



# City of Norman, OK

Municipal Building Council  
Chambers  
201 West Gray Street  
Norman, OK 73069

## Master

**File Number: K-1213-66 CO#1**

**File ID:** K-1213-66 CO#1

**Type:** Contract

**Status:** Consent Item

**Version:** 1

**Reference:** Item No. 15

**In Control:** City Council

**Department:** Utilities Department

**Cost:** \$59,751.00

**File Created:** 01/13/2014

**File Name:** Final Change Order Krapff-Reynolds Phase II SE  
Bishop

**Final Action:**

**Title:** CHANGE ORDER NO. ONE TO CONTRACT NO. K-1213-66: BY AND BETWEEN THE NORMAN UTILITIES AUTHORITY AND KRAPFF-REYNOLDS CONSTRUCTION COMPANY INCREASING THE CONTRACT AMOUNT BY \$59,751 AND EXTENDING THE CONTRACT BY NINETEEN (19) CALENDAR DAYS FOR THE S.E. BISHOP INTERCEPTOR PROJECT, PHASE II, SECTIONS 2A AND 2B, AND FINAL ACCEPTANCE OF THE PROJECT.

**Notes:** ACTION NEEDED: Acting as the Norman Utilities Authority, motion to approve or reject Change Order No. One to Contract No. K-1213-66 with Krapff-Reynolds Construction Company increasing the contract amount by \$59,751; and, if approved, authorize the execution of the contract, accept the project, and direct final payment in the amount of \$59,771 to Krapff-Reynolds Construction Company.

ACTION TAKEN: \_\_\_\_\_

**Agenda Date:** 01/28/2014

**Agenda Number:** 15

**Attachments:** SEBishopInterceptor Map, SE Bishop 2A2B CO#1

**Project Manager:** Charlie Thomas, Capital Projects Engineer

**Entered by:** charlie.thomas@normanok.gov

**Effective Date:**

### History of Legislative File

Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
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### Text of Legislative File K-1213-66 CO#1

Body

**BACKGROUND:** The SE Bishop Interceptor improvements were recommended by the Wastewater Master Plan (WWMP) as adopted by the Norman Utilities Authority (NUA) on November 13, 2001. The improvements have been completed in phases as shown on the attached map; Phase 1 was complete in 2004 and Phase 2, Section 1 was complete in January 2007. The current project, Phase 2, Sections 2A and 2B, is now complete and the final project, Phase 2, Section 2C, was advertised for bids on January 2, 2014 with completion expected in late 2014.

On December 18, 2012, the NUA approved Contract No. K-1213-66 in the amount of \$1,054,480 with Krapff-Reynolds Construction Company (Krapff-Reynolds) of Oklahoma City for construction of the Phase 2, Sections 2A and 2B improvements. Section 2A consists of approximately 2,400 linear feet (LF) of 24-inch sewer

serving the Eagle Cliff and Cobblestone Creek subdivisions, and includes replacement of the existing aerial crossing of Bishop Creek west of 12th Avenue SE at the western end of Cedar Lane Road. Section 2B consists of approximately 1,150 LF of 24-inch sewer north of Highway 9 and west of Classen Boulevard. Construction began January 28, 2013, and was complete on August 15, 2013.

**DISCUSSION:** As with any project of this scope, field adjustments and modifications were necessary. Proposed Final Change Order No. 1 (CO#1) consists of three adjustments: 1) modifications to the proposed concrete piers at the aerial crossing over Bishop Creek, 2) relocation of an existing waterline and 3) reconciliation of "as-bid" to "as-built" quantities.

During excavation for the new piers to support the aerial crossing, it was discovered that existing bridge abutments prevented installation of two of the four proposed piers. The concrete bridge abutments were much too extensive to remove cost effectively. The design engineer and staff determined that relocating and reducing the number of concrete piers from four to two was the best, most economical solution. This solution allowed a reduction in piers but required an increase in the span between the piers supporting the aerial crossing. In order to accommodate the longer span, additional labor and materials were required. Krapff-Reynolds provided surveying services for the relocation, incurred additional costs for pier drilling delays, and increased the diameter and depth of pier drilling requiring additional concrete and additional reinforcing steel. These costs totaling \$52,173 are shown as Item (a) on Attachment No.1 to proposed CO#1.

Next, near the Senior Cottages on Oak Tree Avenue, it was discovered that an existing eight inch (8") water main was installed more deeply than anticipated which directly conflicted with the required alignment of the new interceptor. Staff asked, and Krapff-Reynolds agreed, to assist with relocating the conflicting water line. Krapff-Reynolds provided 120 LF of waterline, valves and fittings installed with 60 LF in steel casing where the waterline crossed a creek. A new fire hydrant was added to enhance service. These costs totaling \$20,944 are shown as Item (b) on Attachment No. 1 to proposed CO#1.

The third component of the change order is the reconciliation of "as-bid" to "as-built" or final quantities as delineated in Attachment No. 2 to proposed CO#1. The net change is a decrease of \$13,366; the major cost differences include:

Bid Item 11: Adding 25 feet of 24-inch sewer in 36-inch steel casing under the railroad and a small creek for an increase of \$12,500;

Bid Item 13: Deleting 126 vertical feet of 42-inch diameter pier construction since two, rather than four, piers were used to support the aerial crossing for a decrease of \$37,800; and

Bid Item 38: Adding 88 additional square yards of asphalt paving for an increase of \$8,800.

In summary, the proposed change order will increase the contract amount by \$59,751 to \$1,114,231; an increase of less than 6% of the original contract amount. Lastly, due to the extra work identified above, Krapff-Reynolds requested, and staff recommends approval of, a 19-calendar day time extension to coincide with the final completion date of August 15, 2013.

The WWMP proposed the enlargement of interceptors to meet obligated and future capacity demands. The Sewer Excise Tax (SET) funds enlargement of interceptors to serve full build out (FBO) needs under the Norman 2025 Land Use And Transportation Plan (2025 Plan). The Sewer Sales Tax (SST) funds obligated interceptor needs serving existing customers and contractual obligations as of August 2001. Therefore, funding for the SE Bishop Interceptor is pro-rated based on the pipe diameter for FBO flow versus the pipe diameter for obligated flow.

The funding split for Section 2A is 37.5% Sewer Excise Tax (SET) and 62.5% Sewer Sales Tax (SST) based on a FBO diameter of 24 inches versus an obligated pipe diameter of 15 inches. The funding split for Section 2B is 25% SET and 75% SST based on a FBO diameter of 24 inches versus an obligated pipe diameter of 18 inches. Based on the pro-rated funding for each phase, the overall funding for the project is 67% SST and 33% SET.

Thus, the proposed change order funding amount of \$59,751 is \$40,033 by the SST and \$19,718 by the SET. The Fiscal Year Ending 2014 (FYE14) budget for the SE Bishop Interceptor (WW0267) includes unencumbered balances of \$479,553 for SET Construction (322-9048-432.61-01) and \$578,487 for SST Construction

(323-9048-432.61-01) which are sufficient to fund the change order.

**RECOMMENDATION:** Recommend the NUA approve Change Order No 1 to Contract No. K-1213-66 increasing the contract amount by \$59,751 and extending the contract time by 19 calendar days, accept the SE Bishop, Phase 2, Sections 2A and 2B Project, and authorize final payment in the amount of \$59,771.