



December 16, 2025

Wesley Sanchez
Director of Public Works
Village of Lake Orion
21 E. Church St.
Lake Orion, MI 48362

**RE: Dam EAP Update
Village of Lake Orion
Proposal for Professional Services**

Dear Mr. Sanchez:

Nowak & Fraus Engineers (NFE) appreciates the opportunity to submit our proposal for Professional Civil Engineering services for the Village of Lake Orion. As discussed, we have reviewed the existing EAP in comparison with both a “least acceptable” and a “gold standard” example and found that the Village’s information falls somewhere between the two extremes. Accordingly, the costs presented below are intended to update relevant information of most critical concern, leaving out any features that do not appear to be strictly necessary. Please find detailed below a breakdown of our anticipated scope of services and associated fees.

ENGINEERING SERVICES:

1. Update Emergency Action Plan maps / property analysis:

- Having verified with EGLE that the 200-year flow rate at the dam matches the figure used by Tetra Tech in their inundation modeling featured in the current EAP from 2002, we propose to:
 - Update the underlying base map using USGS base maps, FEMA 500-year flood contours, and Oakland County GIS source materials to show current state of downstream development.
 - Along the stream length studied, the difference in area between the 100-year and 500-year flood contours does not substantially change the list of properties affected; therefore we propose to generally show the FEMA 500-year contour as the expected maximum limit of inundation.
 - Where the FEMA 500-year contour indicates less area than Tetra Tech’s 200-year inundation map or areas where FEMA has not published flood contours, we will show the Tetra Tech 200-year inundation area.
- Based on the updated inundation base map, we will identify downstream properties and structures within the inundation area, adding to the EAP any that have changed since the 2002 base map was produced.

2. Update Emergency Action Plan text:

- Verify* and update the list of contacts for the Notification Chart (Figure 1) beyond Village and Township personnel, including:
 - State of Michigan (EGLE)

- MDOT Oakland TSC
- National Weather Service
- Oakland County WRC re: Indianwood Dam
- RCOC
 - * If you have already identified all updated contacts and can provide us a list, we will simply note these on a new Notification Chart rather than spend the time verifying contact information.
- Update List of Affected Property (Figure 1) and relabel all Figures for clarity
- Provide an updated location map for the dam, spillway, auxiliary spillway and relevant features (current Figure 2)
- Update the text regarding Preparedness to:
 - Confirm or update sources of temporary illumination.
 - Confirm or update DPW material stockpile and equipment and list of potential contractor sources for emergency supplies.
 - Update the Access to Site text and provide a map showing alternate access.
- Update text of Appendix C and Appendix F to identify correct personnel by title on Acknowledgment of Participation in Exercise, dates for scheduling exercises, and dates for updating the Emergency Action Plan.
- Update the title and introductory pages to identify the dates of original plan preparation and this update, list the Holders of the Document, and update the Table of Contents.

FEES FOR SERVICES:

Items 1 and 2 above - Update EAP Map, Property Analysis and Text:

Hourly* Not to Exceed: \$2,500.00

* Stated fee includes up to five hard copies of the updated EAP.

SCOPE CLARIFICATIONS AND EXCLUSIONS:

The proposed work does not include updating the flood modelling originally performed by Tetra Tech. Based on the fact that the 200-year flow rate at the dam, as recently confirmed by the Water Resources Division at EGLE, has not changed since the original modelling was completed, we believe the only required “inundation model” update is to use a current base map to identify all properties within the study’s most conservative inundation limit.

ADDITIONAL SERVICES:

In the event certain Holders of the Document require hard copies rather than electronic versions, in excess of the maximum five copies stated above, additional hard copies can be produced as requested at the costs identified for such services in our current Village of Lake Orion Fee Schedule (cost plus 15%).

Acceptance and Authorization to Proceed:

Provided this proposal meets with your approval, please sign, date and return a copy of this Work Authorization to our office. Receipt of your signed Work Authorization will serve as our authorization to proceed.

The above Proposal is valid if accepted within 30 days of its receipt.

Thank you for choosing Nowak & Fraus Engineers to provide Engineering and Surveying services to the Village of Lake Orion.

Sincerely,

Nowak & Fraus Engineers

Accepted and Approved By:



Wendy E. Spence, PE
Sr. Project Manager

(Signature)
Wes Sanchez, DPW Director

Dated: 12/16/2025

(Date)