

COUNCIL ACTION FORM

**SUBJECT: BAKER SUBDIVISION GEOTHERMAL HEAT PUMP SYSTEM –
REPORT OF BIDS**

BACKGROUND:

On September 22, 2020 Council approved the preliminary plans and specifications for the District Geothermal Vertical Closed Loop Project at Baker Subdivision.

The geothermal system would provide space heating and cooling and boost water heating efficiency for all the homes in the subdivision. This project proposal was motivated by an effort to advance environmental sustainability of the subdivision developed by the City, while maintaining affordable utility costs for the mixed-income neighborhood. The system would help to balance the seasonal load and utilization of existing electric infrastructure and reduce community greenhouse gas emissions.

Bid documents were issued to forty-five companies and was sent out to five plan rooms. The bid was also advertised on the Current Bid Opportunities section of the Purchasing webpage and a Legal Notice was published on the websites of a contractor plan room service with statewide circulation and the Iowa League of Cities.

On October 21, 2020, one bid was received as shown below.

Bidder	Bid Price	Sales and/or Use Taxes Included	Evaluated Bid Price
Brimhall Industrial, Inc. Monte Vista, CO	\$755,237	\$10,320	\$765,557

The construction costs are estimated at \$290,000, with a project life of over 50 years. A monthly customer charge would be based on the size of the customer's system. The average charge would start at \$5.25, with Council-approved rate increases as appropriate, resulting in a payback time of around 27 years. One goal of the project would be to keep the utility costs of homes in the neighborhood comparable to or lower than those with more traditional heating and cooling systems. The approved Demand Side Management budget contains \$405,756 carried forward from the FY 2019/20 budget to cover this project cost.

Staff feels that additional time is needed to evaluate the bid in order to determine the reasons why the bid came in significantly higher than the Engineer's estimate.

ALTERNATIVES:

1. Accept the report of bids and delay award for the Baker Subdivision Geothermal Heat Pump System until staff is able to perform a thorough review and determine a recommended action.
2. Reject the bid, which will delay this project.

CITY MANAGER'S RECOMMENDED ACTION:

A district geothermal system will provide highly efficient, affordable, and sustainable space heating and cooling to the new development. This application of geothermal heating and cooling would introduce more local contractors and residents to the technology and model an innovative project structure for other communities. By delaying award of this bid, staff will have adequate time to fully evaluate the bid before recommending action by the City Council.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as stated above.



INVITATION TO BID NO. 2021-023
BAKER SUBDIVISION GEOTHERMAL HEAT PUMP SYSTEM BID SUMMARY

Bidder	Bid Price	Sales and/or Use tax included	Evaluated bid Price	Unit Price #1: Increase or decrease in the number of ground heat exchanger bores	Unit Price #2: Increase of decrease in the required quantities of the grout for ground heat exchanger wells
Thorpe Water Dev Co Ankeny, IA	\$755,237	\$10,320	\$765,557	\$5,100	\$125