

MEMORANDUM

TO: Programs, Projects, and Operations Subcommittee
FROM: Lori Ann Laster, Stormwater Management Engineer
SUBJECT: Construction Bids for the WP-4 Project
DATE: July 7, 2022

The West Papio Regional Basin 4 (WP-4) project is located at approximately 204th Street and Schram Road in Gretna. This multi-purpose project consists of the construction of a flood control reservoir, 2 water quality basins, basic recreation amenities, fisheries enhancements, sanitary sewer realignment, and improvements along the future alignment of Schram Road west of 204th Street.

Portions of the project will be funded by the City of Gretna and the Nebraska Game and Parks Commission. Through Interlocal agreement the City of Gretna will reimburse the District for additional work along the future alignment of Schram Road to prevent disruption of reservoir operations when that portion of the road is constructed. Nebraska Game and Parks Commission awarded the project \$350,000 for fisheries enhancements and other recreational improvements. The engineer’s estimate for the work was \$7,461,745.

Many components of the project require placement of riprap. Due to occasional unavailability from local sources, the original specification for the riprap was quartzite which generally comes from South Dakota and is a superior product to the locally available limestone. However, transportation of the material from South Dakota can make it an uneconomical choice so an alternate bid item for local limestone riprap was required.

Bids were opened for the project on June 30, 2022. Two bids were received and are summarized below. HDR has evaluated the bids and provided their recommendation (see attached). Evaluation of the bids determined that the prices for earthwork were approximately twice the amount estimated. Another item driving the high bid prices is the potential for dewatering during construction of the main dam. This bid item was 3 times the amount for similar projects completed by the subcontractor and may not even be necessary.

Due to these reasons and the potential to attract more bidders in the fall or winter of this year, staff and HDR recommend that all bids be rejected at this time and the bid documents modified to address fluctuation in fuel costs with an escalation/de-escalation factor and the dewatering moved to an alternate bid item only to be used if necessary.

General Contractor	Base Bid	Limestone Alternate Bid
Graham Construction	\$12,810,516.00	\$12,578,958.75
Valley Corp	\$10,997,155.70	\$10,817,556.80

Management recommends that the Subcommittee recommend to the Board of Directors that the General Manager be authorized to reject all bids received for the WP-4 Regional Basin project.



Sent Electronically on July 7, 2022

July 7, 2022

Ms. Lori Laster
Papio-Missouri River Natural Resources District
8901 South 154th Street
Omaha, NE 68138-3621

RE: WP-4 Reservoir & Associated Improvements
Bid Recommendation

Dear Ms. Laster:

Bids were received for the construction of the WP-4 Reservoir & Associated Improvements (WP-4) on June 30, 2022. Per the attached bid tabulation, two (2) bidders submitted base bids which ranged from \$10,997,155.70 to \$12,810,516.00. Both bids were above the Engineer's opinion of probable construction cost of \$7,489,432.50. A summary of the bids is attached.

Bids were evaluated based on the lowest responsive bidder. The apparent low base bid was submitted by Valley Corporation for \$10,997,155.70. This bid is \$1,813,160.30 lower than the next lowest bidder. While differences in bids for individual bid items had greater variations, overall, the base bids of the two bidders were within 17% of each other.

An alternate bid was taken for limestone riprap in lieu of the specified quartzite riprap. Quartzite riprap has been more durable than locally available limestone, and has been frequently used on P-MRNRD projects recently, although at a higher cost. Valley Corporation's alternate bid replacing all project riprap with limestone would reduce the total bid to \$10,817,556.80, a reduction of \$179,598.90. This is a 25% reduction in that bid item, but only a 1.6% of the overall base bid. We do not feel that this reduction offers significant savings, and would likely lead to higher maintenance costs in the future.

Several factors may have affected the bid proposal costs:

- current bidding environment with robust residential, commercial, and data center development activity limited the interest and number of Contractors submitting bids on the Project;
- fuel prices are at record highs, with uncertainty in future fuel prices; and
- substantial increases in material costs due to supply chain delays and lack of raw materials.

Due to Lump Sum bid items, exact reasons for bids being significantly in excess of the Engineer's Estimate are not fully known (the selected contractor would submit a full breakdown of the schedule of values following notice of award). However, Valley Corporation did provide preliminary unit cost breakdowns. Analysis of that breakdown indicates that:

- The significant item costs that contributed to difference between the engineer's estimate and base bid price were earthwork and concrete rates, and that specifically the rates used to establish costs for earthwork are well in excess of engineer's estimate, and appear to be in excess of recent bid costs in the area for similar work;
- Dewatering of the dam and structure foundations was included in the bid form as an individual bid item and bid prices are well in excess of the scope that is anticipated.

Based on the available information, the Board may want to consider rejecting all bids, and pursue rebidding the Project at a later date. It is acknowledged that rebidding the project may not result in receiving lower bids. Should the Board choose to reject all bids at this time, we will work with NRD staff to identify possible revisions to the plans and specifications in an effort to reduce uncertainties considered by the contractors in preparing their bids. Additionally, bidding the project in the fall or winter of 2022 for work in 2023 may allow more contractor interest.

If you have any questions do not hesitate to contact me at (402) 926-7110.

Very truly yours,
HDR ENGINEERING, INC.



John J. Engel, P.E.
Project Manager

Enclosure



Item No	ITEM	UNIT	QTY.	Engineer's Estimate		Valley Corporation		Graham Construction	
				UNIT PRICE	EXTENSION	UNIT PRICE	EXTENSION	UNIT PRICE	EXTENSION
0.1	Mobilization/Demobilization	1	LS	\$660,000.00	\$660,000.00	\$518,542.98	\$518,542.98	\$1,100,000.00	\$1,100,000.00
0.2	Survey	1	LS	\$165,000.00	\$165,000.00	\$173,802.40	\$173,802.40	\$194,000.00	\$194,000.00
0.3	Construction Quality Control Material Testing	1	LS	\$110,000.00	\$110,000.00	\$178,200.00	\$178,200.00	\$176,300.00	\$176,300.00
0.4	Clearing & Grubbing	1	LS	\$165,000.00	\$165,000.00	\$309,159.24	\$309,159.24	\$245,000.00	\$245,000.00
0.5	Demolition & Removals	1	LS	\$165,000.00	\$165,000.00	\$44,477.82	\$44,477.82	\$450,000.00	\$450,000.00
0.6	Stripping & Topsoiling	1	LS	\$165,000.00	\$165,000.00	\$192,798.54	\$192,798.54	\$225,000.00	\$225,000.00
0.7	Right of Way Fence	12000	LF	\$11.00	\$132,000.00	\$13.91	\$166,920.00	\$12.50	\$150,000.00
0.8	Migratory Bird Nest Surveys	1	LS	\$27,500.00	\$27,500.00	\$17,820.00	\$17,820.00	\$20,000.00	\$20,000.00
0.9	All Other Work Not Covered by A Bid Item	1	LS	\$55,000.00	\$55,000.00	\$37,695.34	\$37,695.34	\$21,100.00	\$21,100.00
Series 0 - General Subtotal					\$1,644,500.00		\$1,639,416.32		\$2,581,400.00
1.1	Additional Overexcavation	1000	CY	\$0.00	\$0.00	\$6.75	\$6,750.00	\$11.25	\$11,250.00
1.2	Main Dam	1	LS	\$839,669.60	\$839,669.60	\$1,699,112.21	\$1,699,112.21	\$2,180,000.00	\$2,180,000.00
1.3	Dewatering	1	LS	\$440,000.00	\$440,000.00	\$884,008.21	\$884,008.21	\$1,313,000.00	\$1,313,000.00
1.4	Rock Riprap, NDOT Type C	3100	TNS	\$85.16	\$264,000.00	\$106.52	\$330,212.00	\$177.00	\$548,700.00
Series 1 - Main Dam Subtotal					\$1,543,669.60		\$2,920,082.42		\$4,052,950.00
2.1	Schram Road (Sta. 34+85 to Sta. 40+27)	1	LS	\$101,062.50	\$101,062.50	\$222,504.94	\$222,504.94	\$252,110.00	\$252,110.00
2.2	North Water Quality Basin (Sta. 28+75 to Sta. 34+85)	1	LS	\$354,062.50	\$354,062.50	\$1,084,166.39	\$1,084,166.39	\$642,650.00	\$642,650.00
2.3	Rock Riprap, NDOT Type B	160	TNS	\$55.00	\$8,800.00	\$105.73	\$16,916.80	\$124.25	\$19,880.00
Series 2 - Scram Road & N. Water Quality Basin Subtotal					\$463,925.00		\$1,323,588.13		\$914,640.00
3.1	Trail	1	LS	\$597,300.00	\$597,300.00	\$1,305,211.44	\$1,305,211.44	\$747,250.00	\$747,250.00
3.2	Pedestrian Bridge (Trail Sta. 151+44)	1	LS	\$198,000.00	\$198,000.00	\$209,352.61	\$209,352.61	\$280,950.00	\$280,950.00
3.3	Rock Riprap, NDOT Type B	35	TNS	\$0.00	\$0.00	\$109.25	\$3,823.75	\$116.00	\$4,060.00
Series 3 - Trail Subtotal					\$795,300.00		\$1,518,387.80		\$1,032,260.00
4.1	Schram Lift Station	1	LS	\$520,459.50	\$520,459.50	\$610,117.75	\$610,117.75	\$1,100,000.00	\$1,100,000.00
4.2	Covington Lift Station	1	LS	\$520,459.50	\$520,459.50	\$470,195.49	\$470,195.49	\$556,000.00	\$556,000.00
4.3	Dewatering	1	LS	\$38,500.00	\$38,500.00	\$171,382.34	\$171,382.34	\$280,000.00	\$280,000.00
Series 4 - Sanitary Sewer & Lift Station Subtotal					\$1,079,419.00		\$1,251,695.58		\$1,936,000.00
5.1	Access Area	1	LS	\$917,235.00	\$917,235.00	\$923,251.31	\$923,251.31	\$867,000.00	\$867,000.00
5.2	Fishery Enhancements	1	LS	\$110,550.00	\$110,550.00	\$698,962.66	\$698,962.66	\$430,300.00	\$430,300.00
5.3	West Water Quality Basin	1	LS	\$137,500.00	\$137,500.00	\$15,800.18	\$15,800.18	\$156,250.00	\$156,250.00
5.4	Channel Mitigation	1	LS	\$27,500.00	\$27,500.00	\$13,665.35	\$13,665.35	\$56,200.00	\$56,200.00
5.5	Rock Riprap, NDOT Type B	3500	TNS	\$80.46	\$281,600.00	\$108.03	\$378,105.00	\$136.20	\$476,700.00
Series 5 - Access Area, Fishery Enhancements, & Other Site Improvements Subtotal					\$1,474,385.00		\$2,029,784.50		\$1,986,450.00
6.1	SWPPP, Erosion & Sediment Control	1	LS	\$215,433.90	\$215,433.90	\$134,792.15	\$134,792.15	\$140,000.00	\$140,000.00
6.2	Seeding, Type 'A' - Upland Mix	38	AC	\$3,850.00	\$146,300.00	\$2,019.60	\$76,744.80	\$1,872.00	\$71,136.00
6.3	Seeding, Type 'B' - Wetland Mix	10	AC	\$3,850.00	\$38,500.00	\$4,989.60	\$49,896.00	\$4,710.00	\$47,100.00
6.4	Seeding, Type 'C' - Mesic Mix	20	AC	\$3,850.00	\$77,000.00	\$2,138.40	\$42,768.00	\$1,929.00	\$38,580.00
6.5	Shrub Planting Allowance	1	LS	\$11,000.00	\$11,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
Series 6 - SWPPP & Landscaping Subtotal					\$488,233.90		\$314,200.95		\$306,816.00
1.4	Rock Riprap, NDOT Type C - Main Dam	3000	TNS			\$82.07	\$246,210.00	\$145.00	\$435,000.00
2.3	Rock Riprap, NDOT Type B - Schram Road & N. Water Quality Basin	160	TNS			\$82.07	\$13,131.20	\$92.40	\$14,784.00
3.3	Rock Riprap, NDOT Type B - Trail	35	TNS			\$82.07	\$2,872.45	\$84.25	\$2,948.75
5.5	Rock Riprap, NDOT Type B - Fishery Enhancements	3500	TNS			\$82.07	\$287,245.00	\$104.30	\$365,050.00
Alternate Bid Deduction - Quartzite Riprap Subtotal							-\$729,057.55		-\$1,049,340.00
Bid Alternate - Limestone Rock Riprap Subtotal							\$549,458.65		\$817,782.75
TOTAL BASE BID:					\$7,489,432.50		\$10,997,155.70		\$12,810,516.00
TOTAL BID WITH ALTERNATES:							\$10,817,556.80		\$12,578,958.75

Start Date:		Fall 2022 based on material availability	March 2023
Addendum No. 1:		Yes	Yes
Addendum No. 2:		Yes	Yes
Certification of Non-Segregated Facilities		Yes	Yes
Site Visit/Pre-bid Meeting Attendance:		Yes	Yes
List Subcontractors:			
Surveyor:		Snyder & Associates	RW Engineering
Testing Lab:		Olsson or Terracon	Olsson or Terracon
Bird Nest Survey		Olsson or Terracon	Olsson or Terracon
Earthwork			Pink Grading
Hardscape Installations			Dostals Construction
Sanitary Sewer			Judds Brothers
Traffic Control, Signage, Striping		Highway Signing	Highway Signing
Flexamat, Limestone Blocks		Linhart	
Dewatering		Griffin Dewatering	Griffin Dewatering
Fencing			Midwest Fence
Seeding & Erosion Control		Commercial Seeding	Commercial Seeding
Box Culvert		Gus Construction	Gus Construction
Picnic Shelter		Crouch Recreation	
Pedestrian Bridge			JMN Construction
Electrical			Vierregger Electric
Remarks:		Math error on bid form - Total Base Bid	