Cost Proposal

Three project fees are included herein for your consideration, based on the options described in our proposal and summarized below.

Option 3 includes added items that were identified in our multiple site visits and discussions with the Town but were not requested in the RFP. The additional elements in Option 3 are important to the operation and expansion of the WTP. Option 3 develops a clear expansion and replacement program that is flexible based on growth and budget constraints. Additional items listed in Option 3 may be removed from the scope if they are determined not necessary to meet the Town's goals.

Option 3 also includes an optional parallel series of tasks to help give your operators some breathing room for the peak demand season of 2021.

	Basis of	Fee Summary								
Approach	Option 1 Option 2 Option 3									
Process Unit	Granular Media Filtration Expansion	Membrane Filtration Expansion	Comprehensive Site Master Plan							
Lonetree Pump Station & Pipeline		Remain as is								
Town Lake Pump Station		Remain as is								
Raw Water Tank										
Chemical Storage	Remain in existing location	Add storage to the n	new Membrane Building							
Pretreatment Capacity	Existing D	AF 10 MGD	Convert to SAF 12.5 MGD							
Filtration	Expand existing Filter Building with 3 new GMF	Add new Membrane	e Building with 3 trains							
Taste & Odor Control	upgrades at Lonetree	ystem. Town implement and Town Lake outside sion project.	Implement multi-phase approach. Lease to own GAC contactors in Membrane Building. Optimize T&O removal with SAF conversion. Future flexibility for T&O control.							
Disinfection Compliance	Modify existing	GST with baffles	Add new Disinfection Contact Basin sized for ultimate flows.							
Treated Water Storage	Use exis	ting GST	Convert GST to distribution storage							
Distribution Pump Station	·	d pump station with 3 nps.	New at-grade pump station with vertical turbine pumps above a new DCB							
Backwash Supply	Gravity from existing GST	Backwash from	distribution system							
Backwash Waste	Modify existing pond footprint and recycle	No c	change							

	pump station for Filter							
	Building expansion							
	Use existing electrical	New electrical service for Membrane Building, DCB						
Electrical System	service. Upgrade site	and DPS. Add second diesel generator. Upgrade						
	lighting and security.	site lighting and security						
	Scale existing system							
	for GMF and DPS	Add control system nodes for Membrane Building						
SCADA System	expansion by Town's							
	existing SCADA	T&O system, DCB and new DPS.						
	contractor							

Best Value Project

Our initial analysis indicates that Options 1 and 2 result in similar estimated construction costs but limit the future flexibility and operational robustness provided by Option 3.

Town of Johnstown

Water Treatment Plant Expansion from 5 to 10 mgd

Work Breakdown Structure and Fee Schedule - Option 1 GMF Expansion

Activity	Project Manager	Quality Control	Lead Process	Process	Structural	Architectural	Civil	Mechanical	Electrical, Instrumentation & Controls	Construction	CAD / Designer	- BMcD Total Labor		Evnonces	Expenses Sub-	
	Pugh	Schaefer	Kinser	Rachelson Huth	Kienholz	Lang Dalglish	Tessitore	Olsen	Johnson Patwari	Herrington Other	Ellis			Consul		onsultants Total Cost
TASK SERIES 100 - Project Initiation & Coordination	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Cost	Direct	Cost	
101 - Project Kick Off Meeting	4		4					1				8	2024	\$80		\$ 2,104
102 - Bi-Weekly Review Meetings	26		4									26	\$6,552	\$260		\$ 6,812
103 - Project, Risk and Resource Management, Schedule and Budget Controls	110											20	\$27,720	\$1,110		\$ 28,830
Sub-Total Series 100	140	0	4	0	0	0	0	0	0	0	0	34	\$36,296	\$1,450	\$0	\$37,746
TASK SERIES 200 - Review Existing Data & Basis of Design													400,200	\$1,100	ų,	401,110
201 - Review Existing Records	2		4	8								14	\$3,234	\$130		\$ 3,364
202 - Develop Permitting Matrix	2			4								6	\$1,361	\$50		\$ 1,411
203 - Desktop Analysis ¹	2	1	2	12	2				2		16	37	\$6,296	\$250		\$ 6,546
204 - Workshop 1 - Filter Options Selection	4		4									8	\$2,024	\$80		\$ 2,104
205 - Water Characterization ²	2		4	8								14	\$3,234	\$130		\$ 3,364
206 - Pretreatment Capacity Analysis ³												0	\$0	\$0		\$ -
207 - Prepare 2 Layout Options for Selected Filter Type	2		4	12							16	34	\$5,658	\$230		\$ 5,888
208 - Taste & Odor Control Option Selection ⁴												0	\$0	\$0		\$ -
209 - Workshop 2 - Alternative Design Comparison ⁵	4		4									8	\$2,024	\$80		\$ 2,104
210 - Prepare Conceptual Design ⁶	4		8	30	8	6	12	2	20		40	130	\$23,245	\$930		\$ 24,175
211 - Workshop 3 - Review Conceptual Design	2		2	2								6	\$1,440	\$60		\$ 1,500
212 - Basis of Design Report ⁷	4	2	4	40	4	4	8	4	8	4	8	90	\$18,630	\$750		\$ 19,380
Sub-Total Series 200	28	3	36	116	14	10	20	6	30	4	80	347	\$67,145	\$2,690	\$0	\$69,835
TASK SERIES 300 - Preliminary Design 30%										_	<u> </u>					
301 - Develop Preliminary Design 30%	16	2	24	90	60	40	32	16	40		60	380	\$75,950	\$3,040		\$ 78,990
302 - Topographic Survey							8					8	\$1,408	\$60	\$11,385	\$ 12,853
303 - Geotechnical Investigations					8							8	\$1,920	\$80	\$6,567	\$ 8,567
304 - Workshop 4 - Review Preliminary Design and Phasing	2		2						2			6	\$1,426	\$60		\$ 1,486
305 - Workshop 5 - Delivery Option Determination	2	2								2		6	\$1,516	\$60		\$ 1,576
Sub-Total Series 300	20	4	26	90	68	40	40	16	42	2	60	408	\$82,220	\$3,300	\$17,952	\$103,472
TASK SERIES 400 - Detailed Design 60%	10		20	1.10	00	40	10	00			100	200	#110.050	0.4.750		A 100 100
401 - Prepare 60% Design	16	2	32	140	90	48	40	32	80	8	120	608	\$118,658	\$4,750	# 10.000	\$ 123,408
402 - Utility Locates & Test Holes ⁸	0		0	8					0			8	\$1,714	\$70	\$10,000	\$ 11,784 \$ 1,486
403 - Review Meeting 1 - 60% Design	12	2	4	04	4	4	24	2	4		8	6 88	\$1,426 \$17,753	\$60 \$710		\$ 1,486 \$ 18,463
404 - Initial Permitting Support ⁹ Sub-Total Series 400	30	4	38	24 172	94	52	64	34	86	8	128	710	\$17,753 \$139,551	\$5,590	\$10,000	\$155,141
TASK SERIES 500 - Optimize Operations	30	4	30	172	94	52	04	34	00	0	120	710	\$139,551	\$5,590	\$10,000	\$155,141
501 - Identify Optimization Tasks								T				0	\$0	\$0		\$ -
502 - Workshop 6 - Operations Investigation												0	\$0	\$0		\$ -
503 - WTP Operations Support												0	\$0	\$0		\$ -
504 - Procurement & Installation Support												0	\$0	\$0		\$ -
Sub-Total Series 500	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0
	1										<u> </u>					, ·
Project Subtotals - Design Development to 60%	218	11	104	378	176	102	124	56	158	14	268	1499	\$325,212	\$13,030	\$27,952	\$366,194
TASK SERIES 600 - Final Design																
601 - Prepare 90% Design	20	2	32	120	80	32	40	20	100	8	120	574	\$111,150	\$4,450		\$ 115,600
602 - Review Meeting 2 - 90% Design	2		2	4.5					-			4	\$1,012	\$40		\$ 1,052
603 - Final Permitting Support	8			16		24	4.5	_	60		40	48	\$10,454	\$420	-	\$ 10,874
604 - Prepare Bid Documents	2	2	4	20	16	8	12	8	32		40	144	\$26,220	\$1,050	1	\$ 27,270
605 - Review Meeting 3 - Bid Documents	2		2	450	60	64	F2		400		400	4	\$1,012	\$40	60	\$ 1,052
Sub-Total Series 600	34	4	40	156	96	64	52	28	132	8	160	774	\$149,848	\$6,000	\$0	\$155,848
TASK SERIES 700 - Bid Phase Support								1	1			2	¢ E04	\$00		¢ 504
701 - Pre-Bid Meeting 702 - Bid Phase Support	2 4	-		30	2	A	2	2	6			50	\$504 \$10,780	\$20 \$430	-	\$ 524 \$ 11,210
702 - Bid Phase Support 703 - Review Bids	4	-		30	2	4	۷		6			4	\$10,780	\$430 \$40	-	\$ 11,210
Sub-Total Series 700	10	0	0	30	2	4	2	2	6	0	0	56	\$1,008 \$12,292	\$490	\$0	\$ 1,048
						1				1	1		i e			1
Project Subtotals - Final Design & Bid Phase Support	44	4	40	186	98	68	54	30	138	8	160	830	\$162,140	\$6,490	\$0	\$168,630
Project Subtotals	262	15	144	564	274	170	178	86	296	22	428	2329	\$487,352	\$19,520	\$27,952	\$534,824
Project Total																\$534,824

- 1. Review data provided by Town (record drawings, operating records). Conduct field visual assessment of existing assets to determine if assets suitable to integrate in expanded WTP.
- 2. Town to provide population projections as basis for future water demand calculations. Use existing water quality data.
- 3. Maintain current pretreatment capacity of 10 MGD. Perform desktop analysis to confirm anticipated removal percentages.

 4. Maintain existing PAC system, add ultrasonic buoy to Town Lake. No new T&O control process.
- 5. Select process train for conceptual design.
- 6. Resolve layout on existing WTP site, estimate construction cost, schedule and phases.
- 7. Document decisions and design criteria, based on feedback at Workshop 3.
- 8. Includes allowance for 10 utility test holes at \$1,000 each.
- 9. Prepare initial submittals to CDPHE Water Quality Division, Town Planning and Building Permit, Weld County.

Town of Johnstown

Water Treatment Plant Expansion from 5 to 10 mgd

Work Breakdown Structure and Fee Schedule - Option 2 Membrane Filtration

2		Project Manager	Quality Control	Lead Process	Process	Structural	Architectural	Civil	Mechanical	Electrical, Instrumentation 8	Construction	CAD / Designer					
Part	Activity	Pugh	Schaefer	Kinser		Kienholz		Tessitore	Olsen	Johnson		Ellis			Expenses		Total Cost
Security S		Houre	Houre	Hours		Houre	, and the second	Houre	Houre			Hours	Houre	Cost	Direct	Cost	-
Procedure Process	TASK SERIES 100 - Project Initiation & Coordination	Tiours	riours	riours	Tiours	riouis	riours	Tiours	riours	Tiours	riours	riours	riours	Cost	Direct	Cost	
28 Ages files from the service temperature throughout the service temperature throughout the service temperature throughout the service temperature throughout the service temperature through the service temperature throughout the service temperature through the service temperature throughout throughout throughout throughout the service temperature throughout througho	101 - Project Kick Off Meeting	4		4									8	2024	\$80		\$ 2,104
Second comment 19	102 - Bi-Weekly Review Meetings	24											24	\$6,048	\$240		\$ 6,288
All Control State Process Control State State	103 - Project, Risk and Resource Management, Schedule and Budget Controls	100												\$25,200	\$1,010		\$ 26,210
Process process 2	Sub-Total Series 100	128	0	4	0	0	0	0	0	0	0	0	32	\$33,272	\$1,330	\$0	\$34,602
Security Administration 2	TASK SERIES 200 - Review Existing Data & Basis of Design																
Stronger Fig. Fig	201 - Review Existing Records	2		4	8								14	\$3,234	\$130		\$ 3,364
12	202 - Develop Permitting Matrix	2			4								6	\$1,361	\$50		\$ 1,411
15 March Research Control	203 - Desktop Analysis ¹	2	1	2	12	2				2		16	37	\$6,296	\$250		\$ 6,546
18. Produce and Capacity Analysis	204 - Workshop 1 - Filter Options Selection	4		4									8	\$2,024	\$80		\$ 2,104
P. Primer 1. Primer 2	205 - Water Characterization ²	2		4	8								14	\$3,234	\$130		\$ 3,364
18. Trans. A processor of the processo	206 - Pretreatment Capacity Analysis ³												0	\$0	\$0		*
18. 18.	207 - Prepare 2 Layout Options for Selected Filter Type	2		4	12							16	34				\$ 5,888
19. Proping Conceptual Design 4 8 30 9 0 12 2 24 46 124 121 120 180 8 24 140 140 140 150 1	208 - Taste & Odor Control Option Selection ⁴												0				T
11 Windows Communication Programs 2 2 2 4 4 4 4 8 4 8 6 10 10 10 10 10 10 10	209 - Workshop 2 - Alternative Design Comparison ⁵	4		4									8	\$2,024	\$80		
12-Based Design Royal 4 2 4 40 4 4 9 4 6 4 6 90 91 11600 370 1 11600 170 1 11600 170 1 11600 170 1 11600 170 1 11600 170 1 11600 170 1 11600 170 1 11600 170 1 11600 170 1 11600 170 1 11600 170 1 11600 170 1 11600 1 1 1 1 1 1 1 1 1	210 - Prepare Conceptual Design ⁶	4		8	20	8	6	12	2	24		40	124	\$21,930	\$880		\$ 22,810
The Front Fire Section 28 3 36 108 14 10 20 6 31 4 60 361 385,500 32,400 30 384,700 30 3	211 - Workshop 3 - Review Conceptual Design	2		2	2								6	\$1,440	\$60		\$ 1,500
March Selfent Sub- Free Informating Design 2009 19 2 2 7 7 4 4 32 11 4 4 4 4 5 5 5 5 5 5	212 - Basis of Design Report ⁷	4	2	4	40	4	4	8	4	8	4	8	90	\$18,630	\$750		\$ 19,380
100 Designation 12 2 20 70 40 43 32 12 43 40 38 \$62,000 \$8,440 \$1,450	Sub-Total Series 200	28	3	36	106	14	10	20	6	34	4	80	341	\$65,830	\$2,640	\$0	\$68,470
100 Total property Standy	TASK SERIES 300 - Preliminary Design 30%																
103	301 - Develop Preliminary Design	12	2	20	70	40	40	32	12	40		40	308	\$62,006	\$2,480		\$ 64,486
19	302 - Topographic Survey							8					8	\$1,408	\$60	\$11,385	\$ 12,853
10 Marchago 10 10 10 10 10 10 10 1	303 - Geotechnical Investigations					8							8	\$1,920	\$80	\$6,567	\$ 8,567
16 Workshop 5 Delivery Option Decommandmen 2 2	304 - Workshop 4 - Review Preliminary Design and Phasing	2		2						2			6	\$1,426	\$60		\$ 1,486
Ass. Settings 400: Desirated Design (6%) 16 2 24 120 80 40 32 32 80 8 100 514 510,785 54,030 5 104,780 20 : Utility Londers & Test Holefol 1 2 2 4 24 4 2 2 4 8 8 100,785 54,030 5 11,781 30 : Indian Hornitry Support 12 2 4 24 4 2 4 8 8 100,785 54,030 5 14,880 30 : Indian Hornitry Support 12 2 4 24 4 2 4 8 8 108 51,120 570 5 14,980 30 : Indian Hornitry Support 12 2 4 24 4 24 4 2 4 8 8 108 106,100 570 5 14,980 30 : Indian Hornitry Support 10 10 10 10 10 10 10 1	305 - Workshop 5 - Delivery Option Determination	2	2								2		6	\$1,516	\$60		\$ 1,576
101 Fire Propriet Office Design 101 2	Sub-Total Series 300	16	4	22	70	48	40	40	12	42	2	40	336	\$68,276	\$2,740	\$17,952	\$88,968
122 - Unity Coates & Tent Hotels*	TASK SERIES 400 - Detailed Design 60%																
1.50 1.50	401 - Prepare 60% Design	16	2	24	120	80	40	32	32	60	8	100	514	\$100,768	\$4,030		\$ 104,798
104 - Initial Permitting Support 12 2 4 24 4 2 4 2 4 8 8 8 18 40 5740 8 8 100 5740 8 8 100 5740 8 8 100 5740 8 100	402 - Utility Locates & Test Holes ⁸				8								8	\$1,714	\$70	\$10,000	\$ 11,784
20th - Total Series 400 30 4 30 152 84 64 36 34 66 8 108 616 \$122,316 \$4,900 \$10,000 \$197,216	403 - Review Meeting 1 - 60% Design	2		2						2			6	\$1,426	\$60		\$ 1,486
ASAS SERIES 600 - Optimize Operations	404 - Initial Permitting Support ⁹	12	2	4	24	4	24	4	2	4		8	88	\$18,409	\$740		\$ 19,149
100 - Hemistry Optimization Tasks	Sub-Total Series 400	30	4	30	152	84	64	36	34	66	8	108	616	\$122,316	\$4,900	\$10,000	\$137,216
102 Workshop 6 - Operations Investigation	TASK SERIES 500 - Optimize Operations																
103-WTP Operations Support	501 - Identify Optimization Tasks												0	\$0	\$0		\$ -
104 - Programent & Installation Support 105	502 - Workshop 6 - Operations Investigation												0	\$0	\$0		\$ -
Sub-Total Series 500 0 0 0 0 0 0 0 0 0	503 - WTP Operations Support												0	\$0	\$0		\$ -
Project Subtotals - Design Development to 60% 202 11 92 328 146 114 96 52 142 14 228 1325 \$289,694 \$11,610 \$27,952 \$329,256 \$285,00 Final Design	504 - Procurement & Installation Support												0	\$0	\$0		\$ -
ASK SERIES 600 - Final Design 16 2 24 90 60 24 54 36 120 8 100 534 \$100,357 \$4,130 \$107,487 \$02. Review Meeting 2 - 90% Design 2 2 2 4 20 16 8 12 8 32 40 144 \$26,220 \$1,052 \$10,874 \$100. Fersper Bid Documents 2 2 2 4 20 16 8 12 8 32 40 144 \$26,220 \$1,050 \$2,770 \$1,052 \$10,874 \$1,002 \$1,052 \$1	Sub-Total Series 500	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0
ASK SERIES 600 - Final Design 16 2 24 90 60 24 54 36 120 8 100 534 \$100,357 \$4,130 \$107,487 \$02. Review Meeting 2 - 90% Design 2 2 2 4 20 16 8 12 8 32 40 144 \$26,220 \$1,052 \$10,874 \$100. Fersper Bid Documents 2 2 2 4 20 16 8 12 8 32 40 144 \$26,220 \$1,050 \$2,770 \$1,052 \$10,874 \$1,002 \$1,052 \$1	Project Subtotale Decign Development to 600/	202	-11	02	220	1/6	11/	06	52	1/12	1/1	220	1225	£200 604	¢11 610	¢27.052	\$220.256
16 2 24 90 60 24 54 36 120 8 100 534 \$103,357 \$4,130 \$107,487		202	11	92	320	140	114	90	52	142	14	220	1323	φ209,094	\$11,010	\$21,95Z	\$329,230
102 Review Meeting 2 90% Design 2 2 2 3 4 51,012 \$40 \$1,052		1 :-	_	1			1 0: 1			1	_	1 10-		010	A4 : = =		
103 - Final Permitting Support 8			2		90	60	24	54	36	120	8	100		1. 1	1.1		+ · · · · · · · · · · · · · · · · · · ·
104 - Prepare Bid Documents 2 2 2 4 20 16 8 12 8 32 40 144 \$26,220 \$1,050 \$27,270 \$1,050 \$27,270 \$1,050 \$1,	602 - Review Meeting 2 - 90% Design			2					1			1					
Signature Sign																	
Sub-Total Series 600 30 4 32 126 76 56 66 44 152 8 140 734 \$142,056 \$5,680 \$0 \$147,736 \$147,7		_	2		20	16	8	12	8	32		40					
ASK SERIES 700 - Bid Phase Support 2 5504 520 524									ļ								
Columbde		30	4	32	126	76	56	66	44	152	8	140	734	\$142,056	\$5,680	\$0	\$147,736
702 - Bid Phase Support 4 30 2 4 2 2 6 50 \$10,780 \$430 \$ 11,210 703 - Review Bids 4 50 \$10,008 \$40 \$1,008 \$40 \$1,008 Sub-Total Series 700 10 0 0 30 2 4 2 2 6 0 0 56 \$12,292 \$490 \$0 \$12,782 Project Subtotals - Final Design & Bid Phase Support 40 4 32 156 78 60 68 46 158 8 140 790 \$154,348 \$6,170 \$0 \$160,518 Project Subtotals 242 15 124 484 224 174 164 98 300 22 368 2115 \$444,042 \$17,780 \$27,952 \$489,774	· · · · · · · · · · · · · · · · · · ·				ı												
1,048 1,008 1,04	·			ļ			ļ		1								
Sub-Total Series 700 10 0 0 30 2 4 2 2 6 0 0 56 \$12,292 \$490 \$0 \$12,782 Project Subtotals - Final Design & Bid Phase Support 40 4 32 156 78 60 68 46 158 8 140 790 \$154,348 \$6,170 \$0 \$160,518 Project Subtotals 242 15 124 484 224 174 164 98 300 22 368 2115 \$444,042 \$17,780 \$27,952 \$489,774			ļ		30	2	4	2	2	6						ļ	
Project Subtotals - Final Design & Bid Phase Support 40 4 32 156 78 60 68 46 158 8 140 790 \$154,348 \$6,170 \$0 \$160,518 Project Subtotals 242 15 124 484 224 174 164 98 300 22 368 2115 \$444,042 \$17,780 \$27,952 \$489,774									<u> </u>				•				
Project Subtotals 242 15 124 484 224 174 164 98 300 22 368 2115 \$444,042 \$17,780 \$27,952 \$489,774		10	0	0	30	2	4	2	2	6	0	0		\$12,292	\$490	\$0	\$12,782
	Project Subtotals - Final Design & Bid Phase Support	40	4	32	156	78	60	68	46	158	8	140	790	\$154,348	\$6,170	\$0	\$160,518
Project Total \$489,774	Project Subtotals	242	15	124	484	224	174	164	98	300	22	368	2115	\$444,042	\$17,780	\$27,952	\$489,774
	Project Total																\$489,774

- 1. Review data provided by Town (record drawings, operating records). Conduct field visual assessment of existing assets to determine if assets suitable to integrate in expanded WTP.
- 2. Town to provide population projections as basis for future water demand calculations. Use existing water quality data.
- 3. Maintain current pretreatment capacity of 10 MGD. Perform desktop analysis to confirm anticipated removal percentages.

 4. Maintain existing PAC system, add ultrasonic buoy to Town Lake. No new T&O control process.
- 5. Select process train for conceptual design.
- 6. Resolve layout on existing WTP site, estimate construction cost, schedule and phases.
- 7. Document decisions and design criteria, based on feedback at Workshop 3.
- 8. Includes allowance for 10 utility test holes at \$1,000 each.
- 9. Prepare initial submittals to CDPHE Water Quality Division, Town Planning and Building Permit, Weld County.

Town of Johnstown

Water Treatment Plant Expansion from 5 to 10 mgd

Work Breakdown Structure and Fee Schedule - Option 3 Comprehensive Site Mater Plan

	Project Manager	Quality Control	Lead Process	Process	Structural	Architectural	Civil	Mechanical	Electrical, Instrumentation & Controls	Construction	CAD / Designer	BMcD		D Sub-		
Activity	Pugh	Schaefer	Kinser	Rachelson Huth	Kienholz	Lang Dalglish	Tessitore	Olsen	Johnson Patwari	Herrington Other	Ellis	Tot	al Labor	Expenses	Consultants	s Total Cost
	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Cost	Direct	Cost	
TASK SERIES 100 - Project Initiation & Coordination	4		4		I	1		T				0	0004	#00	ı	¢ 0.104
101 - Project Kick Off Meeting 102 - Bi-Weekly Review Meetings	30		4									8 30	2024 \$7,560	\$80 \$300		\$ 2,104 \$ 7,860
103 - Project, Risk and Resource Management, Schedule and Budget Controls	120											120	\$30,240	\$1,210		\$ 31,450
Sub-Total Series 100	154	0	4	0	0	0	0	0	0	0	0	158	\$39,824	\$1,590	\$0	\$41,414
TASK SERIES 200 - Review Existing Data & Basis of Design	134	0				U				U	0	130	φ39,02 4	\$1,550	φ0	\$41,414
201 - Review Existing Records	4		8	16				1			1	28	\$6,467	\$260	<u> </u>	\$ 6,727
202 - Develop Permitting Matrix	2			4								6	\$1,361	\$50		\$ 1,411
203 - Desktop Analysis ¹	4	1	8	24	4				4		16	61	\$11,788	\$470		\$ 12,258
204 - Workshop 1 - Filter Options Selection	4		4		·							8	\$2,024	\$80		\$ 2,104
205 - Water Characterization ²	4		12	16								32	\$7,483	\$300	\$10,000	\$ 17,783
206 - Pretreatment Capacity Analysis ³	4		24	40								68	\$15,672	\$630		\$ 16,302
207 - Prepare 2 Layout Options for Selected Filter Type	4		4	24							16	48	\$8,733	\$350		\$ 9,083
208 - Taste & Odor Control Option Selection ⁴	12		16	32								60	\$13,942	\$560		\$ 14,502
209 - Workshop 3 - Taste & Odor Control Option Selection	4		4	4								12	\$2,881	\$120		\$ 3,001
210 - Disinfection & Distribution Pump Station Options Development ⁵	12		24	40	8				8			92	\$21,262	\$850		\$ 22,112
211 - Workshop 4 - Alternative Design Comparison ⁶	4		4									8	\$2,024	\$80		\$ 2,104
212 - Prepare Conceptual Design ⁷	8		16	60	16	8	32	4	40		40	224	\$43,142	\$1,730		\$ 44,872
213 - Prepare WTP Siting Options, Construction & Prioritization Phases ⁸	4		8	24	4				4	8		52	\$12,000	\$480		\$ 12,480
214 - Workshop 5 - Review Conceptual Design	4		4	4								12	\$2,881	\$120		\$ 3,001
212 - Basis of Design Report ⁹	4	2	4	40	4	4	8	4	8	4	8	90	\$18,630	\$750		\$ 19,380
Sub-Total Series 200	78	3	140	328	36	12	40	8	64	12	80	801	\$170,290	\$6,830	\$10,000	\$187,120
TASK SERIES 300 - Preliminary Design 30%																
301 - Develop Preliminary Design	32	2	40	180	80	40	24	32	80		120	630	\$124,372	\$4,970		\$ 129,342
302 - Topographic Survey							8					8	\$1,408	\$60	\$11,385	\$ 12,853
303 - Geotechnical Investigations					8							8	\$1,920	\$80	\$6,567	\$ 8,567
304 - Workshop 4 - Review Preliminary Design and Phasing	4		4						2			10	\$2,438	\$100		\$ 2,538
305 - Workshop 5 - Delivery Option Determination	2	2								2		6	\$1,516	\$60		\$ 1,576
306 - Preliminary Design Report	4	2	16	60	8	8	12	4	8	8		130	\$28,693	\$1,150		\$ 29,843
Sub-Total Series 300	42	6	60	240	96	48	44	36	90	10	120	792	\$160,346	\$6,420	\$17,952	\$184,718
TASK SERIES 400 - Detailed Design 60%			T		1	1		•	1		•		T	1	1	1
401 - Prepare 60% Design	32	2	40	180	120	60	40	40	100	8	160	782	\$152,804	\$6,110		\$ 158,914
402 - Utility Locates & Test Holes ¹⁰				2								2	\$428	\$20	\$20,000	\$ 20,448
403 - Review Meeting 1 - 60% Design	2		2						2			6	\$1,426	\$60		\$ 1,486
404 - Initial Permitting Support ¹¹	12	2	4	24	4	4	4	2	4		8	68	\$14,233	\$570	***	\$ 14,803
Sub-Total Series 400	46	4	46	206	124	64	44	42	106	8	168	858	\$168,891	\$6,760	\$20,000	\$195,651
TASK SERIES 500 - Optimize Operations		0		0.4	ı	1		1				40	#10.500	0.100	ı	10.040
501 - Identify Optimization Tasks 502 - Workshop 6 - Operations Investigation	8	2	8	24					4			46 12	\$10,520 \$2,881	\$420		\$ 10,940 \$ 3,001
i i	4		4 32	40									· ' '	\$120		\$ 3,001
503 - WTP Operations Support	4		32 8		10			0	20			76	\$17,704	\$710		\$ 21,210
504 - Procurement & Installation Support Sub-Total Series 500	20	2	52	24 92	16 16	0	0	8	32 36	0	0	92 226	\$20,390 \$51,495	\$820 \$2,070	\$0	\$ 21,210
						0		8	†	0	0					
Project Subtotals - Design Development to 60%	340	15	302	866	272	124	128	94	296	30	368	2835	\$590,847	\$23,670	\$47,952	\$662,469
TASK SERIES 600 - Final Design																
601 - Prepare 90% Design	24	2	32	140	100	40	32	24	80	8	160	642	\$122,164	\$4,890		\$ 127,054
602 - Review Meeting 2 - 90% Design	2		2									4	\$1,012	\$40		\$ 1,052
603 - Final Permitting Support	8			16		24						48	\$10,454	\$420		\$ 10,874
604 - Prepare Bid Documents	4	2	8	30	16	8	12	8	32		40	160	\$29,882	\$1,200		\$ 31,082
605 - Review Meeting 3 - Bid Documents	2		2									4	\$1,012	\$40		\$ 1,052
	40	4	44	186	116	72	44	32	112	8	200	858	\$164,524	\$6,590	\$0	\$171,114
Sub-Total Series 600											,				1	L
TASK SERIES 700 - Bid Phase Support								•	1							\$ 524
TASK SERIES 700 - Bid Phase Support 701 - Pre-Bid Meeting	2											2	\$504	\$20		
TASK SERIES 700 - Bid Phase Support 701 - Pre-Bid Meeting 702 - Bid Phase Support	4			30	2	4	2	2	6			50	\$10,780	\$430		\$ 11,210
TASK SERIES 700 - Bid Phase Support 701 - Pre-Bid Meeting 702 - Bid Phase Support 703 - Review Bids	4											50 4	\$10,780 \$1,008	\$430 \$40		\$ 1,048
TASK SERIES 700 - Bid Phase Support 701 - Pre-Bid Meeting 702 - Bid Phase Support 703 - Review Bids Sub-Total Series 700	4 4 10	0	0	30	2	4	2	2	6 6	0	0	50 4 56	\$10,780 \$1,008 \$12,292	\$430 \$40 \$490	\$0	\$ 1,048 \$12,782
TASK SERIES 700 - Bid Phase Support 701 - Pre-Bid Meeting 702 - Bid Phase Support 703 - Review Bids	4	0 4	0 44							0 8	0 200	50 4	\$10,780 \$1,008	\$430 \$40	\$0 \$0	\$ 1,048
TASK SERIES 700 - Bid Phase Support 701 - Pre-Bid Meeting 702 - Bid Phase Support 703 - Review Bids Sub-Total Series 700	4 4 10			30	2	4	2	2	6		t - t	50 4 56	\$10,780 \$1,008 \$12,292	\$430 \$40 \$490	·	\$ 1,048 \$12,782

Notes:

- 1. Review data provided by Town (record drawings, operating records). Conduct field visual assessment of existing assets to determine if assets suitable to integrate in expanded WTP.
- 2. Town to provide population projections as basis for future water demand calculations. Use existing water quality data and conduct additional lab analysis to characterize water quality. Includes \$10,000 allowance for laboratory costs.

- Convert existing DAF to SAF. Send sample water to SAF vendor for jar testing.
 Prepare comparison of T&O options including GAC, Ozone, BAF. Prepare conceptual design for GAC system, leased to own system to incorporate in WTP expansion.
 Develop disinfection, distribution storage and pumping analysis, including design of new disinfection contact basin. Perform desktop analysis on corrosion impact to distribution system.
- Select process train for conceptual design.
 Resolve treatment train, layout on existing WTP site, estimate construction cost, schedule and phases.
- 8. Prepare 3 concepts for WTP layout on the existing property and two additional properties.
- 9. Document decisions and design criteria, based on feedback at Workshop. Select WTP site.
- 10. Includes allowance for 10 utility test holes at \$1,000 each.
- 11. Prepare initial submittals to CDPHE Water Quality Division, Town Planning and Building Permit, Weld County.