



WEST DES MOINES WATER WORKS BOARD OF TRUSTEES MEETING COMMUNICATION

DATE: October 16, 2023

ITEM:

6. Recommendation from Staff
 - b. Motion – Approving a Professional Services Agreement with HDR for a Regional Treatment Plant Site Evaluation Study

FINANCIAL IMPACT:

Up to 50% of \$451,023. If CIWW moves forward, WDMWW will submit a State Revolving Loan (SRF) Planning and Design Loan, and the costs will be transferred to CIWW. If CIWW does not move forward, the study may be ended, and Urbandale Water has agreed to split the cost. This will be documented in a separate letter agreement with Urbandale Water.

SUMMARY:

West Des Moines Water Works is taking the lead on a study that will identify the next plant expansion beyond the current Saylorville 10 MGD expansion. Staff are recommending moving forward with this study to determine where the next expansion should be located and what transmission improvements are needed to get the treated capacity to those participating in CIWW. These large source, treatment and transmission projects take 5-10 years to complete and bring online and the process needs to begin to stay on track to ensure water needs can be met for the Des Moines Metro.

BACKGROUND

Several suburban communities including West Des Moines Water Works have evaluated possible treatment plant options. Evaluating each potential site against source water quantity, quality, and cost of treatment will help the region make the best decision on where additional treatment capacity should be added. The joint west plant that was studied by West Des Moines Water Works will be part of the evaluation.

RECOMMENDED ACTION BY THE BOARD OF TRUSTEES:

To Adopt a Motion Approving a Professional Services Agreement with HDR for a Regional Treatment Plant Site Evaluation Study.

Prepared by: Clara Murphy

Approved for Content by: Clara Murphy

**SHORT FORM AGREEMENT BETWEEN OWNER AND
HDR ENGINEERING, INC. FOR PROFESSIONAL SERVICES**

THIS AGREEMENT is made as of this _____ day of _____, 2023, between West Des Moines Water Works (“OWNER”) and HDR ENGINEERING, INC., (“ENGINEER”) for services in connection with the project known as the CIWW Regional Water Treatment Facility Study (“Project”);

WHEREAS, OWNER desires to engage ENGINEER to provide professional engineering, consulting and related services (“Services”) in connection with the Project; and

WHEREAS, ENGINEER desires to render these Services as described in SECTION I, Scope of Services.

NOW, THEREFORE, OWNER and ENGINEER in consideration of the mutual covenants contained herein, agree as follows:

SECTION I. SCOPE OF SERVICES

ENGINEER will provide Services for the Project, which consist of the Scope of Services as outlined on the attached Exhibit A.

SECTION II. TERMS AND CONDITIONS OF ENGINEERING SERVICES

The HDR Engineering, Inc. Terms and Conditions, which are attached hereto in Exhibit B, are incorporated into this Agreement by this reference as if fully set forth herein.

SECTION III. RESPONSIBILITIES OF OWNER

The OWNER shall provide the information set forth in paragraph 6 of the attached “HDR Engineering, Inc. Terms and Conditions for Professional Services.”

SECTION IV. COMPENSATION

Compensation for ENGINEER’S services under this Agreement shall be on the basis of per diem.

- Direct Labor Costs times a factor of 3.18 for the services of ENGINEER’S personnel engaged on the Project, plus Reimbursable Expenses, estimated to be \$451,023.

The amount of any sales tax, excise tax, value added tax (VAT), or gross receipts tax that may be imposed on this Agreement shall be added to the ENGINEER’S compensation as Reimbursable Expenses.

Compensation terms are defined as follows:

Direct Labor Cost shall mean salaries and wages, (basic and overtime) paid to all personnel engaged directly on the Project. The Direct Labor Costs and the factor applied to Direct Labor Costs will be adjusted annually as of the first of every year to reflect equitable changes to the compensation payable to Engineer.

Reimbursable Expense shall mean the actual expenses incurred directly or indirectly in connection with the Project for transportation travel, shipping and express, and other incurred expense.

SECTION V. PERIOD OF SERVICE

Upon receipt of written authorization to proceed, ENGINEER shall perform the services within the time period(s) described in Exhibit A.

Unless otherwise stated in this Agreement, the rates of compensation for ENGINEER'S services have been agreed to in anticipation of the orderly and continuous progress of the project through completion. If any specified dates for the completion of ENGINEER'S services are exceeded through no fault of the ENGINEER, the time for performance of those services shall be automatically extended for a period which may be reasonably required for their completion and all rates, measures and amounts of ENGINEER'S compensation shall be equitably adjusted.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

"OWNER"

BY: _____

NAME: _____

TITLE: _____

ADDRESS: _____

HDR ENGINEERING, INC.

"ENGINEER"

BY: _____

NAME: _____

TITLE: _____

ADDRESS: _____

EXHIBIT A

SCOPE OF SERVICES

SCOPE OF SERVICES

October 9, 2023

Table of Contents

PART 1 – DATA COLLECTION AND CRITICAL REVIEW	2
PART 2A – WATER TREATMENT FACILITY EVALUATION AND PLANNING	4
PART 2B – WATER TRANSMISSION AND DISTRIBUTION INFRASTRUCTURE EVALUATION AND PLANNING	5
PART 3 – DEVELOP RECOMMENDATIONS	7
PART 4 – REPORT PREPARATION AND SUBMITTAL	8
PART 5 – PROJECT MANAGEMENT	8

OVERALL OBJECTIVE

Working in conjunction with Central Iowa Water Works (CIWW), the overall objective of this study is to determine the best option for planning, design and construction of new water supply, treatment, transmission, and distribution facilities for the growing Des Moines metropolitan area.

PART 1 – DATA COLLECTION AND CRITICAL REVIEW

Key Outcomes/Objectives:

- Share data, previous reports, and other pertinent information.
- Identify upgrades that could be implemented cost-effectively and quickly (stop gaps).
- Determine population projections, current water demands, and calculate future water demand projections.
- Confirm evaluation criteria across water systems (including minimum pressure, maximum velocity, minimum storage).
- Confirm cost and non-monetary basis for alternatives development.

HDR Tasks:

- Conduct Kickoff meeting.
- Collect and review population and demand data for CIWW communities. Develop future demands for the year 2050.
- Update 2022 DMWW Long-Range Plan Update demand projections with actual data and known large customers.
- Prepare TM-1: Population and Demand Projections.
- Collect and review existing data/studies for five water supply and treatment expansion locations and aquifer storage and recovery (ASR) facilities.
- Conduct site visit.
- Determine data gaps and need for additional information.
- Look for short-term/stop gap measures that would provide additional capacity.
- Prepare TM-2: Summary of Water Treatment/ASR Facilities and Stop Gap Measures.
- Prepare TM-3: Cost and Non-Monetary Analysis Baseline Plan.
- Conduct Population and Demand Projections Workshop presenting draft TM-1. Finalize TM-1 following workshop.
- Conduct Water Treatment Facilities Workshop presenting draft TMs 2 and 3. Finalize TMs following workshop.

CIWW Tasks:

- Establish team and decision makers.
- Provide data, studies, and comprehensive list of community participants in CIWW.
- Provide 2050 demands (e.g., average day, maximum day and peak hour demand) needed for each community participant.
- Actively participate in Workshops and Meetings.

- Confirm basic assumptions for cost opinions.
- Provide comments on draft technical memoranda summarized into a single document delivered to HDR at one time.

Deliverables:

- TM-1: Population and Demand Projections.
- TM-2: Summary of Water Treatment/ASR Facilities and Stop Gap Measures.
- TM-3: Cost and Non-Monetary Analysis Baseline Plan.

Meetings/Workshops:

- Kickoff Meeting, in person, attended by six HDR personnel.
- Population and Demand Projections Workshop, in person, attended by four HDR personnel.
- Water Treatment Facilities Workshop, in person, attended by four HDR personnel.
- Site Visits to Plants, see below.

Key Understandings:

- Site visits to the five water treatment locations are assumed to occur over two consecutive days and will include four people from the HDR team.
- The basis for updating the DMWW Long Range Plan is the Preliminary Engineering Report for the Saylorville Water Treatment Plant Capacity Expansion, Chapter 1 (7/1/2022).
- Existing studies to be reviewed and summarized include the following by HDR: Des Moines Water Works Long Range Plan (2017), Saylorville Water Treatment Plant Capacity Expansion (2022) and West Des Moines Process Evaluation for the Future West Water Production Facility (2020). Two additional reports from Grimes, and Urbandale, which were prepared by others, will be provided to HDR for review.
- No additional ASR facilities other than those identified in Preliminary Engineering Report for the Saylorville Water Treatment Plant Capacity Expansion, Chapter 1 (7/1/2022) are assumed for this project.
- Treatment facility cost opinions that are presented in prior studies will be used as the basis for future task Opinions of Probable Construction Cost (OPCCs). Due to each previous study having different time horizons, interest rates, contingencies, and cost basis, HDR will prepare a plan and develop key assumptions to normalize each cost opinion in TM-3. TM-3 will only define the criteria for OPCCs, actual OPCC development will be included in future TMs.
- Stop gaps or quick wins will not be included in draft TM-2. They will be discussed at the Water Treatment Facilities Workshop and added to the final TM.
- Population and demand projections will be developed for the service area. Certain wholesale customers will provide their 2050 demands, which will supersede the population projection for that respective area.

PART 2A – WATER TREATMENT FACILITY EVALUATION AND PLANNING

Key Outcomes/Objectives:

- Organize, review, and update/confirm five treatment expansion locations.
- Establish water quality goals.

HDR Tasks:

- Review and summarize pertinent water quality goals either for each treatment location, or a range of values for each treatment source.
- Prepare TM-4: Water Quality
- Review and evaluate five locations for Water Treatment.
- For five locations, evaluate source water availability (drought conditions), given existing river data and source water availability reports. This will be a desktop evaluation.
- Develop basis of design for each location including preliminary site plan and process flow diagram.
- Develop up to 3 Alternatives that meet the 2050 CIWW Demand as identified in Part 1.
- Develop opinion of probable construction cost (OPCC) for each of the five locations and 3 alternatives.
- Prepare TM-5: Water Supply and Treatment Alternatives
- Conduct Water Quality, Supply, and Treatment Alternatives Workshop presenting draft TMs 4 and 5. Finalize TMs following workshop.

CIWW Tasks:

- Actively participate in workshops and meetings.
- Confirm water quality goals.
- Confirm basic assumptions for cost opinions.
- Provide input on validity of potential alternatives.
- Provide comments on draft technical memoranda summarized into a single document and delivered to HDR at one time.
- As a result of the Workshop, reduce number of alternatives to no more than 3 (as applicable)

Deliverables:

- TM-4: Water Quality.
- TM-5: Water Supply and Treatment Alternatives.

Meetings/Workshops:

- Water Quality, Supply, and Treatment Alternatives Workshop, in person, attended by five HDR personnel.

Key Understandings:

- Past river data and source water studies provided by CIWW will be used to evaluate source water availability. These studies will include source of supply information for each location, either surface water or groundwater. Assumed studies are listed under the Key Understandings in Part 1. Source water analysis will be a desktop evaluation only.
- The five water supply and expansion locations include McMullen, Saylorville, Grimes, West Des Moines, and Urbandale. cursory review will also be given to a sixth location, Indirect Potable Reuse from the Des Moines WRA facility.
- Drawings for each location are limited to those described in the scope and will not be detailed design drawings.
- No survey, geotechnical, hydrogeological or additional site reconnaissance other than the Part 1 site visits is included.
- OPCCs are considered Class 5. Any OPCCs provided by HDR are made on the basis of information available to HDR and on the basis of HDR's experience and qualifications and represents its judgment as an experienced and qualified professional engineer. However, since HDR has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s)' methods of determining prices, or over competitive bidding or market conditions, HDR does not guarantee that proposals, bids or actual project or construction cost will not vary from OPCCs that HDR prepares.

PART 2B – WATER TRANSMISSION AND DISTRIBUTION INFRASTRUCTURE EVALUATION AND PLANNING

Key Outcomes/Objectives:

- Develop hydraulic model of CIWW service area.

HDR Tasks:

- Receive existing water distribution system models for each water system.
- Combine individual water system models into one Combined CIWW Hydraulic Model.
- Validate new combined CIWW hydraulic model.
- Model the 3 Alternatives (from Part 2A) using the combined CIWW Hydraulic Model. Conduct hydraulic analysis using extended period simulation to identify system deficiencies for the existing, near-term (2030), and future (2050) demands. Conduct Hydraulic Analysis Workshop presenting water system deficiencies.
- Identify CIP projects (e.g., storage, major transmission, and pump station improvements) to address water system deficiencies for near-term (2030) and future (2050) for 3 alternatives (from Part 2A).
- Prepare TM-6: Water System Evaluation
- Conduct Water System Evaluation Workshop presenting draft TM-6.
- For the recommended improvements on 3 alternatives resulting from the Water System Evaluation Workshop, develop OPCCs for identified CIP projects.
- Finalize TM-6 following workshop.

CIWW Tasks:

- Provide existing water distribution system models for each individual water system.
- Provide peaking factors and future demands for the individual water systems.
- Provide comments on draft technical memoranda summarized into a single document and delivered to HDR at one time.

Deliverables:

- TM-6: Water System Evaluation.
- Combined CIWW Hydraulic Model.

Meetings/Workshops:

- Hydraulic Analysis Workshop, in person, attended by four HDR personnel.
- Water System Evaluation Workshop, in person, attended by four HDR personnel.

Key Understandings:

- Demand projections will be based on the TM-1 from Part 1.
- OPCCs will only be developed after the Water System Evaluation Workshop and included in the Final TM-6.
- The following water systems are part of the total service area and assumed to be included in the current DMWW hydraulic model:
 - Des Moines Water Works
 - Berwick
 - Cumming
 - Pleasant Hill
 - Polk County / SE Polk
 - Runnells
 - Warren County
 - Windsor Heights
- The combined CIWW hydraulic model will add water production, storage, and major transmission facilities for the following water systems. It is assumed that each individual hydraulic model is current and converges; and that the individual hydraulic models do not require updates.
 - Ankeny
 - Clive
 - Johnston
 - Waukee
 - Grimes
 - Urbandale
 - West Des Moines
- The Combined CIWW hydraulic model is assumed to include the following water systems as wholesale customers/point connections:
 - Norwalk
 - Polk City

- Warren County Water District
- Xenia Rural Water District
- The combined CIWW hydraulic model is a planning model to evaluate the larger regional system. The combined model is considered validated when it is able to predict the hydraulic grade line within 10 FT of measured values. Modeling will be completed in WATERGEMS.
- OPCCs are considered Class 5. Any OPCCs provided by HDR are made on the basis of information available to HDR and on the basis of HDR's experience and qualifications and represents its judgment as an experienced and qualified professional engineer. However, since HDR has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s') methods of determining prices, or over competitive bidding or market conditions, HDR does not guarantee that proposals, bids or actual project or construction cost will not vary from OPCCs that HDR prepares.

PART 3 – DEVELOP RECOMMENDATIONS

Key Outcomes/Objectives:

- Evaluate and determine best value treatment expansion alternative(s) for CIWW.

HDR Tasks:

- Develop overall alternative scenarios based on water supply, treatment, transmission, storage, and pumping using the information from Parts 1, 2A, and 2B.
- Consider water quality and production based on seasonal changes in development of the alternatives.
- Prepare TM-7: Alternatives Summary
- Conduct Alternatives Review Workshop including monetary and non-monetary factors, a multi-criterion decision analysis (MCDA) using HDR's decisionSPACES with the alternatives described in TM-7 and criteria from TM-3.

CIWW Tasks:

- Actively participate in workshops and meetings including an overall alternatives evaluation workshop.
- Provide comments on draft technical memoranda summarized into a single document delivered to HDR at one time.

Deliverables:

- TM-7: Alternatives Summary with recommended alternative.

Meetings/Workshops:

- Alternative Selection Workshop (Monetary and Non-Monetary Factors), in person, attended by seven HDR personnel.

Key Understandings:

- It is anticipated that three alternatives will be included in the evaluation.

PART 4 – REPORT PREPARATION AND SUBMITTAL

Key Outcomes/Objectives:

- Draft and Final Report summarizing results from study.

HDR Tasks:

- Summarize process and outcome from Alternative Selection Workshop.
- Incorporate previous TMs.
- Develop Draft Report.
- Incorporate CIWW comment, update and deliver Final Report.
- Prepare single page project summary.

CIWW Tasks:

- Provide comments on draft report summarized into a single document delivered to HDR at one time.

Deliverables:

- Draft Report.
- Final Report.
- Single Page Project Summary.

Meetings/Workshops:

- Draft report presentation, in person, five HDR personnel.
- Final report presentation to CIWW Tech Committee, in person, five HDR personnel.

Key Understandings:

- New text for the draft and final reports will be a summarization of the MCDA analysis from Part 3 and an executive summary, all other final TMs will be included unmodified.
- Single page project summary is intended to be no larger than 11" x 17" to be used for communications with the public and elected officials.

PART 5 – PROJECT MANAGEMENT

Key Outcomes/Objectives:

- Open communication and timely execution of project.

HDR Tasks:

- Develop project management plan and quality plan.
- Schedule development and management.
- Correspondence and meetings with CIWW.
- Supervision of HDR team.
- Monthly invoice and progress reporting.
- Conduct internal Project Approach and Resource Review and internal Management Reviews.

CIWW Tasks:

- Participate in Monthly Meetings, virtually.

Potential Deliverables:

- Project Schedule.
- Progress Reports and invoices.

Meetings/Workshops:

- Monthly Progress Meetings, virtual meetings held monthly with up to four HDR personnel.

Key Understandings:

- It is anticipated that the overall project duration will be eleven months with a notice to proceed in October 2023.

EXHIBIT B

TERMS AND CONDITIONS

**HDR Engineering, Inc. Terms and Conditions
for Professional Services
for West Des Moines Water Works/Central Iowa Water Works**

1. STANDARD OF PERFORMANCE

The standard of care for all professional engineering, consulting and related services performed or furnished by ENGINEER and its employees under this Agreement will be the care and skill ordinarily used by members of ENGINEER's profession practicing under the same or similar circumstances at the same time and in the same locality. ENGINEER makes no warranties, express or implied, under this Agreement or otherwise, in connection with ENGINEER's services.

2. INSURANCE/INDEMNITY

ENGINEER agrees to procure and maintain, at its expense, Workers' Compensation insurance as required by statute; Employer's Liability of \$250,000; Automobile Liability insurance of \$1,000,000 combined single limit for bodily injury and property damage covering all vehicles, including hired vehicles, owned and non-owned vehicles; Commercial General Liability insurance of \$1,000,000 combined single limit for personal injury and property damage; and Professional Liability insurance of \$1,000,000 per claim for protection against claims arising out of the performance of services under this Agreement caused by negligent acts, errors, or omissions for which ENGINEER is legally liable. If flying an Unmanned Aerial System (UAS or drone), ENGINEER will procure and maintain aircraft unmanned aerial systems insurance of \$1,000,000 per occurrence. OWNER shall be made an additional insured on Commercial General and Automobile Liability insurance policies and certificates of insurance will be furnished to the OWNER. ENGINEER agrees to indemnify OWNER for third party personal injury and property damage claims to the extent caused by ENGINEER's negligent acts, errors or omissions. However, neither Party to this Agreement shall be liable to the other Party for any special, incidental, indirect, or consequential damages (including but not limited to loss of use or opportunity; loss of good will; cost of substitute facilities, goods, or services; cost of capital; and/or fines or penalties), loss of profits or revenue arising out of, resulting from, or in any way related to the Project or the Agreement from any cause or causes, including but not limited to any such damages caused by the negligence, errors or omissions, strict liability or breach of contract. The employees of both parties are intended third party beneficiaries of this waiver of consequential damages.

3. OPINIONS OF PROBABLE COST

Any opinions of probable project cost or probable construction cost provided by ENGINEER are made on the basis of information available to ENGINEER and on the basis of ENGINEER's experience and qualifications, and represents its judgment as an experienced and qualified professional engineer. However, since ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s)' methods of determining prices, or over competitive bidding or market conditions, ENGINEER does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable cost ENGINEER prepares.

4. CONSTRUCTION PROCEDURES

ENGINEER's observation or monitoring portions of the work performed under construction contracts shall not relieve the contractor from its responsibility for performing work in accordance with applicable contract documents. ENGINEER shall not control or have charge of, and shall not be responsible for, construction means, methods, techniques, sequences, procedures of construction, health or safety programs or precautions connected with the work and shall not manage, supervise, control or have charge of construction. ENGINEER shall not be responsible for the acts or omissions of the

contractor or other parties on the project. ENGINEER shall be entitled to review all construction contract documents and to require that no provisions extend the duties or liabilities of ENGINEER beyond those set forth in this Agreement. OWNER agrees to include ENGINEER as an indemnified party in OWNER's construction contracts for the work, which shall protect ENGINEER to the same degree as OWNER. Further, OWNER agrees that ENGINEER shall be listed as an additional insured under the construction contractor's liability insurance policies.

5. CONTROLLING LAW

This Agreement is to be governed by the law of the state where ENGINEER's services are performed.

6. SERVICES AND INFORMATION

OWNER will provide all criteria and information pertaining to OWNER's requirements for the project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations. OWNER will also provide copies of any OWNER-furnished Standard Details, Standard Specifications, or Standard Bidding Documents which are to be incorporated into the project.

OWNER will furnish the services of soils/geotechnical engineers or other consultants that include reports and appropriate professional recommendations when such services are deemed necessary by ENGINEER. The OWNER agrees to bear full responsibility for the technical accuracy and content of OWNER-furnished documents and services.

In performing professional engineering and related services hereunder, it is understood by OWNER that ENGINEER is not engaged in rendering any type of legal, insurance or accounting services, opinions or advice. Further, it is the OWNER's sole responsibility to obtain the advice of an attorney, insurance counselor or accountant to protect the OWNER's legal and financial interests. To that end, the OWNER agrees that OWNER or the OWNER's representative will examine all studies, reports, sketches, drawings, specifications, proposals and other documents, opinions or advice prepared or provided by ENGINEER, and will obtain the advice of an attorney, insurance counselor or other consultant as the OWNER deems necessary to protect the OWNER's interests before OWNER takes action or forebears to take action based upon or relying upon the services provided by ENGINEER.

7. SUCCESSORS, ASSIGNS AND BENEFICIARIES

OWNER and ENGINEER, respectively, bind themselves, their partners, successors, assigns, and legal representatives to the covenants of this Agreement. Neither OWNER nor ENGINEER will assign, sublet, or transfer any interest in this Agreement or claims arising therefrom without the written consent of the other. No third party beneficiaries are intended under this Agreement.

8. RE-USE OF DOCUMENTS

All documents, including all reports, drawings, specifications, computer software or other items prepared or furnished by ENGINEER pursuant to this Agreement, are instruments of service with respect to the project. ENGINEER retains ownership of all such documents. OWNER may retain copies of the documents for its information and reference in connection with the project; however, none of the documents are intended or represented to be suitable for reuse by OWNER or others on extensions of the project or on any other project. Any reuse without written verification or adaptation by ENGINEER for the specific purpose intended will be at OWNER's

sole risk and without liability or legal exposure to ENGINEER, and OWNER will defend, indemnify and hold harmless ENGINEER from all claims, damages, losses and expenses, including attorney's fees, arising or resulting therefrom. Any such verification or adaptation will entitle ENGINEER to further compensation at rates to be agreed upon by OWNER and ENGINEER.

9. TERMINATION OF AGREEMENT

OWNER or ENGINEER may terminate the Agreement, in whole or in part, by giving seven (7) days written notice to the other party. Where the method of payment is "lump sum," or cost reimbursement, the final invoice will include all services and expenses associated with the project up to the effective date of termination

10. SEVERABILITY

If any provision of this agreement is held invalid or unenforceable, the remaining provisions shall be valid and binding upon the parties. One or more waivers by either party of any provision, term or condition shall not be construed by the other party as a waiver of any subsequent breach of the same provision, term or condition.

11. INVOICES

ENGINEER will submit monthly invoices for services rendered and OWNER will make payments to ENGINEER within thirty (30) days of OWNER's receipt of ENGINEER's invoice.

ENGINEER will retain receipts for reimbursable expenses in general accordance with Internal Revenue Service rules pertaining to the support of expenditures for income tax purposes. Receipts will be available for inspection by OWNER's auditors upon request.

If OWNER disputes any items in ENGINEER's invoice for any reason, including the lack of supporting documentation, OWNER may temporarily delete the disputed item and pay the remaining amount of the invoice. OWNER will promptly notify ENGINEER of the dispute and request clarification and/or correction. After any dispute has been settled, ENGINEER will include the disputed item on a subsequent, regularly scheduled invoice, or on a special invoice for the disputed item only.

OWNER recognizes that late payment of invoices results in extra expenses for ENGINEER. ENGINEER retains the right to assess OWNER interest at the rate of one percent (1%) per month, but not to exceed the maximum rate allowed by law, on invoices which are not paid within thirty (30) days from the date OWNER receives ENGINEER's invoice. In the event undisputed portions of ENGINEER's invoices are not paid when due, ENGINEER also reserves the right, after seven (7) days prior written notice, to suspend the performance of its services under this Agreement until all past due amounts have been paid in full.

12. CHANGES

The parties agree that no change or modification to this Agreement, or any attachments hereto, shall have any force or effect unless the change is reduced to writing, dated, and made part of this Agreement. The execution of the change shall be authorized and signed in the same manner as this Agreement. Adjustments in the period of services and in compensation shall be in accordance with applicable paragraphs and sections of this Agreement. Any proposed fees by ENGINEER are estimates to perform the services required to complete the project as ENGINEER understands it to be defined. For those projects involving conceptual or process development services, activities often are not fully definable in the initial planning. In any event, as the project progresses, the facts developed may dictate a change in the services to be performed, which may alter the scope. ENGINEER will inform OWNER of such situations so that changes in scope and adjustments to the time of performance and compensation can be made as required. If such change, additional services, or suspension of services results in an increase or decrease in the cost of or time required for performance of the services, an equitable adjustment shall be made, and the Agreement modified accordingly.

13. CONTROLLING AGREEMENT

These Terms and Conditions shall take precedence over any inconsistent or contradictory provisions contained in any proposal, contract, purchase order, requisition, notice-to-proceed, or like document.

14. EQUAL EMPLOYMENT AND NONDISCRIMINATION

In connection with the services under this Agreement, ENGINEER agrees to comply with the applicable provisions of federal and state Equal Employment Opportunity for individuals based on color, religion, sex, or national origin, or disabled veteran, recently separated veteran, other protected veteran and armed forces service medal veteran status, disabilities under provisions of executive order 11246, and other employment, statutes and regulations, as stated in Title 41 Part 60 of the Code of Federal Regulations § 60-1.4 (a-f), § 60-300.5 (a-e), § 60-741 (a-e).

15. HAZARDOUS MATERIALS

OWNER represents to ENGINEER that, to the best of its knowledge, no hazardous materials are present at the project site. However, in the event hazardous materials are known to be present, OWNER represents that to the best of its knowledge it has disclosed to ENGINEER the existence of all such hazardous materials, including but not limited to asbestos, PCB's, petroleum, hazardous waste, or radioactive material located at or near the project site, including type, quantity and location of such hazardous materials. It is acknowledged by both parties that ENGINEER's scope of services do not include services related in any way to hazardous materials. In the event ENGINEER or any other party encounters undisclosed hazardous materials, ENGINEER shall have the obligation to notify OWNER and, to the extent required by law or regulation, the appropriate governmental officials, and ENGINEER may, at its option and without liability for delay, consequential or any other damages to OWNER, suspend performance of services on that portion of the project affected by hazardous materials until OWNER: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the hazardous materials; and (ii) warrants that the project site is in full compliance with all applicable laws and regulations. OWNER acknowledges that ENGINEER is performing professional services for OWNER and that ENGINEER is not and shall not be required to become an "arranger," "operator," "generator," or "transporter" of hazardous materials, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA), which are or may be encountered at or near the project site in connection with ENGINEER's services under this Agreement. If ENGINEER's services hereunder cannot be performed because of the existence of hazardous materials, ENGINEER shall be entitled to terminate this Agreement for cause on 30 days written notice. To the fullest extent permitted by law, OWNER shall indemnify and hold harmless ENGINEER, its officers, directors, partners, employees, and subconsultants from and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) caused by, arising out of or resulting from hazardous materials, provided that (i) any such cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or injury to or destruction of tangible property (other than completed Work), including the loss of use resulting therefrom, and (ii) nothing in this paragraph shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's sole negligence or willful misconduct.

16. EXECUTION

This Agreement, including the exhibits and schedules made part hereof, constitute the entire Agreement between ENGINEER and OWNER, supersedes and controls over all prior written or oral understandings. This Agreement may be amended, supplemented

or modified only by a written instrument duly executed by the parties.

17. LITIGATION SUPPORT

In the event ENGINEER is required to respond to a subpoena, government inquiry or other legal process related to the services in connection with a legal or dispute resolution proceeding to which ENGINEER is not a party, OWNER shall reimburse ENGINEER for reasonable costs in responding and compensate ENGINEER at its then standard rates for reasonable time incurred in gathering information and documents and attending depositions, hearings, and trial.

18. NO THIRD PARTY BENEFICIARIES

Except as otherwise provided in this Agreement, no third party beneficiaries are intended under this Agreement. In the event a reliance letter or certification is required under the scope of services, the parties agree to use a form that is mutually acceptable to both parties.

19. UTILITY LOCATION

If underground sampling/testing is to be performed, a local utility locating service shall be contacted to make arrangements for all utilities to determine the location of underground utilities. In addition, OWNER shall notify ENGINEER of the presence and location of any underground utilities located on the OWNER's property which are not the responsibility of private/public utilities. ENGINEER shall take reasonable precautions to avoid damaging underground utilities that are properly marked. The OWNER agrees to waive any claim against ENGINEER and will indemnify and hold ENGINEER harmless from any claim of liability, injury or loss caused by or allegedly caused by ENGINEER's damaging of underground utilities that are not properly marked or are not called to ENGINEER's attention prior to beginning the underground sampling/testing.

20. UNMANNED AERIAL SYSTEMS

If operating UAS, ENGINEER will obtain all permits or exemptions required by law to operate any UAS included in the services. ENGINEER's operators have completed the training, certifications and licensure as required by the applicable jurisdiction in which the UAS will be operated. OWNER will obtain any necessary permissions for ENGINEER to operate over private property, and assist, as necessary, with all other necessary permissions for operations.

21. OPERATIONAL TECHNOLOGY SYSTEMS

OWNER agrees that the effectiveness of operational technology systems and features designed, recommended or assessed by ENGINEER (collectively "OT Systems") are dependent upon OWNER's continued operation and maintenance of the OT Systems in accordance with all standards, best practices, laws, and regulations that govern the operation and maintenance of the OT Systems. OWNER shall be solely responsible for operating and maintaining the OT Systems in accordance with applicable laws, regulations, and industry standards (e.g. ISA, NIST, etc.) and best practices, which generally include but are not limited to, cyber security policies and procedures, documentation and training requirements, continuous monitoring of assets for tampering and intrusion, periodic evaluation for asset vulnerabilities, implementation and update of appropriate technical, physical, and operational standards, and offline testing of all software/firmware patches/updates prior to placing updates into production. Additionally, OWNER recognizes and agrees that OT Systems are subject to internal and external breach, compromise, and similar incidents. Security features designed, recommended or assessed by ENGINEER are intended to reduce the likelihood that OT Systems will be compromised by such incidents. However, ENGINEER does not guarantee that OWNER's OT Systems are impenetrable and OWNER agrees to waive any claims against ENGINEER resulting from any such incidents that relate to or affect OWNER's OT Systems.

22. FORCE MAJEURE

ENGINEER shall not be responsible for delays caused by factors beyond ENGINEER's reasonable control, including but not limited to delays because of strikes, lockouts, work slowdowns or stoppages, government ordered industry shutdowns, power or server outages, acts of nature, widespread infectious disease outbreaks (including, but not limited to epidemics and pandemics), failure of any governmental or other regulatory authority to act in a timely manner, failure of the OWNER to furnish timely information or approve or disapprove of ENGINEER's services or work product, or delays caused by faulty performance by the OWNER's or by contractors of any level or any other events or circumstances not within the reasonable control of the party affected, whether similar or dissimilar to any of the foregoing. When such delays beyond ENGINEER's reasonable control occur, the OWNER agrees that ENGINEER shall not be responsible for damages, nor shall ENGINEER be deemed in default of this Agreement, and the parties will negotiate an equitable adjustment to ENGINEER's schedule and/or compensation if impacted by the force majeure event or condition.

23. EMPLOYEE IMMUNITY

The parties to this Agreement acknowledge that an individual employee or agent may not be held individually liable for negligence with regard to services provided under this Agreement. To the maximum extent permitted by law, the parties intend i) that this limitation on the liability of employees and agents shall include directors, officers, employees, agents and representatives of each party and of any entity for whom a party is legally responsible, and ii) that any such employee or agent identified by name in this Agreement shall not be deemed a party. Specifically, in the event that all or a portion of the services is performed in the State of Florida, the following provision shall be applicable:

THE PARTIES ACKNOWLEDGE THAT PURSUANT TO APPLICABLE FLORIDA STATUTES AN INDIVIDUAL EMPLOYEE OR AGENT MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE WITH REGARD TO SERVICES PROVIDED UNDER THIS AGREEMENT. To the maximum extent permitted by law, the Parties intend i) that this limitation on the liability of employees and agents shall include directors, officers, employees, agents and representatives of each Party and of any entity for whom a Party is legally responsible, and ii) that any such employee or agent identified by name in this Agreement shall not be deemed a Party. The Parties further acknowledge that the Florida statutes referred to above include but are not limited to: §558.0035(1)(a)-(e); §471.023(3)(an engineer is personally liable for negligence except as provided in § 558.0035); §472.021(3) (surveyor and mapper); §481.219(11)(architect and interior designer); §481.319(6) (landscape architect); and §492.111(4) (geologist).