

ITEM#: 18  
DATE: 1-10-23  
DEPT: PW

## COUNCIL ACTION FORM

**SUBJECT: PRAIRIE VIEW INDUSTRIAL CENTER UTILITY EXTENSION PROJECT**

### **BACKGROUND:**

The Prairie View Utility Extension Project consists of the extension of water and sanitary sewer mains to the recently annexed area east of Interstate 35 (I-35). The overall project includes water main and a gravity sewer main between I-35 and Potter Ave (formerly 590th), a force sewer main to be installed from Teller Ave (formerly 580th) to west of Freel Drive, and a sewer lift station to be constructed. Most of this new area has been certified by the Iowa Economic Development Authority for industrial development.

On May 12, 2021, City Council awarded the Prairie View Industrial Utility Project to Keller Excavating, Inc., of Boone, Iowa, in the amount of \$6,168,791.40. Change Order 1 was administratively approved by staff, resulting in a contract deduction of \$206.40.

On August 9, 2022, City Council approved Change Order 2 in the amount of \$2,210,255.72. This provided for the construction of water main and sanitary from Teller Ave to Potter Ave, funded through American Rescue Plan Act (ARPA) funding.

Keller Excavating has started the water main and sanitary sewer work from Teller Ave to Potter Ave. After utility locates were marked out in the field, **it was discovered that the Nevada raw water well line was not located correctly as shown in the original design.** At 5501 Lincoln Way, the Nevada raw water line shifts south into the bottom of the ditch (see attached map). This conflicts with the trenching operation that is necessary to construct the sanitary gravity main at a depth of 25 feet through this location.

Nevada's raw water line has two bends shifting south, then another two bends where it shifts back to the north. At each of these bends is a concrete reaction block to hold the bends in place from the forces in the watermain. These blocks cannot be disturbed by trenching operations, otherwise the work could potentially cause a failure in Nevada's raw water line. Staff explored several options to address the conflict:

1) **RELOCATE THE RAW WATER LINE**

The City's contractor would bore or trench in a new raw water line further north. Completing this work would take two to three days where the water line would be offline. **Recently staff was notified that existing industries on East Lincoln Way draw water from Nevada's raw water line and relocating the main would put them out of production, which would not be acceptable.**

2) SHIFT THE SANITARY SEWER MAIN

The sanitary sewer could be relocated south near the edge of East Lincoln Way. This would then require the removal and replacement of a large section of East Lincoln Way to accommodate the trenching operation. This is less expensive initially but could cause significant maintenance issues due to settlement of soil at the trench. It would also be difficult to pave this section of East Lincoln Way during the winter months, potentially extending the project closure and further disrupting E. Lincoln Way traffic and industry operations, making this option undesirable.

3) JACK AND BORE THE SANITARY MAIN THROUGH A CASING

The sanitary main could be placed inside a metal casing that has been bored through this section. This option would allow the sanitary sewer to be constructed as currently designed and meet all DNR requirements. In this same area there is an Alliant Energy pressure regulating station with both high-pressure and low-pressure gas lines. The jack and bore operation would avoid any additional potential conflict with these utilities by boring under them, leaving all existing utilities undisturbed.

**After evaluating these options and considering the advantages, disadvantages, and costs, staff believes the best option is to jack and bore the sanitary sewer main through this section of the project. The estimated cost to complete jack and boring through this section is an additional \$337,280.00. The funding for this change order would come from savings from the North Sunset Ridge Sewer project ARPA funds.**

Revenue and expenses associated with this program are estimated as follows:

Funding Source	Available Revenue	Estimated Expenses
G.O. Bonds	\$4,300,000	
EDA Grant	1,500,000	
Prior Authorized ARPA Funds	900,000	
ARPA (2023/24 Ames Plan 2040 Water & Sewer Utility CIP)	2,000,000	
ARPA Savings (N Sunset Ridge Sewer)	300,000	
Current contract		\$8,378,840.72
<b>Change Order 3 (this action)</b>		<b>337,280.00</b>
Engineering and Administration		275,000.00
<b>TOTAL</b>	<b>\$9,000,000</b>	<b>\$8,991,120.72</b>

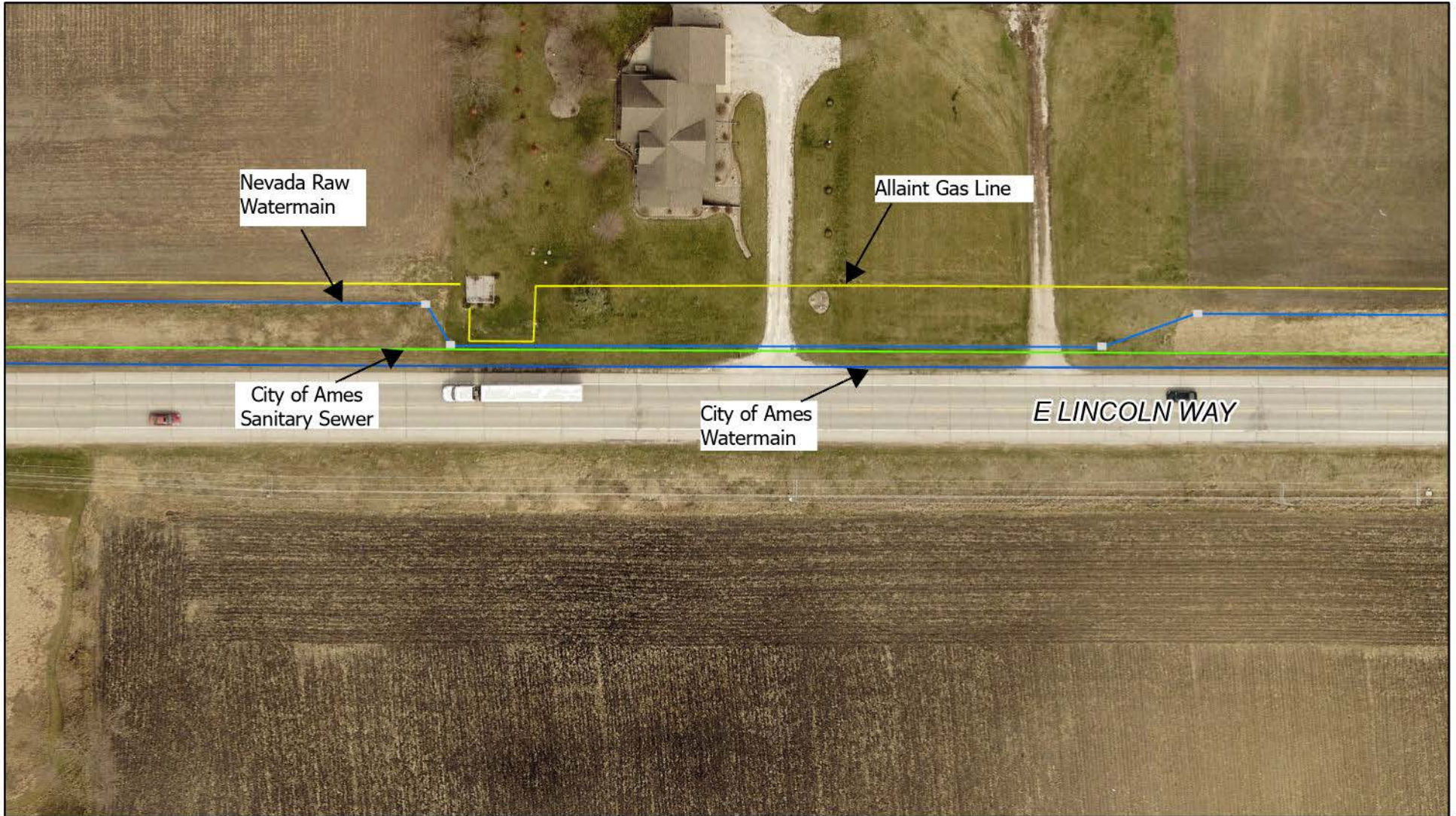
**ALTERNATIVES:**

1. Approve Change Order 3 for the Prairie View Industrial Center Utility, as negotiated, in the amount of \$337,280.00, funded from ARPA savings.
2. Do not approve Change Order 3.

**CITY MANAGER'S RECOMMENDED ACTION:**

Approving the change order will allow construction to continue as efficiently as possible while protecting existing utilities from damage and minimizing disruption to traffic and existing businesses. **Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as noted above.**

Prairie View Industrial Utility Extension  
5501 East Lincoln Way



■ Nevada Raw Watermain  
Reaction Blocks

