

**AMENDMENT NUMBER 3 TO
PROFESSIONAL SERVICES AGREEMENT BETWEEN
NTH Consultants, Ltd
AND THE CITY OF ANN ARBOR**

This Amendment Number 3 ("Amendment") is to the agreement between the City of Ann Arbor, ("City") and NTH Consultants, Ltd., ("Contractor") for Professional Engineering Services, which is dated January 26, 2022 ("Agreement"). City and Contractor agree to amend the Agreement as follows:

- 1) Article III, SERVICES, is amended to read as follows:
 - A. The Contractor agrees to provide Professional Engineering Services ("Services") in connection with the Project as described in Exhibit A, and as amended for additional tasks by Amendment Number 3 (Exhibit A-3). The City retains the right to make changes to the quantities of service within the general scope of the Agreement at any time by a written order. If the changes add to or deduct from the extent of the services, the compensation shall be adjusted accordingly. All such changes shall be executed under the conditions of the original Agreement.
 - B. Quality of Services under this Agreement shall be of the level of quality performed by persons regularly rendering this type of service. Determination of acceptable quality shall be made solely by the Contract Administrator.
 - C. The Contractor shall perform its Services for the Project in compliance with all statutory, regulatory, and contractual requirements now or hereafter in effect as may be applicable to the rights and obligations set forth in the Agreement. The Contractor shall also comply with and be subject to the City of Ann Arbor policies applicable to independent contractors.
 - D. The Contractor may rely upon the accuracy of reports and surveys provided to it by the City (if any) except when defects should have been apparent to a reasonably competent professional or when it has actual notice of any defects in the reports and surveys.
- 2) Article V, COMPENSATION, is amended to read as follows:
 - A. The Contractor shall be paid in the manner set forth in Exhibit B, and as amended by Amendment Number 3 (Exhibit B-3). The total fee to be paid the Contractor for the Services shall not exceed \$1,171,287.77. The original contract amount was \$589,405.30. The Amendment No. 1 amount was \$214,102.47. The Amendment No. 2 amount was \$140,080.00. The Amendment No. 3 amount is \$227,700.00. Payment shall be made monthly, unless another payment term is specified in Exhibit B or Exhibit B-3, following receipt of invoices submitted by the Contractor, and approved by the Contract Administrator.

- B. The Contractor will be compensated for Services performed in addition to the Services described in Article III, only when the scope of and compensation for those additional Services have received prior written approval of the Contract Administrator.
- C. The Contractor shall keep complete records of work performed (e.g. tasks performed, hours allocated, etc.) so that the City may verify invoices submitted by the Contractor. Such records shall be made available to the City upon request and submitted in summary form with each invoice.

All terms, conditions, and provisions of the Agreement, unless specifically amended above, shall apply to this Amendment and are made a part of this Amendment as though expressly rewritten, incorporated, and included herein.

City and Contractor agree that for this Amendment and any documents related to the Agreement: 1) signatures may be delivered electronically in lieu of an original signature; 2) to treat electronic signatures as original signatures that bind them; and 3) signatures may be executed and delivered by facsimile and upon such delivery, the facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

This Amendment to the Agreement shall be binding on the Parties' heirs, successors, and assigns.

[SIGNATURE PAGE FOLLOWS]

For _____

Contractor Name

By _____

Name: _____

Title: _____

Date: _____

For City of Ann Arbor

By _____
Christopher Taylor, Mayor

By _____
Jacqueline Beaudry, City Clerk

Date: _____

Approved as to substance

Milton Dohoney Jr., City Administrator

Sue McCormick, Interim Public Services Area
Administrator

Approved as to form and content

Atleen Kaur, City Attorney

EXHIBIT A-3 SCOPE OF SERVICES

SCOPE OF SERVICES CHANGES

We have divided the additional engineering services currently required or anticipated to potentially be required into the following categories:

1. Additional Bidding Assistance Efforts
2. Additional “Out-of-Scope” Submittal and Interaction Required by FERC – Construction Dam Safety Surveillance Monitoring Plan (CDSSMP) and 3-day Potential Failure Mode Analysis (2nd round)
3. Revisions to Evaluations, Analysis, Plans, and Design per FERC Direction (after August 2023 – Amendment No. 2 – post 60% design)
4. EGLE/City of Ann Arbor Floodplain Permit Compensatory Cut Analysis and Collector Ditch Watercourse Joint Permit Application (JPA) extended review efforts and future monitoring of conditions at the dam site
5. Additional Dam Surveillance, Data Review, Bidding Evaluation, and Continued Project Management
6. Owner-Approved Miscellaneous Allowance

1. Additional Bidding Assistance Efforts

During the bidding process, the engineering team originally envisioned a bidding process that involved issued for bidding documents, conducting a pre-bid meeting, responding to requests from contractors and issuing addendum as required, a post-bid interview with the low bidder only and a recommendation letter for award to the City. The bidding process engaged in multiple rounds of bidding scorecard reviews (2), multiple rounds (2 rounds) of interviews with multiple (2) bidders, several interactions with bidders to further clarify and refine their bid understanding to further refine the evaluation, checking references of the contractors and their dewatering subcontractors, and significant interaction with the City throughout the course of the process to determine the recommendation for award in order to allow the City to determine how to proceed forward. Additionally, after recommendation, there was additional effort by the team to further refine the City’s strategy how to execute the work considering budgetary constraints.

2. Additional “Out-of-Scope” Submittal and Interaction Required by FERC – Construction Dam Safety Surveillance Monitoring Plan (CDSSMP) and 3-day Potential Failure Mode Analysis (2nd round)

Based on communications with FERC, additional effort beyond that anticipated at the proposal stage or in the preparation of Contract Amendment No. 1 or 2 was necessary. This effort includes:

- Completion of the Construction Dam Safety Surveillance Monitoring Plan (CDSSMP).
- Completion of a 2nd PFMA was envisioned after the 60% design submittal in the original scope; however, it occurred after the issued for bid documents were completed and extended to 3 days, instead of an assumed 1-day duration. Additionally, after completion of 60% design, additional meeting consultation was conducted with FERC to ensure their alignment with the overall design parameters

3. Revisions to Evaluations, Analysis, Plans, and Design per FERC Direction (after August 2023 – Amendment No. 2 – post 60% design)

After the PFMA and during bidding, several revisions had to be made to the engineering Amendment – Over \$75K Rev. 2022

design to accommodate requests from FERC during the PFMA or bidding phase by the City including:

- Minimizing excavation into the existing face of the dam per FERC. This analysis required the bench to be widened from 12 feet to 15 feet to maintain the required thicknesses of the filter/mineral drain.
- Revising the thickness of mineral/filter drains at TD-23 and TD-43 to accommodate the removal of grouting these toe drains.
- Eliminating the grouting program from the project.
- Revising the mineral drain and filter details at the tapered ends of the stabilization berm.
- Thicken the topsoil from 6 inches to 12 inches per direction from the City of Ann Arbor.

Once the final cross section was established through NTH's analysis and discussion with FERC and the City, the remedial design had to be modified. These revisions occurred after the 60 percent design submittal which covered the previous inclusion of design modifications in Amendment No. 2.

To accommodate the revisions, the previously completed evaluations, analyses, and drawings have to be revised. This effort will include:

- Revisions to the seepage and stability modeling presented in the BODR submitted June 2023.
- Updating the previously submitted BODR for resubmission to FERC. This effort also included revisions to address a modest number of comments from FERC pursuant to its PFMA review.
- Revising all of the engineering drawings to incorporate the revisions.
- Updating several specification sections to be consistent with the PFMs developed during the PFMA conference.

4. EGLE/City of Ann Arbor Floodplain Permit Compensatory Cut Analysis and Collector Ditch Watercourse Joint Permit Application (JPA) extended review efforts and future monitoring conditions

Based on meetings with EGLE and the City of Ann Arbor, additional effort beyond that anticipated at the original scope, Amendment No. 1 or 2 was necessary including:

- Evaluation of compensatory cut, including volume and location evaluations, that may have been required by EGLE/City of Ann Arbor for the floodplain/floodway filling required by the project.
- Ongoing discussions and negotiations with EGLE regarding the designation of the existing toe ditch as a natural stream including review of DRAFT permit conditions, long-term monitoring requirements and finalization of the JPA efforts for the project that exceeded the effort originally envisioned as part of Amendment 2. The team's efforts included additional coordination and meeting time with EGLE and the City regarding permit conditions and edits of the submitted documents required by EGLE to satisfy their determination of the collector ditch as a watercourse. This includes an additional 30 hours of effort from DLZ.
- Additional coordination with the City of Ann Arbor's floodplain manager to evaluate the project and required conditions to comply or obviate the requirements of the City's floodplain management ordinance.

5. Additional Dam Surveillance, Data Review, Bidding Evaluation, and Continued Project Management

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Due to budgetary constraints and the team's desire to select the most-qualified bidder, it is currently understood that the project is likely to extend to an estimated construction start in Spring 2025 and may include an additional round of bidding due to the City's procurement process. This will extend the project schedule and incur additional project management effort by the engineering team. Additionally, continued dam surveillance and data evaluation will be necessary through April 2025 until construction is expected to commence. Services provided under this task include:

- Extension of weekly progress calls with Stantec from March 2024 through June 2024 (FY24). Continuation of monthly progress calls from July 2024 through April 2025 (FY25).
- Extension of internal project coordination and management meetings from March 2024 through April 2025 (FY24 and FY25).
- Completion of monthly dam surveillance and data review in consultation with Stantec to satisfy ongoing evaluation of dam conditions during the interim period prior to construction in Spring 2024. We have assumed this monthly dam surveillance will include 1 site visit every other month plus 2 hours per month of data review and consultation from July 2024 through April 2025 and include no more than 8 visits (FY25).
- Completion of an additional round of contractor bidding to include pre-bid meeting, response to bidder questions/inquiries, issuance of bidding addenda (if needed), a single round of bidder (no more than 2) interviews, and a single round of bidder scorecard review/analysis prior to a recommendation for award (FY25).

6. Owner-Approved Miscellaneous Allowance

Given the unknown nature of additional project needs or demands prior to construction in Spring 2025, the engineering team requests a miscellaneous allowance be set aside to address any project needs or requests from various stakeholders involved in this project. The use of these miscellaneous allowance funds would not be permitted unless specifically authorized by the City prior to completing efforts or assignments for the Barton Dam Right Embankment Remediation project.

**EXHIBIT B-3
FEE SCHEDULE**

Contractor shall be paid for those Services performed pursuant to this Amendment inclusive of all reimbursable expenses (if applicable), in accordance with the terms and conditions as set in the original Contract.

The total amount of fees to be paid under the amended Agreement shall not exceed \$1,171,587.77. The original contract amount was \$589,405.30. The Amendment No. 1 amount was \$214,102.47. The Amendment No. 2 amount was \$140,080. The Amendment No. 3 is \$227,700.00 and is broken down in the table below:

Task No.	Task	Est. Fees
FY 2024		
1	Additional Bidding Assistance Efforts	\$24,000
2	Additional "Out-of-Scope" Submittal and Interaction Required by FERC – Construction Dam Safety Surveillance Monitoring Plan (CDSSMP) and 3-day Potential Failure Mode Analysis (2nd round)	\$24,600
3	Revisions to Evaluations, Analysis, Plans, and Design per FERC Direction (after August 2023 – Amendment No. 2 – post 60% design)	\$61,600
4	EGLE/City of Ann Arbor Floodplain Permit Compensatory Cut Analysis and Collector Ditch Watercourse Joint Permit Application (JPA) extended review efforts and future monitoring conditions	\$17,000
5	Additional Dam Surveillance, Data Review, Bidding Evaluation, and Continued Project Management	
	-Continued Project Management	\$15,000
	Total Cost FY2024	\$142,200
FY 2025		
	Additional Dam Surveillance, Data Review, Bidding Evaluation, and Continued Project Management	
7	-Dam Surveillance and Data Review	\$14,000
	-Additional Bidding Evaluation	\$18,500
	-Continued Project Management	\$28,000
8	Owner-Approved Miscellaneous Allowance	\$25,000
	Total Cost FY2025	\$85,500
	Total Cost	\$227,700