

**CITY OF TRENTON
PAINTING & IMPROVEMENTS OF THE EWING &
LAWRENCEVILLE TANKS
RATES & CHARGES**

1. SCE will provide the Design, Permitting and Bid Period Engineering Services for a **Lump Sum Fee of \$15,895**. The breakdown of our costs associated with the various aspects of the phase is attached for the City's review.
2. SCE will provide the Construction Phase Engineering Services for a **Not to Exceed Amount of \$53,720** with an estimate supported by hours and by title and by hourly rate which is attached.

SCE will utilize the following fee structure for all tasks where fee is estimated and for any additional work authorized by owner or for client initiated revisions and/or changes or for items not included in lump sum amounts:

- Principal/Project Officer \$160/hr.
- Project Manager \$150/hr.
- Senior Engineer \$135/hr.
- Engineer \$120/hr.
- Land Surveyor \$120/hr.
- Senior Designer \$110/hr.
- Designer \$95/hr.
- Technician \$80/hr.
- Senior Inspector \$95/hr.
- Inspector \$80/hr.
- Secretarial/Clerical \$45/hr.
- Survey Equipment Unit Cost
 - Robotic/GPS \$50/hr.
- Any actual disbursements or unusual expenses which we incur on your behalf, such as filing fees, delivery charges, travel, parking and toll charges will be included as expense charges in your invoices. (Minimum reproduction charge of \$20 per event).
 - Large format black and white document reproduction \$0.50/square foot
 - Large format color document reproduction \$3.00/square foot
 - Large volume black and white photocopies \$0.15/copy
 - Large volume color photocopies \$0.30/copy
 - Mileage will be billed at \$0.57 per mile.
 - Approved subcontracted services will be billed at actual cost plus 15 percent.



PROPOSAL FEE BREAKDOWN

CITY OF TRENTON - TRENTON WATER WORKS

(Ewing and Lawrenceville Water Storage Tank Rehabilitation)

Task Description	Staffing										Total \$	
	PTC	PM	Designer	Technician	Envir.	Party Chief (office)	Survey Field	Inspector	Total Hrs	Directs		
SURVEYING												
Note									0			\$0
									0			\$0
									0			\$0
									0			\$0
									0			\$0
									0			\$0
Sub-Total	0	0	0	0	0	0	0	0	0		\$0	\$0
ENGINEERING/DESIGN/PERMITTING/BID												
Project Set Up/Client Kickoff Meeting	4	5							9			\$1,390
Data Gathering/Review		4	9						13			\$1,455
Basis of Design Report	2	8	17	4					31			\$3,455
BOD Review Meeting	4								4			\$640
75% Plans & Specifications	3	8	17						28			\$3,295
Design Review Meeting	4								4			\$640
100% Plans & Specifications	2	5	9						16			\$1,925
Cost Estimate	2	2	5						9			\$1,095
Issue Addenda as Necessary		2							2			\$300
Bid Receipt		2	5						7			\$775
Bid Review and Recommendation		3	5						8			\$925
									0			\$0
									0			\$0
									0			\$0
									0			\$0
									0			\$0
									0			\$0
									0			\$0
Sub-Total	21	39	67	4	0	0	0	0	131		\$0	\$15,895
ENVIRONMENTAL												
Note									0			\$0
									0			\$0
									0			\$0
									0			\$0
									0			\$0
									0			\$0
Sub-Total	0	0	0	0	0	0	0	0	0		\$0	\$0
CONSTRUCTION PHASE/INSPECTION (Assumes spring 2014 and fall 2014 - 3 months each)												
Conduct Preconstruction Conference		4	2						6			\$870
Shop Drawings		4	10						14			\$1,550
RFPs		2	6						8			\$870
Payment Recommendations (8)		2	9						11			\$1,260
Project Communications		2	6						8			\$870
Inspection (PT - daily for all paint related QA/QC)								450	450			\$36,000
Filling/Testing and Start-up		6						18	24			\$2,340
Cellular relocation coordination punch list/project closeout		9	10					18	37			\$3,740
Records as-built and manuals		2	5					18	30			\$2,985
								10	18			\$1,560
Sub-Total	8	40	56	0	0	0	0	514	618		\$0	\$53,720
Total Hours	29	79	123	4	0	0	0	514	749		\$0	\$69,615
Total	\$160	\$150	\$95	\$80	\$110	\$95	\$145	\$80	\$41,20		CHECK	\$69,615
	\$4,640	\$11,850	\$11,685	\$320	\$0	\$0	\$0	\$0	\$0			

TANK INDUSTRY CONSULTANTS

Per Unit # Units

2,000,000 Gallon Lawrenceville Tank

Preparation of Specifications			\$ 9,250.00	Fixed Fee
Meeting Attendance*	\$ 1,550.00	4	\$ 6,200.00	Fixed Fee
Bidding Services			\$ 1,150.00	Fixed Fee
Contract Administration			\$ 3,450.00	T&E
Resident Project Representation				
Time & Expenses based on Rate Structure in effect at the time services performed				
12 to 14 weeks @ approximately \$3,475/week		estimate	\$ 48,650.00	T&E
				\$ 68,700.00

2,000,000 Gallon Ewing Tank

Preparation of Specifications			\$ 9,250.00	Fixed Fee
Meeting Attendance*	\$ 1,550.00	4	\$ 6,200.00	Fixed Fee
Bidding Services			\$ 1,150.00	Fixed Fee
Contract Administration			\$ 3,450.00	T&E
Resident Project Representation				
Time & Expenses based on Rate Structure in effect at the time services performed				
12 to 14 weeks @ approximately \$3,475/week		estimate	\$ 48,650.00	T&E
				\$ 68,700.00

Meeting Attendance is based on on-site attendance by the Project Manager or Field Supervisor, and teleconference with engineer.

Time and Expense (T&E) estimates are invoiced in accordance with the rate structure in effect at the time services are performed. Included with this fee proposal are the 2013 rates. It is anticipated that the 2014 hourly rates will increase approx 3.5%

Resident Project Representation weekly estimate is based on a 40-hour workweek. Time in excess of 40 hours will be invoiced at the overtime rate. Lodging and per diem are included in the weekly estimate for Resident Project Representation.

Tank Industry Consultants

7740 West New York Street
Indianapolis, Indiana 46214

Professional Services 2013 Rate Structure

Effective January 1, 2013 through December 31, 2013

Long-Term Resident Observation

Technician (travel and on-job time)	\$61.00 per hour
Overtime Premium (over 40 hrs/week)	\$31.00 per hour
Minimum 32 hours per week	
Per Diem	\$118.50 per day

Spot Observation

Technician (travel and on-job time)	\$85.00 per hour
Overtime Premium (over 8 hrs/day)	\$42.50 per hour
Per Diem	\$138.00 per day with lodging \$50.00 per day without lodging
Support Staff (Minimum 1 hr @ Sr. PE Rate)	Hourly Rates Shown Below

Engineering and Support Staff

Field Services Manager/Contract Administrator	\$103.00 per hour
Field Superintendent/NACE Certified Technician	\$101.00 per hour
Overtime Premium (over 40 hrs/week)	\$50.50 per hour
Minimum 32 hours per week	
Project Manager	\$108.00 per hour
Engineer - E.I.	\$93.75 per hour
Professional Engineer	\$132.50 per hour
Licensed Senior Professional Engineer	\$196.25 per hour
Licensed Principal Engineer	\$223.00 per hour
Licensed Senior Principal Engineer	\$257.50 per hour
Safety Director	\$134.00 per hour
Clerical	\$53.00 per hour

Direct Expenses

- A charge of \$10.50 per hour is added for every office hour worked to cover copying, fax, mail, telephone, long distance, paging, cell phone, trucks, field equipment, and other miscellaneous costs.

Mileage

- \$0.76 per mile per vehicle from nearest office
Indianapolis, IN • Bolingbrook, IL • Pittsburgh, PA • Houston, TX • El Paso, TX

Reimbursable Expenses

- Travel by public transportation at cost, plus 10%.
- All other reimbursable expenses (not otherwise listed on this rate structure) at cost plus 10%.

Subcontract Laboratory Analysis (Fees are doubled for rush service)

- | | |
|--|---------------------|
| Total Lead in Samples by Atomic Absorption Spectroscopy | \$120.75 per sample |
| Total Metals (Cadmium, Chromium & Lead) in Samples by Atomic Absorption Spectroscopy | \$248.85 per sample |
| Leachable Lead in Samples by Toxicity Characteristic Leaching Procedure | \$509.25 per sample |



8.0 Cost Proposal

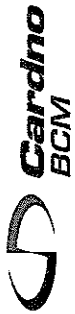
8.1 Insurance

Cardno BCM maintains outstanding insurance coverage for the protection of itself and its clients in the performance of any its services. A sample Certificate of Insurance, which is found in **Appendix D**, illustrates the minimum insurance coverage carried by BCM.

8.2 Compensation

Proposed Service	Fee
Design and Bidding Phase (Lump Sum Total):	\$27,340
Construction Phase (Not to Exceed):	\$37,480
Total:	\$64,820

Cardno BCM's Fee Breakdown as well as a per diem rate schedule is provided in **Appendix E**. We expect the cost will fully cover the services described herein. The fees include all labor, expenses, travel, management, and costs related to the services rendered for the project. Costs for additional out of scope services requested to be performed will be based upon our current Schedule of Billing Charges in effect at the time services are provided.



**TRENTON WATER WORKS
EWING AND LAWRENCEVILLE WATER TANKS - REHABILITATION
ENGINEERING SERVICES - COST AND MANPOWER ESTIMATE**

Tasks	Manpower Estimates (hours)											Totals Hours	Labor	Exp.	Fee			
	Proj Mgr & QC 110\$/hr	Sr. Proj Engr 98\$/hr	Project Engr 80\$/hr	Struct Engr 108\$/hr	Elec Engr 115\$/hr	Design 85\$/hr	I & C Engineer 115\$/hr	Scientist /Tech. 75\$/hr	Surveyor 90\$/hr	QA Review 110\$/hr	Clerical /Tech 55\$/hr							
Design Phase																		
1. Drawings & Specifications																		
Ewing Tank Drawing	4	20				24										\$4,550	\$4,550	
Lawrenceville Tank Drawing	4	20				24										\$4,550	\$4,550	
Standard Structural Details	4	20		4		24										\$4,876	\$4,876	
Electrical Site Plans					16	16	4								\$24	\$3,794	\$3,794	
Electrical Plan and Sections Reproduction (20 sets)					16	16	4								\$350	\$3,770	\$3,770	
2. Meetings	12	12														\$2,496	\$50	\$2,546
3. Bidding Phase																		
Answer Questions	2	8		1	1	1										\$1,313	\$1,313	
Addenda		8		1												\$893	\$893	
Bid Tab		2														\$251	\$251	
Rec. of Award		4														\$447	\$447	
Design Phase Services Subtotal	26	94	0	6	33	106	8	0	0	4	2					\$26,916	\$424	\$27,340
	(\$)	\$2,860	\$9,212	\$0	\$654	\$3,795	\$920	\$0	\$0	\$440	\$110					\$26,916	\$424	\$27,340



**TRENTON WATER WORKS
EWING AND LAWRENCEVILLE WATER TANKS - REHABILITATION
ENGINEERING SERVICES - COST AND MANPOWER ESTIMATE**

Tasks	Manpower Estimates (hours)											Totals Hours	Labor	Exp.	Fee			
	Proj Mgr	Sr. Proj Engr	Design Engr	Struct Engr	Elec Engr	Designer	I&C Engineer	Draft/ Tech.	Const. Super.	Const. Inspector	Admin.							
	110\$/hr	98\$/hr	80\$/hr	108\$/hr	115\$/hr	86\$/hr	115\$/hr	75\$/hr	90\$/hr	60\$/hr	55\$/hr							
B. Construction Administration Phase Services																		
Administration & Meetings	8	120							16						144	\$14,080	\$298	\$14,378
Shop Drawings		24		16	16										56	\$5,936		\$5,936
Change Orders		24							12						36	\$3,432		\$3,432
Start Up & Punch List	2	16							8						26	\$2,508		\$2,508
Record Drawings & Documentation		4				12									16	\$1,412		\$1,412
O & M Manual		8													8	\$784		\$784
Pre Con Meeting	2								4						6	\$580		\$580
Part Time Inspection (30 site visits @ 4hr visit)															120	\$7,200	\$1,250	\$8,450
Subtotal	12	196	0	16	16	12	0	0	40	120	0	412						
(\$)	\$1,320	\$19,208	\$0	\$1,744	\$1,840	\$1,020	\$0	\$0	\$3,600	\$7,200	\$0	\$35,932				\$35,932	\$1,548	\$37,480
PROJECT TOTAL - HOURS	38	290	0	22	49	117	8	0	40	124	2	690						
PROJECT TOTAL - COSTS	\$4,180	\$28,420	\$0	\$2,398	\$5,635	\$9,945	\$920	\$0	\$3,600	\$7,640	\$110	\$62,848				\$62,848	\$1,972	\$64,820

T&M ASSOCIATES

Trenton Water Works
Ewing and Lawrenceville Storage Tank Rehabilitation
Item 1 - Design, Permitting and Bid Phase

DATE 9/11/2013

Manhour Budget

NO.	TASK	DIV MANGR	PROJ MGR	SUPV ENGR	PRIN ENGR	SR STAFF ENGR	STAFF ENGR	SR INSPECT	ASST ENGR	ENGR TECH 3	ADMIN SUPPORT	TOTAL HOURS
1	Kickoff Meeting with Owner		4				4				1	9
2	Review Existing Documentation / Reports / As-Built Drawings						2			8	1	11
3	Field Visit / Equipment Inventory									6		6
4	Plan and Elevation Drawings of the Tank									4	8	12
5	Tank Rehab Design						8			24	16	48
6	Cell Antenna Coordination						2			6		8
7	Specification Preparation						2			8	2	12
8	Cost Estimate and Construction Schedule		1				2			6		9
9	Client Review Meetings (75% and 100%)		8								1	9
10	Final Bid Documents						2			8		10
11	Notice to Bidders						2					2
12	Bid Document Submittal (20 Copies)									4	1	5
13	Bid Inquiries / Responses / Addendum		1				4			6		11
14	Evaluation of Bids / Recommendation of Award Report		1				1			2	1	5
15	Coordination with Owner										1	5
16	QA / QC / PM		4				2			2		12
TOTAL HOURS		4	23	0	0	0	31	0	0	84	24	174

HOURLY LABOR RATE	\$309	\$163	\$156	\$144	\$126	\$114	\$108	\$50	\$64	\$78
LABOR COST	\$1,236	\$3,864	\$0	\$0	\$0	\$3,534	\$0	\$7,660	\$2,016	\$624
DIRECT LABOR TOTAL										
\$18,834										

LABOR FEE

\$18,834

DIRECT EXPENSES (NO MARKUP)

\$2,166 20 Bid Sets

TOTAL FEE

\$21,000

T&M ASSOCIATES

DATE 9/11/2013

**Trenton Water Works
Ewing and Lawrenceville Storage Tank Rehabilitation
Item 2 - Construction Inspection Phase**

Manhour Budget

NO.	TASK	DIV MANGR	PROJ MGR	SUPV ENGR	PRIN ENGR	SR STAFF ENGR	STAFF ENGR	SR INSPECT	ASST ENGR	ENGR TECH 3	ADMIN SUPPORT	TOTAL HOURS
1	Preconstruction Meeting						4					4
2	Progress Review Meetings (2 Meetings)						8					8
3	Shop Drawing Reviews		4				12				2	18
4	Construction Observation							24				24
5	Contractor Payment Requests		2				12	4			2	20
6	Construction Activity Reports / Correspondence		2				8				2	12
7	Respond to Requests for Information		2				8					10
8	Review/Process Contractor Change Order Requests		2				8					10
9	Cellular Providers Coordination							4				4
10	Furnish Operations Manuals / SOPs						12					12
11	Record Drawings								2	10		12
12	Punchlist Inspection and Startup Services								16			16
13	Project Closeout		2				4				2	8
TOTAL HOURS		0	14	0	0	0	76	50	0	10	8	158

HOURLY LABOR RATE	\$309	\$168	\$156	\$144	\$126	\$114	\$108	\$90	\$84	\$78
LABOR COST	\$0	\$2,352	\$0	\$0	\$0	\$8,664	\$5,400	\$0	\$840	\$624
DIRECT LABOR TOTAL										
\$17,880										

LABOR FEE

COST MARK UP	10%
\$96,000	\$105,600

CONTRACTED SERVICES
MBA - Inspection Services

TOTAL FEE \$123,480

T&M proposes a lump sum fee for **design, permitting and bid phase** services as outlined in our technical proposal of **\$21,000**. Attached is a spreadsheet outlining the manpower projections for the personnel involved in the various tasks required for the project.

T&M Associates proposes a not to exceed fee for the **construction phase** scope of services outlined in our proposal of **\$123,480**. This fee will be billed to the City on a monthly basis based on actual effort expended on the project for the various labor categories engaged in the assignment. We have attached herein our task breakdown for the various components of the construction phase for your information. The breakdown shows the specific task anticipated, the labor category to be engaged in that task, with total hours and associated labor costs. Expenses will be billed at cost.



MBA

MUMFORD-BJORKMAN ASSOCIATES, INC

Fee Proposal

A. Provide Design, Permitting and Bid Period Engineering Services

1. Design - prepare and provide specifications (2 tanks): **\$6,800**
 2. Meetings - attend design kick-off meeting: **\$ 600**
Two Additional on-site progress/ review meetings: **\$ 600/meeting if required**
(No charge if on the phone)
 3. Bid Period - respond to bidders, evaluate bids: **\$ 600**
Attend pre-bid meeting on site: **\$ 500 (if required)**
- TOTAL: \$8,000 for 2 tanks**

If both tanks are bid separately at different times, and two sets of specifications are required, fees will be:

1. Design - prepare and provide specifications (1 tank): **\$4,300**
 2. Meetings - attend design kick-off meeting: **\$ 600**
Two Additional on-site progress/ review meetings: **\$ 600/meeting if required**
(No charge if on the phone)
 3. Bid Period - respond to bidders, evaluate bids: **\$ 600**
Attend pre-bid meeting on site: **\$ 500 (if required)**
- TOTAL: \$5,500 per tank**

B. Provide Construction Phase Engineering Services (Not To Exceed Estimate, per tank)

1. Project Management Services (performed by Project Manager)

* Prepare for/ attend pre-construction meeting: 5 hours x \$150/hour =	\$ 750
* Coordination with Cell Carriers: 20 hours x \$150/hour =	\$3,000
* Review submittals: 10 hours x \$150/hour =	\$1,500
* Progress meetings (if required AND attended by MBA's Project Manager, not MBA's Inspector): 5 hours x \$150/hour =	\$ 750 if req.
* Various tasks, scheduling, respond to questions: 20 hours x \$150/hour =	\$3,000
TOTAL:	\$8,250

2. Inspection Services (performed by MBA Inspector)

Pricing for part-time welding inspection and full-time painting inspection is based on a daily rate of \$750/day (\$75/hour x 10 hour minimum), inclusive of all expenses. There will be no extra charges for overtime or weekend work. Holidays will be billed at 1.5 times the daily rate.

* Welding Inspection: 2 days (est.) x \$750/day =	\$ 1,500
* Painting Inspection: 6 days/week x 10 weeks (est.) x \$750/day =	\$45,000
* First Anniversary Inspection (ROV)/ per tank:	\$ 2,800 if req.
TOTAL for 1 tank:	\$46,500

Please note: All rates are good through December 31, 2014. There is a 3% escalation fee for work performed in 2015.

Pricing for full-time painting inspection is inclusive of all expenses. There will be no extra charges for overtime or weekend work. Holidays will be billed at 1.5 times the daily rate.

While we estimate that 10 weeks of painting inspection will be needed per tank, based on fully blasting, priming and painting the interior and exterior, we suggest that 12 weeks be budgeted, since we cannot predict the quality of the painter or the size of their crew. The 6 days/week schedule shown above is based on our experience with tank painters, who typically work Monday-Saturday. Your project may be different, depending on the hours and days of work allowed at each site, and the painter.

FEE PROPOSAL MANHOURS BY TASK GROUPS

City of Trenton, Department of Public Works -Trenton Water Works Division
 Project Name: Professional Engineering Services for Ewing Tank and Lawrenceville Tank
 Billing Rates

TITLE	Actual Employee Billing Rate	Task 1 – Field Inspection and Preliminary Engineering	Task 2 – Preparation of Detailed Technical Specifications / Project Documents	Task 2A – Construction Administration	Task 2B – Construction Inspection
Project Principal / Division Director	\$ 200.00	1	3	2	2
Project Manager	\$ 200.00	3	6	4	5
Division Director Electrical	\$ 200.00	0	4	0	0
QA/QC	\$ 200.00	0	3	3	0
Senior Water Engineer	\$ 186.00	0	43	35	0
Senior Project Engineer	\$ 132.00	5	68	55	30
Senior Coating / Construction Inspector	\$ 162.00	6	4	20	32
Project Engineer	\$ 114.00	0	75	0	0
Designer / Lead CADD Designer	\$ 85.00	0	95	0	0
Estimator	\$ 135.00	0	0	0	0
Senior Engineer Water Distribution	\$ 171.00	0	0	0	0
Coating / Construction Inspector	\$ 118.00	21	0	0	551
GIS Specialist	\$ 105.00	0	0	0	0
Staff Engineer	\$ 72.00	0	57	84	0
Engineering Technician	\$ 72.00	0	40	0	0
CADD Technician	\$ 72.00	0	0	0	0
Junior Coating Inspector / Construction Inspector	\$ 88.00	47	0	0	450
Administrative Assistant	\$ 105.00	0	6	1	0
Engineering Intern	\$ 65.00	0	0	0	0
Total		\$ 9,046.00	\$ 45,061.00	\$ 24,963.00	\$ 115,162.00

City of Trenton will pay based on the specified billing rate and any change in personnel or change in salary of the personnel during the contract shall have no bearing on the employee billing rate during the life of the contract.

RFP2013-35

THE DESIGN PHASE AND BID PHASE AND FOR THE CONSTRUCTION PHASE FOR THE PAINTING AND IMPROVEMENTS OF THE EWING TANK AND LAWRENCEVILLE TANK OPENING
DATE: SEPTEMBER 13, 2013 AT 11:00AM