



# LOMR for Fox River Floodway

City of Aurora

March 1, 2019

Mark Phipps, P.E., CFM, CPESC  
Drainage and Underground Coordinator  
Interim Development Coordinator  
City of Aurora Engineering Division  
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Dear Mr. Phipps:

WBK Engineering, LLC (WBK) is pleased to provide this proposal to the City of Aurora (Client) for professional engineering services for preparation of a LOMR submittal to revise the floodway of the Fox River in downtown Aurora. WBK looks forward to the opportunity to assist the City of Aurora on the engineering analysis and documentation for the LOMR. Included below is our understanding of the assignment, scope of services, project assumptions, and estimate of fee.

## Understanding of the Assignment

We understand the current FEMA Flood Insurance Rate Map (FIRM) shows the floodway of the Fox River in downtown Aurora on top of existing buildings which does not accurately represent the true floodway. Due to the floodway encroaching onto these properties, they are required to provide flood insurance. The City is requesting re-delineation of the floodway within the downtown area of Aurora to more accurately represent the true floodway location taking into account the limits of buildings and retaining walls. This re-delineation of the floodplain/floodway will require submittal of a Letter of Map Revision to FEMA. The steps required to re-delineate the floodway of the Fox River will require several steps:

1. Topographic Map of Fox River within the limits of the study.
2. Hydraulic modeling of the Fox River.
3. Preparation of the LOMR submittal.

## Scope of Services

### Task 1 | Topographic Map

We will utilize a two man survey crew with GPS and Robotic survey equipment to collect all physical features including retaining walls, roadway centerlines, bridge railings, low chords and piers, edge of buildings, and hydraulic sections of the River. Where possible, we will obtain full cross sections across the River. A two man crew will be utilized for survey pickup, but more importantly for safety of the survey persons. All survey will be on NAVD 88 datum. The horizontal datum used will be Illinois State Plane (East Zone). The survey will also include locating the top and edge of retaining walls, and edge of buildings along the River. It is anticipated surveyed sections to be located upstream and downstream of each roadway crossing. Cross sections and topographic pickup will not include the dam and will terminate at a determined safe distance from the dam.



## Task 2 | Hydraulic Modeling

It is our understanding that the City has requested the regulatory model from FEMA. Our plan is to convert the assumed HEC-2 hydraulic model to the latest version of HEC-RAS to create the “duplicate effective” model. Once this model is assembled which matches the regulatory model (in accordance with FEMA guidelines), the geometry in the model will be updated with the surveyed topographic data to prepare a “corrected effective” model. This corrected effective model will include adequate detail through cross sections to accurately delineate the floodway and floodplain of the Fox River through the study reach. We plan on utilizing the cross sections in the existing model to represent the area adjacent to the dam.

As part of the modeling effort, we will prepare a draft floodplain/ floodway map for the City to review. Any changes requested by the City from this one review will be updated on the map. The limits of the floodplain/ floodway will be in state plane coordinates. The regulatory discharges will be used to delineate the floodway and therefore no hydrologic analysis is included in our scope to determine discharges.

## Task 3 | Preparation of the LOMR Submittal

Following accurate mapping of the floodplain and floodway, we will prepare the Letter of Map Revision for submittal to FEMA. We cannot guarantee approval of the floodway map and delineation by FEMA. This task will include preparation of MT-2 forms for submittal including Overview and concurrence form, Riverine Hydrology and Hydraulics form, and the Riverine structures form. We will send the submittal package to the City for review, concurrence, and signature. We will also prepare a floodplain/ floodway map and annotated flood profile. We assume two revisions to the LOMR submittal based on comments from FEMA.

## Task 4 | Coordination with IDNR-OWR

WBK will prepare a submittal to IDNR-OWR for their concurrence on the modeling and mapping of the floodway. We assume the LOMR report will be the primary supporting document for the submittal supplemented with additional narrative, cover letter, and anticipate one resubmittal based on comments from IDNR. Our cost does not include any permit fees for this task.

## Project Assumptions

In preparing this proposal, we have attempted to provide you with a complete package of the engineering services anticipated at this point in time. In doing so, we have made some assumptions which will need to be verified during the engineering process. Any findings which are not consistent with our assumptions may increase the engineering budget for this project. We will thoroughly discuss any such findings with you and negotiate any budget revisions prior to proceeding. Our assumptions are as follows:

- That survey of window openings for structures along the River will not be required.
- That the City of Aurora will be signing the community acknowledgement form.
- That there will be no modifications to existing adjacent streets.
- That the City will be preparing any public notices required for modification to the floodway.
- That levee/ floodwall analysis will not be required and that the existing walls along the River are not considered levees or floodwalls.
- Boundary of parcel surveys will not be required.

## Estimate of Fees

Due to the nature of the tasks listed in the above Scope of Basic Services, we have provided time and material budgets. The actual amount invoiced will be based on the level of effort required to accomplish the task, but we will not exceed the budget without your prior approval. Our estimated fees are based on the entire Scope of Basic Services being awarded to us. In general, individual tasks cannot be broken out and awarded separately.

Task #	Task Name	Fee
Task 1	Topographic Map	\$15,980
Task 2	Hydraulic Modeling	\$10,100
Task 2a	Conversion of HEC-2 model to HEC-RAS	\$1,800
Task 3	Preparation of the LOMR submittal	\$8,700
Task 4	Coordination with IDNR-OWR	\$5,500
	<b>TOTAL</b>	<b>\$42,080</b>
	Reimbursable Costs (Including Printing)	Cost + 10%

Please note that preparing this proposal requires the exercise of professional knowledge and judgment, and as such, this proposal remains the proprietary instrument of service of the firm WBK Engineering, LLC. No portion of this proposal may be shared with another firm providing similar services without our permission.

We propose to bill you monthly based on the attached Schedule of Charges. We establish our contract in accordance with the attached General Terms and Conditions. These General Terms and Conditions are expressly incorporated into and are made an integral part of this contract for professional services. We reserve the right to increase our fees by five percent (5%) on December 31st of each calendar year.

If this proposal is acceptable, please return one (1) signed copy to us for our files to serve as a notice to proceed. Thank you for the opportunity to provide service to the City of Aurora. If you have any questions, please do not hesitate to call.

Sincerely,



John Witte P.E., CFM  
 Water Resource Practice Lead

Encl: 2019 Schedule of Charges  
 General Terms and Conditions- City of Aurora (rev March 1, 2019)

THIS PROPOSAL, SCHEDULE OF CHARGES, AND GENERAL TERMS & CONDITIONS ACCEPTED FOR THE CITY OF AURORA:

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

**WBK ENGINEERING, LLC**  
**2019 Standard Charges for Professional Services**

<u>Classification</u>	<u>Hourly Rate</u>
Principal	\$ 215
Engineer VI	\$ 194
Engineer V	\$ 172
Engineer IV	\$ 145
Engineer III	\$ 119
Engineer II	\$ 100
Engineer I	\$ 88
Engineering Technician IV	\$ 140
Engineering Technician III	\$ 117
Engineering Technician II	\$ 93
Engineering Technician I	\$ 78
Senior Scientist	\$ 183
Environmental Resource Specialist V	\$ 152
Environmental Resource Specialist IV	\$ 124
Environmental Resource Specialist III	\$ 100
Environmental Resource Specialist II	\$ 88
Environmental Resource Specialist I	\$ 78
Urban Planner VI	\$ 194
Urban Planner V	\$ 154
Urban Planner IV	\$ 130
Urban Planner III	\$ 102
Urban Planner II	\$ 86
Intern	\$ 47
Office Professional	\$ 64
Direct Costs: Copies & Prints, Messenger & Delivery Services, Mileage, etc.	Cost +10%

*Charges include overhead and profit.*

*WBK Engineering, LLC reserves the right to increase rates and costs by 5% annually.*

**WBK ENGINEERING, LLC**  
**GENERAL TERMS AND CONDITIONS**  
**MODIFIED FOR CITY OF AURORA, IL**  
**March 1, 2019**

1. Relationship Between Engineer and Client: WBK ENGINEERING, LLC (Engineer) shall serve as Client's professional engineer consultant in those phases of the Project to which this Agreement applies. This relationship is that of a buyer and seller of professional services and as such the Engineer is an independent contractor in the performance of this Agreement and it is understood that the parties have not entered into any joint venture or partnership with the other. The Engineer shall not be considered to be the agent of the Client. Nothing contained in this Agreement shall create a contractual relationship with a cause of action in favor of a third party against either the Client or Engineer.

Furthermore, causes of action between the parties to this Agreement pertaining to acts or failures to act shall be deemed to have accrued and the applicable statute of limitations shall commence to run not later than the date of substantial completion.

2. Responsibility of the Engineer, Job Site Safety/Supervision & Construction Observation: Engineer will perform services under this Agreement in accordance with generally accepted and currently recognized engineering practices and principles, and in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. No other representation, express or implied, and no warranty or guarantee is included or intended in this Agreement, or in any report, opinion, document, or otherwise.

Notwithstanding anything to the contrary which may be contained in this Agreement or any other material incorporated herein by reference, or in any Agreement between the Client and any other party concerning the Project, the Engineer shall not have control or be in charge of and shall not be responsible for the means, methods, techniques, sequences or procedures of construction, or the safety, safety precautions or programs of the Client, the construction contractor, other contractors or subcontractors performing any of the work or providing any of the services on the Project. Nor shall the Engineer be responsible for the acts or omissions of the Client, or for the failure of the Client, any architect, engineer, consultant, contractor or subcontractor to carry out their respective responsibilities in accordance with the Project documents, this Agreement or any other agreement concerning the Project. Any provision which purports to amend this provision shall be without effect unless it contains a reference that the content of this condition is expressly amended for the purposes described in such amendment and is signed by the Engineer.

3. Changes: Client reserves the right by written change order or amendment to make changes in requirements, amount of work, or engineering time schedule adjustments, and Engineer and Client shall negotiate appropriate adjustments acceptable to both parties to accommodate any changes, if commercially possible.
4. Suspension of Services: Client may, at any time, by written order to Engineer (Suspension of Services Order) require Engineer to stop all, or any part, of the services required by this Agreement. Upon receipt of such an order, Engineer shall immediately comply with its terms and take all reasonable steps to minimize the costs

associated with the services affected by such order. . Engineer will not be obligated to provide the same personnel employed prior to suspension, when the services are resumed, in the event that the period of suspension is greater than thirty (30) days.

5. Termination: This Agreement may be terminated by either party upon thirty (30) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. With thirty (30) day written notice, this Agreement may be terminated by Client whenever Client shall determine that termination is in its best interests. Client shall only be responsible for payment of fees actually incurred up to the date of termination.
6. Documents Delivered to Client: Drawings, specifications, reports, and any other Project Documents prepared by Engineer in connection with any or all of the services furnished hereunder shall be delivered to, and shall be the property of, the Client for the use of the Client. Engineer shall have the right to retain originals of all Project Documents and drawings for its files. Furthermore, it is understood and agreed that the Project Documents such as, but not limited to reports, calculations, drawings, and specifications prepared for the Project, whether in hard copy or machine readable form, are instruments of professional service intended for one-time use in the construction of this Project. These Project Documents are and shall remain the property of the Client.

When and if record drawings are to be provided by the Engineer, Client understands that information used in the preparation of record drawings is provided by others and Engineer is not responsible for accuracy, completeness, nor sufficiency of such information. Client also understands that the level of detail illustrated by record drawings will generally be the same as the level of detail illustrated by the design drawing used for project construction. If additional detail is requested by the Client to be included on the record drawings, then the Client understands and agrees that the Engineer will be due additional compensation for additional services.

It is also understood and agreed that because of the possibility that information and data delivered in machine readable form may be altered, whether inadvertently or otherwise, the Engineer reserves the right to retain the original tapes/disks and to remove from copies provided to the Client all identification reflecting the involvement of the Engineer in their preparation. The Engineer also reserves the right to retain hard copy originals of all Project Documentation delivered to the Client in machine readable form, which originals shall be referred to and shall govern in the event of any inconsistency between the two. Engineer shall take all reasonable precautions to maintain the integrity of said machine readable data and information.

The Client understands that the automated conversion of information and data from the system and format used by the Engineer to an alternate system or format cannot be accomplished without the introduction of inexactitudes, anomalies, and errors. In the event Project Documentation provided to the Client in machine readable form is so converted, the Client agrees to assume all risks associated therewith.

The Client recognizes that changes or modifications to the Engineer's instruments of professional service introduced by anyone other than the Engineer may result in adverse consequences which the Engineer can neither predict nor control.

7. Reuse of Documents: All Project Documents including but not limited to reports, opinions of probable costs, drawings and specifications furnished by Engineer pursuant to this Agreement are intended for use on the Project only. Any reuse, without specific written verification or adaptation by Engineer, shall be at Client's sole risk.

The Engineer shall have the right to include representations of the design of the Project, including photographs of the exterior and interior, among the Engineer's promotional and professional materials. The Engineer's materials shall not include the Client's confidential and proprietary information.

8. Standard of Practice: The Engineer will conduct services under this Agreement in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as of the date of this Agreement.
9. Compliance with Laws: The Engineer will exercise the usual and customary professional care in his/her efforts to comply with those laws, codes, ordinances and regulations which are in effect as of the date of this Agreement. With specific respect to prescribed requirements of the Americans with Disabilities Act of 1990 or certified state or local accessibility regulations (ADA), Client understands ADA is a civil rights legislation and that interpretation of ADA is a legal issue and not a design issue and, accordingly, retention of legal counsel (by Client) for purposes of interpretation is advisable.

Further to the law and code compliance, the Client understands that the Engineer will provide designs in accordance with the prevailing Standards of Practice as previously set forth, but that the Engineer does not warrant that any reviewing agency having jurisdiction will not for its own purposes comment, request changes and/or additions to such designs. In the event such design requests are made by a reviewing agency, but which do not exist in the form of a written regulation, ordinance or other similar document as published by the reviewing agency, then such design changes (at substantial variance from the intended design developed by the Engineer), if effected and incorporated into the project documents by the Engineer, shall be considered as Supplementary Task(s) to the Engineer's Scope of Service and compensated for accordingly.

10. Affirmative Action: The Engineer is committed to the principles of equal employment opportunity. Moreover, as a government contractor bound by Executive Order 11246, Engineer takes its affirmative action obligations very seriously. Engineer states as its Policy of Affirmative Action the following:

It will be the policy of the Engineer to recruit, hire, train and promote persons in all job titles without regard to race, color, religion, sex, age, disability, veteran status, national origin, or any other characteristic protected by applicable law.

All employment decisions shall be consistent with the principle of equal employment opportunity, and only job-related qualifications will be required.

All personnel actions, such as compensation, benefits, transfers, tuition assistance, social and recreational programs, etc. will be administered without regard to race, color, religion, sex, age, disability, veteran status, national origin, or any other characteristic protected by applicable law.

11. Insurance and Indemnification: Engineer shall procure and maintain at its sole cost, during the terms of this agreement, the types and amounts of insurance coverage required by the client as shown in the proposal and contract for this work. The Engineer shall require any and all subcontractors to this agreement to provide and maintain, at the subcontractor's sole cost, the types and amounts of insurance coverage required by the client as shown in the contract documents. Engineer to endorse and name Owner and to require all subcontractors to endorse and name Owner as a primary, non-contributory additional insured on the above referenced insurance policies for this project.

The Engineer also agrees to provide Owner with a Certificate of Insurance evidencing that all coverages, limits and endorsements required herein are maintained and in full force and effect. Said Certificate(s) of Insurance shall include a minimum thirty (30) day Notice to Owner of cancellation or non-renewal of coverage except for ten (10) day notice for non-payment. The Certificate Holder address shall read: City of Aurora, ATTN: Risk Manager, 44 E. Downer Place, Aurora, IL 60507.

Engineer shall indemnify and hold harmless the Client and the Client's officers, employees, and agents, from and against any loss, damage, injury or liability including reasonable attorney's fees and costs to the extent arising from any willful or negligent acts of Engineer, its employees, agents, subcontractors and their employees and agents performed during the execution of the services provided for in this agreement. Engineer shall not be responsible for any loss, damage or liability arising from any acts by Owner, its agents, staff, consultants employed by others, or other third parties who are not employees of Engineer.

In the event of joint or concurrent negligence of Engineer and Client, each shall bear that portion of the loss or expense that its share of the joint or concurrent negligence bears to the total negligence (including that of third parties), which caused the personal injury or property damage.

12. Opinions of Probable Cost: Since Engineer has no control over the cost of labor, materials or equipment, or over the Contractor(s) method of determining process, or over competitive bidding or market conditions, his/her opinions of probable Project Construction Cost provided for herein are to be made on the basis of his/her experience and qualifications and represent his/her judgment as a design professional familiar with the construction industry, but Engineer cannot and does not guarantee that proposal, bids or the Construction Cost will not vary from opinions of probable construction cost prepared by him/her. If prior to the Bidding or Negotiating Phase, Client wishes greater accuracy as to the Construction Cost, the Client shall employ an independent cost estimator Consultant for the purpose of obtaining a second construction cost opinion independent from Engineer.



13. Governing Law & Dispute Resolutions: This Agreement shall be governed by and construed in accordance with Articles previously set forth by (Item 9 of) this Agreement, together with the laws of the **State of Illinois**.
14. Successors and Assigns: The terms of this Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns: provided, however, that neither party shall assign this Agreement in whole or in part without the prior written approval of the other.
15. Waiver of Contract Breach: The waiver of one party of any breach of this Agreement or the failure of one party to enforce at any time, or for any period of time, any of the provisions hereof, shall be limited to the particular instance, shall not operate or be deemed to waive any future breaches of this Agreement and shall not be construed to be a waiver of any provision, except for the particular instance.
16. Entire Understanding of Agreement: This Agreement represents and incorporates the entire understanding of the parties hereto, and each party acknowledges that there are no warranties, representations, covenants or understandings of any kind, matter or description whatsoever, made by either party to the other except as expressly set forth herein. Client and the Engineer hereby agree that any purchase orders, invoices, confirmations, acknowledgments or other similar documents executed or delivered with respect to the subject matter hereof that conflict with the terms of the Agreement shall be null, void and without effect to the extent they conflict with the terms of this Agreement.
17. Amendment: This Agreement shall not be subject to amendment unless another instrument is duly executed by duly authorized representatives of each of the parties and entitled "Amendment of Agreement".
18. Severability of Invalid Provisions: If any provision of the Agreement shall be held to contravene or to be invalid under the laws of any particular state, county or jurisdiction where used, such contravention shall not invalidate the entire Agreement, but it shall be construed as if not containing the particular provisions held to be invalid in the particular state, country or jurisdiction and the rights or obligations of the parties hereto shall be construed and enforced accordingly.
19. Force Majeure: Neither Client nor Engineer shall be liable for any fault or delay caused by any contingency beyond their control including but not limited to acts of God, wars, strikes, walkouts, fires, natural calamities, or demands or requirements of governmental agencies.
20. Subcontracts: Engineer may subcontract portions of the work, but each subcontractor must be approved by Client in writing.
21. Access and Permits: Client shall arrange for Engineer to enter upon public and private property and obtain all necessary approvals and permits required from all governmental authorities having jurisdiction over the Project. Client shall pay costs (including Engineer's employee salaries) incident to any effort by Engineer toward

assisting Client in such access, permits or approvals, if Engineer performs such services.

22. Designation of Authorized Representative: Each party (to this Agreement) shall designate one or more persons to act with authority in its behalf in respect to appropriate aspects of the Project. The persons designated shall review and respond promptly to all communications received from the other party.
23. Notices: Any notice or designation required to be given to either party hereto shall be in writing, and unless receipt of such notice is expressly required by the terms hereof shall be deemed to be effectively served when deposited in the mail with sufficient first class postage affixed, and addressed to the party to whom such notice is directed at such party's place of business or such other address as either party shall hereafter furnish to the other party by written notice as herein provided.
24. Client's Responsibilities: The Client agrees to provide full information regarding requirements for and about the Project, including a program which shall set forth the Client's objectives, schedule, constraints, criteria, special equipment, systems and site requirements.

When Contract Documents prepared under the Scope of Services of this contract require insurance(s) to be provided, obtained and/or otherwise maintained by the Contractor, the Client agrees to be wholly responsible for setting forth any and all such insurance requirements. Furthermore, any document provided for Client review by the Engineer under this Agreement related to such insurance(s) shall be considered as sample insurance requirements and not the recommendation of the Engineer. Client agrees to have their own risk management department review any and all insurance requirements for adequacy and to determine specific types of insurance(s) required for the project. Client further agrees that decisions concerning types and amounts of insurance are specific to the project and shall be the product of the Client. As such, any and all insurance requirements made part of Contract Documents prepared by the Engineer are not to be considered the Engineer's recommendation, and the Client shall make the final decision regarding insurance requirements.

25. Information Provided by Others: The Engineer shall indicate to the Client the information needed for rendering of the services of this Agreement. The Client shall provide to the Engineer such information as is available to the Client and the Client's consultants and contractors, and the Engineer shall be entitled to rely upon the accuracy and completeness thereof. The Client recognizes that it is impossible for the Engineer to assure the accuracy, completeness and sufficiency of such information, either because it is impossible to verify, or because of errors or omissions which may have occurred in assembling the information the Client is providing.
26. Payment: Client shall be invoiced once each month for work performed during the preceding period. Client agrees to pay each invoice as required by the Illinois Local Government Prompt Payment Act (the "Act"). The Client further agrees to pay interest on approved but unpaid balances to the extent and as provided by the Act. When construction observation tasks are part of the service to be performed by the Engineer

under this Agreement, the Client will include the following clause in the construction contract documents and Client agrees not to modify or delete it:

Kotecki Waiver: Contractor (and any subcontractor into whose subcontract this clause is incorporated) agrees to assume the entire liability for all personal injury claims suffered by its own employees, including without limitation claims under the **Illinois** Structural Work Act, asserted by persons allegedly injured on the Project; waives any limitation of liability defense based upon the Worker's Compensation Act, court interpretations of said Act or otherwise; and to the fullest extent permitted by law, agrees to indemnify and hold harmless and defend Owner and Engineer and their agents, employees and consultants (the "Indemnitees") from and against all such loss, expense, damage or injury, including reasonable attorneys' fees, that the Indemnitees may sustain as a result of such claims, except to the extent that **Illinois** law prohibits indemnity for the Indemnitees' own negligence. The Owner and Engineer are designated and recognized as explicit third-party beneficiaries of the Kotecki Waiver within the general contract and all subcontracts entered into in furtherance of the general contract.

27. Hazardous Materials/Pollutants: Unless otherwise provided by this Agreement, the Engineer and Engineer's consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of or exposure of persons to hazardous materials/pollutants in any form at the Project site, including but not limited to mold/mildew, asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic/hazardous/pollutant type substances.

Furthermore, Client understands that the presence of mold/mildew and the like are results of prolonged or repeated exposure to moisture and the lack of corrective action. Client also understands that corrective action is an operation, maintenance and repair activity for which the Engineer is not responsible.