

April 5, 2017

Chris Mattingly, PE
City of Norman
201 W Gray St
Norman, OK 73609

Subject: Norman Water Treatment Plant Phase II Improvements
DWSRF Project No. P40-1020801-02, Norman Contract No. K-1617-121
Recommendation of Award of Project

Dear Mr. Mattingly:

Attachment A provides a summary of the bids received for the Norman Water Treatment Plant Phase II Improvements project on March 30, 2017. A total of three bids were received from prequalified contractors.

Pursuant to the pre-bid ranking of the Bid Alternates (see attachment A), Bid Alternates Q, R, O, P, C, S, I, and F (described in Attachment B) are recommended for award in the order listed. Bid Alternates A, B, D, E, G, H, J, K, M, and N are not recommended (Alternate L was not used). The summary of the base bid with the selected alternates is shown in Table 1.

Table 1	
Foley Company	\$29,990,165
Archer Western	\$32,019,850
Garney	\$32,930,000
Engineer's Estimate	\$27,400,000

All bids appear to be in order with the following exceptions:

- Archer Western base bid item 11 total price was written incorrectly as \$60,000 instead of \$6,000. Since the total base bid price was read aloud, this change was acceptable and the total cost for this item was adjusted accordingly.
- Foley Company alternate item K unit price was missing. Since the total alternate price was read aloud, the unit price was changed to \$105.00 and is acceptable.

These errors do not change the status of the bid prices listed above and, as a result, do not change the apparent bid results.

Please refer to Attachment A that summarizes the complete bid results. Carollo Engineers, Inc. has analyzed Foley Company's bid documents and found them to be complete. Foley Company was prequalified to perform this project, therefore reference information was not checked, and contractor license status was not verified to confirm that there are no outstanding judgments or actions against Foley Company.

Based on the above, Carollo recommends that Foley Company's bid be accepted as responsive for a total amount of \$29,990,165 (base bid plus alternates Q, R, O, P, C, S, I, and F). If you have any questions, please do not hesitate to contact us at 405-840-7094 or 816-682-2233.

Mr. Chris Mattingly
City of Norman
April 5, 2017
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Sincerely,

CAROLLO ENGINEERS, INC.

Thomas O. Crowley, P.E.

Thomas O. Crowley, PE
Vice President

Attachment

cc:Amber Wooten, Carollo



Norman Water Treatment Plant Phase II Improvements
DWSRF Project No. P40-1020801-02, Norman Contract No. K-1617-121
Recommendation of Award of Project
ATTACHMENT A – Bid Evaluation Priority

TABLE 3: RECOMMENDED HIERARCHY FOR SELECTION OF BID ALTERNATES

Item Number	Description	Rank	Description	Carollo Reasons
Q	Area 60 - Lime System Equipment	1	Adds robustness to lime system by adding redundancy	most critical chemical for softening plant; will provide redundancy and flexibility in operations
R	Areas 60 and 65 - Carbon Dioxide Feed System and Ferric Sulfate System	2	Extends existing CO2 equipment life by relocating it indoors and replaces FES system	second most critical chemical for softening plant; moving FES allows for appropriate secondary containment; existing FES feeders are beyond useful life
G	On-Site Hypochlorite Generation System	3	Deductive alternate; bulk hypo does increase safety; payback period for OSGH is estimated at 15+ years	chlorate management with dilution; space and power requirements for OSHG are included in base bid (not removed as part of alternate); upgrade to OSHG can be a stand-alone CIP; no advantage to switching for building classification (H-3)
O	Area 82 - Maintenance Building	4	Expands space for maintenance activities	Increased equipment will require more space for maintenance activities
P	Area 84 - Administration Building and Administration Area at Filter Building	5	Adds office and training space as well as expands laboratory space	Improves laboratory and staff work space
C	Distribution system connection for backwash supply	6	Provides alternative backwash supply when BWT is offline for maintenance making treatment more robust	Can Norman take WTP offline during winter for inspection/painting of BWT (approximately 1.5 months), or, alternatively worded, can you meet demands while using OKC water and wells? If you can meet demands with OKC water and wells, then this should be a low priority item.
S	Provide Atlas Polar Copco Air Compressor	7	Provides equipment that matches other air compressor at the WTP making maintenance activities easier	Low anticipated cost; consistency between spare parts

D	New air wash system work	8	Provides alternative filter cleaning method	Anticipated high costs but does offer process enhancements (however lower benefits with respect to costs of other process related alternatives)
I	Area 84 - Steel canopy with metal soffit panels	9	Provides covered storage at Administration Building - only applicable if Alternative P is selected	
N	Area 82 - Covered parking at south side of building by extending the roof and structure 20' to the south	10	Provides covered storage for PAC at new maintenance building - only applicable is Alternative O is selected	
M	Area 60 - door replacement	11	Replaces existing equipment that is at end of useful life	Can be performed by Norman staff if necessary
F	Area 82 - High volume low speed fan	12	Improves air circulation in new maintenance building - only applicable if Alternative O is selected	
B	Replace filter effluent valve and flow meter for Filters #1-4	13	Replaces existing equipment that is nearing end of useful life and requires partial plant shutdown to complete	Can be performed by Norman staff if necessary
E	Replace filter effluent valve and flow meter for Filters #5-8	14	Replaces existing equipment that is nearing end of useful life and requires partial plant shutdown to complete	Can be performed by Norman staff if necessary
K	Chemical trench covers	15	Replaces existing covers that are nearing the end of useful life	Norman staff can replace as funds are available

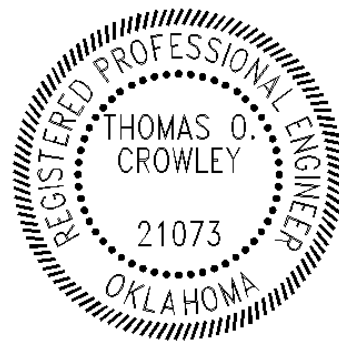
Mr. Chris Mattingly
City of Norman
March 28, 2017

A	Replace backwash pump	16	Replaces existing covers that are nearing the end of useful life	BWT can be filled using distribution system, low process benefit by alternative work
H	Area 84 - Replace typical hollow metal frames (frame type 1) with hollow metal frames with side lite (frame type 2A)	17	Alternative construction material - only applicable if Alternative P is selected	
J	Area 84 - Brick veneer on South Side of Building in lieu metal panels	18	Alternative construction material - only applicable if Alternative P is selected	

Sincerely,

CAROLLO ENGINEERS, INC.

Thomas O. Crowley, P.E.



Thomas O. Crowley, PE
Vice President

Norman Water Treatment Plant Phase II Improvements
DWSRF Project No. P40-1020801-02, Norman Contract No. K-1617-121
Recommendation of Award of Project
ATTACHMENT B – BID TABULATION RESULTS



Bid Opening March 30, 2017, 2:00 PM

Bid Tabulation - Listed in order of Engineer Recommended Priority of Alternates

Base Bid		Unit	Estimated Quantity	Archer Western		Foley ²		Garney		Price	Engineer Total
Item No.	Description			Unit Price	Total	Unit Price	Total	Unit Price	Total		
1	Norman WTP Ph II Improvements, all work except that specifically identified in unit price items or bid alternates	LS	1	\$ 26,504,000.00	\$ 26,504,000	\$ 24,500,000.00	\$ 24,500,000	\$ 26,078,000.00	\$ 26,078,000		
2	42" diameter uncased drilled piers	VLF	5,390	\$ 185.00	\$ 997,150	\$ 203.00	\$ 1,094,170	\$ 240.00	\$ 1,293,600		
3	Temporary casing for 42" diameter drilled piers	VLF	5,390	\$ 20.00	\$ 107,800	\$ 74.50	\$ 401,555	\$ 75.00	\$ 404,250		
4	Additional concrete sidewalk	SF	100	\$ 13.00	\$ 1,300	\$ 6.50	\$ 650	\$ 8.00	\$ 800		
5	Additional asphalt paving	SY	500	\$ 66.00	\$ 33,000	\$ 50.25	\$ 25,125	\$ 51.00	\$ 25,500		
6	Additional heavy duty concrete paving	SY	100	\$ 74.00	\$ 7,400	\$ 68.50	\$ 6,850	\$ 125.00	\$ 12,500		
7	Additional gravel roadways	SY	1,000	\$ 15.00	\$ 15,000	\$ 9.75	\$ 9,750	\$ 21.00	\$ 21,000		
8	Additional imported select material backfill	CY	100	\$ 85.00	\$ 8,500	\$ 22.50	\$ 2,250	\$ 48.00	\$ 4,800		
9	Additional controlled low strength material	CY	2,000	\$ 140.00	\$ 280,000	\$ 108.00	\$ 216,000	\$ 106.00	\$ 212,000		
10	Additional slab sodding	SY	100	\$ 4.00	\$ 400	\$ 3.50	\$ 350	\$ 13.00	\$ 1,300		
11	Additional pine trees, 14" caliper	EA	10	\$ 600.00	\$ 6,000	\$ 442.50	\$ 4,425	\$ 3,012.00	\$ 30,120		
12	30" diameter permanently cased drilled piers	VLF	725	\$ 165.00	\$ 119,625	\$ 360.00	\$ 261,000	\$ 408.00	\$ 295,800		
13	Electrical Equipment Inspection, Maintenance and Testing	LS	1	\$ 60,000.00	\$ 60,000	\$ 55,305.00	\$ 55,305	\$ 57,000.00	\$ 57,000		
14	Insulation in existing chemical trenches	LF	200	\$ 10.00	\$ 2,000	\$ 13.50	\$ 2,700	\$ 479.00	\$ 95,800		
15	Excavation and fill at Area 34 (Intermediate Pump Station) associated with bedrock at elevation 1143	CY	880	\$ 105.00	\$ 92,400	\$ 78.00	\$ 68,640	\$ 115.00	\$ 101,200		
16	Excavation and fill at Area 43 (Ozone Destruct Building) associated with bedrock at elevation 1141	CY	235	\$ 160.00	\$ 37,600	\$ 154.00	\$ 36,190	\$ 136.00	\$ 31,960		
17	Excavation and fill at Area 55 (UV Building) associated with bedrock at elevation 1135	CY	765	\$ 95.00	\$ 72,675	\$ 97.00	\$ 74,205	\$ 109.00	\$ 83,385		
TOTAL BASE BID					\$ 28,344,850		\$ 26,759,165		\$ 28,749,015		\$ 24,689,000
Alternates Selected in priority order											
Item No.	Description	Unit	Estimated Quantity	Archer Western		Foley		Garney		Price	Engineer Total
Q	Area 60 - Lime System Equipment	LS	1	\$ 792,000.00	\$ 792,000	\$ 920,000.00	\$ 920,000	\$ 1,026,000.00	\$ 1,026,000		\$ 566,000.00
R	Areas 60 and 65 - Carbon Dioxide Feed System and Ferric Sulfate System	LS	1	\$ 300,000.00	\$ 300,000	\$ 452,000.00	\$ 452,000	\$ 546,000.00	\$ 546,000		\$ 190,000.00
O	Area 82 - Maintenance Building	LS	1	\$ 744,000.00	\$ 744,000	\$ 570,000.00	\$ 570,000	\$ 812,000.00	\$ 812,000		\$ 384,000.00
P	Area 84 - Administration Building and Administration Area at Filter Building	LS	1	\$ 1,458,000.00	\$ 1,458,000	\$ 872,000.00	\$ 872,000	\$ 1,313,000.00	\$ 1,313,000		\$ 1,135,000.00
C	Distribution system connection for backwash supply	LS	1	\$ 273,000.00	\$ 273,000	\$ 369,000.00	\$ 369,000	\$ 359,000.00	\$ 359,000		\$ 405,000.00
S	Provide Atlas Polar Copco Air Compressor	LS	1	\$ 17,000.00	\$ 17,000	\$ 11,000.00	\$ 11,000	\$ 6,000.00	\$ 6,000		\$ 14,000.00
I	Area 84 - Steel canopy with metal soffit panels	LS	1	\$ 81,000.00	\$ 81,000	\$ 27,000.00	\$ 27,000	\$ 110,000.00	\$ 110,000		\$ 12,000.00
F	Area 82 - High volume low speed fan	LS	1	\$ 10,000.00	\$ 10,000	\$ 10,000.00	\$ 10,000	\$ 9,000.00	\$ 9,000		\$ 5,000.00
TOTAL BASE BID PLUS SELECTED ALTERNATES					\$ 32,019,850		\$ 29,990,165		\$ 32,930,015		\$ 27,400,000
Alternates Not Selected¹											
A	Replace backwash pump	LS	1	\$ 88,000.00	\$ 88,000	\$ 62,000.00	\$ 62,000	\$ 108,000.00	\$ 108,000		\$ 150,000.00
B	Replace filter effluent valve and flow meter for Filters #1-4	LS	1	\$ 135,000.00	\$ 135,000	\$ 174,000.00	\$ 174,000	\$ 162,000.00	\$ 162,000		\$ 30,000.00
D	New air wash system work	LS	1	\$ 1,980,000.00	\$ 1,980,000	\$ 2,895,000.00	\$ 2,895,000	\$ 1,811,000.00	\$ 1,811,000		\$ 941,000.00
E	Replace filter effluent valve and flow meter for Filters #5-8	LS	1	\$ 67,000.00	\$ 67,000	\$ 49,000.00	\$ 49,000	\$ 37,000.00	\$ 37,000		\$ 30,000.00
H	Area 84 - Replace typical hollow metal frames (frame type 1) with hollow metal frames with side lite (frame type 2A)	LS	1	\$ 13,000.00	\$ 13,000	\$ 5,500.00	\$ 5,500	\$ 8,000.00	\$ 8,000		\$ 2,500.00
J	Area 84 - Brick veneer on South Side of Building in lieu metal panels	LS	1	\$ 14,000.00	\$ 14,000	\$ 15,000.00	\$ 15,000	\$ 42,000.00	\$ 42,000		\$ 11,000.00
K	Chemical trench covers	LF	200	\$ 120.00	\$ 24,000	\$ 105.00	\$ 21,000	\$ 100.00	\$ 20,000		\$ 60,000.00
L	NOT USED	LS									
M	Area 60 - door replacement	LS	1	\$ 38,000.00	\$ 38,000	\$ 42,000.00	\$ 42,000	\$ 60,000.00	\$ 60,000		\$ 50,000.00
N	Area 82 - Covered parking at south side of building by extending the roof and structure 20' to the south	LS	1	\$ 38,000.00	\$ 38,000	\$ 56,000.00	\$ 56,000	\$ 61,000.00	\$ 61,000		\$ 32,000.00
G	On-Site Hypochlorite Generation System	LS	1	\$ (700,000.00)	\$ (700,000)	\$ (528,158.00)	\$ (528,158)	\$ (586,000.00)	\$ (586,000)		\$ (900,000.00)
Documents required with bid											
	Prequalification				X		X		X		
	Prebid meeting attendance				X		X		X		
00410	Acknowledge all addenda				X		X		X		
00432	Bid Bond				X		X		X		
00434	List of subcontractors				X		X		X		
00434	Approved Electrical Subcontractor				X		X		X		
00434	Approved I&C Subcontractor				X		X		X		
00456	DW412 Anti/Non Collusion Affidavit				X		X		X		
00457	DW413 Business Relationship Affidavit				X		X		X		
00459	DW415 Claim or Invoice Affidavit				X		X		X		
00460	DW501 American Iron and Steel Certification				X		X		X		
00461	DW211 Contractors Statement of Equal Opportunity				X		X		X		
	DW12 Prime Contractor Certification of Non-segregated Facilities				X		X		X		
00462	Facilities				X		X		X		
00463	DW074A Certification of Labor Standards Compliance				X		X		X		
00465	DW414 Certification regarding Lobbying				X		X		X		

Notes:

¹ Alternates A, B, D, E, H, J, K, L, M, N, and G were not selected because of costs.
² The apparent low bidder is Foley Company with a total bid price of \$29,990,165 consisting of base bid plus all selected alternates. The apparent low bidder Foley Company has properly complied with all bid requirements.

Bids Verified By: _____