Wiss, Janney, Elstner Associates, Inc.
30700 Telegraph Road, Suite 3580
Bingham Farms, Michigan 48025
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April 27, 2021

Ms. Anne Watros
Professional Services Contract Specialist
Michigan Department of Technology, Management and Budget
State Facilities Administration | Design and Construction Division
3111 W. St. Joseph Street
Lansing, Michigan 48917

Indefinite Scope, Indefinite Delivery (ISID) Contract No. 00903

WJE No. 2021.0459.0

Dear Ms. Watros:

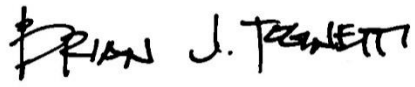
Thank you for selecting Wiss, Janney, Elstner Associates, Inc. (WJE) for the upcoming ISID, multi-year contract period. We are excited to assist the Michigan Department of Technology, Management and Budget (DTMB) in caring for its *existing* building enclosures and structural systems, as well as, providing quality control for *proposed new* building enclosures and structural systems. As requested, please find the following enclosed:

- **Signed ISID Contract 00903**; please note the following comment and clarifying mark-up:
  - *Page 27 Environmental & Pollution Liability Insurance:* Per our telephone discussion on 4/27/21, it is WJE's understanding that WJE will not be required by DTMB to provide this insurance rider as part of this ISID since the State has other vendors/ISIDs that can accommodate this need on a project-specific basis should that need arise for the State. This comment is outlined here to acknowledge this agreed upon understanding.
  - *Appendix D in WJE RFP Response:* We had inadvertently left out the name of Mr. Neil Waraksa as being an "authorized personnel" for signing DTMB contracts so we've added his name to the list.
- **Certificates of Insurance** for General Liability and Professional Liability consistent with Article V in the Contract (included in Appendix 5)
- **Executed PSC Certification Forms** (included in Appendices 3, 4 and 6)

Should you have any questions regarding the enclosed, please contact me at 248.593.0900 or btognetti@wje.com, at your earliest convenience. We look forward to working with you and your DTMB team.

Sincerely,

WISS, JANNEY, ELSTNER ASSOCIATES, INC.



Brian J. Tognetti, RA, CCCA, NCARB
Associate Principal & Unit Manager

Enclosures:
- Partially Executed (Signed by WJE) ISID Contract No. 00903
- Certificates of Insurance (Appendix 5 attached to Contract)
- Completed PSC Certification Forms (Appendices 3, 4 and 6 attached to Contract)

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET

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

(Authority: Public Act 431 of 1984, as amended)

CONTRACT FOR PROFESSIONAL SERVICES: Indefinite Scope – Indefinite Delivery Billing Rate – Not to Exceed

THIS CONTRACT, authorized this 16th day of April in the year two-thousand and twenty-one (2021), by the Director, Department of Technology, Management and Budget, BETWEEN the STATE OF MICHIGAN acting through the STATE FACILITIES ADMINISTRATION, DESIGN AND CONSTRUCTION DIVISION of the DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET, 3111 West St. Joseph Street, Lansing, Michigan, hereinafter called the Department, and

Wiss, Janney, Elstner Associates, Inc.
30700 Telegraph Rd., Suite 3580
Bingham Farms, MI 48025

the Prime Professional Services Contractor, hereinafter called the Professional,

WHEREAS the Department proposes securing professional services FOR THE FOLLOWING PROJECT:

Indefinite-Scope, Indefinite-Delivery Contract No. 00903
Department of Technology, Management and Budget
State Facilities Administration, Design and Construction Division
Professional Architectural and Engineering Indefinite-Scope, Indefinite Delivery Contract (ISID) for Minor Projects -
Various State Departments and Facilities
Various Site Locations, Michigan

Provide professional services, technical staff, and support personnel for ISID minor projects on an as-needed basis at various State/Client Agencies within various locations as defined by the State of Michigan. These various ISID minor projects may include projects where the construction costs are between fifteen-thousand dollars ($15,000) and five-hundred-thousand dollars ($500,000) for this Contract.

This Contract is for professional design services for an unspecified number of ISID projects. The scope of work for each assigned project will be defined at the time the project is awarded by the State to the Professional firm. The professional services required for each of these assigned projects requested by the Department may include any or all the Tasks included in the Phase 100 – Study through the Phase 700 – Construction text of the Department's Standard Professional Services Contract.

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

This Contract does not warrant or imply to the Professional design firm entitlement to perform any specific percentage (%) amount of compensation, work, or projects during the life of this four (4) year Contract.

This Contract will remain in effect for four (4) years from the date of this Contract award but may be unilaterally terminated by the State of Michigan at any time, for cause or its convenience, by written notification of the State, to the Professional. Furthermore, this Contract may be extended for one (1) additional year, at the sole option and discretion of the State upon the Department providing written notice to the Professional prior to the expiration of the original four (4) year Contract period. Any such time extension shall be subject to the terms and conditions of this Contract, including, but not limited to, the existing hourly billing rates included in this Contract for the Professional, their Consultant, and their employees or agents.

Please note that for this Professional Services Contract your permanent assigned ISID Contract No., as noted on page 1 of this contract, must be provided on all Project correspondence and documents.

The Professional is not to provide any professional services or incur expenses until individual ISID Projects are assigned to this Contract. (See Article 2 – Compensation and the Project/Program Statement attached to this Contract.)

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

I. The Professional shall provide the services for the assigned Project in the study, design, and construction administration, Phase and Task sequence provided in this Professional Services Contract and to the extent authorized by the Department of Technology, Management and Budget State Facilities Administration (SFA), Design and Construction Division (DCD) [Department] and be solely responsible for such professional services. The Professional's services shall be performed in strict accordance with this Professional Services Contract and follow the Project/Program Statement.

II. The State of Michigan shall compensate the Professional for providing their professional architectural and/or engineering study, design, and construction administration services for the Project in accordance with the conditions of this Professional Services Contract.

IN WITNESS, WHEREOF, each of the parties has caused this Professional Services Contract to be executed in blue ink, a scanned digital signature is also acceptable, by its duly authorized representatives on the dates shown beside their respective signatures, with the Contract to be effective upon the date on which the Professional received an electronic copy executed by the authorized State of Michigan representative(s) by electronic mail.

FOR THE PROFESSIONAL:

Wiss, Janney, Elstner Associates, Inc. — Firm Name

CV0017157 — SIGMA Vendor Number

Brian J. Tognetti — Signature

04/20/2021 — Date

Brian J. Tognetti, Principal & Unit Manager — Title

FOR THE STATE OF MICHIGAN:

Director, DTMB, State Facilities Administration

4/27/2021 — Date

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

ARTICLE I
PROFESSIONAL SERVICES SCOPE OF WORK

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

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

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

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

No substitution of any "Key Principal Personnel/Employee" essential for the successful completion of the Project and identified in the Professional's Organizational Chart will be allowed by the Professional for this Contract without the prior written consent from the Project Director. Before any "Key Principal Personnel/Employee" substitution takes place, the Professional shall submit a written request to the Project Director, and this substitution request shall include the following information: (1) A request in writing for a No Cost Contract Modification; (2) Detailed written justification for this substitution; (3) The Professional's qualifications of any proposed "Key Principal Personnel/Employee" replacement; and (4) A written statement from the Professional assuring the Department that the Project scope of work will not be adversely affected by this substitution. This request to modify their Professional Services Contract must be accepted and approved in writing by the Project Director and the Director of the Department. The Department will designate an individual to serve as the Project Director for the Project scope of work who shall be fully acquainted with the Project/Program Statement and have the authority to render Project decisions and furnish information promptly. Except in connection with issues under the Article XII - Contract Claims and Disputes text, the Project Director will exercise general management and administration for the Professional's services in so far as they affect the interest of the State. The Professional shall indemnify, defend, and hold harmless the State against exposure to claims arising from delays, negligence, or delinquencies by the Professional for the professional services of this Contract.

During the construction administration services of the Project, the Professional shall be required to complete and submit, the on-site Inspection record form titled “DTMB-0452, The Professional’s Inspection Record” for all on-site Inspection visits to the Project site. The Professional’s Inspection Record shall be completed and signed by the Professional and submitted monthly, with the original document sent to the Project Director and copies sent to the State/Client Agency and Construction Contractor. The Professional’s Inspection Record shall accompany the Professional’s monthly submitted payment request.

The “DTMB-0460, Project Procedures” documents package containing Department forms for use during construction administration shall be used by the Professional in the administration of this Contract. All professional services will be consistent with the Department’s current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" unless otherwise approved in writing by the Department.

The professional services required for each Phase of this Contract shall be performed by the Prime Professional and their Consultants in accordance with service descriptions in this article. The following service descriptions outlined in this Contract represents the Department’s standard of care method for describing the Professional’s responsibilities for providing the professional services of this Contract, but by inclusion, or omission, do not limit or exclude any regular or normal professional services necessary to accomplish the Project and be in accordance with the approved Project Budget and the industries accepted practice and standards for professional services. However, all the services outlined in this Contract may or may not be applicable to the Project/Program Statement and will require the Professional to identify only the services that are applicable for the Project at hand. The Professional shall determine and coordinate the interface of the services required for the Project at hand and be responsible for identifying any additional services necessary to successfully complete their Project.

Soil Erosion and Sedimentation Control in the State of Michigan is regulated under the 1994 Public Act 451, as amended – The Natural Resources and Environmental Protection Act, Part 91 – Soil Erosion and Sedimentation Control. Soil Erosion and Sedimentation Control associated with this Contract will be monitored and enforced by the Department.

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

The following professional services, if they become necessary and essential for completing the Project, will be individually rendered by the Professional, only upon specific written authorization by the Department and the Project Director to the Professional and for the purpose and to the extent so authorized.

Should litigation occur as a result of this Project, only if through no fault of the Professional, the Professional firm shall be compensated by the Department on an actual hourly billing rate basis at the rate set forth in this Contract by a Contract Modification and/or Contract Change Order, if required to assist the Department of Attorney General, State Affairs Division in providing the professional services necessary during litigation.

LITIGATION: The Professional shall provide all information, presentations, depositions, testimony as “expert witness”, and similar or related services, on behalf of the Department, as may be required in relation to the professional services of the study, design and construction of this Project.

ACCOUNTING: The Professional shall provide all specialized categorizations and distributions of the costs of study, design and construction services, construction costs, and operational costs, as may be required according to purpose specific parameters.

PUBLIC AWARENESS: The Professional shall provide all design and construction related services to assist in and make presentations of the professional services of the study, design, construction and operational aspects of the Projects as may be required for public meetings, hearings, and similar informational activities.

PHASE 100 - STUDY PHASE

Provide a complete and comprehensive architectural and/or engineering study consistent with the Project/Program Statement, with itemized construction cost estimates.

Task 101 COORDINATION: Meet with the Project Team and define all areas of investigation. Establish Project Team responsibilities and lines of communications. Review the status of the study efforts with the Project Team at such frequency and times as may be required to achieve the Project objectives.

Present study documents to the State/Client Agency and the Department for their review at the 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications. Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 102 RESEARCH: Gather and/or develop all data to evaluate and clarify the Project. Research existing data, analyze and refine the concepts of the Project/Program Statement. Through discussions with the Project Team, by interrogation and necessary counsel, establish, in requisite detail, the information required to complete the Study incorporating functional and operations needs of the State/Client Agency's respective program(s), as well as operational factors, maintenance, and other support features. Identify all additional research, studies, and analysis necessary to express such objectives and requirements in terms of a fully operable facility or system which will acceptably serve its intended use.

Task 103 ANALYSIS: Analyze data, information and research gathered. Create draft recommendations or results of the study and research. Upon completion of all on-site field investigation activities prepare a complete architectural and/or engineering study report. If appropriate, provide itemized construction cost estimates. The analysis will correlate, describe, and record research findings and information for the Project Team's understanding and acceptance. Transcribe and consolidate all existing data, studies, and the research analysis of Task 102 into a draft study report. Submit one (1) electronic copy in indexed PDF format of the draft study report to the Project Team at 50 percent and 90 percent completion review intervals and solicit review comments.

Task 110 STUDY REPORT: Incorporate the study review comments as directed by the Department into the final study report. Prepare and attend presentations to the Project Team and others for Study acceptance. The final report shall use the following outline and contain such detail as required for the Project Team's understanding and acceptance.

A. Management Summary
B. Problem
C. Research Findings, Discussion and Details
D. Conclusion
E. Recommendation

Provide one reproducible original and an electronic copy suitable for legible reproduction. One study report presentation shall be considered basic services for this Task. Any additional study report presentations requested by the Department will be considered extra professional services and the additional study costs will be paid to the Professional by the Department with a Contract Change Order.

PHASE 200 - PROGRAM

Amplify the Project/Program Statement and, if available, final Study Report, to embody the physical, functional, and programmatic relationships required to achieve the Project objectives. The resultant program analysis, when accepted and approved by the Department, shall create the general scope of work of the Project. Such acceptance does not limit subsequent inclusion of minor, but essential, programmatic or design details whose necessity and arrangement may best become apparent during subsequent Phases of the Project's evolution.

Task 201 COORDINATION: Meet with the Project Team and establish lines of communication, authority, and responsibility. Establish a method for the Department and the State/Client Agency to formally sign off on data input, the program analysis, and appropriate elements of the resultant design.

Present proposed program analysis documents to the Project Team for review at the 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications.

Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 202 PROGRAMMING: Identify and develop data to evaluate and clarify the proposed Project. Through discussions with the Project Team, by interrogation and necessary counsel, establish, in requisite detail, the functional and operational needs of the State/Client Agency's respective program(s), as well as operational factors, maintenance and other support features. Allocation of spaces shall be in accordance with the State of Michigan's current "Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies and Professional Service Contractors" and be consistent with the Project/Program Statement and Project Budget. Provide all additional research, studies, and program analysis necessary identify the objectives and requirements for a fully operable Project acceptably serving its intended use.

Task 203 DEVELOPMENT: Transcribe and consolidate all data, studies and the analysis of Task 202 into a program analysis summarizing the complete program for the project, including spaces, physical features, systems, functions, capacities, relationships, and interactions required by the proposed Project. Revise the proposed program as required to achieve the Project objectives and incorporate review comments by the Project Team. Obtain approval and sign-off of space allocations from the Project Director before providing the space allocations to the State/Client Agency for approval and sign-off of the complete program.

Task 209 PROJECT COST ESTIMATE: Provide an itemized cost estimate of the proposed Project program. Verify in writing that the Project Budget is adequate to achieve the proposed Project. Revise the program analysis documents as necessary to provide an acceptable program analysis design within the Department's authorized Project Budget.

Task 210 PROGRAM ANALYSIS REPORT: Prepare a draft program analysis report containing the program, cost estimate, signoffs and backup data and information. Submit one (1) electronic copy in indexed PDF format of the draft study report to the Project Team at 50 percent and 90 percent completion review intervals and solicit review comments. Incorporate review comments as directed by the Department into the proposed final program analysis report. Provide one reproducible original and an electronic copy suitable for legible reproduction. One program analysis report presentation shall be considered basic services for this Task. Any additional program analysis report presentations requested by the Department will be considered extra professional services and the additional study costs will be paid to the Professional by the Department with a Contract Change Order.

PHASE 300 - SCHEMATIC DESIGN

Prepare progressive schematic design deliverables consistent with the Project/Program Statement, and approved program (if applicable). Diagrammatically depict the area(s) and relationship of the Project functions. Establish the design basis for and show principal building design elements and locations of the various structural, mechanical, heating, ventilating, and air conditioning (HVAC), electrical and other systems as necessary to completely achieve the Project. The Professional shall obtain Professional Consultant firms for civil/site survey, site geotechnical investigation analysis and soil testing as the Professional deems necessary to achieve a viable and economic Project design. Revise design as necessary to obtain approval from the Department and the State/Client Agency.

Task 301 COORDINATION: Meet with the Project Team to establish a physical size and arrangement of the Project and its principal systems. Include technical, human, and physical environment requirements consistent with the Project program as well as the functional interrelationships between spaces or systems. Determine any Project requirements as necessary to accommodate artwork.

Where the Project involves work in an existing building, site, and/or utility system, identify and locate by scaled graphic diagram, any building and/or site utility areas that may have potential hazardous material contamination and may require testing, abatement and/or removal by the Department, prior to the renovation and/or during the new construction work of the Project.

Identify and define, in writing, the impact of the proposed Project schematic design on the existing building or facility operations. Assist the Department in determining and resolving any Project requirements for maintaining the current operation of the existing building facility spaces or systems and site utility areas, including as a minimum, the impact of hazardous waste removal, and the associated necessary demolition and repair of the adjoining work.

Hazardous material testing and removal will be performed by the Department by separate Contract using other professional firms. See Task 512 - Hazardous Materials, for text defining the Professional's responsibility for assisting the Department with these materials.

Progressively review, with the Project Team, the development of the schematic design documents and assist in obtaining data and providing timely decisions. Present proposed schematic design documents for review to the State/Client Agency and the Department at 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications. Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 302 CONSTRUCTION CODE AND DESIGN REVIEWS: Identify, list, and define for the Department, in writing, the impact of all applicable construction codes, rules, regulations, environmental requirements, design reviews, and permitting procedures current as of the start of this schematic design Phase that will apply to the design of the proposed Project. Review with the Project Team the principal impacts on Project planning and incorporate these into the schematic design report and the Project cost/proposed construction schedule of Task 309.

Task 303 CIVIL/SITE STAGING INVESTIGATION: The Professional shall retain a civil/site survey Consultant and a site geotechnical testing Consultant and coordinate their proposed architectural and/or engineering services and prepare the site staging investigation survey instructions program(s) required to establish and execute a complete schematic site design appropriate to the Project/Program Statement. Analyze site staging investigation results and incorporate into the schematic site design. Coordinate a site-specific testing program to identify and/or confirm the Project site underground conditions and accurately specify contractual requirements. This includes, but is not limited to, access, traffic control, demolition, Soil Erosion and Sedimentation Control, engineered fill, utilities, removal of obstructions/contaminations, borrow and spoil areas, bracing, shoring, waterproofing, dewatering, dredging, and similar work. Provide the Department with copies of all site investigation geotechnical test reports. Review conclusions and, upon request, explain their influence on the Project schematic design. Define the impact of the Project on adjacent buildings.

Task 304 STRUCTURAL: Research, survey, define, and render all existing structural systems appropriate to the proposed Project. Show facility layout, applicable area floor loadings and basic elevations. Outline any existing principal structural system members and render and show the proposed structural system schematic design for renovations and additions.

Task 305 MECHANICAL/HVAC/PLUMBING/UTILITIES: Research survey, define and render the schematic design basis for all proposed mechanical, plumbing systems, and utility systems appropriate to the Project. This includes but is not limited to all plumbing, HVAC, and other mechanical systems, equipment, and their respective loads. Define and render the schematic design capacities, sources, flows, and functions of all existing and/or proposed utility systems, including but not limited to steam, water, fuel, storm and sanitary sewers, and fire protection. Field-check and verify accessibility and space for all equipment on the proposed schematic design drawings. Confirm, in writing, to the Department, the availability of utility capacities at current or proposed connections. Contact applicable utilities for information on connections, connection permit requirements, fees, and schedules.

Task 306 ELECTRICAL: Research, survey, define and render the schematic design basis for all proposed electrical systems appropriate to the Project.

This may include, but is not limited to utility service systems, primary and secondary distribution systems, building control systems, security systems, elevators, fire alarms, television, data, communications, and similar systems. Define sources, equipment capacities, and loads, including those for open office workstation/partitioning systems. Field-check and verify accessibility and space for all equipment on the proposed schematic design drawings. Confirm, in writing, to the Department, the availability of utility capacities at current or proposed connections. Contact applicable utilities for information on connections, connection permit requirements, required easements, transformers, fees, and schedules.

Task 307 ARCHITECTURAL/ENGINEERING: Research, survey, define, and render the existing and proposed schematic design architectural and/or engineering building area layout appropriate to the Project/Program Statement. Show proposed applicable area/room space, finish treatment, uses, interrelationships, and principal building sections, elevations, and dimensions. Show principal building fire protection spaces and features. Consider sustainability in material, equipment, systems, and general design selections, provide LEED checklist, as applicable.

Task 308 DRAFTING: Prepare and render proposed schematic design documents appropriate to the Project, on sheet size approved by the Project Director. Include all principal building/site utility systems. Coordinate the Project schematic design with all architectural and/or engineering design disciplines for completeness, accuracy and consistency, and conflict avoidance. The Professional shall field-check and verify the accuracy of all existing and proposed architectural and/or engineering drawings and any data furnished by the Department, the State/Client Agency or any other Project related source.

Task 309 PROJECT COST/PROPOSED CONSTRUCTION SCHEDULE: Evaluate the proposed schematic design against the estimated Project cost and design/construction schedule. Revise schematic design as required to produce a design within the Department's approved Budget. Prepare and submit a Project Budget based on the approved schematic design. Apply critical target dates to the Professional's Project Study, Design and Proposed Construction Schedule and submit to the Department for their review and approval.

Task 310 SCHEMATIC DESIGN REVIEW: Prepare, reproduce, submit, and make presentations and revisions of the schematic design planning documents. Present proposed documents for the Project Team review at the 50 percent and 90 percent completion intervals and solicit review comments. Revise proposed schematic design documents, as necessary, to incorporate all requested design review comments. Obtain Department approval and sign-off prior to State/Client Agency sign-off, when requested by Project Director. Where legislative review is required, provide an additional one (1) electronic copy in PDF format of the Department approved proposed schematic design documents to the Department for distribution to the Joint Capital Outlay Subcommittee, in the format of the "Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies, and Professional Service Contractors".

Provide one (1) schematic design presentation to the Project Team for this Task. Any additional schematic design presentations requested by the Department will be considered extra professional services and the additional schematic design costs will be paid to the Professional by the Department with a Contract Change Order.

If Contract Services conclude with this Phase, provide bond prints and an indexed PDF of architectural and/or engineering drawings of the final approved schematic design, suitable for legible reproduction.

PHASE 400 - PRELIMINARY DESIGN

Prepare progressive preliminary design documents to develop the Project based on the Project/Program Statement, and the approved schematic design and program, if applicable. Refine the schematic design documents as necessary to produce an acceptable preliminary design. The preliminary design and outline draft specification shall be complete and detailed enough to define the size, function, arrangements, spaces, location and operations of equipment, and materials comprising the principal design details of structures and systems. The proposed preliminary design documents and outline draft specifications shall clearly depict the Professional's proposed design intent of the Project's systems, materials, equipment, utilities, site improvements, and other elements through single-line diagrams, system layout drawings and developed plans and design details. The preliminary design thus achieved must constitute the complete basis for further detail into final design drawings.

Prepare in bar chart format, the proposed Project construction schedule. Prepare a complete estimated Project cost statement based on prevailing or predictable factors for the proposed construction bidding period. The Department's written acceptance of the estimated project cost statement will establish the authorized Budget for the Project. The Professional shall apply the means and methods necessary to achieve the proposed preliminary design within the authorized Budget for the Project.

Task 401 COORDINATION: Meet with the Project Team to review the Project/Program Statement, approved schematic design documents (if applicable), and refine the Project. Assist the Project Team to progressively review the proposed preliminary design, develop input, and provide timely decisions.

Where the Project involves work in an existing building, site, and/or utility system, identify and locate by scaled graphic diagram, any building and/or site utility areas that may have potential hazardous material contamination and may require testing, abatement, and/or removal by the Department, prior to the renovation and/or during the new construction work of the Project. Identify and define, in writing, the impact of the proposed Project schematic design on the existing building or facility operations. Assist the Department in determining and resolving any Project requirements for maintaining the current operation of the existing building facility spaces or systems and site utility areas, including as a minimum, the impact of hazardous waste removal, and the associated necessary demolition and repair of the adjoining work.

Hazardous material testing and removal will be performed by the Department by separate Contract using other professional firms. See Task 512 - Hazardous Materials, for text defining the Professional's responsibility for assisting the Department with these materials.

Progressively review, with the Project Team, the development of the preliminary design documents and assist in obtaining data and providing timely decisions. Incorporate design refinements consistent with the proposed Project scope. Establish equipment and/or materials to be furnished by the State. Present proposed preliminary design documents for review to the State/Client Agency and the Department at 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications. Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 402 SPECIFICATIONS: Prepare proposed preliminary design outline draft specifications for Divisions 00 through 49, in the current version of the Master Format Outline by the Construction Specifications Institute (C.S.I.), as appropriate for the defined Project. Outline specifications will address sustainable design in materials selection.

Task 403 CIVIL/SITE STAGING DESIGN/INVESTIGATION: If the Professional did not obtain a site specific geotechnical testing program for this Project and advise the Department during the Schematic Design Phase, they shall retain a civil/site survey Consultant and a geotechnical testing Consultant and coordinate their proposed architectural and/or engineering services to prepare and provide a preliminary geotechnical site investigation and site staging design as directly related to the Project.

Coordinate a site-specific testing program to identify and/or confirm the Project site underground conditions and to accurately specify the proposed construction contractual requirements. This includes, but is not limited to access, traffic control, demolition, Soil Erosion and Sedimentation Control, engineered fill, utilities, removal of obstructions/contaminations, borrow and spoil areas, bracing, shoring, waterproofing, dewatering, dredging, and similar work. Determine and prepare a list of required civil/site drawings as related to the Project. Illustrate and coordinate any off-site work necessary for a completely functioning Project. Revise as required.

Task 404 STRUCTURAL: Prepare structural calculations appropriate to the proposed Project and size major components. Prepare preliminary structural plans, sections, elevations, and details drawings, as applicable for the defined scope of work. Determine and prepare a list of required preliminary structural drawings as related to the proposed Project. Revise as required.

Task 405 MECHANICAL/HVAC/PLUMBING/UTILITIES: Identify existing mechanical/heating, ventilating, and air conditioning equipment, plumbing systems, and utility systems.
Calculate heat loss, heat gain, and other demands for all spaces. Determine ventilation requirements. Calculate total loads, identify, and size new equipment. Identify and/or calculate total utility loads. Include the needs of any existing building or system that is a part of, or interfaces with the Project, as well as those of the Project. Provide basic engineering design appropriate for all principal building components, utility systems and building systems, and all pre-engineered equipment suitable and appropriate for the proposed Project. Field-check and verify clearances for all proposed equipment and systems proposed. Prepare preliminary HVAC, plumbing, and utility drawings. Determine and prepare a list of required preliminary design drawings as related to the proposed Project. Review current, mechanical, plumbing and utility system codes and incorporate applicable requirements. Revise as required. Secure in writing, the approval of capacities and connections for the Project from the appropriate utilities/suppliers.

Task 406 ELECTRICAL: Identify existing equipment and systems. Prepare load calculations, including electric loads for fixed, and movable, equipment, as appropriate to the defined Project. Determine electric service requirements and size major transformer and service equipment. Provide single line diagrams of primary service and distribution systems. Develop and outline basic equipment and distribution systems for lighting, power, building control, elevators, fire, security, television, data, communications, and other specialized systems of the Project. Coordinate design to incorporate design requirements for any open office workstation/partitioning systems.

Field-check and verify clearances for all proposed equipment and design systems proposed. Prepare preliminary electrical drawings. Determine and prepare a list of required preliminary design electrical drawings as related to the proposed Project. Review current electrical codes and incorporate all applicable requirements. Revise as required. Secure in writing, the approval of capacities and connections for the Project from the appropriate utility/suppliers.

Task 407 ARCHITECTURAL/ENGINEERING: Prepare preliminary architectural and/or engineering drawings, appropriate to the proposed Project, to detail and define the Project. Coordinate design to incorporate design requirements for any open office workstation/partitioning systems. Determine and prepare a list of required preliminary design architectural and/or engineering drawings. Drawings will include plans, elevations, sections, and critical construction details in order that an accurate and detailed construction estimate can be provided. Depict sustainable design criteria and energy efficient design features of the Project, provide LEED Checklist, and provide summary calculations to demonstrate applicable compliance with the State of Michigan's current Energy Code requirements. Revise as required.

Task 408 DRAFTING: Prepare and render the preliminary design architectural and/or engineering documents on sheet size approved by Project Director. Coordinate the preliminary design with related architectural and/or engineering design disciplines for completeness, accuracy and consistency and conflict avoidance. Prepare drawings using applicable State of Michigan standards as defined in the Department's "Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies, and Professional Service Contractors" and DTMB DCD "Design and Construction Standards for Office Construction and Tenant Fit out" for all Project design disciplines. The Professional shall field-check and verify the accuracy of all existing and proposed drawings and any data furnished by the Department, the State/Client Agency, or any other Project related source.

Task 409 COST ESTIMATE AND CONSTRUCTION SCHEDULE: Prepare an itemized Project construction cost estimate based on prevailing or reasonably predictable factors for the proposed bidding period. Recommend construction strategies, methods, and phasing. Identify long-lead items and any State of Michigan-furnished materials, equipment, systems, and furnishings, with procurement deadlines consistent with the proposed schedule and phasing. Prepare in bar chart format a detailed schedule of the design and proposed bidding and construction schedule, incorporating the information listed above.

Task 410 PRELIMINARY DESIGN REVIEW: Prepare, reproduce, submit, and make presentations and revisions of the schematic design planning documents. Present proposed documents for the Project Team review at the 50 percent and 90 percent completion intervals and solicit review comments. Revise proposed preliminary design documents, as necessary, to incorporate all requested design review comments.

With the 50 percent review, provide design criteria and calculations of principal architectural, mechanical, plumbing, and electrical engineering systems demonstrating basic compliance with the State of Michigan's current Energy Code requirements.

For each review, present proposed preliminary design documents first to the State/Client Agency for programmatic design conformance review, then present to the Department for review, determination of required revisions, and acceptance. Revise proposed preliminary design documents, as necessary, to incorporate all requested design review comments required for the Department's written acceptance of the proposed Project preliminary design.

Where legislative review is required, provide an additional one (1) electronic copy in PDF format of the approved proposed preliminary design documents to the Department for distribution to the Joint Capital Outlay Subcommittee, in the format of the "Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies, and Professional Service Contractors". Provide one (1) schematic design presentation to the Project Team for this Task. Any additional schematic design presentations requested by the Department will be considered extra professional services and the additional preliminary design costs will be paid to the Professional by the Department with a Contract Change Order. If Contract Services conclude with this Phase, provide bond prints, electronic CAD, and indexed PDF of architectural and/or engineering drawings of the final approved schematic design and outline specifications suitable for legible reproduction.

PHASE 500 - FINAL DESIGN

Prepare for progressive, periodic review, Final Design Documents which shall revise, refine, amplify, and depict, in detail, the Project as described and required by the Project/Program Statement and any approved preliminary design. Final Design Documents shall be prepared in Phases/Bid packages appropriate to the Project, schedule, and funding.

The proposed Final Design Documents shall document a complete and constructible Project. Final Design Documents shall incorporate and comply with all current, applicable regulations, ordinances, construction codes and statutes, and must have accomplished all reviews by appropriate federal, State or any local authorities having jurisdiction before presentation to the Department for acceptance and advertisement for bidding. Where design approvals are required, the Professional shall acquire and provide them. The Final Design Documents shall be without ambiguity and must be so complete that no significant design decision is left to the discretion of any Bidder, manufacturer, or supplier. The Final Design Documents will not define, quantify, or in any other way represent any work as being assignable to, or to be performed by, any Consultant or sub-consultant, except for fire suppression systems or other specialized system(s) provided that it is specifically authorized, in writing, by the department.

Bidding Documents shall consist of, but are not limited to, the Final Design Documents, including final architectural and/or engineering drawings and specifications, special, general, and supplemental conditions of the Construction Contract, and modifications, if any, to MICHSPEC or DCSpec documents provided by the Department. Such standard documents may consist of, but are not limited to, the project advertisement, the Instructions to Bidders, the proposal forms, general, supplemental, and any special conditions of the Construction Contract, and the standard form of agreement between the Department and the Construction Contractor. The Professional may not substitute any other special, general, and supplemental conditions for the Construction Contract or other standard documents provided by the Department. The Professional may not revise, other than the fillable portions of the general conditions, or use any additional general condition requirements unless the revisions or requirements are accepted and approved by the Department in writing.

In addition to the requirements herein, the professional services for this Project shall include, but are not limited to, those set forth in the current version of MICHSPEC or the current DCSPEC as adopted and modified by the State of Michigan and incorporated into the Construction Contract, plus such other Department standard documents and general conditions as may be part of the Construction Contract.

The Contract Documents shall consist of the Bidding Documents and all Addenda and attachments necessary to provide a complete Construction Contract for the Project.

Task 501 COORDINATION: Review approved preliminary design drawings with the Project Team and solicit revisions. Incorporate any revisions and design refinements.

Present proposed final design documents to the State/Client Agency and the Department for their review at the 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications.
Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation, or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 502 SPECIFICATIONS: Prepare final design specifications in the format defined below and with Phasing as appropriate for the Project. Include a schedule of all required submittals, a construction material testing schedule, and all other necessary schedules. Specifications shall be coordinated with the final design architectural and/or engineering drawings and shall be prepared in the current version of the Master Format Outline by the Construction Specifications Institute (C.S.I.). The final design architectural and/or engineering specifications shall clearly define the Project design and construction requirements indicating the type and quality of materials, products, and workmanship.

Sustainable Design shall be used wherever possible by the Professional in their Project design. The United States Green Building Council's (USGBC) LEED Green Building Rating System will be used as a convenient and industry accepted standard of reporting and measurement of the materials and design strategies used in the Project, but the USGBC certificate will not be required. Sustainable Design is defined in this Contract as the Professional's use of Project design resources with no negative impact to the natural ecosystems, an emphasis on overall energy efficiency, recycling, reduction of waste, and achieving a net enhancement of the Project.

Performance specifications shall be used when feasible. If not, the Professional shall name at least three (3) acceptable materials, products or systems and the specifications shall contain an "or equal" clause. Whenever possible, recycled materials and/or Michigan-manufactured products shall be named and given first preference. Proprietary specifications or allowances may be permitted with the Department's acceptance and written approval, but only for special, unavoidable conditions. Provide Project specifications to the Department for procurement of items to be pre-purchased through existing State contracts or separate bids.

Task 503 CIVIL/SITE STAGING DESIGN: If the Professional did not obtain a site-specific geotechnical testing program for this Project and advise the Department during the Schematic Design Phase, they shall retain a civil/site survey Consultant and a geotechnical testing Consultant and coordinate their proposed architectural and/or engineering services to prepare and provide a preliminary geotechnical site investigation and site staging design as directly related to the Project. Coordinate a site-specific testing program to identify and/or confirm the Project site underground conditions and to accurately specify the proposed construction contractual requirements. This includes, but is not limited to access, traffic control, demolition, Soil Erosion and Sedimentation Control, engineered fill, utilities, removal of obstructions/contaminations, borrow and spoil areas, bracing, shoring, waterproofing, dewatering, dredging, and similar work. Determine and prepare a list of required civil/site drawings as related to the Project. Illustrate and coordinate any off-site work necessary for a completely functioning Project. Revise as required.

Soil Erosion and Sedimentation Control shall be implemented in accordance with the current edition of the Department's compliance manual and 1994 PA 451, as amended – The Natural Resources Environmental Protection Act, Part 91 – Soil Erosion and Sedimentation Control. Submit final civil/site design drawings depicting Soil Erosion and Sedimentation Control measures to the Department's Soil Erosion and Sedimentation Control Program for review in accordance with 1994 PA 451, as amended. For DTMB managed projects, coordinate review submission with Project Director as plan review is completed within the Design and Construction Division.

Task 504 STRUCTURAL: Prepare and render complete structural final design documents.

Task 505 MECHANICAL/HVAC/PLUMBING/UTILITIES: Prepare and render complete mechanical, plumbing, and utility system final design documents.

Task 506 ELECTRICAL: Prepare and render complete electrical system final design documents.

Task 507 ARCHITECTURAL/ENGINEERING: Prepare and render complete architectural and/or engineering final design documents. Assist the Department in the determination of and specification of furnishings, colors, and finish selections. Provide material finish and color board for final acceptance as required for the defined Project.

Task 508 DRAFTING: Prepare complete final design architectural and/or engineering drawings for Bidding Documents on sheet size approved by Project Director using applicable State of Michigan standards as defined in the "Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies and Professional Services Contractors." The Professional shall field-check and verify the accuracy of all existing and proposed drawings and any data furnished by the Department, the State/Client Agency or any other Project related source.

The Project Bidding Documents derived from the Final Design drawings shall be made available and converted if necessary, to the AutoCAD computer drafting system. Bidding Documents shall be provided electronically in pdf format to the Department for advertisement by the Department.

Provide one electronic copy of signed and sealed documents in addition to paper review and approval sets of the Contract Documents. The signed and sealed print sets are the controlling Contract Documents for this Project. The software name and release number used to produce the Design Contract drawings will be clearly identified on the electronic media.

Task 509 CHECKING CONTRACT DOCUMENTS: Check and coordinate all proposed Bidding and Contract Documents for completeness and accuracy. Prepare Bidding and Contract Documents that will protect the Department from unexpected construction cost increases, schedule delays or claims for reason of defective or incomplete rendering of the Professional's design, or for any delinquency by the Professional for performance of the professional design services under this Contract. Check the adequacy of all spaces and clearances.

Cross-check and coordinate the requirements of all proposed final design drawings between the architectural and/or engineering design disciplines for completeness, accuracy, and consistency, and conflict avoidance. Similarly, cross-check and coordinate all proposed final design drawings against the Project specifications. Mark each drawing with the name of the checker and with the written signature approval of the appropriate Professional "Key Principal Personnel/Employee."

Task 510 CONSTRUCTION CODES AND PERMITS: The Professional's Contract Documents shall comply with the State of Michigan Construction Code, 1972 PA 230, as amended, the State of Michigan Energy Code, the Americans with Disabilities Act (ADA) Accessibility Guide requirements, the State of Michigan Barrier-Free Access Code requirements, and all Project related construction code requirements in effect at the time of award of this Contract. Assist the Department in obtaining approval of the Project and its design by appropriate governmental regulating and/or code enforcement authorities.

Project Bidding Documents may not be advertised until plan review approval is obtained.

Except as otherwise provided for in this Contract, code compliance and plan review approval(s) shall be performed by the, the Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Plan Review Division, and the Bureau of Fire Services. Code compliance and plan review approval fees shall be paid by the Professional as a reimbursable expense, unless otherwise provided for. Submit all modeling, testing, design data, and appropriate drawings and applications for all permits, tests, and approvals, which the Department is required to secure as a prerequisite authorization for the Project's approval. Submit Soil Erosion and Sedimentation Control plans/drawings to the Department's Soil Erosion and Sedimentation Control Program as the enforcing authority for this Project, no later than at the 90 percent final design stage.

Provide energy efficient design features and summary calculations to demonstrate Project compliance with the State of Michigan Sustainability requirements.

Submit documents for review in a timely manner allowing appropriate time for review/permitting processes by respective authorities, such that the Project schedule is not unnecessarily delayed. Assist the State/Client Agency to secure any appropriate construction code waivers.

Incorporate all required modifications into the Bidding Documents. Follow through to ensure issuance of the construction codes and permits approvals. Secure all required design approvals before submitting the final design documents to the Project Team for the final design document review of Task 515.
Any approval secured in initial plan review and permitting does not relieve the Professional from complying with code official's construction field inspections enforcement requirements.

Task 511 CONSTRUCTION TESTING PROGRAM: Coordinate Project on-site survey and appropriate research to identify site specific abnormal construction conditions. Coordinate site specific geotechnical testing program of areas, consistent with the design and siting requirements. Identify and confirm the site underground conditions sufficiently to accurately specify the construction contractual requirements. Establish the required construction quality control and materials testing program. Define and specify the types of Project construction tests required, the approximate quantities to be tested and the projected cost thereof. Prepare quality control and material testing services program Bidding Documents for the construction quality control and material testing services. Testing services shall be estimated and identified as an authorized reimbursable expense item in this Contract.

Task 512 HAZARDOUS MATERIALS: Where the Project involves work in an existing building and/or utility system, assist the Department to determine the scope of potential hazardous materials contamination that may require testing, abatement and/or removal by the Department, prior to the renovation and/or during the new construction work of the Project. Hazardous materials testing and removal for this Project will be performed by the Department by separate Contract unless specifically noted in the project scope. Coordinate the professional design services of this Contract with any hazardous material removal services required to implement this Project. Include for the Department's use, architectural and/or engineering drawings and specifications for all restoration work necessary following completion of the removal/abatement Project. Revise the final design drawings, specifications, and schedule, if necessary, to reflect the impact of the hazardous material removal/abatement on the existing State/Client Agency facility operations.

Task 513 DESIGN AND CONSTRUCTION BUDGET: The Professional shall be responsible for all costs incurred by it, necessitated by for rebidding a Project if it is over Budget due to their design. Submit in writing the itemized estimate of the construction costs with each final design review. Include all construction Bid packaging and Phasing. Determine the amount and adequacy of any construction contingency. Upon submittal of the 90 percent complete final design documents, confirm an accurate itemized construction cost estimate in writing to the Department. Confirm that the total Project construction cost is estimated to be within the Project Budget.

Notify the Department in writing if it becomes evident during the final design phase that the Project cannot be constructed within the Professional's estimated construction Budget. Unless the Department determines the problem to be outside the control or responsibility of the Professional, the Professional shall revise their final design drawings and specifications to produce a complete design for the Project within the Professional's original estimated construction Budget cost and will otherwise be responsible for any costs incurred by the Department in rebidding the Project.

Assist the Department to rebid the Project in accordance with the Task 516 construction bidding/contracting procedures.

Task 514 CONSTRUCTION SCHEDULE: Determine the appropriate proposed construction schedule to be part of the Construction Contract. Consider all principal influencing factors, including, but not limited to, current and projected material delivery times, local labor contract periods, and other historical principal causes of delays.

Task 515 FINAL DESIGN BIDDING DOCUMENTS REVIEW: Provide complete final design documents review. When the final design is 50 percent complete, submit the final design documents to the Project team for their review. If the final design appears to exceed the Project Budget, review with the Department all cost reduction design options. Incorporate at 90 percent completion, all required design modifications applicable to the Project, and resubmit to the Project Director. Confirm in writing that the requirements of Tasks 509 and 510 have been met.

Submit 100 percent complete sets of Bidding Documents to the Project Team for their final review. Submit final design documents to the State/Client Agency and the Department for their final design review and revise as necessary to incorporate all review comments required for Department written acceptance of the Bidding Documents. Provide adequate time (minimum of 14 calendar days) for the reviews and implementation of any comments or modifications.

Task 516 CONSTRUCTION BIDDING AND CONTRACTING: Assist the Department in the construction bidding and contracting process. The State of Michigan will advertise for bids and issue construction documents on-line and award and hold the Construction Contract. Prepare (maximum of 6mb electronic PDF files) and distribute Bidding Documents to the Project Director as required to accommodate predetermined construction Bid packages and/or Phases. Conduct pre-bid meetings and issue pre-bid meeting minutes and bidder's lists. Issue Addenda to the Project Director as required for posting. Include in each Addendum complete specifications for the Project if such specifications are not part of the Bidding Documents.

The Professional will be compensated by the Department with a Contract Change Order for providing the professional services necessary to rebid the Project for reason of defaulted or disqualified construction Bidder(s) or unacceptable price range as required by the design and construction Budget text of Task 513.

The Professional's construction bidding and contracting procedure services for Task 516 are not complete until: (1) The responsive, responsible, best value construction Bidder's Bid has been selected and accepted by the Department; and (2) The responsive, responsible, best value construction Bidder's Construction Contract has been executed. The PSC is to also incorporate any State required preferences with their review and recommendation.

Construction Bid Evaluation and Recommendation of Construction Contract Awards: Review and evaluate the submitted construction Bids. Provide the Department with a written recommendation for the apparent lowest responsive, responsible, best value construction Bidder for the Project Construction Contract award(s) within five (5) business days of the date of the Department's construction Bid opening. Exempt from recommendation any firm that in the Professional's opinion is unqualified for the Project (documentation required) or that the Professional has a business association with on this Project, and any firm, that the Professional has used in preparation of the Contract Documents or for any estimating work related to the Project.

The Professional shall conduct pre-contract meetings with responsive, responsible best value construction Bidder(s) to review the following items: (1) Understanding of the design intent of the Contract Documents; and (2) To advise and assist the Construction Contractor(s) in understanding the requirements of the Department's standard form of Construction Contract Documents, Project scope of work, and its Construction Contract award procedures.

Unless otherwise designated in the Department's Notice of Intent to Award letter to the recommended Construction Contractor within fifteen (15) calendar days from the date that the Notice of Intent to Award letter was mailed to the Construction Contractor, the Construction Contractor recommended for the award of the Construction Contract shall (a) Fill out and execute the Department's, current version of MICHSPEC standard form documents Section 00500, Contract Agreement and the Section 00800, Supplementary Conditions, electronically; (b) Execute Section 00610, Performance Bond, and the Section 00620, Payment Bond (and attach to each bond a separate, certified copy of Power of Attorney); and (c) Return to the Department, the Construction Contractor's executed Section 00500, Contract Agreement, Section 00610, Performance Bond, and Section 00620, Payment Bond forms, evidence of Certificates of Insurance and any other legal documents required for submittal by the Department's, Notice of Intent to Award letter.

Task 517 FINAL DESIGN CORRECTION PROCEDURES: Correct at no additional cost to the Department any design errors or omissions and/or other Project related deficiencies identified during the 600 and 700 Construction Phase. All reproduction costs for design interpretations, clarifications, and Bulletins related to the Professional's final design errors or omissions and similar or avoidable costs shall be accounted as part of the Professional's calculated hourly billing rates.

Provide design clarifications and interpretations of the Contract Documents requirements necessary to: (1) Adequately describe the Project work; (2) Adapt architectural and/or engineering final design documents during construction to accommodate field conditions identified during construction; (3) Refine design details that are not feasible and identified during construction; and (4) Comply with current construction/building codes, and all other Project related design and construction matters as may be necessary to produce a complete Project.

Design Interpretations and Clarifications: For elements of construction having no change in cost to the State the Professional will: (1) Provide instructions, and/or design interpretations and clarifications for design details within five (5) business days of the Construction Contractor's request record same, in writing; and (2) Revise the Professional's original final design architectural and/or engineering drawings and specifications as appropriate to the Project. Marking and initialing of drawings is not an acceptable form of written instruction.

Bulletin Authorization: Request authorization from the Project Director to issue each individual Bulletin. The Professional's Bulletin Authorization request will: (1) Identify the problem requiring the change; (2) Describe clearly if such problem arises from the architectural and/or engineering final design errors or omissions; (3) Identify the anticipated design cost and the estimated construction cost to implement the change(s); and (4) Describe clearly in the Professional's opinion which part, if any, of the design and/or construction costs are the obligation of the State, the Professional or the Construction Contractor. Include a Contract Modification request for any work outside the Project. Identify any anticipated Project design or construction schedule implications.

Bulletins: All reproduction costs for design interpretations and clarifications and Bulletins related to the Professional's architectural and/or engineering final design errors or omissions and similar or avoidable costs shall be accounted as part of the Professional's calculated hourly billing rates.

Describe, by Bulletin, design revisions necessary to correct the architectural and/or engineering final design errors or omissions, to address previously unidentified on-site field design conditions, to reduce costs and for all other matters approved by the Department involving costs or credit to the State. Postponement of action on items to accumulate multi-item Bulletins is not permitted.

Prepare and issue Bulletins within ten (10) business days of receipt of the Department's authorization. Bulletins shall be in such form and detail as the Department may prescribe. The Professional shall incorporate all accepted Bulletin revisions or design interpretations into the appropriate originals of all applicable Contract Documents. Such revised drawings and specifications shall be issued as part of Bulletins. Each Bulletin shall prescribe a time schedule for the Construction Contractor's response. Provide one electronic copy of each Bulletin to the Department and distribute as the Department may direct.

Evaluate the Construction Contractor's price quotation(s) and review and attempt to negotiate with the Construction Contractor to provide the Department with costs that are consistent with the value of the Project Bulletin(s). Recommend appropriate action to the Department regarding the Construction Contractor's quotations within five (5) business days of receipt thereof.

PHASE 600 - CONSTRUCTION ADMINISTRATION - OFFICE SERVICES

During the construction Phase of this Project, the "DTMB-0460, Project Procedures" documents package shall be used by the Professional in the administration of this Contract.

The Professional shall use the "DTMB-0452, The Professional's Inspection Record" for all on-site Inspection visits to the Project site. The form shall be completed and signed by the Professional and compiled monthly with the original form document sent to the Department's, Project Director and a copy sent to the Construction Contractor. The on-site Inspection record standard document form shall be completed and accompany the Professional's monthly payment request.

The Professional shall provide all required construction administration services and timely professional and administrative initiatives as the circumstances of the Project construction may require in order to allow the design intent requirements of the Professional's Contract Documents to be successfully implemented into a completed Project through the Construction Contractor's completion of the Construction Contract work.

In observed cases which may involve danger to human life, immediate safety hazards to personnel, existing or impending damage to the Project, to State/Client Agency property or to other property; as may be impacted by the Project, the Professional shall inform the Construction Contractor(s) of the situation and their observations.

The Professional shall immediately record and report such situations to the Department and certify any accrued Project costs in writing. The Professional shall always have access to the Construction Contractor(s) work.

Establish and maintain effective construction administration office procedures, systems, and records to progressively, and exclusively, manage and control the Professional's obligations, commitments, achievements, and expenditures under this construction Phase administration.

Monitor the quality and progress of the Project construction Phase work. Maintain all necessary Project records, provide on-site visitation reports, and provide all administrative office action as may be necessary to inform the Construction Contractor(s), in writing, with respect to their compliance with the design intent of the Contract Documents.

Advise and assist the Department in taking all practical steps necessary to address and complete the Project in the event of performance delays or defaults by the Construction Contractor(s).

Task 601 COORDINATION: Coordinate the Professional's staff, Consultants, and all other Project related resources. Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications. Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting. Meeting minutes and agendas are to follow the order and outline of the Departments "Sample Progress Meeting Format" and include a summary of executed CCO's, pending CCO's, Shop and RFI Submittal Logs and statuses.

Task 602 SHOP DRAWINGS, SUBMITTALS, and APPROVALS: Monitor, evaluate, and provide administrative action as necessary to achieve timely processing of shop drawings and such other submittals and approvals that are the responsibility of the Professional. Maintain a record of all required, received, rejected, and approved submittals of shop drawings, color/material samples, finishes, and other items requiring the Professional's approval. Notify the Construction Contractor(s), in writing, (copy to the Department) of delinquent submittals, the consequences of such delays, and prescribe a time schedule for their submittal/resubmittal, which will not jeopardize the Construction Contract completion date.

No design revisions will be made as part of the Professional's review and approval of shop drawings, or other submittals. In addition to all other functions, the Professional's approval of shop drawings shall verify the submittals furnished by the Construction Contractor(s) conforms to the design intent of the Professional's Contract Documents/architectural and/or engineering drawings and specifications requirements. Provide written approval or rejection of shop drawings within ten (10) business days of receipt in the Professional's office. Provide and distribute one electronic copy in PDF format of approved submittals as directed by the Department.

Task 603 PAYMENT PROCEDURES: Monitor, evaluate, and provide timely administrative action, as necessary, to certify or reject, as appropriate, and process the Construction Contractor's schedule of costs and monthly submitted payment requests. Review of Payment Requests are to be completed concurrently by the Professional and the Department's Field Representative in which the Professional is to then provide comments to the Contractor.

Payment by the State of Michigan to the Construction Contractor shall be based on the Construction Contractor's approved completion of Contract work performed prior to the date of each monthly submitted payment request. Payment to the Construction Contractor for each monthly submitted payment request invoice shall be made to the Construction Contractor within thirty (30) consecutive calendar days following the Department's receipt and approval of an approved payment request invoice from the Professional. Certification or rejection of all submitted payment requests will be made by the Professional, in writing, within ten (10) business days of receipt in the Professional's office.

The Professional shall certify to the Department, in writing, the dollar amount the Professional determines to be due to the Construction Contractor for their monthly submitted payment request or the Professional shall return the payment request to the Construction Contractor indicating the specific reasons in writing for rejecting the Construction Contractor's monthly submitted payment request certification.

Issue an appropriate certificate for payment only pursuant to a correctly prepared and accurate payment request and only for acceptable Project work. Payment certification shall constitute a written representation by the Professional, to the Department, that based on their Construction Administration on-site field Inspections, and the Professional's evaluations of field reports, test results, and other appropriate and available factors, the quantity and quality of Project work for which the payment request is certified has been accomplished by the Construction Contractor in accordance with the design intent of the Contract Documents and that the payment request is consistent with the quantity and quality of acceptable Project work in place, and that the acceptable materials are properly stored on-site and/or off-site.

No payment request certificate shall be submitted that requests payment for disputed Project work or any Project work showing deficient test results. No payment request certificate may be submitted after the Construction Contract completion date which does not provide for withholding of assessable and/or projected liquidated damages.

Pursuant to the Department's notification, the Professional's certification shall reduce from the amount earned, two (2) times the amount of any current prevailing wage rate payment deficiency, as certified by the Department of Licensing and Regulatory Affairs, Wage and Hour Division against the Construction Contractor or any Subcontractor or supplier thereof. Payment request rejections shall be accompanied with a written explanation and a copy shall be submitted to the Project Director and Department Field Representative.

Task 604 CONSTRUCTION SCHEDULE PROGRESS: Monitor, evaluate, and provide timely administrative action, as necessary, to determine whether the Construction Contractor's construction work schedule and progress appear to be adequate to achieve the Project on time and on schedule. Notify the Department, in writing, within three (3) business days of receipt of the Construction Contractor's proposed Project construction schedule, or amendments thereto, if in the Professional's opinion such construction schedule will produce the Project within the allotted Construction Contract completion time. Notify the Construction Contractor and the Department, in writing, if in the Professional's opinion such schedule should be accepted or rejected. Revise the construction schedule of Task 514 to show that the proposed on-site visitations of Tasks 703-706 are consistent with the actual events of the Project construction schedule. Give prompt, written notification to the Construction Contractor(s) and to the Department of inadequate construction schedule progress.

Unless the Department determines that the needs of the Project require other action the Professional shall proceed as follows: (1) Investigate at the time of occurrence, any areas of inadequate progress whose consequence may be a delay in, or increased cost for, a work item; (2) Notify the Construction Contractor(s) and the Department of the Professional's opinion of the problem and responsibility for the delay and costs. Advise whether the delay in any work may result in delays in the Construction Contract completion date; and (3) Advise the Construction Contractor(s) and the Department, in writing, of recommended action(s) by respective parties necessary to facilitate actions by the Construction Contractor to complete the Project construction on schedule.

Bulletin Costs: During the 600 and 700 Construction Phase, review and evaluate the Construction Contractor's quotations for Bulletin work. Negotiate as appropriate to assure the Department's costs commensurate with the actual value of the Project work. Provide the Department with written recommendation(s) within five (5) business days of receipt of the quotation.

Evaluate any documentable impact on the Project construction schedule claimed by the Construction Contractor(s) arising from Bulletin work. Provide appropriate and timely action under terms allowable under the Construction Contract, to implement any Bulletin work which the Professional and the Department consider critical to the Project construction schedule, but whose cost is disputed.

Within ten (10) business days of its receipt, evaluate and provide the Department with appropriate written recommendations, along with an analysis of any request by the Construction Contractor(s) for a time extension of their Construction Contract completion date.

No recommendation for a Construction Contract time extension may be submitted to the Department which is not substantiated by the Professional's technical review and evaluation of the Project construction schedule showing critical path work, noncritical path work, and float time for the complete Project and any work at issue and having such detail as to clearly document the Construction Contractor's claim. Any recommendation for a time extension of the Construction Contractor's Contract completion date must include a complete analysis of all direct and indirect costs of the Construction Contractor, the Professional, and the Department regarding the time extension. Where the Project is not substantially complete on the Construction Contract completion date, notify the Construction Contractor and the Department, in writing, of the expiration of the Construction Contract completion date and of the assessment and/or withholding of liquidated damages.

Task 605 CONSTRUCTION TESTING PROGRAM: Monitor, evaluate, and provide timely administrative action as may be required in response to the results of the construction quality control and material testing program. In circumstances where the testing is not provided by the Department or the Professional, evaluate, and approve, or disapprove the Construction Contractor(s) work plan for providing all construction test reports.

Provide the Construction Contractor(s) and the Department with written evaluation of all construction test reports, copies of construction test reports, marked with the Professional's approval or disapproval within five (5) business days of receipt of the report.

Within five (5) business days of the receipt of any construction test reports not meeting the Construction Contract requirements direct the Construction Contractor(s), in writing, to take appropriate, corrective, or replacement measures within a prescribed time. Follow up, as appropriate, to require the Construction Contractor(s) to achieve the design intent of the Professional's Contract Documents and avoid delays to any element of work which may, in the Professional's opinion, result in a delay in the Construction Contract completion date. Notify the Construction Contractor, in writing, of any delinquent corrections/replacement and take administrative action in accordance with the Construction Contractor performance text of Task 606.

Task 606 CONSTRUCTION CONTRACTOR PERFORMANCE: Throughout the execution of the Project Construction Contract, monitor and evaluate the Construction Contractor(s) performance and quality assurance procedures and provide timely, administrative action to cause the Construction Contractor(s) to correct their construction deficiencies. With the Department's concurrence, the Professional may direct, in writing, the exposure and testing of any Project construction work, already in place or covered, which the Professional, and/or the Department, believes may not meet the design intent of the Professional's Contract Documents.

Notify the Construction Contractor, and the Department, in writing, within five (5) business days of its identification, of any aspect of the Construction Contractor's performance which is inconsistent with the Contract Documents or which, in the Professional's opinion, is inconsistent with the design intent of the Professional's Contract Documents. Prescribe a reasonable time for correction which will not jeopardize the Project construction schedule completion date. Exert all practical administrative means necessary to require the Construction Contractor to perform as required by their Construction Contract to meet the design intent of the Professional's Contract Documents/architectural and/or engineering drawings and specifications requirements.

Deficient Performance: Upon identification of deficient performance, where the Project Construction Contractor fails to provide timely or acceptable performance, the Professional shall proceed as follows: (1) Notify within three (3) business days the Department, the Construction Contractor and any affected surety, in writing, and by registered mail delivery, of the potential for the Construction Contractor's default action and the Professional's recommendation; (2) Identify applicable Construction Contract references, with design interpretation of such references, and clearly explain where the Construction Contractor's performance fails to meet the design intent of the Professional's Contract Documents; and (3) Specify a time and date for the Construction Contractor to begin active and continuous work towards Contract compliance and a specific time and date for completion.

Potential Default: Upon notification by the Department of potential default by the Construction Contractor, where the Project Construction Contractor fails to adequately perform, the Professional shall proceed as follows: (1) Document the potential default, in writing, to the Construction Contractor, the Construction Contractor's surety and the Department; (2) Provide an explanation of the consequences of the potential default to the Project; (3) Provide the Department with a complete set of Project record documentation necessary to assist the Department in the legal implementation of the Construction Contractor's default action; (4) Establish an appropriate amount and withhold from payment certification of the associated line item(s), include a retainage

consisting of any costs expended for testing and other investigations necessary to establish unsatisfactory performance plus a contingency amount, adequate for the Department to correct such unacceptable performance by means other than the Construction Contractor; and (5) Notify the Construction Contractor and their surety, in writing, of the withholding.

Default: Upon notification of the Project Construction Contractor's default, the Professional shall proceed as follows: (1) Identify the extent of defaulted and/or remaining Project work; (2) Recommend a procedural program for the Department to achieve the defaulted work within the remaining Project construction time schedule if possible; and (3) Provide modified Bidding Documents that will allow the Department to rebid the remaining portion of work using the Professional's recommendations. The Professional will be compensated by the Department with a Contract Change Order for providing the defaulted Construction Contractor assistance service.

Task 607 PUNCH LIST PROCEDURES: Prepare and distribute Punch Lists for each Construction Contract. Prescribe a reasonable time schedule for completion of all construction Punch List items and identify an additional amount to be withheld from payment should standard closeout schedule of values be deemed insufficient to assure the Department sufficient funds to cover all costs as may become necessary to complete the remaining delinquent work. Distribute Punch Lists within five (5) business days of the final Inspection. Notify the Construction Contractor of any delinquent Punch List construction corrections and take appropriate action in accordance with Tasks 604 and 606.

Task 608 CLAIMS: Evaluate and respond to any claims (in whole or in part) against the Department within five (5) business days of the receipt of such claim, in the Professional's office. Where any element of claims or subsequent litigation, are based, in whole or in part, upon any deficiency or delinquency in the Professional's services, the Professional shall provide, in a timely manner, all professional services necessary to defend the claim issue(s). No payment will be due for claim defense services accumulated under this Task until settlement or judgment of litigation concludes the claim issue. The claim settlement or judgment decision will be used as the basis for determining the Professional's obligation, if any, for the costs of such professional services and/or for any costs incurred by the Department for which performance by the Professional may be responsible or contributory. Billing under this claims Task will be in accordance with an appropriate Contract Modification and/or Contract Change Order.

Task 609 AS-BUILT DOCUMENTS: Within forty-five (45) consecutive calendar days after receipt of properly prepared and submitted Construction Contractor annotated as-built documents, incorporate, and render them into the Professional's original Contract Documents for as-built documents. The Professional shall provide the Design and Construction Division with the following two (2) types of deliverable as-built documents for Project close-out: 1) One (1) set of legible/reproducible bond copy completely updated and corrected, as-built records of the Contract Documents/architectural and/or engineering drawings; and 2) Two (2) electronic sets of completely updated and corrected as-built record close- out documents and architectural and/or engineering drawings, one in .pdf format and one in Auto CAD format that is "Auto CAD readable" and conforms to the American Institute of Architects (AIA) National CAD Standard format.

The as-built documents shall depict all construction modifications, additions, and deletions made either by Addendum, Bulletin, supplemental written instructions, and the written notations shown on the Construction Contractor's as-built drawings. The Professional's as-built architectural and engineering drawings shall be of such clarity, detail, and completeness that reference to other documents will not be required to describe or depict, the Project. The as-built documents shall be free of the Professional's original architectural and/or engineering final design errors and omissions. The Professional shall revise the final design as-built drawings as necessary to incorporate all requested Department revisions as required for the Department's formal written acceptance and approval of the Project as-built drawings and the Project final on-site Inspection. The Professional's services for the Task 609, As-Built Documents are not complete until: (1) The as-built architectural and engineering drawings have been verified, in writing, by the Professional to the Project Director as being accurate and complete; and (2) The as-built architectural and engineering drawings have been turned over and accepted by the Department's, Project Director in writing.

Task 610 CLOSE-OUT PROCEDURES: Maintain for the Project record a schedule of the Construction Contractor's required submittals for Project close-out. Review and approve or reject all submittals as appropriate.

Within forty-five (45) consecutive calendar days after Substantial Completion of the Project, after building or Project occupancy, verify to the Department's, Project Director in writing, that the following documents have been received: (1.) All Project code compliance approvals; (2.) Final Inspections; (3.) Final occupancy permits; (4.) Construction Contractor's as-built final design marked-up architectural and engineering drawings; (5.) Copies of "Operation and Maintenance Manuals" of the Project systems; and (6.) Equipment warranties and guarantees.

Provide to the Design and Construction Division within forty-five (45) consecutive calendar days after Substantial Completion of the Project, three (3) copies of "Operation and Maintenance Manuals" of the Project systems and equipment. These close-out manuals shall include copies of reduced size, as-built architectural and engineering drawings, specifications, and all instructions published or furnished by respective manufacturers, construction code compliance certificates, equipment warranties, and guarantees. The manuals shall also include a complete description of the Professional's Final Design intent concepts, operation, and required maintenance of each system. Participate in the Construction Contractor's start-up and in the training instruction of State/Client Agency personnel in the operation and use of the Project systems.

PHASE 700 - CONSTRUCTION ADMINISTRATION - FIELD SERVICES

The Department may provide full or part-time Department Field Representatives to monitor the coordination and progress of the services of the Professional and the Project work of the Construction Contractor(s). Such Inspections may generate reports, minutes of meetings, notes, and documents, which will be available to, and may be useful for, the Professional. The Project Director, or Department Field Representative, has the authority to require the Professional to respond to and resolve design related problems, construction field problems and to attend Project related meetings. Unless delegated by specific written notice from the Department, the Department Field Representative does not have any authority to order any changes in the Project scope of work or authorize any adjustments in Contract price or Contract time.

The Professional shall provide sufficient field Inspections of the Project to administer the construction Phase field services and its related construction Phase administration office services, as directly related to the degree of Project complexity and, up to and including full-time field Inspections. The construction field Inspections shall occur as the construction on-site field conditions and the Project may require and during the regularly scheduled twice a month progress meeting. The Professional shall use for their construction field Inspection services, only personnel having such professional expertise, experience, authority, and compatibility with departmental procedures as the Department may approve. The Professional agrees that such characteristics are essential for the successful completion of the Project. Such individuals shall be replaced for cause where the Department determines and notifies the Professional, in writing, of their unacceptable performance.

The Professional shall review the Project construction work in place and that sequentially planned. The Professional shall determine whether the actual Project construction schedule progress appears to be in accordance with the approved Project construction schedule and whether the quality of the work appears to be in accordance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements and are without apparent defects or deficiencies. No on-site advertising by, or of, the Professional or Project signs other than those appropriate to locate an approved field office will be permitted.

Task 701 COORDINATION: Coordinate the Professional's staff, Consultant firm's staff, Construction Contractors, and all other Project related resources.

Task 702 PRECONSTRUCTION MEETING: Preside at and record preconstruction/organizational meetings for each Construction Contract. Issue meeting minutes and the completed "DTMB 0460, Project Procedures" documents package.

Task 703 CONSTRUCTION INSPECTIONS: The Professional and their Consultants shall conduct and record the principal events and status of the work of all scheduled and other on-site Project activities. The construction field Inspections shall occur as the field conditions and the Project may require and during the regularly scheduled progress and payment meetings.

All construction progress Inspections shall be recorded in the form of a written report to the Department and the Construction Contractor within five (5) business days of the Project construction progress Inspection. The purpose of such Inspection/visitations includes, but is not limited to: (1) Achieve and maintain a working familiarity with the status, quantity, and quality of the Project construction work in place; (2) Determine if the

actual Project construction schedule progress is in accordance with the approved Project construction schedule; (3) Review the installation and determine the acceptability of preparations for, and installation of, pending critical construction components and activities; and (4) The Inspection of Project construction work completed or in progress by the Construction Contractor to determine and verify, in writing, to the Department's, Project Director and the Department Field Representative that the quantity and quality of all Project construction work is in accordance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements.

Task 704 PROBLEM SOLVING MEETINGS: Conduct and record problem solving meetings between the Professional and the Professional's Consultants, the Construction Contractor(s), their Subcontractors, the Department, the Project Director and the Department Field Representative, and any construction managers and other affected parties on-site or elsewhere to assess the construction work progress and provide design interpretation decisions to resolve problems affecting the construction work. These problem- solving meetings shall be scheduled as the construction field conditions and the Project may require, and/or shall be at such time as the Construction Contractor(s), the Professional, the Department, the Project Director, the Department Field Representative and any construction manager agree is appropriate to the Project construction work progress. Non-scheduled or emergency meetings shall be held at such time as necessary to maintain the schedule of various work items and to avoid delays in the Construction Contract completion date.

Task 705 PROGRESS MEETINGS: Conduct and record scheduled Project construction progress meetings (twice a month) with the Project Director, the Department Field Representative, the State/Client Agency, the Construction Contractor(s), and any construction manager. Assess Project construction work progress and provide timely, administrative actions as necessary to maintain the Project construction work on schedule and respond to and resolve all design related and construction items affecting the Project construction cost and be in compliance with the design intent of the Contract Documents, in accordance with Tasks 513 and 514.

Task 706 FINAL PROJECT INSPECTION: Conduct final construction field Inspections of the Project, in concert with the Construction Contractor(s), the Project Director, the Department Field Representative, the State/Client Agency, and any construction manager. Final Project field Inspections shall be conducted to witness and record equipment start-up and all testing, to verify, in writing, that each Construction Contractor has achieved Substantial Completion, to prepare Punch List(s) items, and to determine the status of any part of the Project construction work where the Department intends to take beneficial use or occupancy. Verify to the Project Director and Department Field Representative, in writing, the completeness and accuracy of the Construction Contractor's as- built drawings during the Project construction Phase Field Inspection(s) and identify any corrections required. The Professional shall revise the final as-built drawings as necessary to incorporate all requested Department revisions as required for the Department's formal written acceptance and approval of the Project as-built drawings and the Project final Inspection. Determine to the extent possible that the Project has been constructed in accordance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements and that all equipment and systems function without defects.

ARTICLE II
COMPENSATION

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

Compensation to the Professional shall be on an hourly billing rate basis for professional services rendered by salaried and non-salaried professional, technical, and non-technical support employees, except for any authorized reimbursable expenses provided for in this Contract. Total compensation for any Phase shall not exceed the amount authorized for that Phase, unless authorized in writing by the Department's approved Contract Change Order.

Professional services shall not be performed, and no Project expense shall be incurred by the Professional prior to the issuance of a written and signed Professional Services Contract and a DTMB Form 0402 - Contract Order by the Department to the Professional, authorizing the Professional to start the Project work.

The preparation of Bulletins and Contract Change Orders resulting from increases in the Project scope of work or previously unknown on-site field conditions will be compensated to the Professional, as approved by the Project Director, on an hourly billing rate basis in accordance with this article.

This compensation shall not exceed seven and half percent (7.5%) of the Construction Contractor's quotation for the Bulletin or Contract Change Order or an amount mutually agreed upon by the Professional and the Project Director. The Professional shall provide, at no additional compensation, professional services necessary to respond to and resolve all Construction Contractor design related claims arising wholly or in part from the Professional's Contract Documents errors or omissions or other aspects of the Project's design or the Professional's performance which are inconsistent with the Professional or Construction Contract. Reproduction costs for the Professional firm's interpretations, study/design clarifications, and Bulletins necessary to achieve the Contract scope of work final design requirements is not allowable for reimbursement and shall be accounted as part of the Professional firm's lump sum fee of this Contract.

2.1 PREMIUM TIME/OVERTIME: This Contract anticipates that no premium or overtime is required to achieve this Project's scope of work. No compensation will be allowed to the Professional for any premium or overtime cost incurred to achieve the Project schedule of this Contract, unless directed in writing by the Project Director.

2.2 EMPLOYEE HOURLY BILLING RATES: Hourly billing rates will include all direct and indirect monetary costs to the State for the Professional's services under this Contract other than the authorized and approved reimbursements. Hourly billing rates shall be based on the Professional's documented historical operating expenses and adjusted for Project specific costs. In no case shall this documentation period include more than eighteen (18) months prior to the date of award of this Contract. The Professional may not provide different hourly billing rates for the same individual for different Phases.

No lump-sum subcontracts for the professional services of any employee may be billed against this Contract. Any employee associated with this Project who performs the professional services of a subordinate or of a position classification having a lower classification/pay range shall be accounted and paid for at the lower hourly billing pay rate. The hourly billing rate charge of any employee may be changed by the Professional with a written and Department approved Contract Modification during the life of this Contract to account for normal personnel pay increases.

Hourly billing rates include but are not limited to: Overhead items such as employee fringe benefits, vacations, sick leave, insurance, taxes, pension funds, retirement plans, meals, lodging, computer costs/operating costs and time, telephone, telephone-related services, and all reproduction services (except Contract Bidding Documents).

The hourly billing rate also includes all reproduction costs for design interpretations, study/design clarifications and Bulletins related to design errors or omissions, construction code compliance (precipitating either from design code compliance and plan review, design interpretations, or construction on-site/field Inspections), and all similar, or avoidable costs shall be accounted as part of the Professional's calculated hourly billing rate.

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

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

The hourly billing rate for the Professional may not be applied to the work of the Professional's Consultant's staff. Each Consultant firm must submit a separate hourly billing rate with proper documentation for the Consultant services they will provide as part of the Proposal.

The hourly billing rate of the respective Consultant firm shall be used for that Consultant firm's personnel only. The Professional's Consultant services shall be billed as an authorized reimbursable expense item at a direct cost times the Firm's mark-up percentage, not to exceed 5%, accepted by the Department.

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

2.4 DIRECT COST REIMBURSEMENT ITEMS: The Professional's Consultant services, and authorized reimbursable expenses shall be treated as an authorized reimbursable expense item at a direct cost times the firm's mark-up percentage amount approved by the Department, not to exceed 5%. Reimbursement of authorized expense items at direct cost times the firm's mark-up percentage amount is intended only to compensate the Professional for their direct costs.

The Professional shall be responsible for the selection of the supplier of their professional services or materials, the coordination, adequacy, and application of their professional services, whether provided by the Professional's staff or provided by their Consultant, and therefore responsible for any Project costs that exceed the Contract per Phase reimbursement Budget.

For Projects further than 100 miles one-way from the Professional firm's office, travel expenses to the project site will be allowed as a reimbursable expense at the State of Michigan's rates, based on DTMB's Vehicle and Travel Services Travel Rate Reimbursement for premium mileage rates in effect at execution of this contract. Mileage allowed will be actual, less 100 miles each way. Other travel expenses are not to be included, unless specifically authorized in writing.

In addition, direct cost reimbursement items may include soil borings, site surveys and any required laboratory testing not performed in house, Design Code Compliance and Plan Review Approval Fees by the licensing agency; reproduction of documents for legislative presentation, artistic productions, mobilization of testing equipment, laboratory costs for testing samples, per-linear-foot cost of soil borings and specialized inspections of the structural, mechanical, electrical, chemical or other essential components of the Project.

Compensation for this Contract shall not exceed the amounts per Project Phase shown in the attached Contract Order unless authorized by a Department approved Contract Modification. It shall be the Professional's responsibility to carefully monitor their and their Consultant firms Project costs, activities, and progress and to give the Project Director timely notification of any justifiable need to increase the authorized fee. The Professional may not proceed with professional services that have not been authorized by the Project Director and shall immediately notify the Project Director if such services have been requested or have become necessary. Identification of Professional and Consultant staff, hourly billable rates, and an itemized list per Project Phase of authorized direct cost reimbursement items are identified in the attached Professional's proposal.

ARTICLE III
PAYMENTS

Payment of the professional services fee shall be based on the Professional's performance of authorized professional service(s) performed prior to the date of each submitted payment request. Payment requests shall be submitted monthly to the Project Director on a payment request form (DTMB- 440). Payment for each monthly submitted payment request shall be made within thirty (30) consecutive calendar days following the Department's approval of the payment request.

Payment requests shall include signed certification by the Professional of the actual percentage of work completed as of the date of invoicing for each Phase and summarize the amounts authorized, earned, previously paid, and currently due for each Project Phase. Payment requests shall be supported by itemized records or documentation in such form and detail as the Department may require. Each of the Professional's Consultant's submitted payment request applications shall include similar information.

This includes, but is not limited to:

a) Phase Numbers for the professional services provided.
b) Professional's personnel and position/classification providing service and hours worked
d) Current hourly billing rate charges for each individual position/classification.
e) Copy of certified on-site visitation log or site visit report showing time on-site.

f) Itemized invoices from each of the Professional's Consultant's documenting that firm's professional services charge and the Project work related services provided.
g) Authorized reimbursable expense items provided with receipts and invoices.

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

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

ARTICLE IV
ACCOUNTING

The Professional shall keep current and accurate records of Project costs and expenses, of hourly billing rates, authorized reimbursable expense items, and all other Project related accounting document to support the Professional's monthly application for payment. Project records shall be kept on a generally recognized accounting basis. Such records shall be available to the Department for a period of three (3) years after the Department's final payment to the Professional. The State of Michigan reserves the right to conduct, or have conducted, an audit and inspection of these Project records at any time during the Project or following its completion.

ARTICLE V
INSURANCE

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

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

(a) The Professional must provide proof that it has obtained the minimum levels of insurance coverage indicated or required by law, whichever is greater. The insurance must protect the State from claims that may arise out of or result from or are alleged to arise out of or result from the Professional's or a consultant's performance, including any person directly or indirectly employed by the Professional or a Consultant, or any person for whose acts the Professional or a consultant may be liable.

(b) The Professional waives all rights against the State for the recovery of damages that are covered by the insurance policies the Professional is required to maintain under this Section. The Professional's failure to obtain and maintain the required insurance will not limit this waiver.

(c) All insurance coverage provided relative to this Contract is primary and non-contributing to any comparable liability insurance (including self- insurance) carried by the State.

(d) The State, in its sole discretion, may approve the use of a fully funded self-insurance program in place of any specified insurance identified in this Section.
(e) Unless the State approves, any insurer must have an A.M. Best rating of "A-" or better and a financial size of VII or better, or if those ratings are not available, a comparable rating from an insurance rating agency approved by the State. All policies of insurance must be issued by companies that have been approved to do business in the State. To view the latest A.M. Best's Key Ratings Guide and the A.M. Best's Company Reports (which include the A.M. Best's Ratings) visit the A.M. Best Company internet web site at http://www.ambest.com.

(f) The Professional is responsible for the payment of all deductibles.

(g) In the event the State approves the representation of the State by the insurer's attorney, the attorney may be required to be designated as a Special Assistant Attorney General by the Michigan Attorney General.

(h) Workers' Compensation Insurance: The Professional must provide Workers' Compensation coverage according to applicable laws governing work activities in the state of the Professional's domicile. If the applicable coverage is provided by a self-insurer, the Professional must provide proof of an approved self-insured authority by the jurisdiction of domicile. For employees working outside of the state of the Professional's domicile, the Professional must provide certificates of insurance proving mandated coverage levels for the jurisdictions where the employees' activities occur.

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

(j) If any of the required policies provide claims-made coverage, the Professional must: (a) provide coverage with a retroactive date before the effective date of the contract or the beginning of Contract Activities; (b) maintain coverage and provide evidence of coverage for at least three (3) years after completion of the Contract Activities; and (c) if coverage is canceled or not renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective date, Professional must purchase extended reporting coverage for a minimum of three (3) years after completion of work.

(k) Professional must: (a) provide insurance certificates to the Contract Administrator, containing the (1) project file number; (2) the project title; and (3) description of the program, at Contract formation and within 20 calendar days of the expiration date of the applicable policies; (b) require that consultants maintain the required insurances contained in this Section; (c) notify the Contract Administrator within 5 business days if any insurance is cancelled; and (d) waive all rights against the State for damages covered by insurance. Failure to maintain the required insurance does not limit this waiver.

Commercial General Liability Insurance	
Minimum Limits: $1,000,000 Each Occurrence Limit $1,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations Deductible Maximum: $50,000 Each Occurrence	Professional must have their policy endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds using endorsement CG 20 10 11 85, or both CG 2010 07 04 and CG 2037 07 04.
Umbrella or Excess Liability Insurance	
Minimum Limits: $2,000,000 General Aggregate	Professional must have their policy follow form.
Automobile Liability Insurance	
Minimum Limits: $1,000,000 Per Accident	Professional must have their policy: (1) endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds; and (2) include Hired and Non-Owned Automobile coverage.
Workers' Compensation Insurance	
Minimum Limits: Coverage according to applicable laws governing work activities.	Waiver of subrogation, except where waiver is prohibited by law.
Employers Liability Insurance	
Minimum Limits: $500,000 Each Accident $500,000 Each Employee by Disease $500,000 Aggregate Disease.	
Professional Liability (Errors and Omissions) Insurance	
Minimum Limits: $1,000,000 Each Occurrence $2,000,000 Annual Aggregate Deductible Maximum: $50,000 Per Loss	
Environmental and Pollution Liability (Errors and Omissions) ***	
Minimum Limits: $1,000,000 Each Occurrence $2,000,000 Annual Aggregate	Professional must have their policy: (1) be applicable to the work being performed, including completed operations equal to or exceeding statute of repose; (2) not have exclusions or limitations related to Transportation (upset overturn, spills during loading or unloading, Hazardous Materials Handling, and Non Owned disposal site liability; and (3) endorsed to add "the State of Michigan, its departments, division, agencies, offices, commissions, officers, employees, and agents" as additional insured.

(* Professional to include Pollution Liability Insurance if needed ***)**

ARTICLE VI
INDEMNIFICATION

(a) To the extent permitted by law, the Professional shall indemnify, defend and hold harmless the State from liability, including all claims and losses, and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties), accruing or resulting to any person, firm or corporation that may be injured or damaged by the Professional in the performance of this Contract and that are attributable to the negligence or tortious acts of the Professional or any of its Subconsultants/Consultants, or by anyone else for whose acts any of them may be liable.

(b) Employee Indemnification: In any and all claims against the State of Michigan, its departments, divisions, agencies, boards, sections, commissions, officers, employees and agents, by any employee of the Professional or any of its Subconsultants/Consultants, the indemnification obligation under this Contract shall not be limited in any way by the amount or type of damages, compensation or benefits payable by or for the Professional or any of its Subconsultants/Consultants under worker's disability compensation acts, disability benefit acts or other employee benefit acts. This indemnification clause is intended to be comprehensive. Any overlap in provisions, or the fact that greater specificity is provided as to some categories of risk, is not intended to limit the scope of indemnification under any other provisions.

(c) Patent/Copyright Infringement Indemnification: To the extent permitted by law, the Professional shall indemnify, defend and hold harmless the State from and against all losses, liabilities, damages (including taxes), and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties) incurred in connection with any action or proceeding threatened or brought against the State to the extent that such action or proceeding is based on a claim that any piece of equipment, software, commodity or service supplied by the Professional or its Subconsultants/Consultants, or the operation of such equipment, software, commodity or service, or the use of reproduction of any documentation provided with such equipment, software, commodity or service infringes any United States patent, copyright, trademark or trade secret of any person or entity, which is enforceable under the laws of the United States.

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

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

ARTICLE VII
OWNERSHIP OF DOCUMENTS

All Project deliverables, including but not limited to reports, Bidding Documents, Contract Documents, electronic documents and data, and other Project related documents, including the copyrights, prepared and furnished by the Professional shall become the property of the State of Michigan upon completion of the Project, completion and acceptance of the professional's work, or upon termination of the Contract. Project deliverables shall be delivered to the Department upon their request. The Professional shall have no claim for further employment or additional compensation because of this Contract requirement. The Professional may retain a copy of all Project documents for their files. The professional is to provide unedited CAD files (without Professionals title block) to the Contractor as requested for use in creating Shop Drawings at no additional cost.

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

To the fullest extent allowed by law, the State releases the Professional, the Professionals Consultant(s) and the agents and employees of any of them from and against legal claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of the State's use of the Contract Documents other than in accordance with this Contract Agreement. All Contract deliverables listed may be published or issued for informational purposes without additional compensation to the Professional. The Professional may not use any of the Contract Documents and Contract deliverables for any purpose that may misrepresent the professional services they provided. The Professional shall retain full rights to the Contract Documents and deliverables and the right to reuse component information contained in them in the normal course of the Professional's professional activities.

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

The State of Michigan will not construct additional Projects or buildings based on the work of this Contract without notice to the Professional.

Whenever renderings, photographs of renderings, photographs or models, or photographs of the Project are released by the State of Michigan for publicity, proper credit for design shall be given to the Professional, provided the giving of such credit is without cost to the State of Michigan

ARTICLE VIII
TERMINATION

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

a) Immediately discontinue all professional services affected (unless the notice directs otherwise), and

b) Deliver to the State all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the Professional in performing this Contract, whether completed or in process.

8.1 If the termination is for the convenience of the State, an equitable adjustment in the Contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed professional services.

8.2 If the termination is due to the failure of the Professional to fulfill their Contract obligations, the State may take over the work and prosecute the same to completion by Contract or otherwise. In such case, the Professional shall be liable to the State for any additional cost occasioned to the State thereby.

8.3 If, after notice of termination for failure to fulfill Contract obligations, it is determined that the Professional had not so failed, the termination shall be deemed to have been affected for the convenience of the State. In such event, adjustment in the Contract price shall be made as provided in Section 8.1 of this article.

The rights and remedies of the State provided in this article are in addition to any other rights and remedies provided by law or under this Contract.

ARTICLE IX
SUCCESSORS AND ASSIGNS

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

ARTICLE X
GOVERNING LAW

This Contract shall be construed in accordance with the laws of the State of Michigan.

ARTICLE XI
NONDISCRIMINATION

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

a) The Professional will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, age, sex *(as defined in Executive Directive 2019-09)*, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job or position. The Professional will provide equal employment opportunities to ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the job or position. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

b) The Professional will, in all solicitations or advertisements for employees placed by or on behalf of the Professional, state that all qualified applicants will receive equal employment opportunity consideration for employment without regard to race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the job or position.

b) The Professional or their collective bargaining representative will send to each labor union or representative of workers with which is held a collective bargaining agreement or other Contract or understanding, a notice advising the said labor union or workers' representative of the Professional's nondiscrimination commitments under this article.

c) The Professional will comply with the Elliot-Larsen Civil Rights Act, 1976 PA 453, as amended, MCL 37.2201 et seq; the Michigan Persons with Disabilities Civil Rights Act, 1976 PA 220, as amended, MCL 37.1101 et seq; Executive Directive 2019-09; and all published rules, regulations, directives and orders of the Michigan Civil Rights Commission which may be in effect on or before the date of award of this Contract.

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

f) In the event that the Michigan Civil Rights Commission finds, after a hearing held pursuant to its rules, that the Professional has not complied with the contractual nondiscrimination obligations under this Contract, the Michigan Civil Rights Commission may, as part of its order based upon such findings, certify said findings to the State Administrative Board of the State of Michigan, which the State Administrative Board may order the cancellation of the Contract found to have been violated, and/or declare the Professional ineligible for future Contracts with the State and its political and civil subdivisions, departments, and officers, and including the governing boards of institutions of higher education, until the Professional complies with said order of the Michigan Civil Rights Commission. Notice of said declaration of future ineligibility may be given to any or all the persons with whom the Professional is declared ineligible to Contract as a contracting party in future Contracts. In any case before the Michigan Civil Rights Commission in which cancellation of an existing Contract is a possibility, the State shall be notified of such possible remedy and shall be given the option by the Michigan Civil Rights Commission to participate in such proceedings.

g) The Professional shall also comply with the nondiscrimination provisions of 1976 PA 220, as amended, concerning the civil rights of persons with physical or mental disabilities.

h) The Professional will include, or incorporate by reference, the nondiscrimination provisions of the foregoing paragraphs a) through g) in every subcontract or Contract Order unless exempted by the rules, regulations or orders of the Michigan Civil Rights Commission, and will provide in every subcontract or Contract Order that said nondiscrimination provisions will be binding upon each of the Professional's Consultant's or seller.

ARTICLE XII
CONTRACT CLAIMS AND DISPUTES

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

ARTICLE XIII
DEFINITION OF TERMS

The definition of terms and conditions of this Contract are described and outlined in the following Articles 1 through 14 and attached appendices. The capitalized defined terms used in this Professional Services Contract shall have the following definitions:

ADDENDA: Written or graphic numbered documents issued by the Department and/or the Professional prior to the execution of the Construction Contract which modify or interpret the Project Bidding Documents, including architectural and/or engineering drawings, and specifications, by additions, deletions, clarifications, or corrections. The Addenda shall: (1) Be identified specifically with a standardized format; (2) Be sequentially numbered; (3) Include the name of the Project; (4) Specify the SIGMA Funding Information, Project File No., the Contract Order No. Y, and a description of the proposed Addenda; and (5) Specify the date of Addenda issuance. As such, the Addenda are intended to become part of the Project Contract Documents when the Construction Contract is executed by the Professional's recommended lowest responsive, responsible qualified Construction Contractor. An Addendum issued after the competitive construction Bid opening to those construction Bidders who submitted a Bid, for the purpose of rebidding the Project work without re-advertising, is referred to as a post-Bid Addendum.

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

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

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

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

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

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

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

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

CONSTRUCTION INSPECTION SERVICES: The Professional's field Inspections of the Project during the construction Phase of this Contract which includes but is not limited to: (1) Documenting the quantity and quality of all Project construction work and verifying that the Project construction work is properly completed; (2) Resolve Project problems that are affecting the Project construction work, certify payment requests, process Bulletins, Contract Change Order recommendations, and requests for information (RFI's) in a timely manner as prescribed in the

Department's, current version of MICHSPEC or DC Spec as adopted and modified by the State of Michigan and incorporated into the Construction Contract; and the (3) Inspection of Project construction work completed or in progress by the Construction Contractor to determine and verify to the Department's Project Director and the Department Field Representative that the Project construction work is in compliance with the Professional's design intent and that the Project has been completed by the Construction Contractor in accordance with the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements. The Professional shall provide sufficient Inspections of the Project during the construction Phase to administer the construction Phase field and office services as directly related to the degree of Project complexity, up to and including full-time field Inspections. Construction field Inspections shall occur as the construction field conditions and the Project may require and during the regularly scheduled progress (twice monthly) meetings. The Professional shall use for their construction field Inspection services, only personnel having professional expertise, experience, authority, and compatibility with departmental procedures as the Department may approve. The Professional agrees that such characteristics are essential for the successful completion of the Project. Such individuals shall be replaced for cause where the Department determines and notifies the Professional, in writing, of their unacceptable performance.

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

CONTRACT CHANGE ORDER: A standard document form (DTMB-0403) issued and signed by the State of Michigan and signed by the Professional which amends the Project Design Professional's Contract Documents for changes in the Appendix 1 – Project/Program Statement or an adjustment in Contract price and/or Contract time, or both.

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

CONTRACT MODIFICATION: A form (DTMB-0410) amending the Contract signed by the Department and the Professional. The preparation of Bulletins and Contract Change Orders resulting from changes in the Appendix 1 – Project/Program Statement or previously unknown on-site field conditions as approved by the Department will be compensated to the Professional by way of the Contract Modification in accordance with the Article 2, Compensation text of this Contract. Any Contract Modification of this Professional Services Contract must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the Department may require. No Contract Modification will be approved to compensate the Professional for correcting, or for responding to claims or litigation for, the Professional's Phase 100 – Study, Final Report and Phase 500 - Contract Documents/architectural and/or engineering study/design errors, omissions or neglect on the part of the Professional.

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

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

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

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

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

DEPARTMENT FIELD REPRESENTATIVE: An employee of the State under the direction of the Department who provides the Inspection of construction Projects for compliance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specification requirements and the building construction codes. The Department Field Representative is the liaison between the Construction Contractor, the Professional, and the Project Director. The Project Director, or the Department Field Representative, has the authority to require the Professional to respond to and resolve study/design related problems, construction field problems and to attend Project meetings. Unless delegated by specific written notice from the Department, the Department Field Representative has no authority to order any changes in the Project scope of work or authorize any adjustments in Contract price or Contract time. The Department Field Representative is be included throughout all other phases (100 – 400) to provide additional knowledge and input throughout the development of the project.

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

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

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

PHASE: A discretely distinguishable step necessary to produce the Project during the Professional providing architectural and/or engineering study, design, and construction administration services.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE XIV
COMPLETE AGREEMENT/MODIFICATION

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

APPENDIX 1

PROJECT/PROGRAM STATEMENT

DTMB-0427 (R 01/21)

PROJECT STATEMENT

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

FILE NUMBER	ACCOUNTING TEMPLATE	PROPOSAL DUE DATE
Various	Various	Thursday, March 11, 2021

CLIENT AGENCY
Department of Technology, Management and Budget

PROJECT NAME AND LOCATION
2021 Indefinite Scope Indefinite Delivery (ISID) for General Professional Design Services

PROJECT ADDRESS (if applicable)
Various

CLIENT AGENCY CONTACT	TELEPHONE NUMBER
DTMB - DCD PROJECT DIRECTOR	**TELEPHONE NUMBER**
Tim Hall	517.881.4173

WALK-THROUGH INSPECTION DATE, TIME, AND LOCATION:
No Pre-Proposal Meeting or Walkthrough will be held.

☐ **MANDATORY (Check box if Mandatory)**

PROJECT DESCRIPTION/SERVICES REQUESTED

Provide professional architectural, engineering, surveying, or landscape architectural ISID services for a variety of state funded construction projects.

Please NOTE:

- Proposal responses MUST also be uploaded to SIGMA VSS. Please enter $1.00 total cost as proposal amount. Additionally, hard copy proposals MUST also be received by 2:00 p.m., local time on the date due to be considered responsive and responsible.
- Please remember that individual attachments can be no larger than 6mb.
- If you experience issues or have questions regarding your electronic submission, you must contact the SIGMA Help Desk for assistance. They can be reached by telephone at 888.734.9749 or by email at sigma-procurement-helpdesk@michigan.gov
- Vendors are reminded to keep our office apprised of SIGMA VSS issues and to include your SIGMA ticket number when communicating with our office. Emailed submissions will need prior DCD approval and will be handled on a case-by-case basis. Approved emailed submissions MUST be received prior to 2:00 p.m. deadline to be considered responsive and responsible.

NIGP CODES
90607, 90610, 90632, 90638, 90642, 90644, 90646, 90648, 90658, 90672, 92507, 92531, 92540, 92588

DESIRED SCHEDULE OF WORK
Dependent on the assigned project.

ACCEPTING RFP QUESTIONS UNTIL: 12:00 p.m., local time on Thursday, March 4, 2021

Please do not submit online questions via VSS. ALL questions should be emailed to Tim Hall at hallt2@michigan.gov

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

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

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

REQUEST FOR PROPOSAL
ADDENDUM NO. 1

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

TO:	DATE ISSUED
ALL PROPOSERS	February 2, 2021
PROJECT NAME 2021 Indefinite Scope Indefinite Delivery Request for Proposal for General Professional Design Services (Architectural Engineering, Landscape Architecture)	FILE NUMBER
PROJECT DIRECTOR Tim Hall	PROPOSAL DUE DATE: Thursday, March 11, 2021

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

Please replace Questionnaire posted on January 25, 2021 with the Questionnaire posted today with a revision date of 210202

End

APPROVED BY:
Tim Hall
PROJECT DIRECTOR
DATE February 2, 2021

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

REQUEST FOR PROPOSAL
ADDENDUM NO. 2

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

TO:	DATE ISSUED
ALL PROPOSERS	March 5, 2021
PROJECT NAME 2021 Indefinite Scope Indefinite Delivery Request for Proposal for General Professional Design Services (Architectural Engineering, Landscape Architecture)	FILE NUMBER
PROJECT DIRECTOR Tim Hall	PROPOSAL DUE DATE: March 11, 2021

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

Below are the questions received and Design and Construction's response

Q1 – Are we required to keep the questionnaire in the word document and format or can we recreate it to match our overall proposal style / font. No information will be cut or excluded.

Response – As long as the DTMB logo, wording, and order are maintained, you may modify the document to match your overall proposal style / font.

Q2 – Under the Article 1 Business Organization section requests submitting firms to list "partnering organizations". If one or more partnering organizations are listed and the intent is that those firms will be providing services beyond what the primary firm offers, should the resumes of team members from the partnering organizations be included in Part I Technical Proposal (II-2 Personnel)? Likewise, should cost information be provided for those team members?

Response – Yes

Q3 – In the Technical portion of the RFP, it appears there are two requests for similar information.

1. Address programing, schematic and design development phases, construction documentation and construction inspection.
2. Management Summary, Work Plan and Schedule

Response: There are two separate and distinct responses requested, first, as part of Understanding of Projects and Tasks it is requested that you address programming, schematic and design development phases, construction documentation and construction inspection as part of your broader understanding of the tasks and how they may be likely related to ISID project assignments expected by this RFP; second, is a broader and more detailed explanation of your Management Summary, Work Plan and Schedule to ensure the success of projects expected to result from this RFP.

APPROVED BY:

Tim Hall DATE: March 5, 2021

APPENDIX 2

PROFESSIONAL'S PROPOSAL

WJE

2021 Indefinite Scope Indefinite Delivery

General Professional Design Services

March 11, 2021
WJE No. 2021.0459

PREPARED FOR:
State of Michigan
Department of Technology, Management and Budget

PREPARED BY:
Wiss, Janney, Elstner Associates, Inc.
30700 Telegraph Road, Suite 3580
Bingham Farms, Michigan 48025
248.593.0900 tel | 248.593.8532 fax

2021 Indefinite Scope Indefinite Delivery

General Professional Design Services

Neil Waraksa, PE
Associate III and Project Manager

March 11, 2021
WJE No. 2021.0459

PREPARED FOR:
State of Michigan
Department of Technology, Management and Budget

PREPARED BY:
Wiss, Janney, Elstner Associates, Inc.
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CONTENTS

INTRODUCTION

Wiss, Janney, Elstner Associates, Inc. (WJE) is pleased to provide the State of Michigan Department of Technology, Management and Budget (DTMB) with this response to the Request for Proposal for 2021 ISID General Professional Design Services.

SECTION II - PART I - TECHNICAL

II-1. Understanding of Project and Tasks

WJE is an interdisciplinary engineering, architecture, and materials science firm with expertise in all aspects of construction technology. WJE conducts more than 7,000 projects annually, many for institutional clients such as health care, governmental agencies, educational institutions, and large corporations. We have taken the lead as project manager, project architect/engineer, and designer-of-record where we: perform the survey/investigation, provide options for conceptual repairs with opinions of probable cost for construction/repairs, produce the construction documents based on the repairs selected by the project team, assist with bidding, and provide construction administration/observations and testing. We also routinely perform peer review services where we provide comments and suggestions regarding design criteria and details produced by other architectural and engineering design firms.

The WJE team has significant experience in working in occupied, functioning buildings in an institutional setting, and thus we routinely work with Owners and building occupants to minimize conflict between investigation, demolition, and construction activities and the operational activities of the facility. The WJE team is familiar with organizing and implementing investigative tasks to avoid or minimize intrusion on building users and visitors; examples of issues addressed during the construction phase that minimize disruption include noise control, mitigation of fumes during reroofing or coating applications, developing methods for physical separation of construction activities from user activities, and establishing schedules to avoid inconvenience to building occupants and users. We also have the ability to work outside typical business hours and in the past have worked extended recurring night shifts if/when required.

We also routinely recommend and/or review a repair mock-ups to minimize unknowns, evaluate constructability, and provide the Owner the ability to approve aesthetics of the intended design. This approach has repeatedly proved value to obtain the desired aesthetics for the Owner and minimize potential construction or installation challenges during project work.

For projects in which the DTMB requests a phased approach to step through the design and construction process, WJE will utilize the Phase definitions outlined in the provided DTMB Sample Standard ISID - Contract for Professional Services. WJE will work with the DTMB to analyze and perform the necessary tasks to complete each phase. We anticipate stepping through projects following the DTMB's construction process (anticipating projects for this ISID contract will use Phases 100 through 700 as needed) consistent with work we have previously performed for projects with the DTMB. Understanding that each project is unique and that the DTMB may only require select phases to outline and complete a project, WJE services will be catered to the needs of each project.

WJE's Value

WJE, with its breadth of in-house experience and its laboratory capabilities, is well-suited to provide the services requested for these projects and, for several reasons, would provide the best value to State of Michigan.

We Ask the Structure - We are able to leverage our vast experience, state-of-the-art equipment, and staff of experts to truly understand the condition of a structure or component, identify the root cause(s) of the issue at hand, and (if necessary) develop practical, efficient options to achieve the client's objectives. This deeper understanding allows us to provide significant benefit to our clients including:

- More accurate assessments of actual existing conditions which leads to more effective and efficient repair and maintenance strategies.
- More repair options for the consideration of the client.
- Cost effective repair options by more efficiently targeting only what needs to be repaired.
- More durable repair options by addressing the mechanism(s) causing the distress.

We Think Outside the Box - WJE aspires to consistently deliver practical, innovative, and technically sound solutions—solutions that are reviewed internally by our expert staff, and solutions that often exceed our clients' expectations. Technical mastery of our practice areas allows us to avoid the constraints and costs that often come from excessive reliance on convention and conservatism. Understanding the limitations of common codes and standards allows us to apply them properly and to effectively deal with situations where common, standard approaches are not very efficient. Our expert-based, first-principles approach to consulting helps clients identify value in their buildings/facilities that more conventional, conservative approaches would discount or even overlook, which often results in the saving of substantial resources. WJE's creativity has been the subject of many technical papers and presentations, the source of industry-wide changes in codes and standards, and the basis of understanding countless structural and architectural failures.

We Provide Options - We recognize that our clients must consider numerous non-engineering factors when making decisions about their facilities and structures. Therefore, we strive to inform our clients of all reasonable options and to develop a range of solutions that deliver value across a number of factors (e.g., cost, schedule, impact on operations, durability, safety, master planning, etc.). This approach empowers our clients to evaluate the big picture and select the repair approach that best suits their needs.

We Are Responsive - Given the nature of our work, it is common for WJE to mobilize quickly, at all hours of the day, to all parts of the country, and (when necessary) in large teams. No matter how big or how small the project, WJE professionals bring the same unbridled enthusiasm and commitment to every client and assignment. WJE has a proud history of meeting the demands of our projects and exceeding the expectations of clients.

II-2. Personnel

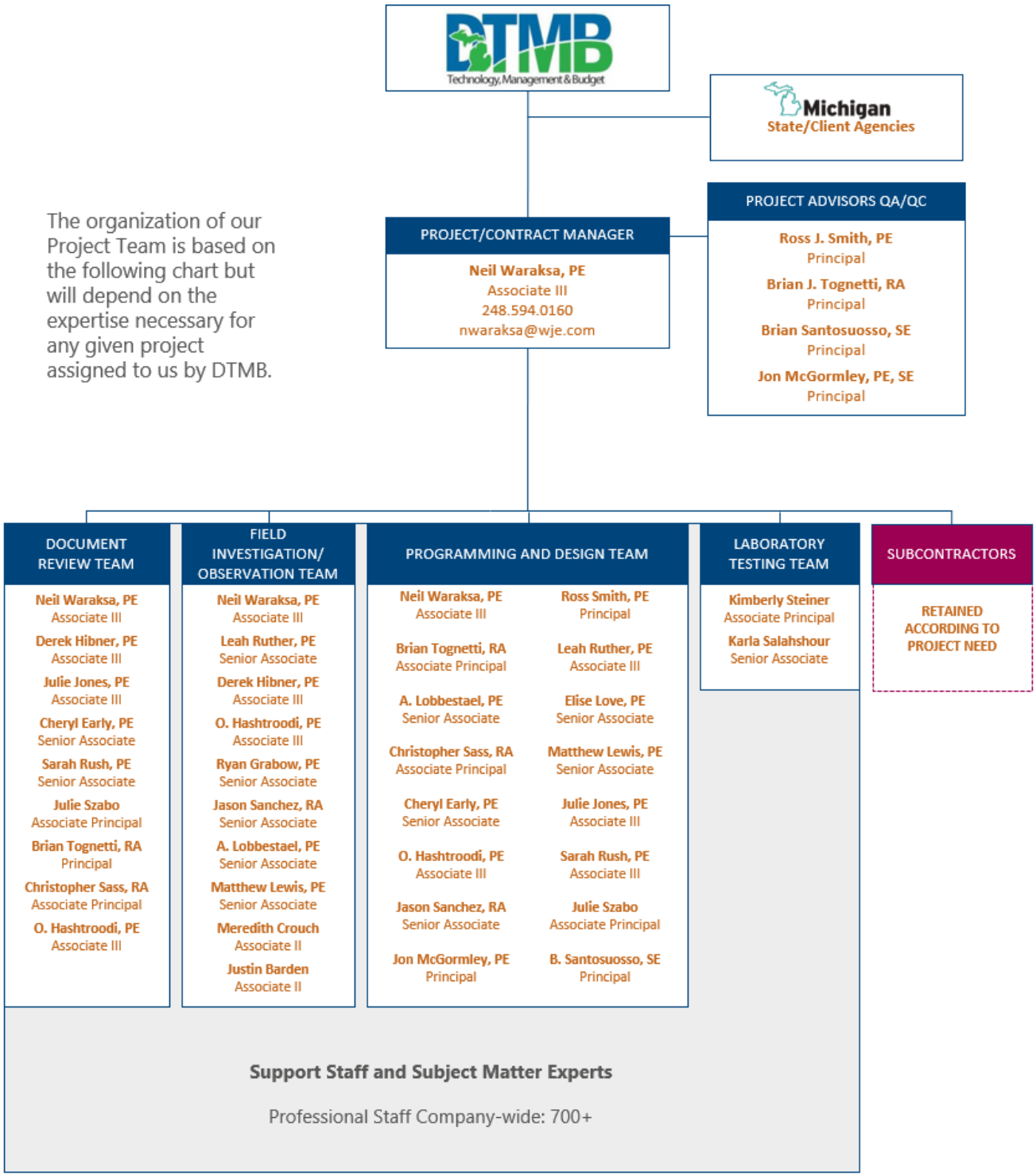
We anticipate that the majority of the tasks associated with this contract will be staffed through WJE's Michigan offices. When justified by the requirements and best interests of each project, we will engage the expertise from our offices nationwide to better serve the DTMB in the most technically sound and efficient way possible.

Typically, the Project Team will be organized such that the Project Manager (PM) is the Primary first point-of-contact and will designate another WJE Team member to serve as a Secondary point-of-contact in the event that the PM is out of the office or on leave. Typically, the Project Advisor is in direct continuous communication with the PM throughout the project and can readily take on this role *if* the PM is out of the office or on leave.

Our anticipated project team members are listed in the following table, with key personnel identified. Please refer to **Appendix B** for Personnel Qualifications.

Name	Position	Classification	Key Personnel
Neil Waraksa, PE	Associate III	Professional Engineer	X
Elise Love, PE, RRC	Senior Associate	Professional Engineer	X
Ross Smith, PE, LEED AP BD+C, CDT	Principal	Professional Engineer	X
Brian J. Tognetti, RA, CCCA, NCARB	Principal	Registered Architect	X
Christopher Sass, RA	Associate Principal	Registered Architect	X
Julie Szabo	Associate Principal	Engineer	X
Leah Ruther, PE	Senior Associate	Professional Engineer	X
Cheryl Early, PE	Senior Associate	Professional Engineer	X
Sarah Rush, PE	Senior Associate	Professional Engineer	X
Matthew Lewis, PE	Senior Associate	Professional Engineer	X
Andrew Lobbestael, PE	Senior Associate	Professional Engineer	X
Ryan Grabow, PE	Senior Associate	Professional Engineer	X
Jason Sanchez, RA	Senior Associate	Registered Architect (MD and NY)	X
Jon McGormley, PE	Principal	Professional Engineer (IA, IL, IN, LA, MO, MS, OH, and OK), SE (IL)	X
Brian Santosuosso, PE, SE	Principal	Professional Engineer (IL)	X
Julie Jones, PE	Associate III	Professional Engineer	X
Derek Hibner, PE, CDT	Associate III	Professional Engineer	X
~~Owjan Hashtroodi, PE~~	~~Associate III~~	~~Professional Engineer~~	~~X~~
Kimberly Steiner	Associate Principal	Chemist	
Karla Salahshour, PE	Senior Associate	Materials Scientist (OH)	
Meredith Crouch	Associate II	Engineer-in-Training	
Justin Barden	Associate II	Engineer-in-Training	

Please see below for an organizational chart outlining the planned project team members, roles, and lines of communication.



II-3. Management Summary, Work Plan and Schedule

A project work plan begins with an understanding of the project demands and client requirements by establishing clear lines of communication between the DTMB (Owner) and professional design service provider prior to commencing work on the project. With over six decades of specializing in delivering practical, innovative, and technically sound solutions across all areas of new and existing construction, we understand that all facility preservation, maintenance, and/or alterations projects are unique in scope. Understanding that every project is different, each work plan/methodology will be unique and tailored to the specific project based on the DTMB requirements.

WJE's typical service approach is presented below and describes some of the unique benefits we can provide to the DTMB. We have briefly described our approach for providing various investigative, design, operations, and consulting services.

- Typically, WJE does not design new structures. Rather, we specialize in the modification and repair of existing structures. While we occasionally work alongside architects or other design professionals in a peer review role, we more typically work directly for the Owner to solve owner-specific problems. Based on our understanding of the types of projects indicated within this RFP, we believe we are uniquely qualified to perform this work for the DTMB. We have developed a project approach and proposed delivery methodology to address requests for proposals (RFPs) we may receive under this ISID.
- For each project, WJE will provide a team of professionals from a range of disciplines as needed to address the specific scope of work. WJE will be available to lead projects as the prime design professional working directly for the DTMB (Owner) but can also serve as part of a team led by another firm, depending on the requirements indicated in the RFP.
- Each project begins with a fundamental understanding of the Client's needs and goals for the project. As such, WJE begins each project with a thorough review process and by developing an open line of communication with our Client. This ensures that the foundation of any given project is sound and that our Client is comfortable with WJE's understanding of the services to be provided. Once we have an understanding of the project's scope, unique needs, and timeline, we develop key milestones and deadlines by appropriately mapping out and phasing a project. This structure helps us to rationally and methodically execute a project while meeting the desired schedule.

WJE will assist the DTMB in developing an accurate scope of work to achieve the desired solutions, and professional services and deliverables will be aligned with DTMB's requirements for each project. Our experience, based on working with the State of Michigan and the DTMB, indicates that project planning typically follows the professional tasks and deliverables outlined below.

Our methodology will be tailored for each project to meet the DTMB's needs, project constraints, budget, and schedule. Our general approach is anticipated to be as follows:

- Meet and/or talk with the DTMB management team and key parties to review the project requirements to gain an initial understanding of the proposed scope of work and identified issues or problems to be solved. During this initial data collection, we would request available documentation such as, but not limited to drawings, maintenance history logs, photographs, previous reports, etc.
- Develop and provide a detailed proposal confirming our understanding of the required scope of services related to the project. Our understanding will result in articulating our project approach staffing/personnel, proposed fee, and project schedule.
- Upon signed authorization of agreement and notice to proceed, we will perform a document review to become familiar with as-built construction, prior repairs, and existing/current issues or conditions. Pertinent documents reviewed may include original architectural and structural drawings, shop drawings, submittals, engineering reports, repair documents, and historical maintenance logs or reports. It is anticipated that available documents will be provided to WJE for reference by the DTMB management team.
- Develop (based on need) field sheets for the building or site in sufficient detail to allow for documentation of existing conditions, as appropriate. These field sheets with recorded field data will serve as a basis for the development of project specific documents such as, but not limited to, repair documents or other required work product.
- If applicable, coordinate access to pertinent areas of the building or site (e.g. roof, facade, etc.). WJE anticipates arranging access, where required, using contractors who are approved by the DTMB and/or with whom we have established working relationships. Similarly, WJE will coordinate contractor support as needed for inspection openings (probes) or testing. Alternately, the DTMB may decide to provide contractor support.
- For condition assessment and investigative work, our process typically includes overall visual review followed by close-up examination of select areas or conditions of concern. Observations are documented in photographs, field notes, and on baseline drawings. As indicated by conditions observed, the investigation may also include non-destructive examination or destructive inspection openings to examine concealed conditions. For efforts that require field testing, such as water penetration and air infiltration of facades and roofing/waterproofing, wind uplift and flood testing (for roofing systems), and other field testing , WJE would work the DTMB to coordinate the effort(s) and establish a test plan. In addition, as required for a specific project, samples may be removed for laboratory materials testing. Following site investigation, field, and laboratory testing, we typically prepare a report documenting findings, analysis, and recommendations as appropriate to the specific project. The report may include options for repair, estimates of probable cost for the recommend work, etc.

- For assessments related to replacement of roofing or fenestrations, our process would be similar to the above but include a detailed evaluation of the existing system and causes of distress may not be required. Some effort would be required to understand the existing conditions and assembly, but the focus would be on detailing of the new work. Where replacement of building components is required, our process also typically involves assisting the Owner in review and selection of the replacement system(s).
- As required, WJE will provide design assistance and peer review services in support of new construction projects or repairs undertaken by the DTMB, for which we are not the lead designer or a consultant to the lead designer. This effort may involve review of in-progress documents or could include a larger role in which WJE would assist during design, development of construction documents, and construction.
- For development of repair or replacement documents for architectural or structural components and systems, following an assessment or investigation, our process typically proceeds through schematic design, design development, and construction document preparation, with reviews as appropriate by the DTMB throughout. As needed for specific projects, WJE can also provide professional services during the bidding phase and construction phase

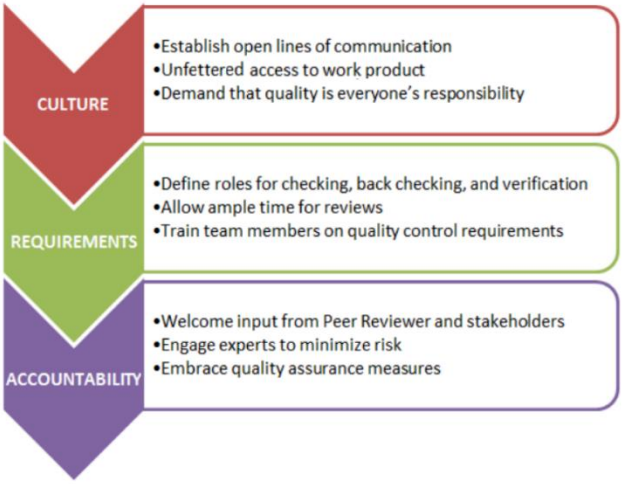
Constructability Review: WJE's specialized expertise in and knowledge of critical performance issues can be vital to understanding and properly addressing design components less familiar to typical design firms. During the design phase, WJE engineers and architects are typically the designer or are an integral part of the decision-making process regarding overall design, materials selection, and details development,-to include design decisions based on constructability. WJE's design professionals have been working closely with contractors in various trades to provide clients (Owners) with solutions for over six decades. This experience has allowed WJE to work side-by-side with contractors to see how designs are applied in the field and how they behave in service. Constructability is a common topic of discussion during the pre-bidding phase with potential contractors and then reviewed during a mock-up phase. When unexpected conditions are encountered in the field, beyond what was expected with a mock-up, WJE has found that it is best to work closely with the contractor onsite to develop a rapid solution to meets the client's objectives and project timelines. Often times revising a design for unexpected field conditions is an iterative process that engages the contractor and design professional immediately.

Additionally, WJE has professional staff that has experience (e.g., previous employment) working as contractors and/or within the construction trades. When applicable, these WJE members are consulted internally for constructability review during the initial design process in addition to engaging the contractor to ask specific constructability questions to confirm that the design is serving the needs best suited for the client and the project.

Quality Assurance Plan (QA): WJE has a long and proven track record of providing quality assurance on previous projects for Federal, State, municipal agencies, and the private industry. During the initial stages of a project, WJE works closely with the Owner to understand the project needs and to develop a plan to assure the project is completed to the Owner's expected level of quality. Although we tend to visit the site more often than a typical A/E firm, our more frequent site visits allow us to interface with Project Team Management and with Contractors to answer questions and address concerns immediately which has proven successful in providing a higher standard of quality assurance.

Quality assurance can generally be achieved by visiting the site to observe project work during the construction phase, and/or by field testing building components to verify they meet a minimum specified performance criteria. Typically, when WJE is performing a site visit regarding QA (during construction) we are observing the Contractor's work to determine if it complies with the issued Construction or Contract Documents, and field testing efforts are performed in general accordance with applicable standards and test methods/procedures to determine if the tested components result in an acceptable outcome. WJE intends to work with the DTMB to develop a customized QA plan, tailored to the suit the demands of the project.

Quality Control (QC) and Quality Control Plan (QCP): Internally, WJE's deliverables are assured quality control through a consistent internal technical review process applied to each project. This is standard practice on all WJE projects and includes all WJE deliverables such as, but not limited to reports, memorandums, sketches, cost estimates, proposals, etc. Within WJE we have organized Technical Resource Groups (TRG's) that provide an open forum for WJE personnel to readily access topic specific technical information, ask questions, and share knowledge with other people throughout the company to serve as an additional form of quality control when checking technical deliverables. At WJE, our team-based approach to knowledge sharing fosters communication and sharing of technical expertise and lessons learned from projects completed throughout the country. Our team members are carefully selected based on the necessary experience and expertise required by the project. Internally, WJE will formalize a QA Plan that will be custom tailored to the requirements of the project for all expected deliverables submitted to the DTMB.



SECTION III - PART II - COST

III-2. Identification of Personnel and Estimated Compensation (Form III-2-a)

POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION

2021 Indefinite-Scope Indefinite-Delivery - Request for Proposal
General Professional Design Services
(Architecture, Engineering, Landscape Architecture)

Firm Name	Wiss, Janney, Elstner Associates, Inc.
Yearly Hourly Billing Rate Increase	3%
Mark-up for Sub-Consultants (not to exceed 5%)	5%
Mark-up for Reimbursables (not to exceed 5%)	5%

Position/Classification	Rate Ranges			
	Year 1	Year 2	Year 3	Year 4
Senior Principal**	$293 - 499	$302 - 514	$311 - 529	$320 - 545
Principal**	$215 - 315	$221 - 324	$228 - 334	$235 - 344
Associate Principal**	$201 - 268	$207 - 276	$213 - 284	$219 - 293
Senior Associate**	$150 - 230	$155 - 237	$160 - 244	$165 - 251
Associate III**	$127 - 182	$131 - 187	$135 - 193	$139 - 199
Associate II	$104 - 148	$107 - 152	$110 - 157	$113 - 162
Associate I	$102 - 117	$105 - 121	$108 - 125	$111 - 129
Senior Specialist	$125 - 156	$129 - 161	$133 - 166	$137 - 171
Specialist	$99 - 136	$102 - 140	$105 - 144	$108 - 148
Senior Technician	$89 - 122	$92 - 126	$95 - 130	$98 - 134
Technician II	$82 - 89	$84 - 92	$87 - 95	$90 - 98
Technician I	$63 - 89	$65 - 92	$67 - 95	$69 - 98

** Key Personnel

Please Note: Associate and Principal Levels within WJE apply to Engineers, Architects, or Materials Scientists

APPENDIX A. QUESTIONNAIRE FOR PROFESSIONAL SERVICES

Questionnaire for Professional Services

Department of Technology, Management and Budget
2021 Indefinite-Scope Indefinite-Delivery – Request for Qualifications
Architecture, Engineering, and Landscape Architecture Services
Various Locations, Michigan

INSTRUCTIONS: Firms shall complete the following information in the form provided. A separate sheet may be used if additional space is needed; please key the continuation paragraphs to the questionnaire. Answer questions completely and concisely to streamline the review process.

ARTICLE 1: BUSINESS ORGANIZATION

1. Full Name: Wiss, Janney, Elstner Associates, Inc. (WJE)
   Address: 30700 Telegraph Road, Suite 3580, Bingham Farms, MI 48025
   Telephone and Fax: 248.593.0900 phone | 248.593.8532 fax
   Website: http://www.wje.com E-Mail: nwaraksa@wje.com
   SIGMA Vendor ID: CV0017157

   If applicable, state the branch office(s), partnering organization or other subordinate element(s) that will perform, or assist in performing, the work:

   We anticipate that the majority of the tasks associated with DTMB projects will be staffed through WJE's Michigan and Illinois offices. When justified by the requirements and best interests of the project, we will engage the expertise from our offices nationwide to better serve our clients in the most technically sound and efficient way possible. Please see Appendix C for a list of WJE's locations.

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

   30700 Telegraph Road, Suite 3580, Bingham Farms, MI 48025

   Please list all person(s) authorized to receive and sign a resulting contract and / or subsequent assignment(s). Please include persons name, title, address, email and phone number. Please see Appendix D

2. Check the appropriate status:

   ☐ Individual firm ☐ Association ☐ Partnership ☒ Corporation, or ☐ Combination – Explain:

   If you operate as a corporation, include the state in which you are incorporated and the date of incorporation: Incorporated in Illinois, January 26, 1973.

Include a brief history of the Professional's firm:

Our Firm: WJE is a global firm of consulting engineers, architects, and materials scientists dedicated to providing practical, innovative, and technically sound solutions to problems in both new and existing structures. Since our founding in 1956, we have successfully evaluated and developed repair, rehabilitation, and restoration designs for buildings and structures involving virtually every conceivable construction material, structural system, and architectural component. WJE personnel are leaders in their respective professions and bring with them a level of collective wisdom and expertise that can only be gained through over a half-century of direct, hands-on experience in architectural and structural engineering, materials conservation, chemistry and petrography, performance testing, and instrumentation. In the context of building enclosure design, performance verification, commissioning, and quality assurance services, WJE remains at the forefront of this process and is recognized around the world for its commitment to ensuring the delivery of energy-efficient, environmentally conscious, technically sound, safe, and serviceable buildings and structures.

Our Approach: WJE was founded on one basic principle: Delivering better solutions requires a better understanding of the problem. From the start, we have delivered a hands-on, technically sound, first-principles approach to our work and an enthusiasm for problem solving that is immediately evident in the delivery of our services and the quality of our work. Our history is failure investigation and repair design around the globe and in virtually every climate. Our goal is to bring those lessons forward into design and construction so that we can improve and enhance the quality and performance of our built environment.

Our People: With nearly 700 professionals operating from offices and laboratories located across the United States and around the world, WJE has the resources to respond to virtually any problem and offers a wide range of technical services and expertise in virtually all aspects of design and construction technology. On a regular basis, we gather as a firm in Chicago to attend an in-house conference hosted by our senior staff on new technologies, problem-solving techniques, and lessons learned from recent projects. Through this effort, as well as through the work of the WJE Janney Technical Center and web-based WJE Technical Resource Groups, we continue to explore better solutions for the most complex design and construction challenges

3. Provide an organization chart depicting all personnel and their roles/responsibilities.

   Please see Appendix E.

4. Provide an organization chart depicting key personnel and their roles for a typical assigned project. Include generic supporting staff positions.

   Please see the Organizational Chart in Section II-2.

5. Has there been a recent change in organizational structure (e.g., management team) or control (e.g. merger or acquisition) of your company? If the answer is yes: (a) explain why the change occurred and (b) how this change affected your company.

   No

6. Provide a four year rate schedule per position.
   Please see Section III-2.

ARTICLE 2: PROJECT TYPES AND SERVICES OFFERED

Identify **ALL** project types and professional services for which your firm is exceptionally qualified and experienced.

Provide attachments illustrating a minimum of three examples, with references, of successful projects performed in the last five years for each item checked. Identification of specialties will not exclude selected firms from project types but will assist the DCD Project Directors in matching firms with projects.

Please see Appendix F for project examples and references.

☐ ADA facility assessment and remodeling
☐ Boilers and steam systems
☒ Bridges – pedestrian and vehicular
☐ Building and structure additions
☒ Building envelope investigation, repair, upgrade
☐ Correctional facilities
☐ Door and window replacement
☐ Fire and security alarm systems
☐ Fish passage structures
☒ General architectural and/or engineering design
☐ HVAC equipment replacement, upgrade, selection
☐ HVAC controls replacement, upgrade, selection
☐ Interior remodeling and renovation
☐ Laboratory facilities
☐ Landscape architecture
☐ Land Planning
☐ Locks, Dams, Water Diking Systems and Water Control Structures
☒ Maintenance and facility preservation
☐ Marine work - boat launch facilities, docks, harbors
☒ Parking and paving
☒ Recreation and Sports Facilities / Fields
☒ Roof repair, restoration and/or replacement design
☐ Soil Erosion Sedimentation Controls
☐ Site surveying
☐ Stormwater management and drainage plans
☒ Structural investigation and assessment
☐ Toilet and/or shower room remodeling or design.
☐ Trail design and development
☐ Wastewater systems
☐ Water supply systems

ARTICLE 3: PROJECT LOCATION

Identify the regions where your firm can most efficiently provide services. Assignments may vary from the regions checked, depending on the specialties and services required.

☐ Western Upper Peninsula (west of Marquette)
☐ Eastern Upper Peninsula (east of Marquette)
☐ Northern Lower Peninsula (north of Grayling)
☒ Saginaw Bay area (east of 127, north of I-69 and M 57, south of Grayling)
☒ Western Lower Peninsula (west of 127, north of Muskegon, south of Grayling)
☒ Central Lower Peninsula (east of Battle Creek, west of Chelsea, south of M 46 and M 57)
☒ Southwestern Lower Peninsula (west of Battle Creek, south of Muskegon)
☒ Southeastern Lower Peninsula (east of Chelsea, south of I-69)

We routinely work and are willing to provide services anywhere within the state to include the Upper Peninsula.

ARTICLE 4: CONTRACT UNDERSTANDING

The following items should be addressed on the assumption that your firm is awarded an Indefinite-Scope, Indefinite-Delivery contract. (See attached sample contract).

4.1 Is it understood that your firm is required to respond to small projects (less than $25,000) as well as larger projects?

Yes ☒ No ☐

4.2 Is it understood that there is no guarantee of any work under this contract?

Yes ☒ No ☐

4.3 Is it understood that your firm will be required to execute the attached standard State of Michigan contract language for professional services?

Yes ☒ No ☐

4.4 Is it clearly understood that professional liability insurance is required at the time of execution of the ISID contract? (See Article 5 of the attached Sample Contract.)

Yes ☒ No ☐

4.5 Is it understood that your firm must comply with State of Michigan law as it applies to your services?

Yes ☒ No ☐

4.6 Is your firm familiar with Design and Construction's MICHSpec and DCSpec contracts and the enforcement of such?

Yes ☒ No ☐
If yes, explain:

For State Agencies, construction documents are prefaced by the MICHSPEC™ (State of Michigan Owner-Contractor Model Documents) specification; this establishes the relationships during construction, of the State, the Professional Service Contractor, and the Construction Contractor. Similarly, DCSpec Medium General Conditions and Contract is for use on projects not exceeding $1M.

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

Yes ☒ No ☐
If yes, explain: Our recent experience with the State of Michigan includes the following projects:

Project	Contact
Grand Tower Exterior Waterproofing	Joel Gordon - gordonj1@michigan.gov
Cadillac Place - 2014 & 2020-21 Facade Assessment and Repair Design - Flagpole Assessment - Structural Assessment	Chris Bahjet - bahjetc@michigan.gov Al Vettese - vetteseE@michigan.gov
Constitution Hall and Hall of Justice - Water Infiltration Investigation	Robert Gruesbeck - gruesbeckr@michigan.gov

ARTICLE 5: CAPACITY AND QUALITY

5.1 Briefly describe your firm's methods and procedures for quality control for your deliverables and services.

WJE utilizes a consistent internal technical review process for all submitted deliverables. The review process is a team-based knowledge sharing method that provides technical expertise and lessons learned from other similar projects WJE has worked on throughout the country. Often times the review process is an iterative effort that requires open communication amongst WJE team members to ensure the client is receiving, at minimum, the level of quality the Owner is expecting. In terms of controlling quality for our services the WJE Project Manager, assisted by a Project Advisor, will assemble a team of qualified personnel consistent with the Organizational Chart indicated in Section II-2 for Personnel, indicating project team members, roles, and direct lines of communication.
.

5.2 Has your firm been involved in claims or suits associated with professional services errors and/or omissions?

Yes ☒ No ☐
If yes, explain:

WJE is involved in over 7,000 contracts per year. As a consequence of these contracts, WJE is brought into a variety of lawsuits. Nevertheless, during the past five years, WJE's Professional Liability carrier has not paid a single professional liability claim on behalf of WJE. Summary status of professional legal claims/disputes over the last five years are provided in Appendix G.

5.3 Will there be a key person who is assigned to a project for its duration?

Yes ☒ No ☐

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

WJE is an independent contractor. WJE is a consulting firm specializing in providing professional structural and architectural services. WJE, the DTMB, and State Agency would enter a contract that would facilitate the DTMB's, and the State Agency's stated objective. WJE has successfully worked on numerous projects with the State, and we would anticipate entering into similar agreements to those with which we have entered in the past.

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

Typically there is a section in the bid documents that addresses how bidders can propose a substitution during the bid process. Based on how the specifications and bid documents are written, this material substitution is often times welcome to promote competition, minimize cost, and maximize performance. Given the bidder followed the procedures to submit the material substitution, WJE will perform a review to verify the substitution meets the minimum design criteria necessary to perform during service and achieve the desired quality satisfactorily for the Owner.

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

Our approach would include requesting the contractor submit a detailed description of the substitution for the specified material or detail. Upon receipt, we would perform a review to verify whether or not the substitution meets the minimum performance and quality requirements associated with the design intent. If the substitution meets the required design performance and quality criteria and the Owner approves, the substitution will be considered; if not, the substitution is rejected. If the Owner and WJE proceed to accept the substitution a change order would then be prepared to document the change in cost relative to the Constract Sum or Guaranteed Maximum Price and the change in Contract Time.

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

It is WJE's practice to assemble a team of the most qualified individuals based on project needs. These Project Team members are involved on all phases of the project, not just one or two, which provides continuity to the project and the Client. This allows for important information to be transferred effectively from the assessment to the design and construction phases of the project. Our most common practice is for a Project Manager to remain so for the entire project. This provides a consistent thread for communication with our clients and with the project team for the life of the project. We intend to utilize our typical approach to project management for the State of Michigan which includes a licensed member of our professional staff serving as a Project Manager. The Project Manager will be responsible for organizing the approach to each phase of work and will serve as the primary point of contact for routine communication and will coordinate the collaboration and delegation of tasks. The Project Manager will also oversee administrative duties required for project deliverables and billing. Should the assigned Project Manager require extended leave of any kind, another qualified member of the project team will step in to perform the usual duties of the project manager and serve as the temporary primary point of contact as required. A Project Advisor will serve to offer technical assistance and review to maintain internal quality control for each phase and deliverable. At WJE, our team-based approach to knowledge sharing fosters communication and sharing of technical expertise and lessons learned from projects completed throughout the country. This important element of our core value will have a direct and positive impact on our collaboration with the State of Michigan. Our team members are carefully selected based on the necessary experience and expertise required by the project.

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

Yes ☒ No ☐

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

Our methods of estimating construction costs are based on referencing unit or lump sum pricing established with previous projects of similar scopes of work within the local or regional area, referencing RSMeans Cost Data, and/or engaging with local contractors to ask for estimated unit prices for select work items. Utilizing the methods above and/or combining some of the methods to serve a cross-check, we are typically able to develop reasonable conceptual estimates of construction cost ranges.

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

Our approach to minimizing construction cost over-runs starts with developing detailed Construction Documents in an effort to alleviate ambiguity for the contractor(s). The intent is to minimize the ambiguity and reduce the unknowns as much as possible so bidders can provide the most accurate estimate of construction costs up-front.

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

This will be determined on a project-by-project basis and per the needs/requirements of the DTMB. Given WJE is a consulting firm that specializes in providing technical solutions, technical review, and technical recommendations based on field data, document review, and analysis we expect construction administration to range from 25-55% of the PSC. In the event that a project's scope of work consists of only construction administrative services the percent would be 100%.

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

This would be based on project demands and the DTMB requirements. WJE provides the following in-house services: bridge inspection, assessment, and repair design; building enclosure (roofing/exterior walls/waterproofing) investigation, repair design, upgrade design, testing, and rehabilitation design; general architecture and/or engineering design; geotechnical engineering; metallurgy and applied mechanics; parking structure assessment, repair design, maintenance recommendations; roof structure and roofing assessment/repair/restoration and/or replacement design; and structural investigation and assessment. Sub-consultants would generally include services needed to provide access (e.g., inspection openings, scaffolding, swing-stage, manlift, etc.) industrial hygeniests (e.g., asbestos, mold, lead testing and/or abatement, etc.), Landscape Architetecture, Environmental Engineering and Water Resource Engineering. For a typical professional design services project, we anticipate performing 90-95% percent of the work with in-house staff and 5-10% percent with sub-consultants.

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

WJE can usually provide a preliminary response within 24 hours. WJE's many advantages over our competitors include our extensive project experience and staff resources, both locally and nationally. Our work often involves projects with demanding schedules and fast turnarounds. Project schedule and the safety and impact on occupants are also significant factors in projects involving existing buildings, which comprise the major portion of WJE's work. Therefore, we are well-versed in the intricacies involved in such a project. Since we understand and respect the pace of construction and the need to minimize inconveniences to building occupants, WJE is committed to providing timely responses to questions, requests for information, construction observations, and testing. Regardless, clear and easy communication is considered critical to the success of our projects, and WJE strives to keep these lines of communication open and free flowing.

5.14 How do you assess whether a construction bidder is responsive and responsible?
The bidding documents provide specific details to bidders regarding what information and documention to include in their bids, how to submit their bids, and when to submit their bids. A 'responsive' bidder will follow and meet all of the indicated criteria in the bid documents. A 'responsible' bidder will meet the minimum qualifications, indicated in the bid documents, to complete the project work successfully by being prepared with the necessary capital, materials, equipment, personnel, and experience to meet the satisfaction of the Owner and project.

5.15 Describe your firm's understanding of Sustainable Design and LEED Certification.

Executing LEED's principles and strategies aligns with our typical role on projects in that clients seeking to create or improve building or enclosure performance benefit from the knowledge we've gained from the investigation of problematic building performance. We apply our multidisciplinary expertise in building technology to encourage energy efficient solutions that reduce the environmental impact of buildings, promote resource conservation, and provide healthy indoor environments for the occupants. Our commitment to these values are also demonstrated through our membership with the USGBC and staff of 40 LEED Accredited Professionals. While WJE has a history of providing inherently sustainable solutions to unique problems, a commitment was made in 2001 to educate our professionals about sustainability issues that are integral to our work and clients' needs. Our commitment manifested in the establishment of an in-house Sustainability Technical Resource Group (TRG) and fully supporting staff in obtaining LEED credentials. Combined, our Sustainability TRG members and LEED-Accredited Professionals facilitate the education and implementation of integrated solutions that utilize the strengths and breadth of experience at WJE. Whether our services are provided for historic or contemporary structures, we endorse the mission of the U.S. Green Building Council (USGBC) to enable environmentally and socially responsible, healthy and prosperous environments that improve the quality of life.

5.16 Describe your experience with similar open-ended contracts.

WJE has a wealth of experience working with open-ended contracts for Federal, State and Local governments, as well as with insurance companies, national chains, commercial real estate companies and many others. WJE currently holds IDIQ contracts with the National Park Service for nationwide structural investigation and seismic upgrades, and for historic structure reports and cultural landscape reports in the Southeast region.

5.17 Describe your methodology for obtaining information about the existence and condition of an existing, facility's components and systems.

Based on the level of detail required some components and systems of a building may be viewed using historical or modern aerial imagery accessed from online sources; WJE has a paid subscription to aerial imagery database through a private vendor. However, when less costly means of viewing the building are exhausted WJE typically requests an onsite visit to perform a field observation effort. Based on project demands and budget, the field observation effort could be kept to a cursory site assessment consisting of a preliminary walk-thru or drive-by to obtain a general idea of the condition and/or extent of the conditions. However, based on experience WJE typically schedules a planned site visit to obtain information regarding existing conditions. Based on the areas and types of conditions to be viewed, WJE would coordinate an access plan with the DTMB management team by contacting building maintenance and/or authorized contractors to provide access and required equipment. For example, to observe distressed conditions located within the building façade WJE would work with the DTMB to coordinate façade access equipment such as a swing stage or a manlift to view close-up conditions. Efforts such as inspection openings that require destructive methods to remove materials, would require the DTMB's approval. Upon the DTMB's approval, WJE would establish a plan that would indicated the quantity, locations, and number of openings requested.

5.18 Describe your approach to securing permits/approvals for the following: campgrounds, critical dunes, coastal zone management, projects adjacent to Michigan lakes and rivers.

Typically permit acquisition is a responsibility of the contractor performing the work. Based on our experience it is more economical to have the contractor apply for the required permits than have the A/E staff take on the permitting effort. Depending on the type of project and scope of work WJE can work with the DTMB in providing administrative services to develop and/or review a customized Permit Plan to serve the project requirements.

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

We request that the Contractor notify the Owner's Representative and Architect/Engineer at once in writing of work that deviates from the basis for payment and for which an adjustment in compensation is desired. Measure, quantify, and document all such work related to the deviation of project scope, and allow Architect/Engineer to verify the accuracy of additional scope, prior to performing Work that might make verification difficult or impossible. Adjustments will be considered only if said deviations, both plus and minus, have been included in the determination of the average deviation from the Unit basis for payment.

APPENDIX B. PERSONNEL QUALIFICATIONS

PERSONNEL QUALIFICATIONS

Neil D. Waraksa | Associate III

EDUCATION

- Macomb Community College
  - Associate Degree, General Education, 2005
- Lawrence Technological University
  - Bachelor of Science, Civil Engineering, 2010
  - Master of Civil Engineering, 2014

PRACTICE AREAS

- Structural Analysis
- Instrumentation/Monitoring/ Load Testing
- Repair and Rehabilitation
- Failure/Damage Investigations
- Facade Assessment
- Building Enclosure Testing

REGISTRATIONS

- AWS Certified Welding Inspector
- Professional Engineer in MI

PROFESSIONAL AFFILIATIONS

- American Welding Society (AWS)
- American Wood Council (AWC)

CONTACT

nwaraksa@wje.com
248.594.0160
www.wje.com

EXPERIENCE

Since joining WJE in 2017, Neil Waraksa has been involved with projects related to structural engineering and architectural claddings. His responsibilities have included field investigation and analysis of existing and damaged structures, development of technical repair documents, conducting field-performed investigative testing, and performing construction observations and assessments. He has performed structural analysis on masonry, wood and steel structures. Mr. Waraksa has also completed multiple condition assessments and has experience with water penetration investigations and review of design/construction regulations.

Prior to joining WJE, Mr. Waraksa performed structural material testing as a project engineer at Lawrence Technological University, including GFRP, CFRP, concrete and steel materials. Additionally, he performed construction materials testing, including concrete compressive strength tests and soil properties testing.

REPRESENTATIVE PROJECTS

Structural Analysis

- First Presbyterian Church of Adrian - Adrian, MI: Ceiling collapse investigation; timber truss analysis and repair design; mortise and tenon joinery analysis
- 4967 Crooks Screen Wall - Troy, MI: Assessment, analysis, and design for rooftop screen wall
- Stewart Building - Adrian, MI: Investigation, analysis and design documentation for masonry wall and parapet construction
- Versatube Corporation - Troy, MI: Field investigation, assessment and analysis of HSS steel members during arbitration

Instrumentation/Monitoring/Load Testing

- JSP South Building Repairs - Detroit, MI: Load testing of facade access rooftop anchorages to verify compliance with MIOSHA regulations
- Beaumont GP Parking Renovation - Grosse Pointe, MI: Traffic coating adhesion testing in accordance with ASTM standards
- Village Plaza - Dearborn, MI: Performance of prayed fire-resistive material (SFRM) bond testing in accordance with ASTM standards and Michigan Building Code

Repair and Rehabilitation

- Concordia University Concrete Staircase - Ann Arbor, MI: Development of connection design and construction drawings for the attachment of concrete stair structure to existing masonry wall
- Beaumont GP Parking Renovation - Grosse Pointe, MI: Double-tee concrete beam parking structure; assessment of damaged concrete elements by sounding and nondestructive methods

Failure/Damage Investigations

- Versatube Corporation - Troy, MI: Fire loss at manufacturing plant; assessment of damage to steel structural elements
- 1115 N. Linden Porch Collapse - Flint, MI: Review of concrete masonry foundation wall collapse; code review and lateral earth pressures requirements

Facade Assessment

- MGM Grand Detroit Hotel and Casino - MI: Condition assessment of existing facade precast concrete construction for owner and to satisfy the City of Detroit facade ordinance
- Kahn Building- Detroit, MI: Condition assessment of existing facade limestone panel construction for owner and to satisfy the City of Detroit facade ordinance
- Marquette Building - Detroit, MI: Assistance with construction period quality control services during restoration of facade terra cotta, brick masonry, limestone, and steel lintel construction

PERSONNEL QUALIFICATIONS

Ross J. Smith | Principal

EDUCATION

- University of Michigan
  - Bachelor of Science in Engineering, Civil and Environmental Engineering, 2000
  - Master of Science in Engineering, Civil (Structural) Engineering, 2001

PRACTICE AREAS

- Building Enclosure Consulting and Commissioning
- Structural Design
- Repair and Rehabilitation
- Failure/Damage Investigations
- Roofing and Waterproofing
- Litigation Consulting
- Facade Assessment
- Peer Review

REGISTRATIONS

- Certified Construction Documents Technologist (CDT)
- LEED Accredited Professional, BD+C
- Professional Engineer in MI, IN, and PA

CONTACT

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616.401.2228
www.wje.com

EXPERIENCE

Ross Smith is experienced in structural evaluation, building enclosure commissioning, unique failure investigations, repair design, and construction quality control. His work also includes structural and architectural failures related to water infiltration, fire, wind, snow, condensation and material failures. Mr. Smith also specializes in full-building condition surveys, coordinating multiple engineering disciplines for a comprehensive analysis and then assisting owners in developing and administering asset management systems. He is also experienced in new building design, sustainable construction, peer reviews, and litigation assistance.

REPRESENTATIVE PROJECTS

Building Enclosure Consulting and Commissioning (BECx)

- University of Michigan, Metro Health Hospital - Wyoming: Comprehensive building enclosure assessment of roofing, windows, masonry, metal panels, and building structure
- Gordie Howe International Bridge, US POE and Canadian POE facilities - BECx services
- VA Outpatient Clinic - Wyoming, MI: Peer review and construction observation
- Sparrow Ionia Hospital - Ionia, MI: Peer review, construction observation, and performance testing
- Various Toyota Production Facilities - Midwest U.S.: Peer review and BECx

Structural Design

- University of Notre Dame, Hesburgh Library - South Bend, IN: Renovation structural peer review and shoring design
- University of Notre Dame, Joyce Athletic and Convocation Center - South Bend, IN: Code review and repair design for suspended catwalk in basketball arena
- Landfill Gas Reclamation Facilities - MI and PA: New design, structural rehabilitation, and retrofit for engine exhaust stack support

Repair and Rehabilitation

- Battle Creek City Hall - Battle Creek, MI: Terra cotta pediment inspection and restoration.
- Salvation Army Adult Rehabilitation Center - Grand Rapids, MI: Full building recladding and window replacement
- Univ. of Michigan, Various Facilities - Ann Arbor: Facade investigation, testing, and repair design; parking ramp improvements
- McKay Tower - Grand Rapids, MI: Building assessment; Terra cotta rehabilitation
- Multiple Urban High-Rises - Chicago, IL; St. Louis, MO; and Grand Rapids, MI: Investigation of thin-stone granite, masonry, terra cotta, limestone, and metal/glass cladding systems
- Grand Rapids Public Museum, VAMC - MI: Roof and facade inspections, repairs, and recommissioning

Failure/Damage Investigations

- Fire, tornado/high wind, snow, and flood related building damage/collapse investigations; repair design drawings
- Municipal Water Main Collapse - Holland, MI: Investigation and litigation support for failure and building collapse
- Unique Failure Investigations - Floating wave attenuation system; channel induction furnace core failure; fabric structure; liquid nitrogen leakage

Roofing and Waterproofing

- Bankers Life Fieldhouse - Indianapolis, IN: Rappelling-assisted field investigation, repair drawings, and specifications
- Ludington Pumped Storage Facility - Ludington, MI: Roof plaza and concrete water stop investigation and repair design
- City of Grand Rapids - MI: Roofing inspection, asset rating, and budgeting of more than twenty city-owned and managed facilities

Litigation Consulting

- University of Michigan Football Stadium - Ann Arbor: Structure recoating construction claim support
- Library of Congress, NAVCC - Culpepper, VA: Architectural peer review, detail redesign, construction administration, and litigation documentation support

AWARDS

- Engineer of the Year, MSPE, Western Chapter, 2020
- Young Engineer of the Year, MSPE, Western Chapter, 2009
- Young Structural Engineer of the Year, SEAMi Western Michigan Chapter, 2009

PERSONNEL QUALIFICATIONS

Brian J. Tognetti | Principal and Unit Manager

EDUCATION

- Lawrence Technological University
  - Bachelor of Science, Architecture, 1996
- University of Michigan
  - Master of Architecture, Construction Emphasis, 1998

PRACTICE AREAS

- Building Enclosure Testing
- Code Consulting
- Construction Troubleshooting
- Facade Assessment
- Failure/Damage Investigations
- Peer Review
- Repair and Rehabilitation
- Roofing and Waterproofing

REGISTRATIONS

- Architect in IN, KS, MI, MO, OH, TN, and WV
- Certified Construction Contract Administrator (CCCA)
- Construction Documents Technologist (CDT)
- National Council of Architectural Registration Boards
- State of Michigan Bureau of Construction Codes (BCC) Certified Instructor for PA 54

CONTACT

btognetti@wje.com
248.593.0900
www.wje.com

EXPERIENCE

Since joining WJE in April 2004, Brian Tognetti has performed various building envelope technical consulting services, and failure/damage investigations related to facade, glazing, roofing, and waterproofing systems. His projects have addressed client concerns regarding design or installation issues, water infiltration, condensation, air/thermal control, material failure, and damage assessment. Mr. Tognetti also specializes in building envelope peer reviews and code consulting services.

Prior to joining WJE, Mr. Tognetti was a project architect facilitating the planning, design, documentation, and construction administration of new construction projects at the architectural and engineering firm SmithGroup. His experience there primarily included professional and college stadiums and practice facilities, corporate office headquarters, university facilities, and health care projects. This experience is evident in Mr. Tognetti's proven ability to lead project teams, provide technical consultation, and effectively mitigate construction issues in the field.

REPRESENTATIVE PROJECTS

Building Enclosure Testing

- Broad Museum - East Lansing, MI: Envelope interface detailing consulting, testing and construction period quality control services
- Auto Owners Insurance Headquarters - Lansing, MI: Peer review, envelope testing, and construction period quality control services

Code Consulting

- Various Structures - Joplin, MO: Damage assessment and code application analyses relative to tornado damage
- Heritage Village Senior Living Development - Warren, MI: Architectural standard-of-care and ADA analyses during litigation
- First Baptist Church - Oak Park, MI: Fire damage assessment, code analyses, and repair documents

Failure/Damage Investigations

- Central Michigan University - Mount Pleasant: Facade investigation of engineered stone cladding
- University of Michigan - Ann Arbor: Zinc roofing failure and laboratory analysis
- PV Public Library - Prescott Valley, AZ: Water infiltration investigation through metal roofing and glazed curtain wall

Peer Review

- Denver International Airport - CO: Peer review of building envelope detailing for extensive addition
- Toyota Supplier Center - Saline, MI: Peer review and building enclosure commissioning services for new facility

Repair and Rehabilitation

- Concord Towers - Madison Heights, MI: Masonry facade repairs and elastomeric waterproof coating replacement
- First Independence Bank - Detroit, MI: Glazed curtain wall replacement, concrete facade cleaning, and low-slope reroofing
- LaSalle Apartments - Toledo, OH: Historic limestone, terra cotta, and clay brick masonry facade restoration
- Hill Auditorium - Ann Arbor, MI: Historic clay brick masonry and terra cotta cornice restoration

Roofing and Waterproofing

- SPS Building - Lansing, MI: Design and construction administration of tear-off and installation of new built-up roofing
- Dental Building - Ann Arbor, MI: Split-slab plaza waterproofing replacement
- Lowes Corporate Headquarters - Mooresville, NC: Investigation and assessment of copper roofing system
- Michigan State Capitol - Lansing: Plaza waterproofing consulting and design for proposed large underground addition

PROFESSIONAL AFFILIATIONS

- Construction Specifications Institute (CSI) - Metropolitan Detroit Chapter
- International Code Council (ICC)
- Southeast Michigan Building Officials and Inspectors Association (SEMBOIA)

TECHNICAL COMMITTEES

- AIA Detroit - Building Codes & Regulations Committee, vice-chair

PERSONNEL QUALIFICATIONS

Christopher Sass | Associate Principal

EDUCATION

- University of Illinois at Chicago
  - Bachelor of Architecture, Building Technology, 1985

PRACTICE AREAS

- Building Envelope Assessment
- Construction Observation
- Prepurchase Surveys
- EIFS and Stucco
- Masonry Deterioration
- Roofing and Waterproofing
- Sealants

REGISTRATIONS

- Registered Architect in IL and MI

PROFESSIONAL AFFILIATIONS

- ASTM International (ASTM), committee chair
- Building Owners and Managers Association (BOMA), TOBY co-chair and judging team leader
- Masonry Institute of Michigan (MIM) - Board of Trustees, president

CONTACT

csass@wje.com
248.593.0900
www.wje.com

EXPERIENCE

From 1978 to 1985, Mr. Sass performed construction observation and prepared presentation and contract documents while working with Wight and Company in Illinois. Since joining WJE in 1985, Mr. Sass has worked on a variety of projects related to the investigation and repair design of distressed conditions in buildings. He has directed and participated in numerous investigations and design of repairs involving plazas, roofing, masonry walls, EIFS cladding, curtain walls, windows, sealants, and water infiltration. These projects have also included insurance claim assessments and work as an expert witness. Mr. Sass has recently been involved in projects that include facade investigations, development of repair documents, and construction period services. The work has been focused on water infiltration, masonry, curtain walls, and roofing.

REPRESENTATIVE PROJECTS

Building Envelope Assessment/Construction Observation

- Book Cadillac Hotel - Detroit, MI: Facade inspection and repair documents
- Town Center - Southfield, MI: Facade investigation, repair documents, and construction period services
- Park Shelton Apartments - Detroit, MI: Facade investigation, repair documents, and construction period services
- Grand Circus Park Centre - Detroit, MI: Facade investigation and repair recommendations
- Barix Clinic of Ohio - Groveport: Investigation of water infiltration/condensation at EIFS cladding
- 789 East Eisenhower Parkway - Ann Arbor, MI: Investigation and development of repair for color variation of precast concrete panels

Masonry Deterioration

- 777 East Eisenhower Parkway - Ann Arbor, MI: Prepare repair documents and observe repairs
- Penobscot Building - Detroit, MI: Evaluation of the distressed terra cotta masonry cladding

Roofing and Waterproofing

- State of Michigan Hall of Justice - Lansing: Investigation of distress in built-up roofing
- Westland Promenade, Westchester, and Shops of Kendal Shopping Malls - Hialeah, FL, and Miami, FL: Investigation of built-up roofing damage resulting from Hurricane Wilma
- Army Aviation Support Facility Hangar - Grand Ledge, MI: Evaluation of distress of single-ply PVC roofing
- Cornerstone Church - Highland, MI: Investigation of water infiltration/condensation of pre-engineered metal building envelope

TECHNICAL COMMITTEES

- ASTM C24 - Building Seals and Sealants, committee chair
- MIM Board of Trustees, president
- MIM Generic Wall Design Committee
- BOMA TOBY Committee, co-chair and judging team leader

PERSONNEL QUALIFICATIONS

Julie A. Szabo | Associate Principal

EDUCATION

- Ryerson University
  - Bachelor of Architectural Science, Building Science, 2002
- Concordia University
  - Master of Building Engineering, Building Science, 2003

PRACTICE AREAS

- Building Science
- Water/Air Leakage Assessment
- Hygrothermal Analysis
- Peer Review
- Construction Troubleshooting
- Repair and Rehabilitation
- Roofing and Waterproofing
- Windows/Curtain Wall/Skylights

PROFESSIONAL AFFILIATIONS

- American Society of Heating, Refrigerating and Air-Conditioning Engineers
- Building Enclosure Council
- Air Barrier Association of America
- Ontario Association of Certified Engineering Technicians and Technologists

CONTACT

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EXPERIENCE

Julie Szabo joined WJE in 2007 and has more than seventeen years of dedicated experience in building enclosure and building science consulting services. She has extensive experience investigating enclosure performance issues, including air leakage, water infiltration, thermal performance, and condensation.

Ms. Szabo has worked on hundreds of projects involving the investigation, rehabilitation, and/or new construction of numerous exterior building enclosure components and systems. These include masonry cavity wall and mass wall construction, natural and cultured stone cladding, precast and cast-in-place concrete, below- and above-grade waterproofing and roofing systems, metal panel rainscreen systems, EIFS, and windows and curtain walls.

REPRESENTATIVE PROJECTS

Water/Air Leakage Assessment

- University of Michigan, North Campus Research Complex - Ann Arbor: Water leakage investigation
- Johns Hopkins University, Gilman Hall - Baltimore, MD: Moisture investigation
- Johns Hopkins University, Cancer Research Buildings I and II - Baltimore, MD: Air leakage investigation and repairs
- Children's National Medical Center - Washington, D.C.: Various water penetration investigations
- Morgan State University, Center for the Built Environment and Infrastructure Studies - Baltimore, MD: Water leakage investigation and repairs
- University of Michigan, Palmer Commons - Ann Arbor: Air leakage investigation

Peer Review

- Coppin State University, Science and Technology Building - Baltimore, MD: Constructability review of exterior enclosure systems
- Park Van Ness Multifamily Residential - Washington, D.C.: Exterior enclosure consulting and peer review
- The Pennsylvania State University, South Halls - State College: Exterior enclosure consulting and peer review
- 600 Massachusetts Avenue - Washington, D.C.: Exterior enclosure consulting and peer review
- Montgomery College Science East and Science West - Rockville, MD: Exterior enclosure consulting and peer review
- Morgan State University, Behavioral Sciences Center - Baltimore, MD: Constructability review of exterior enclosure systems
- Brush Park Building A-5 - Detroit, MI; Constructability review of enclosure assemblies

Construction Troubleshooting

- BRAC 133 Washington Headquarters Service - Alexandria, VA: Review of exterior enclosure during construction
- Children's National Medical Center, Cardiac Intensive Care Unit - Washington, D.C.: Quality control review of new exterior wall system
- Richmond Judicial Center - Richmond, VA: Review of exterior enclosure during construction
- The Pennsylvania State University, South Halls - State College: Review of renovation and new construction
- The Reserve at Tinner Hill - Falls Church, VA: Review of exterior enclosure during construction
- Jefferson at Inigo's Crossing - North Bethesda, MD: Review of exterior enclosure repairs during repairs
- Pike & Rose Residential Tower - North Bethesda, MD
- 1011 M Street Residential, Washington, DC: On-site review of exterior enclosure during construction
- City Club Apartments - Detroit, MI: Review of enclosure during construction phase
- 909 Rose Avenue - North Bethesda, MD: On-site review of exterior enclosure during construction

Repair and Rehabilitation

- Jefferson at Inigo's Crossing - North Bethesda, MD: Roof replacement and sealant replacement
- 12100 Sunset Hills Road - Reston, VA: Below-grade waterproofing repairs
- Children's National Medical Center - Washington, D.C.: Expansion joint and roofing repairs
- Courtyard Marriott - Silver Spring, MD: Window replacement and Exterior wall repairs

PERSONNEL QUALIFICATIONS

Cheryl L. Early | Senior Associate

EDUCATION

- Michigan Technological University
  - Bachelor of Science, Civil Engineering, Structural and Transportation Emphasis, 1996

PRACTICE AREAS

- Structural Analysis
- Historic Preservation
- Structural Design
- Historic Structures Reports
- Failure/Damage Investigations

REGISTRATIONS

- Professional Engineer in ID, IN, MI, and WI

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers
- Association of Preservation Technology Eastern Great Lakes Region Chapter President
- Chi Epsilon Civil Engineering Honor Society
- Michigan Historic Preservation Network
- National Trust for Historic Preservation

CONTACT

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248.593.0900
www.wje.com

EXPERIENCE

Cheryl Early joined WJE in 2016 with more than twenty years of experience in structural engineering, structural design and historic preservation. Leveraging her practical knowledge of vintage construction detailing with her sound understanding of engineering principles, she is able to creatively solve complex or unique structural issues for new buildings and renovation projects.

Ms. Early is experienced with many structural materials including concrete, masonry, steel and wood, as well as aluminum, carbon fiber, autoclaved aerated concrete (AAC), and historic materials. She has worked with structures built in the 1800s through new construction, providing a range of services from feasibility studies through construction administration tasks. Ms. Early has provided consulting and design services for numerous building types including monuments, residential, commercial, educational, healthcare, governmental, pedestrian bridges, and mixed-use properties.

REPRESENTATIVE PROJECTS

Structural Analysis

- Starkweather Elementary School - Plymouth, MI: 1930s cast-in-place concrete floor and masonry structure analysis, construction documents and consulting
- Chelsea Milling Company (Jiffy Mix) - Chelsea, MI: Wood, masonry, steel, and concrete structural alterations and assessments*
- Harry S. Truman Home - Independence, MO: Review and reinforcement of private home for museum use*

Historic Preservation

- Belle Isle Park - Detroit, MI: Assessment and repair design for five prominent buildings
- Detroit Institute of Arts Film Theater - Detroit, MI: Renovation of the grand stair and arcade renovation*
- Traverse City Opera House - Traverse City, MI: Restoration of the opera house's block of buildings*
- Ulysses S. Grant National Historic Site - St. Louis, MO: Relocation and restoration of timber-framed barn connected to new visitor center and office building*
- Brown vs. Board of Education Monroe School - Topeka, KS: Preservation of concrete structure and damaged roof repair*
- Jackson Art Lofts - Jackson, MI: Adaptive reuse of the state's first prison and adjacent buildings into residential and artist spaces*

Structural Design

- Woodward Willis Building - Detroit, MI: New steel moment frame structure with composite concrete floor*
- DNR Maintenance Garage, Muskallonge Lake State Park - Newberry, MI: New wood-framed maintenance garage*
- 52, 71, and 74 East Garfield - Detroit, MI: Assessment and rehabilitation of masonry and wood-framed structures*
- Chelsea Medical Office Building - Chelsea, MI: New multistory, steel moment frame with composite concrete floor structure*

Historic Structures Reports

- Michigan Offshore Lights - Upper Michigan: Thunder Bay Island, Manitou Island, Gull Rock and Stannard Rock
- Keweenaw National Historical Park - Calumet, MI: Historic structures report and structural consulting for several buildings*
- Tallgrass National Prairie Preserve - Strong City, KS: Structural portions of conditions assessment report on more than twenty-five National Park structures and historic structures report on the main house*
- Fort Gratiot Lighthouse - Port Huron, MI: Historic structures report and exterior rehabilitation*

Failure/Damage Investigations

- Iroquois Bike Shop - Mackinac Island, MI: Investigated condition of building and exposed timber piles*
- City Hall - Marine City, MI: Investigated wall failure; structural design, documentation*
- Amtrak Passenger Stations - Jackson and Niles, MI: Repair of multiple structures*
- Irish Hills Twin Towers - Onsted, MI: Field evaluation*
- Fenton Seminary - Fenton, MI: Assessment of wall collapse*

**Indicates with previous firms*

PERSONNEL QUALIFICATIONS

Matthew E. Lewis | Senior Associate

EDUCATION

- Michigan Technological University
  - Bachelor of Science, Civil Engineering, 2002
  - Master of Science, Civil Engineering, 2003

PRACTICE AREAS

- Code Compliance Review
- Construction Observation
- Damage Assessment and Documentation
- Litigation Consulting
- Testing and Instrumentation
- Repair and Rehabilitation Design
- Structural Evaluation

REGISTRATIONS

- Professional Engineer in MI

PROFESSIONAL AFFILIATIONS

- American Institute of Steel Construction (AISC)
- Detroit Area Construction Association (DACA)

CONTACT

mlewis@wje.com
248.593.0900
www.wje.com

EXPERIENCE

Matthew Lewis is experienced in the investigation of historic buildings, parking structures, stadiums, municipal structures, and smokestacks as well as retail, office, and residential buildings. His projects involve field investigation, structural analysis, nondestructive testing and instrumentation, structural damage and failure assessment, preparation of construction documents and drawings, and building code investigation. Mr. Lewis also has experience as a Level 1 infrared thermographer through the Infrared Training Center (ITC) and is a Level 1 member of WJE's difficult access team.

As a graduate student at Michigan Technological University, Mr. Lewis performed research in fatigue analysis and evaluation of large steel overhead sign support structures. The result of his work was a comparative method for structures based on a combination of their economic and performance characteristics. This method was made available to state departments of transportation nationwide for use in the development of a stronger, more economic sign support structure.

REPRESENTATIVE PROJECTS

Construction Observation

- Conner Creek - Detroit, MI: Observation of extensive reinforced concrete repairs in a historic CSO facility
- Palo Verde Water Reclamation Facility - Palo Verde, AZ: Observation of concrete repairs for large water treatment structures at nuclear power plant

Damage Assessment and Documentation

- Cadillac Place - Detroit, MI: Causation investigation for partial collapse of historical plaster ceiling
- Joplin Schools - Joplin, MO: Structural assessment of tornado damage at multiple educational facilities

Litigation Consulting

- Center for Forensic Psychiatry - Ann Arbor, MI: Analysis of construction change order items related to project cost overrun and delay
- Criminal Justice Center - Huntsville, AL: Extensive field inspection and evaluation of construction documents for new correctional facility

Testing and Instrumentation

- Comerica 411 Building - Detroit, MI: Use of ground penetrating radar to locate post-tensioned tendons during repair and renovation construction
- M-25 Bridge Replacement - Caseville, MI: Condition surveys and construction vibration monitoring for historic buildings

Structural Evaluation

- Arkansas Public Schools - Little Rock and Morrilton: Field inspection of fire-retardant-treated truss structures
- Major Retail Store Chain - Various Locations Nationwide: Field inspection, structural analysis, repair recommendations, and design for large metal-frame buildings

PERSONNEL QUALIFICATIONS

Andrew J. Lobbestael | Senior Associate

EDUCATION

- Lawrence Technological University
  - Bachelor of Science, Architecture, 2010
  - Bachelor of Science, Civil Engineering, 2010
  - Master of Civil Engineering, 2014

PRACTICE AREAS

- Repair and Rehabilitation Design
- Structural Evaluation
- Concrete Structures
- Failure/Damage Investigations
- Facade Inspections
- Water Leakage Assessment
- Testing and Instrumentation

REGISTRATIONS

- Professional Engineer in MI

CONTACT

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EXPERIENCE

Since joining WJE in 2007, Andrew Lobbestael has been involved with numerous projects related to both structural engineering and architecture. His typical responsibilities have included the investigation and analysis of existing and damaged structures, nondestructive evaluation of concrete, development of repair and rehabilitation documents, and construction observations. He has performed a variety of structural analyses on steel, concrete, masonry, and wood.

Mr. Lobbestael has investigated several structural failures and has performed numerous water infiltration investigations. The water infiltration investigations have solved long-term water infiltration issues. Additionally, he has performed construction vibration monitoring and performed vibration-related damage assessments. Prior to joining WJE, Mr. Lobbestael performed construction materials testing.

REPRESENTATIVE PROJECTS

Repair and Rehabilitation Design

- 411 West Lafayette - Detroit, MI: Waterproofing, post-tensioning, and traffic bearing membrane repairs (multiple years)
- Trotter House - Ann Arbor, MI: Repair design and construction document development for masonry repairs, wood window restoration, and facade cleaning
- Arbor Circle Apartments - Ypsilanti, MI: Assessment and repair design of wood framed balconies

Structural Evaluation

- Hoover Building - Ann Arbor, MI: Condition assessments, analysis, and repair design of historic wood trusses for World War I-era factory building
- Karas House Catering - Redford, MI: Bowstring truss failure investigation, analysis, and litigation support
- Materials Processing Warehouse - Riverview, MI: Roof collapse investigation, analysis, and litigation support
- Globe Building - Detroit, MI: Structural analysis of existing wood framing for new mechanical equipment loading
- Grayhaven Marina Village - Detroit, MI: Prepurchase condition survey of multiple wood-framed residential structures

Concrete Structures

- JSP South Building - Detroit MI: Condition assessment and design of repairs to 1940s-era concrete frame building.
- Southfield Town Center Parking Structures - Southfield, MI: Condition assessment of multiple parking structures, repair design, and construction period inspections
- Beaumont Hospital Parking Structure - Grosse Pointe, MI: Construction period services during concrete and waterproofing repairs (multiple years)
- Pine Tower - Bay City, MI: Assessment of precast concrete columns and estimate of remaining service life

Failure/Damage Investigations

- Williams Natatorium - Bloomfield Hills, MI: Investigation and petrographic examination of deteriorated natural stone pool deck
- Best Textiles - Warren, MI: Assessment of reported structural damage at multiple residences caused by natural gas explosion
- Carlyle Place Apartments - Clinton Township, MI: Use of ground penetrating radar (GPR) to assess extent of voiding beneath slab from water main break
- Lake Local Schools - Lake, OH: Assessment of structural damage at multiple buildings caused by tornado

Testing and Instrumentation

- GM Warren Technical Center - Warren, MI: Instrumentation and testing of components of steel rod supported stair case to estimate in situ tension
- Temple Beth El - Bloomfield Hills, MI: Load-tested fall arrest anchorages
- 413 East Huron - Ann Arbor, MI: Remote monitoring of construction vibrations using engineering seismographs

PROFESSIONAL AFFILIATIONS

- American Concrete Institute - Greater Michigan Chapter
- International Concrete Repair Institute, Michigan Chapter president

PERSONNEL QUALIFICATIONS

Ryan Grabow | Senior Associate

EDUCATION

- Lawrence Technological University
  - Bachelor of Science, Architecture, 2003
  - Bachelor of Science, Civil Engineering, 2004
  - Master of Science, Architecture, 2010

PRACTICE AREAS

- Building Enclosure Testing
- Repair and Rehabilitation
- Failure/Damage Investigations
- Litigation Consulting
- Structural Metals
- Water/Air Leakage Assessment
- Design

REGISTRATIONS

- Professional Engineer in MI

CONTACT

rgrabow@wje.com
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EXPERIENCE

Ryan Grabow performs investigations and designs for new construction, renovations, building maintenance, and litigation support. He was a team leader for one of WJE's largest nationwide projects where he developed processes to improve the efficiency of processing, tracking, and analyzing of construction issues across thousands of locations. Mr. Grabow's projects include work done on various structures including museums, healthcare and retail buildings, offices, elderly care and residential facilities, and utilities.

Mr. Grabow previously worked for the architectural design firms Burt Hill/Pollock Krieg Architects in Fort Myers, Florida and J. K. Janiga Architects in Pinckney, Michigan. In addition, he managed the Architectural Computing Resource Center for Lawrence Technological University in Southfield, Michigan.

REPRESENTATIVE PROJECTS

Building Enclosure Testing

- Broad Museum - East Lansing, MI: Envelope testing and construction period services
- Bioengineering Building - East Lansing, MI: Envelope testing
- Auto Owners Insurance Headquarters - Lansing, MI: Envelope testing and construction observation services

Repair and Rehabilitation

- Beachhouse Condominiums - Charlevoix, MI: Investigation and repair of structural deflection and settlement
- Campau Square Plaza - Grand Rapids, MI: Plaza and waterproofing replacement
- Cadillac Place - Detroit, MI: Plaza replacement
- Concord Towers - Madison Heights, MI: Exterior masonry repairs and elastomeric coating application
- Detroit Wastewater - MI: Structural survey and construction administration of concrete delamination and leakage
- Moosehaven "C-Wing" Renovation - Orange Park, FL: Design and construction services for a retirement facility

Failure/Damage Investigations

- Detroit Music Hall - MI: Survey distress due to a utility explosion
- Center for Creative Studies - Detroit, MI: Survey distress in facades
- Retirement Facility Facade - Orange Park, FL: Investigation of stucco failure on three buildings

Litigation Consulting

- Underground duct failure - Canton, Michigan: Investigation and litigation support for failure of underground ductwork during construction
- Stage collapse - Pontiac, MI: Investigation and litigation support of a collapsed temporary stage roof structure
- Stockpile loading analysis - Ecorse, MI: Development of three-dimensional massing from photographs of a removed stockpile involved in a soil stability and seawall failure

Structural Metals

- Major Retail Chain - Nationwide: Steel roof structure inspection, assessment, and repairs

Water/Air Leakage Assessment

- Prescott Valley Library - Prescott Valley, AZ: Water infiltration investigation
- University of Michigan Golf Clubhouse - Ann Arbor, MI: Investigation of basement water infiltration including remote monitoring

Design

- Physicians Primary Care - Fort Myers, FL: Design development and construction administration of a medical office building
- Moorings Park Building L, M, and N - Naples, FL: Design development and construction documentation for a three-building expansion to a retirement facility
- Summerlin Center - Fort Myers, FL: Design development and construction administration of an office complex previously partially constructed and abandoned
- Baker Building - Hamburg, MI: Design development and construction documentation for masonry and limestone office building

PERSONNEL QUALIFICATIONS

Elise M. Love | Senior Associate

EDUCATION

- Michigan Technological University
  - Bachelor of Science, Civil Engineering, 2007
  - Master of Science, Civil Engineering, 2009

PRACTICE AREAS

- Failure/Damage Investigations
- Building Enclosure Commissioning/Consulting/Testing
- Roofing and Waterproofing
- Prepurchase Surveys
- Litigation Consulting
- Masonry
- Bridges and Civil Infrastructure

REGISTRATIONS

- NHI Course 130055 - Safety Inspection of In-Service Bridges
- Professional Engineer in MI and OH
- Registered Roof Consultant

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers (ASCE)
- Construction Specifications Institute (CSI) - Board Member, Metropolitan Detroit Chapter
- IIBEC
- Structural Engineering Institute (SEI)

CONTACT

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EXPERIENCE

Elise Love joined WJE in 2009 and has since been involved in a diverse range of projects, including the investigation, analysis, and repair of existing structures and the building enclosure. Ms. Love's project experience includes failure and damage assessments of existing wood, steel, aluminum, reinforced concrete, and concrete masonry structures; repair and rehabilitation design for existing wood, reinforced concrete, and concrete masonry structures. She also has expertise in building enclosure commissioning, consulting, and testing services; roofing and waterproofing assessment/repair design; condition and prepurchase assessments; peer reviews; water infiltration assessments; and weld inspections for open-web steel joists. Ms. Love also conducts assessments of in situ concrete slab-on-ground cracking; performs construction period building monitoring; provides construction and design-related litigation consulting; and performs structural/safety inspection of bridges.

REPRESENTATIVE PROJECTS

Failure/Damage Investigations

- Indoor Practice Facility - Ypsilanti, MI: Assessment of air-supported structure (dome) collapse
- Lake Local Schools - Millbury, OH: Structural assessment of structural steel and masonry elements of storm-damaged structures
- Various Residential Structures - Dexter, MI: Assessment/repair design for structural tornado damage in wood-framed structures
- Pontiac Silverdome Stage - Pontiac, MI: Assessment of temporary aluminum stage roof structure collapse
- Stony Creek Apartments - Washington Township, MI: Assessment and repair design of fire-damaged wood trusses
- Career Technology Center - Monroe, MI: Cracking assessment in concrete slab-on-ground
- McKinley Taylor Properties - Taylor, MI: Structural condition assessment of corroded structural steel substructure in crawl spaces

Building Enclosure Commissioning/Consulting/Testing

- Sparrow Headquarters - Lansing, MI: Peer review and building envelope consulting services
- Auto Owners Insurance Headquarters - Lansing, MI: Peer review, building enclosure testing, and construction period quality control services
- Toyota PD Building - Saline, MI: Peer review and roofing consulting services
- National Headquarters Building - Lansing, MI: Investigation of water infiltration at windows, curtain walls, and masonry walls

Roofing and Waterproofing

- Big Buck Brewery - Gaylord, MI: Metal roofing damage assessment
- University of Michigan - Ann Arbor, MI: Zinc roofing failure investigation and laboratory analysis
- Lakeview Middle School - Battle Creek, MI: Assessment of cause of single-ply roofing damage

Prepurchase Surveys

- 6435 Hix Road - Westland, MI: Prepurchase property condition assessment
- Walker Plants - Novi, MI: Assessment of architectural and structural building/ property damage and tenant changes

Litigation Consulting

- Medical Facility - Grand Rapids, MI: Litigation consulting for construction and design-related building envelope issues
- Gratiot Shopping Center - Saginaw, MI: Litigation-related code consulting regarding structural repairs following partial roof collapse

Masonry

- East Hall - Ann Arbor, MI: Historic terra cotta and brick masonry assessment and restoration
- Hill Auditorium - Ann Arbor, MI: Historic terra cotta cornice and brick masonry restoration

Bridges and Civil Infrastructure

- Illinois Department of Transportation - Cook and Will Counties, IL: Safety inspection and member force analysis for steel bascule bridges
- US-34 Bridge over Missouri River - Mills County, IA/Sarpy County, NE: Initial safety inspection for concrete and steel bridge

PERSONNEL QUALIFICATIONS

Sarah V. Rush | Senior Associate

EDUCATION

- Michigan Technological University
  - Bachelor of Science, Civil Engineering, 2010
  - Master of Science, Civil Engineering, 2012

PRACTICE AREAS

- Failure/Damage Investigation
- Repair and Rehabilitation
- Structural Analysis
- Fire Damage
- Facade Assessment
- Nondestructive Evaluation
- Water/Air Leakage Assessment
- Roofing and Waterproofing

REGISTRATIONS

- Professional Engineer in MI

PROFESSIONAL AFFILIATIONS

- American Concrete Institute - Greater Michigan Chapter

CONTACT

srush@wje.com
248.593.0900
www.wje.com

EXPERIENCE

Sarah Rush has been involved in numerous projects of various structure types and objectives related to both structural engineering and architecture. Her responsibilities have included field investigation and analysis of existing and damaged structures, development of technical repair and rehabilitation documents, and construction observations. She has performed structural analysis on steel, concrete, masonry, and wood structures. Ms. Rush has assisted with several nondestructive investigations and completed multiple condition assessments. Additionally, she has experience in litigation assistance, code review, and water infiltration investigations.

As a graduate student at Michigan Technological University, Ms. Rush performed finite element modeling and shrinkage testing of polymer and steel fiber reinforced ultra-high performance concrete as a bonded overlay on concrete bridge decks. The result of this work was a comparative method to standard overlay technologies based on economic, performance, constructability, and service life characteristics.

REPRESENTATIVE PROJECTS

Structural Analysis

- Mt. Zion - Clarkston, MI: Structural steel evaluation of a curved, three-dimensional, partial roof collapse
- Aunt Millie's Bakery - Plymouth, MI: Condition assessment of a distressed, elevated concrete slab, including analysis and repair recommendations
- Indoor Athletic Facility - College Station, TX: Assessment and testing of the steel cable bracing systems of two fabric-hoop structures after a partial roof collapse
- Major Retail Store Chain - Various Locations Nationwide: Field inspection, structural analysis, repair recommendations, and design for large metal frame buildings

Fire Damage

- Pontiac Central High School - Pontiac, MI: Structural assessment of fire damage to elevated concrete slab and concrete masonry
- Rue Versailles Apartments - Oak Park, MI: Structural assessment of fire damage to a wood-framed apartment building and preparation of technical repair documents

Facade Assessment

- Grand Park Centre - Detroit, MI: Condition assessment, including terra cotta, limestone, and clay brick masonry elements submitted to owner and City of Detroit to satisfy facade ordinance requirements
- Metropolitan United Methodist Church - Detroit, MI: Condition assessment, technical repair document development, and construction observation services, including sandstone, granite, and brick masonry elements
- University of Michigan, C. C. Little Building - Ann Arbor: Condition assessment, water infiltration testing, technical repair document development, and construction observation services, including clay brick masonry and limestone elements
- Beaumont Hospital - Grosse Pointe, MI: Condition assessment, technical repair document development, and construction observation services, including clay brick masonry walls

Nondestructive Evaluation

- Automotive Manufacturing Facility - Saginaw, MI: Use of impact echo to locate distressed concrete in elevated concrete slab
- Carlyle Place Apartments - Clinton Township, MI: Use of ground penetrating radar to locate voids in concrete slab on ground

Water/Air Leakage Assessment

- Auto-Owners Insurance Headquarters - Lansing, MI: Water infiltration quality insurance testing of unitized curtain wall panel and insulated wall panel joints and tie-ins during recladding construction

Roofing and Waterproofing

- 35th Macomb Centre - Clinton Township, MI: Condition assessment, design, and construction observation services of tear-off and installation of EPDM membrane system

PERSONNEL QUALIFICATIONS

Leah M. Ruther | Senior Associate

EDUCATION

- Calvin College
  - Bachelor of Science, Civil Engineering, 2011
- Lawrence Technological University
  - Master of Civil Engineering, 2013

PRACTICE AREAS

- Repair and Rehabilitation Design
- Structural Evaluation
- Damage Assessment and Documentation
- Fire Damage Investigation
- Construction Observation Services
- Facade Assessment
- Testing and Instrumentation
- Roofing and Waterproofing

REGISTRATIONS

- Professional Engineer in MI

PROFESSIONAL AFFILIATIONS

- Structural Engineers Association of Michigan - Young Members Chapter

CONTACT

lruther@wje.com
248.593.0900
www.wje.com

EXPERIENCE

Since joining WJE in 2012, Leah Ruther has been involved in numerous projects related to both structural engineering and architecture. Her typical responsibilities have included the investigation and analysis of existing and damaged structures, development of technical repair and rehabilitation documents, and construction observations. Ms. Ruther has performed a variety of structural analyses on steel, concrete, masonry, and wood structures. She has assisted with several nondestructive investigations and completed multiple condition assessments. Additionally, Ms. Ruther has performed multiple water infiltration investigations.

REPRESENTATIVE PROJECTS

Repair and Rehabilitation Design

- First Baptist Church - Oak Park, MI: Repair of masonry walls, wood trusses, and roofing with preparation of construction drawings
- Two Pierce Place Parking Garage - Itasca, IL: Concrete repairs with preparation of construction drawings
- CC Little - Ann Arbor, MI: Waterproofing and masonry repairs with technical documentation preparation and construction observation services

Structural Evaluation

- Paul Building - Grand Rapids, MI: Roof collapse investigation and analysis; repair design and preparation of repair documents
- Major Retail Store Chain - Various Locations: Field inspection, structural analysis, repair recommendations, and design for large metal-frame buildings
- Granger Energy of Morgantown - Morgantown, PA: CMU wall and concrete foundation design

Damage Assessment and Documentation

- Hagelstein Bakery - Royal Oak, MI: Structural evaluation of partial wall collapse, shoring design, and preparation of repair documents
- Kamps Hardwood - Grand Rapids, MI: Structural evaluation of partial roof collapse

Fire Damage Investigation

- Residential Home - Whitehall, MI: Structural assessment of fire damage to wood trusses followed by repair design and preparation of repair documents

Construction Observation Services

- Varsity Tennis - Ann Arbor, MI: Preparation of repair documents for subgrade waterproofing of the concrete foundation and performed construction observations
- Metropolitan United Methodist Church Parsonage - Huntington Woods, MI: Preparation of repair documents for masonry repairs and roof replacements; performed construction observations

Facade Assessment

- Fox Theater Parking Garage - Detroit, MI: Condition assessment and report of findings submitted to owner and City of Detroit to satisfy facade ordinance requirements
- Simpson Circle Parking Structure Cooling Tower Enclosure - Ann Arbor, MI: Condition assessment with technical document preparation and construction services

Testing and Instrumentation

- Prescott Valley Public Library - Prescott Valley, AZ: Field investigation and water infiltration testing of metal roofing system

Roofing and Waterproofing

- 35th Macomb Centre - Clinton Township, MI: Condition assessment and design of EPDM membrane roofing system

PERSONNEL QUALIFICATIONS

Jason A. Sanchez | Senior Associate

EDUCATION

- University of California, Berkeley
  - Bachelor of Arts, Architecture 2005

PRACTICE AREAS

- Facade Assessment
- Leakage Investigation
- Testing and Instrumentation
- Litigation Consulting
- Building Enclosure Consulting
- Repair and Rehabilitation Design
- Roofing and Waterproofing
- Plazas and Terraces

REGISTRATIONS

- Architect in MD and NY

PROFESSIONAL AFFILIATIONS

- American Institute of Architects
- International Institute of Building Enclosure Consultants

CONTACT

jsanchez@wje.com
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EXPERIENCE

Jason Sanchez has broad-based experience in the investigation, assessment, and rehabilitation of existing structures and building enclosures. He works with various building systems, including roofing, below- and above-grade waterproofing, a range of window and curtain wall systems, and a variety of building facade systems, including precast concrete panels, metal panels, masonry cavity walls, stucco, and EIFS. Mr. Sanchez focuses on the investigation, development, and implementation of building envelope repair design for a wide range of building types and structures in the Midwest and mid-Atlantic regions.

REPRESENTATIVE PROJECTS

Facade Assessment

- Riverfront Towers - Detroit, MI: Facade and window assessment and investigation of water leakage
- United Auto Workers Union Building - Detroit Michigan: Condition assessment of glass, metal facade panels, and roofing following fire loss
- Holiday Inn - Deland, FL: Facade assessment and stucco replacement design

Leakage Investigation

- University of Michigan, Pound Medelon House - Ann Arbor: investigation of below-grade water leakage at historic house
- Coppin State University, Health and Human Services Building - Baltimore, MD: Investigation of water leakage at metal panels, roofs, windows, masonry, and precast concrete panels
- Children's Nation Medical Center - Washington, D.C.: Investigation of water leakage at curtain walls and skylights
- United States Holocaust Memorial Museum - Washington, D.C.: Investigation of water leakage at precast concrete panels and skylight

Testing and Instrumentation

- Auto-Owners South Campus Addition - Lansing, MI - Enclosure performance testing and verification of new construction including curtain wall, storefront, masonry, sealants, and roofing.
- University of Michigan, Palmer Commons - Ann Arbor: Investigation of air leakage and thermal discontinuities
- Johns Hopkins University, Gilman Hall - Baltimore, MD: Water testing, concrete moisture monitoring, and air temperature and relative humidity monitoring

Litigation Consulting

- City Modern Development - Detroit, MI; Assessment of roof moisture damage during construction
- Dundee Products - Dundee, MI; Assessment of construction defects relating to metal roof panels and water leakage.
- HHMI Janelia Farm Campus - Ashburn, VA: Failure investigation of nearly three-acre green roof, subsequent design and construction period services for removal and replacement

Building Enclosure Consulting

- United States Courthouse - Buffalo, NY: Mock-up and construction period services for new construction, including curtain wall, roofing, and precast concrete panels
- North Carolina State University, Hunt Library - Raleigh: Curtain wall fabrication quality assurance services for new construction
- Eisenhower Executive Office Building - Washington, D.C.: Construction period services for replacement of copper flat-seam roof on National Register property
- Morgan State University, Behavioral and Social Sciences Center - Baltimore, MD: Building envelope consulting for new construction

Roofing and Waterproofing

- Detroit Metro Airport - MI: Condition assessment of the McNamara and North Terminal roofs
- Comerica Auburn Hills Operations Center - Auburn, MI - Plaza waterproofing water leakage investigation and waterproofing system replacement design
- Jefferson at Inigo's Crossing - Bethesda, MD: Roof assessment and roof and joint sealant replacement design
- Anne Arundel Community College, Humanities Building - Arnold, MD: Roof replacement design

PERSONNEL QUALIFICATIONS

Owjan A. Hashtroodi | Associate III

EDUCATION

- Isfahan University of Technology
  - Bachelor of Science, Civil Engineering, 2010
- University of Surrey
  - Master of Science, Structural Engineering, 2011
- University of Toledo
  - Master of Science, Civil Engineering, bridge engineering emphasis, 2014

PRACTICE AREAS

- Structural Design (New Construction)
- Repair and Rehabilitation Design
- Structural Evaluation
- Structural Analysis/ Computer Applications
- Failure/Damage Investigations
- Concrete/Masonry Structures
- Steel Structures
- Wood/Heavy Timber Structures

REGISTRATIONS

- Professional Engineer in MI

PROFESSIONAL AFFILIATIONS

- American Institute of Steel Construction (AISC)
- Structural Engineers Association of Michigan (SEAMi)

CONTACT

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EXPERIENCE

Since joining WJE in 2018, Owjan Hashtroodi has been involved with projects related to structural engineering and architecture. His typical responsibilities have included investigation, analysis, and nondestructive testing of existing and damaged concrete, steel, wood, and masonry structures. Mr. Hashtroodi has also been responsible for the development of technical repair and rehabilitation documents, construction observations, and drawings and specifications.

Prior to joining WJE, Mr. Hashtroodi managed projects involving the design of new buildings with a wide variety of materials, including concrete, masonry, steel, wood, heavy timber, and cold-formed steel. He has provided a range of services, from feasibility studies through construction administration tasks. Mr. Hashtroodi has provided consulting and design services for numerous building types, including residential, commercial, educational, industrial, mixed-use, mid-rise, vehicular, and pedestrian bridges.

REPRESENTATIVE PROJECTS

Structural Design (New Construction)

- Flint Cultural Center School - Flint, MI: New 78,000-square-foot steel building with composite floor, DLH roof joists, and a combination of cantilevered columns and CMU shear wall lateral systems*
- Anderson Brothers Bank - Myrtle Beach, SC: New one-story 4,500-square-foot building with a high center roof, drive-through canopy, and decorative entrance canopy; steel building with roof joists and a combination of braced and moment frames in a region with high seismic and high wind speeds*
- Adrian College Boathouse - Manitou Beach, MI: New 13,000-square-foot building with concrete basement walls, composite floor, exposed heavy timber trusses, and porch deck with cantilevering glulam wood beams*
- M1 Concourse, Building 13 - Pontiac, MI: New 25,000-square-foot parking garage with slab-on-grade, full mezzanine level with car elevator cut-outs and an occupiable roof; structural system of the building consisted of steel columns with composite floor deck and steel-braced frames*
- College Boulevard Bridge - Grants, NM: Design of a vehicular composite steel girder bridge (thirty-six feet wide by fifty-eight feet long with two six-foot-wide pedestrian sidewalks)*

Repair and Rehabilitation Design

- St. Clair Inn - St. Clair, MI: Renovation and new addition to the historic inn, including addition of three new two-story cottages, two wedding chapels, and new rooftop balcony; removal of existing roof and addition of new third floor with hotel rooms; and new three-story banquet facility of mixed steel and wood structure supported by a deep foundation system consisting of concrete grade beams and H-piles*
- Cadillac House - Lexington, MI: Retrofit and renovation of the historic 1859 Cadillac House to its original exterior look, including the design of new roof cupola, porch, elevator, and staircase; reinforcement of existing floor; and design of a new lateral system*
- Concrete Pedestrian Canopy - Dearborn, MI: Assessment and preparation of repair construction documents and specifications for distressed concrete canopies

Structural Evaluation

- Second Sweet Home Church - Detroit, MI: Field inspection, structural analysis, and nondestructive testing for assessment of glued-laminated wood arches
- Cabot Street Warehouse - Detroit, MI: Field inspection, condition assessment, and structural analysis of elevated concrete platform, exterior mat foundation, and damaged steel columns due to impact loads
- Henry Ford Hospital Parking Structures - Detroit, MI: Field inspection and condition assessment to identify hazardous conditions; preparation of field notes to report findings

Failure/Damage Investigations

- General Broach Company - Morenci, MI: Investigation of cause of roof collapse and extent of damage; repair recommendations

** Indicates with previous firms*

PERSONNEL QUALIFICATIONS

Derek R. Hibner | Associate III

EDUCATION

- Alpena Community College
  - Associate of Applied Science, Concrete Technology, 2009
- Michigan State University
  - Bachelor of Science, Civil Engineering, 2016
  - Master of Science, Structural Engineering, 2017

PRACTICE AREAS

- Damage Assessment
- Failure Investigation
- Materials Evaluation
- Repair, Retrofit, and Rehabilitation Design
- Structural Evaluation
- Testing and Instrumentation

REGISTRATIONS

- Professional Engineer in MI

PROFESSIONAL AFFILIATIONS

- American Concrete Institute
- American Society of Civil Engineers
- ASTM International
- International Facilities Management Association of Michigan
- Structural Engineers Association of Michigan

TECHNICAL COMMITTEES

- ASTM C09.64 - Concrete and Concrete Aggregates: Nondestructive and In-Place Testing
- ASTM C09.97 - Concrete and Concrete Aggregates: Manual of Testing

EXPERIENCE

Since joining WJE in 2017, Derek Hibner has been involved with numerous projects relating to both structural engineering and architecture. His experience extends to peer review of design documents, design and construction period services for repair projects, field investigation, structural analysis, nondestructive testing and instrumentation, and structural damage/failure assessments.

As a graduate student at Michigan State University, Mr. Hibner performed research on the residual axial capacity of fire-exposed reinforced concrete columns. The results of his research have led to a better understanding of how much axial capacity a concrete column retains after being exposed to realistic fires.

Prior to graduate school, Mr. Hibner was employed at a construction consulting company, where he was responsible for performing a wide variety of construction materials testing and field inspection tasks, His projects there included compaction testing of backfilled soils, asphalt testing, concrete testing, structural steel inspection, fireproofing inspection, floor flatness/levelness testing, deep foundation installation inspection, and geotechnical engineering investigation.

REPRESENTATIVE PROJECTS

Damage Assessment

- Les Stanford Chevrolet - Dearborn, MI: Assessment of extent of fire damage and recommendations for removal of damaged steel members
- Green Hills Apartments - Midland, MI: Assessment of extent of fire and water damage and assessment of code provisions applicable to the repair
- Hurricane Harvey-Related Water Damage - Houston, TX: Water infiltration testing and condition surveys to assess the type and extent of damage
- Meridian Magnesium - Eaton Rapids, MI: Assessment of extent of fire and explosion damage; design of structural steel and concrete repairs

Failure Investigation

- Battle Creek City Hall - Battle Creek, MI: Investigation and repair recommendations for historic terra cotta cladding failure
- Holiday Inn Express and Suites - Southgate, MI: Investigation of cause of break in fire suppression line

Materials Evaluation

- Michigan State University, Super-Conducting Radio Frequency High Bay - East Lansing, MI: Geotechnical investigation for foundation design; deep foundation installation inspection*

Repair, Retrofit, and Rehabilitation Design

- Marquette Building Banner Attachment Design - Detroit, MI: Anchor system design for multistory exterior banner attachment to building facade
- Dix Dam Bridge Repairs - Lancaster, KY: Construction period monitoring of concrete repairs

Structural Evaluation

- 211 E. Grand River Peer Review - East Lansing, MI: Review of bracing design documents for existing wall provided by engineer of record
- Grand Circus Parking Garage - Detroit, MI: Concrete condition assessment and repair design
- Cass Avenue Parking Garage - Detroit, MI: Concrete condition assessment and repair design

Testing and Instrumentation

- REO Town Power Plant - Lansing, MI: Mass concrete temperature sensor installation and monitoring, structural steel inspection, and construction materials testing*
- Michigan State University, Eli and Edythe Broad Art Museum - East Lansing: Concrete materials testing of self-consolidating concrete; structural steel inspection*
- Advance Building Parking Structure - Southfield, MI: Use of ground penetrating radar technology to locate prestressing tendons in precast concrete members

**Indicates projects with other firms*

CONTACT

dhibner@wje.com
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www.wje.com

PERSONNEL QUALIFICATIONS

Julie M. Jones | Associate III

EDUCATION

- Washington University in St. Louis
  - Bachelor of Science, Civil Engineering, 2011

PRACTICE AREAS

- Facade Assessment
- Water/Leakage Assessment
- Roofing and Waterproofing
- Roof Assessment and Design
- Building Enclosure Consulting
- Repair and Rehabilitation

REGISTRATIONS

- Professional Engineer in MI
- Construction Documents Technologist (CDT)

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers
- International Institute of Building Enclosure Consultants - Great Lakes Chapter

CONTACT

jjones@wje.com
248.593.0900
www.wje.com

EXPERIENCE

Julie Jones has a diverse background in construction and engineering as applied to the inspection, evaluation, and problem solving of new and existing structures. She works on a variety of projects ranging from facade evaluations and investigations to roofing assessments and replacements.

Prior to joining WJE, Ms. Jones was a project engineer and manager with firms specializing in building envelope consulting. She has extensive experience in the investigation, design development, and construction observation of roofing and waterproofing systems. Her project management and construction contract administration experience on numerous building envelope projects ranges from the initial assessment stage through project closeout. In addition, Ms. Jones has performed design reviews for new construction projects to assess for code compliance and evaluate the design relative to long-term durability, as well as manufacturer and owner requirements.

REPRESENTATIVE PROJECTS

Facade Assessment

- Metropolitan United Methodist Church - Detroit, MI: Condition assessment, including granite and sandstone masonry elements submitted to owner and City of Detroit to satisfy facade ordinance requirements
- Albert Kahn Building - Detroit, MI: Condition assessment, technical repair document development, and construction observation services, including limestone, granite, and brick masonry elements
- Renaissance Center - Detroit, MI: Condition assessment submitted to owner and City of Detroit to satisfy facade ordinance requirements*

Water/Air Leakage Assessment

- University of Michigan - Ann Arbor: Below grade water infiltration investigation
- PV Public Library - Prescott Valley, AZ: Water infiltration investigation through metal roofing and glazed curtain wall
- National Museum of American History - Washington, D.C.: Roof-level and below-grade water infiltration investigation*
- National Building Museum - Washington, D.C.: Investigation and design of sheet metal roofing, built-in gutter flashing, and snow guard systems*

Roofing and Waterproofing

- Michigan State Capitol - Lansing: Plaza waterproofing consulting and design for proposed large underground addition
- Animal Conservation Center - Detroit, MI: Technical repair document development and construction observation related to below-grade waterproofing repairs
- Hurricane Harvey Roof Renovation - Rockport, TX: Roof replacement construction phase quality control
- Veterans' Memorial Waterproofing Restoration - Charleston, WV: Roof replacement and reflecting pool restoration*

Roof Assessment and Design

- Lee Plaza Hotel - Detroit, MI: Roof assessment and conceptual replacement alternatives for historic hotel
- Birmingham Public Schools - Birmingham, MI: Roofing assessments, replacement design, construction documents, and construction phase administration*
- General Motors - Flint, MI: Roof failure investigation, replacement design, and construction administration*
- U.S. Customs House - Baltimore, MD: Roof replacement design development*

Building Enclosure Consulting

- 2221 14th Street NW - Washington, D.C.: Design phase peer review and construction phase quality control services*

Repair and Rehabilitation

- Grand Hotel - Mackinac Island, MI: Waterproofing detail development for industrial kitchen space
- Macy's, Inc. - Atlanta, GA: Design and detail development for emergency facade recladding
- High-Rise Apartment Building - Detroit, MI: Review and repair trash chute servicing twenty-two-story apartment building
- Architect of the Capitol Campus - Washington, D.C.: Fall protection flashing design with various existing roofing systems*

**Indicates with previous firms*

PERSONNEL QUALIFICATIONS

Justin D. Barden | Associate II

EDUCATION

- University of Michigan
  - Bachelor of Science, Civil Engineering, 2018
  - Master of Science, Civil Engineering, 2019

PRACTICE AREAS

- Concrete Structures
- Failure Investigation
- Structural Evaluation
- Structural Analysis
- Repair and Rehabilitation Design
- Facade Assessment

PROFESSIONAL AFFILIATIONS

- American Concrete Institute (ACI) - Greater Michigan Chapter
- International Concrete Repair Institute (ICRI) - Greater Michigan Chapter

CONTACT

jbarden@wje.com
248.593.0900
www.wje.com

EXPERIENCE

Since joining WJE in 2018, Justin Barden has been involved in many projects relating to facade investigation and structural engineering of new and existing buildings. He has been involved in structural assessments, structural analyses, structural damage and failure investigations, and the preparation of construction documents. Mr. Barden has performed multiple investigations, developed repair designs, and conducted numerous construction observations pertaining to concrete, steel, and wood structures.

REPRESENTATIVE PROJECTS

Concrete Structures

- NOW Parking Structure - Birmingham, MI: Condition assessment of parking structure, development of emergency facade stabilization, and design of new cable barrier system
- Henry Ford Health Systems - Detroit, MI: Condition assessment and development of repair and maintenance plan of a two-way reinforced concrete structure
- Beaumont Hospital - Dearborn, MI: Evaluation of prestressed, double-tee beam structure with corrosion related distress
- The Century - Southfield, MI: Development of repairs for a post-tensioned concrete parking structure
- Schlumberger - Houston, TX: Emergency assessment of structurally deficient parking structure*
- University of Michigan - Ann Arbor: Water infiltration assessment and repair design of Simpson Parking Structure*
- Mott Community College - Flint, MI: Construction observations for repairs to a large button headed tendon post-tension parking structure*

Failure Investigation

- Lee Middle and High School - Wyoming, MI: Investigation of partial building collapse and development of structural framing demolition documents
- Multiple Schools and Apartment Buildings - Dayton, OH: Failure and damage investigation of tornado-damaged buildings

Structural Evaluation

- University of Michigan, Hoover Building - Ann Arbor: Assessment and structural analysis of historic wood trusses
- Historic School Buildings - Detroit, MI: Structural and facade assessment of multiple vacant historic school buildings
- Mixed-Use Complex - Houston, TX: Litigation support and structural failure investigation of a post-tensioned podium mixed-use building*

Structural Analysis

- The Henry Ford and Greenfield Village Farmer's Market - Detroit, MI: Structural analysis and design of historic timber framed structure
- The Salvation Army - Bay City, MI: Investigation and structural analysis of wood bowstring trusses
- 727 W. Ellsworth - Ann Arbor, MI: Analysis of existing open web steel joist roof and design of reinforcement for new rooftop equipment
- Battle Creek City Hall - Battle Creek, MI: Terra Cotta facade connection analyses and design
- Great Lakes Water Authority - Detroit, MI: Structural analyses and design of facility addition

Repair and Rehabilitation Design

- Taylor Creek Stables - Davison, MI: Assessment and repair design of laterally buckled wood trusses
- Metropolitan United Methodist Church - Detroit, MI: Repair design for deteriorated concrete structural members
- Hunter's Ridge Apartments- Farmington Hills, MI: Design of reinforcement repairs of burned metal plate connected wood trusses

Facade Assessment

- Royal Oak Middle School - Royal Oak, MI: Assessment of failed masonry cladding and design of stabilization repairs
- Restaurant Building - Dayton, OH: Assessment of tornado-damaged facade and roof

**Indicates with previous firms*

PERSONNEL QUALIFICATIONS

Meredith M. Crouch | Associate II

EDUCATION

- Oklahoma State University
  - Bachelor of Science, Architectural Engineering, structures focus, 2019

PRACTICE AREAS

- Structural Evaluation
- Architectural Investigation
- Damage Assessment and Documentation
- Building Enclosure Testing
- Structural Steel Connection Design

CONTACT

mcrouch@wje.com
248.593.0900
www.wje.com

EXPERIENCE

Since joining WJE in 2019, Meredith Crouch has participated in projects related to structural engineering and architecture. She has gained experience in field inspections, architectural investigations, structural damage assessments, and water testing.

Prior to her employment at WJE, Ms. Crouch worked in the connection design division of a structural engineering firm. She was responsible for developing designs and calculation sets for structural steel connections.

REPRESENTATIVE PROJECTS

Structural Evaluation

- Apartment Complex - Ann Arbor, MI: Inspection and documentation of both concrete- and wood-framed balconies
- Concrete Pedestrian Canopy - Dearborn, MI: Inspection and documentation of cantilevered concrete canopy
- Confidential World Headquarters - Detroit, MI: Evaluation and documentation of failed structural sealant at the facade glazing panels

Architectural Investigation

- Prescott Valley Public Library/Yavapai College - Prescott Valley, AZ: Assessment of original design intent relative to reported deficiencies
- Riverfront Towers - Detroit, MI: Investigation of computer modeling damages due to pipe burst for use in litigation

Damage Assessment and Documentation

- Woodland Hills Apartments - Trotwood, OH: Assessment and documentation of tornado damage and assistance in reporting the extent of damage
- Meadows of Catalpa Apartments - Dayton, OH: Assessment and documentation of tornado damage and assistance in reporting the extent of damage
- Lee Middle and High School - Wyoming, MI: Assessment and documentation of collapsed structural members and areas surrounding the collapse
- School - West Bloomfield Township, MI: Documentation of water damage from collapsed roof and failed fire suppression system
- Vintage House Banquets and Catering - Fraser, MI: Assessment of collapsed parapet and recommendations for repair

Building Enclosure Testing

- Building Complex - Grand Rapids, MI: Spray nozzle and spray rack water testing of curtain walls and punched windows throughout the complex
- Restaurant - Detroit, MI: Observation and documentation during water testing of awning

Structural Steel Connection Design

- 111 West 57th Street - New York, NY: Design of vertical brace connections using the Uniform Force Method and design of shear moment and column splice connections*
- TCU Amon G. Carter Stadium, East Addition - Fort Worth, TX: Steel beam shear connection design and review of existing details for additional load*
- University of Missouri Memorial Stadium, South End Zone Addition - Columbia: Design of kicker connections and review of design of coped beam connections and moment connections for additional load*
- Al Thumama Stadium - Doha, Qatar: Design of moment connections and review of existing details for additional load*

**Indicates work at previous firm*

PERSONNEL QUALIFICATIONS

Brian J. Santosuosso | Principal and Unit Manager

EDUCATION

- Lehigh University
  - Bachelor of Science, Civil Engineering, 2001
  - Master of Science, Civil Engineering, 2003

PRACTICE AREAS

- Bridge Engineering
- Collapse Investigation
- Instrumentation and Field Testing
- Nondestructive Testing
- Structural Analysis

REGISTRATIONS

- AWS Certified Welding Inspector
- Bridge Program Mgr. in IL
- INDOT Certified Bridge Inspection Team Leader
- MT NDE Level II
- NHI Course 130055 - Safety Inspection of In-Service Bridges
- NHI Course 130078 - Fracture Critical Inspection Techniques for Steel Bridges
- Professional Engineer in IN, MI, OH, MS, and NY
- Structural Engineer in IL

PROFESSIONAL AFFILIATIONS

- American Welding Society
- AREMA Technical Committee 15, Steel Structures

CONTACT

bsantosuosso@wje.com
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EXPERIENCE

Since joining WJE in 2002, Brian Santosuosso has acquired extensive experience through work on projects involving fatigue and fracture of steel bridge components, including the retrofit of fatigue sensitive details. These projects have involved fixed and movable span bridges and generally have been geared toward extending the service life of an existing structure, damage assessment and repair, or forensic investigation of a failure. Mr. Santosuosso also has experience with nondestructive test methods including strain and displacement sensors and monitoring, ultrasonic testing, magnetic particle testing, and visual inspection.

Mr. Santosuosso's recent projects involved ultrasonic testing of pin and hanger connections, removal and replacement of steel bridge truss members under live load, repair and balancing of vertical lift and bascule bridges, and rehabilitation of fixed span and movable structures. In addition, he has performed many structural and material evaluations and condition surveys.

REPRESENTATIVE PROJECTS

Bridge Engineering

- 92nd Street Bascule Bridge East Leaf - Chicago, IL: Assessment of trunnion bearing deterioration and design of structural components, jacking scheme, and step-by-step jacking procedure for in-place trunnion refurbishment
- 92nd Street Bascule Bridge West Leaf - Chicago, IL: Assessment of rack and pinion gear interference issue and development of rehabilitation scheme; design of structural modifications to reset rack and pinion alignment and construction observation
- Boston Central Artery/Tunnel - Boston, MA: Safety inspection of more than 120 steel viaduct structures
- Central Avenue Bridge - Stickney, IL: Inspection of fatigue sensitive details
- Chicago Skyway - Chicago, IL: Truss member replacement under traffic
- I-435 Bridge over the Missouri River - Kansas City, MO: Retrofitting of fatigue sensitive details
- Joe Page Bridge - Hardin, IL: Rack and pinion damage investigation
- Michigan Avenue Bascule Bridge - Chicago, IL: Assessment and investigation of tail lock operational issues.
- I-64 Sherman Minton Bridge - New Albany, IN: Routine, fracture critical, and in-depth Inspection of main river crossing unit and approach structures; development, design, and installation of retrofits to correct steel stringer and floor beam deterioration

Instrumentation and Field Testing

- Benicia-Martinez Bridge - Martinez, CA: Development and installation of health monitoring system
- I-5 over the Columbia River - Portland, OR: Instrumentation and field testing to assess stringer cracking
- I-80 over the Missouri River - Council Bluffs, IA: Instrumentation and field testing
- I-435 over the Missouri River - Kansas City, MO: Instrumentation and field testing
- IL 100/106 over the Illinois River - Florence, IL: Balancing of vertical lift span
- Jackson Blvd Bridge - Chicago, IL: Balancing of Chicago-style bascule bridge
- Joe Page Bridge - Hardin, IL: Balancing of vertical lift span
- McDonough Street Bridge - Joliet, IL: Balancing of two leaf rolling bascule bridge
- Murray Baker Bridge - Peoria, IL: Instrumentation during bridge rehabilitation
- Wells Street Bridge - Chicago, IL: Balancing of double-deck bascule bridge supporting vehicular and CTA passenger train traffic

Nondestructive Testing

- Three Bridges in South Dakota: Ultrasonic and visual inspection of pin and hanger connections
- Twenty-Six Bridges in North Dakota: Ultrasonic and visual inspection of pin and hanger connections
- Blackhawk Bridge - Lansing, IA: Ultrasonic and visual inspection of pin and hanger connections
- Boston Central Artery/Tunnel - Boston, MA: Ultrasonic testing of High Mast Light Tower anchors
- Main Street Bridge - Jacksonville, FL: Ultrasonic testing of vertical lift span bridge trunnions

PERSONNEL QUALIFICATIONS

Jonathan C. McGormley | Principal

EDUCATION

- University of Cincinnati
  - Bachelor of Science, Civil Engineering, 1992
- Purdue University
  - Master of Science, Civil Engineering, 1994

PRACTICE AREAS

- Bridge Engineering
- Instrumentation and Field Testing
- Failure Investigation
- Fatigue and Fracture Analysis
- Nondestructive Testing
- Steel Structures
- Structural Investigation

REGISTRATIONS

- Professional Engineer in IA, IL, IN, LA, MO, MS, OH, and OK
- Structural Engineer in IL

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers
- International Association of Bridge and Structural Engineering
- Research Council on Structural Connections
- Transportation Research Board

CONTACT

jmcgormley@wje.com
847.272.7400
www.wje.com

EXPERIENCE

Jonathan McGormley joined WJE in 1994 and has been involved with the structural evaluation and repair of commercial and residential properties, bridges, parking structures, and other deteriorated or distressed structures. He is routinely called to assess the condition of structures after fire, storm, and impact damage. Mr. McGormley is experienced in the inspection and evaluation of steel bridge structures with an emphasis on fatigue and fracture problems. He is experienced in visual, magnetic particle, and ultrasonic testing techniques and has overseen bridge retrofit projects in which WJE personnel were responsible for self-performing the work. Mr. McGormley has conducted numerous instrumentation and field testing projects to better characterize the behavior of structures. He has also performed construction engineering services, design reviews, and building code compliance checks and is experienced in the finite element modeling of steel, concrete, and aluminum structural members. Mr. McGormley's analysis experience includes the structural evaluation of tensioned fabric structures for several production companies.

REPRESENTATIVE PROJECTS

Bridge Engineering

- NB Route 291 Missouri River Bridge - Liberty Bend, MO: Load rating, gusset plate repair design, and installation of truss bridge
- NHI Instructor: Bridge Construction Inspection and Bridge Rehabilitation Design courses
- Poplar Street Bridge - East St. Louis, IL: Fatigue and fracture assessment, redundancy modifications, and seismic upgrades of two-girder bridge
- Gusset Plate Evaluation Procedures - Nationwide: Development of analytical approach for load rating that also considers effects of deterioration
- Indiana Toll Road - IN: Bridge deck joint elimination using accelerated bridge construction practices

Instrumentation and Field Testing

- I-20/55 - Jackson, MS: Live load stress measurements, trial retrofit installation, and fatigue life study of plate girder bridge
- Metropolitan Water Reclamation District Deep Tunnel - Chicago, IL: Nondestructive testing of steel piping

Failure Investigations

- I-35W Bridge - Minneapolis, MN: Failure investigation and debris removal oversight of deck truss
- I-280 Maumee River Crossing - Toledo, OH: Investigation of gantry crane collapse
- State Route 69 Bridge over the Tennessee River - Clifton, TN: Investigation into cause of plate girder bridge collapse during erection
- Rayse Creek Bridge - Jefferson County, IL: Precast deck beam bridge collapse due to steel pile bent corrosion
- Rail Rapid Transit: Investigation of electric flash butt weld failures in recently fabricated continuous welded rail strings
- Rail Rapid Transit: Investigation, including field and laboratory testing, of composite rail tie failures

Fatigue and Fracture Analysis

- Cal-Sag Channel Trusses - Cook County, IL: Fracture critical inspections and load rating
- Cedar Street Bridge over the Illinois River - Peoria, IL: Condition evaluation and repair of deck-truss bridge
- U.S. 77 over Missouri River - Sioux City, IA: Fracture critical inspection of tied arch bridge
- Fremont Bridge - Portland, OR: Fatigue assessment of 2,200-foot, three-span, tied-arch bridge
- I-435 Bridge over the Missouri River - Kansas City, MO: Fatigue and fracture retrofit development/installation and redundancy modifications for two-girder bridge
- I-80 Bridge over the Missouri River - Council Bluffs, IA: Fracture critical inspection, fatigue assessment, instrumentation, and retrofit development/installation of plate girder bridge
- Light Poles - Chicago, IL: Fatigue investigation
- Matthew Welsh Bridge over Ohio River - Mauckport, IN: Installation of fatigue retrofits to address cracking in two-girder approach spans

PERSONNEL QUALIFICATIONS

Kimberly Steiner | Associate Principal and Unit Manager

EDUCATION

- Arizona State University
  - Bachelor of Science, Chemical Engineering, 1996
  - Master of Science, Chemistry, 1998

PRACTICE AREAS

- Corrosion
- Construction Materials
- Coatings
- Laboratory Evaluations
- Chemical Analysis
- Research and Product Evaluation
- Microscopy

PROFESSIONAL AFFILIATIONS

- American Water Works Association
- NACE International

CONTACT

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EXPERIENCE

Kimberly Steiner focuses on failure analysis, consulting, and research on construction materials. She conducts on-site evaluations and laboratory characterization and analysis of materials to investigate failures, corrosion, incompatibilities of materials with the surrounding environment and general chemical and compositional analysis. Information Ms. Steiner gains from lab testing is related to the real-world problem being addressed.

Ms. Steiner uses various analytical techniques to solve construction materials problems, including chemical analysis, microscopy, and physical testing. She has expertise in scanning electron microscopy, light microscopy, Fourier transform infrared spectroscopy, UV/visible spectroscopy, atomic absorption spectroscopy, X-ray fluorescence, X-ray diffraction, ion chromatography, gas chromatography with mass spectrometry, and a variety of wet chemical techniques.

REPRESENTATIVE PROJECTS

Corrosion

- High-Rise Residential Buildings - Chicago, IL: Environmentally assisted cracking (stress corrosion cracking) of copper tubes in HVAC systems
- Residential and Commercial Buildings - Nationwide: Corrosion failures of copper and galvanized steel drinking water pipes
- Commercial Buildings - Nationwide: Corrosion failures of fire sprinkler pipes
- Residential Buildings - FL and TX: Evaluation of residences with corrosive (Chinese) drywall
- Medical Facilities - Nationwide: Corrosion of copper tubing due to interaction with sealant
- Commercial Buildings - TX: Corrosion of roofing systems from insulation
- Hospital - Southeastern U.S.: Corrosion of hospital equipment related to installation
- Green Bay, WI: Evaluation of corrosion of bolts in a buried sewer line

Coatings

- Manufacturing Plant - NC: evaluation of coating/lining failures on process equipment
- Sports Arena - Western U.S: Evaluation of coated exterior panels
- Residential Building - FL: Evaluation of corrosion failure of coated aluminum windows

Construction Materials

- Various Buildings - Nationwide: Evaluation of staining of stone and facade materials
- Commercial Buildings - Nationwide: Staining of glass windows related to exposure to construction materials
- Various Buildings - Nationwide: Evaluation of causes of fracture of tempered glass
- Various Buildings - Nationwide: Analysis for bond breakers in precast and tilt-up concrete structures
- Commercial Buildings - Southern U.S.: Evaluation of moisture retention on concrete slabs ("slab sweating")
- Commercial Buildings - Nationwide: Evaluation of blistering of flooring materials
- Commercial Buildings - Nationwide: Evaluation of rundown of Polyisobutylene sealant in insulated glass units

Laboratory Evaluations

- Testing of and test method development for ADA-compliant detectable warning systems
- Testing of compatibility of fire prevention gels with building materials
- Testing and characterization of stone consolidants
- Test methods for concrete sealers

Chemical Analysis

- Materials analysis for identification of components
- Chemical analysis of paints, coatings, membranes, and sealants
- Admixture analysis of concrete and mortars

Microscopy

- Optical microscopy of coatings, cementitious systems, corrosion products, and other systems
- Scanning electron microscopy with energy dispersive X-ray spectroscopy of coatings, fasteners, concrete, dimension stone, and many other systems
- Characterization of protective coatings
- Evaluation of environmental degradation of various materials

PERSONNEL QUALIFICATIONS

Karla A. Salahshour | Senior Associate

EDUCATION

- University of Texas at Austin
  - Bachelor of Science, Architectural Engineering, 2010
  - Master of Science, Civil Engineering, 2012

PRACTICE AREAS

- Petrography
- Laboratory Evaluations
- Construction Materials
- Historic Preservation
- Masonry
- EIFS, Stucco, Plaster
- Flooring and Underlayments
- Pavement Investigation

REGISTRATIONS

- Professional Engineer in OH

PROFESSIONAL AFFILIATIONS

- American Concrete Institute (ACI)
- Association for Preservation Technology International (APT)
- ASTM International
- Society of Concrete Petrographers (SCP)

TECHNICAL COMMITTEES

- ACI 221 - Aggregates
- ACI 232 - Fly Ash in Concrete
- ACI 523 - Cellular Concrete

CONTACT

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216.642.2300
www.wje.com

EXPERIENCE

Since joining WJE, Karla Salahshour has specialized in the evaluation and characterization of historic and modern building materials. Her work in WJE's Cleveland materials laboratory focuses on the petrographic examination of concrete, mortar, grout, brick, stucco and plaster, natural and manufactured stone, and other construction materials. Ms. Salahshour's laboratory work has included investigating the causes of distress in construction materials, characterization of cementitious materials, and the evaluation of durability concerns in hardened concrete.

Ms. Salahshour also conducts field evaluations, such as evaluating distress in concrete slabs and pavements and evaluating the performance of coating systems. Her field experience also includes the investigation of stone cladding panels, mass masonry structures, terra cotta facades, EIFS and stucco systems, and terrazzo. These field evaluations often grade into laboratory testing.

REPRESENTATIVE PROJECTS

Petrography

- Carvins Cove Dam - Roanoke, VA: Examination of deteriorated concrete due to alkali-silica reaction
- Blue Racer Natrium Plant - Natrium, WV: Examination of fire-damaged concrete
- Medical Center - Beachwood, OH: Investigation of lightweight cellular concrete
- Yale University, Welsh Hall - New Haven, CT: Examination of stone masonry
- Denso Facility - Livonia, MI: Examination of a pigmented metallic shake

Flooring and Underlayments

- Manufacturing Facility - Solon, OH: Investigation of static dissipative floor coating failure
- Urgent Care Facility - Kent, OH: Investigation of abrasion and impact damage on flooring material
- Medical Center - Beachwood, OH: Evaluation of substrate slab moisture
- Rice University - Houston, TX: Investigation of floor blisters
- Corning Museum of Glass - Corning, NY: Evaluation of floor densifiers and sealers
- Houston Methodist Hospital - Nassau Bay, TX: Investigation of blistered terrazzo flooring

Laboratory Evaluations

- Washington Dulles Airport - Washington, D.C.: Evaluation of failed terrazzo flooring systems
- Ahuja Medical Center - Beachwood, OH: Investigation of terra cotta rain screen panels
- Ohio State University, McCorkle Aquatic Pavilion - Columbus: Investigation of delaminated ceramic pool tiles
- Gilmore Academy Natatorium - Gates Mills, OH: Investigation of pool coating blisters
- InfoCision Stadium - Akron, OH: Investigation of rail post pocket grout
- Providence Point - Scott Township, PA: Examination of aggregate base course

Historic Preservation

- Washington National Cathedral - Washington, D.C.: Examination of mortar
- Hoover Dam - Henderson, NV: Evaluation of terrazzo plaza
- Edison Monument Tower - Menlo Park, NJ: Investigation of mosaic concrete repairs
- Union Theological Seminary - New York, NY: Examination of cast stone spires
- Perry's Victory and International Peace Memorial - Put-In-Bay, OH: Observations of efflorescence cleaning and mortar repointing
- Salk Institute for Biological Studies - La Jolla, CA: Evaluation of original concrete for restoration

Pavement Investigation

- Dallas/Fort Worth International Airport - TX: Examination of concrete apron
- Los Angeles International Airport - CA: Investigation of concrete runway
- Colorado Springs Airport - CO: Investigation of d-cracking in pavement
- Indianapolis International Airport - IN: Investigation of concrete surface distress
- Denver International Airport - CO: Investigation of concrete deterioration and evaluation of concrete repairs
- Honda Plant - OH: Evaluation of roller-compacted concrete
- Nova Place - Pittsburgh, PA: Investigation of porous pavement distress

APPENDIX C. WJE LOCATIONS

WJE Office Address List

ATLANTA
2915 Premiere Parkway, Suite 100
Duluth, GA 30097
770.923.9822

AUSTIN
9511 North Lake Creek Parkway
Austin, TX 78717
512.257.4800

BOSTON
311 Summer Street, Suite 300
Boston, MA 02210
617.946.3400

CHICAGO
10 South LaSalle Street, Suite 2600
Chicago, IL 60603
312.372.0555

CLEVELAND
9655 Sweet Valley Drive, Suite 3
Cleveland, OH 44125
216.642.2300

DALLAS
6363 North Highway 161, Suite 550
Irving, TX 75083
972.550.7777

DENVER
3609 South Wadsworth Boulevard,
Suite 400
Lakewood, CO 80235
303.914.4300

DETROIT
30700 Telegraph Road, Suite 3580
Bingham Farms, MI 48025
248.593.0900

DOYLESTOWN
800 Hyde Park
Doylestown, PA 18902
215.340.5830

HONOLULU
Topa Financial Center
745 Fort Street, Suite 2200
Honolulu, HI 96813
808.591.2728

HOUSTON
4321 West Sam Houston Parkway
North, Suite 190
Houston, TX 77043
832.467.2177

INDIANAPOLIS
8606 Allisonville Road, Suite 205
Indianapolis, IN 46250
317.510.3940

LOS ANGELES
225 South Lake Avenue, Suite 500
Pasadena, CA 91101
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Milwaukee, WI 53202
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605 North Highway 169, Suite 1000
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NEW HAVEN
2 Trap Falls Road, Suite 502
Shelton, CT 06484
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NEW YORK
1350 Broadway, Suite 910
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NORTHBROOK (HQ)
330 Pfingsten Road
Northbrook, IL 60062
847.272.7400

PHILADELPHIA
601 Walnut Street, Suite 875W
Philadelphia, PA 19106
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800 Vinial Street, Suite B301
Pittsburgh, PA 15212
412.316.9732

PORTLAND
15930 SW 72nd Avenue
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PRINCETON
5 Vaughn Drive, Suite 100
Princeton, NJ 08540
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RALEIGH
2500 Regency Parkway
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919.654.3037

SAN ANTONIO
1344 South Flores Street, Suite 201
San Antonio, TX 78204
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16496 Bernardo Center Drive, Suite 202
San Diego, CA 92128
858.207.5461

SAN FRANCISCO
2000 Powell Street, Suite 1650
Emeryville, CA 94608
510.428.2907

SEATTLE
960 South Harney Street
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110 East Broward Boulevard,
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561.226.1220

WASHINGTON, D.C.
2941 Fairview Park Drive, Suite 300
Falls Church, VA 22042
703.641.4601

APPENDIX D. AUTHORIZED PERSONNEL

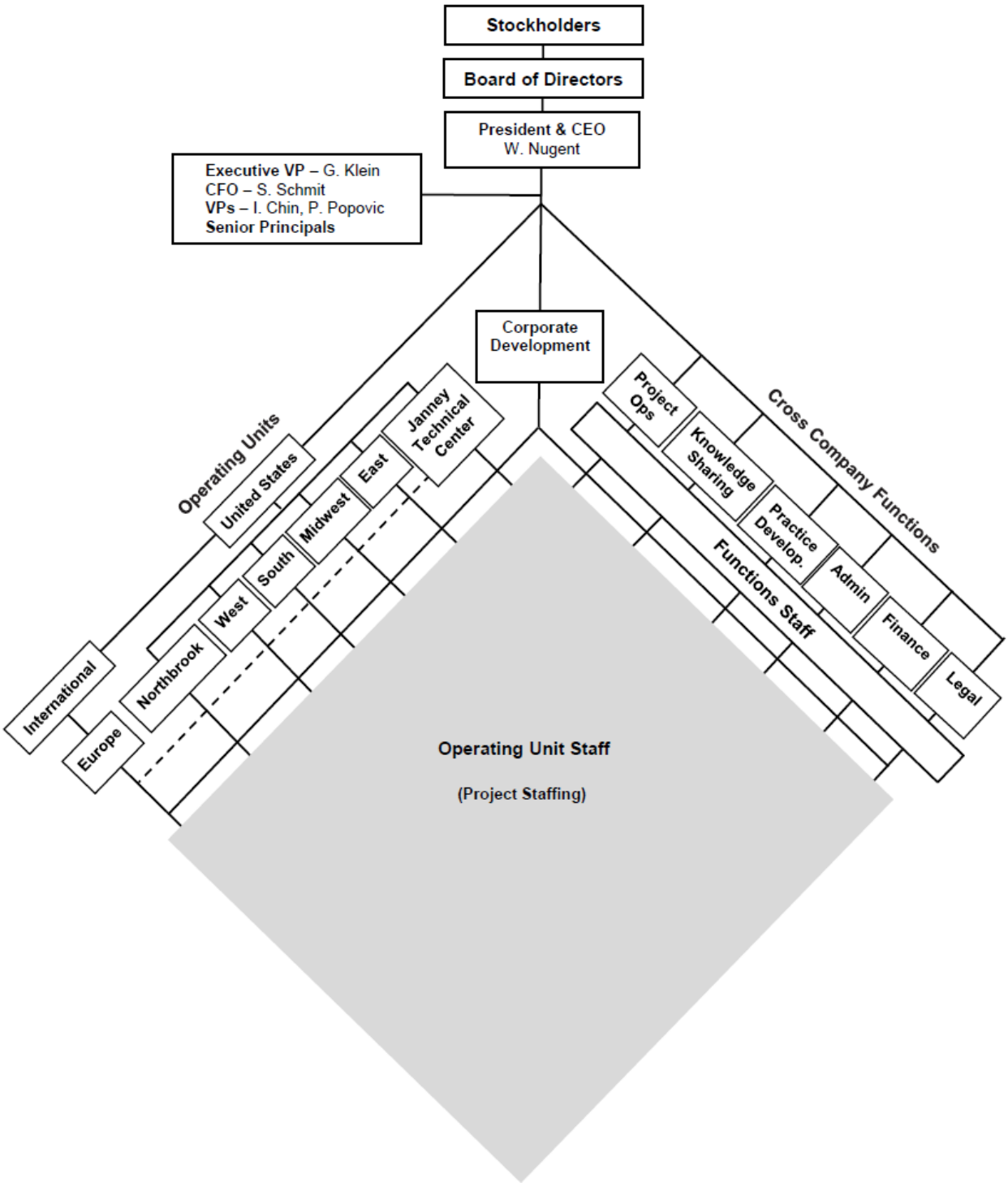
WJE

PERSONS AUTHORIZED TO RECEIVE AND SIGN DTMB CONTRACTS

Name	Title	Address	Email	Phone Number
Brian Tognetti	Principal & Unit Manager	30700 Telegraph Road, Suite 3580 Bingham Farms, MI 48025	btognetti@wje.com	248.594.0143
Ross Smith	Principal	41 Washington Avenue, Suite 315 Grand Haven, MI 49417	rsmith@wje.com	616.401.2228
Christopher Sass	Associate Principal	30700 Telegraph Road, Suite 3580 Bingham Farms, MI 48025	csass@wje.com	248.594.0149
Julie Szabo	Associate Principal	30700 Telegraph Road, Suite 3580 Bingham Farms, MI 48025	jszabo@wje.com	248.594.0156
Cheryl Early	Senior Associate	30700 Telegraph Road, Suite 3580 Bingham Farms, MI 48025	cearly@wje.com	248.594.0158
Ryan Grabow	Senior Associate	30700 Telegraph Road, Suite 3580 Bingham Farms, MI 48025	rgrabow@wje.com	248.594.0142
Matthew Lewis	Senior Associate	30700 Telegraph Road, Suite 3580 Bingham Farms, MI 48025	mlewis@wje.com	248.594.0145
Andrew Lobbestael	Senior Associate	30700 Telegraph Road, Suite 3580 Bingham Farms, MI 48025	alobbestael@wje.com	248.594.0151
Elise Love	Senior Associate	41 Washington Avenue, Suite 315 Grand Haven, MI 49417	elove@wje.com	248.514.4993
Sarah Rush	Senior Associate	30700 Telegraph Road, Suite 3580 Bingham Farms, MI 48025	srush@wje.com	248.594.0153
Leah Ruther	Senior Associate	41 Washington Avenue, Suite 315 Grand Haven, MI 49417	lruther@wje.com	734.660.3612
Jason Sanchez	Senior Associate	30700 Telegraph Road, Suite 3580 Bingham Farms, MI 48025	jsanchez@wje.com	248.594.0163
Neil Waraksa	Associate III	30700 Telegraph Road, Suite 3580 Bingham Farms, MI 48025	nwaraksa@wje.com	248.594.0160

APPENDIX E. WJE ORGANIZATIONAL CHART

WJE Organizational Chart



APPENDIX F. PROJECT EXAMPLES AND REFERENCES

BRIDGES - PEDESTRIAN AND VEHICULAR

INDOT On-Call Bridge Load Capacity/Analysis/Testing
Indianapolis, IN
Load Capacity Rating of New Structures Not Previously Rated and/or Rehabilitated/Widened Structures Which Have Not Been Previously Rated.

Indiana Department of Transportation
Bill Dittrich
bdittrich@indot.in.gov
317-234-6220

North Country Trail Pedestrian Bridge
Muskallonge Lake State Park, MI
Structural Design

Sanders & Czapski
Bill Sanders
bill@sanders-czapski.com
906-273-1207

Poplar Street Bridge Complex
East St. Louis, IL
Structural Evaluation, Seismic Retrofit and Rehabilitation of Elevated Roadways

Illinois Department of Transporation
Robert Harbaugh
robert.harbaugh@illinois.gov
618-346-3195

BUILDING ENVELOPE INVESTIGATION, REPAIR, UPGRADE

Lee Plaza
Detroit, MI
Assessment of structural and building enclosure conditions. Development of conceptual level estimate of rehabilitation work items and associated costs.

SDG Associates
Wesley Sims
wsims@sdg-assoc.com

McLaren Port Huron - South Tower
Port Huron, MI
Field measurement of air leakage through installed exterior windows and doors

Kramer Management Group
Dan Rooney
dan.rooney@kramermg.com
(517) 719-0171

Federal Reserve Bank Of Chicago - Detroit
Detroit, MI
Exterior Masonry Consulting Services

Sachse Construction/Federal Reserve Bank
Gerald Bourdage
Gerald.Bourdage@chi.frb.org
313.964.6016

GENERAL ARCHITECTURAL AND/OR ENGINEERING DESIGN

Riverfront Tower Apartments
Detroit, MI
Facade Repair Recommendations, Water Infiltration Investigation

AMP Residential, LLC
Al Kester
akester@ampresidential.com
517-512-2030

Book Depository Building
Detroit, MI
Exterior Rehabilitation Assessment and Suggested Repairs

Gensler
Brett Taylor
Brett_Taylor@gensler.com

Heritage Hall
Lansing, MI
Theater/Auditorium Waterproofing Consulting and Design Review

Quinn Evans Architects
Ben Telian
btelian@quinnevans.com

MAINTENANCE AND FACILITY PRESERVATION

Battle Creek Repair Design
Battle Creek, MI
Masonry Repair Design

City of Battle Creek
Katie Norton
kmnorton@battlecreekmi.gov
269-966-3355

Vacant Historic School Buildings Plan
Detroit, MI
Disposition Plan and Condition Assessments of Vacant Historic Buildings

Interboro Partners
Andrew Wald
awald@interboropartners.com
612-849-2281

Michigan Offshore Lights
Lansing, MI
Structural Repairs and Roof Restorations

O|X Studios & MI State Historic Preservation Office
Bryan Lijewski
LijewskiB@michigan.gov
517-335-9839

PARKING AND PAVING

Auburn Hills Parking Garage
Auburn Hills, MI
Condition Assessment

OHM Advisors
Kim O'Rear
Kim.Orear@ohm-advisors.com
734-417-8661

Grand Circus Parking Garage
Detroit, MI
Parking Garage Assessment

Pullman Construction
Pete Wallace
pwallace@structural.net
734-282-3801

Beaumont Grosse Pointe Parking Deck
Grosse Pointe, MI
Investigation and Repair of Concrete Structure

Beaumont Hospitals
David Tremberth
David.Tremberth@beaumont.org
313.473.1826

RECREATION AND SPORTS FACILITIES/FIELDS

Detroit Music Hall
Detroit, MI
Fire Escape Load Test

Integrity Building Group
Brian Mooney
info@ibgdetroit.com
313-400-2106

University of Notre Dame Joyce Athletic Convocation Center
Notre Dame, IN
Catwalk Repair Design and Construction

University of Notre Dame
Tony Polotto
apolotto@nd.edu
574-631-4205

Nashville Sounds Stadium Damage
Nashville, TN
Structural Damage Assessment

The Cincinnati Insurance Companies
Christine Snyder
Christine_Snyder@cinfin.com
315.414.0142

ROOF REPAIR, RESTORATION AND/OR REPLACEMENT DESIGN

Detroit Metro Airport
Detroit, MI
Roof Condition Assessment and Construction Period Services

GHD
Jarrod Cherwinski
Jarrod.Cherwinski@ghd.com
248-893-3401

Congregational Church of Birmingham
Bloomfield Hills, MI
Water Infiltration Investigation and Reroofing Recommendations

Congregational Church of Birmingham
Eric Hill
ehillarchitect@gmail.com
248-515-6953

Belle Isle Sawmill Roof
Detroit, MI
Roof Condition Assessment, Repairs, and Construction Services of Historic Building

Schostak Brothers & Co Inc. & Michigan DNR
Amanda Treadwell
treadwella@michigan.gov
313.269.7430

STRUCTURAL INVESTIGATION AND ASSESSMENT

Godfrey Lee High School Collapse
Wyoming, MI
Building Collapse Investigation and Repair Documents

Godfrey-Lee Public Schools
Dean Whitmore
dean_whitmore@gbtpa.com
(248) 452-6075

Facilities Services Buildings A, B & C
Ann Arbor, MI
Roof Framing Condition Surveys

University of Michigan
Michelle Smay
chelle@umich.edu
734-904-9790

Joplin Schools Disaster Response
Joplin, MO
WJE has assisted Travelers with over 500 claims since 1981, including condition assessments of thirteen schools post-hurricane.

Travelers Insurance
Scott Felton
sfelton@travelers.com

APPENDIX G. FIVE YEAR LITIGATION HISTORY

Five-Year Litigation History

WJE is involved in over 7,000 contracts per year. As a consequence of these contracts, WJE is brought into a variety of lawsuits. Nevertheless, during the past five years, WJE's Professional Liability carrier has not paid a single professional liability claim on behalf of WJE. Summary status of professional legal claims/disputes over the last five years are provided below.

Over the last five years, WJE has NOT been involved in any litigation or legal proceedings involving allegations against the firm for false claims or fraud.

WJE has NOT been fined or convicted in any other state or federal litigation or legal proceeding relating to the procurement or performance of any public or private construction project over the last five years.

Claimant	Year	Project Site	Description	Disposition/Status
United States ex rel. Davis and Westley	2016	Minnesota	Frivolous whistleblower case against WJE and dozens of other parties claiming coverup on the I-35 bridge collapse in Minneapolis in 2007.	WJE Dismissed
Great Northern Insurance v Academy House	2017	Pennsylvania	Subrogation claim by insurer claiming damage from burst water pipe.	WJE Dismissed
Gilliland v Baptist Health	2017	Arkansas	Worker injured on job claiming WJE directed his work.	WJE Dismissed
Bass v Lord & Taylor	2017	New York	Pedestrian injured by stone falling from façade.	Pending
Fordec Realty Corporation v Travelers	2018	New York	Owner of collapsed garage claims WJE conspired with Travelers to deny its claim.	WJE Dismissed
Ledcor v Tamal Vista	2018	California	Third party subcontractors suing WJE for claims relating to window installation.	WJE Dismissed
Gjurra v Third Avenue	2018	New York	Insurance company suing WJE for contribution on claim to worker injured by faulty elevator operation.	WJE Dismissed

Pipovic v Retail Properties of America	2018	Illinois	Employee injured at employer's parking garage suing WJE for negligent repair.	Pending
Pullum v CBRE et al	2018	Illinois	Party injured by debris from contractor's equipment suing WJE and other entities.	Pending
Ersbak v Certain Underwriters and Lloyd's of London	2018	Hawaii	Homeowner claims insurance company and everyone hired by it conspired to deny claim.	Pending
Stone v United Services Automobile Assoc. et al	2020	Hawaii	Homeowner claims insurance company failed to pay claims and WJE damaged property when inspecting home for damage.	Pending
Performance Services Inc v Halff Associates et al	2020	Texas	Contractor claims various engineering negligence including failure of WJE to account for scour near a wall.	Pending

Suspension or Debarment

WJE is not presently nor has it ever been debarred, proposed for debarment, or declared ineligible for the contract awards of any state or federal agency.

Prepared by:

Stephen Safranek
Secretary

Dated: January 18, 2021

APPENDIX 3

PROFESSIONAL CERTIFICATION FORMS

R 12/16/13

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
Facilities and Business Services Administration
Design & Construction Division

Certification of a Michigan Based Business

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

To qualify as a Michigan business:

Vendor must have, during the 12 months immediately preceding this bid deadline:
or
If the business is newly established, for the period the business has been in existence, it has:

(check all that apply):

- ☐ Filed a Michigan single business tax return showing a portion or all of the income tax base allocated or apportioned to the State of Michigan pursuant to the Michigan Single Business Tax Act, 1975 PA 228, MCL ˜208.1 – 208.145; or
- ☒ Filed a Michigan income tax return showing income generated in or attributed to the State of Michigan; or
- ☒ Withheld Michigan income tax from compensation paid to the bidder's owners and remitted the tax to the Department of Treasury; or

I certify that **I have personal knowledge** of such filing or withholding, that it was more than a nominal filing for the purpose of gaining the status of a Michigan business, and that it indicates a significant business presence in the state, considering the size of the business and the nature of its activities.

I authorize the Michigan Department of Treasury to verify that the business has or has not met the criteria for a Michigan business indicated above and to disclose the verifying information to the procuring agency.

Bidder shall also indicate one of the following:

- ☒ Bidder qualifies as a Michigan business (provide zip code: 48025)
- ☐ Bidder does not qualify as a Michigan business (provide name of State: _____).
- ☐ Principal place of business is outside the State of Michigan, however service/commodity provided by a location within the State of Michigan (provide zip code: _____)

Bidder: Wiss, Janney, Elstner Associates, Inc.

Brian J. Tognetti, Principal & Unit Manager
Authorized Agent Name (print or type)

BRIAN J. TOGNETTI 04/20/2020
Authorized Agent Signature & Date

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

R 12/16/13

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
Facilities and Business Services Administration
Design & Construction Division

Responsibility Certification

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

(a) Has not been convicted of a criminal offense incident to the application for or performance of a contract or subcontract with the State of Michigan or any of its agencies, authorities, boards, commissions, or departments.

(b) Has not had a felony conviction in any state (including the State of Michigan).

(c) Has not been convicted of a criminal offense which negatively reflects on the bidder's business integrity, including but not limited to, embezzlement, theft, forgery, bribery, falsification, or destruction of records, receiving stolen property, negligent misrepresentation, price-fixing, bid-rigging, or a violation of state or federal anti-trust statutes.

(d) Has not had a loss or suspension of a license or the right to do business or practice a profession, the loss or suspension of which indicates dishonesty, a lack of integrity, or a failure or refusal to perform in accordance with the ethical standards of the business or profession in question.

(e) Has not been terminated for cause by the Owner.

(f) Has not failed to pay any federal, state, or local taxes.

(g) Has not failed to comply with all requirements for foreign corporations.

(h) Has not been debarred from participation in the bid process pursuant to Section 264 of 1984 PA 431, as amended, MCL 18.1264, or debarred or suspended from consideration for award of contracts by any other State or any federal Agency.

(i) Has not been convicted of a criminal offense or other violation of other state or federal law, as determined by a court of competent jurisdiction or an administrative proceeding, which in the opinion of DTMB indicates that the bidder is unable to perform responsibly or which reflects a lack of integrity that could negatively impact or reflect upon the State of Michigan, including but not limited to, any of the following offenses under or violations of:

   i. The Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.101 to 324.90106.
   ii. A persistent and knowing violation of the Michigan Consumer Protection Act, 1976 PA 331, MCL 445.901 to 445.922.
   iii. 1965 PA 166, MCL 408.551 to 408.558 (law relating to prevailing wages on state projects) and a finding that the bidder failed to pay the wages and/or fringe benefits due within the time period required.
   iv. Repeated or flagrant violations of 1978 PA 390 MCL 408.471 to 408.490 (law relating to payment of wages and fringe benefits).
   v. A willful or persistent violation of the Michigan Occupational Health and Safety Act, 1974, PA 154, MCL 408.10001 to 408.1094, including: a criminal conviction, repeated willful violations that are final orders, repeated violations that are final orders, and failure to abate notices that are final orders.
   vi. A violation of federal or state civil rights, equal rights, or non-discrimination laws, rules, or regulations.
   vii. Been found in contempt of court by a Federal Court of Appeals for failure to correct an unfair labor practice as prohibited by Section 8 of Chapter 372 of the National Labor Relations Act, 29 U. s. C. 158 (1980 PA 278, as amended, MCL 423.321 et seq).

(j) Is NOT an Iran linked business as defined in MCL 129.312.

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

Bidder: Wiss, Janney, Elstner Associates, Inc.

Brian J. Tognetti, Principal
Authorized Agent Name (print or type)

BRIAN J. TOGNETTI 04/20/2020
Authorized Agent Signature & Date

☐ I am unable to certify to the above statements. My explanation is attached.

APPENDIX 4

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

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

The Professional's Consultant must submit a separate hourly billing rate for the professional Consultant services they will provide for State of Michigan Projects. A moderate mark-up of the Professional's Consultant services hourly billing rates, not to exceed 5%, will be allowed.

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

2021 HOURLY BILLING RATE
Based on 2020 Expenses

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

SALARIES:
Principals (Not Project Related)
Clerical/Secretarial
Technical (Not Project Related)
Temporary Help
Technical Training
Recruiting Expenses

OFFICE FACILITIES:
Rents and Related Expenses
Utilities
Cleaning and Repair

SUPPLIES:
Postage
Drafting Room Supplies
General Office Supplies
Library
Maps and Charts
Magazine Subscriptions

SERVICES (PROFESSIONAL):
Accounting
Legal
Employment Fees
Computer Services
Research

FINANCIAL:
Depreciation

EQUIPMENT RENTALS:
Computers
Typewriter
Bookkeeping
Dictating
Printing
Furniture and Fixtures
Instruments

TRAVEL:
All Project-Related Travel*

MISCELLANEOUS:
Professional Organization Dues
for Principals and Employees
Licensing Fees

SERVICES (NONPROFESSIONAL):
Telephone and Telegram
Messenger Services

TAXES:
Franchise Taxes
Occupancy Tax
Unincorporated Business Tax
Property Tax
Single Business Tax
Income Tax

INSURANCE:
Professional Liability Insurance
Flight and Commercial Vehicle
Valuable Papers
Office Liability
Office Theft
Premises Insurance
Key-Personnel Insurance

EMPLOYEE BENEFITS:
Hospitalization
Employer's F.I.C.A. Tax
Unemployment Insurance
Federal Unemployment Tax
Disability
Worker's Compensation
Vacation
Holidays
Sick Pay
Medical Payments
Pension Funds
Insurance - Life
Retirement Plans

PRINTING AND DUPLICATION:
Specifications (other than Contract Bidding Documents)
Drawings (other than Contract Bidding Documents)
Xerox/Reproduction
Photographs

LOSSES:
Bad Debts (net)
Uncollectible Fee
Thefts (not covered by Project/Contract bond)
Forgeries (not covered by Project/Contract bond)

DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET,
VEHICLE AND TRAVEL SERVICES
SCHEDULE OF TRAVEL RATES FOR CLASSIFIED AND UNCLASSIFIED EMPLOYEES
Effective October 1, 2020

MICHIGAN SELECT CITIES *

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	$85.00	$85.00
Breakfast	$10.25	$13.25
Lunch	$10.25	$13.25
Dinner	$24.25	$27.25

MICHIGAN IN-STATE ALL OTHER

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	$85.00	$85.00
Breakfast	$ 8.50	$11.50
Lunch	$ 8.50	$11.50
Dinner	$19.00	$22.00
Per Diem	**$87.00**	
Lodging	$51.00	
Breakfast	$ 8.50	
Lunch	$ 8.50	
Dinner	$19.00	

OUT-OF-STATE SELECT CITIES *

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	Contact Conlin Travel	Contact Conlin Travel
Breakfast	$13.00	$16.00
Lunch	$13.00	$16.00
Dinner	$25.25	$28.25

OUT-OF-STATE ALL OTHER

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	Contact Conlin Travel	Contact Conlin Travel
Breakfast	$10.25	$13.25
Lunch	$10.25	$13.25
Dinner	$23.50	$26.50
Per Diem	**$95.00**	
Lodging	$51.00	
Breakfast	$10.25	
Lunch	$10.25	
Dinner	$23.50	

Incidental Costs Per Day (with overnight stay) $5.00

Mileage Rates

Premium Rate	$0.575 per mile
Standard Rate	$0.360 per mile

* See Select Cities Listing

** Lodging available at State rate, or call Conlin Travel at 877-654-2179 or www.somtravel.com

SELECT HIGH COST CITY LIST

TRAVEL RATE REIMBURSEMENT FOR CLASSIFIED AND UNCLASSIFIED EMPLOYEES
Effective October 1, 2020

Michigan Select Cities/Counties

Cities	Counties
Ann Arbor, Auburn Hills, Detroit, Grand Rapids, Holland, Leland, Mackinac Island, Petoskey, Pontiac, South Haven, Traverse City	All of Grand Traverse, Oakland and Wayne

Out of State Select Cities/Counties

State	City/County
Arizona	Phoenix, Scottsdale, Sedona
California	Los Angeles (Los Angeles, Orange, Mendocino & Ventura Counties, and Edwards AFB), Eureka, Arcata, Mckinleyville, Mammoth Lakes, Mill Valley, San Rafael, Novato, Monterey, Palm Springs, San Diego, San Francisco, Santa Barbara, Santa Monica, South Lake Tahoe, Truckee, Yosemite National Park
Colorado	Aspen, Breckenridge, Grand Lake, Silverthorne, Steamboat Springs, Telluride, Vail
Connecticut	Bridgeport, Danbury
District of Columbia	Washington DC (also the cities of Alexandria, Falls Church and Fairfax, and the counties of Arlington and Fairfax, in Virginia; and the counties of Montgomery and Prince George's in Maryland) (See also Maryland and Virginia)
Florida	Boca Raton, Delray Beach, Jupiter, Fort Lauderdale, Key West
Georgia	Jekyll Island, Brunswick
Idaho	Sun Valley, Ketchum
Illinois	Chicago (Cook and Lake counties)
Kentucky	Kenton
Louisiana	New Orleans
Maine	Bar Harbor, Kennebunk, Kittery, Rockport, Sanford
Maryland	Counties of Montgomery & Prince Georges, Baltimore City, Ocean City
Massachusetts	Boston (Suffolk), Burlington, Cambridge, Woburn, Martha's Vineyard
Minnesota	Duluth, Minneapolis/St. Paul (Hennepin and Ramsey Counties)
Nevada	Las Vegas
New Mexico	Santa Fe
New York	Lake Placid, Manhattan (the borough of Manhattan, Brooklyn, Bronx, Queens and Staten Island), Riverhead, Ronkonkoma, Melville, Suffolk County, Tarrytown, White Plains, New Rochelle
Ohio	Cincinnati
Pennsylvania	Bucks County, Pittsburgh
Rhode Island	Bristol, Jamestown/Middletown/ Newport (Newport County) Providence
Texas	Austin, Dallas, Houston, L.B. Johnson Space Center
Utah	Park City (Summit County)
Vermont	Manchester, Montpelier, Stowe (Lamoille County)
Virginia	Alexandria, Falls Church, Fairfax
Washington	Port Angeles, Port Townsend, Seattle
Wyoming	Jackson, Pinedale

APPENDIX 5

CERTIFICATES OF INSURANCE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 4/20/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Greyling Insurance Brokerage 3780 Mansell Road, Suite370 Alpharetta, GA 30022	**CONTACT NAME:** Sam Barbera		
	PHONE (A/C, No, Ext): 847-753-7211	**FAX (A/C, No):** 847-291-9371	
	E-MAIL ADDRESS: sbarbera@wje.com		
	INSURER(S) AFFORDING COVERAGE		**NAIC #**
	INSURER A : Syndicate 2623/623 at Lloyd's		
INSURED Wiss, Janney, Elstner Associates, Inc Attn: Sam Barbera 330 Pfingsten Rd. Northbrook IL 60062	**INSURER B :**		
	INSURER C :		
	INSURER D :		
	INSURER E :		
	INSURER F :		

COVERAGES **CERTIFICATE NUMBER:** 61285831 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☐ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO-JECT ☐ LOC ☐ OTHER:						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG 	$ $ $ $ $ $ $
	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) 	$ $ $ $ $
	☐ **UMBRELLA LIAB** ☐ OCCUR ☐ **EXCESS LIAB** ☐ CLAIMS-MADE ☐ DED ☐ RETENTION $						EACH OCCURRENCE AGGREGATE 	$ $ $
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? **Y / N** ☐ **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	**N / A**					☐ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ $ $
A	Professional Liability (Claims Made)			W1755E210701	1/1/2021	1/1/2023	$1,000,000 Per Claim $2,000,000 Annual Aggregate	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

WJE No. 2021.0459 - Professional Architectural and Engineering Indefinite-Scope, Indefinite Delivery

CERTIFICATE HOLDER

State of Michigan
Department of Technology, Management and Budget
Design & Construction Division
3111 West St. Joseph Street
Lansing MI 48917

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Matias Ormaza

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 4/20/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Greyling Insurance Brokerage 3780 Mansell Road, Suite370 Alpharetta, GA 30022	**CONTACT NAME:** Sam Barbera **PHONE (A/C, No, Ext):** 847-753-7211 **FAX (A/C, No):** 847-291-9371 **E-MAIL ADDRESS:** sbarbera@wje.com
INSURED Wiss, Janney, Elstner Associates, Inc Attn: Sam Barbera 330 Pfingsten Rd. Northbrook IL 60062	**INSURER(S) AFFORDING COVERAGE** / **NAIC #** **INSURER A :** Nat'l Union Fire Ins Co of Pittsburgh, PA 19445 **INSURER B :** Travelers Property Casualty Ins. Co. 36161 **INSURER C :** New Hampshire Ins. Co. 23841 **INSURER D :** **INSURER E :** **INSURER F :**

COVERAGES **CERTIFICATE NUMBER:** 61285776 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	✓ **COMMERCIAL GENERAL LIABILITY** ☐ CLAIMS-MADE ✓ OCCUR ✓ Contractual Liability GEN'L AGGREGATE LIMIT APPLIES PER: ✓ POLICY ☐ PRO-JECT ☐ LOC ☐ OTHER:	✓		GL9566221	4/1/2021	4/1/2022	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 500,000 $ 25,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
A	**AUTOMOBILE LIABILITY** ✓ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ✓ HIRED AUTOS ONLY ✓ NON-OWNED AUTOS ONLY ✓ Comp/Coll ✓ $250/$500 ded.	✓		CA5721463	4/1/2021	4/1/2022	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 2,000,000 $ $ $
B	✓ **UMBRELLA LIAB** ✓ OCCUR ✓ **EXCESS LIAB** ☐ CLAIMS-MADE ☐ DED ✓ RETENTION $ 10,000	✓		ZUP41N2517621NF	4/1/2021	4/1/2022	EACH OCCURRENCE AGGREGATE	$ $2,000,000 $ $2,000,000
C C	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N: N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	✓	WC015853342 (AOS) WC015853341 (CA)	4/1/2021 4/1/2021	4/1/2022 4/1/2022	✓ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

WJE No. 2021.0459 - Professional Architectural and Engineering Indefinite-Scope, Indefinite Delivery
Contract No. 00903

Additional Insured: The State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents.

CERTIFICATE HOLDER

State of Michigan
Department of Technology, Management and Budget
Design & Construction Division
3111 West St. Joseph Street
Lansing MI 48917

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Matias Ormaza

AGENCY CUSTOMER ID: _____

LOC #: _____

ADDITIONAL REMARKS SCHEDULE

AGENCY	NAMED INSURED
Greyling Insurance Brokerage	Wiss, Janney, Elstner Associates, Inc Attn: Sam Barbera 330 Pfingsten Rd. Northbrook IL 60062
POLICY NUMBER	
CARRIER / NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 **FORM TITLE:** Certificate of Liability (03/16)

HOLDER: State of Michigan Department of Technology, Management and Budget Design & Construction Division

ADDRESS: 3111 West St. Joseph Street Lansing MI 48917

Subject to the terms, conditions, limitations and exclusions of the policies evidenced herein: The above are included as Additional Insureds when required by written contract with the Named Insured under the general liability including ongoing operations and products/completed operations and auto liability, but only with respect to services provided by Wiss, Janney, Elstner Associates, Inc., regarding the referenced contract.

Excess/Umbrella Liability Policy follows form.

When agreed in written contract, coverage is provided on a primary and non-contributory basis.

Waiver of Subrogation is afforded the Additional Insureds under Workers Compensation.

POLICY NUMBER: GL9566221

COMMERCIAL GENERAL LIABILITY
CG 20 10 12 19

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
ANY PERSON OR ORGANIZATION WHOM YOU BECOME OBLIGATED TO INCLUDE AS AN ADDITIONAL INSURED AS A RESULT OF ANY CONTRACT OR AGREEMENT YOU HAVE ENTERED INTO.	PER THE CONTRACT OR AGREEMENT.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. **Section II 6 Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

C. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable limits of insurance;

whichever is less.

This endorsement shall not increase the applicable limits of insurance.

POLICY NUMBER: GL9566221

COMMERCIAL GENERAL LIABILITY
CG 20 37 12 19

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location And Description Of Completed Operations
ANY PERSON OR ORGANIZATION WHOM YOU BECOME OBLIGATED TO INCLUDE AS AN ADDITIONAL INSURED AS A RESULT OF ANY CONTRACT OR AGREEMENT YOU HAVE ENTERED INTO.	PER THE CONTRACT OR AGREEMENT.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. **Section II** – **Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and

2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to **Section III** – **Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable limits of insurance;

whichever is less.

This endorsement shall not increase the applicable limits of insurance.

APPENDIX 6

FEDERAL PROVISIONS ADDENDUM

(If your project is funding wholly or in part by federal funds, this appendix applies)

FEDERAL PROVISIONS ADDENDUM

This addendum applies to purchases that will be paid for in whole or in part with funds obtained from the federal government. The provisions below are required, and the language is not negotiable. If any provision below conflicts with the State's terms and conditions, including any attachments, schedules, or exhibits to the State's Contract, the provisions below take priority to the extent a provision is required by federal law; otherwise, the order of precedence set forth in the Contract applies. Hyperlinks are provided for convenience only; broken hyperlinks will not relieve Contractor from compliance with the law.

1. Equal Employment Opportunity

If this Contract is a "**federally assisted construction contract**" as defined in 41 CFR Part 60-1.3, and except as otherwise may be provided under 41 CFR Part 60, then during performance of this Contract, the Contractor agrees as follows:

a. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

c. The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

d. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

e. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

f. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

g. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

h. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, that if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

2. Davis-Bacon Act (Prevailing Wage)

If this Contract is a **prime construction contract** in excess of $2,000, the Contractor (and its Subcontractors) must comply with the Davis-Bacon Act (40 USC 3141-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"), and during performance of this Contract the Contractor agrees as follows:

a. All transactions regarding this contract shall be done in compliance with the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable. The contractor shall comply with 40 U.S.C. 3141-3144, and 3146-3148 and the requirements of 29 C.F.R. pt. 5 as applicable.

b. Contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor.

c. Additionally, contractors are required to pay wages not less than once a week.

3. Copeland "Anti-Kickback" Act

If this Contract is a contract for construction or repair work in excess of $2,000 where the Davis-Bacon Act applies, the Contractor must comply with the Copeland "Anti-

Kickback" Act (40 USC 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"), which prohibits the Contractor and subrecipients from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled, and during performance of this Contract the Contractor agrees as follows:

a. **Contractor**. The Contractor shall comply with 18 U.S.C. §874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.

b. **Subcontracts**. The Contractor or Subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA or the applicable federal awarding agency may by appropriate instructions require, and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.

c. **Breach**. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a Contractor and Subcontractor as provided in 29 C.F.R. § 5.12.

4. Contract Work Hours and Safety Standards Act

If the Contract is **in excess of $100,000** and **involves the employment of mechanics or laborers**, the Contractor must comply with 40 USC 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5), as applicable, and during performance of this Contract the Contractor agrees as follows:

a. **Overtime requirements**. No Contractor or Subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

b. **Violation; liability for unpaid wages; liquidated damages**. In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any Subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of $27 for each calendar day on which such individual was required or permitted to work in excess of the standard work

week of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

c. **Withholding for unpaid wages and liquidated damages**. The State shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or Subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

d. **Subcontracts.** The Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

5. Rights to Inventions Made Under a Contract or Agreement

If the Contract is funded by a federal "funding agreement" as defined under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

6. Clean Air Act and the Federal Water Pollution Control Act

If this Contract is **in excess of $150,000,** the Contractor must comply with all applicable standards, orders, and regulations issued under the Clean Air Act (42 USC 7401-7671q) and the Federal Water Pollution Control Act (33 USC 1251-1387), and during performance of this Contract the Contractor agrees as follows:

Clean Air Act

1. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
2. The Contractor agrees to report each violation to the State and understands and agrees that the State will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency or the applicable federal awarding agency, and the appropriate Environmental Protection Agency

Regional Office.

3. The Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA or the applicable federal awarding agency.

Federal Water Pollution Control Act

1. The Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
2. The Contractor agrees to report each violation to the State and understands and agrees that the State will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency or the applicable federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.
3. The Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA or the applicable federal awarding agency.

7. Debarment and Suspension

A "contract award" (see 2 CFR 180.220) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (51 FR 6370; February 21, 1986) and 12689 (54 FR 34131; August 18, 1989), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

a. This Contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the Contractor is required to verify that none of the Contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

b. The Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

c. This certification is a material representation of fact relied upon by the State. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the State, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

d. The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and

throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

8. Byrd Anti-Lobbying Amendment

Contractors who apply or bid for an award of **$100,000 or more** shall file the required certification in *Exhibit 1 – Byrd Anti-Lobbying Certification* below. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

9. Procurement of Recovered Materials

Under 2 CFR 200.322, Contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act.

a. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:

i. Competitively within a timeframe providing for compliance with the contract performance schedule;

ii. Meeting contract performance requirements; or

iii. At a reasonable price.

b. Information about this requirement, along with the list of EPA- designated items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive- procurement-guideline-cpg-program.

c. The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

10. Additional FEMA Contract Provisions.

The following provisions apply to purchases that will be paid for in whole or in part with funds obtained from the Federal Emergency Management Agency (FEMA):

a. Access to Records. The following access to records requirements apply to this contract:

i. The Contractor agrees to provide the State, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of

making audits, examinations, excerpts, and transcriptions.

ii. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

iii. The Contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.

In compliance with the Disaster Recovery Act of 2018, the State and the Contractor acknowledge and agree that no language in this contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

b. Changes.
See the provisions regarding modifications or change notice in the Contract Terms.

c. DHS Seal Logo and Flags.
The Contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

d. Compliance with Federal Law, Regulations, and Executive Orders.
This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion of the contract. The Contractor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives.

e. No Obligation by Federal Government.
The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the State, Contractor, or any other party pertaining to any matter resulting from the Contract."

f. Program Fraud and False or Fraudulent Statements or Related Acts
The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to this contract.

EXHIBIT 1
BYRD ANTI-LOBBYING CERTIFICATION

Contractor must complete this certification if the purchase will be paid for in whole or in part with funds obtained from the federal government and the purchase is greater than $100,000.

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

   This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

EXHIBIT 1 - BYRD ANTI-LOBBYING CERTIFICATION

The Contractor, Wiss, Janney, Elstner Associates, Inc., certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

Brian J. Tognetti

Signature of Contractor's Authorized Official

Brian J. Tognetti, Principal & Unit Manager

Name and Title of Contractor's Authorized Official

04/20/2020

Date