



## Agenda Memo

Crest Hill, IL

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**Meeting Date:** | October 9, 2023  
**Submitter:** | Ronald J Wiedeman  
**Department:** | Engineering  
**Agenda Item:** | Well 14 Drilling Improvement.

**Summary:** The award of this project was discussed at the September 11<sup>th</sup> workshop meeting and at that meeting it was explained that this project was currently not included in the city existing 2024 budget and that outside funding sources planned to be used have not been received and the timeframe when these funds are not currently known.

Due to the current question on the status of funding for this project, Strand and the City have revisited the decision to construct this well now, in the future or at all. With the city in 2030 moving to the new water supply through the Grand Prairie Water Commission does the construction of the well still make sense at this time.

Discussion of a new well began in 2013 due to the fact that with the city's current number of wells they would supply enough water for both general use and fire protection once the undeveloped sections of the city get developed.

With the city making the decision to move from our own wells to Lake Michigan water supply the capacity that the city will need to supply can be looked at differently than originally thought. The water supply can be looked at as follows:

- Prior to 2030
- After 2030

Prior to 2030: Based on current demand and with maintenance improvements being made to our existing water distribution system which the city has completed or will be completed between now and 2030 the existing number of wells will be able to handle the demand for water along with the ability to provide fire protection flows.

If demand increases due a large development, then a well 14 will be needed along with other infrastructure improvements required to put well 14 into service. The completion of all of these projects is currently scheduled to be completed in late 2026.

As discussed at the September 11<sup>th</sup> workshop the drilling of Well 14 is not currently included in the 2024 budget. The city has been awarded a grant from the county through the American Rescue fund to \$500,000.00 that can be used for this project or any other infrastructure project. Staff is working with the county finalizing the agreement. The agreement is a reimbursement grant and the work will need to be completed by December 31, 2026. The other funding source is through DCEO funds-\$400,000.00. To date, DCEO has not released this funding and has not provided any information to the city on the DBE/MBE requirements. If we award the project without knowing these requirements the city will be put in a position of possibility not be able to use these funds. Therefore, the following options are available for Well 14:

1. Award the project now with the possibility of not being able to use the DCEO funding.
2. Continue working with the elected officials and DCEO to get the requirements for the DBE/MBE requirements and then rebid the project.
3. Delay the drilling well 14 until there is a need for increased demand. This will provide the city the ability, if desired, to have the developer or developers share in the cost of drilling the well.

The drilling of the well based on the current bid will cost the city \$850,000.00 and as mentioned above is not currently included in the 2024 budget.

Besides the cost of drilling this new well there are other infrastructure items that are needed to bring this new water supply into the city's existing water supply system. These projects included constructing a new raw water supply line from Well 14 to Well 10 located at the corner of Caton Farm Rd and Oakland Ave. Besides this new line improvements to the existing Wellhouse 10 will be needed to accept this raw water line. This work is currently estimated at \$4.5 million currently planned to be completed in 2026.

The southwest corner of Oakland and Caton Farm Rd is also the same location where the city is proposing a new aboveground water storage tank and new water receiving station will be constructed so the city will be able to provide enough storage per IEPA requirements for drinking water supplied by the water commission. Along with the construction of the new storage tank and receiving station modifications to the existing well house 10 will also be needed. The cost of modifying the existing station to accept water from future well 14 would best be completed at the same time as the construction of the storage and new receiving station. The cost to complete Well 10 upgrades can be absorbed into overall construction cost of the storage tank and new receiving stations. These improvements are scheduled to be completed in 2026.

By only constructing the raw water line and eliminating a separate contract to upgrade well 10 to accept the raw water from future Well 14 and include this work in the construction of the new receiving station will save the city approximately 1.5 million dollars.

For the period after 2030 when the city is on the new water supply. The new supply line has been designed to provide water capacity for both demand and fire protection based on full build out of the city. This scenario includes the full build out of the Crest Hill Business Park, Weber and Division, Statesville property, etc.

As mentioned above the storage tank along with our existing elevated storage tanks will provide the 2 days of storage per IEPA requirements if in the case the main supply line needs to be shut down for maintenance.

The other thing to discuss is the case the water supply line is down for a period longer than a 2-day period to some undefined time. In this case, the city will need to use its own wells to provide the water supply. At this point the city has enough wells in place without drilling Well 14 to meet this requirements based on current demand, but any increase in demand would require future Well 14. Therefore, giving the city time to decide on when Well 14 needs to be installed.

**Recommended Council Action:**

1. Staff recommends that between now and 2026 install the new raw water line from the proposed Well 14 location and Well 10. This is currently planned to be paid through an IEPA loan, but there are a few other funding sources available that can be looked at to help pay for a portion of the project thereby decreasing the city overall cost contribution and allow the city to pay for this project without having to get an IEPA loan. The current estimate of cost for this work is \$2.4 million dollars and has been included in previous presentation to council for the overall cost to construct Well 14. This new line after 2030 can be converted to a distribution line which will provide additional redundancy from the south end of the city to the north and west sides and then be converted back to a raw water line during times of an emergency.
2. Delay the drilling well 14 until there is a need for increased demand. This will provide the city the ability, if desired, to have the developer or developers share in the cost of drilling the well.

**Financial Impact:**

**Funding Source:** Water

**Budgeted Amount:** n/a

**Cost:** n/a

**Attachments:**