## **North Marshall Water Final Engineering Report**

Dated: 7/13/2021		Budget	Committed	Spent	Remaining	Remarks
Parkway Crossing		Биадег	Committed	Spent	Remaining	Remarks
Contractor - Lump Sum Contract	D'Port Drilling	\$81,210	\$81,210			Bid
	=	\$81,210	\$81,210	\$0	\$81,210	=
Carter Brien Pumping Station - Well #2						
Contractor - Lump Sum Contract	N/A	\$0	\$0			Eliminated due to Budget Constraints
	=	\$0	\$0	\$0	\$0	≡
Tatumsville Pumping Station - Well #7		**	**	**	**	
Contractor - Lump Sum Contract	YEC	\$296,061	\$296,061			Negotiated Bid, Subcontractor - Fondaw Well Drilling
	=	\$296,061	\$296,061	\$0	\$296,061	=
Waterline Upgrades 2021 Contractor - Contract Highway 68/641 Bore	YEC	\$2,036,637	\$0			Negotiated Bid
KY 1422 Waterline Replacement Griggstown Rd. from US 68 to Sandy Adair Ln. Salyers Creek Rd. KY 795 Scale Bottom Rd.						
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	=	\$2,036,637	\$0	\$0	\$2,036,637	=
		\$2,030,037	ΦО	ΦΟ	φ2,030,037	
Electronic Meters	NMWD	\$500,000	\$500,000	\$342,000		Radio Read Meters
	=	\$500,000	\$500,000	\$342,000	\$158,000	=
Engineering	PCE	\$230,000	\$230,000	\$165,000	\$65,000	Contract
Resident Inspector	NMWD	\$65,000	\$65,000		\$65,000	
Contingency		\$120,092	\$150,000		\$120,092	
Land & Rights	NMWD	\$10,000	\$10,000	<b>#0.004</b>	\$10,000	
Administrative & Legal		\$25,000	\$25,000	\$2,284	\$22,716	
	=	\$450,092	\$480,000	\$167,284	\$312,716	=
Interest		\$50,000	\$50,000	\$0	\$50,000	
Grand Totals	=	\$3,414,000	\$1,407,271	\$509,284	\$2,934,624	=

The debt will be serviced by a proposed rate increase.

Prepared By: Paul Cloud, Paul Cloud Engineering

## Reimbursibles - Administrative & Legal

Kip Mathis	\$240	Legal
Bid Listing	\$397	Paducah Blueprint
Advertisements	\$857	Paducah Sun
Advertisements	\$790	Tribune Courier

## Waterlines - Revision 4

Triffe Control   1	Item No.	Description	Est. Quantity	Units	Unit Price	Total Budget Price	Actual Quantity	Units	Unit Price	Total Actual Price	Balance
Triffe Control   1	1	Mobilization, Bonds, Insurance, and Demobilization	1	LS	\$94,000	\$94.000		LS	\$94,000	\$0	94,000
The Control	2										13,200
4	3	Traffic Control	1	LS	\$86,000	\$59,400		LS	\$86,000	\$0	59,400
Section   Comparison   Compar	4	flanges, connectors, etc., including testing and clean up; in place, complete and ready for use	0	LF	\$0	\$0		LF	\$0	\$0	0
6 Interpretation of the control of t	5	flanges, connectors, etc., including testing and clean up; in place, complete and ready for use	40,570	LF	\$27	\$1,095,390		LF	\$27	\$0	1,095,390
To fings, connectore, e.g., nucleiting besting and otherwise, in June 1997   Sept.   Sept.	6	flanges, connectors, etc., including testing and clean up; in place, complete and ready for use	20	LF	\$87	\$1,740		LF	\$87	\$0	1,740
20 ppt, with Code Luck Coupling, O-Ring and Spline, sometime and ready or sometime setting and clean up, in place, complete and ready or sometime setting and clean up, in place, complete and ready or sometime setting and clean up, in place, complete and ready or sometime setting and clean up, in place, complete and ready or sometime setting and clean up, in place, complete and ready or sometime setting and clean up, in place, complete and ready for use setting and clean up, in place, complete and ready or sometime, and clean up, in place, complete and ready or sometime, and clean up, in place, complete and ready for use setting applicable pinks, flanges, comedon, etc., and up, and the setting applicable pinks, flanges, comedon, etc., and up, and the setting applicable pinks, flanges, comedon, etc., and up, and the setting applicable pinks, flanges, comedon, etc., and up, and the setting applicable pinks, flanges, comedon, etc., and up, and the setting applicable pinks, flanges, comedon, etc., and up, and and	7	flanges, connectors, etc., including testing and clean up; in place, complete and ready for use	300	LF	\$43	\$12,900		LF	\$43	\$0	12,900
200 pal, with Cetra Luk Coupling, C-Ring and Spline, including applicable pinist, fample, connections, etc., 1,000   LF   \$38   \$38,160   LF   \$38   \$90   38,11	8	200 psi, with Cetra Lok Coupling, O-Ring and Spline, including applicable joints, flanges, connectors, etc., including testing and clean up; in place, complete and ready for use	0	LF	\$0	\$0		LF	\$0	\$0	0
- 200 pals with Cetra Lock Coupling, C-Rings and Spline, including spelicials (pints, Ringses, connections, etc., including spelicials) (pints, Ringses, connections, etc., installed by deficiental bore; in pitcher, complete and ready for use   1	9	200 psi, with Cetra Lok Coupling, O-Ring and Spline, including applicable joints, flanges, connectors, etc., including testing and clean up; in place, complete and ready	1,060	LF	\$36	\$38,160		LF	\$36	\$0	38,160
11   Including applicable prints. Barges, complete and ready for use   Section 1.5	10	<ul> <li>200 psi, with Cetra Lok Coupling, O-Ring and Spline, including applicable joints, flanges, connectors, etc., including testing and clean up; in place, complete and ready</li> </ul>	240	LF	\$55	\$13,200		LF	\$55	\$0	13,200
12   Including applicable joints, flanges, connectors, etc., installed by directional bore under a creek; in jalace, complete and ready for use   500   LF   \$75   \$36,000   LF   \$75   \$50   \$50   \$47,330   LF   \$75   \$50   LF   \$75   \$50   \$47,330   LF   \$75   \$50   \$50   LF   \$75	11	including applicable joints, flanges, connectors, etc., installed by directional bore; in place, complete and ready for use	0	LF	\$0	\$0		LF	\$0	\$0	0
13   flanges, connections, etc., including testing and clean up. in place, connections, etc., including testing and clean up. in place, or place, complete and ready for use   Section 15   27 × 17 × 10 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 16   Ze x 1.5 × 1.0 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 17 × 10 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 17 × 10 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete, and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete, and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete, and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete, and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete, and ready for use   Section 18 x MJ Feducier with Transition Gaskets; in place, complete, and ready for use   Section 18 x MJ Feducier with Transition	12	including applicable joints, flanges, connectors, etc., installed by directional bore under a creek; in place, complete and ready for use	480	LF	\$75	\$36,000		LF	\$75	\$0	36,000
Complete and ready for use	13	flanges, connectors, etc., including testing and clean up; in place, complete and ready for use	520	LF	\$91	\$47,320		LF	\$91	\$0	47,320
10   2 × 1.5 × 1.0 × 1	14		3	EA	\$875	\$2,625		EA	\$875	\$0	2,625
10	15		0	EA	\$0	\$0		EA	\$0	\$0	0
17	16		0	EA	\$0	\$0		EA	\$0	\$0	0
10 x 8 * - MJ x MJ Reducer with Transition Gaskets; in   0   EA   \$0   \$0   \$0   \$0   \$0   \$0   \$0   \$	17	6" x 4" - MJ x MJ Reducer with Transition Gaskets; in place,	3	EA	\$27	\$81		EA	\$27	\$0	81
19 6"x6"x2" - Tee; in place, complete and ready for use	18	10" x 8" - MJ x MJ Reducer with Transition Gaskets; in	0	EA	\$0	\$0		EA	\$0	\$0	0
20 6'x6'x3' - Tee; in place, complete and ready for use	19	· · · · · · · · · · · · · · · · · · ·	1	EA	\$910	\$910		EA	\$910	\$0	910
22   6"x6"x6" - Tee; in place, complete and ready for use   1   EA   \$635   \$635   EA   \$635   \$50   622	_										0
23   12" x 12" x 10" SS tapping tee, valve and box; in place, complete, and ready for use   1	21	6"x6"x4" - Tee; in place, complete and ready for use	12	EA	\$620	\$7,440		EA	\$620	\$0	7,440
20	22		1	EA	\$635	\$635		EA	\$635	\$0	635
Complete, and ready for use	23		1	EA	\$6,220	\$6,220		EA	\$6,220	\$0	6,220
25   complete, and ready for use   0   EA   \$0   \$0   EA   \$0   \$0   EA   \$0   \$0   EA   \$0   \$0   \$0   \$0   \$0   \$0   \$0   \$	24		0	EA	\$0	\$0		EA	\$0	\$0	0
26         8" x 8" x 8" SS Stapping tee, valve and box; in place, complete, and ready for use         1         EA         \$3,910         \$3,910         EA         \$3,910	25		0	EA	\$0	\$0		EA	\$0	\$0	0
27       8" x 8" x 6" SS tapping tee, valve and box; in place, complete, and ready for use       1       EA       \$3,115       \$3,115       EA       \$3,115       \$0       3,115         28       6" 6" 6" 6" SS tapping tee, valve and box; in place, complete, and ready for use       3       EA       \$2,925       \$8,775       EA       \$2,925       \$0       8,77         29       4" x 4" x 4"" St tapping tee, valve and box; in place, complete, and ready for use       3       EA       \$2,230       \$6,690       EA       \$2,230       \$0       6,689         30       4" Cap, Mechanical Joint Ductile Iron with Transition Gaskets, Thrust Block; in place, complete, ready for use       9       EA       \$280       \$2,520       EA       \$280       \$0       2,53         31       2" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.       0       EA       \$860       \$0       EA       \$860       \$0         32       "Gate Valve and box, including applicable fittings, in place, complete, and ready to use.       3       EA       \$1,120       \$3,360       EA       \$1,120       \$0       3,34         33       "Gate Valve and box, including applicable fittings, in place, complete, and ready to use.       8       EA       \$1,260       \$10,080       EA       \$1,260       \$0	26	8" x 8" x 8" SS tapping tee, valve and box; in place,	1	EA	\$3,910	\$3,910		EA	\$3,910	\$0	3,910
28       6" x 6"" S Stapping tee, valve and box; in place, complete, and ready for use       3       EA       \$2,925       \$8,775       EA       \$2,925       \$0       8,775         29       4" 4" x 4" S Stapping tee, valve and box; in place, complete, and ready for use       3       EA       \$2,230       \$6,690       EA       \$2,230       \$0       6,66         30       4" Cap, Mechanical Joint Ductile Iron with Transition Gaskets, Thrust Block; in place, complete, ready for use       9       EA       \$280       \$2,520       EA       \$280       \$0       \$2,53         31       2" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.       0       EA       \$860       \$0       EA       \$860       \$0         32       3" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.       3       EA       \$1,120       \$3,360       EA       \$1,120       \$0       3,34         34" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.       8       EA       \$1,260       \$10,08       EA       \$1,260       \$0       \$0       \$10,08         34" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.       8       EA       \$1,260       \$10,08       EA       \$1,260       \$0 <t< td=""><td>27</td><td>8" x 8" x 6" SS tapping tee, valve and box; in place,</td><td>1</td><td>EA</td><td>\$3,115</td><td>\$3,115</td><td></td><td>EA</td><td>\$3,115</td><td>\$0</td><td>3,115</td></t<>	27	8" x 8" x 6" SS tapping tee, valve and box; in place,	1	EA	\$3,115	\$3,115		EA	\$3,115	\$0	3,115
complete, and ready for use  29 4" x 4" x 4" x 5" St tapping tee, valve and box; in place, complete, and ready for use  30 4" Cap, Mechanical Joint Ductile Iron with Transition Gaskets, Thrust Block; in place, complete, ready for use  9 EA \$280 \$2,520 EA \$280 \$0 \$2,550  31 2" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  32 3" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  33 4" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  34 6" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  35 6" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  36 6" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  37 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  38 EA \$1,260 \$10,080 EA \$1,260 \$0 10,080 EA \$1,260 EA \$1	28	6" x 6" x 6"" SS tapping tee, valve and box; in place,	3	EA	\$2,925	\$8,775		EA	\$2,925	\$0	8,775
average complete, and ready to use  3	29	4" x 4" x 4"" SS tapping tee, valve and box; in place,	3	EA	\$2,230	\$6,690		EA	\$2,230		6,690
31 complete, and ready to use.  32 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  33 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  34 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  35 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  36 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  37 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  38 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  39 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  30 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  31 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  30 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  31 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  32 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  34 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  35 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  36 Gate Valve and box, including applicable fittings, in place, complete, and ready to use.	30	4" Cap, Mechanical Joint Ductile Iron with Transition	9	EA				EA			2,520
32 3" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  33 4" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  34 6" Gate Valve and box, including applicable fittings, in place, complete, and ready to use.  35 6" Gate Valve and box, including applicable fittings, in place, complete, and ready to use  36 8" Gate Valve and box, including applicable fittings, in place, complete, and ready to use  37 8" Gate Valve and box, including applicable fittings, in place, complete, and ready to use  38 8" Gate Valve and box, including applicable fittings, in place, complete, and ready to use  39 EA \$1,552 \$144,336 EA \$1,552 \$0 \$144,336 EA \$1,875 \$0 \$	31		0	EA	\$860	\$0		EA	\$860	\$0	0
33 4" Gate Valve and box, including applicable fittings, in place, complete, and ready to use  34 Gate Valve and box, including applicable fittings, in place, complete, and ready to use  35 Gate Valve and box, including applicable fittings, in place, complete, and ready to use  36 Gate Valve and box, including applicable fittings, in place, complete, and ready to use  37 Gate Valve and box, including applicable fittings, in place, complete, and ready to use  38 Gate Valve and box, including applicable fittings, in place, complete, and ready to use  39 EA \$1,552 \$144,336 EA \$1,552 \$0 \$144,336  40 Gate Valve and box, including applicable fittings, in place, complete, and ready to use  40 Gate Valve and box, including applicable fittings, in place, complete, and ready to use  41 Experience of the valve and box, including applicable fittings, in place, complete, and ready to use  42 Experience of the valve and box, including applicable fittings, in place, complete, and ready to use	32	3" Gate Valve and box, including applicable fittings, in place, complete, and ready to use .	3	EA	\$1,120	\$3,360		EA	\$1,120	\$0	3,360
34 6" Gate Valve and box, including applicable fittings, in place, complete, and ready to use  35 8" Gate Valve and box, including applicable fittings, in place, complete, and ready to use  36 10" Gate Valve and box, including applicable fittings, in place, complete, and ready to use  36 10" Gate Valve and box, including applicable fittings, in place, complete, and ready to use  36 25 8" Gate Valve and box, including applicable fittings, in place, complete, and ready to use  37 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20	33	4" Gate Valve and box, including applicable fittings, in place,	8	EA	\$1,260	\$10,080		EA	\$1,260	\$0	10,080
35 8" Gate Valve and box, including applicable fittings, in place, complete, and ready to use  36 10" Gate Valve and box, including applicable fittings, in place, complete, and ready to use  36 2 Exp bydrants pay with 5" Gate Valve and applicable fittings.  Exp bydrants pay with 5" Gate Valve and applicable fittings.	34	6" Gate Valve and box, including applicable fittings, in place,	93	EA	\$1,552	\$144,336		EA	\$1,552	\$0	144,336
36 10" Gate Valve and box, including applicable fittings, in place, complete, and ready to use Explored purpose and produced by the second place of the second place o	35	8" Gate Valve and box, including applicable fittings, in place,	1	EA	\$1,875	\$1,875		EA	\$1,875	\$0	1,875
Fire hydrants, new with 6" Cate Valve and applicable fittings	36	10" Gate Valve and box, including applicable fittings, in	2	EA	\$2,700	\$5,400		EA	\$2,700	\$0	5,400
37 in place, complete, and ready for use  18 EA \$5,050 \$90,900 EA \$5,050 \$0 90,90	37	Fire hydrants, new with 6" Gate Valve and applicable fittings,	18	EA	\$5,050	\$90,900		EA	\$5,050	\$0	90,900

	Totals	Totals			\$2,036,637				\$0	2,036,637
53	6" Ductile Iron Pipe, 350 psi, including applicable joints, flanges, connectors, etc., including testing and clean up; in place, complete and ready for use	140	LF	\$116	\$16,240	0	LF	\$116	\$0	16,240
	Reconnect existing far side meter with new service line from new main to meter bored under roadway (not encased) including applicable fittings; in place, complete and ready for use	105	EA	\$0	\$0		EA	\$0	\$0	(
51	Reconnect existing near side meter with new service line to new main including applicable fittings; in place, complete and ready for use	80	EA	\$0	\$0		EA	\$0	\$0	C
50	Inline Control Valve, 8" Actuated Butterfly Valve, with applicable fittings, Concrete Vault with Access, Sump Pump, Discharge line, electrical connection, electrical conduit, wire and terminations; in place, complete and ready to use	0	EA	\$0	\$0		EA	\$0	\$0	C
49	Construction Staking, Layout, and Record Survey and Drawings	1	LS	\$26,000	\$26,000		LS	\$26,000	\$0	26,000
48	Final Cleanup of affected route (Exclude Bores and paved areas)	1	LF	\$100	\$100		LF	\$100	\$0	100
47	Uncased driveway bore, all line sizes, in place, complete, ready for use	870	LF	\$100	\$87,000		LF	\$100	\$0	87,000
46	Steel cased Highway bore,10" CS Casing with End Seals and Spacers / Isolators (excluding 6" carrier); in place, complete and ready for use	650	LF	\$142	\$92,300		LF	\$142	\$0	92,300
45	Steel cased Highway bore,12" CS Casing with End Seals and Spacers / Isolators (excluding 6" carrier); in place, complete and ready for use	240	LF	\$161	\$38,640		LF	\$161	\$0	38,640
44	Steel cased Highway bore,16" CS Casing with End Seals and Spacers / Isolators (excluding 10" carrier); in place, complete and ready for use	270	LF	\$150	\$40,500		LF	\$150	\$0	40,500
43	#12 AWG Copper Insulated Tracer Wire, THHN, with applicable connectors; in place, complete, and ready for use	43,610	LF	\$0.25	\$10,903		LF	\$0.25	\$0	10,903
42	Automatic Air Release Valve Assembly. This includes a 1" corporation stop and saddle clamp, 1" brass trim gate valve with handle extension, and an APCO Air Release Valve Model No. 75-1". The assembly will be installed in a 24" diameter concrete valve box with lid. Include applicable fittings; in place, complete and ready to use.	1	EA	\$3,812	\$3,812		EA	\$3,812	\$0	3,812
41	Flush hydrant, existing hydrant to be removed	0	EA	\$0	\$0		EA	\$0	\$0	,
39 40	Flush hydrant, existing relocated with new Gate Valve and applicable fittings, in place, complete, and ready for use  Fire hydrant, existing hydrant to be removed	3	EA EA	\$4,500 \$400	\$4,500 \$1,200		EA EA	\$4,500 \$400	\$0 \$0	4,500 1,200
38	Fire hydrants, existing relocated with new 6" Gate Valve and applicable fittings, in place, complete, and ready for use	2	EA	\$2,630	\$5,260		EA	\$2,630	\$0	5,260