

**OCEAN CITY FAIRNESS IN TAXES
POST OFFICE BOX 565
OCEAN CITY, NEW JERSEY 08226**

Monday, April 5, 2021

Sent via email – jgillian@ocnj.us

Honorable Jay A. Gillian, Mayor
City of Ocean City, New Jersey
City Hall - 861 Asbury Avenue
Ocean City, New Jersey 08226

SUBJECT: ACT Engineers Schedule of Billable Hours

Dear Mayor Gillian:

There has been discussion at recent council meetings regarding injecting competition into the process of selecting professional service contracts for engineering services by issuing Request for Proposals (RFP's) in order to develop a pool of engineering firms that could be used for future municipal capital improvement work. Some of this discussion surrounded the awarding of contracts to ACT Engineers that were not subject to competition. To date, ACT Engineers have been awarded thirty nine (39) professional service contracts amounting to roughly \$7.3 million without being subjected to the RFP process. Based on my public sector experience, that is an extraordinary amount of professional service contracts to be awarded without being subject to any competition.

During these discussions regarding the RFP process and the awarding of additional professional service contracts to ACT Engineers, it was publicly stated several times that they city was receiving the best service at the most competitive price from ACT Engineers. In other words, Ocean City was getting the best deal. I assume that statement was based on verification that ACT Engineers was providing reasonable and competitive rates since their commencement of work in Ocean City during the summer of 2015.

As you are aware, I have been submitting Open Public Records Act (OPRA) request regarding ACT Engineers invoicing. While I have concerns over ACT Engineers billing practices, I was willing to put that issue on the 'back burner' in order to address more pressing concerns, like the proposed Public Safety Complex and the city wide flood mitigation plan. However, during this time, I did continue to submit OPRA request to the city along with submitting OPRA request to other communities that ACT Engineers perform municipal engineering work. While my review is not complete, some preliminary findings are troubling.

Presently, ACT Engineers is performing dredging and flood mitigation work for Brick Township, in Ocean County. This work is basically identical to the work that ACT Engineers has performed and is currently performing in Ocean City. As a result of reviewing Brick Township purchase orders, invoicing and other related documentation along with my knowledge of ACT Engineers work here in Ocean City, I have been able to determine the following:

1. For 2015 to 2019, the top rate (Principal Rate) Ocean City paid ACT Engineers was \$192.00 per hour.
2. For 2020, the top rate Ocean City (Principal Rate) paid ACT Engineers was \$200.00 per hour.
3. For 2019 and 2020, the top rate Brick Township paid ACT Engineers was \$140 per hour.
4. For 2021, the top rate Brick Township paid ACT Engineers was \$165 per hour.
5. The top rate for ACT Engineers is paid to three (3) employees. Those employees are Carol Beske, Robert Korkuch and Eric Rosina. Of these three (3) employees, only one is a state licensed engineer. Please keep in mind that the current hourly rate of our city solicitor, who is a seasoned litigator, is \$185 per hour.
6. The significant pay difference also extends to other titles with ACT Engineers.

Believe me, I struggled with advising you about this situation with ACT Engineers prior to going public but elected not to for the following reasons:

1. What logical reason does ACT Engineers have to charge Ocean City such excessive rates for a number of years beyond the simple reason that Ocean City is foolish enough to pay it? This is not an issue that some research over a couple of days could have found a satisfactory answer on why this was occurring. It is the exact same type of work and yet two (2) vastly different set of pay rates are being charged. ACT Engineers knew exactly what they were doing.

2. Based on my discussions with you, somehow you have rationalize in your mind that ACT Engineers is the only engineering firm capable of performing dredging and flood mitigation work in Ocean City, thus for some reason should not subject to competition or accountability. More so, an invoice review would show that you have given Carol Beske wide ranging authority to handle issues that are commonly handled by Business Administrator or city staff. One of the best examples of this is the appromately \$7,300 the city spend having Carol Beske prepare city employees for the town hall meeting on the proposed Public Safety Complex. Totally unnecessary. Thirty six hours of meeting preparation for a one hour meeting. All of this is very unnerving and of grave concern to me.

3. While the public could not attend the February 11, 2021 city council meeting due to the pandemic, ACT Engineers was permitted to attend the meeting and sit there and give a sales presentation to city council, which in my opinion clearly demonstrated an unhealthy (and unwise) bias towards ACT Engineers on your part. ACT Engineers did not attend that council meeting to discuss a particular project, they focused exclusively on their firm's qualifications along with highlighting their past performance. Nothing more than a sales pitch disguised as some sort of technical discussion.

On countless occasions and without fail, I (both as an individual and a FIT officer) have stood before city council and strongly supported your aggressive approach to capital improvement work. Of course, that was based on the assumption that capital dollars were being spend wisely. **You have made tremendous progress for the city in the area of capital improvements so please do not allow this pay issue to overshadow all the good work you have done while you have been in office.**

I am presently of the belief that until this matter is reconciled, that ACT Engineers should not be awarded any further professional service contracts and that a 'pause' take place with any current work that they are conducting. The one exception would be the current private dredging contract since that project is time sensitive. A copy of this correspondence is being sent to all city council members as FIT will be lobbying them to fully review this pay rate matter along with stopping all current and future work until the issue is resolved; that is if it can be resolved.

Furthermore, while I know it is a remote possibility, FIT will request a refund of taxpayer dollars from ACT Engineers that is how strongly FIT feels about this matter. As stated at the council meeting, this is nothing short of taxpayer abuse and it will not be tolerated. A primary responsibility of being Mayor is to advocate for the community along with representing the interest of the taxpayer. In this case, your actions lead me to believe that you representing the interest of ACT Engineers at the expense of the community. Unfortunately, the city was taken advantage of due to a lack of due diligence and FIT will take the necessary action to protect the interest of the Ocean City taxpayer.

Respectfully yours,

A handwritten signature in black ink, appearing to read 'DB', written in a cursive style.

David Breeden, President
Ocean City Fairness in Taxes

ATTACHMENTS

CC: Michael Allegretto, Aide to the Mayor
Robert Barr, President, City Council of Ocean City
Ocean City Fairness in Taxes Board of Directors

**OCEAN CITY FAIRNESS IN TAXES
LISTING AND DESCRIPTION OF EXHIBITS
ACT Engineers Pay Rate Issue**

Exhibit "A" - Purchase Order Listing by Vendor Name

This report shows as of January 22, 2021, that ACT Engineers has secured seven (7) different contracts with Brick Township ranging in cost from \$8,400 to \$220,000. ACT Engineers started working for Brick Township in February, 2019. As the title descriptions of the contracts indicate, their work deals with dredging, hydrographic survey and flood mitigation data gathering. Identical work has been performed or is currently being performed in Ocean City by ACT Engineers and in many cases, by the exact same ACT Engineers employees, like Carol Beske, Robert Korkuch, Eric Rosina, Wesley Lane, Jeffrey Richter and Junetta Dix.

Exhibit "B" -- Year 2019 Schedule of Billable Rates for Brick Township

On an annual basis, Brick Township establishes a pool of engineers by utilizing the Request for Proposal (RFP) process. As part of that process, in order to be eligible for the pool of engineers, all firms must agree to a rate schedule. This is the rate schedule for 2019 for Brick Township. To the right of the listing of rates for Brick Township, is the rate paid by Ocean City for 2019 for dredging and flood mitigation work. **Please note that the significant difference in billable rates between Ocean City and Brick Township exist with not only with the top position or rate, but with other titles as well.**

Exhibit "C" -- Year 2020 Schedule of Billable Rates for Brick Township

This is the rate schedule for 2020 for Brick Township. To the right of the listing of rates for Brick Township, is the rate paid by Ocean City for 2020 for dredging and flood mitigation work.

Exhibit "D" -- Year 2012 Schedule of Billable Rates for Brick Township.

This is the rate schedule for 2020 for Brick Township. Have not seen an ACT Engineers schedule of hourly rates and charges for Ocean City for 2021.

Exhibit "E" -- Sample Invoice for Brick Township

This is an invoice prepared by ACT Engineers for services rendered for Brick Township from March 29, 2020 to April 30, 2020. The work is for a project called Flood Mitigation Data Gathering. Many of the work descriptions included with this invoice are similar to work description found on Ocean City invoices

Exhibit "F" -- Sample Invoice for Ocean City

This is an invoice prepared by ACT Engineers for services rendered for Ocean City from August 1, 2020 to August 31, 2020. The work is for a project called OC Flood Mitigation Design – Merion Park – Four Seasons. **Please note on last page of this invoice, the city paid an ACT Engineers employee a \$190 per hour to print, bind and deliver flood documents to Ocean City.**

Exhibit "G" -- Brick Township Resolution for Awarding 2021 Engineering Pool

This is the resolution establishing the engineering pool for the Brick Township for calendar year 2021. Despite Brick Township establishing the rates that their professionals can charge, numerous engineering firms submit proposals to Brick Township. For 2021, the engineering pool for Brick Township consisted of twenty (20) firms.

Exhibit "H" – Sample Flood Mitigation Solutions

This document was prepared by ACT Engineers as part of a Flood Mitigation Power Point presentation given to Brick Township residents. Most of the recommendations ACT Engineers made for Brick Township are similar, if not exactly the same recommendations that ACT Engineers is making for Ocean City flood mitigation work.

January 22, 2021
03:40 PM

Township of Brick
Purchase Order Listing By Vendor Name

Exhibit "A"

P.O. Type: All
 Range: ACT ENGINEERS, INC. to ACT ENGINEERS, INC.
 Format: Condensed First Enc Date Range: First to 12/31/21
 Include Non-Budgeted: Y

Open: Y Paid: Y Void: Y
 Rcvd: Y Held: Y Aprv: Y
 Bid: Y State: Y Other: Y Exempt: Y

Vendor #	Name	Status	Amount	Void Amount	Contract	PO Type
ACTEN010	ACT ENGINEERS, INC.					
19-00514	02/04/19 Dredging Management Plan	Open	59,950.00	0.00		
19-01251	03/20/19 Hydrographic Survey	Clsd	34,990.00	0.00		
19-04120	10/07/19 Waterfront Hydrographic Survey	Open	220,000.00	0.00		
20-00751	02/24/20 Normandy Beach & Seaweed Point	Open	31,200.00	0.00		
20-00753	02/24/20 Flood Mitigation Data Gatherin	Open	173,500.00	0.00		
20-03006	08/07/20 Lower BeaverDam Creek Phase 1	open	123,000.00	0.00		
20-03008	08/07/20 Nejecho Dredging Permit Applic	Clsd	8,400.00	0.00		
			<u>651,040.00</u>			

Total Purchase Orders: 7 Total P.O. Line Items: 0 Total List Amount: 651,040.00 Total Void Amount: 0.00

Exhibit "C"

2020 SCHEDULE OF BILLABLE HOURLY RATES/EXPENSES

The Township has established a rate schedule, which lists hourly rates for various Positions/Titles that may be used under this proposal. By submitting a proposal and accepting a contract with the Township, the Professional agrees to bill the Township in accordance with the established rate schedule.

Firms submitting proposals for Professional Engineering Services shall provide the following disciplines at the hourly rates listed below:

Engineering Services

- Civil
- Construction Administration
- Electrical
- Marine/Coastal
- Mechanical
- Structural
- Traffic/Transportation
- Water Resources
- Dredging

Other Technical Services

- Environmental
- Regulatory Compliance
- Grants
- GIS
- Parks & Landscape Design
- Planning
- Surveying

<u>TITLE</u>	<u>BRICK RATE</u>	<u>OCEAN CITY RATE</u>	<u>DIFFERENCE</u>
Technical Assistant	\$ 55.00	80	25 (+46%)
Senior Technician	\$ 75.00	115	40 (+53%)
Technical Professional	\$ 95.00	-	
Project Professional	\$105.00	140	35 (+33%)
Senior Designer/Technical Manager	\$115.00	120	5 (+4%)
Senior Project Professional	\$120.00	145	25 (+21%)
Project Manager	\$125.00	170 175	50 (+40%)
Senior Project Manager	\$135.00	190	55 (+41%)
Principal	\$140.00	200	60 (+43%)

EXPENSES

Photocopies	0.20 – 0.80 per copy
Blueprint Reproduction	0.37 per square foot
Other Reproduction	Square foot rate subject to type of material used
Special Mailings/Delivery	Rates subject to priority, weight and distance

Other Direct Costs Cost plus 15% to include, but not limited to, subcontractors, supplies and other material

Please use the attached exception sheet for any exceptions you may want to take regarding any details in the specifications or rate schedule.

Exhibit "D"

Engineering Services

- Civil
- Construction Administration
- Electrical
- Marine/Coastal
- Mechanical
- Structural
- Traffic/Transportation
- Water Resources
- Dredging

Other Technical Services

- Environmental
- Regulatory Compliance
- Grants
- GIS
- Parks & Landscape Design
- Planning
- Surveying

<u>TITLE</u>	<u>RATE</u>
Technical Assistant	\$ 60.00
Senior Technician	\$ 80.00
Technical Professional	\$100.00
Project Professional	\$110.00
Senior Designer/Technical Manager	\$120.00
Senior Project Professional	\$130.00
Project Manager	\$135.00
Senior Project Manager	\$145.00
Principal	\$165.00

EXPENSES

Photocopies	0.20 – 0.80 per copy
Blueprint Reproduction	0.37 per square foot
Other Reproduction	Square foot rate subject to type of material used
Special Mailings/Delivery	Rates subject to priority, weight and distance
Other Direct Costs	Cost plus 15% to include, but not limited to, subcontractors, supplies and other materials



1 Washington Boulevard, Suite 3
 Robbinsville, New Jersey 08691
 Telephone No. (609) 818-0200
www.actengineers.com

Brick Township

Township of Brick
 401 Chambers Bridge Road
 Brick, NJ 08723

April 30, 2020
 Project No: 180917-20A
 Invoice No: 19874

Project 180917-20A Flood Mitigation Data Gathering
 Purchase Order 20-00753
Professional Services from March 29, 2020 to April 30, 2020

Task 1.0 Existing Data Review
Professional Personnel

	Hours	Rate	Amount	
Principal				
Korkuch, Robert	8.00	140.00	1,120.00	
Rosina, Eric	5.00	140.00	700.00	
Program Manager				
Lane, Wesley	.25	140.00	35.00	
Richter, Jeffrey	12.75	140.00	1,785.00	
Senior Project Professional				
Birtok, Andrew	4.00	135.00	540.00	
Sr. Staff Technical Representative				
Weber, Kristen	6.00	120.00	720.00	
Totals	36.00		4,900.00	
Total Labor				4,900.00
Billing Limits	Current	Prior	To-Date	
Total Billings	4,900.00	1,220.00	6,120.00	
Limit			7,500.00	
Remaining			1,380.00	
		Total this Task		\$4,900.00

Task 2.0 Public Outreach/Meetings
Professional Personnel

	Hours	Rate	Amount	
Principal				
Beske, Carol	16.75	140.00	2,345.00	
Program Manager				
Dix, Junetta	3.00	140.00	420.00	
Totals	19.75		2,765.00	
Total Labor				2,765.00
Billing Limits	Current	Prior	To-Date	
Total Billings	2,765.00	945.00	3,710.00	
Limit			17,500.00	
Remaining			13,790.00	

Project	180917-20A	Flood Mitigation Data Gathering	Invoice	19874
---------	------------	---------------------------------	---------	-------

Professional Personnel

			Hours	Rate	Amount	
	Senior Project Professional					
BS2	Smith, Brad	4/29/2020	6.50	135.00	877.50	
	Preparation of deliverables for meeting on 5/1. Extract classified LIDAR data for Normandy Beach area.					
BS2	Smith, Brad	4/30/2020	7.50	135.00	1,012.50	
	Creation of Flood inundation mapping & meeting to discuss meeting logistics.					
	Totals		14.00		1,890.00	
	Total Labor					1,890.00
						Total this Task \$1,890.00

Task	5.0	Flood Mitigation Concept Engineering
------	-----	--------------------------------------

Professional Personnel

			Hours	Rate	Amount	
	Principal					
REK	Korkuch, Robert	4/28/2020	3.50	140.00	490.00	
	Status and prep mtg; draft agenda; outline exhibits; confer with LIDAR vendor re: schedule; research materials for site visit.					
	Totals		3.50		490.00	
	Total Labor					490.00
						Total this Task \$490.00

Task	6.0	Project Management
------	-----	--------------------

Professional Personnel

			Hours	Rate	Amount	
	Principal					
EBR	Rosina, Eric	4/7/2020	1.00	140.00	140.00	
	Project Kick Off Meeting					
REK	Korkuch, Robert	4/23/2020	1.00	140.00	140.00	
	Proj tasks status, work plan, schedule, deliverables, 5/1/20 mtg prep					
	Program Manager					
JSR	Richter, Jeffrey	4/7/2020	.75	140.00	105.00	
	Phone with Eric and Carol to review status of project. Coordinate review of existing data with Andy					
JSR	Richter, Jeffrey	4/8/2020	.25	140.00	35.00	
	Coordinate status of County LIDAR with Brad.					
JSR	Richter, Jeffrey	4/23/2020	1.00	140.00	140.00	
	Video conference with Eric, Rob, Carol and Junetta to review project status and prepare for meeting with Township.					
	Senior Project Professional					
BS2	Smith, Brad	4/24/2020	.50	135.00	67.50	
	Discussion with Jeff and Kristen about project and deliverables.					
	Totals		4.50		627.50	
	Total Labor					627.50
						Total this Task \$627.50
						Total this Project \$10,672.50
						Total this Report \$10,672.50

Project	180917-20A	Flood Mitigation Data Gathering	Invoice	19874	
ACB	Birtok, Andrew	4/17/2020	1.00	135.00	135.00
	Continue online searching for reports / studies on flooding in Back Bay, Atl City, etc				
	Sr. Staff Technical Representative				
KMW	Weber, Kristen	4/28/2020	2.00	120.00	240.00
	Data gathering				
KMW	Weber, Kristen	4/30/2020	4.00	120.00	480.00
	Research historical data for Brick flooding & develop exhibits for meeting				
	Totals		36.00		4,900.00
	Total Labor				4,900.00
			Total this Task		\$4,900.00

Task	2.0	Public Outreach/Meetings	Hours	Rate	Amount
Professional Personnel					
Principal					
CLB	Beske, Carol	4/8/2020	1.25	140.00	175.00
	project meetings				
CLB	Beske, Carol	4/9/2020	2.00	140.00	280.00
	project meetings				
CLB	Beske, Carol	4/13/2020	.25	140.00	35.00
	project meeting				
CLB	Beske, Carol	4/15/2020	.50	140.00	70.00
	project meeting				
CLB	Beske, Carol	4/16/2020	1.50	140.00	210.00
	project meeting				
CLB	Beske, Carol	4/22/2020	1.50	140.00	210.00
	report and meeting coordination				
CLB	Beske, Carol	4/23/2020	2.00	140.00	280.00
	project meeting				
	coordination with Brick				
CLB	Beske, Carol	4/24/2020	1.00	140.00	140.00
	project meeting				
	coordination with Brick				
CLB	Beske, Carol	4/27/2020	.50	140.00	70.00
	Project meetings				
CLB	Beske, Carol	4/28/2020	1.75	140.00	245.00
	Project meetings				
CLB	Beske, Carol	4/29/2020	.50	140.00	70.00
	Project meetings				
CLB	Beske, Carol	4/30/2020	4.00	140.00	560.00
	project meetings, material for Brick meeting				
Program Manager					
JND	Dix, Junetta	4/23/2020	1.00	140.00	140.00
	Planning meeting for Township meeting next week				
JND	Dix, Junetta	4/28/2020	1.00	140.00	140.00
	Prep. meeting re: project status for client meeting				
JND	Dix, Junetta	4/30/2020	1.00	140.00	140.00
	Prep. meeting for client meeting				
	Totals		19.75		2,765.00
	Total Labor				2,765.00
			Total this Task		\$2,765.00

Task 4.0 Hydrologic & Hydraulic Evaluation

Project	180917-20A	Flood Mitigation Data Gathering	Invoice	19874
---------	------------	---------------------------------	---------	-------

Billing Backup

Wednesday, May 20, 2020

ACT Engineers

Invoice 19874 Dated 4/30/2020

12:54:00 PM

Project	180917-20A	Flood Mitigation Data Gathering
Task	1.0	Existing Data Review

Professional Personnel

			Hours	Rate	Amount
Principal					
EBR	Rosina, Eric	4/23/2020	1.00	140.00	140.00
	Coord meeting with J Dix, C Beske, R Korkuch regarding deliverables and schedule				
EBR	Rosina, Eric	4/28/2020	1.00	140.00	140.00
	Data Review/Coord with Team regarding Twp update				
REK	Korkuch, Robert	4/29/2020	4.50	140.00	630.00
	Onsite review of 8 sites				
EBR	Rosina, Eric	4/29/2020	1.00	140.00	140.00
	Data Review/Coord with Team regarding Twp update				
REK	Korkuch, Robert	4/30/2020	3.50	140.00	490.00
	Organize site photos; review draft presentation; outline deliverables; participate in coord mtg for presentation; prep scope of work for Normandy Beach field investigation; rvw draft presentation exhibits				
EBR	Rosina, Eric	4/30/2020	2.00	140.00	280.00
	Data Review/Coord with Team regarding Twp update				
Program Manager					
JSR	Richter, Jeffrey	4/16/2020	.50	140.00	70.00
	Review collected data and provide project status to Eric.				
JSR	Richter, Jeffrey	4/23/2020	1.00	140.00	140.00
	Reach out to Brad for status of GIS data. Review data collected to date. Coordinate project with Kristen and Brad.				
JSR	Richter, Jeffrey	4/24/2020	1.50	140.00	210.00
	Coordinate exhibits for Township conference call with Brad and Kristen. Research flood elevations for Brick Township.				
JSR	Richter, Jeffrey	4/27/2020	1.50	140.00	210.00
	Coordinate data research with Andy. Review downloaded documents.				
WJL	Lane, Westley	4/28/2020	.25	140.00	35.00
	discussion w/ ER & BS for meeting on 5/1/20				
JSR	Richter, Jeffrey	4/28/2020	2.75	140.00	385.00
	Coordinate research with Kristen. Phone conference with Rob, Eric, Carol and Junetta. Prepare project schedules and distribute to ACT team.				
JSR	Richter, Jeffrey	4/29/2020	1.00	140.00	140.00
	Project coordination with Brad. Review and respond to email from Rob. Update project schedule. Phone with Rob on observations from his site visit.				
JSR	Richter, Jeffrey	4/30/2020	4.50	140.00	630.00
	Review flood exhibit with Brad. Coordinate flood information with Kristen. Conference call with project team. Tide level research.				
Senior Project Professional					
ACB	Birtok, Andrew	4/13/2020	1.25	135.00	168.75
	Online researching for reports / studies on flooding in Back Bay, All City, etc				
ACB	Birtok, Andrew	4/14/2020	1.00	135.00	135.00
	Reach out to local MUA to get storm system data; gather data from NJDEP/Rutgers, USACE				
ACB	Birtok, Andrew	4/15/2020	.75	135.00	101.25
	Continue online researching for reports / studies on flooding in Back Bay, All City, etc				

Project	180917-20A	Flood Mitigation Data Gathering	Invoice	19874
---------	------------	---------------------------------	---------	-------

Outstanding Invoices

Number	Date	Balance
19813	3/28/2020	2,165.00
Total		2,165.00

Project	180917-20A	Flood Mitigation Data Gathering	Invoice	19874	
			Total this Task	\$2,765.00	

Task	4.0	Hydrologic & Hydraulic Evaluation			
Professional Personnel					
			Hours	Rate	Amount
Senior Project Professional					
Smith, Brad			14.00	135.00	1,890.00
Totals			14.00		1,890.00
Total Labor					1,890.00
Billing Limits					
		Current	Prior	To-Date	
Total Billings		1,890.00	0.00	1,890.00	
Limit				18,500.00	
Remaining				16,610.00	
			Total this Task	\$1,890.00	

Task	5.0	Flood Mitigation Concept Engineering			
Professional Personnel					
			Hours	Rate	Amount
Principal					
Korkuch, Robert			3.50	140.00	490.00
Totals			3.50		490.00
Total Labor					490.00
Billing Limits					
		Current	Prior	To-Date	
Total Billings		490.00	0.00	490.00	
Limit				30,000.00	
Remaining				29,510.00	
			Total this Task	\$490.00	

Task	6.0	Project Management			
Professional Personnel					
			Hours	Rate	Amount
Principal					
Korkuch, Robert			1.00	140.00	140.00
Rosina, Eric			1.00	140.00	140.00
Program Manager					
Richter, Jeffrey			2.00	140.00	280.00
Senior Project Professional					
Smith, Brad			.50	135.00	67.50
Totals			4.50		627.50
Total Labor					627.50
Billing Limits					
		Current	Prior	To-Date	
Total Billings		627.50	0.00	627.50	
Limit				15,000.00	
Remaining				14,372.50	
			Total this Task	\$627.50	
			Total this Invoice	\$10,672.50	



1 Washington Boulevard, Suite 3
 Robbinsville, New Jersey 08691
 Telephone No. (609) 918-0200
www.actengineers.com

Ocean City

City of Ocean City
 861 Asbury Avenue
 Ocean City, NJ 08226

August 31, 2020
 Project No: 150709-20C
 Invoice No: 20118

Project 150709-20C OC-Flood Mitigation Design-Merion Park-Four Seasons
 Purchase Order 20-02076
Professional Services from August 1, 2020 to August 31, 2020

Task	A.O	Supplemental Survey		
Professional Personnel				
		Hours	Rate	Amount
Program Manager				
Lane, Wesley		.75	190.00	142.50
Richter, Jeffrey		4.25	190.00	807.50
Sr. Staff Technical Representative				
Lochard, Jean		6.00	120.00	720.00
Designer				
Hislop, Nicholas		36.00	105.00	3,780.00
Senior Technician				
Studdiford, Andrew		18.00	115.00	2,070.00
		Totals		7,520.00
		Total Labor		7,520.00
Billing Limits		Current	Prior	To-Date
Total Billings		7,520.00	0.00	7,520.00
Limit				18,000.00
Remaining				10,480.00
			Total this Task	\$7,520.00

Task	B.O	Jurisdictional Wetlands		
Professional Personnel				
		Hours	Rate	Amount
Program Manager				
Dix, Junetta		1.50	190.00	285.00
Senior Project Professional				
Smith, Brad		4.00	145.00	580.00
Sr. Staff Technical Representative				
Countess, Michael		.50	120.00	60.00
Technician				
Lynch, Sean		13.25	80.00	1,060.00
		Totals		1,985.00
		Total Labor		1,985.00

Project	150709-20C	OC-Flood Mitigation-Merion-Four Seasons	Invoice	2011B
---------	------------	---	---------	-------

Billing Limits	Current	Prior	To-Date	
Total Billings	1,985.00	0.00	1,985.00	
Limit			2,000.00	
Remaining			15.00	
Total this Task				\$1,985.00

Task	C.0	Piezometer Installation & Monitoring		
Professional Personnel				

	Hours	Rate	Amount	
Principal				
Korkuch, Robert	1.50	200.00	300.00	
Program Manager				
Richier, Jeffrey	2.00	190.00	380.00	
Managing Professional				
Odarchenko, Vladimir	22.00	175.00	3,850.00	
Sr. Staff Technical Representative				
Nordeen, Reece	2.50	120.00	300.00	
Totals	28.00		4,830.00	
Total Labor				4,830.00

Billing Limits	Current	Prior	To-Date	
Total Billings	4,830.00	0.00	4,830.00	
Limit			15,000.00	
Remaining			10,170.00	
Total this Task				\$4,830.00

Task	E.0	Design Development & Engineer's Estimate		
Professional Personnel				

	Hours	Rate	Amount	
Program Manager				
Richter, Jeffrey	5.00	190.00	950.00	
Totals	5.00		950.00	
Total Labor				950.00

Billing Limits	Current	Prior	To-Date	
Total Billings	950.00	0.00	950.00	
Limit			24,000.00	
Remaining			23,050.00	
Total this Task				\$950.00

Task	K.0	Project Management		
Professional Personnel				

	Hours	Rate	Amount	
Principal				
Korkuch, Robert	6.00	200.00	1,200.00	
Program Manager				
Dix, Junetta	2.00	190.00	380.00	
Richter, Jeffrey	2.75	190.00	522.50	
Managing Professional				
Odarchenko, Vladimir	1.50	175.00	262.50	
Sr. Staff Technical Representative				
Countess, Michael	.50	120.00	60.00	

Project	150709-20C	OC-Flood Mitigation-Merion-Four Seasons	Invoice	20118
Staff Technical Representative				
	Crawford, Kathryn	.25	110.00	27.50
	Totals	13.00		2,452.50
	Total Labor			2,452.50
Billing Limits				
	Total Billings	Current	Prior	To-Date
	Limit	2,452.50	0.00	2,452.50
	Remaining			5,000.00
				2,547.50
			Total this Task	\$2,452.50

Task	L.O	Public Involvement	Hours	Rate	Amount
Professional Personnel					
Principal					
	Beske, Carol		3.75	200.00	750.00
	Korkuch, Robert		1.50	200.00	300.00
	Totals		5.25		1,050.00
	Total Labor				1,050.00
Billing Limits					
	Total Billings	Current	Prior	To-Date	
	Limit	1,050.00	0.00	1,050.00	
	Remaining			3,000.00	
				1,950.00	
			Total this Task		\$1,050.00
			Total this Invoice		\$18,787.50

Please include the invoice number on your payment. Thanks!

Project	150709-20C	OC-Flood Mitigation-Merion-Four Seasons	Invoice	20118
---------	------------	---	---------	-------

Billing Backup

ACT Engineers

Invoice 20118 Dated 8/31/2020

Wednesday, September 9, 2020

5:09:10 PM

Project	150709-20C	OC-Flood Mitigation Design-Merion Park-Four Seasons
Task	A.0	Supplemental Survey

Professional Personnel

			Hours	Rate	Amount	
Program Manager						
WJL	Lane, Wesley	8/3/2020	.25	190.00	47.50	
	discuss status of project w CAD					
WJL	Lane, Wesley	8/13/2020	.50	190.00	95.00	
	coordination meeting					
JSR	Richter, Jeffrey	8/18/2020	2.00	190.00	380.00	
	Discuss survey requirements with Wes. Research storm sewer plans for information and mark up plans for survey. Discuss survey requirements with Andrew and Nick.					
JSR	Richter, Jeffrey	8/19/2020	1.50	190.00	285.00	
	Mark up plans for survey and discuss scope of work with Jean and survey crew.					
JSR	Richter, Jeffrey	8/24/2020	.25	190.00	47.50	
	Discuss survey results with Andrew and Nick.					
JSR	Richter, Jeffrey	8/27/2020	.50	190.00	95.00	
	Coordinate inclusion of recent survey work into base plan.					
Sr. Staff Technical Representative						
JDL	Lochard, Jean	8/19/2020	2.00	120.00	240.00	
	Field work preparation and instruction					
JDL	Lochard, Jean	8/21/2020	1.50	120.00	180.00	
	Field work edit (markup) check					
JDL	Lochard, Jean	8/26/2020	1.50	120.00	180.00	
	Data Analysis and processing					
JDL	Lochard, Jean	8/27/2020	1.00	120.00	120.00	
	Merion park data Analysis					
Designer						
NJH	Hislop, Nicholas	8/20/2020	9.25	105.00	971.25	
	Field survey.					
NJH	Hislop, Nicholas	8/21/2020	8.00	105.00	840.00	
	Field survey.					
NJH	Hislop, Nicholas	8/27/2020	3.75	105.00	393.75	
	Updated storm sewer maps.					
NJH	Hislop, Nicholas	8/28/2020	8.00	105.00	840.00	
	Updated storm sewer maps.					
NJH	Hislop, Nicholas	8/31/2020	7.00	105.00	735.00	
	Updated storm sewer maps.					
Senior Technician						
ADS	Studdiford, Andrew	8/20/2020	9.75	115.00	1,121.25	
	Set GPS points and run traverse to get outfall pipes. Also get inverts on storm drainage.					
ADS	Studdiford, Andrew	8/21/2020	8.25	115.00	948.75	
	Get inverts on storm structures.					
	Totals		65.00		7,520.00	
	Total Labor					7,520.00
				Total this Task		\$7,520.00

Project	150709-20C	OC-Flood Mitigation-Merion-Four Seasons	Invoice	20118
---------	------------	---	---------	-------

Task B.0 Jurisdictional Wetlands

Professional Personnel

			Hours	Rate	Amount	
	Program Manager					
JND	Dix, Junetta	8/13/2020	1.50	190.00	285.00	
	Kick off meeting					
	Senior Project Professional					
BS2	Smith, Brad	8/27/2020	.50	145.00	72.50	
	Download data, import into TBC.					
BS2	Smith, Brad	8/28/2020	3.50	145.00	507.50	
	Process data, delineate wetlands line. Export wetlands point, wetlands line, and 1970's wetlands lines to CAD.					
	Sr. Staff Technical Representative					
MJC	Countess, Michael	8/19/2020	.50	120.00	60.00	
	coord. with JD and SL Re; Field Work - Wetlands Inventory.					
	Technician					
SPL	Lynch, Sean	8/25/2020	2.00	80.00	160.00	
	Wetlands prep					
SPL	Lynch, Sean	8/26/2020	11.25	80.00	900.00	
	Wetland delineation and mapping					
	Totals		19.25		1,985.00	
	Total Labor					1,985.00
				Total this Task		\$1,985.00

Task C.0 Piezometer Installation & Monitoring

Professional Personnel

			Hours	Rate	Amount	
	Principal					
REK	Korkuch, Robert	8/18/2020	.50	200.00	100.00	
	Rvw proposed piezometer locations					
REK	Korkuch, Robert	8/24/2020	.50	200.00	100.00	
	Purchase options					
REK	Korkuch, Robert	8/28/2020	.50	200.00	100.00	
	Discussion of installation options					
	Program Manager					
JSR	Richter, Jeffrey	8/18/2020	1.50	190.00	285.00	
	Discuss piezometer locations with Vlad. Meeting with Vlad and Rob to finalize locations.					
JSR	Richter, Jeffrey	8/28/2020	.50	190.00	95.00	
	Discuss sensor locations with Vlad and Rob.					
	Managing Professional					
VGO	Odarchenko, Vladimir	8/12/2020	2.50	175.00	437.50	
	scope for pz installation					
VGO	Odarchenko, Vladimir	8/14/2020	3.00	175.00	525.00	
	Map city property; develop preliminary pz locations					
VGO	Odarchenko, Vladimir	8/18/2020	4.00	175.00	700.00	
	prop PZ mapping; review with RK/JR; data for progress update					
VGO	Odarchenko, Vladimir	8/19/2020	3.50	175.00	612.50	
	Subcontractor drilling scope; contact drillers; scope equipment; finalize progress update presentation to city					
VGO	Odarchenko, Vladimir	8/21/2020	2.00	175.00	350.00	
	coord with subcontractors; review pricing; revise scope					

Project	150709-20C	OC-Flood Mitigation-Merion-Four Seasons			Invoice	20118
VGO	Odarchenko, Vladimir	8/24/2020	3.00	175.00	525.00	
	order water level monitors; rev. scope/approach; review GIS wetland mapping with BS					
VGO	Odarchenko, Vladimir	8/27/2020	1.00	175.00	175.00	
	test pressure transducer; install program					
VGO	Odarchenko, Vladimir	8/28/2020	2.00	175.00	350.00	
	review installation w/ RK, JR; troubleshoot equipment					
VGO	Odarchenko, Vladimir	8/31/2020	1.00	175.00	175.00	
	coordination with Driller; update					
	Sr. Staff Technical Representative					
RMN	Nordeen, Reece	8/28/2020	2.50	120.00	300.00	
	Prepare Piezometers to collect data using HOBOWare software.					
	Totals		28.00		4,830.00	
	Total Labor					4,830.00
					Total this Task	\$4,830.00

Task	E.O	Design Development & Engineer's Estimate				
Professional Personnel						
			Hours	Rate	Amount	
Program Manager						
JSR	Richter, Jeffrey	8/19/2020	2.50	190.00	475.00	
	Review LIDAR maps and develop concept solutions. Coordinate exhibit with Juan.					
JSR	Richter, Jeffrey	8/19/2020	1.00	190.00	190.00	
	Review wetlands plan and discuss with Juan and Vlad.					
JSR	Richter, Jeffrey	8/21/2020	.50	190.00	95.00	
	Research automatic flood mitigation measures.					
JSR	Richter, Jeffrey	8/25/2020	.75	190.00	142.50	
	Teams meeting with Jun, Sean and Brad to discuss limits of wetlands delineation.					
JSR	Richter, Jeffrey	8/28/2020	.25	190.00	47.50	
	Discuss concept design approach with Rob.					
	Totals		5.00		950.00	
	Total Labor					950.00
					Total this Task	\$950.00

Task	K.O	Project Management				
Professional Personnel						
			Hours	Rate	Amount	
Principal						
REK	Korkuch, Robert	8/11/2020	1.50	200.00	300.00	
	Schedule and resource requirements prep.					
REK	Korkuch, Robert	8/12/2020	1.00	200.00	200.00	
	Tech staff mtg prep					
REK	Korkuch, Robert	8/13/2020	.50	200.00	100.00	
	Tech staff coord mtg					
REK	Korkuch, Robert	8/18/2020	.50	200.00	100.00	
	Discuss City council mtg re flood mitigation design contracts					
REK	Korkuch, Robert	8/19/2020	1.00	200.00	200.00	
	Schedule and mtg documents review					

Project	150709-20C	OC-Flood Mitigation-Merion-Four Seasons	Invoice	20118	
REK	Korkuch, Robert	8/20/2020	1.50	200.00	300.00
	Flood Mitigation Coord mtg w/O.C re: r/w environmental mapping; proposed piezometer locations; preliminary concepts and locations for 2020 work; draft mtg record				
	Program Manager				
JSR	Richter, Jeffrey	8/13/2020	.75	190.00	142.50
	Prepare for meeting and Teams meeting to discuss project scope.				
JSR	Richter, Jeffrey	8/20/2020	2.00	190.00	380.00
	Prepare for and attend Zoom meeting with City.				
JND	Dix, Junetta	8/31/2020	2.00	190.00	380.00
	Print, bind, deliver flood documents to OC				
	Managing Professional				
VGO	Odarchenko, Vladimir	8/13/2020	.50	175.00	87.50
	project meeting				
VGO	Odarchenko, Vladimir	8/20/2020	1.00	175.00	175.00
	progress mtg update and call w/ City				
	Sr. Staff Technical Representative				
MJC	Countess, Michael	8/13/2020	.50	120.00	60.00
	Review Plans and Scope. Conference Call				
	Staff Technical Representative				
KCC	Crawford, Kathryn	8/31/2020	.25	110.00	27.50
	Prepare transmittal to OC recipients for forwarding of Flood Mitigation Final Reports (RK)				
	Totals		13.00		2,452.50
	Total Labor				2,452.50
				Total this Task	\$2,452.50

Task	L.O	Public Involvement	Hours	Rate	Amount
Professional Personnel					
Principal					
CLB	Beske, Carol	8/12/2020	.50	200.00	100.00
	prep stakeholder outreach				
CLB	Beske, Carol	8/13/2020	.50	200.00	100.00
	project meeting				
CLB	Beske, Carol	8/17/2020	.50	200.00	100.00
	addressing public questions on project				
CLB	Beske, Carol	8/18/2020	.50	200.00	100.00
	public involvement plan				
CLB	Beske, Carol	8/18/2020	1.75	200.00	350.00
	Public plan for neighborhood outreach.				
REK	Korkuch, Robert	8/20/2020	.50	200.00	100.00
	Coord w/Carol re: piezometer impacts to resident properties				
REK	Korkuch, Robert	8/27/2020	.50	200.00	100.00
	Budget coord				
REK	Korkuch, Robert	8/28/2020	.50	200.00	100.00
	Coord w/Carol re: info for public				
	Totals		5.25		1,050.00
	Total Labor				1,050.00
				Total this Task	\$1,050.00
				Total this Project	\$18,787.50
				Total this Report	\$18,787.50

RESOLUTION

WHEREAS, N.J.S.A. 19:44A-20.5 et seq. provides for the procedure for soliciting proposals through a fair and open process; and

WHEREAS, there is a need to retain Professional Engineering/Surveying, Environmental, Dredging and Traffic Consultants for various minor projects and preliminary studies on proposed capital projects, environmental issues and other general engineering projects for the 2021 calendar year; and

WHEREAS, the Township of Brick has solicited proposals for said position through a fair and open process on November 13, 2020; and

WHEREAS, the Business Administrator has reviewed the proposals and is satisfied with the qualifications and experience of the firms which are the subject of such an award; and

WHEREAS, the Business Administrator has recommended the firms listed below to be retained for the purpose of providing the required services on an as needed basis.

NOW, THEREFORE, BE IT RESOLVED by the Township Council of the Township of Brick, County of Ocean and State of New Jersey, as follows:

1. That the Mayor is authorized to execute and the Township Clerk to attest to the agreements with the following firms:

ENGINEERING/SURVEYING POOL

- ACT Engineers, Inc., 1 Washington Boulevard, Suite 3, Robbinsville, NJ 08691
- ARH Associates, Inc., 215 Bellevue Avenue, P.O. Box 579, Hammonton, NJ 08037
- Bright View Engineering, LLC, 5 Pitcairn Drive, Roseland, NJ 07068
- Center State Engineering, Inc., 481 Spotswood Englishtown Road, Monroe Township, NJ 08831
- CME Associates, 1460 Route 9 South, Howell, NJ 07731
- Concord Engineering Group, Inc., 520 South Burnt Mill Road, Voorhees, NJ 08043
- French & Parrello Associates, PA, 1800 Route 34, Suite 101, Wall, NJ 07719
- Grotto Engineering Associates, LLC, 340 North Avenue, Cranford, NJ 07016
- H2M Associates, Inc., 4810 Belmar Boulevard, Suite 201, Wall Township, NJ 07753
- Keystone Engineering Group, 3836 Quakerbridge Road, Suite 103, Hamilton, NJ 08619
- Leon S. Avakian, Inc., 788 Wayside Road, Neptune, NJ 07753
- L.S. Engineering Associates Corporation, 150 River Road, Suite E2, Montville, NJ 07045
- Maser Consulting Inc., 331 Newman Springs Road, Suite 203, Red Bank, NJ 07701
- Morgan Engineering, LLC / Morgan Municipal Services, LLC, P.O. Box 5232, Toms River, NJ 08754
- Prestige Environmental, Inc., 220 Davidson Avenue, Suite 307, Somerset, NJ 08873
- Suburban Consulting Engineers, Inc., 96 US Highway 206, Suite 101, Flanders, NJ 07836
- T&M Associates, 1144 Hooper Avenue, Suite 202, Toms River, NJ 08753
- T&M Associates, LLC, 22 Brewer Lane, Hillsborough, NJ

- Maser Consulting Inc., 331 Newman Springs Road, Suite 203, Red Bank, NJ 07701
- Prestige Environmental, Inc., 220 Davidson Avenue, Suite 307, Somerset, NJ 08873
- Suburban Consulting Engineers, Inc., 96 US Highway 206, Suite 101, Flanders, NJ 07836

DREDGING ENGINEERING POOL

- ACT Engineers, Inc., 1 Washington Boulevard, Suite 3, Robbinsville, NJ 08691
- CME Associates, 1460 Route 9 South, Howell, NJ 07731
- French & Parrello Associates, PA, 1800 Route 34, Suite 101, Wall, NJ 07719
- Leon S. Avakian, Inc., 788 Wayside Road, Neptune, NJ 07753
- Maser Consulting Inc., 331 Newman Springs Road, Suite 203, Red Bank, NJ 07701
- Suburban Consulting Engineers, Inc., 96 US Highway 206, Suite 101, Flanders, NJ 07836

TRAFFIC ENGINEERING POOL

- Bright View Engineering, LLC, 5 Pitcairn Drive, Roseland, NJ 07068
- CME Associates, 1460 Route 9 South, Howell, NJ 07731
- French & Parrello Associates, PA, 1800 Route 34, Suite 101, Wall, NJ 07719
- L.S. Engineering Associates Corporation, 150 River Road, Suite E2, Montville, NJ 07045
- Maser Consulting Inc., 331 Newman Springs Road, Suite 203, Red Bank, NJ 07701
- Suburban Consulting Engineers, Inc., 96 US Highway 206, Suite 101, Flanders, NJ 07836

2. That this contract is being awarded as a professional service in accordance with N.J.S.A. 40A:11-5 pursuant to a fair and open process.
3. That services for this contract shall be rendered to the Township at the rates listed on "Attachment A", schedule of authorized hourly fees, with an aggregate amount not to exceed \$1,900,000.00.
4. That this contract is awarded contingent upon the adequate provisions of funding in the 2021 operating, escrow and/or capital budgets under appropriations entitled Engineering – Expert Services, account 1-01-20-165-207 and Buildings & Grounds – Expert Services, account 1-01-26-310-207.
5. That this resolution shall take effect January 1, 2021 for the duration of one (1) year.
6. That such agreements shall be available for public examination in the office of the Township Clerk during normal business hours.
7. That a notice of this action shall be printed once in the official newspaper of the Township of Brick.
8. That a certified copy of this resolution shall be provided to the firms, Business Administrator, Township Engineer, Chief Financial Officer and the Purchasing Agent.

CERTIFICATION

Township Clerk of the Township of Brick, County of

**PRELIMINARY RESULTS
ENGINEERING SERVICES POOL
OPEN: NOVEMBER 13, 2020 @ 11:00 AM**

Established Rates:

- Technical Assistant \$60.00
- Senior Technician \$80.00
- Technical Professional \$100.00
- Project Professional \$110.00
- Senior Designer/Technical Manager \$120.00
- Senior Project Professional \$130.00
- Project Manager \$135.00
- Senior Project Manager \$145.00
- Principal \$165.00

PROFESSIONAL FIRM	a. Engineering/Surveying Pool	b. Environmental Engineer	c. Dredging Engineer	d. Traffic Engineer	e. Planning Board Engineer	f. Board of Adjustment Eng.
ACT Engineers, Inc. 1 Washington Boulevard, Suite 3 Robbinsville, NJ 08691	✓	✓	✓			
ARH Associates, Inc. 215 Bellevue Avenue, P.O. Box 579 Hammonton, NJ 08037	✓	✓			✓	✓
Bright View Engineering, LLC 5 Pitcairn Drive Roseland, NJ 07068	✓			✓	✓	✓
Center State Engineering, Inc. 481 Spotswood Englishtown Road Monroe Township, NJ 08831	✓					
CME Associates 1460 Route 9 South Howell, NJ 07731	✓	✓	✓	✓	✓	✓
Concord Engineering Group, Inc. 520 South Burnt Mill Road Voorhees, NJ 08043	✓					
French & Parrello Associates, PA 1800 Route 34, Suite 101 Wall, NJ 07719	✓	✓	✓	✓		

PRELIMINARY RESULTS
ENGINEERING SERVICES POOL
OPEN: NOVEMBER 13, 2020 @ 11:00 AM

Established Rates:

- Technical Assistant \$60.00
- Senior Technician \$80.00
- Technical Professional \$100.00
- Project Professional \$110.00
- Senior Designer/Technical Manager \$120.00
- Senior Project Professional \$130.00
- Project Manager \$135.00
- Senior Project Manager \$145.00
- Principal \$165.00

PROFESSIONAL FIRM	a. Engineering/Surveying Pool	b. Environmental Engineer	c. Dredging Engineer	d. Traffic Engineer	e. Planning Board Engineer	f. Board of Adjustment Eng.
Grotto Engineering Associates, LLC 340 North Avenue Cranford, NJ 07016	✓					
H2M Associates, Inc. 4810 Belmar Boulevard, Suite 201 Wall Township, NJ 07753	✓					
Keystone Engineering Group 3836 Quakerbridge Road, Suite 103 Hamilton, NJ 08619	✓					
Leon S. Avakian, Inc. 788 Wayside Road Neptune, NJ 07753	✓		✓		✓	
L.S. Engineering Associates Corporation 150 River Road, Suite E2 Montville, NJ 07045	✓	✓		✓		
Maser Consulting Inc. 331 Newman Springs Road, Suite 203 Red Bank, NJ 07701	✓	✓	✓	✓		
Matrix New World Engineering, Land Surveying and Landscape Architecture, PC 442 State Route 35, 2nd Floor Eatontown, NJ 07724	✓					

**PRELIMINARY RESULTS
ENGINEERING SERVICES POOL
OPEN: NOVEMBER 13, 2020 @ 11:00 AM**

Established Rates:

- Technical Assistant \$60.00
- Senior Technician \$80.00
- Technical Professional \$100.00
- Project Professional \$110.00
- Senior Designer/Technical Manager \$120.00
- Senior Project Professional \$130.00
- Project Manager \$135.00
- Senior Project Manager \$145.00
- Principal \$165.00

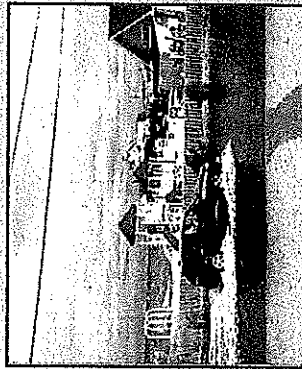
PROFESSIONAL FIRM	a. Engineering/Surveying Pool	b. Environmental Engineer	c. Dredging Engineer	d. Traffic Engineer	e. Planning Board Engineer	f. Board of Adjustment Eng.
Morgan Engineering, LLC / Morgan Municipal Services, LLC P.O. Box 5232 Toms River, NJ 08754	✓					
Prestige Environmental, Inc. 220 Davidson Avenue, Suite 307 Somerset, NJ 08873	✓	✓				
Suburban Consulting Engineers, Inc. 96 US Highway 206, Suite 101 Flanders, NJ 07836	✓	✓	✓	✓	✓	✓
T&M Associates 1144 Hooper Avenue, Suite 202 Toms River, NJ 08753	✓					
Van Cleef Engineering Associates, LLC 32 Brower Lane Hillsborough, NJ 08844	✓					
WJH Engineering 257 Monmouth Road, Building A, Suite 7 Oakhurst, NJ 07755	✓					

NORMANDY BEACH

Conceptual Flood Mitigation Design Approaches

Site Name	Short Term Design Approaches (To Design Elevation $\leq 2.0'$) (Floods 1,500± hrs. per year*)	Long Term Design Approaches ($>2.0'$ Design Elevation) (Floods 60± hrs. per year*)
Normandy Beach	<ul style="list-style-type: none"> • Install Check Valves • Raise Roads / Sidewalks / Driveways / etc. • Raise Select Bulkheads • Install Additional Drainage Infrastructure 	<ul style="list-style-type: none"> • Raise Roads / Properties • Raise Bulkheads • Install Additional Drainage Infrastructure • Pump Stations

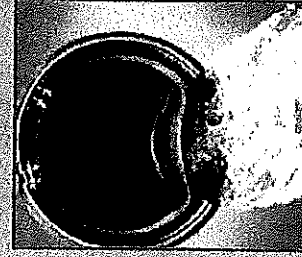
*USGS Mantoloking Tide Gage



Raise Roadways



Raise Bulkhead Heights



Install Check Valves



ACT
ENGINEERS

