



Agenda Memo

Crest Hill, IL

Meeting Date:	June 15, 2026
Submitter:	Ronald J Wiedeman
Department:	Engineering
Agenda Item:	A Resolution for a Professional Services Agreement for a 2026 Water System Model Update and Water Main Replacement Prioritization Plan by and Between the City of Crest Hill, Will County, Illinois and Strand and Associates, Inc. in the amount of \$150,000.00.

Summary: Engineering is presenting a proposal for consideration by council to approve a professional services agreement for engineering services by Strand & Associates, Inc. to update the model of the City's existing water system and create a new list of priority water main locations that can be used by staff to plan future city infrastructure improvements.

The last time the city's system was modeled was in 2021 and since then we have completed many water system improvements that need to be included into the model

The consultant's work will complete the following tasks:

- Review water demands projections prepared during the Lake Michigan Allocation process and update analysis to reflect demand trends from 2022-2025 and prepare projections through 2050.
- Perform a water supply capacity analysis to review the ability of the city's system and future Lake Michigan water supply to meet the water demand projections.
- Prepare a report with the finding of the water demand and pumping capacity analyses and finding.
- Prepare an exhibit showing proposed hydrant flow test locations.
- Prepare a draft risk assessment matrix for Staff use of water main replacement locations.
- Update the existing water model using the software WaterGEMS.
- Will perform fire flow reading at 15 locations to compare with results of the water modeling.
- Review and provide information to the City on the performance of the City's water system during current average and maximum day demands.

- Generate pressure and maximum day demand available fire flows based on updated model.
- Identify deficiencies within the City's system based on new model results on average day demands, and maximum day demand.
- The new model will incorporate the new ground water tanks along with the two new water pumping stations constructed to receive water from the Commission.
- The new model will provide information on the demands of the City with anticipated a future growth from 2030 through 2050.
- Develop a risk-based asset assessment and water main replacement prioritization plan using risk matrix, scoring breakdowns and weighted factors.
- Based on all of the work above a final report will be produced that compiles all of the information from the model along with final list of water main replacement prioritization locations.

If the work is authorized it will begin immediately and be completed by May 2027.

Recommended Council Action: A Resolution for a Professional Services Agreement for a 2026 Water System Model Update and Water Main Replacement Prioritization Plan by and Between the City of Crest Hill, Will County, Illinois and Strand and Associates, Inc. in the amount of \$150,000.00.

Financial Impact:

Funding Source: Water Fund (07-06-5330)

Budgeted Amount: \$145,000.00

Cost: 150,000.00

Attachments:

Resolution-Water Model Study

Exhibit A-Agreement for Engineering Services Water Model and WM Prioritization Plan Services.