



The City of NORMAN

201 West Gray, Bldg. C • P.O. Box 370
Norman, Oklahoma • 73069 • 73070

UTILITIES ENGINEERING
Phone: 405-366-5443
Fax: 405-366-5447

Date: November 7, 2016
To: Steve Lewis, City Manager
Through: Ken Komiske, Director of Utilities *KKomiske*
From: Mark Daniels, Utilities Engineer *MDaniels*
Subject: Emergency Repairs to Existing Piping at WRF

Background:

The Phase 2 Water Reclamation Facility (WRF) Improvements are about 86% complete at this time. WRF staff and the our contractor have recently discovered that the 30-inch reinforced concrete pipe (RCP) between the new Influent Metering Facility and Primary Clarifiers 3 and 4 (South Plant) is very deteriorated and close to collapse in several locations along its 354 foot length (see location map). The sewer pipe was televised by Urban Contractors to determine its condition and length. Based on this review, full replacement of this pipe segment is recommended.

Previously, about 30 feet of 36-inch concrete piping between existing Parshall Flume and existing splitter box upstream of Primary Clarifiers 1 and 2 (North Plant) collapsed while performing reconnections to the splitter box. This pipe was repaired by Archer Western at a cost of \$29,203.54 under Change Order No. 1 as CMR17.

Discussion:

Two written quotes have been obtained from contractors to slip line the existing 30-inch RCP with 27-inch fiberglass reinforced pipe (FRP). Garver has determined that the flow characteristics of the slightly smaller FRP will meet or exceed flow requirements for this piping in the future. Slip lining was chosen due to many above ground and below ground obstructions that would be encountered if the piping was installed by open-cut technologies. Jordan Contractors, Inc. submitted a low bid of \$85,300 while Urban Contractors, LLC submitted a bid of \$99,240. Archer Western is willing to submit a bid if desired but they have indicated they would hire Urban to perform the work and add 20% for overhead and profit. The two bids are attached.

The Fiscal Year Ending (FYE) 2017 construction budget for the Phase 2 Water Reclamation Facility (WRF) Improvements includes approximately \$1,475,708 in the Water Reclamation Fund account and \$901,219 in the Sewer Excise Tax account for a total of \$2,376,927. It is proposed to fund the emergency repair cost of \$85,300 with 40.7% (\$34,717) from Sewer Excise Tax account 322-9048-432.61-01 and 59.3% (\$50,583) from Water Reclamation Fund account 032-9048-432.61-01. Approval of this expenditure will leave an unencumbered balance for the Phase 2 WRF Improvements of about \$2,291,627.

Recommendation:

Staff recommends authorization to complete emergency sewer repairs discussed above. Estimated cost of the project is approximately \$85,300 with funding as detailed above.

Steve Lewis 11-11-16

Approved by Steve Lewis, City Manager

Enclosures: Bids
Location Map

Cc: Anthony Francisco, Director of Finance
Steve Hardeman, Utilities Superintendent



JORDAN CONTRACTORS, Inc.

123 S. Broadway, Tecumseh, OK 74873

PHONE: 405.598.2169 FAX: 405.598.2160 EMAIL: jordancontractors@gmail.com

Norman Municipal Authority
201 W Gray St
Norman, OK 73069

Attn: Mark Daniels

Scope of work:

- 1) Install slip line pipe in 30" RCP (Approximately 360')
- 2) Install 3 new 6' manholes
- 3) The ID of slip line is 26.46
- 4) Install new ring and lid on starter manhole
- 5) Backfill with ODOT Agg under paving
- 6) No bonds or sod
- 7) Haul off our spoils

Using Hobas Flush relining pipe 27" \$85,300.00
(pipe delivery after two weeks)

Using 27" Vylon slip lining \$75,300.00
(pipe delivery after Thanksgiving)



7113 N. Bryant
Oklahoma City, OK 73121

Contact: Jim Parrish
Phone: 405-478-5370
Fax: 405-478-5618

Quote To: Mr Mark Daniels, P.E.

Job Name: Norman WWTP

Phone:
Fax:

Date of Plans:
Revision Date:

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
10	MH 48" ID, 0-6FT	3.00	EA	2,400.00	7,200.00
20	27" HOBAS FLUSH RELINE, 28" OD, 26.48" ID, SN130PSI	354.00	LF	260.00	92,040.00
GRAND TOTAL					\$99,240.00