

Memorandum

To: Programs, Projects, and Operations Subcommittee

From: Amanda Grint, Assistant General Manager

Date: November 30, 2022

Re: Change Order 15 with Graham Construction for Missouri River Levee Improvements

The District executed a contract with Graham Construction Inc. on February 15, 2019, to construct modifications to the Missouri River R-613 and R-616 Federal Levee Systems. The original bid price of the contract was \$22,811,811. Following delays caused by the 2019 flood, Graham Construction proceeded to complete construction actions on the levee system under limited notices to proceed (as USACE repairs on the levees were also completed) and finally under a full notice to proceed on May 7, 2020.

Since the beginning of construction, Graham has been issued 14 change orders amounting to an increase of \$3,749,116.38. Previous Board action approved change orders over 110% of the contract amount however, this final change order includes a large amount to account for the closure structure on the BNSF railroad.

Enclosed is a copy of proposed change order #15 which would approve and additional \$1,734,507.27 of work and increase the contract price to \$28,295,434.65, or 24%, over the original contract price. This change order covers major railroad closure structure work along with additional gate well stems, grading, fencing and cleanup work.

Staff recommends that the Subcommittee recommend to the Board that the General Manager be authorized to approve Change Order 15 with Graham Construction Inc. for Modifications to the Missouri River R-613 and R-616 Federal Levee Systems, bringing the total construction contract price to \$28,295,434.65.

Date of Issuance: 11/29/2022

Effective Date: 12/09/2022

Owner: Papio-Missouri River NRD

Owner's Contract No.: 560

Contractor: Graham Construction, Inc.

Contractor's Project No.: -

Engineer: FYRA Engineering

Engineer's Project No.: 001-12-01

Project: Modification of Federal Levee Systems R-613 and R-616-613

Item(s) added to contract (required change order)

The Contract is Modified as follows upon execution of this Change Order:

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN	UNIT COST	TOTAL
1.072	EXTEND STEM GUIDE	EA	-5	\$ 805.00	\$ (4,025.00)
2.028	SHEET PILE	SF	-761.5	\$ 40.00	\$ (30,460.00)
2.078	EXTEND STEM GUIDE	EA	-1	\$ 810.00	\$ (810.00)
2.187	DOZER - T-REX - 2022 PRICING	HR	56.25	\$ 275.00	\$ 15,468.75
1.140	PL-14, PL-17A, B, & C STEM REPLACEMENT	LS	1	\$ 73,881.70	\$ 73,881.70
1.141	L-1 STEM REPLACEMENT	LS	1	\$ 11,004.47	\$ 11,004.47
1.142	EXTEND FENCE TO ROW MARKER	LS	1	\$ 1,300.00	\$ 1,300.00
2.178	BNSF CLOSURE STRUCTURE	LS	1	\$ 1,316,516.17	\$ 1,316,516.17
2.179	BAGGED GROUT FOR SHEETPILE CUTOFF	LS	1	\$ 20,000.00	\$ 20,000.00
2.180	RAILROAD OBSERVATION - BNSF 370 CLOSURE	LS	1	\$ 46,200.00	\$ 46,200.00
2.181	RAILROAD FLAGGING - BNSF 370 CLOSURE	LS	1	\$ 46,200.00	\$ 46,200.00
2.189	PR-14 STEM REPLACEMENT	LS	1	\$ 15,825.13	\$ 15,825.13
2.190	R-4 STEM REPLACEMENT	LS	1	\$ 3,017.00	\$ 3,017.00
2.191	PL-14 STEM GUIDE ADDITION	LS	1	\$ 3,018.00	\$ 3,018.00
2.192	PL-10, PL-15, PL-16, PL-17A, PL-17C, AND L-TB-1 GATE WELL HATCH REPLACEMENT	LS	1	\$ 27,100.07	\$ 27,100.07
2.193	GATE WELL SAFETY RAIL	LS	1	\$ 27,730.97	\$ 27,730.97
2.194	SAFETY LADDER	EA	2	\$ 2,042.34	\$ 4,084.68
2.195	SURPLUS MATERIAL PURCHASE	LS	1	\$ 5,138.91	\$ 5,138.91
2.196	INSTALL BARB WIRE FENCE (2022 PRICING)	LF	4000	\$ 9.25	\$ 37,000.00
2.197	R616 GATE AND FENCE ADJUSTMENTS	LS	1	\$ 9,675.00	\$ 9,675.00
2.198	R613 PC LB GATE ADJUSTMENTS	LS	1	\$ 3,200.00	\$ 3,200.00
2.199	SKID LOADER - 2022 PRICING	HR	75.75	\$ 120.00	\$ 9,090.00
2.200	END DUMP - T-REX - 2022 PRICING	HR	49	\$ 110.00	\$ 5,390.00
2.201	TRACTOR+MOWER - T-REX - 2022 PRICING	HR	11.25	\$ 115.00	\$ 1,293.75
2.202	DUMP TRUCK - FINAL GRADE - 2022 PRICING	HR	20.5	\$ 110.00	\$ 2,255.00
2.203	TRACTOR + JOKER - FINAL GRADE - 2022 PRICING	HR	31.25	\$ 335.00	\$ 10,468.75
2.204	SIDEDUMP - FINAL GRADE - 2022 PRICING	HR	2.5	\$ 145.00	\$ 362.50
2.205	LOADER - FINAL GRADE - 2022 PRICING	HR	8	\$ 265.00	\$ 2,120.00
2.206	CRUSHED ROCK	TON	363.64	\$ 20.35	\$ 7,400.07
2.207	FUEL SURCHARGE	LS	1	\$ 160.01	\$ 160.01
2.208	SEEDING - 2022 PRICING	AC	32.9	\$ 975.00	\$ 32,077.50
2.209	EROSION CONTROL BLANKET - 2022 PRICING	SY	18758.4	\$ 1.35	\$ 25,323.84
2.210	MOBILIZATION - FINAL GRADE	LS	1.0	\$ 7,500.00	\$ 7,500.00

EJCDC® C-941, Change Order.

TOTAL \$ 1,734,507.27

Prepared and published 2013 by the Engineers Joint Contract Documents Committee.

Attachments:

Work Change Directive 015

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TERMS <i>[note changes in Milestones if applicable]</i>
Original Contract Price: \$22,811,811.00	Original Contract Times: Substantial Completion: 4/1/2021 Ready for Final Payment: 6/1/2021 days or dates
Increase from previously approved Change Orders No. 001 to 014: \$3,749,116.38	Increase from previously approved Change Orders No. 001 to 014: Substantial Completion: 578 Ready for Final Payment: 578 days
Contract Price prior to this Change Order: \$26,560,927.38	Contract Times prior to this Change Order: Substantial Completion: 10/31/2022 Ready for Final Payment: 12/31/2022
Increase of this Change Order: \$1,734,507.27	Increase of this Change Order: Substantial Completion: 81 Ready for Final Payment: 59 days
Contract Price Incorporating this Change Order: \$28,295,434.65	Contract Times with all approved Change Orders: Substantial Completion: 1/20/2023 Ready for Final Payment: 2/28/2023

RECOMMENDED:

By: Jindy Rogers
Engineer (if Required)

AUTHORIZED:

By: _____
Owner (Authorized Signature)

RECEIVED:

By: _____
Contractor (Authorized Signature)

Title: Project Manager

Title: General Manager

Title: Project Manager

Date: _____

Date: _____

Date: _____

Approved by Funding Agency (if applicable)

By: _____

Date: _____

Title: _____

Date of Issuance: 11/29/2022

Effective Date: 12/09/2022

Owner: Papio-Missouri River NRD

Owner's Contract No.: 560

Contractor: Graham Construction, Inc.

Contractor's Project No.: -

Engineer: FYRA Engineering

Engineer's Project No.: 001-12-01

Project: Modification of Federal Levee Systems R-613 and R-616-613

Item(s) added to contract (required change order)

Contractor is directed to proceed promptly with the following change(s):

Description:

Gate Well Stem Extension

The plans for the stem extensions at PR-17, PR-14, PL-14, L-1, and R-4 can not be installed as designed. In order to fully operate these gate wells new stems need to be fabricated and installed A new stem guide is also needed at PL-14. The total costs for these additions is \$105,936.30.

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN QUANTITY	UNIT COST	TOTAL
1.072	EXTEND STEM GUIDE	EA	-5	\$ 805.00	\$ (4,025.00)
1.140	PL-14, PL-17A, B, & C STEM REPLACEMENT	LS	1	\$ 73,881.70	\$ 73,881.70
1.141	L-1 STEM REPLACEMENT	LS	1	\$ 11,004.47	\$ 11,004.47
2.078	EXTEND STEM GUIDE	EA	-1	\$ 810.00	\$ (810.00)
2.189	PR-14 STEM REPLACEMENT	LS	1	\$ 15,825.13	\$ 15,825.13
2.190	R-4 STEM REPLACEMENT	LS	1	\$ 3,017.00	\$ 3,017.00
2.191	PL-14 STEM GUIDE ADDITION	LS	1	\$ 3,018.00	\$ 3,018.00
TOTAL					\$ 101,911.30

Gate Well Hatch and Ladder Modifications

The gate wells at penetrations PL-10, PL-15, PL-16, PL-17A&C, and L-TB-1 require additional safety measures. These measures include additional ladder rungs in the interiors of the gatewells where current rung spacing is not to OSHA Standard, safety ladders on the exteriors of L-TB-1 and PL-17C, and safety railings around the perimeter of the tops of the gate wells.

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN QUANTITY	UNIT COST	TOTAL
2.192	PL-10, PL-15, PL-16, PL-17A, PL-17C, AND L-TB-1 GATE WELL HATCH REPLACEMENT	LS	1	\$ 27,100.07	\$ 27,100.07
2.193	GATE WELL SAFETY RAIL	LS	1	\$ 27,730.97	\$ 27,730.97
2.194	SAFETY LADDER	EA	2	\$ 2,042.34	\$ 4,084.68
TOTAL					\$ 58,915.72

R-616 Highway 370/BNSF Closure Section

Modifications were made to the R-616 closure section under HWY 370 in accordance with BNSF requirements. Bids were previously received for the FCA Floodwall and sheet piling components of the closure structure. Bids for all other components were not solicited during bid phase, since the plans for the closure were not final. Costs for the construction of this structure and any flagging and observation required are provided below. The flagging and observation fee is based on a one month duration and will be billed in accordance with BNSF's invoice, plus the contractors fee (10%). Bid item 2.028 is being reduced by 761.5 LF, because the costs for sheet piling is now incorporated into bid item 2.178. The total price for the modifications is \$1,398,456.17, per the calculations below. These costs were developed with the assumptions that:

- BNSF will provide track removal and ballast and track replacement.

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN QUANTITY	UNIT COST	TOTAL
2.028	SHEET PILE	SF	-761.5	\$ 40.00	\$ (30,460.00)
2.178	BNSF CLOSURE STRUCTURE	LS	1	\$ 1,316,516.17	\$ 1,316,516.17
2.179	BAGGED GROUT FOR SHEETPILE CUTOFF	LS	1	\$ 20,000.00	\$ 20,000.00
2.180	RAILROAD OBSERVATION - BNSF 370 CLOSURE	LS	1	\$ 46,200.00	\$ 46,200.00
2.181	RAILROAD FLAGGING - BNSF 370 CLOSURE	LS	1	\$ 46,200.00	\$ 46,200.00
TOTAL					\$ 1,398,456.17

Surplus Material Purchase

Material to be purchased by the PMRNRD from Graham. These materials include

- (1) 21' section of 84" Diameter CMP
- (1) 21' section of 30" Diameter CMP
- (1) 20' section of 30" Diameter CMP
- (2) 26' section of 30" Diameter CMP
- (1) 20' section of 24" Diameter CMP
- (2) 24" Metal Flared End Sections
- (2) 30" Metal Flared End Sections
- (2) 36" Metal Flared End Sections
- (3) Timber poles of varying length
- Slide Gate Assembly, Gray
- Various sizes and lengths of CMP for repair/overlap

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN QUANTITY	UNIT COST	TOTAL
2.195	SURPLUS MATERIAL PURCHASE	LS	1	\$ 5,138.91	\$ 5,138.91
TOTAL					\$ 5,138.91

Additional Fencing Work

Additional fence work is required along the R613 and R616 systems. The R613 PR LB requires 4,000 of new barb wire fencing to be installed and current fencing to be extended to the ROW markers near Falconwood park. The R616 MR RB requires multiple gates to be replaced and the fencing to be extended to the extents of the ROW. The R613 PC LB requires a new gate for cyclist to be installed and the existing gate downstream of the BNSF railroad to be widened to 19' to accomidate the farmers equipment.

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN QUANTITY	UNIT COST	TOTAL
2.196	INSTALL BARB WIRE FENCE (2022 PRICING)	LF	4000	\$ 9.25	\$ 37,000.00
2.197	R616 GATE AND FENCE ADJUSTMENTS	LS	1	\$ 9,675.00	\$ 9,675.00
2.198	R613 PC LB GATE ADJUSTMENTS	LS	1	\$ 3,200.00	\$ 3,200.00
1.142	EXTEND FENCE TO ROW MARKER	LS	1	\$ 1,300.00	\$ 1,300.00
TOTAL					\$ 51,175.00

25th to 36th Street

The levee top between 25th and 36th is degraded and requires fresh rock surfacing to continue to function properly. Contractor should strip overgrown vegetation and loose rock from the levee top and place a fresh 6" layer of crushed rock.

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN QUANTITY	UNIT COST	TOTAL
2.199	SKID LOADER - 2022 PRICING	HR	40.5	\$ 120.00	\$ 4,860.00
2.200	END DUMP - T-REX - 2022 PRICING	HR	49	\$ 110.00	\$ 5,390.00
2.201	TRACTOR+MOWER - T-REX - 2022 PRICING	HR	8.25	\$ 115.00	\$ 948.75
2.206	CRUSHED ROCK	TON	363.64	\$ 20.35	\$ 7,400.07
2.207	FUEL SURCHARGE	LS	1	\$ 160.01	\$ 160.01
TOTAL					\$ 18,758.83

Betz Ditch to Capehart Road

During borrow operations in the area, double benches were formed and need to be removed between Betz Ditch and Capehart Road. Contractor should mow the area, remove the double benches, regrade the side slopes to match the 3:1 required slopes, and regrade the bench.

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN QUANTITY	UNIT COST	TOTAL
2.187	DOZER - T-REX - 2022 PRICING	HR	30.75	\$ 275.00	\$ 8,456.25
2.201	TRACTOR+MOWER - T-REX - 2022 PRICING	HR	3	\$ 115.00	\$ 345.00
2.208	SEEDING - 2022 PRICING	AC	7	\$ 975.00	\$ 6,825.00
2.209	EROSION CONTROL BLANKET - 2022 PRICING	SY	5000	\$ 1.35	\$ 6,750.00
TOTAL					\$ 22,376.25

Work Change Directive No. 015

Falconwood Park to HWY 34 RB

After construction operations were completed in the area, multiple locations were found to have rough surfaces, unacceptable slopes, and trash/debris. Contractor should remove all trash and debris and regrade slopes using skid loaders and dump trucks. The rough landside surfaces should be tilled up using a joker. The area should then be reseeded once the tilled vegetation has dried out.

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN QUANTITY	UNIT COST	TOTAL
2.199	SKID LOADER - 2022 PRICING	HR	35.25	\$ 120.00	\$ 4,230.00
2.202	DUMP TRUCK - FINAL GRADE - 2022 PRICING	HR	17.00	\$ 110.00	\$ 1,870.00
2.203	TRACTOR + JOKER - FINAL GRADE - 2022 PRICING	HR	9.00	\$ 335.00	\$ 3,015.00
2.204	SIDEDUMP - FINAL GRADE - 2022 PRICING	HR	2.50	\$ 145.00	\$ 362.50
2.205	LOADER - FINAL GRADE - 2022 PRICING	HR	8.00	\$ 265.00	\$ 2,120.00
2.208	SEEDING - 2022 PRICING	AC	16.5	\$ 975.00	\$ 16,087.50
2.209	EROSION CONTROL BLANKET - 2022 PRICING	SY	3844.5	\$ 1.35	\$ 5,190.08
TOTAL					\$ 32,875.08

HWY 34 to Harlan Lewis RB

After construction operations were completed in the area a double bench was noted downstream of Harlan Lewis Road. Contractor should remove the double bench and regrade its slope using a bulldozer. The area should then be reseeded and matted as needed.

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN QUANTITY	UNIT COST	TOTAL
2.187	DOZER - FINAL GRADE - 2022 PRICING	HR	14.25	\$ 275.00	\$ 3,918.75
2.203	TRACTOR + JOKER - FINAL GRADE - 2022 PRICING	HR	7.75	\$ 335.00	\$ 2,596.25
2.208	SEEDING - 2022 PRICING	AC	7.2	\$ 975.00	\$ 7,020.00
2.209	EROSION CONTROL BLANKET - 2022 PRICING	SY	7476.5	\$ 1.35	\$ 10,093.28
TOTAL					\$ 23,628.28

Missouri Confluence to Harlan Lewis LB

After construction operations were completed in the area a double bench was noted downstream of Harlan Lewis Road. Contractor should remove the double bench and regrade its slope using a bulldozer. The area should then be reseeded and matted as needed.

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN QUANTITY	UNIT COST	TOTAL
2.187	DOZER - FINAL GRADE - 2022 PRICING	HR	2.50	\$ 275.00	\$ 687.50
2.203	TRACTOR + JOKER - FINAL GRADE - 2022 PRICING	HR	8.0	\$ 335.00	\$ 2,680.00
2.208	SEEDING - 2022 PRICING	AC	2.2	\$ 975.00	\$ 2,145.00
2.209	EROSION CONTROL BLANKET - 2022 PRICING	SY	2437.4	\$ 1.35	\$ 3,290.49
TOTAL					\$ 8,802.99

Offutt Ditch to Hayworth Park

After construction operations were completed in the area, the upstream portions of the seepage berm were tilled by a farmer causing very rough surfaces. Contractor should regrade the seepage berms. The rough landside surfaces should be tilled up using a joker and then reseeded once the tilled vegetation has dried out.

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN QUANTITY	UNIT COST	TOTAL
2.203	TRACTOR + JOKER - FINAL GRADE - 2022 PRICING	HR	6.5	\$ 335.00	\$ 2,177.50
				TOTAL	\$ 2,177.50

UP Railroad to Fort Crook Road RB

After construction operations were completed, the downstream transition between the stripped bench and native ground were left at a steep 3:1 slope. The Contractor should regrade the area to a flatter (10:1 or less) slope and reseed the area.

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN QUANTITY	UNIT COST	TOTAL
2.187	DOZER - FINAL GRADE - 2022 PRICING	HR	3.5	\$ 275.00	\$ 962.50
2.202	DUMP TRUCK - FINAL GRADE - 2022 PRICING	HR	3.5	\$ 110.00	\$ 385.00
				TOTAL	\$ 1,347.50

UP Railroad to Fort Crook Road LB

After construction operations were completed, the downstream transition between the stripped bench and native ground were left at a steep 3:1 slope. The Contractor should regrade the area to a flatter (10:1 or less) slope and reseed the area.

ITEM #	ITEM DESCRIPTION	UNIT	CHANGE IN QUANTITY	UNIT COST	TOTAL
2.187	DOZER - FINAL GRADE - 2022 PRICING	HR	5.3	\$ 275.00	\$ 1,443.75
2.210	MOBILIZATION - FINAL GRADE	LS	1.0	\$ 7,500.00	\$ 7,500.00
				TOTAL	\$ 8,943.75

Purpose for Work Change Directive:

Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contractor Price

- Non-agreement on pricing of proposed change.
- Necessity to proceed for schedule or other Project reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price: \$ 1,734,507.27 increase.

Contract Time: 0 days increase.

By:

- Lump Sum
- Cost of the Work
- Unit Price
- Other

RECOMMENDED:

Jindy Rogers

Engineer (Authorized Signature)

Title: Project Manager

Date: 11/29/2022

AUTHORIZED:

By: _____
Owner (Authorized Signature)

Title: _____

Date: _____

RECEIVED:

By: _____
Contractor (Authorized Signature)

Title: _____

Date: _____

Approved by Funding Agency (if applicable)

By: _____

Date: _____

Title: _____