Table 1 - Waukesha WWTP Modifications Post Design Services Proposal
Strand Selected for Construction Observation

	Stearns	Witthuhn	Anderson	Lee	Fisher	Thimm	Carreros	Maki	N/A	Kress	Sill	Gander	Rank	Lindert	Arant	Matzen	Larson	Staff	Staff	Total	
	QCE	Process	PM	WW	Lead Elec	Elec	Elec	Lead Str	Str	Arch	Lead Mech	Mech	Site	Stormwtr	AD Eng	AD Eng	Op Spec	ACAD	Office	Hours	Labor
Raw Rate	$62.85	$41.15	$30.96	$34.88	$48.28	$32.92	$34.02	$51.84		$37.26	$40.36	$34.02	$54.72	$47.63	$80.00	$60.00	$37.58	$31.76	$29.48		
1. Post Design Services																				**8,320**	**$ 331,919**
a. Review and reply to RFIs (180) ($970 per RFI)	45	300	200	130	120	30	30	60		30	18	32	18	18	36	60		45	90	1,262	$ 52,149
b. Request for price proposals (25) ($1,560 per RFPP)	10	75		25	25	25		25		25	10	10				10		20	20	280	$ 11,413
c. Shop drawing review	40	1750	800	1150	340	460	200	220		160	80	400	40	20	60	260		40	60	6,080	$ 238,553
d. Attend meeting at request of City (130 hours) ($106 to $200 per hour)	10	80			10			10		10						10				130	$ 5,894
e. Participate in conference calls (60 hours) ($106 to $200 per hour)	10	10			10					10	10					10				60	$ 2,899
f. Participate on partial utilization review (if authorized) ($106 to $200 per hour)	2	8			8					8	8								8	42	$ 1,698
g. Conduct substantial completion review ($106 to $200 per hour)	2	40		8	16			8		8	12		8			8			8	118	$ 5,174
h. Final completion review		100																	8	108	$ 4,351
i. SCADA functionality tests					120	80	40													240	$ 9,788
2. Operation and Maintenance Manual																				**994**	**$ 35,718**
a. Prepare updated O&M manual and submit 2 copies of draft for review		32	320	16		40				16	8	20			8	60	166	64	48	798	$ 28,624
b. Meet to discuss comments		8															8			16	$ 630
c. Update manual with necessary revisions		16		32		8						4				8	56	24	32	180	$ 6,464
3. Startup and Training																				**802**	**$ 27,096**
a. Provide combined process and equipment startup training																					
i. Classroom training on operational theory and design goals		20	450														80	20	20	590	$ 18,986
ii. Field training, manufacturer training, SCADA interface training		20															112			132	$ 5,032
b. Post startup assistance (if authorized) ($106 to $200 per hour)		20															60			80	$ 3,078
4. Record Drawings																				**488**	**$ 15,949**
a. Prepare record drawings based on contractor's markups		24		24														120		168	$ 5,636
b. Create master drawing set		16																304		320	$ 10,313
5. Onsite SCADA Services																				**1,650**	**$ 63,206**
a. Design and install HMI screens (WWTP and PS's)					500	700	300													1,500	$ 57,390
b. WIMS programming coordination		50															100			150	$ 5,816
	119	2,569	1,770	1,385	1,149	1,343	570	323	0	267	146	466	66	38	104	426	582	637	294	12,254	$ 473,888
																Total "Contract" Hours/Raw Labor Cost				12,132	$ 469,112
																Total "If Authorized" Hours/Raw Labor Cost				122	$ 4,776