

**SHAFER, KLINE & WARREN, INC.**

3200 Penn Terrace  
Columbia, MO 65202  
(573) 442-4537

**Benton County, MO**  
**Fort Lyon Ave.**  
**Project Number BRO-B008 (14)**  
**Bridge No.10600241**  
**June 26, 2018**

ENGINEER'S ESTIMATE					C&C Bridge & Concrete, Inc. 2124 River Lane Pilot Gove, MO 65276 660-834-3109		Gene Haile Excavating, Inc. 31571 Old Eighty Seven California, MO 65018 573-619-4275		Widle, Inc. 5700 M HWY Blackwater, MO 65322 660-846-3791		Boone Construction Co. 5611 Brown Station Road Columbia, MO 65202 573-474-1011		Chester Brass Construction Co. P.O. Box 430 Hanibal, MO 63401 573-221-5958		Lehamn Construction, LLC 900 Russellville Rd. California, MO 65018 573-796-8101		Sharp Excavating, LLC 41940 Highway 154 Perry, MO 63462 573-565-2651			
LINE	ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT		
<b>ROADWAY ITEMS</b>																				
1	201	Clearing & Grubbing (0.8 acres)	L.S.	1	\$12,000.00	\$12,000.00	\$2,000.00	\$2,000.00	\$3,000.00	\$3,000.00	\$5,000.00	\$5,000.00	\$6,500.00	\$6,500.00	\$3,000.00	\$3,000.00	\$8,475.00	\$8,475.00	\$10,000.00	\$10,000.00
2	202.3	Removal of Existing Improvements	L.S.	1	\$3,000.00	\$3,000.00	\$2,000.00	\$2,000.00	\$1,500.00	\$1,500.00	\$5,000.00	\$5,000.00	\$4,000.00	\$4,000.00	\$7,000.00	\$7,000.00	\$7,900.00	\$7,900.00	\$10,000.00	\$10,000.00
3	203	Embankment in Place	C.Y.	2,693	\$15.00	\$40,395.00	\$7.00	\$18,851.00	\$15.00	\$40,395.00	\$12.00	\$32,316.00	\$15.00	\$40,395.00	\$13.00	\$35,009.00	\$16.00	\$43,088.00	\$10.00	\$26,930.00
4	304	4" Aggregate Base Course (2" Clean)	S.Y.	1,045	\$10.00	\$10,450.00	\$3.00	\$3,135.00	\$6.00	\$6,270.00	\$4.85	\$5,068.25	\$3.15	\$3,291.75	\$4.00	\$4,180.00	\$9.00	\$9,405.00	\$3.00	\$3,135.00
5	310	4" Crushed Stone Surface	S.Y.	1,137	\$8.00	\$9,096.00	\$3.00	\$3,411.00	\$6.00	\$6,822.00	\$4.18	\$4,752.66	\$3.25	\$3,695.25	\$4.00	\$4,548.00	\$8.00	\$9,096.00	\$3.00	\$3,411.00
6	606.1	Guardrail Transition Section	EACH	4	\$500.00	\$2,000.00	\$300.00	\$1,200.00	\$325.00	\$1,300.00	\$320.00	\$1,280.00	\$295.00	\$1,180.00	\$500.00	\$2,000.00	\$350.00	\$1,400.00	\$400.00	\$1,600.00
7	606.1	Type A Crashworthy End Terminal	EACH	4	\$2,500.00	\$10,000.00	\$2,800.00	\$11,200.00	\$3,200.00	\$12,800.00	\$2,627.00	\$10,508.00	\$2,400.00	\$9,600.00	\$2,500.00	\$10,000.00	\$2,700.00	\$10,800.00	\$2,500.00	\$10,000.00
8	607.2	Fence	L.F.	746	\$12.00	\$8,952.00	\$7.00	\$5,222.00	\$8.00	\$5,968.00	\$1.15	\$857.90	\$6.00	\$4,476.00	\$9.00	\$6,714.00	\$11.00	\$8,206.00	\$7.00	\$5,222.00
9	607.2	Drive Gate	L.F.	16	\$25.00	\$400.00	\$500.00	\$8,000.00	\$20.00	\$320.00	\$100.00	\$1,600.00	\$20.00	\$320.00	\$20.00	\$320.00	\$65.00	\$1,040.00	\$40.00	\$640.00
10	607.2	Water Gate	L.F.	110	\$175.00	\$19,250.00	\$65.00	\$7,150.00	\$75.00	\$8,250.00	\$68.50	\$7,535.00	\$100.00	\$11,000.00	\$180.00	\$19,800.00	\$58.00	\$6,380.00	\$35.00	\$3,850.00
11	618	Mobilization	L.S.	1	\$40,000.00	\$40,000.00	\$20,000.00	\$20,000.00	\$25,000.00	\$25,000.00	\$30,000.00	\$30,000.00	\$38,500.00	\$38,500.00	\$50,000.00	\$50,000.00	\$26,290.00	\$26,290.00	\$130,000.00	\$130,000.00
12	627	Contractor Surveying and Staking	L.S.	1	\$3,500.00	\$3,500.00	\$3,000.00	\$3,000.00	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$7,500.00	\$7,500.00	\$3,500.00	\$3,500.00
13	725	24" Aluminized Steel Corrugated Pipe	L.F.	40	\$40.00	\$1,600.00	\$50.00	\$2,000.00	\$35.00	\$1,400.00	\$45.55	\$1,822.00	\$48.00	\$1,920.00	\$60.00	\$2,400.00	\$67.00	\$2,680.00	\$40.00	\$1,600.00
14	805	Seeding (includes Fertilizing & Mulching)	ACRE	0.8	\$5,000.00	\$3,750.00	\$5,500.00	\$4,400.00	\$4,750.00	\$3,800.00	\$1,000.00	\$800.00	\$3,000.00	\$2,400.00	\$4,000.00	\$3,200.00	\$5,525.00	\$4,420.00	\$8,000.00	\$6,400.00
15	806.3	Ditch Checks	EACH	18	\$250.00	\$4,500.00	\$250.00	\$4,500.00	\$150.00	\$2,700.00	\$44.98	\$809.64	\$200.00	\$3,600.00	\$200.00	\$3,600.00	\$175.00	\$3,150.00	\$150.00	\$2,700.00
16	806.7	Silt Fence	L.F.	185	\$4.00	\$740.00	\$5.50	\$1,017.50	\$3.00	\$555.00	\$0.72	\$133.20	\$3.00	\$555.00	\$6.00	\$1,110.00	\$4.00	\$740.00	\$0.75	\$138.75
<b>SUBTOTAL ROADWAY</b>						<b>\$169,633.00</b>		<b>\$97,086.50</b>		<b>\$123,580.00</b>		<b>\$110,982.65</b>		<b>\$134,433.00</b>		<b>\$155,881.00</b>		<b>\$150,570.00</b>		<b>\$219,126.75</b>
<b>SIGNING ITEMS</b>																				
17	616	Type III Moveable Barricades	EACH	6	\$375.00	\$2,250.00	\$150.00	\$900.00	\$150.00	\$900.00	\$285.00	\$1,710.00	\$140.00	\$840.00	\$300.00	\$1,800.00	\$150.00	\$900.00	\$300.00	\$1,800.00
18	616	Construction Signs	EACH	6	\$200.00	\$1,200.00	\$125.00	\$750.00	\$125.00	\$750.00	\$150.00	\$900.00	\$105.00	\$630.00	\$400.00	\$2,400.00	\$115.00	\$690.00	\$150.00	\$900.00
<b>SUBTOTAL SIGNING</b>						<b>\$3,450.00</b>		<b>\$1,650.00</b>		<b>\$1,650.00</b>		<b>\$2,610.00</b>		<b>\$1,470.00</b>		<b>\$4,200.00</b>		<b>\$1,590.00</b>		<b>\$2,700.00</b>
<b>BRIDGE ITEMS</b>																				
19	206	Excavation for Structures	C.Y.	47	\$50.00	\$2,350.00	\$25.00	\$1,175.00	\$25.00	\$1,175.00	\$200.00	\$9,400.00	\$63.50	\$2,984.50	\$25.00	\$1,175.00	\$44.00	\$2,068.00	\$35.00	\$1,645.00
20	216.1	Removal of Existing Bridge	L.S.	1	\$8,000.00	\$8,000.00	\$10,000.00	\$10,000.00	\$6,000.00	\$6,000.00	\$20,000.00	\$20,000.00	\$13,500.00	\$13,500.00	\$5,500.00	\$5,500.00	\$18,100.00	\$18,100.00	\$13,000.00	\$13,000.00
21	611.3	Type 2 Rock Blanket	C.Y.	611	\$60.00	\$36,660.00	\$40.00	\$24,440.00	\$45.00	\$27,495.00	\$38.00	\$23,218.00	\$54.00	\$32,994.00	\$40.00	\$24,440.00	\$52.00	\$31,772.00	\$50.00	\$30,550.00
22	624	Geotextile Fabric	S.Y.	1,080	\$3.00	\$3,240.00	\$2.00	\$2,160.00	\$3.00	\$3,240.00	\$1.56	\$1,684.80	\$2.00	\$2,160.00	\$2.00	\$2,160.00	\$4.00	\$4,320.00	\$3.00	\$3,240.00
23	702	HP10x42 Structural Steel Piles	L.F.	168	\$70.00	\$11,760.00	\$80.00	\$13,440.00	\$100.00	\$16,800.00	\$64.75	\$10,878.00	\$77.00	\$12,936.00	\$70.00	\$11,760.00	\$68.00	\$11,424.00	\$35.00	\$5,880.00
24	702	Pile Point Reinforcement	EACH	14	\$150.00	\$2,100.00	\$125.00	\$1,750.00	\$110.00	\$1,540.00	\$228.00	\$3,192.00	\$90.00	\$1,260.00	\$150.00	\$2,100.00	\$158.00	\$2,212.00	\$300.00	\$4,200.00
25	702.4.3	Pre-Bore for Piling	L.F.	140	\$200.00	\$28,000.00	\$100.00	\$14,000.00	\$100.00	\$14,000.00	\$120.80	\$16,912.00	\$135.00	\$18,900.00	\$100.00	\$14,000.00	\$113.00	\$15,820.00	\$145.00	\$20,300.00
26	703	Class B-2 Concrete	C.Y.	56.8	\$650.00	\$36,920.00	\$350.00	\$19,880.00	\$550.00	\$31,240.00	\$228.95	\$13,004.36	\$565.00	\$32,092.00	\$500.00	\$28,400.00	\$608.00	\$34,534.40	\$650.00	\$36,920.00
27	703	Slab on Concrete NU-Girder	S.Y.	290	\$350.00	\$101,500.00	\$265.00	\$76,850.00	\$290.00	\$84,100.00	\$225.00	\$65,250.00	\$375.00	\$108,750.00	\$325.00	\$94,250.00	\$280.00	\$81,200.00	\$225.00	\$65,250.00
28	705	Prestressed Concrete NU53 Girder (113'-4")	EACH	3	\$32,000.00	\$96,000.00	\$35,000.00	\$105,000.00	\$35,000.00	\$105,000.00	\$48,333.00	\$144,999.00	\$33,500.00	\$100,500.00	\$41,000.00	\$123,000.00	\$37,100.00	\$111,300.00	\$37,000.00	\$111,000.00
29	713	SL-1 Rail on Bridge	L.F.	234	\$60.00	\$14,040.00	\$50.00	\$11,700.00	\$79.00	\$18,486.00	\$58.00	\$13,572.00	\$54.00	\$12,636.00	\$65.00	\$15,210.00	\$80.00	\$18,720.00	\$50.00	\$11,700.00
30	715	Vertical Drains at End Bents	EACH	2	\$1,500.00	\$3,000.00	\$1,000.00	\$2,000.00	\$1,300.00	\$2,600.00	\$732.00	\$1,464.00	\$1,800.00	\$3,600.00	\$2,000.00	\$4,000.00	\$2,300.00	\$4,600.00	\$650.00	\$1,300.00
31	716.1	Plain Neoprene Bearing Pads	EACH	6	\$150.00	\$900.00	\$125.00	\$750.00	\$121.00	\$1,920.00	\$320.00	\$1,920.00	\$200.00	\$1,200.00	\$300.00	\$1,800.00	\$304.00	\$1,824.00	\$175.00	\$1,050.00
<b>SUBTOTAL BRIDGE</b>						<b>\$344,470.00</b>		<b>\$283,145.00</b>		<b>\$312,402.00</b>		<b>\$325,494.16</b>		<b>\$343,512.50</b>		<b>\$327,795.00</b>		<b>\$337,894.40</b>		<b>\$306,035.00</b>
<b>TOTAL CONTRACTOR</b>						<b>\$517,553.00</b>		<b>\$381,881.50</b>		<b>\$437,632.00</b>		<b>\$439,086.81</b>		<b>\$479,415.50</b>		<b>\$487,876.00</b>		<b>\$490,054.40</b>		<b>\$527,861.75</b>

WORKING DAYS = 120

LIQUIDATED DAMAGES = \$950 PER DAY

Note: Text in Red is Bidders error in calculations.

**SHAFER, KLINE & WARREN, INC.**

3200 Penn Terrace  
Columbia, MO 65202  
(573) 442-4537

**Benton County, MO**

Fort Lyon Ave.

Project Number BRO-B008 (14)

Bridge No.10600241

June 26, 2018

					Youngs' General Contracting, Inc. 5100 HWY PP Poplar Bluff, MO 63901 573-785-1501		Do-Rite Contrstuction & Excavating 1719 S HWY 65 Lincoln, MO 65338 660-547-2627	
LINE	ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
<b>ROADWAY ITEMS</b>								
1	201	Clearing & Grubbing (0.8 acres)	L.S.	1	\$10,000.00	\$10,000.00	\$5,750.00	\$5,750.00
2	202.3	Removal of Existing Improvements	L.S.	1	\$10,000.00	\$10,000.00	\$5,900.00	\$5,900.00
3	203	Embankment in Place	C.Y.	2,693	\$15.00	\$40,395.00	\$17.65	\$47,531.45
4	304	4" Aggregate Base Course (2" Clean)	S.Y.	1,045	\$10.00	\$10,450.00	\$6.45	\$6,740.25
5	310	4" Crushed Stone Surface	S.Y.	1,137	\$12.00	\$13,644.00	\$6.45	\$7,333.65
6	606.1	Guardrail Transition Section	EACH	4	\$1,000.00	\$4,000.00	\$348.00	\$1,392.00
7	606.1	Type A Crashworthy End Terminal	EACH	4	\$2,200.00	\$8,800.00	\$2,830.00	\$11,320.00
8	607.2	Fence	L.F.	746	\$6.50	\$4,849.00	\$10.60	\$7,907.60
9	607.2	Drive Gate	L.F.	16	\$140.00	\$2,240.00	\$16.00	\$256.00
10	607.2	Water Gate	L.F.	110	\$30.00	\$3,300.00	\$169.00	\$18,590.00
11	618	Mobilization	L.S.	1	\$50,000.00	\$50,000.00	\$13,800.00	\$13,800.00
12	627	Contractor Surveying and Staking	L.S.	1	\$4,000.00	\$4,000.00	\$4,200.00	\$4,200.00
13	725	24" Aluminized Steel Corrugated Pipe	L.F.	40	\$100.00	\$4,000.00	\$62.25	\$2,490.00
14	805	Seeding (includes Fertilizing & Mulching)	ACRE	0.8	\$4,000.00	\$3,200.00	\$5,305.00	\$4,244.00
15	806.3	Ditch Checks	EACH	18	\$500.00	\$9,000.00	\$355.00	\$6,390.00
16	806.7	Silt Fence	L.F.	185	\$6.50	\$1,202.50	\$7.65	\$1,415.25
<b>SUBTOTAL ROADWAY</b>						<b>\$179,080.50</b>		<b>\$145,260.20</b>
<b>SIGNING ITEMS</b>								
17	616	Type III Moveable Barricades	EACH	6	\$375.00	\$2,250.00	\$165.00	\$990.00
18	616	Construction Signs	EACH	6	\$180.00	\$1,080.00	\$125.00	\$750.00
<b>SUBTOTAL SIGNING</b>						<b>\$3,330.00</b>		<b>\$1,740.00</b>
<b>BRIDGE ITEMS</b>								
19	206	Excavation for Structures	C.Y.	47	\$48.00	\$2,256.00	\$112.25	\$5,275.75
20	216.1	Removal of Existing Bridge	L.S.	1	\$35,000.00	\$35,000.00	\$41,300.00	\$41,300.00
21	611.3	Type 2 Rock Blanket	C.Y.	611	\$47.00	\$28,717.00	\$88.40	\$54,012.40
22	624	Geotextile Fabric	S.Y.	1,080	\$2.00	\$2,160.00	\$3.55	\$3,834.00
23	702	HP10x42 Structural Steel Piles	L.F.	168	\$150.00	\$25,200.00	\$162.00	\$27,216.00
24	702	Pile Point Reinforcement	EACH	14	\$150.00	\$2,100.00	\$127.25	\$1,781.50
25	702.4.3	Pre-Bore for Piling	L.F.	140	\$215.00	\$30,100.00	\$103.50	\$14,490.00
26	703	Class B-2 Concrete	C.Y.	56.8	\$1,000.00	\$56,800.00	\$3,000.00	\$170,400.00
27	703	Slab on Concrete NU-Girder	S.Y.	290	\$160.00	\$46,400.00	\$300.00	\$87,000.00
28	705	Prestressed Concrete NU53 Girder (113'-4")	EACH	3	\$37,500.00	\$112,500.00	\$52,045.00	\$156,135.00
29	713	SL-1 Rail on Bridge	L.F.	234	\$80.00	\$18,720.00	\$55.25	\$12,928.50
30	715	Vertical Drains at End Bents	EACH	2	\$1,400.00	\$2,800.00	\$2,455.00	\$4,910.00
31	716.1	Plain Neoprene Bearing Pads	EACH	6	\$300.00	\$1,800.00	\$245.00	\$1,470.00
<b>SUBTOTAL BRIDGE</b>						<b>\$364,553.00</b>		<b>\$580,753.15</b>
<b>TOTAL CONTRACTOR</b>						<b>\$546,963.50</b>		<b>\$727,753.35</b>

WORKING DAYS = 120

LIQUIDATED DAMAGES = \$950 PER DAY