



Date: June 15, 2021
To: Darrel Pyle, City Manager
From: Chris Mattingly, P.E., Director of Utilities
Subject: Contract K-1920-1 – Change Order No. 1
Project WA0242 Robinson Street Water Line Phase III

office memorandum

On July 14, 2020, the Norman Utilities Authority (NUA) approved Contract K1920-1 with Garney Companies, Inc. (Garney) for the construction of Project WA0242 – Robinson Street Water Line Phase III in the amount of \$1,978,875.00. The project will install approximately 6,800 linear feet 30-inch diameter water transmission main between Flood Ave. and 24th Ave. N.W. This line is part of a multi-phase project that, when complete, will increase system resiliency and redundancy by allowing for larger volumes of water to be pumped directly from the Norman Water Treatment Plant on East Robinson to the west side of Norman during times of high demand. This project also includes the replacement of 3,000 linear feet of 12-inch diameter water distribution mains and all appurtenant hydrants, meters and services along Robinson. These mains have reached the end of their useful lives and are prone to increasingly disruptive and costly breaks.

One of the 12" distribution mains being replaced, identified as Line 4 in the Contract Drawings, runs in front of the Westwood Golf Course, and, as a result, the project included the replacement two existing services and meters to the golf course. Prior to start of construction in front of Westwood, a field meeting convened with Garney, NUA, Design Engineer (Plummer), and staff from Westwood Golf Course to review and coordinate planned work. During this meeting, several revisions to the work were identified that would increase efficiency of NUA's operations going forward and/or address potential critical issues that were not previously identified until this site meeting. These revisions are as follows:

1. **Previously Unknown 2" Service Off Line 4:** The Contract Drawings show two water services, one 1/12" to Westwood Golf Course that were to be replaced when Line 4 was completed in front of the course. During the field meeting, Westwood staff identified a third, previously-unknown, 2-inch diameter service just west of the two known services which fed the irrigation for a portion of the course. This service must also be replaced when the new Line 4 along Robinson is placed into service.
2. **Revisions to Meters, Boxes, and Locations:** The Contract Drawings show the new service lines from Line 4 connecting to existing meters inside the fence line of Westwood Golf Course. After reviewing this layout, NUA determined that if all meters were, instead, installed outside the fence line they could be accessed at any time without entering Westwood Golf Course. This would allow for much more efficient reading, maintaining, repairing and/or replacing meters in the future

It was also noted that the contract called for the largest of the meters, the 4-inch, to be installed in a concrete vault with a hatch. NUA deemed a concrete vault to be excessive in this application as they typically specify only a rectangular, plastic meter box for 4-inch meters both because they are cheaper and because they are more accessible (hatches can only be unlocked with a special "key" which a meter reader or maintenance person would not typically carry and that can often be lost over time). Eliminating this vault and hatch and replacing it with a plastic one will allow for Line Item 29 to be deleted and its cost credited to the project.

3. **Revisions to 4-Inch Service at Westwood:** The Contract Drawings show the new 4-inch service from Line 4 connecting directly to the suction side of an existing irrigation pump station on the Westwood Golf Course. However, Westwood staff advised that they no longer needed pump station

to meet their irrigation needs and, in fact, it was no longer even operational. Since system pressure was sufficient to meet their needs, they simply allow system pressure to push water through pump station, past the decommissioned pumps, and out through the discharge piping to the irrigation system. Since the pump station is in a deteriorating condition, all parties agreed that this configuration could not safely be allowed to remain. Instead, the 4-inch service will be disconnected at the point where it turns toward the suction side of the pump station. The discharge piping will be disconnected at a similar point. Then, new 4-inch piping will be used to directly connect the suction and discharge piping, completely bypassing the pump station. Once station was bypassed, it will be demolished before it can deteriorate further and result in a potential nuisance or hazardous condition.

During the field meeting, NUA also observed that the 4-inch service eventually ended at an above-grade, blow-off adjacent to an irrigation pond. Per Westwood staff, this blow-off was sited so that, in an emergency and with appropriate permission, they could use the blow-off to fill their pond and irrigate the golf course. NUA noted several issues with the blow-off that would have to be addressed to avoid potential for future issues. First, the above grade portion of the blow-off will be replaced with a blow-off constructed of Schedule 80 PVC, which is much more durable than Schedule 40 PVC. In addition, a check valve will be added to the discharge and the bottom of the check valve will be set at a minimum of 16" above overflow elevation of pond. Finally, erosion protection must be installed at the discharge point as well.

Change Order No. 1 proposes to increase the Contract by \$33,076.80 or a total of 1.67% over the original Contract Price of \$1,978,875.00. This would result in a new Contract Total of \$2,011,951.80. Change Order No. 1 will also result in a 30-Calendar-Day time extension to the project, mostly to account for long lead times on some of the necessary construction materials. For Change Order No. 1, pursuant to Resolution R-1112-55 since the change order is less than \$40,000, the City Manager may approve this item and approval by the City Council is not required. Approval of Change Order No. 1 is hereby recommended.

cc: Ken Giannone, P.E., Capital Projects Manager
Nathan Madenwald, P.E., Utilities Engineer
Brenda Hall, City Clerk
File

