

Exhibit B

Budget for RFP-813 - Stormwater Hydraulic Model Calibration & Analysis Project

Description	CDM Smith										AR	AEW	MCS		Hours	Labor	ODCs	OP	Total (Labor, ODC, OPs & Fees)
	Jay Zawacki Project Manager	Arthur Chan Stormwater Modeler	Henry Fan Stormwater Modeler	Karen Duff Field Support	John Bergsma Field Support	Mark TenBroek Technical Director	Mitch Heineman Technical Review	Marc Stonehouse Technical Review	Kerry Sheldon Public Involvement	Jeff Bednar FEMA Specialist	Mike Saam Metering Support	Vince Astorino Metering Support							
Phase I																			
Task 1: Public Engagement - Phase I	72	0	0	0	0	56	0	0	248	0	0	0	376	\$23,359	\$340	\$31,000	\$56,267		
1.a Kickoff and prepare public engagement strategy	12					4			16				32	\$2,632	\$20	\$2,000	\$4,753		
1.b Web-site information	4					12			20				36	\$3,400	\$75	\$2,500	\$6,104		
1.c Assemble advisory group	8					4			45				57	\$2,070	\$20	\$5,625	\$7,997		
1.d Define focus groups	8					4			20				32	\$2,070	\$50	\$2,500	\$4,748		
1.e Meet with focus groups	12					12			36				60	\$4,524	\$75	\$4,500	\$9,328		
1.f Provide general public outreach	16					12			75				103	\$5,085	\$50	\$9,375	\$14,981		
1.g Document public engagement activities	12					8			36				56	\$3,578	\$50	\$4,500	\$8,356		
Task 2: Preliminary Model Calibration/Validation	64	578	214	144	152	44	32	20	0	0	0	0	1,248	\$132,127	\$11,137	\$0	\$143,823		
2.a Update Model	8	80	20	20	20	4	4						156	\$15,920	\$50	\$0	\$15,973		
2.b Provide field verification	6	72	8	60	60	4							210	\$19,713	\$1,200	\$0	\$20,973		
2.c Review model inlet points	4	60	12	40	20								136	\$12,789	\$75	\$0	\$12,868		
2.d Perform model calibration simulations	8	54	10										72	\$7,142	\$9,600	\$0	\$17,222		
2.e Calibrate hydraulic model parameters	10	160	64	24	12	16	8	8					302	\$33,272	\$50	\$0	\$33,325		
2.f Provide model validation simulations	8	40	12		40		16						116	\$12,532	\$50	\$0	\$12,585		
2.g Summarize hydraulic model results	8	80	48			16	4	4					160	\$19,220	\$100	\$0	\$19,325		
2.h Design storm scenario development	12	32	40			4		8					96	\$11,539	\$12	\$0	\$11,552		
Task 3: Data Collection	112	84	24	32	288	66	0	8	8	0	484	452	1,558	\$68,936	\$131,000	\$94,600	\$305,817		
3.a Determine new flow metering locations	8	40	4		60	16		8					136	\$15,015	\$150	\$0	\$15,173		
3.b Gather new flow and rain data	32	4			16						420	420	892	\$8,637	\$75,700	\$84,000	\$176,322		
3.c Perform rainfall and flow analysis	4	40			140	12							196	\$18,089	\$200	\$0	\$18,299		
3.d Upgrade rain gauges	20		4		16						48	32	120	\$4,555	\$24,500	\$8,000	\$38,680		
3.e Review city meter ownership	8				8	6					16		38	\$3,178	\$30,000	\$1,600	\$36,358		
3.f Large event data gathering	40		16	32	64	16			8				176	\$19,462	\$450	\$1,000	\$20,985		
Task 4: Final Model Calibration/Validation	19	296	96	0	32	12	8	8	0	0	0	0	471	\$48,836	\$1,100	\$0	\$49,992		
4.a Perform model calibration simulations	3	60	12		4								79	\$7,531	\$800	\$0	\$8,371		
4.b Calibrate hydraulic model parameters	4	164	40			8	8	8					232	\$24,782	\$75	\$0	\$24,861		
4.c Provide model validation simulations	4	40	32		4								80	\$8,260	\$75	\$0	\$8,339		
4.d Summarize hydraulic model results	8	32	12		24	4							80	\$8,263	\$150	\$0	\$8,421		
Task 5: Documentation	95	108	52	0	12	14	4	4	8	0	0	0	297	\$34,900	\$1,175	\$1,000	\$37,185		
5.a Deliver project model and documentation	3	32	32										67	\$7,086	\$800	\$0	\$7,926		
5.b Deliver project data files and documentation	32	8	8			4							52	\$7,107	\$75	\$0	\$7,186		
5.c Prepare draft report	32	40	12		12				8				104	\$10,451	\$75	\$1,000	\$11,580		
5.d Gather report comments	8	4				2							14	\$1,955	\$75	\$0	\$2,034		
5.e Prepare final report	20	24				8	4	4					60	\$8,301	\$150	\$0	\$8,459		
Task 6: Procedures	16	56	32	0	0	4	8	8	0	0	0	0	124	\$14,911	\$950	\$0	\$15,909		
6.a Deliver model update procedures	8	32	24			2	4	4					74	\$8,764	\$800	\$0	\$9,604		
6.b Deliver design storm update procedures	8	24	8			2	4	4					50	\$6,147	\$150	\$0	\$6,305		
Task 7: Training	14	44	16	0	0	0	48	0	0	0	8	0	130	\$17,492	\$1,100	\$800	\$19,488		
7.a Develop training materials	4	16	4				16						40	\$5,698	\$800	\$0	\$6,538		
7.b Perform general training session	4	16	4				24						48	\$7,312	\$75	\$0	\$7,391		
7.c Perform detailed training	4	12	8				8						32	\$4,201	\$75	\$0	\$4,280		
7.d Perform meter training	2										8		10	\$281	\$150	\$800	\$1,279		
Phase II																			
Task 8: Public Engagement - Phase II	24	0	0	0	0	24	0	0	140	0	0	0	188	\$9,047	\$950	\$17,500	\$28,420		
8.a Public meetings	16					16			100				132	\$6,031	\$800	\$12,500	\$19,996		
8.b Other information outlets	8					8			40				56	\$3,016	\$150	\$5,000	\$8,424		
Task 9: Deficiency Analysis & Recommendations	86	560	112	24	184	8	0	8	0	0	0	0	982	\$95,574	\$600	\$0	\$96,206		
9.a Simulation preparation	8	40	16										64	\$6,603	\$150	\$0	\$6,761		
9.b Existing condition deficiency analysis	6	80	8	8									102	\$9,718	\$75	\$0	\$9,797		
9.c Identify needed improvements	32	180	24		60								296	\$28,209	\$75	\$0	\$28,288		
9.d Future condition deficiency analysis	12	80	8	8	20								128	\$12,149	\$75	\$0	\$12,228		
9.e Analyze stormwater management impacts	12	140	32		24								208	\$19,915	\$75	\$0	\$19,994		
9.f Cost analysis	16	40	24	8	80	8		8					184	\$18,980	\$150	\$0	\$19,138		
Task 10: Verify FEMA Mapping	14	16	0	0	0	0	0	0	0	108	0	0	138	\$3,397	\$350	\$13,500	\$17,940		
10.a Compare FEMA Flood Maps to InfoSWMM	6	8								50			64	\$1,558	\$200	\$6,250	\$8,331		
10.b Assess model agreement and need for revisions	8	8								58			74	\$1,839	\$150	\$7,250	\$9,609		
Task 11: Documentation	98	132	34	0	0	14	4	4	0	0	0	0	286	\$34,378	\$16,450	\$0	\$51,653		
11.a Deliver project model and documentation	8	16	8										32	\$3,506	\$150	\$0	\$3,664		
11.b Deliver project data files and documentation	8	16	8										32	\$3,506	\$50	\$0	\$3,559		
11.c Prepare draft report	32	48	4			4	4	4					96	\$11,663	\$50	\$0	\$11,716		
11.d Gather report comments	8	4	2			2							16	\$2,192	\$50	\$0	\$2,245		
11.e Prepare final report	40	48	8			8							104	\$12,755	\$150	\$0	\$12,913		
11.f Provide InfoSWMM model software	2		4										6	\$756	\$16,000	\$0	\$17,556		
GRAND TOTAL	614	1,874	580	200	668	242	104	60	404	108	492	452	5,798	\$482,957	\$165,152	\$158,400	\$822,700		