

**Cost Estimate of
Consultant Services**

Firm: MACTEC ENGINEERING AND CONSULTING

Route: Everett Road Bridge Repair and Deerfield Road Expansion Joint Inspect Date: 11/01/10

Section: 10-00123-06-RS Complexity Factor: 0

County: Lake Overhead and Fringe Rate: 154.84%

Job No.:

Proj. No.:

Item	(A) Manhours	(B) Payroll	(C) Overhead & Fringe Benefits	(D) Other Direct Costs	(E) Fixed Fee	(F) Services By Others	(B+C+D+ E+F) Total	% of Grand Total
1 Phase I Engineering Inspection and Des	506	\$23,145	\$35,837		\$8,847		\$67,829	47.0%
2 Phase II Plans	462	\$18,407	\$28,501		\$7,036		\$53,944	37.4%
3 Phase III Field inspection of Deck (1 day)	60	\$2,732	\$4,230		\$1,044		\$8,006	5.6%
4 Deerfield Road Inspection and Technical	45	\$2,255	\$3,491	\$344	\$862		\$6,952	4.8%
5 ADDITIONAL TASKS	8	\$373	\$577	\$413	\$143		\$1,505	1.0%
TOPOGRAPHIC SURVEY					\$0	\$ 3,000	\$3,000	2.1%
PAVEMENT CORING					\$0	\$ 3,000	\$3,000	2.1%
LANDSCAPE ARCHITECTURE					\$0	-	\$0	0.0%
LIGHTING & ELECTRICAL					\$0	-	\$0	0.0%
TOTALS	1,081	\$46,911	\$72,637	\$757	\$17,932	\$6,000	\$144,237	100%

DRAFT

10-1145
Oct 29, 2010

Everett Road Bridge Repair and Deerfield Road Expansion Joint Inspection
10-00123-06-RS

10/29/2010

CONSULTANT ESTIMATE OF MANHOURS

Item Number	Work Item	SHEETS	Proj. Mgr./ Sr. Pr.	Princ. Eng	Senior Eng	Proj. Eng	Staff Eng	Senior Tech.	Tech.	Admin. Off. Asst.	MEC Item Total	Item Total
1.0	Phase I Engineering Inspection and Design (BCR/TS&L)											
1.1	As-built/exist cond/Field Inspection and Documentation			26		10					36	36
1.2	Alt. Anal./Exhibits/ Write Up			39		43		24			106	106
1.3	Develop Construction Staging Plans	2	4	8	24			24			60	60
1.5	Coordination Meetings: Fed/Tollway/Muni		24	36		12		10			82	82
1.6	Develop Plan/Base Sheet/Coord w. survey and LC Aerial		2	4	24					2	32	32
1.7	Phase I Plan exhibits: Sections, staging/detour, Cost Estimates	2	4	4	24		8	12			52	52
1.8	Abrreviated PDR		4	8				4		2	18	18
1.9	Structural TS&L Sheets	2		32		24		24			80	80
1.10	Coord w. Tollway/utilities/ etc.		16	24							40	40
	SUBTOTAL:	6	54	181	72	89	8	98	0	4	506	506
2.0	Phase II Plans											
2.1	Title Sheet & Index of Sheets	1		1	2			4			7	7
2.2	General Notes	1		1	4			2			7	7
2.3	Summary of Quantities	1			16		4	2			22	22
2.4	Alignments Ties and Benchmarks	1			2		8				10	10
2.5	Typical Sections	1			2			4			6	6
2.6	Maintenance of Traffic	2			16		8				24	24
2.7	Temporary Traffic Signal & Details	2			24		24	8			56	56
2.8	Roadway plan, showing shoulder repair	2		2	30		16	12			60	60
2.9	GP&E	1		2		4		8			14	14
2.10	Index of sheets & Total BOM	1		4		10					14	14
2.11	Staging	1		2		4		8			14	14
2.12	Removal Details	1		2		16		16			34	34
2.13	Typical Section	1		2		4		8			14	14
2.14	Deck Plan (showing patches)	1		8		8		16			32	32
2.15	Superstruct Details	1		8		8		16			32	32
2.16	Temp Barrier Sheet	1				2		4			6	6
2.17	Exp. Joint Sheet	1		2		2		6			10	10
2.18	Specs			16							16	16
2.19	Quantities/Cost Est.			4		16					20	20
2.20	Meetings/Coordination		8	16		16					40	40
2.21	QA/QC		4	20							24	24
	SUBTOTAL:	20	12	90	96	90	60	114	0	0	462	462

Everett Road Bridge Repair and Deerfield Road Expansion Joint Inspection
10-00123-06-RS

10/29/2010

CONSULTANT ESTIMATE OF MANHOURS

Item Number	Work Item	SHEETS	Proj. Mgr./ Sr. Pr.	Princ. Eng	Senior Eng	Proj. Eng	Staff Eng	Senior Tech.	Tech.	Admin. Off. Asst.	MEC Item Total	Item Total
3.0	Phase III Field inspection of Deck (1 day per Stage)											
3.1	Bridge Inspection			16	16						32	32
3.2	Patch Sketches			8	8			12			28	28
3.3											0	0
3.4											0	0
	SUBTOTAL:	0	0	24	24	0	0	12	0	0	60	60
4.0	Deerfield Road Inspection and Technical Memo											
4.1	Inspection			10		10					20	20
4.2	Exhibits	1		4							4	4
4.3	Write-up			16							16	16
4.4	Check/Revise			4							4	4
4.5	QAQC		1								1	1
4.6											0	0
	SUBTOTAL:	1	1	34	0	10	0	0	0	0	45	45
5.0	ADDITIONAL TASKS											
5.1	Survey		2							2	4	4
5.2	Geotechnical		2							2	4	4
5.3											0	0
5.4											0	0
	SUBTOTAL:	0	4	0	0	0	0	0	0	4	8	8
	PROJECT SUMMARY											
1.0	Phase I Engineering Inspection and Design (BCR/TS&L)	6	54	181	72	89	8	98	0	4	506	506
2.0	Phase II Plans	20	12	90	96	90	60	114	0	0	462	462
3.0	Phase III Field inspection of Deck (1 day per Stage)	0	0	24	24	0	0	12	0	0	60	60
4.0	Deerfield Road Inspection and Technical Memo	1	1	34	0	10	0	0	0	0	45	45
5.0	ADDITIONAL TASKS	0	4	0	0	0	0	0	0	4	8	8
	TOTALS	27	71	329	192	189	68	224	0	8	1081	1081

MACTEC ENGINEERING AND CONSULTING
AVERAGE HOURLY PROJECT RATES

ROUTE: Everett Road Bridge Repair and Deerfield Road Expansion Joint Inspection
SECTION: 10-00123-06-RS
COUNTY: Lake
JOB NO.: 0

DATE: 10/29/10

SHEET 1 OF 1

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Phase I Engineering Inspection and Design (BCR/TS&L)			Phase II Plans			Phase III Field inspection of Deck (1 day per Stage)			Deerfield Road Inspection and Technical Memo			OTHER SERVICES TASKS			TOTALS		
		HOURS	% PART.	WGTD RATE	HOURS	% PART.	WGTD RATE	HOURS	% PART.	WGTD RATE	HOURS	% PART.	WGTD RATE	HOURS	% PART.	WGTD RATE	HOURS	% PART.	WGTD RATE
PROJECT MANAGER	\$ 70.00	54	10.67	7.47	12	2.60	1.82	0	0.00	0.00	1	2.22	1.56	4	50.00	35.00	71	6.57%	4.60
PRINCIPAL ENGINEER	\$ 53.25	181	35.77	19.05	90	19.48	10.37	24	40.00	21.30	34	75.56	40.23	0	0.00	0.00	329	30.43%	16.21
SENIOR ENGINEER	\$ 46.84	72	14.23	6.67	96	20.78	9.73	24	40.00	18.74	0	0.00	0.00	0	0.00	0.00	192	17.76%	8.32
PROJECT ENGINEER	\$ 37.43	89	17.59	6.58	90	19.48	7.29	0	0.00	0.00	10	22.22	8.32	0	0.00	0.00	189	17.48%	6.54
STAFF ENGINEER	\$ 29.60	8	1.58	0.47	60	12.99	3.84	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	68	6.29%	1.86
SENIOR TECHNICIAN	\$ 27.47	98	19.37	5.32	114	24.68	6.78	12	20.00	5.49	0	0.00	0.00	0	0.00	0.00	224	20.72%	5.69
TECHNICIAN	\$ 27.46	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00%	0.00
WORD PROCESSING	\$ 23.20	4	0.79	0.18	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	4	50.00	11.60	8	0.74%	0.17
TOTALS		506	100.00	45.74	462	100.00	39.84	60	100.00	45.53	45	100.00	50.11	8	100.00	46.60	1081	100%	43.40

**MACTEC ENGINEERING AND CONSULTING
OTHER DIRECT COSTS**

ROUTE: **Everett Road Bridge Repair and Deerfield Road Exp**
SECTION: **10-00123-06-RS**
COUNTY: **Lake**
Job No. **0**

RATE TABLE	
\$0.50	per mile vehicle use
\$0.00	per CADD/GIS hour
\$0.10	per copy (8 1/2"X11")
\$0.50	per copy (8 1/2"X11") COLOR
\$0.25	per copy (11"X17")
\$0.80	per copy (11"X17" COLOR)
\$1.50	per print (22"x34")
\$1.00	Per page (Facsimile)
\$8.00	Mylar
\$15.00	Overnight Delivery
\$25.00	per day parking

Subtotals

PHASE II

Preliminary Plans (30%)		SETS @	\$1.50	\$0.00	full size
		SETS @	\$0.25	\$0.00	1/2 size
		SETS @	\$0.10	\$0.00	specs
		SETS @	\$0.10	\$0.00	Lightning Report
	1	4 SETS @	\$5.00	\$20.00	full size - Color Exhibits for meeting
		SETS @	\$0.80	\$0.00	11x17 Color Exhibits for Meetings
Pre-Final Plans (60%)	18	2 SETS @	\$1.50	\$54.00	full size
		SETS @	\$0.50	\$0.00	1/2 size
	18	5 SETS @	\$0.25	\$22.50	11"x17"
		SETS @	\$0.10	\$0.00	Specs & Estimates
Final Plans (90%)		SETS @	\$1.50	\$0.00	full size
		SETS @	\$0.25	\$0.00	1/2 size
		SETS @	\$0.25	\$0.00	11"x17"
		SETS @	\$0.10	\$0.00	Specs & Estimates
Bid Sets (100%)	18	3 SETS @	\$1.50	\$81.00	full size
	18	5 SETS @	\$0.25	\$22.50	1/2 size
	18	1 Sheet @	\$8.00	\$144.00	mylar
		Disk @	\$8.00	\$0.00	Direct
		SETS @	\$0.10	\$0.00	Specs & Estimates
CADD :	4 HOURS @		\$0.00	\$0	35% OF design hrs

\$344

OTHER TASKS

CORRESPONDENCE AND MINUTES:

		SHEETS @	\$0.10	\$0	
FIELD TRIPS:	8	60 MILES	\$0.500	\$240	
OFFICE VISITS	3	60 MILES	\$0.500	\$90	
		PARKING	\$25.00	\$0	
PHOTOGRAPHS AND PROCESSING					
OVERNIGHT DELIVERY:	2		\$15.00	\$30	
Report Printing	5	30 SHEETS	\$0.35	\$53	

\$413

\$756.50

SERVICES BY OTHERS

TOPOGRAPHIC SURVEY	Ed Peckley	\$	3,000
PAVEMENT CORING	Wang & Associates	\$	3,000
LANDSCAPE ARCHITECTURE	Not Required		
LIGHTING & ELECTRICAL	Not Required		

**Everett Road Bridge Repair and Deerfield Road
Expansion Joint Inspection
MACTEC ENGINEERING AND CONSULTING
Rate Ranges (2010)**

<u>Classification</u>	<u>Rate</u>
Project Principal	\$61.84 to \$81.73
Project Manager	\$45.48 to \$75.87
Senior Engineer	\$43.06 to \$46.91
Project Engineer	\$30.76 to \$40.59
Staff Engineer	\$25.50 to \$32.12
Senior Technician	\$25.17 to \$26.53
Cadd Technician	\$25.17
Word Processor	\$17.95 to \$27.25

Raises occur annually at the end of February and average 3.5%