ISID - Environmental (Billing Rate)
Indefinite-Scope, Indefinite-Delivery Contract
R 6/7/11

DTMB CONTRACT
Technology, Management & Budget

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET

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

CONTRACT FOR PROFESSIONAL SERVICES: Indefinite Scope-Indefinite Delivery

THIS CONTRACT, authorized this 2nd day of September in the year two-thousand and eleven (2011), by the Director, Department of Technology, Management and Budget, BETWEEN the STATE OF MICHIGAN acting through the FACILITIES AND BUSINESS SERVICES ADMINISTRATION, DESIGN AND CONSTRUCTION DIVISION of the DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET, First Floor, Stevens T. Mason Building, Lansing, Michigan, and **Otwell Mawby,309 E. Front St. , Traverse City, MI 49684,** the Prime Professional Services Contractor, hereinafter called the Professional.

WHEREAS, the Department proposes securing professional services for:

Indefinite-Scope, Indefinite-Delivery Contract No. 00326
Index No. (To Be Established) Contract Order No. Y (To Be Assigned)
File No. (To Be Assigned)
Department of Technology, Management and Budget, Facilities and Business Services Administration, Design and Construction Division, Professional Architectural and Engineering Indefinite-Scope, Indefinite-Delivery Contract (ISID) for Minor Projects - **Environmental Engineering and Construction Administration Services**
Various State Departments and Facilities
Various Site Locations, Michigan

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

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

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

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

FOR THE PROFESSIONAL:

OTWELL MAWBY, P.C.
Firm Name

[redacted]
Federal Identification (I.D.) Number

Signature

9/29/2011
Date

PRINCIPAL
Title

FOR THE STATE OF MICHIGAN:

Director, Department of Technology, Management and Budget

OCT 5 2011
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

Provide professional environmental services, technical staff, and support personnel for ISID minor projects on an as-needed basis at various State/Client Agencies within the various site location areas as defined by the State of Michigan. 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 environmental services required for each of these assigned projects requested by the Department may include any or all of the Tasks included in the Phase 100 – Study through the Phase 900 – Operation and Maintenance Management.

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

The total compensation to be paid to the Professional by the Department for all assigned ISID minor Projects under this Contract will not exceed two-hundred and fifty-thousand dollars ($250,000) unless, otherwise approved in writing by the Department.

This Contract does not warrant or imply to the Professional design firm, entitlement to perform any specific percentage (%) amount of environmental work during the life of this three (3) year Contract.

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

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

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 includes attendance at all Project related meetings and conferences. Professional services for the assigned projects under this contract shall be provided in the Phase/Task sequence shown below and shall be rendered in accordance with the Professional's proposed and approved Project Study, Design, and Proposed Construction Schedule. The Professional's study, design and proposed construction schedule shall be detailed, undated, and time sequence related for all Phase/Task services appropriate for the Project. The Professional shall field-check and verify the accuracy of all study/drawing and any data furnished by the Department, the State/Client Agency or any other Project related source. The Professional shall not employ or consult with any firms in completing the Professional's obligations herein who it anticipates will be a construction Bidder for the Project or any part thereof, unless specifically authorized, in writing, by the Department. The Professional acknowledges that the Department is the first interpreter of the Professional's performance under this Contract.

The Professional acknowledges by signing this Professional Services Contract having a clear understanding of the requested professional environmental services required by the Department 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 "DMB-452, 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 "DMB-460, 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 of 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.

PHASE 100 - STUDY PHASE

Provide a complete and comprehensive environmental study consistent with the Project's Program Statement, with itemized construction cost estimates as defined by the Department.

Task 101 COORDINATION: Meet with the Project Team and define all areas of investigation. Establish Project Team responsibilities and lines of communications for the assigned Project. 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 102.01 PHASE I - SITE ASSESSMENT: Conduct a Phase I - Site Characterization Assessment of the Project site, its buildings and/or structures, and the natural environment. The survey shall be performed, and reported, in accordance with the current edition of the American Society for Testing and Materials (ASTM) standard practice for E1527-05 Environmental Site Assessment, the instructions for which are part of this Contract and it's specifications. The subjects of investigation within the text of this standard practice guide shall be supplemented with such other topics of investigation as may be necessary, and appropriate, to completely describe the Project site. Upon finding any definitive indication of possible defect, or reaching any conclusion that a Phase II Site Assessment Investigation is necessary, photographs and additional site assessment investigations and sampling shall be performed while on-site, using manual and portable power tools and equipment.

Task 102.02 PHASE II - SITE ASSESSMENT: Upon receiving the Department's written authorization, conduct the Phase II - Site Assessment Investigations to evaluate potential defects identified in the related Phase I - Site Characterization Assessment. Submit a summary report of the Phase II - Site Assessment Investigation in accordance with the Task 110 Report format.

Task 102.03 SITE CLASSIFICATION: Determine which classification scenarios (Class 1 through Class 4) fit the Project site based on their threat to human health, safety or sensitive environmental receptors in accordance with the Department of Environmental Quality operational memoranda and the American Society for Testing and Materials, Standard Guide for Risk-Based Corrective Action process for sites under Part 213 of the 1994 PA 451, as amended.

Task 102.04 RESEARCH: Gather and/or develop all data to evaluate and clarify the Project. Research existing data, analyze and refine the concepts of the assigned Project's Program Statement. Through discussions with the Project Team, by interrogation and necessary counsel, establish, in requisite detail, the information required to complete the Study for functional and operational 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 103.01 INITIAL RESPONSE INVESTIGATIONS: Conduct such on-site investigations as may be necessary to assess any potential for, verify the occurrence/circumstance of, and envision the implications of, fugitive contamination. Except as may be otherwise directed by the Department, the following work of this Task shall be commenced within twenty-four (24) hours of the assignment by the Department:

A. Perform site surveys and site investigations to identify, and initially assess, the extent of uncontrolled toxic/hazardous materials at the Project site. Conduct site Inspections to detect any immediate hazard to public health, safety, and welfare. Prescribe and oversee implementation of measures to arrest, stabilize, contain, and negate or remedy such hazards. In circumstances posing risk of fire, explosion, or release of toxic materials to the atmosphere, develop contingency response procedure plans for the affected area. Prepare submittals, and provide all information necessary to secure the approval of the State and the local disaster preparedness authority having governing jurisdiction at the Project site.

B. Recommend procedures for the safe execution of the affected State/Client Agency functions, consistent with the character and impacts of the site contamination. Provide appropriate information for notifications to personnel impacted by the site contamination, and/or for the Department of Environmental Quality's use in its public information program regarding the site contamination. Provide no statements to State/Client Agency staff, wards of the State, inmates, news media, or the public, regarding any circumstance of the site contamination.

C. Provide, on the Department's behalf, the appropriate notifications to the Department of Environmental Quality's, State Project Manager and the local and State government agencies and identify any reportable quantities of hazardous materials that may have been released, as required by the 1994 PA 451, as amended. Provide reports required by the 1994 PA 451, as amended, and make all other required notifications to the respective enforcing agency(s). Prepare and provide the initial response investigation(s) reports for this Task, in accordance with the Task 110 Report format or the format required by the enforcing agency.

Provide initial response services including emergency response to a new spill or source area at the request of the Department of Environmental Quality.

Task 103.02 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 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 five (5) copies of the draft study report to the Project Team at 50 percent and 90 percent completion review intervals and solicit review comments.

Task 104 PRELIMINARY SITE INVESTIGATION: Conduct the following on-site Inspections, and research, as appropriate, to define the Project site and the circumstances of the site contamination:

A. Identify and analyze the character, use, history, construction, utilities, and all other pertinent built and natural features of the site, and those within any proximate area which may be impacted by, subject to, responsible for, or contributory to, fugitive contamination. Secure, for reference, all site maps utility/building/structural drawings, well/boring records, surveys, any enforcement records, and all other applicable data. Conduct additional on-site surveys and investigations as necessary to adequately define and depict the Project site. Identify all known, and suspected, contaminants and those that may be predictable from previous site usage.

B. Conduct an evaluation of the existing data based on preliminary site data and the characteristics of the contaminants, and to the extent that reasonable predictions can be made, envision the source(s), routes, and consequences of active contamination and inspect for indications thereof. As applicable, prepare and submit, on the Department's behalf, a site characterization plan in accordance with the 1994 PA 451, as amended. Prepare and provide preliminary site investigation report(s) for this Task in accordance with the Task 110 Report format requirements.

C. Conduct Tier 1 Assessment for sites under Part 213 of the 1994 PA 451, as amended. Gather site assessment data on source characterization, potential for exposure and degradation of beneficial uses and extent of contamination. Evaluate Tier 1 results for no action, final corrective action, interim corrective action or tier upgrade-further analysis. Prepare and provide the ninety (90) calendar day initial assessment report in accordance with the report format required by the Department of Environmental Quality.

Task 105 PROJECT WORK PLAN: Prepare a complete, cost effective, viable, and efficient, work plan to determine the extent and degree of environmental contamination at the Project site.

A. The work plan shall be consistent with the Department's approved Project/Program Statement scope of work and the governing enforcing agency's guidelines for preparation of Project work plan(s). Incorporate the Project specific adapted Project Health and Safety Plan and Quality Control/Quality Assurance Plan of Tasks 602 and 603 and the cost and schedule estimate of Task 108 and Task 109. Summarize the preliminary site investigation findings of Task 104. Develop an appropriate program of sampling and other specialized, nondestructive, investigations to adequately characterize the Project site with respect to geologic, hydrogeologic, hydrologic, topographic, surface and ground water, soil, sediment, air quality, biota, demographics, and other parameters influencing, or, influenced by the contaminants, and/or affecting the vertical and horizontal dispersal and intensities of contaminants, and the migration of the same. Support each line of site investigation with the logic and principals underlying and being applied to define test indicators, detection levels, expected background levels, and the prescribed Project work.

B. Where Project site sample analysis is to be by other than the Professional firm's own staff, or subcontracted laboratory, the work plan shall include, as appendixes, a listing of the type, method, and number, of environmental tests to be performed and an inventory of all sampling supplies required. The work plan shall be objectively composed and shall not identify the Professional, by name, as performing any part of the work plan. This document shall be so comprehensive, definitive, clearly presented, and self-contained, that the intended work may readily be competitively bid from that document. Review the work plan with the Project Team and revise as required. Where the Project requires, submit the work plan in accordance with the 1994 PA 451, as amended. Submit the work plan and report in accordance with the Task 110 Report work plan format requirements.

Task 106 REMEDIAL INVESTIGATION/SITE ASSESSMENT: Direct, or as appropriate supervise, the Phase 600 and 700 related Tasks of this Contract for site specific surveys, sampling and subsurface investigations as necessary to fully identify and/or monitor the circumstances of contamination.

Task 106.01 Conduct all site investigation work in accordance with the requirements of the accepted Project work plan (and such extensions and modifications thereof as the governing enforcement authority may require), and with the Project schedule. Notify the Department and the governing enforcing agency of all sampling with adequate advance notification to allow for their participation.

Task 106.02 Provide a summary report of all findings and determinations. Include and analyze the results of all laboratory testing. Conduct dispersion modeling as appropriate. Identify and define all geological parameters having influence. Depict the results of all data to graphically show the location(s), vertical and horizontal extent, profiles, and intensities of the site contamination, any plume orientation/rate of dispersion, and the characteristics of any impacted soils and surface/ground water. Identify all computer programs used to reduce, analyze, and otherwise use data. Analyze and provide a risk assessment of the site contamination consistent with the United States Environmental Protection Agency (USEPA) and the Department of Environmental Quality evaluation criteria. The finalized report shall be sufficiently objective, comprehensive, and inclusive that no other reference will be required to understand the circumstances of the site contamination, determine the appropriate method of remediation, and submit proposals for its design. Submit the remedial investigations reports in accordance with the Task 110 Report format requirements.

Task 106.03 Conduct Tier 2 Assessment: Upon receiving the Department's written authorization, to consider site-specific target levels (SSTLs) and appropriate points of compliance in accordance with the Department of Environmental Quality operational memoranda and the American Society for Testing and Materials, Standard Guide for Risk-Based Corrective Action process. Evaluate the results of Tier 2 for no action, final corrective action, interim corrective action or tier upgrade. Provide a summary report of the Tier 2 assessment in accordance with the report format required by the Department of Environmental Quality.

Task 106.04 Conduct Tier 3 Assessment: Where the Project requires under Part 213 of the 1994 PA 451, as amended. Upon receiving the Department's written authorization, conduct Tier 3 assessment to consider a more refined site-specific target levels to improve the accuracy of the applicable models in accordance with the Department of Environmental Quality operational memoranda and the American Society for Testing and Materials, Standard Guide for Risk-Based Corrective Action process. Evaluate the results of Tier 3 for no action, final

corrective action or interim corrective action. Provide a summary report of the Tier 3 assessment in accordance with the report format required by the Department of Environmental Quality.

Task 106.05 Conduct a Site Characterization: By collecting sufficient data to understand source area(s), define the nature and extent of contamination, understand contaminant transport and exposure pathways and design a remediation system. Conduct a feasibility study to select a viable and most economical remedial alternative for implementation as a corrective action plan at the site. Prepare the final assessment three-hundred and sixty-five (365) calendar day report. Prepare a closure report for the sites qualified for closure under Part 213 of the 1994 PA 451, as amended. Provide the reports in accordance with the report format required by the Department of Environmental Quality.

Task 106.06 BUILDINGS/AIR QUALITY: Define and conduct the appropriate testing program to confirm and/or establish the existing baseline/ambient air quality for the site/building(s)/facility and to identify any level(s) of contamination therein.

A. Determine the local air quality as reported by most current air quality report of the Department of Environmental Quality, Air Quality Division. Such program shall consist of one (1) or more sampling stations on-site and upwind of buildings. Within buildings and structures, identify and sample appropriate areas of homogeneous use, common air supply/return/circulation. Provide a minimum of three (3) samples per area known to contain hazardous materials or sources of contamination as well as one (1) or more representing the main ventilation system air return within each mechanical room, boiler room, and utility tunnel, at all open space or above ceiling plenums, and at such other locations as may represent quantifiable areas having common air supply or circulation characteristics.

B. Present test results in comparison to standard limits of concentrations allowed and/or recommended by the Department of Community Health, the Department of Environmental Quality, the Michigan Occupational Safety and Health Regulations, and the United States Environmental Protection Agency. Present findings in such format as the Department may prescribe. Verbally notify the governing enforcing agency and the Department of any test results exceeding allowable limits and confirm notice in writing. Provide a summary testing report in accordance with the Task 110 Report format requirements.

Task 106.07 HAZARDOUS MATERIALS: Define and conduct an appropriate bulk sampling program for suspected toxic/hazardous materials and/or for waste characterization.

A. ASBESTOS: Assess all asbestos containing materials and provide a management plan and operating/maintenance program in the following format:
   (1) Assessment.
   (2) Management Plan.
   (3) Operations and Maintenance Program.

Task 107 RISK ASSESSMENT: Provide support to the Department and the State/Client Agency to determine ecological and human health risks at the site due to the presence of contaminants. Conduct statistical analysis and data evaluations to support risk assessment. The Professional will evaluate site specific data on a reach by reach basis to develop statistically significant relations of contaminants, to the extent that the data allow.

Task 107.01 ECOLOGICAL RISK ASSESSMENT: Provide support to the Department and the State/Client Agency to determine risks posed by contaminants at the site. Evaluate the studies, analysis, models and comments on the Ecological Risk Assessment provided by the Potential Responsible Parties (PRPs) and/or the United States Environmental Protection Agency (USEPA) and prepare a response to address the issues/comments.

Task 107.02 HUMAN HEALTH RISK ASSESSMENT: Provide support to the Department and the State/Client Agency to determine risks posed by contaminants at the site to humans. Evaluate the studies, analysis, models and comments on the Human Health Risk provided by PRPs and/or USEPA and prepare a response to address the issues/comments.

Task 108 PROJECT COST: Provide itemized construction cost(s) estimates for each Project and maintain current, the estimated cost for, and expenditures of each Task of each respective Phase. In addition to remediation costs, such costs shall include, and specifically identify, all professional, testing, construction, and remediation costs, as well as any costs to maintain the State/Client Agency facility operations. Project cost analysis shall consider

funding sources availability, and all steps of the Project Budget and appropriation processes and similar allocation processes affecting funding availability. Such availability shall be compared to projected cash flows. Where any cost is projected to occur over more than one (1) fiscal year, the estimate shall reflect annual costs.

Task 109 PROJECT SCHEDULE: Provide and submit for the Department and the State/Client Agency's acceptance, and maintain current for each assigned Project, a schedule for the events of Tasks 104, 105, 106, and 107. The schedule format will be prescribed by the Department. This schedule shall include the procedural steps of Project Budget submittal, legislative appropriation, and the allocation and release of funds. Project schedules shall be in total compliance with the requirements of any court order(s), consent agreement(s) or other governing directive(s). Prescribed, agreed upon, or historically reasonable schedule times shall be included for reviews and approvals by the governing enforcing agency and for budgetary processes. Such schedules shall be provided in undated unit time durations (day(s), week(s), month(s), etc.) Project schedule dates will be incorporated when approvals or other written orders to proceed become known. Adherence by the Professional, to the Project's accepted schedule time/duration is a condition for satisfactory performance of this Contract.

Task 110 PROJECT STUDY REPORTS: Submit weekly written reports for the work of Tasks 103, 104, 106, and 107 (or as the Department may require) which briefly summarize the on-site field investigation activities, findings, significant decisions, and accomplishment of the preceding period. These reports shall transmit and summarize the findings of the on-site field investigation reports of the Phase 700 Project Tasks. Give notice of identified, or anticipated, problems which require response by the Project Team. Project study reports shall identify any significant deviations from the accepted Project work plan, itemized construction cost estimate, or schedule, and provide explanations of the same.

A. Submit the Task 102, draft, preliminary, and final versions, of the Project written report in accordance with the current edition of the American Society for Testing and Materials (ASTM) standard practice for E1527-05, Environmental Site Assessment and as outlined in the Department's approved Project/Program Statement, and the summary reports of Tasks 102, 103, 104, 106, and 107 as the Department may require. Prepare all revisions thereto as the Project Team may deem necessary to produce complete and acceptable report documents. The draft, preliminary, and final reports of Tasks 102.01, 103, 104, 105, 106, and 107 shall be as required by the governing enforcing agency or the Department, as appropriate, and shall include as a minimum the following items:

1. Problem
2. Conclusion
3. Recommendations
4. Discussion, details, and documentation

B. Provide copies of the finalized work plan of Task 105 and summary reports of Tasks 102, 103, 104, 106, and 107 as necessary for submittal to the governing enforcing agency and the Department, along with one (1) camera-ready original, suitable for legible reproduction. In addition, copies of the work plan, and all study reports of this Phase shall be provided to the Project Team members along with up to five (5) additional copies to be distributed as the Department may direct. Provide the Department copies of all electronic/computer data records generated for the Project scope of work, suitable for reapplication to the Project by others.

C. When directed by the Department, submit the Project work plan and reports to the governing enforcing agency on the State/Client Agency's behalf. Monitor the progress of the approval process. Attend all Project related meetings, make presentations, explain all submitted technical data and proposals, provide and submit such amending information, and make such revisions, as may be necessary for the governing enforcing agency's evaluation and approval of the Project work plan and report. Provide environmental investigation/study presentations as indicated in the Project scope of work plan for Department acceptance and incorporate all study review comments required for Department written acceptance of the Project program analysis report. Provide one (1) acceptable environmental investigation/study presentation to the Project Team for this Task. Any additional environmental investigation/study presentations requested by the Department will be considered extra professional services and the additional environmental investigation/study costs will be paid to the Professional firm by the Department with a Contract Change Order.

Task 111 DATA MANAGEMENT: Review data submitted by Potential Responsible Party (PRP) to determine completeness, integrity, and comparability to other data sets. Develop and manage a comprehensive database to allow the Department and the State/Client Agency access to all electronically submitted data. Run queries on the data at the direction of the Project Director to support the agency's analysis and decision making processes. Review and validate data submitted by Potential Responsible Party (PRP) on quarterly basis. Provide data queries, maps, and associated summaries as requested by the Department and the State/Client Agency.

Task 112 DOCUMENT MANAGEMENT: Provide services to the Department and the State/Client Agency Project to organize, log, maintain document database, and manage the documents associated with the administrative records for the site. Assist the Department and the State/Client Agency in locating, copying, and distributing documents as requested through the Freedom of Information Act or as otherwise requested by the Department and the State/Client Agency. Project

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 and the State/Client Agency deem 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 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 "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" 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 Project. Revise the proposed program as required to achieve the assigned 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 assigned project budget is adequate to achieve the 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, sign-offs and backup data and information. Submit five (5) copies 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 and the State/Client Agency 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 and the State/Client Agency will be considered extra professional services and the additional study costs will be paid to the Professional by the Department and the State/Client Agency 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 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 art work.

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 and the State/Client Agency, 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 and the State/Client Agency 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 and the State/Client Agency by separate Contract using other professional firms. See Task 512 - Hazardous Materials, for text defining the Professional's responsibility for assisting the Department and the State/Client Agency 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 and the State/Client Agency deem 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 and the State/Client Agency, 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 assigned 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 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 and the State/Client Agency 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 assigned 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 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.

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 design disciplines for completeness, accuracy and consistency, and conflict avoidance. 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 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 and the State/Client Agency 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 ten (10) copies of the Department approved proposed schematic design documents to the Department for distribution to the Joint Capital Outlay Subcommittee, in the format of the "Major Project Design Manual for Professional Services Contractors and State/Client Agencies". Provide one (1) schematic design presentation to the Project Team for this Task. Any additional schematic design presentations requested by the Department and the State/Client Agency will be considered extra professional services and the additional schematic design costs will be paid to the Professional by the Department and the State/Client Agency with a Contract Change Order. If Contract Services conclude with this Phase, provide mylar drawings of the final approved schematic design, suitable for legible reproduction.

PHASE 400 - PRELIMINARY DESIGN

Prepare progressive preliminary design documents based on the assigned 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 construction schedule for the Project. Prepare a complete estimated cost statement based on prevailing or predictable factors for the proposed construction bidding period. The Department's written acceptance of the estimated 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 and the State/Client Agency, 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 and the State/Client Agency 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 and the State/Client Agency by separate Contract using other professional firms. See Task 512 - Hazardous Materials, for text defining the Professional's responsibility for assisting the Department and the State/Client Agency 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 assigned Project scope of work. 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 and the State/Client Agency deem 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 2004 MasterFormat 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 and the State/Client Agency during the Schematic Design Phase, they shall retain a civil/site survey Consultant and a geotechnical testing Consultant and coordinate their proposed design 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 assigned 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 assigned 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 assigned 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 design 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 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 and energy efficient design features of the Project 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 documents on sheet size approved by Project Director. Coordinate the preliminary design with related design disciplines for completeness, accuracy and consistency and conflict avoidance. Prepare drawings using applicable State of Michigan standards as defined in the Department's "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" 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 408.01 DESIGN DEVELOPMENT: Prepare proposed preliminary remedial design drawings, specifications, operating procedures/instructions and other parameters as may be required to Bid, construct, and operate the specialized equipment, systems, or pilot plant, as may be necessary and authorized, to prove the performance of the environmental site remediation system, equipment, or process. Define the expected performance, the means by which it is to be measured, and the criteria against which it will be evaluated. Operate the system as authorized. Evaluate all findings and provide a summary report in the format and detail of the Phase 100, Task 110-A/Report requirements. Revise the proposed Project design parameters as appropriate to assure a functional environmental site remediation system.

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 Project preliminary design.

Where legislative review is required, provide an additional ten (10) copies of the approved proposed preliminary design documents to the Department for distribution to the Joint Capital Outlay Subcommittee, in the format of the "Major Project Design Manual for Professional Services Contractors and State/Client Agencies". 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 and the State/Client Agency with a Contract Change Order. If Contract Services conclude with this Phase, provide mylar drawings of the final approved schematic design, 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.

Bidding Documents shall consist of, but are not limited to, the Final Design Documents, including final drawings and specifications, special, general and supplemental conditions of the Construction Contract, and modifications, if any, to standard 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 "MICHSPEC 2001 Edition of The Owner and Contractor Standard Construction Contract and General Conditions for Construction (Long Form)" or the current " or the current DMB DCSPEC – Bidding and Contract Document for Minor Projects" 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 and the State/Client Agency deem 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 materials testing schedule, and all other necessary schedules. Specifications shall be coordinated with the final design drawings and shall be prepared in the 2004 MasterFormat Outline by the Construction Specifications Institute (C.S.I.). The final design 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) Leadership in Energy & Environmental Design (LEED) Scorecard will be used as an index 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. A list of building construction materials and productions manufactured in Michigan may be obtained at http://www.michigan.gov/buymichiganfirst/0,1607,7-225-48676-209976--,00.html.

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 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.

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 final design documents. Assist the Department and the State/Client Agency in the determination of and specification of furnishings, colors, and finish selections if required in the defined Project.

Task 508 DRAFTING: Prepare complete final design drawings for Bidding Documents on sheet size approved by Project Director using applicable State of Michigan standards as defined in the "Major Project Design Manual for Professional Services Contractors and State/Client Agencies." 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 to the Department for advertisement by the Department. One compact disc (CD) and one print copy for records retention, beyond review and approval sets, of the Bidding Documents will also be provided.

The Project Contract Documents derived from the Project Bidding Documents shall be made available and converted if necessary, to the AutoCAD computer drafting system. One compact disc (CD) and three signed and sealed print copies (for records retention, Project Director, and provision to the Construction Contractor) beyond review and approval sets, of the Contract Documents will also be provided. 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 compact disk (CD).

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 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 and the State/Client Agency in obtaining approval of the Project and its design by appropriate governmental regulating and/or code enforcement authorities.

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 Department of State Police, Fire Marshal Division, the Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Plan Review Division. 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 Energy Code 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. The Department will retain an independent professional quality control and material testing services firm for the construction testing at the 50 percent completion review stage. 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 and the State/Client Agency to determine the scope of potential hazardous materials contamination that may require testing, abatement and/or removal by the Department and the State/Client Agency, 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 the State/Client Agency by separate Contract. Coordinate the professional design services of this Contract with any hazardous material removal services required to implement the assigned Project. Include for the Department's use, drawings and specifications for all restoration work necessary following completion of the removal/abatement. Revise the final design drawings, specifications and schedule, if necessary, to reflect the impact of the hazardous material removal/abatement on the existing Department and/or 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 predicted 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 and the State/Client Agency 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. Give consideration to 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 and the State/Client Agency 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 first to the State/Client Agency for their final design review of the programmatic design conformance. Submit Bidding Documents to the Department and the State/Client Agency for their review and revise as necessary to incorporate all review comments required for Department written acceptance of the Bidding Documents.

Task 516 CONSTRUCTION BIDDING AND CONTRACTING: Assist the Department in the construction bidding and contracting process. The State of Michigan will advertise for bids on-line and award and hold the Construction Contract. Prepare and distribute Bidding Documents and instructions as required to accommodate predetermined construction Bid packages and/or Phases. Maintain a construction Bidders' list. Conduct pre-bid meetings and issue pre-bid meeting minutes and bidder's lists. Issue Addenda to all construction Bidders as required. 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 lowest responsive, responsible qualified construction Bidder's Bid has been selected and accepted by the Department; and (2) The lowest responsive, responsible qualified construction Bidder's Construction Contract has been executed.

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 qualified 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 qualified 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, MICHSPEC 2001 Edition of the Owner and Contractor Standard Construction Contract and General Conditions for Construction (Long Form)" standard form documents Section 00500, Contract Agreement and the Section 00800, Supplementary Conditions, in triplicate; (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 original 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 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 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 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 scope of work. Identify any anticipated design or construction schedule implications.

Bulletins: All reproduction costs for design interpretations and 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. Describe, by Bulletin, design revisions necessary to correct the 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 in order 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 up to five (5) copies of each Bulletin to the Department and distribute as the Department may direct. Provide the Construction Contractor with the following number of Bulletin copies: (1) For construction costs less than one (1) million dollars, provide two (2) copies; and (2) All others, provide five (5) copies.

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 the assigned Project, the "DMB-460, Project Procedures" documents package shall be used by the Professional in the administration of this Contract.

The Professional shall use the "DMB-452, 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 have access to the Construction Contractor(s) work at all times.

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.

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/ 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 up to five (5) copies 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.

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 State of Michigan 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, 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/ 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, 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 amount to be withheld from payment consisting of a minimum of two (2) times the estimated value of the unacceptable construction work plus an amount sufficient 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 ninety (90) consecutive calendar days after receipt of properly prepared a 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 Project Director with the following two (2) types of deliverable as-built documents for Project close-out: (1) One (1) set of legible/reproducible mylars completely updated, as-built original tracings of the Contract Documents/ drawings; and (2) Two (2) sets of completely updated as-built, close-out documents of the Project Contract Documents/ drawings on compact disks (CD's) 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 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 drawings have been verified, in writing, by the Professional to the Project Director as being accurate and complete; and (2) The as-built 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 ninety (90) 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 drawings; (5.) Copies of "Operation and Maintenance Manuals" of the Project systems; and (6.) Equipment warranties and guarantees.

Provide to the Project Director, within ninety (90) 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 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. These Department Field Representatives will be under the direction of the Project Director. 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 monthly progress and payment meetings. 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/ 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.

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 monthly 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 their Department Field Representative that the quantity and quality of all construction work is in accordance with the design intent of the Professional's Phase 500 - Contract Documents/ 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 their 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, 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 monthly scheduled Project construction progress meetings with the Project Director, 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, 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/ drawings and specifications requirements and that all equipment and systems function without defects.

Phase 900 - Operation and Maintenance Management - Remediation Facility

The Operation and Maintenance (O&M) Contractor shall protect all new and existing work from damage and shall provide all personnel of every environmental expertise, tools, non-process equipment, instruments, vehicles, and every other technical item necessary to operate and maintain the Project system/facility as outlined in the Owner's approved Project/Program Statement scope of work requirements. The Department and/or the State/Client Agency will have unrestricted access to the Project site. Proper safety provisions shall be provided at all times for the protection of all persons. All Federal, State, and Local laws/ordinances codes, rules, and regulations applicable to any aspect of this work are deemed to be included herein the same as written in full. The O&M Contractor shall comply with all authorities having enforcement jurisdiction over the assigned Project scope of work. Applicable laws include, but may not be limited to, those listed below:

Task 901 GENERAL OPERATION: Before any Project work is performed on-site, the O&M Contractor shall develop, and secure the Department and/or the State/Client Agency's acceptance of, and place in effect, a comprehensive work plan consistent with the Project system/facility scope of work.

Within twenty (20) consecutive calendar days of award of the Contract, the O&M Contractor must submit the Cost Forecast, Project Schedule, subcontractors/Vendor list, Project Work Plan and the Facility Health and Safety Plan. Notice-to-Proceed on-site will not be given to the O&M Contractor before submittals have been received and accepted by the Department and/or the State/Client Agency.
The approval by the Department and/or the State/Client Agency of the O&M Contractor's submittals shall not relieve the Contractor of the full responsibility for completing the Project work in compliance with all applicable regulatory requirements and the terms, conditions, and specifications of this Contract Work.

1. Project Cost Forecast

A. Description

The Project Cost Forecast is an itemized list based on the Contract price that establishes the value or cost of each part of the Project work. It shall be used as a basis for negotiations concerning changes that may arise during the Contract period.

B. Preparation

a. Project Schedule shall provide an itemized breakdown of labor, material, equipment and costs for each Phase/Task used in preparation of the Bid. Detail monthly costs for the Contract shall be provided.

b. Detail itemized budgeted costs of authorized reimbursable items for each month of the Contract.

c. Project Costs shall be prepared in the Construction Specifications Institute (C.S.I.) format as appropriate for the defined Project requirements and provided in sufficient detail to indicate separate amounts for each division/section of the specifications.

d. Project Schedule shall be printed on 8½-inch by 11 inch white paper; the O&M Contractor's standard forms and computer automated printout will be considered for approval by the Department and/or the State/Client Agency upon the O&M Contractor's request.

e. Identify Project Schedule with:

1.) Title of Project and site location.

2.) Department name and the State/Client Agency and Project Index and File Numbers.

3.) Name, Address and Phone Number of O&M Contractor.

4.) Contract designation.

5.) Date of submission.

Task 901.01 PROJECT WORK PLAN

A. The Project Work Plan shall include, but may not be limited to the following items:

a. Project Organizational Structure: The O&M Contractor's Project organizational structure shall include the "Key Principal Personnel/Employee" names, titles, responsibilities and authorities of each "Key Principal Personnel/Employee" person assigned to a Project function. Necessary "Key Principal Personnel/Employee" substitutions due to change of employment status and other unforeseen circumstances must be submitted in writing for approval by the Department and/or the State/Client Agency.

b. Proof of the O&M Contractor's legal permits and licenses required to successfully complete this Contract.

c. Waste Handling: Recycling and disposal. Describe the equipment and legal procedures to be used to handle waste materials.

d. Recycle/Disposal Facilities: Identify the proposed facilities. Provide a copy of legal license, the name and telephone number of contact person, and a list of legal requirements for acceptance of waste materials for each facility.

B. Acceptance of the Project Work Plan:

Acceptance of the O&M Contractor's Project Work Plan by the Department and/or the State/Client Agency is required prior to the start of any on-site Project work. Acceptance of the Project Work Plan is conditional and will be dependent on satisfactory performance during the Contract period.

C. Notification of Change:

After acceptance of the Project Work Plan, the O&M Contractor shall notify the Department and/or the State/Client Agency of any proposed change to the Project scope of work. Proposed changes to the Project scope of work are subject to the acceptance of the Department and/or the State/Client Agency.

D. Project Organization

a. Site Manager

1.) The O&M Contractor shall identify an individual, within their organization at the Project work site, who shall be responsible for overall site management of the Project Work Plan and have authority to act for the O&M Contractor.

2.) The O&M Contractor's, Site Manager for this Contract shall be an individual experienced in hazardous materials remedial actions whose responsibility is to ensure compliance with the Project Contract Documents/operation and maintenance management services drawings and specifications and the O&M schedule.

3.) The Site Manager shall be on-site whenever the Project Contract work is in progress.

4.) All submittals shall be reviewed and modified or corrected as needed by the O&M Contractor's, Site Manager prior to forwarding to the Department and/or the State/Client Agency.

b. Personnel

1.) Staff personnel shall be maintained under the direction of the O&M Contractor's, Site Manager to perform all Project activities.

2.) The actual number of staff personnel during any specific work period may vary to cover the needs of the Project Contract work Phase.

3.) Staff personnel shall be fully qualified by professional experience and technical training to perform their assigned Project Contract responsibilities and shall be hired directly by and work for the O&M Contractor.

Task 901.02 PROJECT SCHEDULE

A. General

The O&M Contractor shall provide an itemized schedule for all Phase/Tasks over the length of the Contract, broken down into consecutive calendar months. Schedules shall be submitted as part of the O&M Contractor's Project Work Plan, with periodic revisions as required.

B. Project Schedule Updating

For each revised Project Schedule, the O&M Contractor shall show all changes since the previous submission of an updated Project Schedule, and indicate progress of each activity and its completion date. Project Schedule updates shall also include changes in scope, modifications of activities since previous updating, revised projections due to changes, and other identifiable changes.

The O&M Contractor shall also provide a narrative Project Schedule report including discussion of problem areas, including current and anticipated delay factors, and their impact. This report shall include a description of corrective action taken or proposed and its effect on the Project Schedule. The O&M Contractor shall also include a description of revisions in regard to their effect on the Project Schedule due to changes in scope and changes to the duration of activities due to revisions.

Task 901.03 OPERATION AND MAINTENANCE MANAGEMENT SYSTEM OPERATION: Perform all functions necessary to provide uninterrupted, effective, and efficient system, and all components thereof. Such operation shall be in total compliance with all regulatory requirements and legal directives/agreements in effect, in accordance with the facility's O&M Manual, and following written directives of the Department and/or the State/Client Agency. Maintain all required records of operating conditions to verify the same.

Task 901.04 ROUTINE SYSTEM MAINTENANCE: Conduct tests of all emergency alarms, O&M management systems, equipment and procedures prescribed by the Project O&M Manual and other facility specific equipment/procedures. Maintain all safety equipment in good condition. Perform, and maintain record of, routine daily, weekly, monthly and annual inspections and maintenance procedures and the servicing of all routinely renewable/replaceable elements/fluids in accordance with the Project O&M Manual, preventative maintenance schedule(s), manufacturer's recommendations and written instructions of the Department and/or the State/Client Agency.

Task 901.05 BUILDING/GROUNDS: Maintain the building/site, and/or that part associated with the O&M management system and its ancillary support, to ensure its expected service life, to assure a safe work environment and a safe, efficient operation of the O&M management system, and to protect the site, building, and O&M management system, from damage or theft. Grounds maintenance includes normal housekeeping, grounds keeping, snow removal, and the maintenance of access, fencing, and other site security provisions.

Task 902 <u>OPERATION SUPPORT SERVICES</u>

Task 902.01 SPARE REPLACEMENT/PARTS: Put in place, store on-site, inventory, and replenish at least monthly the recommended stock of all fluids, oils, grease, filters, fittings, belts, nuts/bolts, recommended spare parts, and similar items for routine and minor maintenance as prescribed by the O&M Manual, manufacturer recommendations, or the facility use record as may be approved, in writing, by the Department and/or the State/Client Agency.
Identify, locate, and maintain current record of the location and ordering/transportation information for the most immediately available replacement parts for the major and/or critical components of the O&M management system whose failure is most likely to result in significant and unacceptable Project facility downtime.

Task 902.02 CONSUMABLE/SUPPLIES: Put in place, properly store, dispense, inventory, and replenish monthly, or at such other periods as dictated by use and/or agreed upon by the Department and/or the State/Client Agency, all chemicals, fuels, components for sampling, and other consumable supplies required for the continuous operation of the facility and its O&M management systems. Conduct competitive bidding procedures for replacement of those critical items where the establishment of authorized reimbursement is based thereon.

Task 902.03 UTILITIES: Provide the application for, connections/fees, notifications for repair service, and any appropriate disconnection, of all utilities as required for the operation of the facility and its O&M management systems and all other Project Contract work required herein. Payment for utilities shall be timely and shall not invoke any form of late charges. Utilities include: electric, natural gas, water, and sewage. Telephone services shall be provided and maintained, but compensation shall be as part of the O&M Contractor firm's billing rate.

Task 903 SAMPLING: Perform, prepare, and ship/deliver for laboratory analysis and receive/record/report/respond to the results, of all samples necessary for control/operation of the O&M management system and for total compliance with all regulatory requirements and legal directives/agreements in effect. All sampling shall be performed in accordance with the United States Environmental Protection Agency's (USEPA) approved methods (40 CRF part 136). Chain-of-custody procedures of the attached Appendix 3 - O&M Contractor's Project Work Plan shall be complied with and records thereof maintained. Samples shall be shipped/delivered to the laboratory designated in writing by the Department and/or the State/Client Agency. The O&M Contractor shall be responsible for the conduct of all routine in-plant testing by instrument, comparative examination, or in-plant laboratory equipment. The Department and/or the State/Client Agency shall be notified, in writing, of the excursion of any parameter on the day it is detected.

Task 904 WASTE MATERIALS DISPOSAL

Task 904.01 NON-HAZARDOUS WASTE: The O&M Contractor is responsible for the legal disposal and/or recycling of all non-hazardous rubbish and waste materials associated with the O&M management system and with that part of the building and grounds/site associated therewith.

Task 904.02 HAZARDOUS WASTE: The O&M Contractor is responsible for the legal handling, packaging, characterization, inventory, storage, manifesting, and loading, of all hazardous waste materials produced as a result of operation of the system, and/or recovered by the process of the O&M management system. The Owner maintains signatory responsibility for all hazardous waste materials. The O&M Contractor shall be exclusively responsible for monitoring the accumulated quantities and/or storage time of such waste materials and any violation of applicable laws. Except where otherwise provided for by this Contract, or directed in writing by the Owner, the O&M Contractor shall be responsible for all legal transportation and treatment/disposal of all hazardous waste materials associated with this Contract.

Task 904.02.1 TRANSPORTATION: Transportation of hazardous waste materials shall be in accordance with the following legal governing requirements:

A. FEDERAL

1.) United States Environmental Protection Agency, Hazardous Waste Management Systems (40 CRF 260)

2.) Standards Applicable to Generators (40 CRF 262)

3.) Standards Applicable to Transporters of Hazardous Waste (40 CRF 263)

4.) United States Department of Labor, Occupational Safety and Health Standards (29 CRF 1910)

5.) United States Department of Transportation, Hazardous Material Regulations (40 CRF Subchapter C, Parts 171-177)

B. STATE

1.) Hazardous Waste Management Act, PA 64 1979, as amended.

2.) Liquid Industrial Waste Haulers Act, PA 136 1979, as amended.

3.) Transportation of Waste Materials, through states other than the State of Michigan, pursuant to this Contract, must comply with all applicable requirements of those states.

C. LOCAL

1.) Comply with all permits and requirements imposed to regulate seasonal use of certain roads.

Task 904.02.2 WASTE DISPOSAL/TREATMENT: No waste materials may be disposed of on any part of any facility, not in full compliance with all governing requirements unless the governing enforcing agency has

determined that the facility is fully complying with directives for remediation and the part of the site upon which disposal of waste materials from this facility is to be made is in full compliance with all requirements. Prior to shipment of any such waste materials to any facility, the O&M Contractor shall provide the Department and/or the State/Client Agency the facility's certification to that condition along with evidence that the facility has been inspected in accordance with the requirements of the Resource Conservation and Recovery Act of 1976, as amended, within the prior six (6) months and is in compliance as required by the USEPA's on-site disposal policy. Disposal/treatment of waste materials shall be in accordance with the following governing requirements:

A. FEDERAL

1.) Resource Conservation and Recovery Act of 1976, as amended, by the Toxic Substance Control Act of 1979, as amended, and compliance with the USEPA's official disposal policy.

B. STATE

1.) Hazardous Waste Management Act, PA 64 1979, as amended.

2.) Disposal/Treatment Facilities used pursuant to this Contract, located outside the State of Michigan, must be in full compliance with all applicable legal requirements of those states.

Task 905 NON-ROUTINE/EMERGENCY EVENTS: Respond to all events requiring emergency action, or correction. Take steps consistent with the situation to minimize the event, to remediate any damage, and/or make essential repairs to the O&M management system as soon as possible. Where any event involves the release of contamination, record and file the required notifications. Notify the Department and/or the State/Client Agency, or their designate, of the event, necessary repairs, and the status thereof, as soon as conditions are stable but not later than one (1) day after the event. The Department and/or the State/Client Agency approval must be secured for any expenditure of the response funds exceeding five-hundred dollars ($500). Any part required for non-routine repairs that cost five-hundred dollars ($500) or more must be secured by competitive bidding.

Task 909 FACILITY/SITE SAFETY PROVISIONS: The O&M Contractor shall properly protect all new and existing work from damage. Proper safety provisions shall be provided at all times for the protection of all persons on-site. The O&M Contractor is responsible for the on-site safety of their personnel, subcontractors, Vendors and all others performing a professional service pursuant to this Contract. Before any work is performed on-site the O&M Contractor shall designate and identify in writing their Site Safety Officer who will be responsible for safety matters under this Contract. No individual may perform work on-site until the O&M Contractor submits to the Department and/or the State/Client Agency copies of all professional certifications appropriate to that individual's position. The O&M Contractor shall develop and implement a Facility Health and Safety Plan. This plan must be consistent with the outline format of the attached Appendix 4 – Facility Health and Safety Plan and shall be accepted in writing by the Department and/or the State/Client Agency before any work is performed on-site and before any subsequent change is made to the Facility Health and Safety Plan. The plan is an on-site enforceable document governing the activities of the O&M Contractor's personnel and subcontractors/Vendors. Disregard of any provision thereof shall be deemed just and sufficient cause for suspension of the Project work and/or removal of the O&M Contractor's personnel without compromise or prejudice to the Owner's rights. Acceptance of the O&M Contractor's Facility Health and Safety Plan imposes no responsibility on the Owner for administration, or effectiveness, of the Facility Health and Safety Plan. Such acceptance remains in effect only subject to the Facility Health and Safety Plan's effectiveness. Revision and acceptance is required in any event where the Facility Health and Safety Plan fails to protect the health and/or safety of personnel on-site.

A. The Facility Health and Safety Plan shall meet the following requirements:

1.) 29 CRF 1910: Safety and Health Regulations for General Industry, National Institute of Occupational Safety and Health Administration, December, 1986, as amended.

2.) Standard Operating Safety Guides, USEPA, November, 1984, as amended.

3.) Occupational Health and Safety Guidance Manual for Hazardous Waste Site Activities Michigan Occupational Safety and Health Administration (MIOSHA) Publication 85-115, October, 1985, as amended.

4.) Michigan Right-to-Know Law, 1986 PA 80, as amended.

B. The Facility Health and Safety Plan shall define site-specific safety provisions necessitated by all Project activities of the O&M Contractor and their subcontractors. Particular attention shall be given to work safety during removals and repackaging.

C. The O&M Contractor and their Site Safety Officer shall be solely responsible for the implementation and monitoring of the Facility Health and Safety Plan. The Facility Health and Safety Plan shall address, but not be limited to, the following items:

1.) Site Characterization: Provide a description of past activities at the Project site.

2.) Hazards: Provide a list and description of potential chemical and physical hazards associated with the Project site.

3.) Planning: Describe the proposed Facility Health and Safety organization and procedures for continuous updating of the Facility Health and Safety Plan based on actual site conditions. The Department and/or the State/Client Agency shall be notified in writing of any proposed changes. This section shall also identify Project site operating procedures.

4.) Training: Identify the types and levels of training provided to all site workers and other on-site personnel prior to their assignment to this Project. As a minimum, all Project site workers shall be trained in accordance with 29 CRF 1910.120, as amended. Provide the name, professional qualifications and responsibilities for the Site Safety Officer and all health and safety staff. Provide copies of appropriate certification for all individuals to the Department and/or the State/Client Agency. No individual will be allowed on-site without proper Project Work/Task related certification.

5.) Medical Monitoring: All on-site personnel shall have been enrolled in an ongoing medical monitoring program as identified in 29 CRF 1910, December, 1986, as amended, and shall be appropriately certified for work. The Facility Health and Safety Plan shall describe the details of the O&M Contractor's Medical Monitoring Program. Provide documentation of program participation by all personnel to the Department and/or the State/Client Agency.

6.) Personal Protective Equipment: Identify levels of personal protection to be utilized for each site activity as defined in the USEPA's, Standard Operating Safety Guidelines. Identify conditions that would require increasing the level of protection during each activity. Procedures for protecting personnel from other physical hazards (i.e., heat stress, hypothermia, excessive noise, etc.) shall also be identified in this section.

7.) Site Control: Identify procedures for maintaining the site as a safe and workable environment. Include procedures for establishing and maintaining distinct exclusion, contamination reduction, and clean zones; as well as procedures for maintaining effective site communications.

8.) Decontamination: Identify procedures to be used to ensure proper equipment and personnel decontamination.

9.) Waste Handling Procedures: Identify procedures to ensure safe waste handling during all site activities.

10.) Site Emergencies: Provide a Project Contingency Plan that sets forth policy and procedures for responding to emergency situations, such as fire, physical injury, release of toxic materials, etc.

D. The O&M Contractor shall conduct all operations in accordance with the Department and/or the State/Client Agency's, approved Facility Health and Safety Plan. Disregard for the provisions of the Facility Health and Safety Plan shall be deemed just and sufficient cause for suspension of the work and/or removal of the O&M Contractor's personnel without compromise or prejudice to the rights of the Owner. Acceptance of the O&M Contractor's Facility Health and Safety Plan imposes no responsibility of the Owner for administration or effectiveness of the Facility Health and Safety Plan. Such acceptance remains in effect only subject to the Facility Health and Safety Plan's effectiveness. Revision and reacceptance is required in any event where the Facility Health and Safety Plan fails to protect the health and/or safety of personnel.

Task 910 REPORTS

Task 910.01 REGULATORY REPORTS: Prepare and submit all reports required by governing regulatory enforcement agencies having jurisdictional authority over the remediation system and/or facility. Such reports shall be entirely and sufficiently complete and shall be submitted with such timeliness that no violation of any of the requirements in force, occurs. The O&M Contractor will be responsible for any penalties incurred from defective or delinquent reporting.

Task 910.02 OPERATION REPORTS: Submit monthly operating reports to the Department and/or the State/Client Agency by the fifth (5th) day of each month, or at such other monthly interval as the Department and/or the State/Client Agency may approve. Reports shall include, but may not be limited to, summation of hours of plant operation, process output/recovery, waste storage/disposal, safety related matters, visitors, regulatory inspections, emergencies/emergency repairs, record of all essential decisions, instructions made/issued by responsible parties regarding the O&M management system, copies of all record documents, and a summary of unusual conditions, observations, recommendations. Reports shall have appended graphic presentation of recovery/reduction of contamination during the reporting period and for such previous period (up to 12 months) as the Project Director may require. Reports shall inform the Project Director of the accumulation times and quantities of hazardous waste.

Task 910.03 NON-ROUTINE EVENTS AND EMERGENCIES: Prepare and submit such reports, at such times, as will keep the Department and/or the State/Client Agency knowledgeable of the current circumstances of the daily non-routine events and emergencies or as the Project Director may otherwise direct.

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 technical support employees, except for any authorized reimbursable expenses provided for in this Contract. Total compensation for any Phase shall not exceed the amount authorized for that Phase, unless authorized in writing by the Department's approved Contract Change Order. Professional services shall not be performed and no Project expense shall be incurred by the Professional firm prior to the issuance of a written and signed Professional Services Contract and a DMB Form 402 - Contract Order by the Department to the Professional, authorizing the Professional to start the Project.

Compensation to the Professional for services and authorized technical and technical support employees performing a direct service for this Project shall be determined using the Professional firm's billing rates. The Professional firm's hourly billing rate cost shall be the actual amount paid for the employee services on the Project exclusive of fringe benefits, vacations, sick leave, other indirect costs and profit. Such costs and the Professional firm's hourly billing rates shall not change during the life of this Contract without written approval by the Department. The Professional firm's hourly billing rates may also include: (1) All consumables used by the Professional or the Professional firm's Consultants for collection of samples to be tested and analyzed by others; and (2) The costs of owning, operating, maintaining, insuring, and replacing all direct reading/measuring and testing instruments designed for on-site field Inspection and testing work, along with their computer or data recorders, as

the Professional may use for on-site field Inspections, investigations, measuring, sampling, or testing services See attached Appendix for the guide to overhead items allowed for the professional services contractor firm's hourly billing rate calculation. Reimbursement for the Project/Program Statement scope of work requirements will be provided only for Department approved items authorized for reimbursement compensation in this Contract. Compensation is approved and authorized by the Department on a per test basis for laboratory services by Professional firm(s) identified and listed in this Contract to: (1) Test and analyze samples collected by their technical employees; and (2) The Professional firm's per test costs shall be recognized by the Department to include all consumables necessary to prepare and secure the respective sample(s) and to conduct the required analytical testing procedures thereon.

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 firm, as approved by the Department on an hourly billing rate basis in accordance with this article. This compensation shall not exceed seven and one-half percent (7.5%) of the Construction Contractor's quotation for the Bulletin or Contract Change Order or an amount mutually agreed upon by the Professional and the Project Director.

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

2.1 PREMIUM TIME/OVERTIME: This Contract anticipates that no premium or overtime is required to achieve the Project's scope of work. No compensation will be allowed to the Professional for any premium or overtime cost incurred to achieve the Project schedule of this Contract, unless directing 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 amounts of any of the Firm's employees 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, and all Project related travel expenses for Projects <u>less than</u> one-hundred (100) miles in each direction from the Professional's Michigan office, 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. No mark-up to Consultant firm's charges will be allowed.

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

2.4 DIRECT COST REIMBURSEMENT ITEMS: The Professional's Consultant services and authorized reimbursable expenses shall be treated as an authorized reimbursable expense item at a direct cost. The Professional shall be responsible for the selection of the supplier of 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, any Project costs that exceed the Contract per Phase reimbursement Budget.

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

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

Compensation for this Contract shall not exceed the 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 (DMB-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.

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

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

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

(c) All insurance coverage provided relative to this Contract is primary and 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) Where specific coverage limits are listed in this Section, they represent the minimum acceptable limits. If the Contractor's policy contains higher limits, the State is entitled to coverage to the extent of the higher limits.

(g) The Contractor must maintain all required insurance coverage throughout the term of this Contract and any extensions. However, in the case of claims-made Commercial General Liability policies, the Contractor must secure tail coverage for at least three (3) years following the termination of this Contract.

(h) The minimum limits of coverage specified are not intended, and may not be construed; to limit any liability or indemnity of the Contractor to any indemnified party or other persons.

(i) The Contractor is responsible for the payment of all deductibles.

(j) If the Contractor fails to pay any premium for a required insurance policy, or if any insurer cancels or significantly reduces any required insurance without the State's approval, the State may, after giving the Contractor at least 30 days notice, pay the premium or procure similar insurance coverage from another company or companies. The State may deduct any part of the cost from any payment due the Contractor, or require the Contractor to pay that cost upon demand.

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

5.1 Workers' Compensation Insurance

The Contractor must provide Workers' Compensation coverage according to applicable laws governing work activities in the state of the Contractor's domicile. If the applicable coverage is provided by a self-insurer, the Contractor must provide proof of an approved self-insured authority by the jurisdiction of domicile.

For employees working outside of the state of the Contractor's domicile, the Contractor must provide certificates of insurance proving mandated coverage levels for the jurisdictions where the employees' activities occur.

5.2 Employers Liability Insurance

Minimal Limits:
$1,000,000 Each Accident;
$1,000,000 Each Employee by Disease
$1,000,000 Aggregate Disease

5.3 Motor Vehicle Insurance

If a motor vehicle is used in relation to the Contractor's performance, the Contractor must have vehicle liability insurance on the motor vehicle for bodily injury and property damage as required by law.

5.4 Commercial General Liability Insurance

For claims for damages because of bodily injury or death of any person, other than the Professional's employees, or damage to tangible property of others, including loss of use resulting therefrom, to the extent that such kinds of liability are not insured by other specific liability insurance and are ordinarily insurable under general liability insurance. The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents as additional insureds on the Commercial General Liability certificate. The Contractor also agrees to provide evidence that insurance policies contain a waiver of subrogation by the insurance company.

Minimal Limits:
$1,000,000 Personal & Advertising Injury Limit;
$1,000,000 Each Occurrence Limit;
$2,000,000 General Aggregate Limit other than Products/Completed Operations; and
$2,000,000 Products/Completed Operations Aggregate Limit.

Deductible Maximum:
$50,000 Each Occurrence

5.5 Pollution Liability Insurance

Minimal Limits:
$1,000,000 Each Occurrence
$2,000,000 Annual Aggregate

Deductible Maximum:
$50,000 Per Loss

5.6. Umbrella Insurance

Minimal Limits:
$1,000,000 Each Occurrence
$2,000,000 Annual Aggregate

5.7 Professional Liability Insurance (Errors and Omissions)

For claims for damages arising out of an error, omission or negligent act in the performance of professional services.

Minimal Limits:
$1,000,000 Each Occurrence
$2,000,000 Annual Aggregate

Deductible Maximum:
$50,000 Per Loss

The Professional firm's Errors and Omissions coverage shall include coverage for claims resulting from acts of forbearance that cause or exacerbate pollution and claims of bodily injury and property damage in the amount of $1,000,000 minimum

coverage per occurrence, $2,000,000 annual aggregate. This insurance is required of all Professional firms who conduct professional environmental services including, but not limited to, any of the following services:

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

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

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

Certificate of Insurance documents, acceptable to the State, shall be provided and filed with the Department prior to commencement of the Professional's Project services, unless otherwise approved in writing, and not less than 20 days before the insurance expiration date every year thereafter. Facsimile copies of the Certificate of Insurance will not be accepted. Certificate of Insurance documents must be either submitted hard copy or portable document file (.pdf). The Certificate of Insurance documents must specify on the certificate in the oblong rectangle space labeled "Description of Operations/Locations/Vehicles/Exclusions Added By Endorsement/Special Provisions/Special Items" the following items: **(1) The Project File No.; (2) The Project Title; (3) Description of the Project; and (4) The State of Michigan must be named as an "Additional Insured on the General Liability Insurance Policy."** The Certificate of Insurance documents shall contain a provision that the Project insurance coverage afforded under the insurance policies for this Contract will not be modified or canceled without at least thirty (30) consecutive calendar days prior written notice, except for 10 days for non-payment of premium, to the State of Michigan, Department.

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

ARTICLE VI
INDEMNIFICATION

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

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

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

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

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

ARTICLE VII
OWNERSHIP OF DOCUMENTS

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

If the Professional is in default or breach of its obligations under this Contract, the State shall have full ownership rights of the Project deliverables, including Bidding Documents and Contract Documents, including all electronic data. If the Professional is in default or this Contract Agreement is terminated, the State shall not use the Contract Documents and deliverables of this Contract for completion of the Project by others without the involvement of other qualified Professionals who shall assume the professional obligations and liability for the Project work not completed by the Professional. To the fullest extent allowed by law, the State releases the Professional, the Professionals Consultant(s) and the agents and employees of any of them from and against legal claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of the State's use of the Contract Documents other than in accordance with this Contract Agreement.

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

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

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

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

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

ARTICLE VIII
TERMINATION

The State may, by written notice to the Professional, terminate this Contract 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 effected for the convenience of the State. In such event, adjustment in the Contract price shall be made as provided in Section 8.1 of this article.

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

ARTICLE IX
SUCCESSORS AND ASSIGNS

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

ARTICLE X
GOVERNING 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, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job or position. The Professional will provide equal employment opportunities to ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job or position. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

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

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

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

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

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

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

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

ARTICLE XII
CONTRACT CLAIMS AND DISPUTES

In any claim or dispute by the Professional which cannot be resolved by negotiation, the Professional shall submit the claim or dispute for an administrative decision by the Department of Technology, Management and Budget, Director of Facilities and Business Services Administration within thirty (30) consecutive calendar days of the end of the disputed negotiations, and any decision of the Director of Facilities and Business Services 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 Facilities and Business Services Administration is a prerequisite to filing a suit in the Michigan Court of Claims.

ARTICLE XIII
DEFINITION OF TERMS

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

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

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

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

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

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

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

BULLETIN: A standard document form (DMB-485, Bulletin Authorization No. and the DMB-489, 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 "DMB-460, Project Procedures" documents package.

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

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

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

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

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

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

CONTRACT CHANGE ORDER: A standard document form (DMB-403) issued and signed by the State of Michigan and signed by the Professional which amends the Project Design Professional's Contract Documents for changes in the Project/Program Statement or an adjustment in Contract price and/or Contract time, or both.

CONTRACT DOCUMENTS: The Professional's Phase 100 – Study, Final Report and Phase 500 - Final Design plans/drawings, specifications, Construction Contract, instructions to construction Bidders, proposal, Bidding Documents, agreement, conditions of the Contract, payment bond, performance/labor and material bond, prevailing wages, all Addenda, and attachments as may be necessary to comprise a Construction Contract for the Project. Specifications for this Contract will be prepared for Division 00 through 49, in the 2004 MasterFormat Outline by the Construction Specifications Institute (C.S.I.), as appropriate for the Project.

CONTRACT MODIFICATION: A form (DMB-410) amending the Contract signed by the Department and the Professional. The preparation of Bulletins and Contract Change Orders resulting from changes in the Project/Program Statement or previously unknown on-site field conditions as approved by the Department will be compensated to the Professional by way of the Contract Modification in accordance with the Article II, Compensation text of this Contract. Any Contract Modification of this Professional Services Contract must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the Department may require. No Contract Modification will be approved to compensate the Professional for correcting, or for responding to claims or litigation for, the Professional's Phase 100 – Study, Final Report and Phase 500 - Contract Documents study/design errors, omissions or neglect on the part of the Professional.

CONTRACT ORDER: A form (DMB-402) 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 DMB-402 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 FBSA, DCD Director.

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

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

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

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

DEPARTMENT FIELD REPRESENTATIVE: An employee of the State under the direction of the Project Director who provides the Inspection of construction Projects for compliance with the design intent of the Professional's Phase 500 - Contract Documents/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 their Department Field Representative, has the authority to require the Professional to respond to and resolve study/design related problems, construction field problems and to attend Project meetings. Unless delegated by specific written notice from the Department, the Department Field Representative has no authority to order any changes in the Project scope of work or authorize any adjustments in Contract price or Contract time.

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

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

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

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

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

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

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

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

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

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

PROJECT TEAM: The Professional, the Project Director, 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 their Department Field Representative, the State/Client Agency and any construction manager, is substantially complete and shall be attached to the respective DMB-455, Certificate of Substantial Completion form. This standard document form is a part of the "DMB-460, 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, Facilities and Business Services Administration, Soil Erosion and Sedimentation Control Program.

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

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

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

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

SUBSTANTIAL COMPLETION: The form (DMB-445) stating that the Project work, or a portion of the Project work eligible for separate Substantial Completion, has been completed in accordance with the design intent of the Professional's Contract Documents to the extent that the Department and the State/Client Agency can use or occupy the entire Project work, or the designated portion of the Project work, for the use intended without any outstanding, concurrent work at the Project work site, except as may be required to complete or correct the Project work Punch List items.

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

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

ARTICLE XIV
COMPLETE AGREEMENT/MODIFICATION

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

APPENDIX 1

PROJECT/PROGRAM STATEMENT

DMB-427 (R 6/99)

PROJECT/PROGRAM STATEMENT

STATE OF MICHIGAN

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
Facilities and Business Services Administration
First Floor, Stevens T. Mason Building
P.O. Box 30026
Lansing, Michigan 48909

FILE NUMBER	INDEX NUMBER(S)	COMPTROLLER OBJECT	APPROVAL DATE
Various	Various		

DEPARTMENT
Department of Technology, Management and Budget

AGENCY
Various

ADDRESS
Various

AGENCY CONTACT	TELEPHONE NUMBER
Various	Various
DTMB PROJECT MANAGER	**TELEPHONE NUMBER**
Sadi Rayyan	517-335-7949

PROJECT DESCRIPTION
Provide professional environmental Indefinite-Scope Indefinite-Delivery (ISID) services for a variety of state funded cleanup sites. The professional will be required to effectively perform tasks at assigned contaminated sites through appropriate investigations and remedial/corrective action plans to bring the assigned sites to closure in accordance with the applicable Part 201 or Part 213 of the Michigan Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended. Activities may include environmental site assessments, investigations, feasibility studies, design, construction and operation and maintenance (O&M) of remedial systems. The professional firm is required to refer to State and Federal statutes, procedures, guidelines and the administration rules when providing the services or entering into contracts with subcontractors to provide the services. **The Professional shall submit 4 hard and 4 electronic (via CD or DVD) copies of the technical and the cost proposal. The Professional must use the attached appropriate forms to indicate the billing rates.** The State reserves the right not to award the contract(s) or award the contract(s) to one or more firms.

SPECIAL WORKING CONDITIONS
Working on-site and in the vicinity of the assigned projects.

DESIRED SCHEDULE OF WORK
Dependent on the assigned project.

LOCATION OF WORK AREAS
Various

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 (MIOSHA, DNR, and DPH), 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
2011 Environmental ISID RFP
Professional Environmental Consulting Services
Scope of Work

SUMMARY

The state of Michigan is requesting services of Professional Services Contractors to provide high-quality environmental services to evaluate, design and supervise the implementation of abatements/remedies at assigned sites of environmental contamination under Parts 201 and 213 of the Michigan Natural Resources and Environmental Protection Act (NREPA), 1994 P.A. 451, as amended; Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); and other relevant federal statutes and requirements. The professional firms must be able to perform tasks required by the remedial investigation (RI), feasibility study (FS), risk-based-corrective-actions (RBCA), design, bid specifications, construction oversight, community relations needs assessments, natural resource damages assessments, and other related tasks to design passive/active monitoring or remedial actions to bring the assigned site(s) into compliance with the current state and federal environmental requirements.

Preference will be given to firms in the state of Michigan generally meeting the following requirements.

- The professional firm must be a Qualified Underground Storage Tank Consultant.
- Experience working at Parts 201 and 213 of NREPA 1994 P.A. 451, as amended sites.
- Experience working at CERCLA regulated sites.
- Experience in conducting effective environmental assessment, investigation and remediation services.
- Experience in preparation of specifications/construction documents and construction oversight activities.
- Experience with the development of human health and ecological risk assessments.
- Experience with database development and management.
- Ability to perform sampling and provide technical review and Quality Assurance/Quality Control (QA/QC) of provided laboratory data.
- Ability to provide comprehensive professional services for the assigned projects.
- Accounting systems with flexibility to provide detailed cost documentation.
- Consideration will be given to the number and location of the satellite offices, record of past performance, and financial and technical resources.

A number of contaminated sites have been identified in Michigan. This includes sites appearing on the list of contaminated sites authorized by Part 213 and Part 201 of the NREPA 1994 PA 451, as amended. Major steps in resolving the contamination problems at these sites are remedial investigations and subsequent feasibility studies and remedial design work and construction oversight services. The State through review and evaluation of the responses to this RFP, anticipates selecting one or more professional firms to perform remedial investigation/feasibility studies and remedial design services at selected sites of environmental contamination. The professional will be required to provide professional environmental services, technical staff, and support personnel for the ISID minor projects on an as-needed basis for various State/Client Agencies within the various site location areas 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).

The executed contract will be 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 environmental services required for each of these assigned projects requested by the Department may include any or all of the Tasks included in the Phase 100 – Study through the Phase 900 – Operation and Maintenance management as detailed in the attached SAMPLE contract. **No markup of the consultants/subcontractors' fees or the reimbursable expenses will be allowed.**

SCOPE OF WORK

The professional services to be performed during studies at these sites of environmental contamination may include:

1) geophysical studies;
2) hydrogeological investigations;
3) sampling and analysis of hazardous materials and containers (waste piles, drums, tanks, etc);
4) collection and analysis of soil, sediment, flora, fauna, water, and air samples;
5) evaluation of sample data;
6) risk-based-corrective-actions;
7) evaluation and development of disposal and remedial alternatives;
8) preparation of environmental impact statements;
9) remedial action design including development of plans/drawings and specifications;
10) natural resource damage assessments;
11) construction oversight or construction management services; and
12) operation and maintenance of remediation systems.

In the course of performing this work, the consultant may be required to develop project work plans, safety plans, quality assurance/quality control plans, and community relations plans.

In addition to these activities, the State may request that the professional firms perform the following additional tasks, including but not limited to: professional assistance for underground storage tank removal/closure; assessing potential uncontrolled hazardous material sites; prepare health and safety plans (HASPs); comply with the State Environmental Policy Act and local, State and Federal permit requirements prior to conducting remedial actions; provide enforcement support, such as documentation of facts and information about a site and expert testimony during enforcement proceedings; and provide other program development and management assistance for the State departments/agencies. This assistance may include review of plans, drawings, specifications, proposals, technical reports and other work products associated with a hazardous substance site where a release has occurred or is likely to occur; the assessment of environmental and public health risks; record searches, historical reviews; research on technical issues; and personnel training.

COST AND COMPENSATION

The services will be provided at the assigned projects and will be in accordance with a cost proposal submitted for the assigned project. However, the Professional is responsible for developing and implementing site-specific HASP for the assigned site(s), the Professional is responsible for obtaining any permits which are required for the performance of the work specified at the assigned project(s), all on-site work shall be in a timely manner. Security of the Site and equipment shall be the Professional's responsibility.

DELIVERABLES

The Professional shall provide electronic copies of all final reports, plans, specifications, drawings and other significant deliverables in Microsoft Word, Excel and AutoCAD, as applicable, as well as in a separate PDF format that is provided on 1 CD. In addition, the Professional shall provide one unbound, reproducible copy of each deliverable for each of the assigned project or as specified in the assigned project scope of work. The Department/agency will be responsible for obtaining access to the assigned sites, providing map for the assigned sites and providing previous investigation/analytical results conducted at the assigned sites.

INVOICING

Application for payment will be submitted monthly per the requirements in the Contract for Professional Services. Project costs will be reimbursed to the Professional on an as-incurred basis in accordance with the

terms of the Contract for Professional Services. Invoices received covering service periods for which the progress reports have not been received by the State will not be processed until the progress reports are received. These will be considered incomplete invoices.

Each invoice that includes labor will include a one-page summary sheet that lists by date the name of the individual providing the professional service, the individual's position/classification, hours worked that day and hourly billing charge. Each invoice that includes reimbursable expenses will include a one page summary with the following categories: *Meals, Lodging, Travel, Shipping, Equipment Rental, Field Supplies/Equipment Purchase, Subcontractors and Miscellaneous.* Under Meals and Lodging categories, the date, name of the individual and total daily cost will be included. Under Travel category, the Professional will include the date, name of the individual, total daily mileage (above 200 miles), mileage rate and total daily cost. Under Shipping, the Professional will include the date shipped, description of item shipped (e.g., tech memo, etc.) and the cost to ship the item. Under Equipment Rental, the Professional will include the range of dates equipment rented, description of equipment rented and rental cost. Under Field Supplies/Equipment Purchase and Miscellaneous categories, the Professional will include the date purchased, description and purpose of the item purchased and the cost. Under Subcontractors, the Professional will list the date of the subcontractor work, name of the subcontractor, description of work conducted and the cost. The cost for each category will be totaled.

No markup of the consultants/subcontractors' fees or the reimbursable expenses will be allowed.

EQUIPMENT AND SUPPLY PURCHASE AND RENTAL PROCEDURES

The Professional shall use the methods in this section to purchase, rent or use Professional-owned equipment. If an item will be consumed or would be expected to be rendered unusable during the project assignment, then renting is not a viable alternative and purchasing the item is necessary. Examples of consumption are bags of cement and installed casing. Examples of items expected to be rendered unusable are Tyveks and disposable bailers. If the rental price or price of using Professional-owned equipment exceeds the purchase price, the item shall be purchased. If the purchase price exceeds $2,500, the Professional shall obtain three bids and the State will accept the lowest bid. At the end of the project, the State then has the option to accept ownership of a purchased piece of equipment. All deposit charges will be paid by the Professional and will not appear on invoices to the State.

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

FOR THE STATE OF MICHIGAN

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

FOR THE PROFESSIONAL

Otwell Mawby agrees to extend the terms, conditions, and pricing of our 2011 ISID Environmental General Services contract, No. 00326, to MiDEAL members and will remit the one percent (.01) administrative payment fee along with the quarterly report as outlined.

Signature

3/28/14
Date

ROBERT M KOLTUNIAK PRINCIPAL
Print Name/Title