

**RFP2020-38 ENGINEERING SERVICES FOR PHASES 1 AND 2 OF THE DECENTRALIZED WATER STORAGE TANK PROJECT FOR THE CITY OF TRENTON, DEPARTMENT OF WATER AND SEWER PROPOSALS OPENED 9/9/2020 AT 11:00AM**

RFP2020-38 ENGINEERING SERVICES FOR PHASES 1 AND 2 OF THE DECENTRALIZED WATER STORAGE TANK PROJECT FOR THE CITY OF TRENTON, DEPARTMENT OF WATER AND SEWER					
NUMBER OF RESPONDENTS:	5				
NAME OF BIDDER	ARCADIS U.S., INC.	BUCHART HORN, INC.	JACOBS ENGINEERING GROUP, INC.	MOTT MACDONALD LLC	H2M ASSOCAITES, INC.
ADDRESS	17-17 ROUTE 208 NORTH, SUITE 290 WEST	2 EVES DRIVE, SUITE 110	412 MT. KEMBLE AVENUE, SUITE 100S DOWNTOWN BUILDING-1ST FLOOR	111 WOOD AVENUE SOUTH	4810 BELMAR BOULEVARD
CITY, STATE, ZIP	FAIR LAWN, NJ 07410	MARLTON, NJ 08053	MORRISTOWN, NJ 07960	ISELIN, NJ 08830	WALL TOWNSHIP, NJ 07753
CONTACT NAME	GERARD SPIESBACH	EDWARD J. DIMOND, PE, PROJECT MANAGER	A.J. CAPUZZI	JOSEPH STANLEY, PE, PP, CME, SENIOR VICE PRESIDENT	STEVEN C. HEARL, P.E., LEED AP, CCCA, VICE PRESIDENT
TELEPHONE	201-398-4379	856-797-4344	862-242-7320	973-912-2485	732-414-2661
FAX	201-797-4399	717-852-1401	972-267-3555	973-912-2455	732-414-2662
E-MAIL	<a href="mailto:GERRY.SPIESBACH@ARCADIS.COM">GERRY.SPIESBACH@ARCADIS.COM</a>	<a href="mailto:EDIMOND@BUCHARTHORN.COM">EDIMOND@BUCHARTHORN.COM</a>	<a href="mailto:ALBERT.CAPUZZI@JACOBS.COM">ALBERT.CAPUZZI@JACOBS.COM</a>	<a href="mailto:JOSEPH.STANLEY@MOTTMAC.COM">JOSEPH.STANLEY@MOTTMAC.COM</a>	<a href="mailto:SHEARL@H2M.COM">SHEARL@H2M.COM</a>
OWNERSHIP DISCLOSURE STATEMENT	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED
EQUAL EMPLOYMENT OPPORTUNITY EXHIBIT A	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED
REQUIRED EVIDENCE EEO/AFFIRMATIVE ACTION REGULATIONS QUESTIONNAIRE	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED
ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA DATE 8/24/2020	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED
NJ BUSINESS REGISTRATION CERTIFICATE	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED
NON-COLLUSION AFFADAVIT	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED
AMERICANS WITH DISABILITIES ACT OF 1990 LANGUAGE	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED
ETHICS COMPLAINT DISCLOSURE	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED
DEBARMENT NOTICE	INCLUDED	INCLUDED	REQUIRED FROM AWARDED VENDOR	INCLUDED	INCLUDED
CERTIFICATION AND DISCLOSURE OF POLITICAL CONTRIBUTIONS	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED
DISCLOSURE OF INVESTED ACTIVITIES IN IRAN	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED
CITY OF TRENTON RESIDENT EMPLOYMENT POLICY	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED
EIC	CERT.#188 EXP. 08/15/2021	CERT.#4602 EXP. 09/15/2020	CERT.#3187 EXP. 01/15/2023	CERT.#2062 EXP. 08/15/2021	CERT.#3244 EXP. 05/15/2023
CERTIFICATE OF INSURANCE	REQUIRED FROM AWARDED VENDOR	REQUIRED FROM AWARDED VENDOR	REQUIRED FROM AWARDED VENDOR	REQUIRED FROM AWARDED VENDOR	REQUIRED FROM AWARDED VENDOR
60-DAY EXTENSION COMPLIANCE	YES	YES	YES	YES	YES
PROVIDE PRIORITY EMERGENCY SERVICES	N/A	YES	YES	YES	YES
REFERENCES	N/A	N/A	INCLUDED	INCLUDED	INCLUDED
W-9	N/A	N/A	INCLUDED	INCLUDED	N/A
EXCEPTIONS (IF ANY)	NONE	NONE	NONE	NONE	N/A
TOTAL FEE FOR BOTH PHASES	\$160,031.00 (SEE ATTACHED BREAKDOWN OF PRICING)	\$462,574.00 (SEE ATTACHED BREAKDOWN OF PRICING)	\$650,000.00 (SEE ATTACHED BREAKDOWN OF PRICING)	\$678,972.00 (SEE ATTACHED BREAKDOWN OF PRICING)	\$1,192,258.00 (SEE ATTACHED BREAKDOWN OF PRICING)
FATAL FLAW	NONE	NONE	NONE	NONE	NONE

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## FEE PROPOSAL

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### Fee Proposal - Cost Table

City of Trenton - Department of Water and Sewer  
Engineering Services for Phases 1 and 2 of the Decentralized Water Storage Tank Project

#### Fee Proposal - Phase 1 - Design/Permitting, Bid Services

Title	Principal in-Charge/ Director	Principal Engineer/ Scientist II	Principal Engineer/ Scientist I	Senior Engineer/ Scientist II	Senior Engineer/ Scientist I	Project Engineer/ Scientist	Staff Engineer/ Scientist	Engineer/ Scientist	CADD Designer	Drafter	TOTAL
Rate	\$ 230	\$ 215	\$ 205	\$ 185	\$ 160	\$ 155	\$ 145	\$ 120	\$ 150	\$ 71	
Hours	36	80	330	440	300	740	300			1,000	3,226
Fee	\$ 8,280	\$ 17,200	\$ 67,650	\$ 81,400	\$ 48,000	\$114,700	\$43,500	\$ -	\$ -	\$ 71,000	\$ 451,730
										Subs	\$ 77,550
										Expenses	\$ 7,804
										Permitting and Sampling Allowance	\$ 50,000
										TOTAL	\$ 587,084

#### Fee Proposal - Phase 2 - Site Location Services

Title	Principal in-Charge/ Director	Principal Engineer/ Scientist II	Principal Engineer/ Scientist I	Senior Engineer/ Scientist II	Senior Engineer/ Scientist I	Project Engineer/ Scientist	Staff Engineer/ Scientist	Engineer/ Scientist	CADD Designer	Drafter	TOTAL
Rate	\$ 230	\$ 215	\$ 205	\$ 185	\$ 160	\$ 155	\$ 145	\$ 120	\$ 150	\$ 71	
Hours	14	-	240	40	140	150	55			100	739
Fee	\$ 3,220	\$ -	\$ 49,200	\$ 7,400	\$ 22,400	\$ 23,250	\$ 7,975	\$ -	\$ -	\$ 7,100	\$ 120,545
										Subs	\$ 36,300
										Expenses	\$ 3,186
										TOTAL	\$ 160,031

If Arcadis is selected for both Phase 1 and Phase 2, subtract \$15,000 - \$20,000 for efficiencies related to overall project management and subcontractor onboarding.

## Hourly Rate Schedule

Charges for services provided will be in accordance with the following schedule. All rates presented apply to services rendered as per the schedule provided.

Classification	Hourly Rate(s)
Design Tech II/Resident Project Rep II	\$ 71
CADD Technician	80
Drafter I/Resident Project Rep III and IV	85
Drafter II/Resident Project Rep V	100
Project Assistant I	120
Project Assistant II	140
CADD Designer	150
Engineer/Scientist	120
Staff Engineer/Scientist/Architect	145
Project Engineer/Scientist/Architect	155
Senior Engineer/Scientist/Architect I	160
Senior Engineer/Scientist/Architect II	185
Principal Engineer/Scientist/Architect I	205
Principal Engineer/Scientist/Architect II	215
Engineer/Scientist Director	230

## Other Direct Costs

All expenses incurred for a project, except in-house services specified below, from outside vendors will be invoiced at cost plus 10% to cover administrative expenses. These items may include, but are not limited to: shipping charges; printing; supplies; equipment; traveling expenses; special insurance; licenses; permits; or subcontractors.

## In-house Services

In-house services consist of the following:

- Transportation - \$0.64 per mile for vehicles.
- Equipment - A schedule of usage rates for specialty equipment is available for field assignments.
- Web Hosting - A schedule of monthly web hosting rates is available for client access websites.

## FEE PROPOSAL

Buchart Horn is pleased to provide our not-to-exceed fee for the scope of work described in our proposal, as summarized below:



Task	Not to Exceed Fee
<b>PHASE I</b>	
Preliminary Engineering/Design Memorandum	\$ 50,455.00
Hydraulic Modeling	\$ 19,490.00
Design	\$ 146,076.00
Permitting	\$ 14,635.00
Bid Phase	\$ 11,990.00
Site Survey	\$ 15,400.00
Geotechnical Investigations	\$ 17,700.00
<b>TOTAL PHASE I</b>	<b>\$ 275,746.00</b>
<b>PHASE II</b>	
Site Evaluation	\$ 46,348.00
Environmental Assessments	\$ 50,850.00
Property Appraisals (5 sites)	\$ 16,810.00
Site Survey (3 sites, assume 2 acre max.)	\$ 22,820.00
<b>TOTAL PHASE II</b>	<b>\$ 136,828.00</b>
Allowance for Permitting, Sampling and Analysis, and Miscellaneous Expenses	\$ 50,000.00
<b>TOTAL PHASE I AND PHASE II</b>	<b>\$ 462,574.00</b>
<b>Proposed Credit if selected for both Phases</b>	<b>\$ (10,000.00)</b>

Fee tables are also attached for Phases 1 and 2 to provide a breakdown of the costs by task, indicating labor title, estimated hours, hourly rates, and direct expenses.

**Please note, a credit has been offered if both Phases of the project are awarded to BH.**



**Fee Proposal**  
**City of Trenton**  
**Engineering Services for Phase 1 and 2**  
**Decentralized Water Storage Tank Project**  
**Phase 1**

Task No.	Description	Project Manager	Senior Engineer	Project Engineer	CAD Designer	QA/QC Reviews	Project Structural Engineer	Project Civil Engineer	Engineer-in Training	Electrical Project Engineer	Electrical Engineer/Designer	Specifications and Estimating Engineer	Administrative Support	Total Hours	Labor	Direct Cost & Subs	Total																	
<b>Billing Rate Breakdown</b>																																		
Hourly Billable Rate												\$ 195.00	\$ 155.00	\$ 135.00	\$ 80.00	\$ 195.00	\$ 163.00	\$ 140.00	\$ 80.00	\$ 125.00	\$ 100.00	\$ 100.00	\$ 75.00											
<b>1</b>	<b>Preliminary Engineering/Design Memorandum</b>																																	
	Review Background Information	8		16		4											28	\$ 4,500		\$ 4,500														
	Technical Evaluation of Options	8		40	32	12											92	\$ 11,860		\$ 11,860														
	Vacate Parkway Ave Evaluation	6		10	20												36	\$ 4,120		\$ 4,120														
	Mixer Evaluation	2		12	12	1											27	\$ 3,165		\$ 3,165														
	Life Cycle Cost Analysis	2		24	24	2											52	\$ 5,940		\$ 5,940														
	Design Memorandum	10		32	24	2											68	\$ 8,580		\$ 8,580														
	Conceptual Plan Development	2		16	24	16											58	\$ 7,590	\$ 100	\$ 7,690														
													0	\$ -																				
	Electrical Site Survey												8				8	\$ 800		\$ 800														
	Utility Coordination/New 120/240V Service												2	16			18	\$ 1,850		\$ 1,850														
	Elec. Design Memorandum - Preliminary System Analysis												4	6			10	\$ 1,100		\$ 1,100														
	Communications Overview												2	6			8	\$ 850		\$ 850														
													0	\$ -																				
	<b>Subtotal</b>	38	0	150	136	37	0	0	0	8	36	0	0	0	405	\$ 50,355	\$ 100	\$ 50,455																
<b>2</b>	<b>Hydraulic Modeling</b>																																	
	Obtain/Review WaterGEMS Model	4	12			4		20									40	\$ 5,020		\$ 5,020														
	Initial Model Runs for Verification	4	8			2		16									30	\$ 3,690		\$ 3,690														
	Preliminary Model Runs with Tank	8	8			2		16									34	\$ 4,470		\$ 4,470														
	Confirmatory Model Runs	2	8			2		16									28	\$ 3,300		\$ 3,300														
	Modeling Report	2	8					16									26	\$ 2,910	\$ 100	\$ 3,010														
													0	\$ -																				
	<b>Subtotal</b>	20	44	0	0	10	0	0	84	0	0	0	0	0	158	\$ 19,390	\$ 100	\$ 19,490																
<b>3</b>	<b>Design Phase</b>																																	
	<b>Process Mechanical</b>																																	
	Project Management	80															80	\$ 15,600		\$ 15,600														
	Site Visits (3)	16		16		8											40	\$ 6,840	\$ 250	\$ 7,090														
	Review Meetings (4)	40		24		8											72	\$ 12,600	\$ 250	\$ 12,850														
	<b>30% Design</b>																0	\$ -		\$ -														
	Survey and Base Maps (CES)			2	4												6	\$ 590		\$ 590														
	Tanks			12	12												24	\$ 2,580	\$ 100	\$ 2,680														
	Site Piping			8	12												20	\$ 2,040	\$ 100	\$ 2,140														
	Vaults (4)			12	20												32	\$ 3,220	\$ 50	\$ 3,270														
	Mixers			8	8												16	\$ 1,720		\$ 1,720														
	Demolition			4	8												12	\$ 1,180		\$ 1,180														
	Utility Replacement			16	12												28	\$ 3,120	\$ 100	\$ 3,220														
	P&IDs					12											12	\$ 960	\$ 50	\$ 1,010														
	Technical Specifications					4											4	\$ 540		\$ 540														
	QA/QC			4		24											28	\$ 5,220		\$ 5,220														
	<b>60% Design</b>																0	\$ -		\$ -														
	Geotechnical			2													2	\$ 270		\$ 270														
	Tanks			4	16	24											44	\$ 4,700	\$ 100	\$ 4,800														
	Site Piping			8	32												40	\$ 3,640	\$ 100	\$ 3,740														
	Vaults (4)			12	32												44	\$ 4,180	\$ 50	\$ 4,230														
	Mixers			2	4	8											14	\$ 1,490		\$ 1,490														
	Demolition			4	4												8	\$ 860	\$ 50	\$ 910														
	Utility Replacement					12	32										44	\$ 4,180	\$ 100	\$ 4,280														
	Technical Specifications					12											12	\$ 1,620	\$ 300	\$ 1,920														
	P&IDs							4									4	\$ 320	\$ 50	\$ 370														

95% Design															0	\$ -	\$ -	\$ -
Tanks				8	20										28	\$ 2,680	\$ 100	\$ 2,780
Site Piping				8	20										28	\$ 2,680	\$ 100	\$ 2,780
Vaults (4)				12	20										32	\$ 3,220	\$ 50	\$ 3,270
Mixers				8	8										16	\$ 1,720	\$ -	\$ 1,720
Demolition				2	4										6	\$ 590	\$ 50	\$ 640
Utility Replacement				8	12										20	\$ 2,040	\$ -	\$ 2,040
Technical Specifications				12											12	\$ 1,620	\$ 300	\$ 1,920
P&IDs					4										4	\$ 320	\$ 50	\$ 370
QA/QC				4	40										44	\$ 8,340	\$ -	\$ 8,340
															0	\$ -	\$ -	\$ -
Bid Ready Documents				12	32										44	\$ 4,180	\$ 2,000	\$ 6,180
<b>Subtotal</b>		136	6	254	344	80	0	0	0	0	0	0	0	0	820	\$ 104,860	\$ 4,300	\$ 109,160
<b>Civil/Site</b>																		
Grading & Drainage					32										72	\$ 8,160	\$ -	\$ 8,160
Traffic Control					40	32									72	\$ 2,560	\$ 100	\$ 2,660
															0	\$ -	\$ -	\$ -
<b>Subtotal</b>		0	0	40	64	0	0	40	0	0	0	0	0	0	144	\$ 10,720	\$ 100	\$ 10,820
<b>Structural</b>																		
Miscellaneous Concrete Pads					8		12								20	\$ 2,596	\$ -	\$ 2,596
															0	\$ -	\$ -	\$ -
<b>Subtotal</b>		0	0	0	8	0	12	0	0	0	0	0	0	0	20	\$ 2,596	\$ -	\$ 2,596
<b>Electrical/I&amp;C</b>																		
Tank Site/Lighting Plan/ Gate Controls															2	8		
Tank/Vault Power and Instrumentation Plans															12	24		
RTU/ I/O Cabinet															4	18		
Wiring Diagrams															4	8		
Grounding and Lightning Protection															4	6		
Power Distribution Panel/Schedule/One-Line/ETAP Model															2	12		
P&ID															4		\$ 400	\$ 400
Technical Specifications															12		\$ 1,200	\$ 1,200
Description of Operation/Alarms/Control Narrative															6		\$ 600	\$ 600
Cost Estimate															2	8		
30, 60, and 90% submission															6		\$ 600	\$ 600
Respond to Client Review Comments															2	8		
															10		\$ 1,050	\$ 1,050
															0		\$ -	\$ -
<b>Subtotal</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	152	\$ 16,000	\$ -	\$ 16,000
<b>Specifications and Estimating</b>																		
Technical Specifications Preparation															24	12	36	\$ 3,300
Cost Estimating															8	12	20	\$ 1,700
Final Bid Documents															16	12	28	\$ 2,500
															0		\$ -	\$ -
<b>Subtotal</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	48	36	84	\$ 7,500
<b>Permitting</b>																		
Local Zoning Board Site Plan approval		16		48	40										104	\$ 6,320	\$ 500	\$ 6,820
NJDEP Bureau of Potable Water Permit		4		20	24										48	\$ 2,700	\$ 100	\$ 2,800
Soil Erosion and Sediment Control Permit		1		12	16										29	\$ 1,475	\$ 100	\$ 1,575
Environmental Clearances NJEIT		2		16	16										34	\$ 1,670	\$ 100	\$ 1,770
Coordination with Mercer County		2		16	16										34	\$ 1,670	\$ -	\$ 1,670
															0		\$ -	\$ -
<b>Subtotal</b>		25	0	112	112	0	0	0	0	0	0	0	0	0	249	\$ 13,835	\$ 800	\$ 14,635
<b>4 Bid Phase</b>																		
Bidding															0	\$ -	\$ -	\$ -
Pre-bid Meeting w/ Agenda & Minutes		6		12											18	\$ 2,790	\$ 100	\$ 2,890
Respond to RFI and Prepare Addenda		4		18	12	2									52	\$ 6,360	\$ 100	\$ 6,460
Review Bid and Prepare Report		8		8											16	\$ 2,640	\$ -	\$ 2,640
															0		\$ -	\$ -
<b>Subtotal</b>		18	0	38	12	2	0	0	0	8	8	0	0	0	86	\$ 11,790	\$ 200	\$ 11,990
<b>5 Other Services</b>																		
Survey and Base Maps (CES)															0	\$ -	\$ 15,400	\$ 15,400
Geotechnical															0		\$ 17,700	\$ 17,700
															0		\$ -	\$ -
<b>Subtotal</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	0		\$ 33,100	\$ 33,100
<b>TOTALS</b>		237	50	594	676	129	12	40	84	48	164	48	36	2118	\$ 237,046	\$ 5,600	\$ 275,746	



**Fee Proposal**  
**City of Trenton**  
**Engineering Services for Phase 1 and 2**  
**Decentralized Water Storage Tank Project**  
**Phase 2**

Task No.	Description	Project Manager	Senior Engineer	Project Engineer	CAD Designer	QA/QC Reviews	LSRP	Project Civil Engineer	Engineer-in Training	Electrical Project Engineer	Electrical Engineer/Senior Designer	Specifications and Estimating Engineer	Administrative Support	Total Hours	Labor	Direct Cost	Total		
		Hourly Billable Rate	\$ 195.00	\$ 155.00	\$ 135.00	\$ 80.00	\$ 195.00	\$ 142.00	\$ 140.00	\$ 80.00	\$ 125.00	\$ 100.00	\$ 100.00	\$ 75.00					
	Billing Rate Breakdown																		
1	<b>Site Evaluation</b>																		
	Project Management	40													40	\$ 7,800	\$ 7,800		
	Desktop Screening (GIS, Aerials)	2		20	40		8								70	\$ 7,426	\$ 100	\$ 7,526	
	Hydraulic Model Runs to set General Areas	2	8												18	\$ 2,270		\$ 2,270	
	Field Visits (5 sites)			16			16								32	\$ 4,432	\$ 100	\$ 4,532	
	Conceptual Layouts		2	20	40	6									68	\$ 7,380	\$ 100	\$ 7,480	
	NJSHPO & Threatened/Endangered Research		6	12											18	\$ 1,770		\$ 1,870	
	Meetings (3 per RFP)	12		12		4									28	\$ 4,740	\$ 100	\$ 4,840	
	Evaluation and Recommendation 3 sites (Brief Report)	4		16	20	4									8	52	\$ 3,760		\$ 3,760
	Construction Cost Estimates	2		24	24										66	\$ 3,910		\$ 3,910	
	Update Conceptual Layouts after Survey (3 sites)	2		8	24										34	\$ 2,310	\$ 50	\$ 2,360	
	<b>Subtotal</b>	64	10	122	160	14	24	0	8	0	0	16	8	426	\$ 35,808	\$ 550	\$ 46,348		
2	<b>Environmental Assessments</b>																		
	Phase 1 Site Assessments (5 sites)	5					125								130	\$ 18,725	\$ 250	\$ 18,975	
	Preliminary Site Assessment (5 sites)	5					200								205	\$ 29,375	\$ 2,500	\$ 31,875	
	<b>Subtotal</b>	10	0	0	0	0	325	0	0	0	0	0	0	335	\$ 48,100	\$ 2,750	\$ 50,850		
3	<b>Other Services</b>																		
	Property Appraisals (5 sites)					6									6	\$ 810	\$ 16,000	\$ 16,810	
	Site Survey (3 sites, assume 2 acre max.)			2	4										6	\$ 320	\$ 22,500	\$ 22,820	
	<b>Subtotal</b>	0	0	8	4	0	0	0	0	0	0	0	0	12	\$ 1,130	\$ 38,500	\$ 39,630		
	<b>TOTALS</b>	74	10	130	164	14	349	0	8	0	0	16	8	773	\$ 85,038	\$ 41,800	\$ 136,828		



## SECTION 7 Fee Schedule

We have provided our fee summary in the table below. Our fee for the Phase 1 work is \$540,725 and our fee for the Phase 2 work is \$109,275. The total fee if we were awarded both projects is \$650,000. Per Addendum #1, we included \$50,000 in permit fees, environmental sampling and analysis, and miscellaneous items in the Phase 1 budget. We have also provided the requested breakdown of hours and costs by task and sub task in tables on the following pages. The detailed breakdowns include the hourly rates by job classification. The project will be billed on a not-to-exceed basis using the billing rates provided in our fee.

Phase	Description	Total
1	<b>Phase 1: Design + Allowance</b>	<b>\$ 540,725</b>
	Gravity Zone Storage Tank Design	\$ 490,725
	Addendum 1 Allowance	\$ 50,000
2	<b>Central Pumping Zone Siting Study</b>	<b>\$ 109,275</b>
<b>Total (if awarded both projects)</b>		<b>\$ 650,000</b>

The fee for Phase 1 is based on the most expensive option to design and bid from the three possible design scenarios defined in Addendum No.1:

- 1-large tank across 942 Prospect Street, Parkway Avenue, and 50 Parkway Ave
- 4-smaller tanks on 942 Prospect Street and 50 Parkway Ave
- 2-smaller tanks (with at least 15.5 MG storage) on 942 Prospect Street



Phase 1 Gravity Storage Fee	Hours	Labor	Expenses	Total	Technical Director Project Director	Senior Project Manager	Senior Technologist	Senior Engineer Scientist	Project Engineer Scientist	Junior Engineer Scientist	Office \ clerical	Senior CADD	CADD Technician
	<i>Totals</i>	<i>\$ 460,225</i>	<i>\$ 30,500</i>	<i>\$ 490,725</i>	<i>\$ 293</i>	<i>\$ 226</i>	<i>\$ 204</i>	<i>\$ 177</i>	<i>\$ 145</i>	<i>\$ 113</i>	<i>\$ 84</i>	<i>\$ 122</i>	<i>\$ 84</i>
<b>Design Permitting</b>	<b>3673</b>	<b>\$ 455,265</b>	<b>\$ 30,350</b>	<b>\$ 483,615</b>	<b>6</b>	<b>334</b>	<b>97</b>	<b>452</b>	<b>516</b>	<b>148</b>	<b>200</b>	<b>60</b>	<b>700</b>
A. Reconnaissance													
Project Setup, Safety, PXP	134	\$ 21,274	\$ 150	\$ 21,424									
Site Visit	32	\$ 7,128	\$ 150	\$ 7,128									
Site Visit Expenses	16	\$ 1,905	\$ 150	\$ 1,905									
Document Review	48	\$ 7,538	\$ 150	\$ 7,538									
Hydraulic Review	38	\$ 4,702	\$ 150	\$ 4,702									
B. Design Memorandum	240	\$ 32,040	\$ 32,040		4	20	16	40	40	8	112	-	-
C. Detailed Design	2963	\$ 356,508	\$ 18,000	\$ 374,508									
30, 60, 95, Final	2318	\$ 338,208	\$ 18,000	\$ 338,208	2	194	60	362	360	140	740	200	700
Geotech Eval/Borings	145	\$ 18,300	\$ 18,300				15	30	0	0	100	-	-
D. Topographical and Site Survey	16	\$ 1,672	\$ 8,900	\$ 10,572									
Sub - Topographical Land Site Survey													
E. Permitting	120	\$ 13,088	\$ 13,088										
NJDEP BWSE/ SES/C/Stormwater Permitting Fees Expense	120	\$ 13,088	\$ 13,088										
F. NJI Bank Loan Application	104	\$ 14,602	\$ 14,602				40			4		60	-
G. Meetings	96	\$ 14,083	\$ 300	\$ 14,383									
(4) Start, 30, 60, 95	96	\$ 14,083	\$ 300	\$ 14,083				24		8	24	-	-
(4) Start, 30, 60, 95 Expenses												40	-
H. Address Trenton Comments [covered in C]													
I. Copies (20 Sets) for Bidders	50	\$ 6,959	\$ 150	\$ 7,109									
Bidding													
A. Bid Review	10	\$ 1,313	\$ 1,313					2			6	-	-
B. RFCs/PreBid Mtg. Agenda, Minutes RFCs/PreBid Mtg. Agenda, Minutes Expenses	16	\$ 2,258	\$ 150	\$ 2,408				4			8	-	-
C. Addenda	16	\$ 2,258	\$ 150	\$ 2,408						4	-	8	-
D. Bid Summary	3	\$ 1,129	\$ 1,129					2		2	-	4	-



Phase 2 Siting Study Task Description	Jacobs' Hours	Labor Costs	Subs / Expenses	Total	Hourly Rate->	Project Director	Senior Technologist Project Manager Task Leader	Estimator Project Engineer	Junior Engineer
<b>Project Management</b>	25	\$ 2,888		\$ 2,898	1	4		\$ 156	\$ 90
Desktop GIS Study - Site Screening	32	\$ 3,943		\$ 3,943					20
Document Review	28	\$ 3,581		\$ 3,581					16
Hydraulic Review - Model to Determine Tank HGLs	136	\$ 14,663		\$ 14,663		2			12
Phase 1 Site Assessment and Preliminary Assessment (5 sites)	32	\$ 6,302	\$ 18,000	\$ 24,302		27			94
Property Appraisal (5 sites)	16	\$ 3,127	\$ 12,500	\$ 15,627		13			3
Meetings (3)	41	\$ 7,317		\$ 7,317		19			22
Cost Estimate (5)	44	\$ 5,485		\$ 5,485		4			24
Preliminary TANK Design (5 Sites)	99	\$ 12,238		\$ 12,238	1	18			64
Site Survey (3 sites)	24	\$ 4,520	\$ 14,700	\$ 19,220		16			0
	<b>Totals</b>	<b>477</b>	<b>\$ 64,075</b>	<b>\$ 45,200</b>	<b>\$ 109,275</b>	<b>2</b>	<b>103</b>	<b>\$ 138.85</b>	<b>230</b>



## 8. Fee proposal

As requested in the RFP, our not to exceed fees for phases 1 and 2 as outlined in the RFP, Addendum No. 1 and in this proposal are as follows:

Phase 1	Cost
Task 1 Design / Permitting Services	\$ 466,473
Task 2 Bid Services	\$ 12,175
Phase 1 Subtotal	\$ 478,648
Phase 2	
Tank Site Location Services	\$ 150,324
Phase 1 and 2 Subtotal	\$ 628,972
Permit and Analysis	
Permit and Analysis Allowance	\$ 50,000
Total	\$ 678,972

The following clarifications to the price are stated herein:

### Phase 1

- Anticipated schedule is contingent upon access permissions to all sites (including but not limited to geotechnical borings and survey). If permission to access to all sites is not immediately granted, the schedule will be adversely affected.
- Anticipated schedule is aggressive and based on a strict two-week review period by TWW for each design submittal.
- TWW will provide the preferred tank layout configuration based on available property alternatives found within the feasibility study within two weeks of the Notice to Proceed.
- Per the RFP, TWW has performed environmental investigations at 942 Prospect St., and it is to be assumed that no additional remediation is required at this time. Therefore, there are no hazardous materials and asbestos surveys included within our scope.
- Based on the considerable amount of work required to vacate Parkway Avenue (traffic data collection, signal timing and intersection crash data collection, intersection analyses, preliminary design schematics for Mercer County approval, etc.), it may not be feasible to vacate the county road and meet the schedule described in the RFP. Therefore, we have assumed that Parkway Avenue will not be vacated as part of this project, and the associated work is not included within our scope. We do anticipate that the construction of the tank(s) and interconnecting piping will require the closure of Parkway Avenue, a detour plan, and coordination with NJDOT, which are included within our scope. Should TWW wish to pursue permanently vacating Parkway Avenue, and is able to obtain an extension of the ACO, we can provide cost for the required traffic and safety studies design under a separate submittal.

# Fee

Labor summary totals

Title/Grade:	Project Mgmt.	Process	Surveying	Electrical	ICA	Structural	Landscape Arch	Geotechnical	Environmental	GIS	SW / FHA / FWW	Highway/ Traffic
Name:	JS/MA/AT	NM / Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support
Task 1 - Phase I - Design Services of 23.5 MG Tank	513	785	170	78	90	276	161	250	135	7	272	108
Task 2 - Phase I - Bidding Services of 23.5 MG Tank	16	42	0	0	0	10	0	0	0	0	1	0
Task 3 - Phase II - Identification and Selection of 8.5 MG Storage Tank Site	99	180	216	0	0	0	0	0	339	0	108	0
Task 4 - Allowance for Permit Fees	0	0	0	0	0	0	0	0	0	0	0	0
Total Hours:	628	1,007	386	78	90	286	161	250	474	7	381	108
Total Labor Fee:	\$148,643	\$105,888	\$47,432	\$11,678	\$19,926	\$46,633	\$19,243	\$28,233	\$54,774	\$970	\$50,104	\$14,803

Direct expenses

Code	Description	Loaded Cost	Task 1	Task 2	Task 3	Task 4
COCAR	Company Car Costs	\$2,300	\$1,550	\$250	\$500	\$-
EXLAB	Subconsultants & Temp. Staff					
	Subconsultant No. 1	\$27,400	\$27,400	\$-	\$-	\$-
	Subconsultant No. 2	\$5,980	\$5,980	\$-	\$-	\$-
	Subconsultant No. 3	\$500	\$500	\$-	\$-	\$-
	Subconsultant No. 4	\$2,875	\$-	\$-	\$2,875	\$-
	Subconsultant No. 5	\$24,240	\$-	\$-	\$24,240	\$-
	Subconsultant & Temp. Staff Subtotal	\$60,995	\$33,880	\$-	\$27,115	\$-
GENRL	General	\$850	\$850	\$-	\$-	\$-
HOTEL	Accomodation/Hotel	\$-	\$-	\$-	\$-	\$-
ALLOW	Allowance	\$50,000	\$-	\$-	\$-	\$50,000
TELEP	Telephone	\$16,500	\$15,000	\$1,500	\$-	\$-
	Loaded Direct Expenses Subtotal	\$130,645	\$51,280	\$1,750	\$27,615	\$50,000
	Loaded Labor	\$548,327	\$415,193	\$10,425	\$122,709	\$-
	<b>Grand Total Fee</b>	<b>\$678,972</b>	<b>\$466,473</b>	<b>\$12,175</b>	<b>\$150,324</b>	<b>\$50,000</b>

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