

<u>Bussen-Mayer Engineering Group, Inc.,</u>



December 2, 2019

Kevin Joseph, E.I., Utilities Associate Engineer City of Cocoa Utilities Department 351 Shearer Blvd Cocoa, FL 32922 (via email kjoseph@cocoafl.org)

RE: MICHIGAN AVENUE FORCEMAIN AND REUSE EXTENSION CONSTRUCTION PHASE SERVICES
BUSSEN-MAYER PROJECT NUMBER: 379115B

Dear Mr. Joseph:

Pursuant to your request, Bussen-Mayer Engineering Group, Inc. (BMEG) is pleased to present this Task Order proposal under our Continuing Consultant Contract with the City of Cocoa Utilities Department (CCUD), for professional engineering and consulting services relating to the above referenced project. This project consists of approximately;

- 160 linear feet of 10" DIP force main and 210 linear feet of 12" DIP reuse main via jack and bore inside 120 linear feet of 36" steel casing constructed on the north side of Michigan Avenue within FEC right-of-way;
- 320 linear feet of 10" Fusible PVC force main constructed via direct bore at Clearlake Road;
- 165 linear feet of 10" Fusible PVC force main constructed via direct bore on Michigan Avenue;
- 103 linear feet of 4" Fusible PVC reuse main constructed via direct Bore at University Drive;
- 165 linear feet of 6" Fusible PVC reuse main constructed via direct bore on Michigan
- 2,355 linear feet of 10" PVC force main constructed along Michigan Avenue;
- 1,145 linear feet of 6" PVC reuse main constructed along Michigan Avenue;

Engineering design and permitting services have been provided by BMEG under separate agreement. Construction documents have been provided, including the required site construction permits. This proposal generally provides engineering and inspection services required by the City during completion of the construction phase of the project.

100 PARNELL STREET • MERRITT ISLAND, FL 32953 • PH.: (321) 453-0010 FAX.: (321) 454-6885 • E-MAIL: bussenmayer@bmeg.net • WEBSITE: www.bmeg.net

Based on this information, we propose to provide the following specific scope of services in a timely fashion:

A. CONSTRUCTION SERVICES:

- 1. We will attend a Preconstruction Conference with the applicable utilities companies, the Contractor and CCUD staff. We will also attend the FDOT Pre-Construction Conference and the Brevard County Pre-Construction Conference.
- 2. We will review and approve (or redline) shop drawings and material submittals as required for the project.
- We will assist the City and Contractor with underground utility location coordination and conflict assessment in association with utility companies during the course of construction.
- 4. We will complete general routine site visits and inspections during the course of major utility construction activities, in order to review the progress and quality of the work, review maintenance of traffic measures, confirm compliance with permitting requirements, and provide construction coordination assistance to the Contractor and City. It is anticipated that construction inspections and site visits will occur on average two (2) times per week during active construction periods and will average approximately 2 to 3 hours per inspection.
- 5. We will provide "specific event" inspections for significant/complex construction tasks associated with the project, such as the bore and jack operation under the railway, the direct bore and work in FDOT right-of-way for Clearlake Road, project intersections and other areas of concern.
- 6. We will file the NPDES notification at the commencement of construction (if required). Contractor is responsible for weekly inspections, log book, and maintenance of erosion control measures.
- 7. We will monitor erosion control measures pursuant to the stormwater pollution plan and provide recommendations and coordination within the City and contractor.
- 8. We will attend regularly scheduled progress meetings and field meetings (if necessary) with the City and Contractor to assist in the efficient completion of the project.
- 9. We will evaluate quantities and provide certification or approval of monthly pay requests from Contractor.
- 10. We will assist the City in addressing Contractor RAI's during the course of construction.

- 11. Upon receipt of certified as-built drawings prepared and provided by the Contractor's registered land surveyor, we will complete a final inspection and review the as-built drawings for compliance of the approved plans and permits and make appropriate written comments as necessary. Upon substantial completion of the project in conformance with the approved plans and permits and upon receipt of the final certified as-built drawings revised per comments as referenced above, along with receipt of a passing pressure test, and applicable construction testing, we will provide final certifications for the project to the appropriate involved agencies (FDEP/ Brevard County/ FDOT).
- 12. We will coordinate with the City and attend the final inspection of the project in conjunction with the appropriate agencies and the Contractor. We will assist the City with developing a punchlist of construction deficiencies by the Contractor and assist in pursuing final acceptance and clearance as required.

We have based this proposal based on the following assumptions and conditions;

- 1. Construction testing is not included. A qualified geotechnical testing lab is required (by contractor) per spec's.
- 2. Construction surveying, layout, or as-built preparation is not included.
- 3. It is assumed the project will commence within 90 days of the date of this proposal and be complete within 10 months thereafter.

Our proposed lump sum fees for providing the above described services would be as follows:

A. CONSTRUCTION PHASE SERVICES

\$52,755.00

These fees are based on the estimated man-hour breakdown attached and our standard hourly rates, as itemized and reflected in Exhibit "A" attached.

Invoicing for this project will be in accordance with the following schedule:

INVOICE PROCEDURES AND PAYMENT: BUSSEN-MAYER ENGINEERING GROUP, INC. shall submit invoices to the Client for work accomplished during each calendar month. For services provided on a Lump Sum basis, the amount of each monthly invoice shall be determined on the "percentage of completion method" whereby BUSSEN-MAYER ENGINEERING GROUP, INC. will estimate the percentage of the total work (provided on a Lump Sum basis) accomplished during the invoicing period.

It is hereby acknowledged that this TASK ORDER is an addendum to the master contract approved by the City of Cocoa on June 12, 2017 for engineering design, permitting and

services for construction of utility conveyance system upgrades and expansions, and as such, this TASK ORDER is subject to all conditions and stipulations contained in said contract.

Should you have any questions or comments regarding this proposal, please feel free to contact the undersigned. This proposal is valid for a period of sixty (60) days from the date herein and subject to change thereafter. If you wish us to proceed with the above described services, please issue a work order number and Notice to Proceed for this project. Thank you for the opportunity to provide these services, and we look forward to working with you on this project.

Sincerely,

BUSSEN-MAYER ENGINEERING GROUP, INC.

Joseph W. Mayer, P.E.

President

cc: Kristoffer Smith, E.I.

Exhibit "A"

Man-Hour Breakdown Estimate-Basic Scope MICHIGAN AVE. CONSTRUCTION PHASE SERVICES BMEG# 379115A

12/2/19

Hours Rate Subtotal				12/2	.,	<u> </u>	
Project Engineer 2.00 \$ 135 \$ 270 Project Manager 3.00 \$ 115 \$ 345 \$ 615 \$ 200 \$ 135 \$ 200 \$ 615 \$ 200 \$ 615 \$ 200		Hours	R	Rate	S	ubtotal	
Project Engineer 2.00	A. CONSTRUCTION PHASE SERVICES			-			
Project Manager 3.00 \$ 115 \$ 345 \$ 615	1. Pre-Construction Meeting						
Subtotal \$ 615	Project Engineer	2.00	\$	135	\$	270	
2. Review and Approve shop drawings/submittals Project Engineer 2.00 \$ 135 \$ 270 Project Manager 4.00 \$ 115 \$ 460 Engineering Technician 18.00 \$ 85 \$ 1,530 Office Assistant 4.00 \$ 45 \$ 180 Subtotal \$ 2,440 3. Underground utility coordination Project Engineer 3.00 \$ 135 \$ 405 Project Manager 3.00 \$ 115 \$ 345 Construction Inspector 12.00 \$ 65 \$ 780 Office Assistant 4.00 \$ 45 \$ 180 Construction Inspector 12.00 \$ 65 \$ 780 Office Assistant 4.00 \$ 45 \$ 180 A Site Visits/Inspections Project Engineer 12.00 \$ 135 \$ 1,620 Project Manager 18.00 \$ 115 \$ 2,070 Engineering 164.00 \$ 85 \$ 13,940 Office Assistant 36.00 \$ 45 \$ 1,620 Subtotal \$ 19,250 5. Specific Location Inspections Project Engineer 16.00 \$ 135 \$ 2,160 Project Manager 4.00 \$ 115 \$ 460 Engineering 16.00 \$ 115 \$ 460 Engineering 16.00 \$ 85 \$ 5,440 Engineer	Project Manager	3.00	\$	115	\$	345	
Project Engineer 2.00						Subtotal	\$ 615
Project Manager	2. Review and Approve shop drawings	s/submitt	als				
Engineering Technician 18.00 \$ 85 \$ 1,530	Project Engineer	2.00	\$	135	\$	270	
Office Assistant 4.00 \$ 45 \$ 180 Subtotal \$ 2,440 3. Underground utility coordination Project Engineer 3.00 \$ 135 \$ 405 Project Manager 3.00 \$ 115 \$ 345 Construction Inspector 12.00 \$ 65 \$ 780 Office Assistant 4.00 \$ 45 \$ 180 Subtotal \$ 1,710 4. Site Visits/Inspections Subtotal \$ 1,710 Project Engineer 12.00 \$ 135 \$ 1,620 Project Manager 18.00 \$ 115 \$ 2,070 Engineering 164.00 \$ 85 \$ 13,940 Subtotal \$ 19,250 5. Specific Location Inspections Subtotal \$ 19,250 Froject Engineer 16.00 \$ 135 \$ 2,160 Project Manager 4.00 \$ 115 \$ 460 Engineering 4.00 \$ 115 \$ 460 Engineering 5 5,440 Engineering 64.00 \$ 85 \$ 5,440 5 5,440	Project Manager	4.00	\$	115	\$	460	
Subtotal \$ 2,440	Engineering Technician	18.00	\$	85	\$	1,530	
3. Underground utility coordination Project Engineer 3.00 \$ 135 \$ 405 Project Manager 3.00 \$ 115 \$ 345 Construction Inspector 12.00 \$ 65 \$ 780 Office Assistant 4.00 \$ 45 \$ 180 Subtotal \$ 1,710 4. Site Visits/Inspections Project Engineer 12.00 \$ 135 \$ 1,620 Project Manager 18.00 \$ 115 \$ 2,070 Engineering Technician/Inspector 164.00 \$ 85 \$ 13,940 Office Assistant 36.00 \$ 45 \$ 1,620 Subtotal \$ 19,250 5. Specific Location Inspections Project Engineer 16.00 \$ 135 \$ 2,160 Project Manager 4.00 \$ 135 \$ 460 Engineering 4.00 \$ 115 \$ 460 Engineering 7 64.00 \$ 85 \$ 5,440	Office Assistant	4.00	\$	45	\$	180	
Project Engineer 3.00 \$ 135 \$ 405 Project Manager 3.00 \$ 115 \$ 345 Construction Inspector 12.00 \$ 65 \$ 780 Office Assistant 4.00 \$ 45 \$ 180 Subtotal Subtotal 4. Site Visits/Inspections Project Engineer 12.00 \$ 135 \$ 1,620 Project Manager 18.00 \$ 115 \$ 2,070 Engineering 164.00 \$ 85 \$ 13,940 Office Assistant 36.00 \$ 45 \$ 1,620 Subtotal \$ 19,250 5. Specific Location Inspections Project Engineer 16.00 \$ 135 \$ 2,160 Project Manager 4.00 \$ 115 \$ 460 Engineering 4.00 \$ 15 \$ 5,440 Technician/Inspector 64.00 \$ 85 \$ 5,440						Subtotal	\$ 2,440
Project Manager 3.00 \$ 115 \$ 345	3. Underground utility coordination						
Construction Inspector 12.00 \$ 65 \$ 780 Office Assistant 4.00 \$ 45 \$ 180 Subtotal \$ 1,710 4. Site Visits/Inspections Project Engineer 12.00 \$ 135 \$ 1,620 Project Manager 18.00 \$ 115 \$ 2,070 Engineering 164.00 \$ 85 \$ 13,940 Office Assistant 36.00 \$ 45 \$ 1,620 Subtotal \$ 19,250 5. Specific Location Inspections Project Engineer 16.00 \$ 135 \$ 2,160 Project Manager 4.00 \$ 115 \$ 460 Engineering 4.00 \$ 85 \$ 5,440	Project Engineer	3.00	\$	135	\$	405	
Office Assistant 4.00 \$ 45 \$ 180 Subtotal \$ 1,710 4. Site Visits/Inspections Project Engineer 12.00 \$ 135 \$ 1,620 Project Manager 18.00 \$ 115 \$ 2,070 Engineering 164.00 \$ 85 \$ 13,940 Office Assistant 36.00 \$ 45 \$ 1,620 Subtotal \$ 19,250 5. Specific Location Inspections Subtotal \$ 19,250 Project Engineer 16.00 \$ 135 \$ 2,160 Project Manager 4.00 \$ 115 \$ 460 Engineering 4.00 \$ 85 \$ 5,440	Project Manager	3.00	\$	115	\$	345	
Subtotal \$ 1,710	Construction Inspector	12.00	\$	65	\$	780	
4. Site Visits/Inspections Project Engineer 12.00 \$ 135 \$ 1,620 Project Manager 18.00 \$ 115 \$ 2,070 Engineering Technician/Inspector 164.00 \$ 85 \$ 13,940 Office Assistant 36.00 \$ 45 \$ 1,620 Subtotal \$ 19,250 5. Specific Location Inspections Project Engineer 16.00 \$ 135 \$ 2,160 Project Manager 4.00 \$ 115 \$ 460 Engineering Technician/Inspector Technician/Inspector 64.00 \$ 85 \$ 5,440	Office Assistant	4.00	\$	45	\$	180	
Project Engineer 12.00 \$ 135 \$ 1,620 Project Manager 18.00 \$ 115 \$ 2,070 Engineering 164.00 \$ 85 \$ 13,940 Office Assistant 36.00 \$ 45 \$ 1,620 Subtotal \$ 19,250 5. Specific Location Inspections Project Engineer 16.00 \$ 135 \$ 2,160 Project Manager 4.00 \$ 115 \$ 460 Engineering 16.00 \$ 85 \$ 5,440						Subtotal	\$ 1,710
Project Manager 18.00 \$ 115 \$ 2,070 Engineering	4. Site Visits/Inspections						
Engineering Technician/Inspector 164.00 \$ 85 \$ 13,940 Office Assistant 36.00 \$ 45 \$ 1,620 Subtotal \$ 19,250 5. Specific Location Inspections Project Engineer 16.00 \$ 135 \$ 2,160 Project Manager 4.00 \$ 115 \$ 460 Engineering Technician/Inspector 64.00 \$ 85 \$ 5,440	Project Engineer	12.00	\$	135	\$	1,620	
Technician/Inspector 164.00 \$ 85 \$ 13,940 Office Assistant 36.00 \$ 45 \$ 1,620 Subtotal \$ 19,250 5. Specific Location Inspections Project Engineer 16.00 \$ 135 \$ 2,160 Project Manager 4.00 \$ 115 \$ 460 Engineering Technician/Inspector 64.00 \$ 85 \$ 5,440	Project Manager	18.00	\$	115	\$	2,070	
Office Assistant 36.00 \$ 45 \$ 1,620 Subtotal \$ 19,250 5. Specific Location Inspections Project Engineer 16.00 \$ 135 \$ 2,160 Project Manager 4.00 \$ 115 \$ 460 Engineering Technician/Inspector 64.00 \$ 85 \$ 5,440	Engineering						
Subtotal \$ 19,250	Technician/Inspector	164.00	\$	85	-	13,940	
5. Specific Location Inspections Project Engineer 16.00 \$ 135 \$ 2,160 Project Manager 4.00 \$ 115 \$ 460 Engineering Technician/Inspector 64.00 \$ 85 \$ 5,440	Office Assistant	36.00	\$	45	\$	1,620	
Project Engineer 16.00 \$ 135 \$ 2,160 Project Manager 4.00 \$ 115 \$ 460 Engineering Technician/Inspector 64.00 \$ 85 \$ 5,440						Subtotal	\$ 19,250
Project Manager 4.00 \$ 115 \$ 460 Engineering Technician/Inspector 64.00 \$ 85 \$ 5,440	5. Specific Location Inspections						
Engineering Technician/Inspector 64.00 \$ 85 \$ 5,440	Project Engineer	16.00	\$	135	\$	2,160	
Technician/Inspector 64.00 \$ 85 \$ 5,440	Project Manager	4.00	\$	115	\$	460	
, ,	Engineering						
Subtotal \$ 8,060	Technician/Inspector	64.00	\$	85	\$	5,440	
						Subtotal	\$ 8,060

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					ENGINEE	RING SE	RVICES TOTAL	\$	52,7
					Subtotal	•	1,570]	
Office Assistant	2.00	\$	45	\$	90				
AutoCAD Technician	2.00		70	\$	140				
Engineering Technician	4.00	_	85	\$	340				
Project Manager	4.00		115	\$	460				
Project Engineer	4.00			\$	540				
11. Final Inspection/City Acceptance									
					Subtotal	\$	1,430		
Office Assistant	2.00	\$	45	\$	90				
Engineering Technician	4.00		85	\$	340				
Project Manager	4.00		115	\$	460				
Project Engineer	4.00	\$	135	\$	540			-	
11. Final Certifications							, -	-	
	1	-		'	Subtotal	\$	4,390		
Office Assistant	4.00		45	\$	180				
AutoCAD Technician	16.00		70	\$	1,120				
Engineering Technician	16.00		85	\$	1,360				
Project Engineer Project Manager	8.00		115	\$	920				
Project Engineer	6.00	\$	135	\$	810			-	
10. Contractor RAI's					Jastotal	7	3,000	-	
construction inspector	20.00	۲	0.5	٦	Subtotal	\$	3,800		
Construction Inspector	20.00	•	65	\$	1,300				
Project Engineer Project Manager	10.00			\$	1,150				
Project Engineer	10.00	\$	135	\$	1,350				
9. Review monthly draw requests					Jubiolal	Ą	7,760	_	
Office Assistant	4.00	Ş	45	Ş	Subtotal	خ	7,780		
Construction Inspector Office Assistant	40.00	-	65 45	\$	2,600 180				
Project Manager				-	2,300				
Project Engineer	20.00			\$	2,700				
8. Progress/Site Meetings	20.00	۲	125	۲	2 700			_	
O. Dunamana/Cita Maratina					Subtotal	\$	1,370	-	
Office Assistant	2.00	\$	45	\$	90	4			
Construction Inspector	12.00	-	65	\$	780				
Project Manager	2.00		115	\$	230				
Project Engineer	2.00	\$	135	\$	270				
7. Erosion Control Monitoring		ı		1				_	
					Subtotal	\$	340	-	
Office Assistant	2.00	\$	45	\$	90				
Project Manager	1.00	\$	115	\$	115				
Project Engineer	1.00	\$	135	\$	135				