in Section 3.0, ECT’s proposed ISID program structure centers on a carefully selected team comprised of staff offering extensive experience in each of the DTMB-identified technical fields. This team includes staff from each of ECT’s seven Michigan offices, which are each linked via the Internet to a common computer hub/server so that all project team members can work from a common and unified platform. In addition, ECT’s Lansing office will serve as the primary ISID program management office, and is located only a short distance from the Stevens T. Mason building and Constitution Hall.

Ability to Overcome Adversity/Budget Challenges - A successful DTMB contractor needs to anticipate the unexpected and still be able to meet the goals and objectives of the State/Client Agencies in a timely manner. Often, it is a consultant’s ability to react and overcome the unexpected that is a measure of both their success and ultimately a project’s success.



One such example involves ECT’s cleanup of a chlorinated solvent release in Mason, Michigan, where the MDEQ (based on ECT’s success with the remediation of a trichloroethene [TCE] contaminant plume at the Federal-Mogul Corporation’s St. Johns site; a description of which is provided in Section 2.5, below) asked ECT to design and implement a remediation plan to stimulate indigenous halo-respiring bacteria for the insitu treatment of the leading edge of a bifurcated chlorinated solvent plume threatening surface water and residential receptors. Because this plume was predominantly comprised of degradation byproducts cis-1,2-dichloroethene (DCE) and vinyl chloride, it presented a notable challenge to conventional bioremediation, as halo-respiring bacteria typically do not have high bacterial yield in the absence of parent compounds. In addition, the site is situated in the 22-mile-long Mason Esker, one of the longest eskers in the United States and a complex hydrogeologic setting.

To achieve the MDEQ’s goals and objectives for this site, ECT designed and operated a whey delivery system that is entirely trailered and tailored to the plume’s hydrogeologic and geochemical characteristics such that the only on-site components are delivery and performance monitoring wells. Based on the initial pilot system having achieved approximately 80% degradation of chlorinated

ethenes within six months of startup, the MDEQ subsequently authorized ECT to address the full plume width with this technology. The system, which is still entirely operated out of a trailer, has been in operation for 18 months and has resulted in DCE and vinyl chloride reductions of greater than 90%. Based on this success, the MDEQ has recently engaged ECT to address the other portion of the bifurcated plume, where similar success is currently being demonstrated.

Flexibility and Responsiveness - Through the LOE Program, the MDEQ and DTMB utilize external environmental professionals to augment existing staff of the MDEQ and to address environmentally-impaired sites located throughout Michigan. Two critical consultant attributes for the success of a program such as this are flexibility and responsiveness. A consultant should work with the State/Client Agencies to package services in any way desired.



One recent example of ECT's ability to accommodate MDEQ requests involved the state's planned development of a new regional background level for Arsenic. To assist the MDEQ in defining the study objectives, ECT prepared four conceptual scope and budget estimates reflecting different levels of MDEQ staff participation and sampling. Two scenarios were developed using different pairings of ECT and MDEQ staff for the field sampling events, and two scenarios were developed using significantly different numbers of total samples at alternative locations throughout southeast Michigan. ECT's flexibility in this regard enabled the MDEQ to optimize its approach to the project.

Regulatory Knowledge and Experience (Selection Criterion #2) - In order to make effective technical decisions, it is necessary to have detailed knowledge of the context in which these decisions must be made. This requires in-depth knowledge and experience with the regulations that drive the environmental site closure process, and the procurement procedures that direct the resources that are used for this process. The primary legislative authority for the state cleanup program is Part 201, Environmental Remediation, of the NREPA, 1994 PA 451, as amended. However, knowledge of other state and federal environmental statutes is essential for implementing state cleanups. ECT has the experience and expertise to ensure that regulatory requirements are met in the most cost-effective and technically appropriate manner, whether dealing with state regulations (i.e., NREPA 1994 P.A. 451, as amended) or federal regulations (i.e., CERCLA, RCRA, Emergency Planning and Community Right-to-Know Act [EPCRA], Toxic Substances Control Act [TSCA], the Safe Drinking Water Act [SDWA], and/or the Clean Air Act [CAA]).

Key members of ECT's staff have been in the forefront of the decision-making process and have been actively participating in policy development, rule-making and general review of existing and proposed regulations for well over a decade. For example, ECT staff includes:

- *A member of the original Part 201 Mixing Zone Subcommittee established several years ago by the MDEQ to determine the requirements and procedures for Michigan's groundwater venting mixing zone rules;*
- *One of the five authors that wrote and formulated the Section 506 Great Lakes Fishery & Ecosystem Restoration Plan for the U.S. Army Corps of Engineers;*
- *The Project Director for two of the largest fluvial geomorphology projects within EPA Region 5; and,*
- *A member of the Great Lakes Advisory Board, which provides advice and recommendations to the EPA Administrator.*

Several members of ECT's management team have employment backgrounds within DTMB Client Agencies and as private consultants that span decades of environmental awareness and regulatory changes. In fact, the key personnel identified for this particular DTMB Contract each possess an average of 28 years of experience in the environmental field. This background provides the context for understanding the genesis and intent of the regulations, which has enabled many of the innovative remediation and redevelopment achievements for which ECT is known. Further, each of ECT's CUSTPs have a strong understanding of the Risk-Based Corrective Action (RBCA) process, and ECT's Site Managers receive rigorous regulatory training and participate in state-sponsored technical conferences as part of the firm's in-house professional development program.

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Working under both its LOE and DTMB Discretionary ISID Contracts, ECT has demonstrated this background and knowledge of state regulations, by successfully promoting and expanding the state's cleanup and redevelopment goals. Understanding the linkages between these regulations, quantifying the health and environmental risks associated with a site, and identifying cost-effective site solutions is critical in this time of limited public funding. For example, at the former Federal Mogul facility in St. Johns, Michigan, ECT demonstrated that bioremediation could be effectively used to address off-site risks at a significantly reduced cost in comparison to a conventional pump-and-treat approach. Based on its success at this privately-funded site, the MDEQ subsequently invited ECT to assess and implement the same technology at two state-funded project sites in Mason where DCE and vinyl chloride reductions of greater than 90% have already been achieved.

Sampling and Laboratory Analysis Experience (Selection Criterion #2) - ECT has an extensive Corporate Quality Program (CQP), as described in a number of QA/QC documents including a Comprehensive QA plan, QAPPs, and Standard Operating Procedures (SOPs) for sampling and monitoring projects, the performance and evaluation of remediation pilot tests, equipment and procedural manuals, including calibration manuals, and Project Work or Study Plans. ECT's QAPPs and SOPs have been approved by both EPA and MDEQ.

- **QA/QC Certifications** - ECT personnel have undergone extensive QA/QC training with regard to the operation, use and validation of a variety of sampling and analytical testing equipment and procedures. Included among these are advanced instrumentation certifications and specific QA/QC training involving:
 - Basic and Advanced QA/QC Training on the Set-up and Use of Gas Chromatograph/Mass Spectrometer (GC/MS)
 - Environmental Chemistry QA/QC (MDEQ Course No. 1695 and 1696)
 - MDEQ Laboratory QA/QC Training
 - Army Corps of Engineers training for site specific organic and inorganic analytes in soil and water.
- **Proficiency Testing** - ECT has participated in site-specific QA/QC and Proficiency Testing programs as required by the Army Corps of Engineers, EPA, and related federal agencies that afford a framework for continuous improvement, minimal systematic error, and documented problem solving.
- **Working Cooperatively with the MDEQ Laboratory** - As an LOE/ISID contractor, ECT has extensive experience working with the MDEQ Laboratory on numerous state-funded projects. When

the first samples from state-funded sites were being diverted from private labs to the state lab in June 2003, ECT staff worked closely with the state in establishing processes and procedures regarding the shipment of samples, turn-around times, cost of equipment/containers, preservation techniques, and protocols for delivery, analysis, and results documentation. Since that time, ECT personnel have worked cooperatively with the state laboratory on approximately 75 state-funded projects.

- ***Assisting in the Development of MDEQ Sampling Protocols*** - ECT staff began establishing and implementing low flow sampling techniques and low-level mercury sampling and analysis procedures (USEPA Methods 1669 and 1631) on state-funded sites as early as 2001. In fact, the low flow sampling system developed by ECT staff was designed in such close cooperation with the MDEQ that when implementation of the MDEQ Operational Memorandum occurred in February 2005, the procedure had already been incorporated into ECT’s Manual of Standard Operating Procedures, and recognized by state project management and laboratory personnel on nearly a dozen state-funded projects. Most recently, ECT staff has been working closely with MDEQ district personnel across the state in the development and implementation of vapor sampling methods and protocols relevant to the assessment of risks stemming from volatilization to indoor air.



As a testament to its sampling and laboratory analysis experience, ECT was recently selected to design and implement what is considered to be the most sophisticated real-time monitoring network in the United States. The project involves the Macomb/St. Clair Inter-County Watershed Management Advisory Group, EPA, MDEQ, Macomb County, St. Clair County and more than a dozen local water treatment plants, and is aimed at safeguarding water quality. Funded in large part by the EPA and the Department of Homeland Security, the project involves a water quality monitoring system that has been established to provide early detection of drinking water contamination from chemical spills and other threats to public health. As part of the project, ECT staff installed and calibrated GCs/MSs, Total Organic Carbon analyzers, Fluorometers, and multiparameter probes at each water treatment plant, and is responsible for monitoring 29 specific chemicals, two broad-based parameters, and an additional 7 water quality characteristics. Implemented in 2008, the system is serving as a demonstration project for municipalities operating drinking water treatment plants across the nation.

- ***Understanding of State Procurement Procedures*** - Understanding the various types of procurement activities that will occur under the DTMB ISID program is critical to its effective implementation. There is the initial procurement process to bring a Professional Firm (PF) on board, procurement procedures to access a PF once in the program, procedures for the PF to hire subcontractors, procedures to modify work orders, etc. Other procurement procedures will also apply once a site or project assignment has been made. These include items such as the following:
 - Project Augmentations, increasing or decreasing budget;
 - Date Extensions; and,
 - Close Out of a Project

As a current DTMB contract holder, ECT understands and is well versed in this process and the various program procurement procedures described and alluded to in the DTMB’s RFP.

Another critical procurement function is that of DTMB Trade Contractor (TC) procurement. Under the ISID program, TCs contract directly with the State of Michigan. Therefore, a PF needs to fully understand this process and be prepared to support both the DTMB and State/Client Agency in the process. As a current LOE and DTMB PSC, ECT has helped procure TCs under the terms of public bidding for the State of Michigan, with contract values ranging from several hundred thousand dollars to several million dollars. ECT's staff has extensive experience using DCSPEC[®] as the basis for successfully bidding and administering TC work on behalf of the State/Client Agencies. In addition, ECT staff routinely uses a combination of lump sum and unit rates for those items where quantities are not readily discernible at bid time. This method reduces the need for contingency monies in a TC's bid, which otherwise has the effect of inflating total project costs.

2.5 Special Factors (*Selection Criterion #6*)

ECT offers experience and unique qualifications in a number of specialty fields relevant to both the principle activities and additional tasks identified in the DTMB's RFP. Among these are the following:

Green Remediation
Brownfield Redevelopment and Contaminated Site Reuse
Demolition Design, Preparation, and Oversight
Expedited Site Characterization, Design Acceleration and Environmental Visualization
Alternatives Evaluation and Development
Remedial Action Design
Review of Plans, Drawings, Specifications, Proposals and Technical Reports
UST Removal/Closure
Operations and Maintenance of Remediation Systems
Supplemental Funding Strategies
Community Outreach
Natural Resource Damage Assessments
Ecosystem Restoration and Management
Assessment of Environmental and Public Health Risks
Environmental Justice and Health Monitoring
Sustainable Reuse Concepts
Database Development and Integrated Website Design
Potentially Responsible Party Identification, Enforcement Support, Expert Testimony
Davis-Bacon Act Compliance Management

Representative descriptions of ECT's special qualifications and unique skill set relevant to each of the above are provided as follows:

Green Remediation - In the environmental field, more and more attention is focused on remedial technologies that rely upon natural processes and those that have a smaller overall carbon footprint than traditional technologies. ECT is considered a leader in the implementation of "green" treatment technologies in Michigan, and has developed and utilized a number of innovative and sustainable remediation technologies to help various State/Client Agencies overcome challenges and achieve their goals and objectives with respect to the cleanup of soil and groundwater contamination at state-funded project sites (see reference to ECT's work on behalf of the MDEQ in Section 2.4 *Ability to Overcome Adversity/Budget Challenges*, above).

➤ **In-Situ Bioremediation and Phytoremediation**

The Chevy in the Hole site consists of approximately 130 acres of former General Motors manufacturing properties located along the Flint River, just west of downtown Flint. ECT has been a key consultant in planning the site's reuse by preparing a conceptual environmental model that depicts the current relationship of the known soil and groundwater conditions. With the luxury of time and physical space, the near-term remediation plan incorporates the demonstration of innovative "green technologies" including phytoremediation and an approach to accelerate the treatment of soils and groundwater contaminated with non-aqueous phase liquid (NAPL), which has typically been a driver in the duration (and associated costs) of many environmental cleanups.



ECT's work and ongoing successes at Chevy in the Hole are being used as a national model for the restoration of complex urban brownfield sites having little near-term developer interest, but with the potential for long-term social and economic development for a community. During his closing remarks at the 2010 EPA Brownfields Grantee Workshop, David Lloyd, Director of the EPA's Office of Brownfields and Land Revitalization, acknowledged ECT's solution for the Chevy in the Hole site as "a creative and holistic approach for addressing complex, multi-variable contaminant issues for dealing with otherwise challenging and cost prohibitive environmental cleanups".

➤ **Enhanced Bioremediation**

Contaminants relating to the historical use of the chlorinated solvent TCE were identified in soil and groundwater beneath the floor of a former bearing manufacturing facility in St. Johns, as well as on neighboring properties. After demonstrating that biodegradation was naturally occurring at the site, ECT proposed the use of enhanced anaerobic dechlorination as an interim response measure in order to prevent the continued migration of TCE and its degradation byproducts offsite, where they might jeopardize a municipal well field. The approach was to stimulate indigenous bacteria by the periodic delivery of an electron donor to establish and maintain a permeable biologically active zone, referred to as a biobarrier. Post-implementation monitoring has shown a dramatic decrease in TCE and its daughter products in and immediately downgradient of the barrier, with incoming TCE concentrations of 60-100 ppm being reduced to less than 5 ppm, and daughter products being completely dechlorinated in the groundwater exiting the biobarrier.



On a parallel track, ECT used three-dimensional modeling and environmental visualization to statistically quantify and depict the distribution of TCE beneath the plant, whereby the feasibility of various in-situ treatment alternatives could be better understood and evaluated. With the goal of reducing TCE concentrations in soils to below C_{sat} and reducing sufficient mass such that long term groundwater treatment would be lessened in both intensity and duration, ECT conducted a series of pilot studies and determined that the most cost-effective and practical means of reducing TCE levels was through in-situ chemical oxidation. Using a transient aboveground mixing/oxidant delivery step, over 2,075 tons of TCE contaminated soils were excavated, mixed with oxidant and returned to the

subsurface for in-situ treatment, resulting in an 83-90% reduction in TCE mass. After 30 days, verification of soil remediation was completed, and the results indicated a TCE mass reduction of over 3,500 pounds.

➤ **Wetland Treatment Systems**

ECT was retained to design and provide construction oversight for a unique wetland treatment system used to treat contaminated groundwater at the Bofors Nobel Superfund site near Muskegon. The system, one of the first of its kind in Michigan, relies on a variety of chemical and biological processes unique to wetlands to remove organic and inorganic contaminants. The primary contaminants of concern were benzidine and dichlorobenzidine, in combination with other organic contaminants such as benzene and toluene.



The technical approach was to first confirm that the removal mechanisms identified in preliminary studies would work using the peat-containing soils existing at the site. Accordingly, ECT established a protocol for testing the soils using bench scale experiments and radioactive tracer studies. Soils were incubated for 45 to 60 days and the test results confirmed that contaminant removal was occurring primarily through a bonding of benzidine with humic and fulvic acids in the peat. This attenuates the hazardous nature of benzidine through an irreversible bond.

The strategy to optimize the selected remedial design focused on two separate wetland-related items. One item dealt with the restoration of natural wetland areas filled by previous activities along an existing creek at the site. The second item was associated with the construction of additional wetlands for the treatment of impacted groundwater. The basic mechanisms at work in wetland treatment systems were then identified as a combination of sedimentation and filtration; chemical precipitation and sorption; and, microbial nutrient transformation and plant uptake. Because the effectiveness of any wetland system is related to the hydraulic loading rate of the system, the loading rate was optimized to achieve optimum removal efficiency.

Brownfield Redevelopment and Contaminated Site Reuse Planning - ECT has a deep understanding of the transactional, regulatory, financial, planning, and construction-related aspects of brownfield redevelopment and contaminated site reuse, and more than two decades of experience with Superfund, RCRA, the Clean Water Act, and Michigan’s various cleanup programs. In addition to their technical backgrounds, many of ECT’s senior staff are also members of the Company’s *Brownfields Interaction Team*, where their experience in state and local government, real estate, economic development, finance, law, public relations, and marketing is used to help state agencies, local units of government, borrowers and lenders work through complicated questions related to acquisition, redevelopment, cleanup, job creation and construction, and to help reposition, assemble and market sites for interest by developers and other end users.



ECT offers experience in nearly three dozen local communities throughout the state specifically with regard to EPA Brownfield Assessment, Cleanup, and RLF Grants within EPA Region 5, and the Michigan Brownfield Assessment, Redevelopment, Reclamation, and Revitalization Programs. In the City of Ypsilanti, ECT recently prepared and implemented three EPA Cleanup Grant applications (\$200,000 each) an RLF subgrant (\$300,000) and a cleanup grant (\$250,000) from HUD to complete the demolition and cleanup activities necessary to prepare a portion of the historic Water Street site for redevelopment. Completion of this work included the demolition of 18 buildings, the reuse and recycling of building materials to the extent possible and the remediation of contaminated soil. By recycling or otherwise reusing eighty-three (83) percent of the demolished building materials, ECT not only coordinated the five grants but successfully stretched the available funds to meet City's objectives for the project.

Demolition Design, Preparation, and Oversight - ECT has provided comprehensive engineering specifications and designs, construction management services, and environmental services associated with the abatement of physical/environmental hazards and human health risks at a variety of federal- and state-funded project sites. The types and sizes of these projects have ranged from multi-story industrial complexes, manufacturing buildings, power plants, and recycling facilities, to automobile service stations, schools, and landfilled wetland areas. ECT's role in these projects has been to conduct a comprehensive environmental assessment of each facility in order to compile information relevant to the preparation of engineering specifications designed to raze the structures and/or abate the existing physical/environmental hazards, and facilitate redevelopment of the sites in accordance with the objectives of the responsible regulatory agency and local units of government.



During the demolition of a power plant at the state-funded Performance Paper Site in Kalamazoo, ECT's assessment efforts were credited with having reduced the volume of waste initially scheduled for landfill disposal by more than 50-percent. Coupled with ECT's recycling of over 1,000 tons of decontaminated metal, the MDEQ's project costs were reduced by approximately \$140,000.

Expedited Site Characterization, Design Acceleration and Environmental Visualization - Recent regulatory and policy decisions at state and federal levels have placed an increased emphasis on the use of risk-based decision making in nearly every aspect of environmental management. Accordingly, accurately characterizing the source and extent of contamination is critical in determining the remedial response. The speed with which this step is taken can dramatically impact the cost of an entire project. Using a variety of cost-effective approaches, ECT offers complete and versatile remedial investigation and site characterization services that minimize sampling efforts and maximize the acquisition of useful site data to define the magnitude, nature, and extent of contamination.

Through an approach called Expedited Site Characterization, ECT incorporates tools like Environmental Visualization Systems and other advanced geostatistical applications early in the study process to facilitate a more rapid, cost-effective, and statistically relevant means of characterizing a site. This is accomplished by focusing on those areas of a site that not only have a low confidence level, but also a high level of uncertainty. In addition, while monitoring sites of groundwater contamination often involves regular sampling of numerous wells, over time, many wells may actually become redundant or geostatistically insignificant. In these instances, ECT can perform an analysis that quantifies the impact to

the data set posed by removing a particular well or wells. This provides a defensible approach for identifying wells for decommissioning, and a reduction in the long-term cost of site monitoring.

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ECT's application of EVS and advanced geostatistical analysis has enabled Benton Harbor-based Whirlpool Corporation to reduce site assessment costs, and enhance the analysis and presentation of data for assessments, financial and remediation planning, litigation support, risk communication, and public relations efforts at project locations throughout the United States, South America, and Asia. The technique has also been applied by ECT on behalf of the MDEQ in the partitioning of expenses among multiple responsible parties whose historical activities had contributed to commingled groundwater contaminant plumes at Leaking Underground Storage Tank (LUST) sites.

Alternatives Evaluation and Development - ECT's philosophy on site remediation is to focus directly on cost-effective, technically appropriate solutions, and to aggressively support them with scientific evidence, expert engineering, and regulatory expertise. The key to defending least-cost remediation is a conclusive risk assessment based on accurate evidence and expert conclusions. A complete site picture, coupled with a comprehensive knowledge of chemical interactions, enables ECT to develop scientifically sound, realistic evaluations of environmental and human health risks, establish site-specific cleanup levels, and assess the feasibility and cost-effective application of a variety of cleanup technologies, including those considered creative, innovative, and/or "green", and those on which approval of the end use is contingent upon engineering controls, institutional controls, and/or restrictive covenants.

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ECT was retained to conduct remedial investigations that would subsequently lead to demolition oversight and the relocation of Portage Creek along part of the Allied Paper/Portage Creek/Kalamazoo River Superfund site in Kalamazoo. The overall project objective was to prepare the site for redevelopment by removing hazards to the public and the environment, which included the presence of high levels of polychlorinated biphenyls (PCBs) in the bottom sediments of Portage Creek. ECT's role was to re-initiate the planning and demolition efforts abandoned by previous consultants and trade contractors and to develop a remedy that involved relocating the channelized sections of Portage Creek to enable contaminated sediment removal and provide for restoration of the aquatic habitat. Due to the contamination present within the study area and the complicated existing infrastructure, ECT evaluated various channel configurations, as well as methods for dealing with abandoned control structures, and achieving the fishery, water quality and habitat restoration objectives established for the site. Ultimately, ECT formulated an alternative that met the strict requirements of the MDEQ and DTMB and also the tight budget constraints of the project. The project necessitated close interaction between members of ECT's Site Restoration and Natural Resource Management practices with regard to issues such as the feasibility of using crushed concrete and other inert materials generated from the site to provide engineering controls and enhance fish habitat in the restored channel.

Remedial Action Design - Managing sites with environmental concerns in a cost-effective manner is a critical issue. The integration of practical engineering and environmental technology with innovative application of scientific principles is required to take advantage of cost-effective opportunities in

contaminant remediation. ECT uses innovative strategies and technologies to determine what the problems and associated risks are at a contaminated site; develops realistic, scientifically-based environmental solutions that remain protective of human health and the environment, while also achieving full regulatory and public acceptance; and, applies the solutions in a cost-effective manner by balancing regulatory compliance requirements with its clients' economic realities and the site's reuse potential.



As part of an EPA Consent Order, ECT was retained to review a RCRA–RAP prepared by another consultant. During its preliminary review, ECT determined that the discrete sampling conducted by the previous consultant, while suitable for general assessment purposes, did not comply with applicable RCRA waste sampling protocols. The identified waste streams were then resampled by ECT by compositing multiple aliquots from which statistically representative concentrations of each waste stream could be obtained. Using Toxicity Characteristic Leaching Procedures and subsequent RCRA 8 Metals, Dioxins and Furans and Semi-Volatile Organics analyses, the resulting waste streams were found to be largely non-characteristically hazardous. Based on these results, ECT successfully negotiated the disposal of the wastes at an approved hazardous waste facility, but at a non-hazardous waste rate (non-hazardous waste at \$89/ton verses hazardous waste at \$315/ton).

Review of Plans, Drawings, Specifications, Proposals and Technical Reports - ECT has been responsible for the review/evaluation of engineering design specifications, project and bid cost preparation/evaluation, review of trade contractor submittals, and technical reports involving large-scale construction, demolition and remedial action projects throughout the United States, with contract values ranging from several hundred thousand dollars to agency response allocations of more than \$300 million.



As part of a RCRA–RAP, another consultant had estimated the cost of building demolition at \$1,200,000. However, based on its independent review of the consultant's published waste characterization sampling and structural evaluation, ECT proposed an alternate approach to the EPA that enabled portions of the building to be managed as nonhazardous waste or recyclable materials. As a result, 77.1% of the debris were recycled and 13% were classified as nonhazardous debris; resulting in a 56% (\$675,000) reduction in the prior consultant's estimated cost.

UST Removal/Closure - Managing leaking underground storage tank (LUST) sites in a cost-effective manner is a critical issue. ECT staff offers extensive experience in the management of various state and federally-mandated UST programs and provides comprehensive regulatory support, compliance and response activities with respect to LUST sites.

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ECT currently serves as the LOE contractor for the MDEQ on LUST assessment and remediation projects across Michigan where state funds are being used to assess, remove, and dispose/recycle residual tank fluids, to remove and dispose of USTs, piping and dispenser systems, and to demolish building structures formerly used as service station facilities. Noteworthy among these were four tax-reverted sites in downtown Detroit where state funds were employed as part of a city-wide cleanup effort spearheaded by the Detroit Department of Environmental Affairs and the Detroit Planning and Development Department. ECT's typical role in these projects has been to develop work plans for the purpose of conducting each RI/FS, and performing all required sampling necessary to support an assessment of public health risks and subsequent site closure in accordance with the RBCA process.

Operations and Maintenance of Remediation Systems - ECT currently provides comprehensive operations and maintenance (O&M) services associated with the implementation of remedial response systems at a number of federal and state-funded project sites. The types and sizes of these projects have ranged from NAPL recovery and ozone-air sparge systems at independent gasoline station sites to complex vapor extraction systems beneath multi-story residential developments, and multi-phase recovery systems at former manufacturing facilities, power plants, and recycling facilities. ECT's role in these projects has been to manage the operational status and effectiveness of these systems in terms of abating the identified environmental hazards, and mitigating unacceptable risks to users and occupants of the sites in accordance with the objectives of the corrective action/remedial action plan for which they were designed and installed.

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In early 2008, the MDEQ assigned ECT the former Total Station #2542 Huron Mini Mart Site located in Ypsilanti and requested that it undertake activities to recondition and modify the operational components of a pre-existing/non-operational ozone sparge treatment system. In response, ECT prepared a work plan entitled, "Work Plan for Preparation of DCSPEC Bidding and Contract Documents Pursuant to Ozone Sparge System Modifications/Repairs and Trade Contractor O&M", and subsequently managed the activities required to recondition and modify the operational components of the existing system, including its subsequent operation and maintenance, and groundwater monitoring.

The treatment system was successfully operated under ECT's oversight for a period of two years before being shut down in mid-2011. Based on subsequent groundwater monitoring results, ECT is currently coordinating the decommissioning/removal of the system and abandonment of the on-site wells.

Supplemental Funding Strategies - ECT has consistently provided technical and administrative support to local units of government on behalf of some of the nation's largest brownfield redevelopment projects, during which it conceived and promoted methods by which financial impasses existing between site owners and local governmental officials might be bridged, thereby facilitating the designation of federal, state and local funds necessary to position key properties for redevelopment.

One of the principle redevelopment financing tools available to many local units of government is the ability to capture incremental taxes generated by a brownfield redevelopment (tax increment financing or

TIF) to reimburse developers for many of the excess environmental, hazardous materials abatement, demolition, infrastructure improvement, and site preparation costs typically associated with redeveloping a brownfield site. ECT has extensive experience working with the state and local units of government in the preparation of Brownfield Reuse Plans and TIF schedules, as well as a long and proven record in obtaining other supplementary funding on behalf of local units of government.



Included among its more noteworthy successes is a plan that provides for the reimbursement of more than \$100 million in environmental cleanup required to facilitate the \$600 million Harbor Shores redevelopment project in southwest Michigan. However, in addition to helping communities throughout Michigan secure environmental assessment and cleanup funding, ECT has also successfully aided clients in leveraging state and federal funding sources to acquire millions of dollars in other community assistance, job training, and environmental justice grants, as well. In the past five years alone, the total dollars received for communities as a result of ECT's efforts is well over \$170 million, with more than \$130 million being attributable specifically to brownfield initiatives.

Community Outreach - Community involvement activities occur throughout the timeline of an environmental abatement/remediation project and are considered integral to their success. Accordingly, community involvement will often begin with an overall Community Involvement Plan (CIP) that covers the life of the initiative. This plan identifies existing community organizations that can become “life lines” for sharing information; whether it is for education, site visioning, site planning, community historical perspectives or, in the case of redevelopment, future developer attraction. Community outreach includes approaches and ideas for developing a public participation process that provides complete information, timely public notice and full public access to key decisions, and supports early and continuing involvement of the public in abatement/remediation issues.

In addition to preparing a CIP, ECT will often assist clients in developing an overall community outreach schedule, and support them in meeting with the local communities and helping residents to understand the abatement/remediation program and the opportunities they have to participate in the process.



Based on its community outreach and consensus-building skills among large stakeholder groups, ECT personnel have been retained to serve as Executive Director and staff to the Alliance of Rouge Communities (ARC), a quasi-governmental organization of 38 local communities and three counties located in the Rouge River Watershed in southeast Michigan. Since 2008, ECT has successfully facilitated the ARC's watershed management planning process, which has included an extensive public participation process using the media, websites, public meetings and community events. ECT is also responsible for facilitating the ARC's Public Involvement and Education Committee, which develops public education outreach and publications. (www.allianceofrougecommunities.com)

Natural Resource Damage Assessments - ECT is a nationally recognized authority in managing natural resource restoration projects, with staff having been involved in hundreds of feasibility studies of restoration efforts. Among this staff are experts on the creation and restoration of aquatic ecosystems and wetland habitats, as well as on the assessment of environmental impacts and natural resource damages associated with development projects. In addition to its ability to design projects that meet client needs while maintaining the integrity of natural systems, ECT is recognized for its ability to present scientific

information to the public in a meaningful and understandable manner, and for leading teams of conservation biologists, land managers and real estate specialists in the development of strategies to conserve valuable natural areas in landscapes as diverse as the shorelines of Lakes Huron and Erie, to those in the Gulf Coast and southeastern Florida.

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In one such project, ECT was responsible for identifying the natural resource damages associated with a Natural Resource Damage Assessment complaint initiated by the federal government against General Motors and a municipal wastewater treatment plant near Saginaw Bay, and developing a remedy that provided environmental and social benefits, including wildlife habitat, fish habitat, recreational sites, interpretive areas, and educational opportunities. ECT staff prepared and supervised the implementation of a mitigation plan that consisted of fisheries enhancement projects, increased recreational access, preservation of known nesting sites for bald eagles, preservation of coastal wetlands, and restoration of agricultural areas into coastal wetlands. A total of 400 acres of wetlands was restored and approximately 400 acres of land were preserved.

Ecosystem Restoration and Management - ECT has significant public and private sector experience in all aspects of ecosystem restoration and environmental policy. Since 2006, ECT has also played a key role in the execution of the *Great Lakes Restoration Initiative (GLRI)*, and has been a Mission Support contractor to EPA’s Great Lakes National Program Office. Under this contract, ECT provides program support, big-picture policy planning/development, pathways to de-listing, and implementation support.

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ECT staff includes one of the five authors who wrote and formulated the Section 506 Great Lakes Fishery & Ecosystem Restoration Plan for the U.S. Army Corps of Engineers which resulted in a \$100 Million federal authorization to execute that plan, and the Project Director for two of the largest fluvial geomorphology projects within EPA Region 5. ECT’s work on GLRI projects includes several million-dollar initiatives that have successfully resulted in the execution of natural resource restoration projects across the state, such as the restoration of a historic riverine system at The Henry Ford (Greenfield Village), a National Historic Landmark located in Southeast Michigan, which now provides habitat for both fish and wildlife, and additional enhancements including trails/paths, observation decks, signage, and educational kiosks.

Assessment of Environmental and Public Health Risks - ECT offers expertise in all areas of risk-based closure and human health risk assessment. Projects have been conducted under the auspices of the EPA (CERCLA and RCRA), the Department of Defense, and for private parties. Assessment approaches used have included RBCA, RAGS, ASTM, SSL, combustion risk assessment, and Monte Carlo simulations. On-staff capabilities include the ability to assess the human and ecological risk components of a project that are often required in support of a contemplated land reuse plan, as well as the development of task-based risk assessment procedures that encompass machine and procedural hazards, personal protective equipment, and ergonomic issues.



Examples of ECT's work include its evaluation of environmental risk on behalf of the U.S. Postal Service to support the federal government's efforts to redevelop a 70-acre portion of a nearly 100-year old General Motors facility in Pontiac for use as the Detroit metropolitan area's Processing and Distribution Center. The site exhibited numerous environmental issues, including LNAPL, carbon tetrachloride impacted groundwater, and methane gas at levels of 70 percent. Accelerated scheduling necessitated ECT's close and effective communication and coordination among a diverse group of stakeholders in order to balance construction schedules with the protection of future site workers. For example, ECT demonstrated that long-term risk could be mitigated by incorporating a vapor barrier beneath the entire building. This determination enabled the government to maintain its accelerated construction schedule, while ensuring that methane and other gases at the site would not intrude into the building interior.

Environmental Health Monitoring - Considering that many sites of environmental contamination are located near residential communities or adjacent to waterways, the negative health and welfare impacts of these sites are often a concern to sensitive populations that include the young and elderly. ECT has assisted communities in addressing these issues by developing plans for assessing potential impacts and minimizing adverse exposures to residents located near identified sites of environmental contamination. Specifically, key ECT staff members are often asked to communicate with public health entities in the development of public health monitoring plans enabling communities to address issues such as lead-based paint and asbestos, as well as potential impacts from soil and/or groundwater contamination within neighborhood areas proximal to areas of known environmental contamination.



Based on its successes in other communities, ECT recently received authorization from the EPA to expand a childcare asthma assessment project from 5 to 23 childcare centers as part of a high-profile, federally-funded initiative targeting low-income areas proximal to a number of identified brownfield sites in Orlando, Florida.

Sustainable Reuse Concepts - ECT is currently supporting legislative efforts that will provide financial incentives to redevelopment projects that achieve Leadership in Energy and Environmental Design (LEED) certification, and has partnered with Dr. Jennifer Languell, one of the nation's pre-eminent sustainability experts, to promote the benefits of low-impact development practices and sustainable management elements, such as green roofs, bioswales, and rain gardens, where practical, within the overall cleanup and redevelopment of environmentally challenged sites.



In 2011, Greening of Detroit retained ECT to develop a long-term implementation plan for a green infrastructure (GI) network in Detroit's neighborhoods. Among the outcomes was the development of an interactive Geographic Information System (GIS) tool that enables community groups to assess the costs and benefits of GI over a 20-year time period and identifies areas where a given GI alternative can be optimized based on a projected return on investment, social acceptability, and the potential for reducing stormwater runoff to the city's existing piping infrastructure and the number of combined sewer overflow occurrences. An analysis of how green infrastructure would improve energy efficiency, decrease stormwater entering the combined sewers, improve public health, reduce

budgetary needs, and revitalize neighborhoods was also conducted. Potential energy savings and greenhouse gas reductions were examined as secondary benefits.

Database Development and Integrated Website Design - While developing or updating environmental protection/restoration plans, environmental managers are faced with two key challenges: 1) the task of collecting, tracking, sorting, and analyzing vast amounts of information, and 2) visually representing that information. As a result, development of action plans that provide comprehensive solutions can be extraordinarily complicated. ECT has developed an Environmental Restoration Information Management System (ERIMS) that allows environmental managers the capacity to bring together information that can be readily utilized in assessing environmental health, the status of local impairments, the need for specific projects or project types to address impairments, and finally, monitoring needs. The system also has the capabilities to quickly assess monitoring data against cleanup objectives, and reporting that information in a variety of electronic formats.



As of 2012, ECT's ERIMS has been used extensively by Great Lakes Area of Concern (AOC) managers in the Grand Calumet and Maumee Rivers to integrate data and removal targets for beneficial use impairments by allowing for a more efficient analysis of monitoring data. In these AOCs, ERIMS has also been used to prepare Stage 2 Remedial Action Plans outlining the process for the eventual delisting of the AOCs by identifying a series of strategic projects that need to be implemented within those waterbodies.

ECT also recognizes the need to have an easily accessible and updateable forum that allows governments, community organizations, and other stakeholders to share important environmental information. Utilizing Wiki-sites, ECT has developed an innovative and dynamic resource to achieve this goal. The framework developed by ECT provides users with a consistent visual and informational format, and allows easier navigation through a centralized source. In addition, these sites can be:

- Updated frequently and linked to important external information;
- The foundation for local and regional planning;
- A platform that enables stakeholders to navigate complex information previously difficult to find in a user-friendly format; and,
- A basis for regional and local priority setting.



Funded by the Great Lakes National Program Office, an example of an ECT-developed website can be found on the EPA's "Watershed Central Wiki" website. Watershed Central is an established Wiki structure developed by ECT, which serves as a repository and management tool for collecting and disseminating information to the public. The website provides an easily accessible and comprehensive resource for watershed information that can be viewed by the public, and easily updated by any of the website's approved partners.

Potentially Responsible Party (PRP) Identification, Enforcement Support, Expert Testimony - ECT's expertise in the application of three-dimensional volumetric modeling, analysis, and visualization techniques has provided utility to the MDEQ and multiple private-sector clients in PRP identification and

cost recovery actions involving the partitioning of expenses among multiple parties whose historical operations had contributed to commingled groundwater contaminant plumes.

PROVEN SUCCESS

Senior ECT personnel offer extensive experience in the areas of expert technical review and witness testimony in deposition and trial settings related to a variety of environmental matters, and for writing and conducting seminars and training sessions on the subject of sampling and analysis for evidentiary purposes. Included among the staff designated for this particular DTMB ISID Contract are two Michigan-Licensed Attorneys, whose training and research skills position them well for PRP evaluations, RCRA and CERCLA Closures, evidence and document management, and risk management activities.

Davis-Bacon Act Compliance Management - ECT has a demonstrated skill in complying with federal funding requirements including Davis-Bacon Act employment standards, as well as the reporting and auditing requirements pertaining to equal opportunity in hiring, Housing and Urban Development (HUD) Section 3.0, and National Environmental Policy Act (NEPA) associated with HUD and other federally-funded projects.

PROVEN SUCCESS

Examples of ECT's Davis-Bacon Act Compliance Management skills include its work under the EPA Brownfield Revolving Loan Fund Grant on behalf of both the Downriver Community Conference (a coalition of approximately 15 local communities in Southeast Michigan) and the Genesee County Landbank Authority, as well as assignments in Ypsilanti under the federally-sponsored Neighborhood Stabilization Programs.

3.0 Personnel (Selection Criterion #4)

ECT believes that it offers the DTMB and its State/Client Agencies a highly qualified team unmatched in its experience and ability to simultaneously coordinate and complete multiple work tasks, together with its ability to carry out assignments that are complex, large in scope, and affecting a variety of stakeholders, within an accelerated time-frame, and to ensure that all deliverables and billings are prepared in a timely and accurate manner. The team consists of leading experts in all project areas, with direct experience in the performance of DTMB LOE and ISID assignments, and who are dedicated and responsive to the needs of the DTMB and its State/Client Agencies.

DTMB Relevant Experience of ECT's Project Team

- Geophysical Studies
- Hydrogeological Investigations
- Underground Storage Tank Removal/Closure
- Sampling and Analysis of Hazardous Materials and Containers
- Collection and Analysis of Soil, Sediment, Flora, Fauna, Water, and Air Samples
- Evaluation of Sample Data
- RBCA
- Evaluation and Development of Disposal and Remedial Alternatives
- Preparation of Environmental Impact Statements
- Remedial action Design including Development of Plans/Drawings and Specifications
- Natural Resource Damage Assessments (NRDA)
- Construction Oversight and Construction Management Services
- O&M of Remediation Systems/Oversight of O&M services

3.1 Key Project Team Staffing and Management

The key project team staffing and management for this ISID Contract has an average of 28 years of experience, includes a highly-motivated and multi-disciplined group of professionals that has worked collaboratively on over 30 LOE and ISID assignments, and has proven its ability to perform all of the services requested by the DTMB in an accelerated, cost- and time-efficient manner. Each of ECT's key project team members have previous DTMB PSC/PF experience with the MDEQ, DMVA, or other State/Client Agencies, and all of ECT's staff work in the environmental field.

In addition to its Site Managers having previous DTMB PSC/PF experience, ECT's ISID Program will be lead by a Program Manager who has previously managed two MDEQ PM Contracts, two MDEQ LOE Contracts, and two DTMB Discretionary ISID Contracts, and supported by a Principal who also serves as ECT's Principal-in-Charge (PIC) with respect to its current LOE and DTMB ISID contracts.

Recent Project Experience of Key Program and Site Management Personnel

	Key Personnel	Project Function/Title	DTMB LOE/ISID PROJECTS*																																		
			Jaco Plating	North 34 th Street	Arbor Wash	Gene Carr	Arsenic Background	MARD	Jimmie's Service	MI Center, Inc.	Jenny Enterprises	S&S Shell	Performance Paper	Evelyn Gibbons	Great Northern Pkg.	Taber's Oil	Flint Odyssey House	Clark #767	Central Distributors	Bay Petroleum	Sparan Express	Action Auto #10	Bob's Marathon	Total/Huron Mini Mart	Fred's Country	Sinoco	Portage Creek Tox. Sub	Oil & Water Sep. (Ph I)	Oil & Water Sep. (Ph II)	Camp Grayling #1	Camp Grayling #2	Americhem (North Plume)	Americhem (South Plume)	Anamas Incorporated	Allied Paper/Portage Creek		
Program Management	Charles (Curt) Wolf	Program Manager Engineer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Timothy Hebert	Principal-in-Charge Scientist	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	John Smyth	Program Health & Safety Officer Scientist	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	John Bonds	Program QA/QC Officer Scientist	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Site Managers	Brian Burke	Site Manager Scientist																																			
	John D'Addona	Site Manager Engineer																																			
	Michael Hebert	Site Manager Scientist	✓			✓																															
	Mark Mikesell	Site Manager Scientist				✓																															
	Paul Meyer	Site Manager Scientist		✓		✓																															✓
	Joel Parker	Site Manager Scientist		✓																																	

*Summaries of individual DTMB LOE/ISID projects are provided in Appendix A.

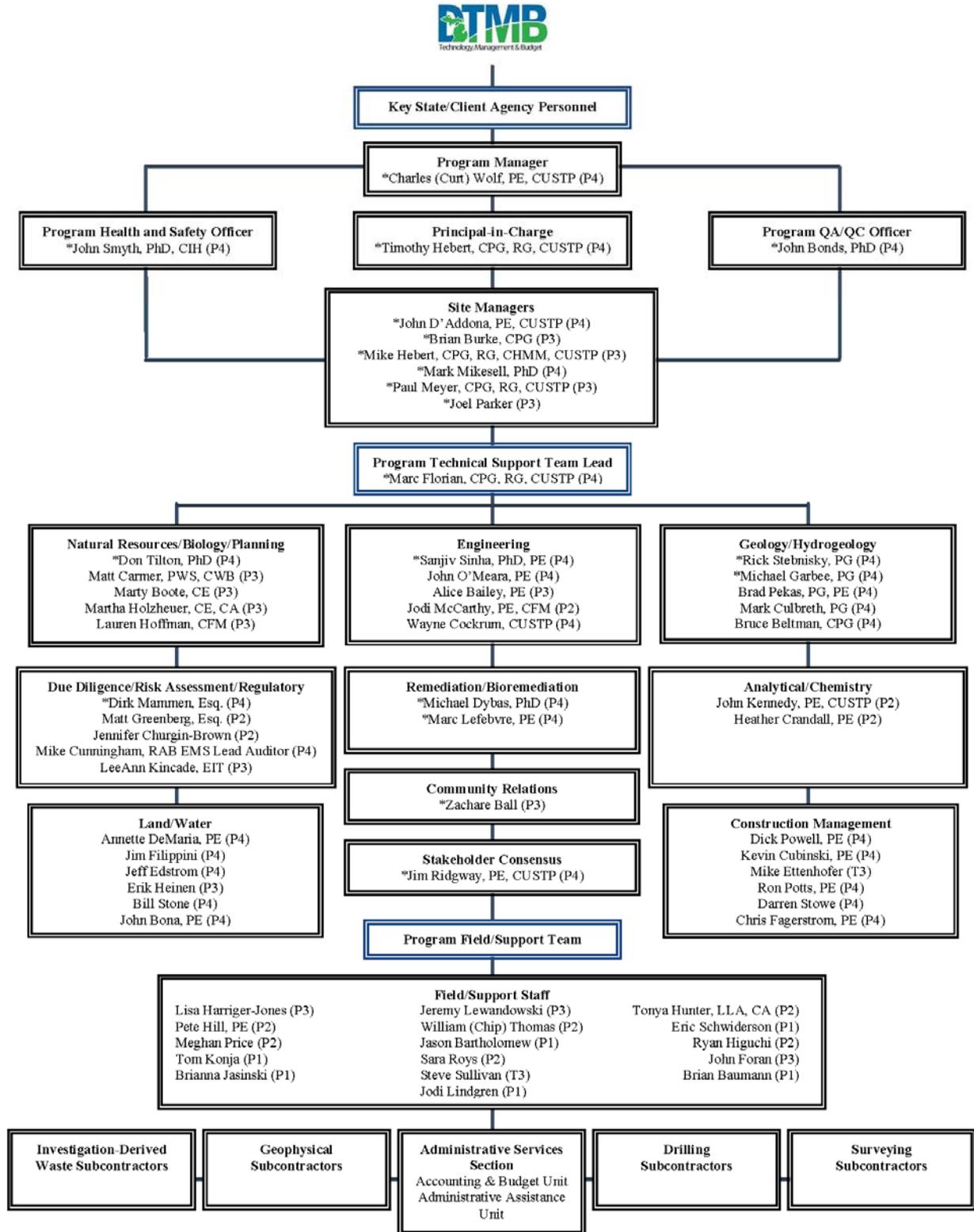
And, while ECT's Program and Site Managers will provide the backbone of this ISID Contract, its Technical Support Team is comprised of a diverse and highly-experienced group of key personnel who will afford the DTMB State/Client Agencies access to a broad spectrum of environmental, scientific, and engineering expertise, including the following:

- Professional Engineers
- Professional Geologists
- Industrial Hygienists
- Toxicologists
- Meteorologists
- Air Quality Scientists
- Coastal Engineers
- Oceanographers
- Limnologists
- Wetland Hydrologists
- Water Quality Scientists
- Hydrogeologists
- Geotechnical Scientists
- Terrestrial Ecologists
- Aquatic Ecologists
- Chemical Engineers
- Environmental Chemists
- Hazardous and Toxic Materials Specialists
- Environmental Auditors
- Planners
- Socioeconomists
- Landscape Architects/Ecologists
- Environmental Law/Policy Specialists
- Geophysicists
- Modelers
- Soil Scientists
- Wildlife Biologists
- Fisheries Biologists
- GIS Specialists
- Stream Geomorphologists
- Botanists

Key Technical Support Team Members

Key Personnel	Project Function/ Title	Education	Registration	DTMB RELEVANT EXPERIENCE														
				Years Experience	DTMB/MD/EP Program Experience	Community Relations	Feasibility Studies	NRDA Work	UST Removal/Closure	PRP Identification	Preliminary Site Investigations	RBCA Activities	Remedial Investigations/Design	BEA Development/Review	Construction Oversight	O&M/O&M Oversight	HAZWOPER Training	
Marc Florian	Program Technical Team Lead Scientist	MBA/Business MS/Geology BS/Geology	RG, CPG, CUSTP	28	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Zachare Ball	Technical Lead Community Relations Scientist	BA/Political Science		40	✓	✓		✓										
Michael Dybas	Technical Lead Bioremediation Scientist	PhD/Microbiology	PhD	33	✓	✓	✓				✓		✓		✓	✓	✓	✓
Dirk Mammen	Technical Lead Due Diligence/Risk Assessment/Regulatory Scientist	JD/Law BS/Geology	JD	27	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
James Ridgway	Technical Lead Stakeholder Consensus Engineer	MS/Civil Engineering BS/Civil Engineering BS/Atmospheric & Oceanic Science	PE, CUSTP	36	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓
Sanjiv Sinha	Technical Lead Engineering Scientist	BE/Civil Engineering MS/Civil & Mineral Engineering PhD/Civil & Env. Engineering	PhD, PE	16	✓	✓	✓	✓			✓							
Richard Stebnisky	Technical Lead Geology/Hydrogeology	BS/MS/Geology	PG	28	✓	✓	✓			✓	✓	✓	✓		✓	✓	✓	✓
Marc Lefebvre	Technical Lead Remediation	BS/Chemical Engineering	PE	30		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
Michael Garbee	Technical Lead Geology	MIBS/International Business Studies MS/Geology BA/Geology	PG	23		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
Donald Tilton	Technical Lead Natural Resources/Biology/Planning Scientist	BA/Biology PhD/Botany	PhD	38	✓	✓	✓	✓		✓	✓		✓		✓	✓	✓	✓

The following organizational chart outlines the authority and communication lines among the specific resources ECT will utilize to deliver the requirements of the DTMB ISID program.



3.2 Key Personnel and Staffing Commitment

The key personnel, whose professional profiles are outlined below, will be committed to this particular DTMB ISID Contract throughout its duration, as their individual areas of expertise and utilization might be required. Resumes of these key project team members are provided in Appendix A.

Summary of Key Personnel Qualifications

	Key Personnel	Project Function/ Title	Education	Registration	DTMB RELEVANT EXPERIENCE														
					Years Experience	DTMB/MDEQ Program Experience	Community Relations	Feasibility Studies	NRDA Work	UST Removal/Closure	PRP Identification	Preliminary Site Investigations	RBCA Activities	Remedial Investigations/Design	BEA Development/Review	Construction Oversight	O&M/O&M Oversight	HAZWOPER Training	
Program Management	Charles (Curt) Wolf	Program Manager Engineer	MBA/Business BS Civil Engineering	PE, CUSTP	25	√	√	√	√	√	√	√	√	√	√	√	√	√	
	Timothy Hebert	Principal-in-Charge Scientist	BS/Geology BS/Biology	RG, PG, CPG, CUSTP	28	√	√	√	√	√	√	√	√	√	√	√	√	√	
	John Smyth	Program Health & Safety Officer Scientist	BS, Chemistry/Mathematics MSPH, Industrial Hygiene/Safety Management PhD, Industrial Hygiene and Safety Management	PhD, CIH	28	√	√	√	√	√	√	√	√	√	√	√	√	√	
	John Bonds	Program QA/QC Officer Scientist	PhD/Analytical Chemistry BS/Chemistry	PhD	44	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Site Managers	Brian Burke	Site Manager Scientist	BS/Geology	CPG	28	√	√	√	√	√	√	√	√	√	√	√	√	√	
	John D'Addona	Site Manager Engineer	BS/Civil Engineering BS/Environmental Sciences Engineering	PE, CUSTP	37	√	√	√	√	√	√	√	√	√	√	√	√	√	
	Michael Hebert	Site Manager Scientist	BS/Geology	CPG, CHMM, PG, CUSTP	26	√	√	√	√	√	√	√	√	√	√	√	√	√	
	Mark Mikesell	Site Manager Scientist	PhD/Microbiology/Environmental Toxicology MS/Soil Microbiology & Biochemistry BS/Soil Science	PhD	29	√	√	√	√	√	√	√	√	√	√	√	√	√	
	Paul Meyer	Site Manager Scientist	BS/Geology	CPG, PG, CUSTP	27	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Joel Parker	Site Manager Scientist	BS/Physics MS/Environmental Engineering		21	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Program Technical Leads	Marc Florian	Program Technical Team Lead Scientist	MBA/Business MS/Geology BS/Geology	RG, CPG, CUSTP	28	√	√	√	√	√	√	√	√	√	√	√	√	√	
	Zachare Ball	Technical Lead Community Relations Scientist	BA/Political Science		40	√	√	√	√	√	√	√	√	√	√	√	√	√	
	Michael Dybas	Technical Lead Bioremediation Scientist	PhD/Microbiology	PhD	33	√	√	√	√	√	√	√	√	√	√	√	√	√	
	Dirk Mammen	Technical Lead Due Diligence/Risk Assessment/Regulatory Scientist	JD/Law BS/Geology	JD	27	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	James Ridgway	Technical Lead Stakeholder Consensus Engineer	MS/Civil Engineering BS/Civil Engineering BS/Atmospheric & Oceanic Science	PE, CUSTP	36	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Sanjiv Sinha	Technical Lead Engineering Scientist	BE/Civil Engineering MS/Civil & Mineral Engineering PhD/Civil & Env. Engineering	PhD, PE	16	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Richard Stebnisky	Technical Lead Geology/Hydrogeology	BS/MS/Geology	PG	28	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Marc Lefebvre	Technical Lead Remediation	BS/Chemical Engineering	PE	30	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Michael Garbee	Technical Lead Geology	MIBS/International Business Studies MS/Geology BA/Geology	PG	23	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	Donald Tilton	Technical Lead Natural Resources/Biology/Planning	BA/Biology PhD/Botany	PhD	38	√	√	√	√	√	√	√	√	√	√	√	√	√	√

Charles (Curt) Wolf, PE/CUSTP (Program Manager), has 25 years of diverse experience in earth and environmental sciences with particular emphasis on project and program management. **Mr. Wolf has previously managed two MDEQ PM Contracts, two MDEQ LOE Contracts, and two DTMB Discretionary ISID Contracts.** He has relevant experience in project and program management, technical supervisory and field experience in the waste management fields relating to site investigations, remedial investigations, hydrogeologic investigations, feasibility studies, design and implementation of site remedial actions, disposal cell and RCRA facility design, and site closure. He has worked with and is familiar with CERCLA, RCRA and various state environmental regulations on hundreds of projects throughout the Midwestern United States, and offers particular knowledge of Michigan Public Act 451 Parts 111, 115, 201 and 213 and issues concerning sites of environmental contamination.

DTMB Relevant Experience

- ✓ DTMB/MDEQ Program Management Experience:
- ✓ **MDEQ PM Contracts (2)**
- ✓ **MDEQ LOE Contracts (2)**
- ✓ **DTMB Discretionary ISID Contracts (2)**
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ NRDA Work
- ✓ UST Removal/Closure
- ✓ PRP Identification
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design
- ✓ BEA Development/Reviews
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

DTMB Relevant Experience

- ✓ DTMB/MDEQ Principal-in-Charge Experience:
- ◆ **MDEQ LOE Contracts (2)**
- ◆ **DTMB Discretionary ISID Contracts (2)**
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ NRDA Work
- ✓ UST Removal/Closure
- ✓ PRP Identification
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design
- ✓ BEA Development/Reviews
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

Timothy Hebert, RG/PG/CPG/CUSTP (Principal-in-Charge), is a Certified/Registered Professional Geologist with nearly 30 years of combined field and project management experience in conducting geologic, hydrogeologic, and geophysical assessments within the States of Michigan, Ohio, Pennsylvania, Indiana, Illinois, Kentucky, Wisconsin, New York, and Missouri, and **has served as ECT's Principal-in-Charge with respect to ECT's two MDEQ LOE Contracts and two DTMB Discretionary ISID Contracts.** His particular areas of specialization include remedial investigations, feasibility studies, and risk-based closures; phase-separated and dissolved hydrocarbon recovery/treatment; conceptual remedial system design; universal/regulated waste management; and, construction/demolition oversight and management with respect to Michigan's remediation and redevelopment program.

John Smyth, PhD (Program Health and Safety Officer), has 28 years of experience and is a Certified Industrial Hygienist (CIH), asbestos inspector, asbestos management planner, asbestos supervisor, and an Association of Energy Engineers-certified indoor air quality professional. Dr. Smyth serves as ECT's Corporate Health and Safety Officer, and his function is to oversee the development and maintenance of HASPs and procedures, and as a task manager with regard to all public health monitoring planning assignments.

DTMB Relevant Experience

- ✓ DTMB/MDEQ Program Experience:
- ◆ **MDEQ LOE Contracts (2)**
- ◆ **DTMB Discretionary ISID Contracts (2)**
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ UST Removal/Closure
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

DTMB Relevant Experience

- ✓ DTMB/MDEQ Program Experience:
 - ◆ MDEQ PM Contracts (2)
 - ◆ MDEQ LOE Contracts (2)
 - ◆ DTMB Discretionary ISID Contracts (2)
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ NRDA Work
- ✓ UST Removal/Closure
- ✓ PRP Identification
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design

John Bonds, PhD (Program QA/QC Officer), has over 40 years of experience managing analytical laboratories and providing project management for RCRA, CERCLA, UST, water quality, QA/QC, and other diverse areas of environmental consulting. His experience is both nationwide and international, with many projects managed and completed for Department of Defense (DOD) entities including Departments of Army, Air Force, and Navy. In addition, he has also completed numerous hazardous waste projects for U.S. Army Corps of Engineers, U.S. EPA, and private sector clients. His function is to oversee the QA/QC elements of this ISID contract, including development and implementation of QAPPs.

Site Managers

Brian Burke, CPG (Site Manager), has over 20 years of experience in the performance of comprehensive remedial investigations involving both hazardous substances and petroleum contaminants, and brings considerable local, technical and regulatory expertise to projects involving the performance geologic, hydrogeologic, geophysical assessments, soil and groundwater remedial investigation/feasibility studies, and risk-based assessments. Based on his expertise in the area of estimating environmental liabilities associated with the cleanup of contaminated sites, Mr. Burke was selected by the U.S. Coast Guard to serve on a four person team tasked with reviewing all open environmental project files at the Cleveland, Ohio and Oakland, California civil engineering units, where he assisted in the development of standard project summary documents and auditable environmental liability estimates for hazardous substance and petroleum product releases at Coast Guard Stations and lighthouses throughout the Great Lakes region and along the United States Pacific coast. In addition to his work on behalf of state- and federally-funded projects, Mr. Burke also offers notable expertise in working with the cleanup of manufactured gas plants, including the development of site-specific cleanup criteria, as well as in negotiated solutions with regard to methodologies for compliance monitoring at complex redevelopment sites.

DTMB Relevant Experience

- ✓ DTMB/MDEQ Site Management Experience:
 - ◆ MDEQ LOE and DTMB ISID Contracts: 4 Sites
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ UST Removal/Closure
- ✓ PRP Identification
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design
- ✓ BEA Development/Reviews
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

DTMB Relevant Experience

- ✓ DTMB/MDEQ Program Experience:
 - ◆ MDEQ PM Contracts (2)
 - ◆ MDEQ LOE Contracts (2)
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ NRDA Work
- ✓ UST Removal/Closure
- ✓ PRP Identification
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design
- ✓ BEA Development/Reviews
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

John D'Addona, PE (Site Manager), has over 35 years of relevant technical supervisory and field experience in the environmental arena relating to site investigations, remedial investigations, hydrogeologic investigations, feasibility studies, design and implementation of site remedial actions, and site closure. He has managed hundreds of environmental assessment, characterization, and remediation assignments on a wide variety of redevelopment projects, **including projects performed under ECT's MDEQ PM Contracts and MDEQ LOE Contracts**. Mr. D'Addona has extensive experience designing and overseeing the implementation of sampling

plans to evaluate the occurrence, nature, and extent of contamination in soil, groundwater, surface water, and sediment. Accordingly, he has been responsible for effecting an approach called *Expedited Site Characterization and Design Acceleration*; an integrated process for shortening the time frame for site work and site redevelopment, and has authored numerous site-specific sampling and analysis plans, Health and Safety Plans (HASPs), and QAPPs. Based on this experience, Mr. D'Addona also serves a key role in project planning and QA/QC oversight.

Michael Hebert, CPG/CHMM/PG/CUSTP (Site Manager), has over 25 years of experience preparing trade contractor specifications and bid packages, assisting governmental agencies and local units of government in trade contractor solicitation and oversight, and in large-scale project management efforts involving work performed under ECT's MDEQ PM and MDEQ LOE Contracts. He has assisted clients in a procurement of trade contractors under a variety of public and private bidding scenarios, with contract values ranging from several hundred thousand dollars to several million dollars. Accordingly, he is a primary reviewer of abatement/remediation/due care plans at sites of environmental contamination, and is skilled at combining his knowledge of remediation technologies with construction-related activities on both small and large sites.

DTMB Relevant Experience

- ✓ DTMB/MDEQ Site Management Experience:
 - ◆ MDEQ LOE Contracts: 13 Sites
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ UST Removal/Closure
- ✓ PRP Identification
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design
- ✓ BEA Development/Reviews
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

DTMB Relevant Experience

- ✓ DTMB/MDEQ Program Experience:
 - ◆ MDEQ PM Contracts (2)
 - ◆ MDEQ LOE Contracts (2)
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ NRDA Work
- ✓ UST Removal/Closure
- ✓ PRP Identification
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design
- ✓ BEA Development/Reviews
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

Mark Mikesell, PhD (Site Manager), specializes in environmental microbiology and chemistry and is responsible for coordinating technical elements of individual project tasks among designated agency staff. For the past 29 years, Dr. Mikesell has served numerous governmental agencies in the areas of water quality, contamination assessment and remediation, and waste treatment. He has extensive experience designing and implementing sampling plans to evaluate the occurrence, nature, and extent of contamination in soil, groundwater, surface water, and sediment. His involvement in these projects has included QA/QC, project planning, and statistical analysis, where he has made key contributions to a wide variety of large and complex projects, including former manufactured gas plant assessments and

remediation, design and implementation of water quality monitoring networks, sub-area assessment of toxics, and numerous soil and groundwater investigations performed under ECT's MDEQ PM and LOE Contracts.

Paul Meyer, CPG/PG/CUSTP (Site Manager), has over 25 years of combined field and project management experience, including extensive work **performed under ECT's LOE and DTMB Discretionary ISID contracts**, where his responsibilities have included the collection of field data; data organization and interpretation; development and implementation of hydrogeologic and site characterization investigations, including the effects of groundwater contamination on surface water/wetlands; oversight of design and construction projects; remedial system operations and maintenance, site safety coordination; preparation of environmental documents, including site assessment and site closure reports; management of UST closure programs; administration and project tracking; preparation of cost estimates; and, procurement/oversight of subcontractors/subconsultants.

DTMB Relevant Experience

- ✓ DTMB/MDEQ Site Management Experience:
 - ◆ **MDEQ LOE and DTMB ISID Contracts: 16 Sites**
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ UST Removal/Closure
- ✓ PRP Identification
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design
- ✓ BEA Development/Reviews
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

DTMB Relevant Experience

- ✓ DTMB/MDEQ Site Management Experience:
 - ◆ **MDEQ LOE Contracts: 5 Sites**
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ NRDA Work
- ✓ UST Removal/Closure
- ✓ PRP Identification
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design
- ✓ BEA Development/Reviews
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

Joel Parker (Site Manager), leads ECT's team in the identification and assessment of "green" treatment technologies and innovative destructive technologies capable of reducing the required life cycle for treating high contaminant concentrations in both solid and aqueous media. With over 20 years of experience, he currently serves as the technical lead and visionary for the highly-successful **bio-remediation efforts being conducted under ECT's current MDEQ LOE Contract**, as well as for a concept that is being implemented at a 100-acre EPA-funded brownfield site that was recently acknowledged by David Lloyd, Director of the EPA's Office of Brownfields and Land Revitalization during his closing remarks at the 2010 EPA

Brownfields Grantee Workshop as "a creative and holistic approach for addressing complex, multi-variable contaminant issues for dealing with otherwise challenging and cost prohibitive environmental cleanups".

Technical Support (Key Personnel Only)

Marc Florian, RG/CPG/CUSTP (Program Technical Team Lead), provides support with regard to overall program QA/QC and has worked closely with state regulatory agencies on more than 50 publicly-funded remediation and redevelopment projects **performed under the MDEQ PM, LOE and DTMB Discretionary ISID Contract programs**. He has represented both major industrial clients and municipalities in the assessment and restoration of environmentally-impaired properties throughout the United States, and as the Chair of ECT's Brownfields Interaction Team, he leads a highly experienced and successful segment of ECT's site restoration practice whose backgrounds in state and local government, real estate, economic development, finance,

DTMB Relevant Experience

- ✓ DTMB/MDEQ Program Experience:
 - ◆ **MDEQ PM and LOE Contracts (3)**
 - ◆ **DTMB Discretionary ISID Contracts (2)**
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ NRDA Work
- ✓ UST Removal/Closure
- ✓ PRP Identification
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design
- ✓ BEA Development/Reviews
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

law, public relations, and marketing are used to help clients work through complicated questions related to acquisition, redevelopment, cleanup, job creation and construction, and to help local units of government reposition sites for specified end uses. He personally serves as technical advisor to a number of local governmental entities and private corporations, and is routinely consulted on matters pertaining to the assessment, cleanup, transfer and redevelopment of private and publicly owned properties.

DTMB Relevant Experience

- ✓ DTMB/MDEQ Program Experience
- ✓ Community Relations
- ✓ NRDA Work

Zachare Ball (Technical Lead – Community Relations), provides support with regard to community outreach and participation elements of all projects. As a former writer for the Detroit Free Press with 40 years of experience, Ms. Ball has overseen many large-scale community involvement projects where public

involvement, education, and job training were considered key to their sustainability. For these projects, Ms. Ball coordinated, produced and distributed educational materials, facilitated workshops, coordinated activities and events with local communities, developed community action plans and public meetings, and/or served as community liaison with citizens and local officials.

Michael Dybas, PhD (Technical Lead - Bioremediation), has more than 30 years of expertise in both basic and applied environmental remediation, and is largely responsible for leading ECT’s bioremediation efforts, ranging from small pilot scale demonstrations to full-scale implementation of *insitu* bioaugmentation and biostimulation of chlorinated solvent plumes such as those associated with the highly-successful **bio-remediation efforts being conducted under ECT’s current MDEQ**

DTMB Relevant Experience

- ✓ DTMB/MDEQ Program Experience
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ Preliminary Site Investigations
- ✓ Remedial Investigations/Design
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

LOE Contract. In a recent project involving Michigan State University and the MDEQ he served as lead Principal Investigator and provided design/build/operational services, including mechanical design and construction, of a groundwater amendment system that provides for nutrient delivery, pH control, and bacterial inoculation of a TCE contaminant plume, which resulted in the successful biodegradation of TCE and its daughter products to ethane and ethane.

His specific areas of expertise include bioremediation and environmental microbiology, novel approaches to chemical delivery, *insitu* bioreactor development, microbial community structure/function relationships, molecular methods of community structure analysis and the application of other innovative technologies.

DTMB Relevant Experience

- ✓ DTMB/MDEQ Program Experience:
 - ◆ MDEQ PM Contracts (2)
 - ◆ MDEQ LOE Contract (1)
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ NRDA Work
- ✓ UST Removal/Closure
- ✓ PRP Identification
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design
- ✓ BEA Development/Review
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

Dirk Mammen, Esq. (Technical Lead - Due Diligence/Risk Assessment/Regulatory), is responsible for managing ECT’s due diligence process, and has been intimately involved in the performance of hundreds of preliminary site assessments, many of which were completed on behalf of state and federally-funded programs. Mr. Mammen has over 25 years of experience managing and performing a wide variety of real estate transactional due diligence assessments, including the performance of over 500 Phase I ESAs nationally. As a Licensed Attorney and degreed geologist, his training and research skills position him well for potentially responsible party (PRP) evaluations, RCRA and CERCLA Closures, evidence and document management,

and risk management activities. Accordingly, he is responsible for reviewing all Phase I ESA reports, ensuring compliance with the ASTM Standard for Environmental Site Assessments (ASTM E-1527-05) and the All Appropriate Inquiry Rule issued under CERCLA, and is ECT's principal lead with regard to the development and review of Baseline Environmental Assessment and issues involving RCRA and federal oversight/response actions.

James Ridgway, PE (Technical Lead – Stakeholder Consensus), is responsible for facilitating stakeholder consensus and identifying, prioritizing and securing ancillary funding for environmental abatement/remediation and other design and construction-related projects. Mr. Ridgway has a thorough knowledge of Michigan's remediation and redevelopment program, and is adept at pursuing and acquiring a variety of funding sources for multi-faceted projects and in raising the awareness of these projects with the appropriate legislative representatives. Mr. Ridgway serves as the executive director of the Alliance of Rouge Communities, is a member of the Great Lakes Advisory Board, currently serves on economic development enhancement team for the Michigan Economic Development Corporation (MEDC), and provided input to President Obama's transition team. He also accompanied former Michigan Governor Granholm on a trip to Israel in order to provide private sector input for development opportunities in Michigan. This trip resulted in the creation of the Green Jobs for Blue Waters Initiative, of which Mr. Ridgway is a member, whose purpose is to focus on municipal, industrial, agricultural and residential water use with the goal of assuring clean and sustainable water resources for the state; promoting and developing ecosystem restoration technologies; promoting the efficient use and re-use of water resources; and, developing and expanding the water-technology supply chain to export these technologies globally.

development; watershed management planning; Total Maximum Daily Loads (TMDLs); Great Lakes restoration policy development for federal agencies; and, water quality. Dr. Sinha was one of the five authors that wrote and formulated the Section 506 Great Lakes Fishery & Ecosystem Restoration Plan for the U.S. Army Corps of Engineers, and is the Project Director for the two largest fluvial geomorphology projects within the State of Michigan.

- DTMB Relevant Experience**
- ✓ DTMB/MDEQ Program Experience
 - ✓ Community Relations
 - ✓ Feasibility Studies
 - ✓ NRDA Work
 - ✓ UST Removal/Closure
 - ✓ RBCA Activities
 - ✓ Remedial Investigations/Design
 - ✓ Construction Oversight
 - ✓ O&M/O&M Oversight

- DTMB Relevant Experience**
- ✓ DTMB/MDEQ Program Experience:
 - ✓ Community Relations
 - ✓ Feasibility Studies
 - ✓ NRDA Work
 - ✓ Preliminary Site Investigations

Sanjiv Sinha, PhD, PE (Technical Lead - Engineering), is the Corporate Director of ECT's firm-wide Water Resources team and has more than 15 years of experience related to ecosystem restoration, environmental policy, and riverine modeling. Dr. Sinha has significant public and private sector experience, and offers expertise in water resources engineering; Remedial Action Plan (RAP)

development; watershed management planning; Total Maximum Daily Loads (TMDLs); Great Lakes restoration policy development for federal agencies; and, water quality. Dr. Sinha was one of the five authors that wrote and formulated the Section 506 Great Lakes Fishery & Ecosystem Restoration Plan for the U.S. Army Corps of Engineers, and is the Project Director for the two largest fluvial geomorphology projects within the State of Michigan.

- DTMB Relevant Experience**
- ✓ Community Relations
 - ✓ Feasibility Studies
 - ✓ PRP Identification
 - ✓ Preliminary Site Investigations
 - ✓ RBCA Activities
 - ✓ Remedial Investigations/Design
 - ✓ Construction Oversight
 - ✓ O&M/O&M Oversight

Richard Stebnisky, PG (Technical Lead – Geology/Hydrogeology), has designed and implemented groundwater quality studies in compliance with RCRA detection monitoring requirements, including statistical analyses of groundwater data; designed, negotiated, and implemented RCRA groundwater quality assessment plans, including a detailed hydrogeologic investigation that successfully demonstrated the immobility of cationic metals due to local geologic and geochemical conditions; and, directed the design of approved corrective action

development; watershed management planning; Total Maximum Daily Loads (TMDLs); Great Lakes restoration policy development for federal agencies; and, water quality. Dr. Sinha was one of the five authors that wrote and formulated the Section 506 Great Lakes Fishery & Ecosystem Restoration Plan for the U.S. Army Corps of Engineers, and is the Project Director for the two largest fluvial geomorphology projects within the State of Michigan.

plans that have included clay covers and slurry trench cutoff walls. With nearly 30 years of experience, Mr. Stebnisky has also successfully negotiated specific conditions of post-closure compliance monitoring programs, designed and gained regulatory approvals of alternative statistical methodologies to determine compliance with groundwater quality standards, and managed and maintained regulatory compliance with post-closure permit conditions.

DTMB Relevant Experience

- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ NRDA Work
- ✓ UST Removal/Closure
- ✓ PRP Identification
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

Marc Lefebvre, PE (Technical Lead – Remediation), has over 30 years of experience evaluating, designing and operating soil and groundwater remediation systems throughout the United States and abroad. His expertise includes work performed on behalf of state- and federally-funded project sites involving a variety of innovative technologies, including vacuum-enhanced free product recovery, multi-phase extraction with ferric sulfate, polymer, caustic and zero valent iron injection, bio-sparging, bio-injection stabilization, air-stripping, land-farming, carbon adsorption and thermal desorption. Mr. Lefebvre's accomplishments include having designed and

implemented an innovative technology that has been projected to save over \$20 million when compared to an alternative previously specified in a Record of Decision at an EPA site on which he now serves as the Engineer of Record and Project Manager. In addition to his alternatives evaluation and design skills, Mr. Lefebvre's responsibilities typically include the development of contractor specifications, and overall operations and maintenance.

Michael Garbee, PG (Technical Lead – Geology), is the Director of ECT's Petroleum Program, and has been responsible for overseeing the characterization and cleanup of well over 500 leaking underground storage tank sites throughout the United States. In this capacity, Mr. Garbee has acted as liaison to the various regulatory agencies associated with the cleanup of such sites, technical reviewer of all project deliverables, and chief coordinator of program staff and resources. With nearly 25 years of experience, Mr. Garbee also offers extensive landfill experience, where his responsibilities have included the evaluation and assessment of environmental

impacts from deposited wastes and the development of site-specific groundwater, leachate, and landfill gas investigation plans for multiple EPA- and privately-funded sites. With regard to his federal work, Mr. Garbee has been responsible for preparation of comprehensive remedial investigation plans involving the evaluation and assessment of environmental impacts under RCRA and CERCLA at hazardous waste storage facilities, and the development of site-specific soil, groundwater, and surface water investigation plans.

DTMB Relevant Experience

- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ NRDA Work
- ✓ UST Removal/Closure
- ✓ PRP Identification
- ✓ Preliminary Site Investigations
- ✓ RBCA Activities
- ✓ Remedial Investigations/Design
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

DTMB Relevant Experience

- ✓ DTMB/MDEQ Program Experience:
 - ◆ MDEQ PM Contracts (2)
 - ◆ MDEQ LOE Contract (1)
- ✓ Community Relations
- ✓ Feasibility Studies
- ✓ NRDA Work
- ✓ PRP Identification
- ✓ Preliminary Investigations
- ✓ Remedial Investigations/Design
- ✓ Construction Oversight
- ✓ O&M/O&M Oversight

Donald Tilton, PhD (Technical Lead - Natural Resources/Biology/Planning), is a nationally recognized authority with nearly four decades of experience in managing natural resource restoration projects. As ECT's Technical Lead with regard to Natural Resources/Biology/Planning, Dr. Tilton has been involved in Superfund sites, Natural Resource Damage Assessments, ecological assessments, and remedial actions. His involvement in these areas has been to assess the ecological effect of contamination and to identify restoration measures that can be implemented to return a site to its natural setting. He is an expert on the creation and restoration of aquatic habitats and has created some of

the largest and most successful wetland restoration projects in the region. In his professional career, he has performed numerous assessments of the environmental impact of projects on natural resources, including freshwater aquatic ecosystems. Dr. Tilton is also recognized for his ability to present scientific information to the public in a meaningful and understandable manner, and has demonstrated this skill both at large public gatherings and more informal events where one-on-one conversation is more common.

3.3 Staff Licensures and Registrations

ECT offers staff possessing the following professional registrations, certifications, and pertinent licenses:

Engineering

Registered Professional Engineers

Geology

Registered and Certified Professional Geologists (National)

Asbestos

AHERA Asbestos Consultants (National)

Certified Asbestos Inspectors (MI)

ISO 14000/Environmental Management Systems

Certified EMS Lead Auditors (National)

Other Pertinent Certifications and Registrations

American Institute of Certified Planners (National)

Certified Confined Space Entry Supervisors, Entrants, and Attendants (National)

Certified Construction Stormwater Operators (MI)

Certified Environmental Professionals (National)

Certified Hazardous Materials Managers (National)

Certified Industrial Hygienists (National)

Certified Industrial Stormwater Operators (MI)

Certified Professional Geologists (National)

Certified Professional Soil Scientists (National)

Certified Professional Wetlands Scientists (National)

Certified Soil Erosion Sedimentation Control Supervisors (National)

Certified UST Professionals (MI)

Certified Waste Treatment Plant Operators (MI)

DOT Certified Hazardous Materials Transportation Shippers (National)
Registered Landscape Architects (MI)

3.4 Acknowledgement of Project Team Ability

In keeping with the objectives of this particular DTMB RFP, ECT hereby acknowledges the ability of its ISID Project Team to offer the following:

- Experience working at sites regulated under Parts 201 and 213 of NREPA 1994 P.A. 451, as amended;
- Experience working at CERCLA regulated sites;
- Experience conducting effective environmental assessment, RI, and FS services;
- Experience with the development of human health and ecological risk assessments;
- Experience with database development and management;
- Experience performing sampling and providing technical review and QA/QC of laboratory data;
- Experience providing comprehensive professional services for the assigned projects;
- An accounting system with the ability to provide detailed cost information; and,
- A solid record of past performance, and financial and technical resources.

The basis for ECT's acknowledgement of the above stems from:

- Its optimization of key Michigan-based personnel and a staff of 200+, including
 - 8 Certified Underground Storage Tank Consultants;
 - 12 Michigan-licensed Professional Engineers;
 - 6 Certified Professional Geologists;
- A thorough knowledge of State of Michigan contracting requirements and procedures;
- The experience, talent, technology, and regulatory knowledge required to quickly identify opportunities that reduce project costs and risk;
- Expertise with the technical complexities and safety issues unique to urban and rural settings; and,
- Quick and effective mobilization capabilities from seven Michigan office locations.

4.0 Management Summary

Program Management - ECT's efforts on behalf of the DTMB will be directed by Program Manager, Charles (Curt) Wolf, P.E., CUSTP, who will be responsible and accountable for all elements of the ISID program. Mr. Wolf has previously directed two MDEQ Environmental Response Division and Storage Tank Division PM Contracts, a MDEQ LOE Contract, a DTMB ISID Contract, and currently directs a second LOE Contract as well as a second DTMB Discretionary ISID Contract. Mr. Wolf's efforts will be supported by ECT's PIC, Timothy Hebert, RG, PG, CPG, CUSTP, who also serves as ECT's PIC with respect to the firm's current LOE and DTMB ISID contracts. Accordingly, ECT is prepared to offer the DTMB a proven program management team and process that is 1) tailored to the specific needs of this particular ISID Contract; 2) provides flexibility at all program levels and elements; and 3) ensures technical quality, safety, timeliness, and cost efficiency.

On the program level, ECT's management process is focused on several key objectives:

- Providing a single point of contact for the State Contract Administrator (SCA) and State Project Manager (SPM);
- Identifying and assigning the Site Manager and team that is best-suited to complete a particular project;
- Maintaining technical and contractual consistency of service between separate projects including health and safety;
- Coordinating communication between projects to ensure that relevant knowledge and information are available to all project team members;
- Identifying potential synergies between separate projects that will allow more effective use of resources and potential services/materials purchasing discounts; and,
- Coordinated contracting and billing.

Site Management - ECT understands that effective and consistent communication is critical, and is committed to providing the state immediate and unrestricted access to members of its project teams. ECT's Program Manager and PIC will work with the SCA and SPM to define the scope of work, overall schedule requirements, and identify the most appropriate Site Manager and support team. In making this selection, ECT will choose the most qualified individual on the basis of the scope of work required. The Site Manager's educational background and work experience will be the main factor in this decision. Once assigned, the Site Manager will be responsible for regularly reporting, on a weekly basis at a minimum, the project's progress from both a financial and technical perspective to the SPM, and the PIC. The Program Manager and PIC will coordinate all relevant communications from the state to its Site Managers and project team members.

The Program Manager and PIC will focus particularly on identifying potential synergies among separate projects, looking for opportunities to share staff, equipment, and technologies. This will help to control costs, ensure that the most effective technology is applied at each site, and promote continual improvements in service over the life of the ISID Contract.

Finally, the Program Manager and PIC will work with ECT's accounting and budget specialists and the SCA to ensure timely, consistent, and accurate project costing, contracting, and billing.

Project Initiation - Beginning with the authorization of a project assignment, the management process will focus on several key objectives:

- Maintaining the safety of public, site workers, and the environment;
- Providing superior technical quality;

- Meeting deadlines;
- Controlling costs;
- Maximizing value to the State of Michigan; and,
- Minimizing the overall amount of time and expense required to complete a project.

Immediately after receiving notification of a project assignment from the SCA, ECT will institute a system of project controls, including obtaining a corporate determination in reference to potential conflicts of interest. Once ECT has received an initial scope of work, the Program Manager and PIC will review the scope of work and begin to assemble the project team. Depending on the magnitude and scope of the project, the Program Manager and PIC may consult with various section or group managers or other technical unit specialists within ECT to identify and select team members.

Once ECT is notified of an assignment, the Program Manager and/or PIC will work with the SPM as he/she develops either a statement of project goals and objectives or a formal written work plan request. If requested, ECT staff can provide assistance with the development of this. After receipt of the Work Plan request, the project team will meet to conduct a formal planning session in order to develop the preliminary work plan that most effectively and economically meets the project objectives. During this session, the selected Site Manager will develop Work and Health and Safety Plan outlines with assistance and support from other key project team members. These outlines will include a budgeted amount of man-hours for each assignment in the outlines. This cost estimate associated with preparation of the Work Plan and project cost estimate will be submitted to the SPM for approval prior to beginning work on the project.

During this planning process, ECT will determine whether subcontracting is required or warranted, and (if so) the most effective means of meeting the technical, schedule, and cost objectives of the project.

As the preliminary Work and Health and Safety Plans are developed for the project, ECT will begin to develop the project estimate. Depending on the type of work involved, the Site Manager will assign the appropriate staff to help complete the preliminary estimate. Upon completion of the preliminary estimate, the Site Manager will conduct a formal in-house review with the PIC and make any necessary revisions. This review will entail a thorough review of not only the means and methods of the work, and health and safety procedures, but also the contractual pricing for personnel, equipment, materials, subcontractors, and other direct costs. Once this in-house review is completed, ECT will submit the completed "Draft" Work and Health and Safety Plans to the SPM for review.

On the basis of comments from the SPM, the Site Manager will assess and revise, if necessary, the Work and Health and Safety Plans and project budget. Once the PIC and SPM are satisfied with the proposed Work and Health and Safety Plans and budget, four copies of the final project assignment packet (inclusive of DTMB paperwork) will be prepared and submitted to the SCA for authorization.

Once ECT receives the approved project assignment packet, the project team will schedule activities with the SPM and prepare for mobilization. This will include completion of material and subcontract solicitations, obtaining state approval for solicitations, issuing subcontracts and purchase orders, contacting local authorities, scheduling field personnel, placing internal warehouse orders for equipment, and all other required activities. ECT's detailed budget will provide the project team with the cost rates, material quantities, man-hours, and other information to help them ensure that the project is organized and controlled as was set forth in the Work Plan.

Project Control - ECT believes that a successful project must be effectively managed in order to be cost-efficient, and its project teams have the experience and proven track record of achieving this goal. The majority of the time and resources used for this ISID Contract will be focused on the completion of

individual projects. ECT is committed to emphasizing this focus through effective project management, and has designed its management structure to complement this process. It will institute the same project control system for any and all types of DTMB ISID projects regardless of size or scope. This approach to project control will allow for simple and cost-effective management for both the State of Michigan and ECT. From the initial receipt of a request for service, until the final invoice is approved and the project is closed out, ECT will maintain a consistent method of control

The Site Manager is responsible for individual project control during the course of the project; it will be his/her responsibility to track all project costs and schedule issues and complete the necessary state and ECT reporting requirements. He/she will review the project schedule and costs on a weekly basis and/or on a daily basis if required at critical project junctures. This review will enable any potential cost or schedule variances to be identified. To manage a project effectively, ECT will maintain a computerized job cost accounting and progress tracking system for project control in three major areas—technical achievement, cost/budget, and scheduling. The PIC and Site Managers are provided status reports summarizing data on cost, schedule, and technical completion on a weekly basis. Because this system is continually updated, ECT's Program Manager, PIC and individual Site Managers can continually review costs, identify budget inconsistencies, and implement corrective actions, as warranted. To complete a project in a cost-effective manner, ECT will consider a variety of factors; such as office location versus site location, scheduling work in the same region to occur concurrently to capture the economies of scale, and assigning the appropriate level of staff to the assignment.

Technical progress will be continually monitored during the course of the project. As the body of information grows, ECT recommends real-time review meetings with the SPM, as well as regulatory and other applicable decision-makers, in order to evaluate the progress of the work with respect to project objectives. In the past, ECT project teams have made extensive use of this type of meeting to obtain real-time decisions on changes in the scope of work. This controls costs by allowing resources in the field to continue with the new scope of work, as appropriate, and avoid additional mobilization and demobilization costs.

ECT understands the importance of being flexible under an ISID program. If unexpected conditions are encountered or other deviations from the approved scope of work are required, the Site Manager will assess the situation and report to the PIC and SPM. If required, a Contract Augmentation will be prepared and sent to the SPM and SCA. ECT will not exceed any itemized task budgets approved by the SPM and/or SCA.

Schedule control will be completed on two separate levels—individual site scheduling completed by the Site Managers, and overall project scheduling completed by the PIC in consultation with the Program Manager, SCM and SPM. ECT's Site Managers will be responsible for scheduling all task activities assigned including subcontractors, laboratories, personnel, equipment, and access.

Subcontractor Management - Support services, such as environmental drilling, geophysical surveys, land surveying, and IDW services are critical to the successful completion of the assigned tasks. These services will be procured from among a pool of subcontractors with whom ECT has established relationships and is confident that the quality of their work will exceed expectations, and demonstrate cost-effectiveness.

ECT will retain overall responsibility for the quality, responsiveness, and timeliness of all subcontractor services, and offers extensive experience managing multiple subcontractors on multidisciplinary task order contracts. Key items in ECT's management of subcontractors will include:

- **Clear Role Definition:** By clearly defining in writing the work scope and the subcontractor's role in relation to the prime contractor and other parties, the subcontractor understands the requirements, allowing them to allocate resources in a timely, efficient, and cost-effective manner to meet ECT's well-defined quality, technical, schedule, and cost requirements.
- **Routine Monitoring and Prompt Corrective Action:** ECT staff checks and evaluates the work progress of subcontractors, allowing for quick identification of any variances from plans, budgets, and schedules.
- **Skill Matching:** ECT analyzes work requirements and matches them with skills of subcontractors and personnel assigned, so work is conducted efficiently.
- **Commitment:** ECT carefully selects subcontractors that share its commitment to excellence, quality, and client satisfaction.
- **Communication:** ECT recognizes that effective communication is the simplest way to avoid problems. It believes that projects are the most successful when all parties working on them understand the goal, what their role is, and the methods to be employed. Consequently, ECT communicates frequently with subcontractors before the project begins and during the completion of the project to ensure the statement of work is understood and implemented as defined in the work plan.

Records and Communication. Project records will be maintained and available for agency review at ECT's Lansing office, which is located only a short distance from the Stevens T. Mason building and Constitution Hall. ECT's central computer system, to which each of the firm's seven Michigan offices are linked with secure high-speed internet connections, will serve as the platform on which individual ISID team members will effectively share information and work on assignments in an integrated and seamless manor.

Accounting - ECT maintains a web-based real-time accounting and progress tracking system where information is continuously entered for control in four major areas—technical achievement, communications, budget, and scheduling. When requested, real-time project status and budget reports (including an individual and detailed explanation of charges) can be generated on a moment's notice and transmitted electronically. In addition, all of the billing and accounting functions under this proposed DTMB ISID Contract will be handled out of ECT's Ann Arbor office. ECT believes that having contract and financial management services located in Michigan and available to meet with DTMB staff at any time will provide an extra level of personalized service to the state, and allow for a timely, accurate, accessible, and auditable accounting function.

ECT's federal ID number is 59-2921038. All invoices for this project will be produced under this number.

4.1 Corporate Quality Assurance Plan (*Selection Criterion #9*)

ECT recognizes that QA/QC is an essential aspect of each project and is dedicated to maintaining a comprehensive Corporate Quality Program (CQP) which is responsive to the specific requirements of the State/Client Agency. This corporate level of organizational responsibility and commitment defines the policies and procedures for controlling the quality of all facets of ECT's technical work including field data collection, field survey methods, data analyses, and project deliverables, as well as efforts performed by subcontractors and communications and confidentiality requirements.

The requirements embodied in ECT's CQP are outlined in a number of QA/QC documents including a Comprehensive QA Plan (CompQAP), project-specific QA Project Plans (QAPPs), Standard Operating Procedures (SOPs), and numerous other manuals (e.g., the *ECT Document Production Manual*, equipment manuals, etc.) for which representative examples are available upon request.

ECT personnel have also undergone extensive QA/QC training with regard to the operation, use and validation of a variety of sampling and analytical testing equipment and procedures. Included among these are advanced instrumentation certifications and specific QA/QC training involving:

- Basic and Advanced QA/QC Training on the Set-up and Use of Gas Chromatograph/Mass Spectrometer (GC/MS)
- Environmental Chemistry QA/QC (MDEQ Course No. 1695 and 1696)
- MDEQ Laboratory QA/QC Training
- Army Corps of Engineers training for site specific organic and inorganic analytes in soil and water.

Further, ECT has participated in site-specific QA/QC and Proficiency Testing programs as required by the Army Corps of Engineers, EPA, and related federal agencies that afford a framework for continuous improvement, minimal systematic error, and documented problem solving.

Given this introduction, the following paragraphs present selected principles and applications of methods and procedures developed by ECT for ensuring adequate QA/QC in the performance of field activities, site sampling, remedial investigation, design, and report preparation.

Project Planning and Document Flow - QAPPs are prepared by ECT using EPA guidance document QA/G-5, and document the project-specific policies, organization, Data Quality Objectives (DQOs), functional activities, and specific QA/QC procedures and activities designed to achieve specified quality goals. The QAPP with attached SOPs is distributed by ECT's Site Manager (SM) to the Field Team Leaders (FTLs) whose ongoing responsibility is to ensure that field personnel are familiar with all sampling procedures and specific QA/QC requirements. As such, the QAPP becomes the roadmap for confirming achievement of the DQOs and the primary instrument for directing the QA effort for each project.

Field Activities, Site Sampling, and Data Recording - ECT staff members are trained in the methods and procedures (applicable to the specific agency and/or jurisdiction in which the work is being performed) pertaining to sampling and analysis, as well as the use and calibration of all sampling equipment. Staff members are also trained on how to record sampling information in bound field logbooks and sample collection data sheets which are supplied in the SOPs included within the QAPP. Copies of the field logbooks and sample collection data sheets are submitted to the FTL along with the chain-of-custody log and all digital photographs taken that day. The FTL reviews the data obtained in the field and produces all necessary reports for submittal to the SM. The FTL is also responsible for ensuring samples are collected and handled according to the requirements in the QAPP. Sample collection is verified by confirming samples were collected with the proper equipment at the appropriate locations with the appropriate frequency. Sample handling is verified by confirming samples were stored in the appropriate containers, transported at the proper temperature, preserved correctly, and logged in properly on the Chain-of-Custody forms. (Verification takes the form of written reports that are prepared daily by the FTL for review by the SM.)

Data Review - One of the primary goals in the analysis and interpretation of data is to show how all aspects of QA/QC for a particular project combine to give an overall level of precision and confidence for the data resulting from the project. A comparison of precision and accuracy of sample results to the laboratory method QC criteria is made to identify any sample results that are outside the established control criteria. The Laboratory QA/QC Manager is responsible for rejecting out of control data and for establishing any appropriate qualifiers to the use and interpretation of the data results. The Project QA/QC Manager conducts a review of the data and the laboratory QA/QC report for data quality/usability and

adherence to requirements. Procedures must be consistent with the method requirements designated in the SOPs, and data must meet all QA/QC requirements. The emphasis of the review is two-fold. First, it is to ensure that all data collected are scientifically valid, defensible, and of known precision and accuracy, in order that conclusions drawn from the data may be considered reliable. The review also serves to determine the adequacy of the QA/QC plan for future projects.

Design and Report Preparation - The purpose of QA/QC reviews for design and report preparation is to ensure that the work products meet accepted professional standards. After a report or design is drafted, a peer review process is used to check its reasonableness. During this review, a technical editor ensures that the document is readable and structurally correct, while an independent member of the professional staff performs a comparison of the data tables against laboratory reports, figures against the data tables, and the text for consistency.

4.2 Health and Safety (*Selection Criterion #8*)

ECT is committed to safety and is a proud member of ISNetworld, the global resource for connecting corporations with safe, reliable contractors in capital-intensive industries. Ongoing occupational safety training is a requirement of project staff, and compliance with ECT's Corporate Health and Safety Program is safety performance metric against which staff members are evaluated annually.

Corporate Health & Safety Program - ECT understands that the key to protecting the health and safety of employees is by understanding the nature of the hazards they face, and planning accordingly to anticipate and mitigate unsafe work conditions. The Corporate Health and Safety Program (CHSP) provided the written framework from which all safety-related policies emerge. This program describes the policies and procedures which must be followed to assure the health and safety of employees and other parties, especially those involved in fieldwork and the handling of hazardous, toxic, and/or flammable materials. The program itself was developed and is continually modified and updated by ECT's Corporate Health and Safety Officer (CHSO) based on input from Site Managers and the real-life work experiences of field staff. Designated Office Health and Safety Coordinators (OHSC) working under the direction of the CHSO administer the corporate program at the office level and advise the CHSO of actual field experiences that may impact the program. The CHSO keeps in frequent contact with each OHSC and works with them to update and revise programs, as needed.

For each Michigan office, safety programs have been developed in compliance with Michigan Occupational Safety and Health Administration (MIOSHA) general industry and construction standards, as applicable. Although the MIOSHA regulations mirror the federal standards, care is taken to ensure that any variations between the state and federal requirements are accounted for. In order to ensure compliance with MIOSHA regulations, the CHSO is on the MIOSHA Standards mailing list, which provides immediate notification of regulatory changes, both proposed and pending.

Site-Specific Health and Safety Plans - Individual Site-Specific Health and Safety Plans (SSHSPs) are designed to meet the requirements of the Occupational Safety and Health Administration (OSHA) standard for hazardous waste and emergency response operations (29 CFR 1910.120) and to establish the additional requirements believed to be necessary to protect the health and safety of all employees and subcontractors working at a particular site. Each SSHSP is maintained on-site in an accessible location during field activities, and is amended as warranted during a project to address identified changes in site conditions. Field Team Members (FTMs) are advised of the information contained in the SSHSP, and are required to have acknowledged their understanding and acceptance of the SSHSP in writing prior to performing field activities. FTMs are prohibited from engaging in any activity on site that is not addressed in the SSHSP or the ECT Corporate Health and Safety Plan.

Medical Monitoring - All ECT personnel participating in field operations where hazardous substances are known or presumed to exist are enrolled in a medical monitoring program. This program includes a baseline physical examination and surveillance examinations as recommended by a qualified and licensed occupational health physician. The purpose of this program is to monitor the health status of each employee involved in work at a site where hazardous substances may be encountered.

Employee Training - All ECT personnel who work at sites where hazardous conditions exist attend (and receive certification for) OSHA approved training in accordance with 29 CFR 1910.120 and Michigan Occupational Health Standards Part 432 Hazardous Waste Operations and Emergency Response (HAZWOPER). Additionally, all such employees attend annual OSHA-approved 8-hour refresher courses, and are required to maintain up to date Certification with the Red Cross for CPR and First Aid. Supervisors are also required to attend an OSHA-approved training course designed specifically for supervisors.

Documentation of training compliance for all responsible program personnel, including the dates and the degree to which training has occurred is available upon request.

Certification of Compliance - ECT attests that the corporate health and safety program referenced and summarized herein meets or exceeds the requirements of the Michigan Occupational Safety and Health Act and 29 CFR Part 1910, as amended.

Recent Safety Awards and Recognitions - The Mosaic Company, the world's leading producer of phosphate crop nutrients, recently recognized ECT with a "Gold Award" for meeting Mosaic's safety excellence and leadership criteria for five consecutive years. The award is a product of the ongoing diligence of the entire ECT team of scientists, engineers, support staff and management, and serves as a practical testament to ECT's commitment to the continual implementation of its Health and Safety Program.

5.0 References

ECT has been the recipient of two multi-year IDIQ LOE Contracts and two Discretionary ISID Contracts by the DTMB to provide architectural and engineering study, design, testing and construction administration services, as well as comprehensive environmental consulting services associated with the investigation and abatement of physical/environmental hazards and human health risks at state-funded project sites throughout Michigan.

Accordingly, the following references are offered as affirmation of ECT's experience with the administration and performance of similar projects, sites, and clients as those contemplated in this particular DTMB RFP:

DTMB and DTMB Client Agency References (Administrative):

DTMB

Sadi Rayyan - Facilities and Business Services Administration (Design and Construction Division)
Steven T. Mason Building, 530 West Allegan Street, PO Box 30026, Lansing 48909
(517) 335-7949

Robert Hall - Director, Design and Construction Division
(517) 373-1004

MDEQ

Gary Simons - Chief, Contracts Unit (Programs Support Section)
Constitution Hall, 525 West Allegan Street, PO Box 30473, Lansing 48909-7973
(517) 373-2811

Connie Lack - Financial Specialist/Administrative Support, Contracts Unit
(517) 373-4807

DTMB Client Agency References (Technical):

LOE Contract #1

Terry Hiske, MDEQ Jackson (517) 780-7928
John Pawloski, MDEQ Grand Rapids (616) 356-0418

LOE Contract #2

Abby Leinbach, MDEQ Lansing (517) 335-6249
Kimberly Sakowski, MDEQ Lansing (517) 335-6244
Dwight Cummings, MDEQ Lansing (517) 335-6242
Barb Cowles, MDEQ Lansing (517) 335-6235

ISID Contract #1

Lt. Col. Edward Hallenbeck, DVMA Lansing, (517) 481-7557
Dwight Cummings, MDEQ Lansing (517) 335-6242

6.0 BILLABLE RATE INFORMATION

The Position, Classification and Employee Billing Rate Information for all of ECT's staff members who may be assigned to projects authorized under this particular DTMB ISID Contract are provided in the following tables (sorted by billing rate and classification).

POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION
Professional Services - 2013 Expanded Environmental Remediation ISID
(Sorted by Billing Rate)

Environmental Consulting & Technology, Inc.

Yearly Percentage Billing Rate Increase: 2.0%

* = Key Personnel

Employee Name	Position	Class	Year 2013	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018
D'Addona, J.*	Site Manager	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Dybas, M.*	Remediation/Bioremediation	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Hebert, T.*	Principal-in-Charge	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Mammen, D.*	Due Diligence/Risk Assessment/Regulatory	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Mikesell, M.*	Site Manager	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
O'Meara, J.	Engineering	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Sinha, S.*	Engineering	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Tilton, D.*	Natural Resources/Biology/Planning	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Ridgway, J.*	Stakeholder Consensus	P4	\$148.32	\$151.29	\$154.31	\$157.40	\$160.55	\$163.76
Stone, W.	Land/Water	P4	\$143.89	\$146.76	\$149.70	\$152.69	\$155.75	\$158.86
Edstrom, J.	Land/Water	P4	\$138.85	\$141.62	\$144.46	\$147.35	\$150.29	\$153.30
Cockrum, W.	Site Manager	P4	\$136.94	\$139.68	\$142.47	\$145.32	\$148.23	\$151.19
DeMaria, A.	Land/Water	P4	\$133.99	\$136.67	\$139.41	\$142.19	\$145.04	\$147.94
Parker, J.*	Site Manager	P3	\$132.95	\$135.61	\$138.32	\$141.08	\$143.91	\$146.78
Ball-McKane, Z.*	Community Relations	P3	\$127.05	\$129.59	\$132.18	\$134.82	\$137.52	\$140.27
Smyth, J.*	Corporate Health and Safety Officer	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Bonds, J.*	Program QA/QC Officer	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Bona, J.	Land/Water	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Cubinski, K.	Construction Management	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Culbreth, M.	Geology/Hydrogeology	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Cunningham, M.	Due Diligence/Risk Assessment/Regulatory	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Filippini, J.	Engineering	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Florian, M.*	Program Technical Support Team Leader	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Garbee, M.*	Geology/Hydrogeology	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Krause, D.	Geology/Hydrogeology	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Lefebvre, M.*	Construction Management	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Pekas, B.	Geology/Hydrogeology	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Potts, R.	Construction Management	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Powell, R.	Construction Management	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Stebnisky, R.*	Geology/Hydrogeology	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Wolf, C.*	Program Manager	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Stowe, D.	Construction Management	P4	\$123.19	\$125.65	\$128.17	\$130.73	\$133.34	\$136.01
Burke, B.*	Site Manager	P3	\$118.17	\$120.53	\$122.94	\$125.40	\$127.91	\$130.47
Boote, M.	Natural Resources/Biology/Planning	P3	\$118.08	\$120.44	\$122.85	\$125.30	\$127.81	\$130.37
Heinen, E.	Land/Water	P3	\$118.00	\$120.36	\$122.77	\$125.22	\$127.73	\$130.28
Harriger-Jones, L.	Field Support	P3	\$113.44	\$115.71	\$118.02	\$120.38	\$122.79	\$125.24
Carmer, M.	Natural Resources/Biology/Planning	P3	\$112.27	\$114.51	\$116.81	\$119.14	\$121.52	\$123.95
McCarthy, J.	Engineering	P2	\$111.22	\$113.45	\$115.72	\$118.03	\$120.39	\$122.80
Schwiderson, E.	Field Support	P1	\$106.37	\$108.50	\$110.67	\$112.88	\$115.14	\$117.44
Hebert, M.*	Site Manager	P3	\$100.44	\$102.45	\$104.50	\$106.59	\$108.72	\$110.89
Kincaide, L.	Engineering	P3	\$100.01	\$102.01	\$104.05	\$106.13	\$108.25	\$110.42
Bailey, A.	Engineering	P3	\$96.20	\$98.12	\$100.09	\$102.09	\$104.13	\$106.21
Cooper, J.	Clerical	CL	\$92.33	\$94.18	\$96.06	\$97.98	\$99.94	\$101.94
Churgin-Brown, J.	Field Support	P2	\$92.18	\$94.02	\$95.90	\$97.82	\$99.77	\$101.77

POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION
Professional Services - 2013 Expanded Environmental Remediation ISID
(Sorted by Billing Rate)

Environmental Consulting & Technology, Inc.

Yearly Percentage Billing Rate Increase: 2.0%

* = Key Personnel

Employee Name	Position	Class	Year 2013	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018
Lewandowski, J.	Field Support	P3	\$91.38	\$93.20	\$95.07	\$96.97	\$98.91	\$100.89
Meyer, P.*	Geology/Hydrogeology	P3	\$90.85	\$92.67	\$94.52	\$96.42	\$98.34	\$100.31
Beltman, B	Geology/Hydrogeology	P4	\$90.02	\$91.83	\$93.66	\$95.53	\$97.45	\$99.39
O'Meara, C.	Clerical	CL	\$89.10	\$90.88	\$92.70	\$94.56	\$96.45	\$98.38
Crandall, H.	Analytical/Chemistry	P2	\$88.64	\$90.41	\$92.22	\$94.07	\$95.95	\$97.87
Kennedy, J.	Analytical/Chemistry	P2	\$88.64	\$90.41	\$92.22	\$94.07	\$95.95	\$97.87
Foran, J	GIS Support	P3	\$85.66	\$87.37	\$89.12	\$90.90	\$92.72	\$94.58
Hill, P.	Field Support	P2	\$85.29	\$87.00	\$88.74	\$90.51	\$92.32	\$94.17
Thomas, W.	GIS Support	P2	\$83.33	\$84.99	\$86.69	\$88.43	\$90.20	\$92.00
Holzheuer, M.	Natural Resources/Biology/Planning	P3	\$82.96	\$84.62	\$86.31	\$88.04	\$89.80	\$91.59
Price, M	Field Support	P2	\$81.24	\$82.86	\$84.52	\$86.21	\$87.93	\$89.69
Hunter, T.	Field Support	P2	\$76.29	\$77.82	\$79.37	\$80.96	\$82.58	\$84.23
Greenberg, M.	Due Diligence/Risk Assessment/Regulatory	P2	\$75.34	\$76.84	\$78.38	\$79.95	\$81.55	\$83.18
Ettenhofer, M.	Construction Management	T3	\$70.67	\$72.08	\$73.52	\$74.99	\$76.49	\$78.02
Higuchi, R.	Field Support	P2	\$67.07	\$68.41	\$69.78	\$71.18	\$72.60	\$74.05
Konja, T.	Field Support	P1	\$63.82	\$65.09	\$66.39	\$67.72	\$69.08	\$70.46
Lindgren, J.	Field Support	P1	\$63.51	\$64.78	\$66.07	\$67.40	\$68.74	\$70.12
Hoffman, M.	Natural Resources/Biology/Planning	P3	\$62.03	\$63.27	\$64.54	\$65.83	\$67.15	\$68.49
Bartholomew, J.	Field Support	P1	\$60.56	\$61.77	\$63.01	\$64.27	\$65.55	\$66.86
Hill, K.	Clerical	CL	\$59.91	\$61.11	\$62.33	\$63.58	\$64.85	\$66.15
Baumann, B.	Field Support	P1	\$59.08	\$60.27	\$61.47	\$62.70	\$63.95	\$65.23
Zuber, L.	Clerical	CL	\$57.46	\$58.61	\$59.78	\$60.97	\$62.19	\$63.44
Newsome, T.	Clerical	CL	\$56.20	\$57.32	\$58.47	\$59.64	\$60.83	\$62.05
Jasinski, B.	Field Support	P1	\$56.13	\$57.26	\$58.40	\$59.57	\$60.76	\$61.98
Roys, S.	Field Support	P1	\$46.09	\$47.01	\$47.95	\$48.91	\$49.89	\$50.88
Stephens, M.	Clerical	CL	\$45.78	\$46.70	\$47.63	\$48.58	\$49.55	\$50.55
Sullivan, S.	Field Support	T3	\$36.87	\$37.61	\$38.36	\$39.13	\$39.91	\$40.71

POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION
Professional Services - 2013 Expanded Environmental Remediation ISID
(Sorted by Classification)

Environmental Consulting & Technology, Inc.

Yearly Percentage Billing Rate Increase: 2.0%

* = Key Personnel

Employee Name	Position	Class	Year 2013	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018
D'Addona, J.*	Site Manager	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Dybas, M.*	Remediation/Bioremediation	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Hebert, T.*	Principal-in-Charge	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Mammen, D.*	Due Diligence/Risk Assessment/Regulatory	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Mikesell, M.*	Site Manager	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
O'Meara, J.	Engineering	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Sinha, S.*	Engineering	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Tilton, D.*	Natural Resources/Biology/Planning	P4	\$150.00	\$153.00	\$156.06	\$159.18	\$162.36	\$165.61
Ridgway, J.*	Stakeholder Consensus	P4	\$148.32	\$151.29	\$154.31	\$157.40	\$160.55	\$163.76
Stone, W.	Land/Water	P4	\$143.89	\$146.76	\$149.70	\$152.69	\$155.75	\$158.86
Edstrom, J	Land/Water	P4	\$138.85	\$141.62	\$144.46	\$147.35	\$150.29	\$153.30
Cockrum, W.	Site Manager	P4	\$136.94	\$139.68	\$142.47	\$145.32	\$148.23	\$151.19
DeMaria, A.	Land/Water	P4	\$133.99	\$136.67	\$139.41	\$142.19	\$145.04	\$147.94
Parker, J.*	Site Manager	P3	\$132.95	\$135.61	\$138.32	\$141.08	\$143.91	\$146.78
Ball-McKane, Z.*	Community Relations	P3	\$127.05	\$129.59	\$132.18	\$134.82	\$137.52	\$140.27
Smyth, J.*	Corporate Health and Safety Officer	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Bonds, J.*	Program QA/QC Officer	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Bona, J.	Land/Water	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Cubinski, K.	Construction Management	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Culbreth, M.	Geology/Hydrogeology	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Cunningham, M.	Due Diligence/Risk Assessment/Regulatory	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Filippini, J.	Engineering	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Florian, M.*	Program Technical Support Team Leader	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Garbee, M.*	Geology/Hydrogeology	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Krause, D.	Geology/Hydrogeology	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Lefebvre, M.*	Construction Management	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Pekas, B.	Geology/Hydrogeology	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Potts, R.	Construction Management	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Powell, R.	Construction Management	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Stebnisky, R.*	Geology/Hydrogeology	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Wolf, C.*	Program Manager	P4	\$125.00	\$127.50	\$130.05	\$132.65	\$135.30	\$138.01
Stowe, D.	Construction Management	P4	\$123.19	\$125.65	\$128.17	\$130.73	\$133.34	\$136.01
Burke, B.*	Site Manager	P3	\$118.17	\$120.53	\$122.94	\$125.40	\$127.91	\$130.47
Boote, M.	Natural Resources/Biology/Planning	P3	\$118.08	\$120.44	\$122.85	\$125.30	\$127.81	\$130.37
Heinen, E.	Land/Water	P3	\$118.00	\$120.36	\$122.77	\$125.22	\$127.73	\$130.28
Harriger-Jones, L.	Field Support	P3	\$113.44	\$115.71	\$118.02	\$120.38	\$122.79	\$125.24
Carmer, M.	Natural Resources/Biology/Planning	P3	\$112.27	\$114.51	\$116.81	\$119.14	\$121.52	\$123.95
McCarthy, J.	Engineering	P2	\$111.22	\$113.45	\$115.72	\$118.03	\$120.39	\$122.80
Schwiderson, E.	Field Support	P1	\$106.37	\$108.50	\$110.67	\$112.88	\$115.14	\$117.44
Hebert, M.*	Site Manager	P3	\$100.44	\$102.45	\$104.50	\$106.59	\$108.72	\$110.89
Kincade, L.	Engineering	P3	\$100.01	\$102.01	\$104.05	\$106.13	\$108.25	\$110.42
Bailey, A.	Engineering	P3	\$96.20	\$98.12	\$100.09	\$102.09	\$104.13	\$106.21
Cooper, J.	Clerical	CL	\$92.33	\$94.18	\$96.06	\$97.98	\$99.94	\$101.94
Churgin-Brown, J.	Field Support	P2	\$92.18	\$94.02	\$95.90	\$97.82	\$99.77	\$101.77
Lewandowski, J.	Field Support	P3	\$91.38	\$93.20	\$95.07	\$96.97	\$98.91	\$100.89
Meyer, P.*	Geology/Hydrogeology	P3	\$90.85	\$92.67	\$94.52	\$96.42	\$98.34	\$100.31

POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION
Professional Services - 2013 Expanded Environmental Remediation ISID
(Sorted by Classification)

Environmental Consulting & Technology, Inc.

Yearly Percentage Billing Rate Increase: 2.0%

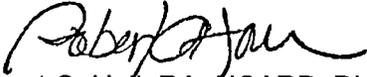
* = Key Personnel

Employee Name	Position	Class	Year 2013	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018
Beltman, B	Geology/Hydrogeology	P4	\$90.02	\$91.83	\$93.66	\$95.53	\$97.45	\$99.39
O'Meara, C.	Clerical	CL	\$89.10	\$90.88	\$92.70	\$94.56	\$96.45	\$98.38
Crandall, H.	Analytical/Chemistry	P2	\$88.64	\$90.41	\$92.22	\$94.07	\$95.95	\$97.87
Kennedy, J.	Analytical/Chemistry	P2	\$88.64	\$90.41	\$92.22	\$94.07	\$95.95	\$97.87
Foran, J.	GIS Support	P3	\$85.66	\$87.37	\$89.12	\$90.90	\$92.72	\$94.58
Hill, P.	Field Support	P2	\$85.29	\$87.00	\$88.74	\$90.51	\$92.32	\$94.17
Thomas, W.	GIS Support	P2	\$83.33	\$84.99	\$86.69	\$88.43	\$90.20	\$92.00
Holzheuer, M.	Natural Resources/Biology/Planning	P3	\$82.96	\$84.62	\$86.31	\$88.04	\$89.80	\$91.59
Price, M.	Field Support	P2	\$81.24	\$82.86	\$84.52	\$86.21	\$87.93	\$89.69
Hunter, T.	Field Support	P2	\$76.29	\$77.82	\$79.37	\$80.96	\$82.58	\$84.23
Greenberg, M.	Due Diligence/Risk Assessment/Regulatory	P2	\$75.34	\$76.84	\$78.38	\$79.95	\$81.55	\$83.18
Eitenhofer, M.	Construction Management	T3	\$70.67	\$72.08	\$73.52	\$74.99	\$76.49	\$78.02
Higuchi, R.	Field Support	P2	\$67.07	\$68.41	\$69.78	\$71.18	\$72.60	\$74.05
Konja, T.	Field Support	P1	\$63.82	\$65.09	\$66.39	\$67.72	\$69.08	\$70.46
Lindgren, J.	Field Support	P1	\$63.51	\$64.78	\$66.07	\$67.40	\$68.74	\$70.12
Hofman, M.	Natural Resources/Biology/Planning	P3	\$62.03	\$63.27	\$64.54	\$65.83	\$67.15	\$68.49
Bartholomew, J.	Field Support	P1	\$60.56	\$61.77	\$63.01	\$64.27	\$65.55	\$66.86
Hill, K.	Clerical	CL	\$59.91	\$61.11	\$62.33	\$63.58	\$64.85	\$66.15
Baumann, B.	Field Support	P1	\$59.08	\$60.27	\$61.47	\$62.70	\$63.95	\$65.23
Zuber, L.	Clerical	CL	\$57.46	\$58.61	\$59.78	\$60.97	\$62.19	\$63.44
Newsome, T.	Clerical	CL	\$56.20	\$57.32	\$58.47	\$59.64	\$60.83	\$62.05
Jasinski, B.	Field Support	P1	\$56.13	\$57.26	\$58.40	\$59.57	\$60.76	\$61.98
Roys, S.	Field Support	P1	\$46.09	\$47.01	\$47.95	\$48.91	\$49.89	\$50.88
Stephens, M.	Clerical	CL	\$45.78	\$46.70	\$47.63	\$48.58	\$49.55	\$50.55
Sullivan, S.	Field Support	T3	\$36.87	\$37.61	\$38.36	\$39.13	\$39.91	\$40.71

Mr. Charles (Curt) Wolf
Environmental Consulting & Technology, Inc.
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January 31, 2014

If your company is interested in participating in the MiDEAL program, please sign below and return to this letter to the letterhead address, Attention: Melissa Sambigiio

FOR THE STATE OF MICHIGAN



Robert C. Hall, RA, NCARB, Director
Design and Construction Division
Facilities Administration

FOR THE PROFESSIONAL

Environmental Consulting & Technology, Inc. agrees to extend the terms, conditions, and pricing of our 2013 Environmental Expanded Remediation Services contract, No. 00468, to MiDEAL members and will remit the one percent (.01) administrative payment fee along with the quarterly report as outlined.



Signature

2/12/14

Date

CHARLES C. WOLF Vice president

Print Name/Title