



PROFESSIONAL SERVICES AGREEMENT

For

CITY OF AURORA, ILLINOIS

MASTODON LAKE MASTER PLAN

HR GREEN Job# 190969

Prepared for:

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THIS **AGREEMENT** is between City of Aurora, Illinois (hereafter "CLIENT") and HR GREEN, INC. (hereafter "COMPANY").

1.0 Project Understanding

1.1 General Understanding

The CLIENT is in need of a Master Plan for Mastodon Lake in Phillips Park. The stated goals of the Master Plan are as follows:

- Task 1 - Improve water quality of Mastodon Lake by reducing the growth of duckweed, wolffia, coontail, sago and other aquatic vegetation, possibly with dredging and aeration. The Master Plan will provide recommendations for applicable and cost effective techniques to dredge the sediment from the lake and provide beneficial reuse options for the dredged material.
- Task 2 - Evaluate and update the previously prepared Engineer's Opinion of Probable Costs (EOPC) to lower the lake outlet to achieve a desirable Base Flood Elevation (BFE) for the purposes of flood protection for adjacent residents. The proposed improvements identified previously include a parallel outlet from the lake and approximately 3,700 feet of storm sewer and open channel and expansion of Little Doe Lake for compensatory storage volume.
- Task 3 - Prepare concept plan and an EOPC for the park surrounding Little Doe Lake. Improvements desired includes but not limited to soccer fields or a walkable natural area, etc. Opportunities to use dredged material from Mastodon Lake will be evaluated.
- Task 4 – Prepare a master plan illustrating a phased implementation plan for tasks 1-3 above and evaluate grant funding opportunities. A Benefit Cost Analysis (BCA) using FEMA approved software and BCA methodology will be required to determine if funding from the Hazard Mitigation Grant Program (HMGP) is applicable. Other funding sources will be evaluated including but not limited to OSLAD, Section 319, etc.

This Agreement includes professional engineering services to be provided by the COMPANY to prepare a Mastodon Lake Master Plan for implementation of preferred solutions for remediation of Mastodon Lake, lowering of its BFE, and enhancement of active and passive recreational uses of the areas surrounding Mastodon and Little Doe Lakes.

1.2 Design Criteria/Assumptions

The following planning criteria are applicable to this project with the following assumptions:

- The City has previously prepared a Mastodon Lake Sediment Evaluation Report dated August 18, 2018 and Mastodon Lake Floodplain Relief Analysis Summary. It is assumed that COMPANY will be provided with electronic copies of the survey and hydrologic/hydraulic modeling (EPA SWMM model) completed as part of this work.

- The City has previously prepared park concept plan for area surrounding Little Doe Lake. It is assumed that COMPANY will be provided with electronic copies of the concept plan. The concept plan will be used as a starting point with modifications made to the plan based on additional investigations and discussions with the City as described in Task 3 scope of services below.
- A topographic survey and/or Right of Way (ROW) survey of the project area is not proposed or included in the scope. Because of the nature of the project is developing a concept level master plan, we recommend using the GIS data and the Kane County 2' topography for the Master Plan. It is assumed that utility maps with existing conditions pipe sizes and inverts will be available within the EPA SWMM models and/or through the City's GIS utility mapping.
- A limited geotechnical analysis and sampling and testing of the lake area was previously completed. Additional geotechnical services may be required but not yet defined. Based on discussions with the City, it is assumed that geotechnical services, if required, will be provided by the City under a separate contract between the City and Rubino Engineering or a geotechnical engineer of City's preference.
- A formal field delineation of wetland boundaries and Jurisdictional determination (JD) is not included in the scope. These services will be provided as part of final engineering in future phases of the project. The wetland boundaries will be shown based on readily available information and GIS shape files provided by the CLIENT.
- A Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) and/or permit application with applicable regulatory agencies is not included in the scope. However, COMPANY will review the applicable permitting requirements for the project from a regulatory agencies including but not limited to:
 - a) Kane County Stormwater Management Ordinance (KCSMO)
 - b) Illinois Dept. of Natural Resources, Office of Water Resources (IDNR-OWR)
 - c) United states Army Corps of Engineers (USACOE)
 - d) Kane DuPage Soil and Water Conservation District (KDSWCD)
 - e) Federal Emergence Management Agency (FEMA) for CLOMR/LOMR
 - f) Illinois Environmental Protection Agency (IEPA)

COMPANY suggest that initial consultation request be submitted to State Historic Preservation Agency (SHPO) for an initial finding of cultural resources within the project limits and IDNR ECOCAT consultation for threatened and endangered species.

- A detailed utility conflict resolution and relocation plan is not anticipated and is not included in the scope. COMPANY will however, review the proposed design, particularly the proposed storm sewer profile for potential conflicts with existing sanitary and water mains and/or franchise utilities. A JULIE design ticket will be submitted to obtain copies of utility maps from franchise utilities. Potential utility conflicts will be identified to be addressed in final design.

- Environmental sampling and testing to fully determine application of dredged material for use in residential areas is not included. The sampling analysis provided as part of the RFP will be reviewed to determine if it meets the sampling requirements for the TACO tier limits for the application.

2.0 Scope of Services

The CLIENT agrees to employ COMPANY to perform the following services:

2.1 TASK 1 – MASTODON LAKE MANAGEMENT PLAN

COMPANY will provide the following scope of services:

A. Kickoff Meeting

COMPANY will facilitate one (1) kickoff meeting with the CLIENT to discuss scope, schedule, and budget and for overall project goals and objectives, milestones, etc. in relation to all tasks identified in this scope of services. COMPANY will provide a meeting agenda, attend the meeting and prepare minutes of the meeting. The meeting will be attended by the COMPANY's client manager, project manager, ecological lead, park design lead and dredging lead sub-consultant.

B. Review of Past Studies and Reports/Data and Base Map

COMPANY will request and collect data the CLIENT and readily available sources and will review this data to familiarize itself with the extent and nature and detail of work previously completed. This includes a review of the EPA SWMM model of the storm sewer system as well as sediment evaluation report. Using the data obtained from the CITY's GIS system, COMPANY will also prepare the base map for exhibits that will be prepared for the master plan.

C. Site Reconnaissance and Assessment

On the same day as the kickoff meeting, COMPANY will conduct one (1) on-site assessment to identify challenges and opportunities to be addressed in the concept plan development. This will include information related to dredging techniques that may best be applicable for the site conditions, dredging material reuse alternatives and potential site location, and preliminary identification of best management practices that are feasible for reducing sediments to the lake for long term sustainability. This site visit will also cover areas of the project for storm sewer construction and open channel design and Little Doe Lake area enhancement concept planning related to the scope of services discussed below.

D. Wetland Services

As noted in the assumptions, a formal field delineation of wetland boundaries and Jurisdictional determination (JD) will not be completed. These services will be provided as part of final engineering in future phases of the project. The wetland boundaries will be shown based on readily available information and GIS shape files provided by the CLIENT. For budgeting purposes, it will be assumed that the wetland will be jurisdictional and require permitting from the USACOE in the final engineering phase. COMPANY and AES will review the wetland maps and determine the permitting required for wetland impacts.

E. Geotechnical Investigations

As noted in section 1.2 above, geotechnical services have been excluded from the scope during this phase of the project. If additional geotechnical borings and/or sampling is required, these services will be provided by the City under a separate contract between the City and Rubino Engineering or a geotechnical engineer of City's preference.

F. Dredging Techniques and Beneficial Use Evaluation

COMPANY and its sub-consultant Berrini & Associates will complete an evaluation of dredging and sediment dewatering alternatives as well as evaluation of alternatives for their beneficial reuse. The following sub-tasks will be completed:

Dredging Alternatives Analysis:

- Evaluation of suitable methods and equipment for dredging
- Estimate of sediment dredged volume (based on estimates completed as part of the sediment evaluation report completed by others.
- Dewatering requirements
- Costs

Beneficial Use Alternatives Analysis:

- Evaluation of physical and chemical properties of sediment using existing data completed as part of the sediment evaluation report
- Evaluation of alternatives for on-site or off-site reuse of dredged material.
- Evaluate floodplain compensatory storage requirements if the dredged material is being placed in the floodplain and potential mitigation opportunities
- Costs

Dredging options will be evaluated for Mastodon Lake to arrive at the most feasible solution in terms of ease of operations, the most workable solution for dewatering, opportunities for on-site or off-site reuse of the dredged material, and overall costs.

G. Ecological Restoration Alternatives Evaluation

COMPANY will evaluate alternatives for the management of aquatic emergent and lake perimeter buffer that promote clear water conditions, improve fish and pollinator habitat and limit Canada Goose use of the lake.

H. Permitting Review

The project team will evaluate permitting requirements applicable for lake dredging, construction operations, wetlands, and for potential mitigation for reuse of dredged material on- and off-site disposal.

I. Engineer's Opinion of Probable Construction Costs

COMPANY will develop an EOPC for the feasible alternative(s) developed as part of the above activities including their effects on permitting-associated costs. Recommended alternatives will be identified considering cost, ease of

implementation, maintenance requirements and ecologic, social and economic values gained.

J. Workshop Meeting

COMPANY will attend one (1) workshop meeting with the CLIENT to present and discuss the recommended alternatives. Relative to this task, COMPANY will facilitate the selection of a CLIENT-preferred lake remediation plan. The meeting will be attended by the COMPANY's client manager, project manager, ecological lead and dredging lead sub-consultant.

K. Concept Lake Remediation Plan

COMPANY will use the results of the workshop meeting to develop an abbreviated report, exhibits and supporting documentation for a preferred concept lake remediation plan to be included in the Master Plan, below.

2.2 TASK 2 – LAKE OUTLET, STORM/OPEN CHANNEL AND BFE ANALYSIS

COMPANY will provide the following scope of services:

A. Storm Sewer Hydrologic and Hydraulic (H&H) Analysis and Open Channel Alternatives Analysis

COMPANY will review and update the design alternatives utilizing the H&H models previously completed and costs identified in the previous studies in addition to gathering input from the City on preferred solutions related to this task. The Engineering Enterprises, Inc. (EEI) report will serve as a foundational guide for alternatives discussion and design for lowering the lake outlet and reconstruction of 3,700 feet of storm sewer and open channel. It is assumed that the H&H models will extend from Mastodon Lake to its connection to existing storm sewer on Hinckley and Parker Avenue intersection. The release rates from the proposed system to the existing system will need to be considered.

The proposed storm sewer involves placement of pipes below an existing parking lot as well as along road right-of-way for connection to existing storm sewer pipes. COMPANY will take into consideration the construction needs of each section of pipe for development of a feasible concept with an update of the concept level cost estimate. Traffic impacts, tree impacts, resident and business impacts will be considered in the selection of the preferred storm sewer alignment. Temporary and permanent easements will be identified for constructability and future access for maintenance and for the purposes of updating the concept level cost estimate. As the EEI study used EPA SWMM to model four scenarios, COMPANY will request and use the original model for refinement of concept plans if needed.

For the downstream open channel sections identified in the EEI report, the existing topography, space limitations and impacts to existing infrastructure (and trees) as well as safety will be considered for its feasibility. If open channel is feasible and desired, modeled flow rates and depth-durations will be used to develop a concept section for the channel to optimize energy dissipation and erosion control over the long-term to reduce maintenance costs.

B. Parallel Lake Outlet Feasibility Analysis

COMPANY will update Mastodon Lake's outlet concept, optimized to safely pass flows and limit flood risk to structures within the project area. The analysis will include evaluation of the feasibility and cost effectiveness of lowering the lake normal water level along with storm sewer and channel improvements. The area residential lowest adjacent grade (LAG) will be estimated based on topographic data available to determine the desired BFE plus a factor of safety. This will also be evaluated in conjunction with meeting the FEMA Benefit Cost Analysis (BCA) for possible funding through the Hazard Mitigation Grant Program. Both current regulatory BFE and preliminary FIS BFE may be analyzed for the BCA. The scope for the BCA task is further described below.

C. Engineer's Opinion of Probable Construction Costs

COMPANY will develop an EOPC for the preferred design developed as part of the above activities including their effects on permitting-associated costs. Recommended alternatives will be identified considering cost, ease of implementation, maintenance requirements and ecologic, social and economic values gained.

D. Progress Meeting

COMPANY will attend one (1) progress meeting with the CLIENT to present and discuss the recommended alternatives identified in the above task. This meeting will be attended remotely via teleconference and web sharing. Relevant exhibits and data for discussions will be send ahead of the meeting to the CLIENT. An email summary of meeting will be prepared to serve as meeting minutes. Relative to this task, COMPANY will facilitate the selection of a CLIENT-preferred plan to reduce the lake BFE and provide the desired flood protection.

E. Concept Base Flood Elevation Alternative Plan

COMPANY will use the results of the progress meeting to develop exhibits and supporting documentation for a preferred concept for the lake outlet modification and the base flood elevation reduction plan to be included in the Master Plan, below. A report and/or technical memorandum is not included.

2.3 TASK 3 – LITTLE DOE LAKE PARK CONCEPT PLAN

COMPANY will provide the following scope of services:

A. Site Analysis

COMPANY will conduct a desktop and site assessment to identify design constraints and opportunities in the development of a concept plan for the park surrounding Little Doe Lake. The following assessment will be included:

- Site Topography
- Soil Conditions
- Vegetative Cover
- Floodplain/Wetlands
- Access

- View-Sheds
- Adjacent Land Uses

This site visit will be performed at the same time as the initial Site Reconnaissance and Assessment.

B. Concept Plan Modifications

COMPANY will make modifications to the City provided concept plan including information related to active or passive recreational opportunities, such as athletic fields, parking, native vegetation, trails, picnic areas, natural play areas, additional recreational features and for locations where Lake Mastodon dredged sediment may be of beneficial use. COMPANY will utilize previously prepared concept plan by the City to make any modifications to the park concept plan.

C. Engineer's Opinion of Probable Construction Costs

COMPANY will develop an EOPC for one (1) preferred design developed as part of the above activities including their effects on permitting-associated costs.

D. Progress Meeting

COMPANY will attend one (1) progress meeting with the CLIENT to present and discuss the recommended alternatives identified in the above task. This meeting will be attended remotely via teleconference and web sharing. Relevant exhibits and data for discussions will be send ahead of the meeting to the CLIENT. An email summary of meeting will be prepared to serve as meeting minutes. Relative to this task, COMPANY will facilitate the selection of a CLIENT-preferred Little Doe Lake concept site plan.

E. Concept Little Doe Lake Plan

COMPANY will use the results of the progress meeting to develop exhibits and supporting documentation for a preferred concept for the Little Doe Lake Concept Site Plan to be included in the Master Plan, below. A report and/or technical memorandum is not included.

2.4 TASK 4 – COMPREHENSIVE MASTER PLAN

COMPANY will provide the following scope of services:

A. Pre-Final and Final Master Plan

COMPANY will assemble the results of the preceding tasks into a draft plan and submit to CLIENT for one (1) round of review and comments. The following content will be developed:

1. Project Background
2. Mastodon Lake Master Plan
3. Lake Outlet, Storm/Open Channel and BFE Analysis Plan
4. Little Doe Lake Site Plan
5. Phasing and Implementation Plan
 - a. Phasing and Sequence of Implementation
 - b. Phasing Costs

- c. Permits Required
 - d. Funding Matrix and Application Deadlines
6. Appendices
- a. Exhibits
 - b. Supporting studies and data
 - c. Benefit Cost Analysis

B. Grant Funding Matrix

COMPANY will review local, state and federal grant funding opportunities suitable for the proposed concepts developed within this proposed scope of work and provide a summary of:

- Grant opportunity
- Application and award timelines
- Grant applicability to the for the proposed work
- Local match requirements
- Likelihood of successful award

C. FEMA Approved Benefit Cost Analysis (BCA)

Since the FEMA HMGP funding is highly contingent upon meeting the BCA of 1.00 or greater, the CLIENT has requested that a BCA be completed for the purposes of identifying opportunities to maximize the BCA. Part of this task will also play into the phasing plan such that the BCA can remain as high as possible.

3.0 Deliverables and Schedules Included in this Agreement

The following deliverables are included in the scope and fee:

- Electronic pdf copies of the Mastodon Lake Master Plan and working documents
- Two (2) bound copies of the Mastodon Lake Master Plan

This schedule was prepared to include reasonable allowances for review and approval times

NOTICE TO PROCEED FROM CLIENT		TBD
Task 1	Develop a concept plan and cost estimate for reducing the growth of duckweed, wolfia, coontail, sago, and other aquatic vegetation in the Lake, possibly with dredging and aeration. Developing the concept plan should include evaluation of various dredging techniques and alternatives for re-use or disposal of dredged material. Re-use may include application in the park surrounding Little Doe Lake or at the fringe of Mastodon Lake to create shallower wetland areas. If changes to the shoreline of Mastodon Lake are recommended, a graphical rendering of the improvements would be beneficial.	Initiating upon notice to proceed with expected August 27, 2019 start date and 1.5-2 weeks allowed for completion of concept plan, City coordination and workshop meeting and preliminary estimate of construction cost, this task will be completed by September 16th, 2019.
Task 2	Review and update the concept level cost estimate for lowering the Lake outlet and reconstructing approximately 3,700 feet of storm sewer and open channel in order to lower the base flood elevation of the Lake.	September 16th – November 8th
Task 3	Develop a concept plan and construction cost estimate for improvements to the park surrounding nearby Little Doe Lake (soccer fields or a walkable natural area, etc.)	September 16th – November 8th
Task 4	Develop a phased implementation plan for Tasks 1-3 and evaluate grant funding opportunities, such as Hazard Mitigation Grants and OSLAD Grants. Evaluation of Hazard Mitigation Grants should include a Benefit Cost Analysis using software acceptable to FEMA and should determine which phase(s) of the work would have to be completed by the City so the final phase would have a Benefit-to-Cost ratio higher than 1.0.	November 11th – December 20th

required by the CLIENT and public authorities having jurisdiction over the project. This schedule shall be equitably adjusted as the project progresses, allowing for changes in the scope of the project requested by the CLIENT or for delays or other causes beyond the control of COMPANY.

4.0 Items not included in Agreement/Supplemental Services

The following items are not included as part of this agreement:

- Surveying services
- Geotechnical services
- Environmental soil sampling and testing
- Preliminary and final design engineering services
- Permitting Application
- Funding applications
- Archeological and/or Cultural Surveys
- Condition assessment of existing utilities to remain
- Utility conflict review via exploratory excavation
- Traffic Studies and/or Roadway Geometric Design
- Letter of Map Revisions (LOMR)
- Right-of-Way Plats and/or Plats of Easement
- Appraisals and Negotiations
- ALTA/NSPS Land Title Surveys
- Plat of Highways
- Plat of Dedication

Supplemental services not included in the agreement can be provided by COMPANY under separate agreement, if desired.

5.0 Services by Others

The following sub consultants are anticipated to provide the following services:

Berrini & Associates

- Dredging and beneficial uses alternative evaluations

Applied Ecological Services, Inc. (AES)

- Wetland consultation

6.0 Client Responsibilities

The following services are expected to be provided by the CLIENT

- Location of and/or information on existing utilities under City maintenance.
- Active participant in planning meetings including review of supporting documents provided ahead of meetings.
- Timely review of alternative concepts, exhibits and plans.
- Provide notification to affected stakeholders for public meeting/open house and provide access to City Hall or other public site for the duration of the meeting.

7.0 Professional Services Fee

7.1 Fees

The fee for services will be based on COMPANY standard hourly rates current at the time the agreement is signed. These standard hourly rates are subject to change upon 30 days' written notice. Non salary expenses directly attributable to the project such as: (2) identifiable communication expenses; (3) identifiable reproduction costs applicable to the work; and (4) outside services will be charged in accordance with the rates current at the time the service is done.

7.2 Invoices

Invoices for COMPANY's services shall be submitted, on a monthly basis. Invoices shall be due and payable within 45 days after approval by the City Council, and in accordance with the Illinois Prompt Payment Act. Retainer, if applicable, shall be credited on the final invoice.

7.3 Extra Services

Any service required but not included as part of this Agreement shall be considered extra services. Extra services will be billed on a Time and Material basis with prior approval of the CLIENT.

7.4 Exclusion

This fee does not include attendance at any meetings or public hearings other than those specifically listed in the Scope of Services. These service items are considered extra and are billed separately on an hourly basis.

7.5 Payment

The CLIENT AGREES to pay COMPANY on the following basis:

TASK	Description	Labor Costs	Direct Costs	Sub-Consultant	Total Costs
Task 1	Lake Mastodon Management Plan	\$26,804.00	\$995.00	\$7,350.00	\$35,149.00
Task 2	Lake Outlet Storm/Open Channel and BFE Analysis	\$13,739.00	\$0.00	\$0.00	\$13,739.00
Task 3	Little Doe Lake Site Concept Plan	\$7,709.00	\$0.00	\$0.00	\$7,709.00
Task 4	Comprehensive Master Plan	\$18,044.00	\$0.00	\$0.00	\$18,044.00
TOTAL FOR PROJECT		\$66,296.00	\$995.00	\$7,350.00	\$74,641.00

Time and Material Not to Exceed Fee of **\$74,641.00**

Terms and Conditions

The following Terms and Conditions are incorporated into this Agreement and made a part of it.

8.0 Terms and Conditions

The following Terms and Conditions are incorporated into this AGREEMENT and made a part of it.

8.1 Standard of Care

Services provided by COMPANY under this AGREEMENT will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing at the same time and in the same or similar locality and in accordance with applicable federal, state and local laws and the rules and regulations of the Illinois Environmental Protection Agency in force at time of this agreement.

8.2 Entire Agreement

This Agreement, and its attachments, constitutes the entire understanding between CLIENT and COMPANY relating to professional engineering services. Any prior or contemporaneous agreements, promises, negotiations, or representations not expressly set forth herein are of no effect. Subsequent modifications or amendments to this Agreement shall be in writing and signed by the parties to this Agreement.

8.3 Time Limit and Commencement of Work

This AGREEMENT must be executed within ninety (90) days to be accepted under the terms set forth herein. The work will be commenced immediately upon receipt of this signed Agreement.

8.4 Suspension of Services

If the Project or the COMPANY'S services are suspended by the CLIENT for more than thirty (30) calendar days, consecutive or in the aggregate, over the term of this Agreement, the COMPANY shall be compensated for all services performed and reimbursable expenses incurred prior to the receipt of notice of suspension. In addition, upon resumption of services, the CLIENT shall compensate the COMPANY for expenses incurred as a result of the suspension and resumption of its services, and the COMPANY'S schedule and fees for the remainder of the Project shall be equitably adjusted.

If the COMPANY'S services are suspended for more than ninety (90) days, consecutive or in the aggregate, the COMPANY may terminate this Agreement upon giving not less than five (5) calendar days' written notice to the CLIENT.

If the CLIENT is in breach of this Agreement, the COMPANY may suspend performance of services upon five (5) calendar days' notice to the CLIENT. The COMPANY shall have no liability to the CLIENT, and the CLIENT agrees to make no claim for any delay or damage as a result of such suspension caused by any breach of this Agreement by the CLIENT.

8.5 Book of Account

COMPANY will maintain books and accounts of payroll costs, travel, subsistence, field, and incidental expenses for a period of five (5) years. Said books and accounts will be available at all reasonable times for examination by CLIENT at the corporate office of COMPANY during that time.

8.6 Insurance

CLIENT reserves the right to review and adjust the insurance carried by COMPANY conditioned upon a mutual determination of changes in risk exposures.

8.7 Termination or Abandonment

Either party has the option to terminate this Agreement. In the event of failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party, then the obligation to provide further services under this Agreement may be terminated upon seven days written notice. If any portion of the work is terminated or abandoned by CLIENT, the provisions of this Schedule of Fees and Conditions in regard to compensation and payment shall apply insofar as possible to that portion of the work not terminated or abandoned.

8.8 Waiver

Either party's waiver of any term, condition, or covenant or breach of any term, condition, or covenant, shall not constitute a waiver of any other term, condition, or covenant, or the breach thereof.

8.9 Severability

If any provision of this Agreement is declared invalid, illegal, or incapable of being enforced by any Court of competent jurisdiction, all of the remaining provisions of this Agreement shall nevertheless continue in full force and effect, and no provision shall be deemed dependent upon any other provision unless so expressed herein.

8.10 Successors and Assigns

All of the terms, conditions, and provisions hereof shall inure to the benefit of and be binding upon the parties hereto, and their respective successors and assigns, provided, however, that no assignment of this Agreement shall be made without written consent of the parties to this Agreement.

8.11 Third-Party Beneficiaries

Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the CLIENT or the COMPANY. The COMPANY's services under this Agreement are being performed solely for the CLIENT's benefit, and no other party or entity shall have any claim against the COMPANY because of this Agreement or the performance or nonperformance of services hereunder. The CLIENT and COMPANY agree to require a similar provision in all contracts with contractors, subcontractors, subconsultants, vendors and other entities involved in this project to carry out the intent of this provision.

8.12 Governing Law and Jurisdiction

The CLIENT and the COMPANY agree that this Agreement and any legal actions concerning its validity, interpretation and performance shall be governed by the laws of the State of Illinois without regard to any conflict of laws provisions, which may apply the laws of other jurisdictions.

It is further agreed that any legal action between the CLIENT and the COMPANY arising out of this Agreement or the performance of the services shall be brought in a court of competent jurisdiction in Kane County Circuit Court.

8.13 Dispute Resolution

In an effort to resolve any conflicts that arise during the design or construction of the project or following the completion of the project, the CLIENT and COMPANY agree that all disputes between them arising out of or relating to this Agreement shall first be attempted to be resolved with a meeting of the managers in charge of the project.

8.14 Attorney's Fees

If litigation arises for purposes of collecting fees or expenses due under this Agreement, the Court in such litigation shall award reasonable costs and expenses, including attorney fees, to the party justly entitled thereto. In awarding attorney fees, the Court shall not be bound by any Court fee schedule, but shall, in the interest of justice, award the full amount of costs, expenses, and attorney fees paid or incurred in good faith.

8.15 Ownership of Instruments of Service

All reports, plans, specifications, field data, field notes, laboratory test data, calculations, estimates and other documents including all documents on electronic media prepared by COMPANY as instruments of service shall be the property of CLIENT. COMPANY shall retain these records for a period of five (5) years following completion/submission of the records, during which period they will be made available to the CLIENT at all reasonable times.

8.16 Reuse of Documents

All project documents including, but not limited to, plans and specifications furnished by COMPANY under this project are intended for use on this project only. Any reuse, without specific written verification or adoption by COMPANY, shall be at the CLIENT's sole risk, and CLIENT shall defend, indemnify and hold harmless COMPANY from all claims, damages and expenses arising out of or resulting therefrom.

Under no circumstances shall delivery of electronic files for use by the CLIENT be deemed a sale by the COMPANY, and the COMPANY makes no warranties, either express or implied, of merchantability and fitness for any particular purpose in the event they are altered in any manner by the CLIENT. In no event shall the

COMPANY be liable for indirect or consequential damages as a result of the CLIENT's use or reuse of the electronic files.

8.17 Failure to Abide by Design Documents or To Obtain Guidance

The CLIENT agrees that it would be unfair to hold COMPANY liable for problems that might occur should COMPANY'S plans, specifications or design intents not be followed, or for problems resulting from others' failure to obtain and/or follow COMPANY'S guidance with respect to any errors, omissions, inconsistencies, ambiguities or conflicts which are detected or alleged to exist in or as a consequence of implementing COMPANY'S plans, specifications or other instruments of service. Accordingly, the CLIENT waives any claim against COMPANY, and agrees to defend, indemnify and hold COMPANY harmless from any claim for injury or losses that results from failure to follow COMPANY'S plans, specifications or design intent, or for failure to obtain and/or follow COMPANY'S guidance with respect to any alleged errors, omissions, inconsistencies, ambiguities or conflicts contained within or arising as a result of implementing COMPANY'S plans, specifications or other instruments of services. The CLIENT also agrees to compensate COMPANY for any time spent and expenses incurred remedying CLIENT's failures according to COMPANY'S prevailing fee schedule and expense reimbursement policy.

8.18 Opinion of Probable Construction Cost

COMPANY shall submit to the CLIENT an opinion of probable cost required to construct work recommended, designed, or specified by COMPANY, if required by CLIENT. COMPANY is not a construction cost estimator or construction contractor, nor should COMPANY'S rendering an opinion of probable construction costs be considered equivalent to the nature and extent of service a construction cost estimator or construction contractor would provide. This requires COMPANY to make a number of assumptions as to actual conditions that will be encountered on site; the specific decisions of other design professionals engaged; the means and methods of construction the contractor will employ; the cost and extent of labor, equipment and materials the contractor will employ; contractor's techniques in determining prices and market conditions at the time, and other factors over which COMPANY has no control. Given the assumptions which must be made, COMPANY cannot guarantee the accuracy of his or her opinions of cost, and in recognition of that fact, the CLIENT waives any claim against COMPANY relative to the accuracy of COMPANY'S opinion of probable construction cost.

8.19 Design Information in Electronic Form

Because electronic file information can be easily altered, corrupted, or modified by other parties, either intentionally or inadvertently, without notice or indication, COMPANY reserves the right to remove itself from of its ownership and/or involvement in the material from each electronic medium not held in its possession. CLIENT shall retain copies of the work performed by COMPANY in electronic form only for information and use by CLIENT for the specific purpose for which COMPANY was engaged. Said material shall not be used by CLIENT or transferred to any other party, for use in other projects, additions to this project, or any other purpose for which the material was not strictly intended by COMPANY without COMPANY's expressed written permission. Any unauthorized use or reuse or modifications of this material shall be at CLIENT'S sole risk. Furthermore, the CLIENT agrees to defend, indemnify, and hold COMPANY harmless from all claims, injuries, direct damages, losses, and expenses arising out of the modification or reuse of these materials.

The CLIENT recognizes that designs, plans, and data stored on electronic media including, but not limited to computer disk, magnetic tape, or files transferred via email, may be subject to undetectable alteration and/or uncontrollable deterioration. The CLIENT, therefore, agrees that COMPANY shall not be liable for the completeness or accuracy of any materials provided on electronic media after a 30 day inspection period, during which time COMPANY shall correct any errors detected by the CLIENT to complete the design in accordance with the intent of the contract and specifications. After 40 days, at the request of the CLIENT, COMPANY shall submit a final set of sealed drawings, and any additional services to be performed by COMPANY relative to the submitted electronic materials shall be subject to separate AGREEMENT. The CLIENT is aware that differences may exist between the electronic files delivered and the printed hard-copy construction documents. In the event of a conflict between the signed construction documents prepared by the COMPANY and electronic files, the signed or sealed hard-copy construction documents shall govern.

8.20 Information Provided by Others

The CLIENT shall furnish, at the CLIENT's expense, all information, requirements, reports, data, surveys and instructions required by this AGREEMENT. The COMPANY may use such information, requirements, reports, data, surveys and instructions in performing its services and is entitled to rely upon the accuracy and completeness thereof. The COMPANY shall not be held responsible for any errors or omissions that may arise

as a result of erroneous or incomplete information provided by the CLIENT and/or the CLIENT's consultants and contractors.

COMPANY is not responsible for accuracy of any plans, surveys or information of any type including electronic media prepared by any other consultants, etc. provided to COMPANY for use in preparation of plans. The CLIENT agrees, to the fullest extent permitted by law, to indemnify and hold harmless the COMPANY from any damages, liabilities, or costs, including reasonable attorneys' fees and defense costs, arising out of or connected in any way with the services performed by other consultants engaged by the CLIENT.

COMPANY is not responsible for accuracy of topographic surveys provided by others. A field check of a topographic survey provided by others will not be done under this contract unless indicated in the Scope of Work.

8.21 Force Majeure

Parties agree that neither party is responsible for damages arising directly or indirectly from any delays for causes beyond their control. For purposes of this Agreement, such causes include, but are not limited to, strikes or other labor disputes; severe weather disruptions or other natural disasters or acts of God; fires, riots, war or other emergencies; failure of any government agency to act in timely manner; failure of performance by the CLIENT or the CLIENT's contractors or consultants; or discovery of any hazardous substances or differing site conditions. Severe weather disruptions include but are not limited to extensive rain, high winds, snow greater than two (2) inches and ice. In addition, if the delays resulting from any such causes increase the cost or time required by the COMPANY to perform its services in an orderly and efficient manner, the parties shall negotiate reasonable adjustment in schedule and compensation.

8.22 Job Site Visits and Safety

Neither the professional activities of COMPANY, nor the presence of COMPANY'S employees and subconsultants at a construction site, shall relieve the General Contractor and any other entity of their obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending or coordinating all portions of the work of construction in accordance with the contract documents and any health or safety precautions required by any regulatory agencies. COMPANY and its personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions. The CLIENT agrees that the General Contractor is solely responsible for job site safety, and warrants that this intent shall be made evident in the CLIENT's AGREEMENT with the General Contractor. The CLIENT also agrees that the CLIENT, COMPANY and COMPANY'S consultants shall be indemnified and shall be made additional insureds on the General Contractor's and all subcontractor's general liability policies on a primary and non-contributory basis.

8.23 Hazardous Materials

CLIENT hereby understands and agrees that COMPANY has not created nor contributed to the creation or existence of any or all types of hazardous or toxic wastes, materials, chemical compounds, or substances, or any other type of environmental hazard or pollution, whether latent or patent, at CLIENT's premises, or in connection with or related to this project with respect to which COMPANY has been retained to provide professional engineering services. The compensation to be paid COMPANY for said professional engineering services is in no way commensurate with, and has not been calculated with reference to, the potential risk of injury or loss which may be caused by the exposure of persons or property to such substances or conditions. Therefore, to the fullest extent permitted by law, CLIENT agrees to defend, indemnify, and hold COMPANY, its officers, directors, employees, and consultants, harmless from and against any and all claims, direct damages, and expenses arising out of, or resulting from the discharge, escape, release, or saturation of smoke, vapors, soot, fumes, acid, alkalis, toxic chemicals, liquids gases, or any other materials, irritants, contaminants, or pollutants in or into the atmosphere, or on, onto, upon, in, or into the surface or subsurface of soil, water, or watercourses, objects, or any tangible or intangible matter, whether sudden or not.

It is acknowledged by both parties that COMPANY'S scope of services does not include any services related to asbestos or hazardous or toxic materials. In the event COMPANY or any other party encounters asbestos or hazardous or toxic materials at the job site, or should it become known in any way that such materials may be present at the job site or any adjacent areas that may affect the performance of COMPANY'S services, COMPANY will notify CLIENT and may, at its option and without liability for consequential or any other damages, suspend performance of services on the project until the CLIENT retains appropriate specialist consultant(s) or contractor(s) to identify, abate and/or remove the asbestos or hazardous or toxic materials, and warrants that the job site is in full compliance with applicable laws and regulations.

Nothing contained within this Agreement shall be construed or interpreted as requiring COMPANY to assume the status of a generator, storer, transporter, treater, or disposal facility as those terms appear within the Resource Conservation and Recovery Act, 42 U.S.C.A., §6901 et seq., as amended, or within any State statute governing the generation, treatment, storage, and disposal of waste.

8.24 Limitation of Liability

The CLIENT agrees, to the fullest extent permitted by law, to limit the liability of COMPANY and COMPANY's officers, directors, partners, employees, shareholders, owners and subconsultants to the CLIENT for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, including attorneys' fees and costs and expert witness fees and costs, so that the total aggregate liability of COMPANY and its officers, directors, partners, employees, shareholders, owners and subconsultants to all those named shall not exceed COMPANY'S total fee received for services rendered on this project or \$1,000,000.00, whichever is greater. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

8.25 Design Without Construction Observation

To the extent COMPANY provides design services without construction observation services under this agreement, it is agreed that the professional services of COMPANY do not extend to or include the review or site observation of the contractor's work or performance and the CLIENT assumes all responsibility for interpretation of the contract documents and for construction observation. It is further agreed that the CLIENT will defend, indemnify and hold harmless COMPANY from any claim or suit whatsoever, including but not limited to all payments, expenses or costs involved, arising from the contractor's performance or the failure of the contractor's work to conform to the design intent and the contract documents. COMPANY agrees to be responsible for its employees negligent acts, errors or omissions.

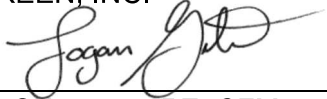
8.26 Municipal Advisor

The COMPANY is not a Municipal Advisor registered with the Security and Exchange Commission (SEC) as defined in the Dodd-Frank Wall Street Reform and Consumer Protection Act. When the CLIENT is a municipal entity as defined by said Act, and the CLIENT requires project financing information for the services performed under this AGREEMENT, the CLIENT will provide the COMPANY with a letter detailing who their independent registered municipal advisor is and that the CLIENT will rely on the advice of such advisor. A sample letter can be provided to the CLIENT upon request.

This Agreement is approved and accepted by the CLIENT and COMPANY upon both parties signing and dating the Agreement. Services will not begin until COMPANY receives a signed agreement. COMPANY's services shall be limited to those expressly set forth in this Agreement and COMPANY shall have no other obligations or responsibilities for the Project except as agreed to in writing. The effective date of the Agreement shall be the last date entered below.

Sincerely,

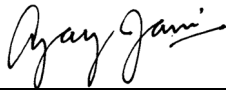
HR GREEN, INC.



Date: August 23, 2019

Logan Gilbertsen, PE, CFM
Lead Engineer/Project Manager

Approved by:
Printed/Typed
Name:



Ajay Jain, PE, CFM

Title: Vice President, Practice Leader

Date: August 23, 2019

CITY OF AURORA, IL

Accepted by:
Printed/Typed
Name:

Title: _____

Date: _____

MAN-HOUR AND FEE ESTIMATE
MASTODON LAKE MASTER PLAN (HR GREEN PROJECT NO.: 190969)
PREPARED BY - HR GREEN, INC.
DATE: AUGUST 5, 2019

Task Descriptions		Hours	Labor Fee	BERRINI	AES	Reimb.	Total FEE
TASK 1	LAKE MASTODON MANAGEMENT PLAN	164	\$26,804	\$6,750	\$600	\$995	\$35,149
A	Kickoff Meeting	18	\$3,114	\$500	\$0	\$497	\$4,111
B	Review of Past Studies and Reports/Data	4	\$692	\$500	\$0	\$0	\$1,192
C	Site Reconnaissance and Assessment	16	\$2,754	\$500	\$0	\$0	\$3,254
D	Wetland Delineation and JD (Limitred to Deskto Analysis)	2	\$332	\$0	\$600	\$0	\$932
E	Geotechnical Assessment (Not Applicable)	0	\$0	\$0	\$0	\$0	\$0
F	Dredging Techniques and Beneficial Uses Analysis	20	\$3,058	\$4,500	\$0	\$0	\$7,558
G	Ecological Restoration (Lake and Buffer Restoration)	22	\$3,932	\$0	\$0	\$0	\$3,932
H	Permitting Review	8	\$1,056	\$0	\$0	\$0	\$1,056
I	EOPC	20	\$3,234	\$250	\$0	\$0	\$3,484
J	Workshop Meeting	14	\$2,594	\$500	\$0	\$497	\$3,591
K	Concept Plan	40	\$6,038	\$0	\$0	\$0	\$6,038
TASK 2	LAKE OUTLET, STORM/OPEN CHANNEL AND BFE ANALYSIS	98	\$13,739	\$0	\$0	\$0	\$13,739
A	Storm Sewer H&H Analysis and Open Channel Feasiblity Analysis	24	\$2,952	\$0	\$0	\$0	\$2,952
B	Lake Outlet Feasibility Analysis (BFE, LAG & Comp Storage)	38	\$5,374	\$0	\$0	\$0	\$5,374
C	EOPC (Preferred Esign)	16	\$2,430	\$0	\$0	\$0	\$2,430
D	Progress Meeting (Via Web Conference)	4	\$709	\$0	\$0	\$0	\$709
E	Concept Plan Exhibits	16	\$2,274	\$0	\$0	\$0	\$2,274
TASK 3	LITTLE DOE LAKE SITE CONCEPT PLAN	50	\$7,709	\$0	\$0	\$0	\$7,709
A	Site Analysis - Issues and Opportunities Map	6	\$852	\$0	\$0	\$0	\$852
B	Alternatives Analysis	20	\$2,902	\$0	\$0	\$0	\$2,902
C	EOPC (Preferred Design)	10	\$1,610	\$0	\$0	\$0	\$1,610
D	Progress Meeting (Via Web Conference)	4	\$671	\$0	\$0	\$0	\$671
E	Concept Plan Exhibits	10	\$1,674	\$0	\$0	\$0	\$1,674
TASK 4	COMPREHENSIVE MASTER PLAN	122	\$18,044	\$0	\$0	\$0	\$18,044
A	Phased Implementation Plan	16	\$2,220	\$0	\$0	\$0	\$2,220
B	Grant Funding Matrix	8	\$1,350	\$0	\$0	\$0	\$1,350
C	FEMA Approved Preliminary BCA for HMGP Grant	56	\$8,560	\$0	\$0	\$0	\$8,560
D	Master Plan Report	42	\$5,914	\$0	\$0	\$0	\$5,914
TOTAL FOR PROJECT (GRAND TOTAL FOR TASKS 1-4)		434	\$66,296	\$6,750	\$600	\$995	\$74,641