

Minutes of a Meeting of
The Brick Township Municipal Utilities Authority held on
June 22, 2015

1. SALUTE TO THE FLAG OF THE UNITED STATES OF AMERICA

2. OPENING STATEMENT

Following the salute to the flag, Ms. Sylvester read the opening statement as follows: *"This meeting is being conducted pursuant to the Open Public Meetings Act, being Chapter 231 of the Laws of 1975. In accordance with the requirements of this law, a Meeting Notice was published on February 7, 2015 in the Asbury Park Press. Similar Notice was given to the Clerk of the Township of Brick and placed on the bulletin board maintained for this purpose by the Authority.*

3. ROLL CALL

Members Present

Thomas C. Curtis
James Fozman
Allan E. Cartine
James C. Bayard
Gregory Flynn
George Cevasco
Stacy Olsen

Also Present

James F. Lacey, CPWM
Stephen T. Specht, PE
Frank Planko, CFO
Joseph Maggio, PE
Gary Vaccaro
Marie Sylvester
Ben Montenegro, Esq.
Chris Theodos
Chuck Fallon

At this time Chairman Cevasco advised, "I would like to deviate from the agenda slightly. We have a very important person with us tonight and her name is Molly O'Brien and she worked very very hard to come up with her idea and put it on paper, I would like to thank her. Mr. Fozman would you please come up. Excellent Job." (Applause.)

Comm. Fozman stated, "The Watershed Committee came up with an idea on a contest involving three categories, but only two categories participated and that was a slogan and a mascot. I would also like to thank our Watershed Committee, Joe Maggio, Rob Karl and Shari Kondrup. They did a lot of work on this contest and also the judging. We have a resolution for Molly from the Commissioners and the Executive Board and it reads: A Resolution Recognizing the Winners of Brick Utilities' 2015 Metedeconk Watershed Mascot and Slogan Contest with the Brick Township Schools. WHEREAS, the Metedeconk River is an important water resource that provides numerous environmental, economic, and social benefits to the Township of Brick; and WHEREAS, the Brick Township Municipal Utilities Authority ("Brick Utilities") relies on the Metedeconk River for its water supply, and the river has been designated a Category One waterway by the State of New Jersey due to its water supply significance;

and WHEREAS, the Metedeconk River contributes a significant amount of freshwater to the Barnegat Bay estuary, and the quality and quantity of this freshwater is important to the bay's water quality and overall health; and WHEREAS, Brick Utilities organized and led the development of the Metedeconk River Watershed Protection and Restoration Plan (the "Watershed Plan") in collaboration with the seven watershed municipalities, Monmouth and Ocean Counties, numerous agencies and other stakeholders; and WHEREAS, the Watershed Plan identifies public education and outreach about the importance of protecting the Metedeconk River as a critical step in the long-term protection of this resource; and WHEREAS, Brick Township school students participated in Brick Utilities' 1st annual contest to create a watershed mascot and a watershed slogan for use in its watershed education and outreach programs; and WHEREAS, Ms. Molly O'Brien, a 3rd grader from Drum Point Elementary School, submitted the winning entry for the watershed mascot with "Henry Heron"; and WHEREAS, Ms. Kara Lynn Schaefer, and 8th grader from Lake Riviera Middle School submitted the winning entry for the watershed slogan with, "*Make a resolution to stomp out water pollution!*"; and NOW, THEREFORE, BE IT RESOLVED this 22nd day of June, 2015, by the Brick Township Municipal Utilities Authority as follows: 1. The Brick Township Municipal Utilities Authority recognizes Ms. Molly O'Brien and Ms. Kara Lynn Schaefer for their contributions in helping Brick Utilities protect the Metedeconk River, Brick Township's primary source of water supply. I certify that the foregoing Resolution was duly adopted by the Brick Township Municipal Utilities Authority at a meeting held on the 22nd day of June, 2015, a quorum being present and voting in the majority."

Comm. Fozman congratulated Ms. O'Brien and a round of applause followed.

Chairman Cevasco stated, "Skipping around again in the agenda, I would like a motion to approve resolution 63-15."

Comm. Bayard made a motion to approve this resolution. Seconded by Comm. Curtis.

AYES: Bayard, Fozman, Curtis, Cartine, Cevasco
NAYSE: None
ABSTAIN: None

Comm. Cevasco stated, "Now moving back on the agenda a little bit we have a presentation tonight from CME Engineering with respect to our Generators. Mr. Maggio."

Director Maggio stated, "Yes Mr. Chairman as the Board knows we have been working very hard with our consultant CME in preparing a conceptual design for the replacement of the campus generators and also looking for new approaches for how we handle our disinfection system. We have just recently received the task two deliverable which is CME's recommendations on how we should proceed in the immediate future on those two topics. As the board knows our generators are extremely critical to maintaining our operations. We saw that directly during Hurricane Sandy and they are becoming very aged. They are reliable in terms of they always operate when we need them, but they are getting to a point where we can't always count on that happening. This is going to be a most important project and I think CME does a very good job and is about to present their recommendations."

Representatives from CME, Jerry Harris from CME Associates stated, "As most of you know we were tasked with coming up with a conceptual design for various improvements here at the plant and we have been working on that assignment for the last couple of months. As Joe said we provided a final draft of our Task 2 Deliverable on the project and we were asked to come tonight to give a brief

presentation on the project that kind of evolved out of that study that we developed in conjunction with your staff. With me Tonight from CME is Keith Chiaravallo, Project Manager and Mike Duvic who worked on the project and our chief electrical engineer Tom Noto. So we have a brief PowerPoint presentation and Keith is going to start."

(A copy of the power point presentation given by CME is attached to these minutes.)

Following the presentation by the representatives from CME, the following questions were raised.

Comm. Cartine asked, "Yeah I've got a couple of questions. The first question is how safe is it to house the chlorinator in the same building with the generators? Is there a possible fire hazard? What precautions do we take? I'm asking I don't know."

Mr. Chiaravallo replied, "The generators will be moved to outside the building in their own stand alone enclosure so they would be separated. They wouldn't be in the same building."

Comm. Olsen asked, "So does that building just become vacant? What happens to the machinery in that building now?"

Mr. Chiaravallo replied, "The existing generator building once we take the old generators out that is is where the new gas chlorine equipment will be installed. The upstairs of that building we would move some of the electrical equipment that is downstairs right now to the upstairs of that building. The building will be fully occupied after the project so you will still be utilizing that whole building."

Comm. Cartine asked, "The other question I had was you talk about doing this in phases and when Phase I would be the generator phase. I would assume that is the most important part of this particular upgrade would be bringing in those generators which we have that we are totally in need of. This would be the first thing we would do in this improvement. Now we can do this basically. We can bring these generators in by it and basically we can deploy these generators first before we can do anything else."

Mr. Chiaravallo stated, "What you would need to do is with this generator there is a lead time on the order of them so they do take four months on a generator that size. In the meantime why the shop drawings are submitted, generators are approved, the orders are placed, the contractor can be on site building foundations, running conduit, pulling wires generators can be set on site and in the mean time the new electrical equipment can be installed upstairs in the generator biding so once they are here they could be connected and you would have a new standby electrical generation system."

Comm. Olsen asked, "Is there a timeline for each phase?"

Mr. Chiaravallo replied, "Probably waiting on deliveries, installation, I mean it could be a year from project award to the contractor by the time they get on board - the construction meeting, shop drawing, delivery of the generators, etc. So yeah off the top of my head about a year for each phase."

Comm. Bayard asked, "Is there any value to the old equipment? Is that figured in? Whether it is for scrap or utilization on a used basis?"

Mr. Chiaravallo replied, "That is not figured into the estimates. I believe there are websites that you can go on to try to sell some of that, but I think it has to go to auction if I am correct. So there may be some value on that. We didn't figure anything in on it because it is kind of indeterminable at this point as to what value they may have."

Comm. Fozman asked, "Once the generators are in place and the electrical is done they will be running and then you will start the next third phase? So they will be operational, and then you will begin clearing everything else out and putting the rest in?"

Mr. Chiaravallo replied, "Yes the new generators and all electrical systems would have to be up and running and operated and tested and then you could take out all the old generators and gut all that and start the gas chlorine system. It will be going in that same space."

Comm. Flynn asked, "What is the fuel source of the generators?"

Mr. Chiaravallo replied, "Diesel. All three would be diesel."

Comm. Flynn asked, "Was there any consideration for anything else? I thought at one time there was some discussion about two diesels and one gas or something like that."

Chairman Cevasco stated, "We looked at that and they are not listed as critical per say. We haven't had them listed as critical, but critical supply has to be diesel. And there was some talk about some consideration that when they put the emergency generator in for the Board of Ed it is considered critical because the police gas their cars there so they had to go with diesel. They had no choice."

Comm. Curtis asked, "How is that when we couldn't get diesel during Sandy?"

Chairman Cevasco stated, "Your guess is as good as mine. We were four or five days out."

Comm. Cartine stated, "Oh we got it but it took a while."

Mr. Chiaravallo stated, "The generators we are looking at each have 72 hour fuel storage. So that is three days running at 100% capacity. Based on the manufacturer's recommendation is to load them to 80% that is your full plant load on that generator. So most times during those times of crisis you are not running your whole plant so you may be running even done at 50% so then your fuel instead of 72 hours you have six days of fuel in each tank. And with the three generators there you actually have the spare generator with another allotment of fuel in it."

Comm. Cartine stated, "Just for your edification a couple of weeks ago the State Legislature passed a law which would provide for those people in the central services first dibs on any fuel needs. This was an outgrowth of the Sandy storm so therefore people like us, hospitals, and those people who provide necessary services will get the fuel delivered first hand and we passed that in the Legislature about two weeks ago."

Comm. Fozman asked, "And all three fuel tanks would be together in a series?"

Mr. Chiaravallo replied, "We spoke to some of the manufactures about connecting the fuel tanks together and they don't recommend it. Those are double wall tanks. If you are putting penetrations at

the bottom there are concerns about leaks. They said they have done it where they can go across the tops of them, but then you have to put hand pumps on them anyway so then it is almost easier to do that yourself if you needed to move fuel from one to the other. It's not that it can't be done, but they don't recommend it."

Comm. Bayard asked, "So you are saying in this report that our generators are deemed emergency and we are critical and that is why we have to go with diesel and not gas?"

Mr. Chiaravallo replied, "Water and wastewater facilities fall under a classification of critical facilities. It is not that you are technically deemed one unless you go out and classify yourself as one. But in order to follow that criteria, which we would recommend - one of the criteria is having 72 hours of fuel on site and within that they say that having natural gas and relying on a utility doesn't qualify for that. But based on that criterion the 72 hours of fuel is what you would have."

Comm. Bayard asked, "Why are we basing it on those criteria if we are not deemed critical? Are we or are we not? Are these generators required to use diesel instead of gas?"

Mr. Chiaravallo replied, "These generators would fit under that criteria."

Comm. Flynn stated, "You just said that we would have to become critical."

Mr. Chiaravallo replied, "No the facility, the definition of a critical facility defines water and wastewater facilities as critical facilities."

Comm. Flynn replied, "So we are automatically critical there is no question about that. We call for diesel there is no discussion."

Comm. Cartine added, "That is correct. Under the law that was just passed."

Comm. Flynn replied, "But still the issue is getting it. One of our conversations was two and one. Is that not feasible? Is there a reason why?"

Comm. Bayard asked, "What I am asking is, do we definitely need to have diesel because we fall under that category?"

Chairman Cevalco replied, "My understanding is we don't officially fall under it, but unofficially we do fall under it. That is the only way I can understand it to be. We haven't gone out and said we want certifications that we are critical or whatever. But we can assume that if there are other listings for utilities authorities being considered critical then we just assume it is easier to follow these guideline as if the State were to come in and say you are a critical facility and we have a gas generator out there and we can't use it."

Comm. Flynn said, "Because they say we are getting it from another critical utility that may have issues."

Chairman Cevalco stated, "I understand what you are saying. I have lived in Brick for 40 years and we've never had a problem with the gas main out here on Route 88, but that still does not make any

difference. The State Legislature in their infinite wisdom says this is the way it is. I was one of the biggest proponents of natural gas fuel."

Comm. Curtis stated, "It's cleaner. It's more efficient..."

Director Lacey added, "And I think one of the engineers brought this up. Wasn't there an issue with loading the natural gas generators right away, and with the natural gas we would have to shut everything down."

Mr. Chiaravallo replied, "Yes there is a big difference between a natural gas generator and diesel generator. The natural gas generators besides the cost difference, they are a considerable amount more expensive you can't load natural gas generators like you can diesel generators. A diesel generator will take your full load in one step. The natural gas generators have to be step loaded. So you have to put 25% of the load, wait a certain period of time. So equipment has to be turned back on in a sequence in order to load the generators in an order. They can't take 100% of the load at one time. So that is why we were primarily looking at the diesel generators and the cost was a big factor."

Comm. Flynn asked, "What is the cost difference between the gas and the diesel?"

Mr. Chiaravallo replied, "I believe the diesel generators, not looking at the overall project cost, but I think the diesel generators were in the ball park of \$350,000 and the natural gas generators were close to \$1 million each. The engine part is a lot bigger on the natural gas as opposed to the diesel."

There being no other questions, Chairman Cevalco thanked the representatives from CME for their presentation.

Comm. Flynn asked Director Specht, "Just out of curiosity is there any noise factor as related to the community?"

Director Specht replied, "Yes there are certain decibel levels we have to meet and we will meet all that and it is all being calculated in."

4. Adoption of Directors' Reports

Comm. Curtis made a motion to adopt the Directors' Reports. Seconded by Comm. Fozman

AYES: Bayard, Fozman, Curtis, Cartine, Cevalco

NAYSE: None

ABSTAIN: None

5. APPROVAL OF MINUTES

May 18, 2015 Regular Meeting

Comm. Bayard made a motion to adopt the May 18, 2015 Regular Meeting Minutes. Seconded by Comm. Fozman

AYES: Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYSE: None
ABSTAIN: None

October 27, 2014 Exempt

Comm. Bayard made a motion to adopt the October 27, 2014 exempt meeting minutes.
Seconded by Comm. Fozman

AYES: Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYSE: None
ABSTAIN: None

6. CORRESPONDENCE

Thank you letter from Doug and Linda Polle, 321 Choctaw Lane for assistance with a
Water line break

Director Specht advised, "The customer had a problem with their service on their side of the curb stop which the contractor came in to replace. When they went to connect up to the curb stop there were some issues on how they would connect up. They gave us a call because they were out of water. We came out immediately, Steve Russell and his men came out and provided the appropriate compression fittings that allowed them to fit up immediately and that saved a bunch of time so they were thankful. If anyone can figure it out it is certainly Mr. Russel."

7. APPROVAL OF BILL RESOLUTION - Commissioner Bayard

Comm. Bayard read the Bill Resolution dated June 22, 2015 in the total amount of
\$2,094,137.55 as follows:

Total Operating Vouchers:	\$	362,281.47
Total Payroll:		1,091,755.34
Total Capital Vouchers:		620,411.81
Escrow:		-
Total Bill Resolution	\$	2,094,137.55

Comm. Fozman made a motion to approve the Bill Resolution. Seconded by Comm. Curtis

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

8. TREASURER'S REPORT - Commissioner Cartine

Comm. Cartine read the Treasurer's Report balances for the month ending May 31, 2015 as
follows:

Unrestricted Funds:

Total Revenue Funds:	\$	11,191,346.39
Total General Funds:		3,652,370.15
Total Unrestricted Funds:		14,843,716.57

Restricted Funds:

Rate Projection Maintenance Fund:		3,276,160.62
Working Capital Fund:		462,854.21
NJEIT Processing Fund:		2,512,105.16
Series 2014A Project Bonds:		1,284,468.06
Series 2015A Project Bonds:		6,987,019.06
Total Bond Funds:		13,140,625.42
Total Other Restricted Funds:		1,571,330.48
Total Restricted Funds		29,234,563.01
Total of All Fund Accounts:		44,078,279.58

Comm. Cartine made a motion to approve the Treasurer's Report. Seconded by Comm. Fozman

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

9. DEVELOPER APPLICATIONS

- 9.1 Preliminary Applications - No Further Action Required - NONE
- 9.2 Other Applications

2155 The Church of St. Pio of Pietrelcina, C/O Mr. David M. Roskos, Preliminary Major Site Subdivision of Block 12.22, Lot 1/The Church of St. Pio Pietrelcina's property, NJ State Hwy. 35 NB, Route 35 SB & Seventh Avenue/529 Route 35 NB, Preliminary, 21 Residential Units

Director Specht advised, "We have two developer applications tonight. Application 2155 is for The Church of St. Pio of Pietrelcina, C/O Mr. David M. Roskos. It is a Preliminary Major Site Subdivision. It is the Catholic Church located on Route 35 on the barrier island. They want to convert that into a 21 lot residential subdivision. I think each lot will be 5,000 square feet and we are only required to provide the sewer and the developer will extend the sewer main around the perimeter of Route 35 and up on 7th Avenue and we will require a ten foot wide sewer easement so I recommend a preliminary approval on this application."

Comm. Curtis made a motion to approve this action. Seconded by Comm. Cartine

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

2166 Bricktown Equities, LLC, c/o Mr. Yitzchol Rokowsky, Preliminary Major Site Plan for Block 462, Lot 27.01, NJ State Hwy. Route 70 & Cedar Bridge Avenue, 575 Route 70, Preliminary, 1 Commercial

Director Specht advised, "Application 2166 is Bricktown Equities, LLC, c/o Mr. Yitzchol Rokowsky. It is a Preliminary Major Site Plan for Block 462, Lot 27.01 located at the intersection of Route 70 and Cedar Bridge. It is also known as 575 Route 70. This is the existing Wells Fargo Bank situation next to Wendy's on Route 70 east bound. They are looking to install an office building attached to the bank. And they will require preliminary approval. They have showed an existing 2" water service to service the new building and require that they install a new 8" water main onto the site to service that building and I would recommend a preliminary approval."

Comm. Bayard made a motion to approve this action. Seconded by Comm. Curtis

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevasco
NAYS: None
ABSTAIN: None

Comm. Curtis asked, "If they don't agree to the 8 inch water main what can we do?"

Director Specht replied, "Then we will deny their application. They may fight it but it is part of our requirements."

Comm. Curtis asked, "We are backed by that if we do deny it?"

Director Specht replied, "Yes based on residential site improvement specification, as well as NJDEP requirements will support that water main extension."

9.3 Release of Performance Bonds - NONE

10. UNANTICIPATED/EMERGENCY CAPITAL EXPENDITURES - NONE

11. CUSTOMER ACCOUNTS RECONCILIATIONS

Director Planko set forth the following customer accounts reconciliations list below and stated, "We have a few more than usual this month for two major reasons. Number one this represents a lot of winter freeze ups that we had dating back to February and also number two it has been five weeks since our last meeting. Again as always we verify that the repairs are in order and the meter is in working order. As usual with these credits there is no financial impact on the authority because there has been on entry into the collection system."

Sewer Credits

- a. Account 2312607-0, 1 Falls Rd. Alleman, A Sewer Credit is recommended in the amount of \$ 1084.95 due to a Broken pipe in Crawlspace. The usage was 141,000 gallons while the average is 6,000 gallons.

- b. Account 2331203-0, 311 Bay Dr. Winifred. A Sewer Credit is recommended in the amount of \$1993.26 due to a broken pipe in the crawlspace. The usage was 246,000 gallons while the average is zero.
- c. Account 2613207-0, 197 Squan Beach Dr. Conte. A Sewer Credit is recommended in the amount of \$ 4869.47 due to a broken pipe in the crawlspace. The usage was 589,000 gallons while the average is 2,000 gallons.
- d. Account 3664007-0, 47 Country Club Ct. Hulmes. A Sewer Credit is recommended in the amount of \$ 1093.39 due to a cracked meter which flooded crawlspace. The usage was 139,000 gallons while the average is zero.
- e. Account 5343657-0, 188 Cartagena Dr. Schwartz. A Sewer Credit is recommended in the amount of \$ 3990.61 due to a cracked meter. The usage was 486,000 gallons while the average is 5,000 gallons.
- f. Account 5828801-0, 49 Farragut Dr. Hutchinson. A Sewer Credit is recommended in the amount of \$ 1547.49 due to a cracked meter & broken pipes. The usage was 197,000 gallons while the average is 8,000 gallons.
- g. Account 10242400-0, 525 Glenwood Ave. Davis. A Sewer Credit is recommended in the amount of \$ 2161.37 due to a broken pipe in the basement. The usage was 281,000 gallons while the average is 24,000 gallons.
- h. Account 12756801-0, 102 Princeton Ave, Salvato. A Sewer Credit is recommended in the amount of \$ 2329.65 due to a sprinkler system being hooked to the city water instead of customers well. The usage was 305,000 gallons while the average is 20,000 gallons.
- i. Account 13287202-0, 61 Lenape Trail, Deflora. A Sewer Credit is recommended in the amount of \$ 3574.34 due to broken pipes in the heating supply line. The usage was 434,000 gallons while the average is zero.
- j. Account 14110407-0, 418 Margherita Pl, Cutaio. A Sewer Credit is recommended in the amount of \$ 1677.86 due to water heater malfunction which flooded the house. The usage was 211,000 gallons while the average is 5,000 gallons.
- k. Account 14176005-1, 534 Parker Ave, Baskinger. A Sewer Credit is recommended in the amount of \$ 1509.67 due to frozen pipes in outside shower. The usage was 190,000 gallons while the average is 3,000 gallons.

1. Account 17236071-0 198 Jack Martin Blvd, Jack Martin LLC. A Sewer Credit is recommended in the amount of \$ 2430.58 due to broken pipe which flooded basement. The usage was 298,000 gallons while the average is zero.

Comm. Cartine stated, "I have a question on H. This was due to a sprinkler system being hooked up to city water instead of the customer's well? We have had this once before or many times before. Is this intentional theft of water or is it a legitimate mistake?"

Director Planko replied, "If it was a theft of services commissioner it wouldn't be on here we would be addressing it as a theft."

Comm. Cartine stated, "Yeah but my question is that these people don't know that they are hooked up to city water? I just can't believe a homeowner doesn't know how their water is hooked up or how their sprinkler system is still hooked up. It is hard for me to believe that."

Comm. Planko advised, "When something like this happens we still charge them for the water, but we don't charge them for collection."

Comm. Cartine continued, "I think it is an offense that happens all too often and I don't think it is just an error made by a plumber. It is usually done by the homeowner. You know these things are happening out there. It's an intentional theft of our water and we are letting people get away with the fact that they didn't know that their water wasn't hooked up to their well but to city water. I don't believe it."

Director Planko advised, "It wasn't a theft of service commissioner because they are paying for the water."

Comm. Cartine stated, "I know they are paying for the water that is not the point, the point is that we have to go out there, we have to do an investigation and so we give them a sewer credit. So what. The fact is that somebody tried to attempt to do what is in my opinion theft of services."

Chairman Cevalco stated, "We just have to watch what we say along those lines. I mean we can only say things. We can't prove that things are suspect."

Comm. Fozman stated, "If he uses his one-time then in the future he doesn't get his credit?"

Director Planko stated, "On a sewer credit we verify that the water was used which they paid for and in our professional opinion that the water did not go down the collection system which we are obligated to credit them for that."

Comm. Curtis asked, "My issue is where does a half a million gallons of water go and nobody sees it?"

Comm. Cartine stated, "These are not all vacant homes or summer homes because I know the addresses. These breaks. These are not all summer homes. These are occupied homes. They don't know that they have a broken line or something with their meter in their crawl space? They can't detect that? But they pay for the water, but the water is wasted. You can say they pay for the water, but the water is wasted."

Director Planko advised, "In many cases the people aren't home too. There are those circumstances."

Comm. Cartine stated, "There are some homes here like Squan Drive, that is probably a summer home. Princeton Avenue – probably a summer home. Glenwood Avenue isn't. Cartegena is. Farragut may be. Lenape trail is down here. I don't know. If the house is vacant that is one thing. The line breaks in the winter time and nobody is there to detect it, but some of these other ones they are occupied homes and nobody knows... we just had a poster here about conservation of water and you're saying 'oh well they're paying for the water any how' - but that is not the point. The point is the water is being wasted and lost."

Director Planko advised, "I am just saying we are following policy commissioner. "

Comm. Cartine stated, "I understand you are following policy, but I am not happy with the fact that we don't take a firmer stance on some of these violators or people who objectively just walk around and don't notice the fact that they have leaks. They will notice when their hot water heater breaks and floods the house. I get frustrated when I see this because it is water that is rushing out you know just wasted water. We are talking about water conservation and then we just say well they are paying for the water anyhow. That is not my point. The point is that sometimes I just feel that we are being taken advantage of and there are some people who should take care of their own personal property a little bit better than they have. Can we force them to do that no we can't but we've got to I don't know there has to be a better answer than they are paying for water."

Director Planko advised "Every sewer credit commissioner whether it be low volume or high volume is in fact a waste of water. It is just a matter of how high a volume it is."

Comm. Fozman made a motion to approve items 11a through l. Seconded by Comm. Cartine

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevasco
NAYS: None
ABSTAIN: None

One Time Credits

- a. Account 7088009-0, 120 Jib Lane, Gaccione. A One Time Water and Sewer Credit is recommended in the amount of \$1,187.22 due to unexplained usage. The usage was 200,000 gallons while the average is 13,000 gallons.

Comm. Fozman asked, "Remember when that lady came in from Greenbriar I - Mrs. Henry and she had said that her water usage was unexplained and here we are giving a credit to this person here who says their water use was due to unexplained usage."

Director Planko advised, "As a matter of fact it is the same circumstance. She had unexplained usage. We gave her the same opportunity for a one-time credit and we actually even gave her a payment plan I believe going into 2017 the Board asked me to do that. I believe we approved that back in March and after we went through those various scenarios and she went to different organizations, we offered

that plan in April the month after we offered it she came in and paid it in full."

Comm. Fozman asked, "Was she in that category of unexplained usage? And did the MUA offer her the one-time credit?"

Director Planko replied, "Yes she was given the one-time credit exactly precisely as this customer."

Comm. Fozman asked, "But she didn't take it."

Director Planko replied, "No we gave it to her but she wasn't satisfied and finally based on the Board's recommendation we gave her a payment plan over two years and then she came in and paid it in full anyway."

Comm. Fozman made a motion to approve this one-time credit. Seconded by Comm. Bayard

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

12. CONTRACT CLOSE-OUTS - None

13. AUTHORIZATION TO EXPEND APPROVED FUNDS

a. Purchase of a Leak Detection Equipment Replacement

Vendor: Vivax-Metrotech Corporation

Amount: \$19,790.00

Funding Source: Capital Project No. 715002 – Water Distribution Leak Detection Units

Director Specht advised, "This is the purchase of leak detection equipment replacement from our vendor Vivax-Metrotech Corporation for \$19,790.00. The funding source is under capital project No. 715002 the Water Distribution Leak Detection Units where we have \$25,000 budgeted this year. Vivax-Metrotech has provided the appropriate pay to play information. The existing equipment that we had was purchased in 2007 and it cost us about \$38,000 and it is now obsolete so I recommend purchase of this equipment from Vivax-Metrotech Corporation."

Comm. Fozman made a motion to approve this one-time credit. Seconded by Comm. Bayard

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

b. Purchase of an Advance SC1500 Stand-On 20" Floor Scrubber and an Advance SC351 Floor Scrubber

Vendor: Supply King

Amount: \$9,919.32

Funding Source: Capital Project No. 915002 – Walk Behind Floor Scrubber Replacement

Director Specht advised, "This is the purchase of an Advance SC1500 Stand-On 20" Floor Scrubber and an Advance SC3511 Floor Scrubber from Supply King in the amount of \$9,919.32. The funding source is Capital project No. 915002 – Walk Behind Floor Scrubber Replacement where we have \$20,000 in the budget. We did receive three quotes. The second quote was from Everclean for \$11,000 and change and the third quote was from Mill Fisk Advance for \$13,000 and change. The existing equipment we have is 18 years old and has exceeded its useful life and I recommend approval."

Comm. Curtis made a motion to approve this purchase. Seconded by Comm. Fozman

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

c. Rotary Electronic Control Valve for 10" Pratt Butterfly Valve on Filter #4

Vendor: Harold Beck & Sons

Amount: \$6,029.00

Funding Source: Capital Account 799008

Director Maggio explained, "We are requesting authorization to expend approved funds for a Rotary Electronic Control Valve for 10" Pratt Butterfly Valve on Filter #4. The vendor is Harold Beck & Sons. The amount is \$6,029.00. Funding source is 799008 and this valve controller drive is in excess of 30 years old and the valve that it does control is critical to the operation of the filter and back wash so we are periodically beginning to change these drives on all of the filters one at a time to improve their reliability due to their age."

Comm. Flynn asked, "The other one is 30 years old?"

Director Maggio replied, "At least. Our records show it is the original to the filter which would have been in the mid 70's so it is probably in excess of that."

Comm. Flynn asked, "And what is the life expectancy of this new one?"

Director Maggio replied, "We would be expecting to get 20 years out of it and that obviously because of the length of time that the other ones were in service that is probably conservative."

Comm. Curtis made a motion to approve this purchase. Seconded by Comm. Bayard

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

d. Replacement of Lime Screw feeder and controllers

Vendor: Chemco L.P.

Amount: \$15,826.00

Funding Source: Capital Account 799008

Director Maggio advised, "The next item is the replacement of the Lime Screw Feeder and controllers in the plant line feed system. The vendor is Chemco and the amount is \$15,826.00. The funding source is capital account 799008. This line feeder is controlled by a chain link sprocket system. It is extremely maintenance intensive and at higher doses or rates of feed, the chain very often jumps the sprocket causing failure of the system until it is repaired. We are requesting to purchase equipment that is the same as the equipment we use in the lime feed system for the PTB. Each has about a quarter of the maintenance required based on work order records and is significantly more reliable and also has a higher capacity feed. With all the work that we are doing with our corrosion control one of the primary things we are doing is increasing our alkalinity and the increase feed of lime is a key component of that increased alkalinity and the reliability of this system at higher speeds is really essential."

Comm. Cartine stated, "A couple of weeks ago I approached you about the acidity in our water and I'm looking at this lime screw feeder which you want to use to increase the alkalinity of the water tells me that we have an acidic problem in our water."

Director Maggio replied, "No. Alkalinity is related to pH but we are maintaining our pH consistently through a balance of pH through the process and this is not the last process where pH is determined. The pH is determined leaving the clearwell and we manage that with caustic soda. Our target goal for pH is 7.8 and that is also part of our corrosion control plan and we are dead on pretty much 100% of the time give or take 1 or 2 units."

Comm. Cartine asked, "So your readings are around 7.8 on a constant basis?"

Director Maggio replied, "And we did reach out to that customer. The feedback we got was very understanding that he may have made a mistake. I think he was using test strips or some outdated test strips. That was resolved amicably."

Comm. Curtis made a motion to approve this action. Seconded by Comm. Fozman

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalco
NAYS: None
ABSTAIN: None

- e. **Water Research Foundation Annual Subscription Renewal**
Amount: \$6,698.88
Funding Source: Account 900-8315

Director Maggio replied, "The next item is our Water Research Foundation Annual Subscription Renewal. The amount is \$6,698.88. The funding source is Account 900-8315. This is an annual subscription to a water quality centric service which provides us with great resources in various studies and information and data about the operation of water treatment systems. We have also participated in a multitude of pilot studies and actual research studies. This is a real valuable resource."

Comm. Cartine stated, "It sounds like an expensive monthly magazine." (laughter.)

Director Maggio replied, "No. Actually it is much more than that, we get a lot out of it."

Comm. Curtis made a motion to approve this action. Seconded by Comm. Fozman.

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

f. Renewal of one year Fortis Software Maintenance and Support Contract

Vendor: MTS Software Solutions, Inc.

Amount: \$6,457.50

Funding Source: Operating Account 962-8703

Director Vaccaro advised, "This is for the renewal of a one year Fortis Software Maintenance and Support Contract. The vendor is MTS Software Solutions, Inc. The amount is \$6,457.50. It comes out of operation account 900628703. It is for our document control imaging system and includes Fortis Software licensing support and hardware maintenance support for the Canon Scanner and it is the same price as last year."

Comm. Fozman made a motion to approve this action. Seconded by Comm. Curtis

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

14. AUTHORIZATION TO SEND OUT BIDS, RFQ'S & RFP'S

- a. Issue Request for Proposal to Suburban Consulting Engineer, Inc. for Cartagena Drive, Cadiz Drive, Valencia Drive, Monterey Drive and the Lagoon Crossing from Granada Drive to Cartagena Drive Water Main Condition Assessment, Design, Bidding, Construction Administration/Management/Inspection

Director Specht advised, "This is an authorization to send out an RFP based on our fiscal year 15/16/17 capital budget. The first item 14a is to issue a request for proposal. Again this is based on feedback received from my June 2nd memorandum which I included in my monthly report to Director Lacey as well as feedback from the Finance Committee. The first RFP is recommended to issue to Suburban Consulting Engineers for Cartagena Drive, Cadiz Drive, Valencia Drive, Monterey Drive and the Lagoon Crossing from Granada Drive to Cartagena Drive for a Water Main Condition Assessment, Design, Bidding, Construction Administration/Management/Inspection. I recommend that RFP go out."

Comm. Fozman made a motion to approve this action. Seconded by Comm. Bayard

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

- b. Request for Proposal to H2M Architects+Engineers for the Condition Assessment of the Metedeconk River Water Main Crossings at Route 70 (16" Diameter) and Adjacent to the Raw Water Pump Station (20" Diameter), the Beaver Dam Creek at Midstreams Road (16" diameter),

Various 12" Diameter Stream Crossings Throughout the Township and the Water Mains in Cedar Village on Honeysuckle Court, Impatiens Court and Orchid Lane

Director Specht advised, "This is also a request for a proposal to be issued to H2M Architects+Engineers for the Condition Assessment of the Metedeconk River Water Main Crossings at Route 70 (16" Diameter) and Adjacent to the Raw Water Pump Station (20" Diameter), the Beaver Dam Creek at Midstreams Road (16" diameter), Various 12" Diameter Stream Crossings Throughout the Township and the Water Mains in Cedar Village on Honeysuckle Court, Impatiens Court and Orchid Lane. I recommend approval to issue that RFP."

Comm. Flynn asked, "What prompts these issues or just continuous inspection?"

Director Lacey advised, "Well the Route 70 Main crossing actually broke about 8 years ago and we had divers come in and it was just fixed with a Band-Aid if you will - a clamp was put around it and we really need to find out exactly what the reason was and whether it needs to be replaced. The other pipes I can't speak to."

Director Specht advised, "The other pipes are critical crossings that we have throughout the Township. They are vintage 40 years old and it is important that we assess these to determine what the life cycle is on these crossing in the event that we do have a failure."

Comm. Flynn asked, "Is this kind of thing already in the plan knowing that we should be checking those things? What is the management program that you are talking about?"

Director Specht replied, "Asset Management? That is correct. That will incorporate items like this and give us more information based on main breaks, corrosion issues. It will give us feedback on that."

Comm. Flynn asked, "And that will kind of tell you when to do what in what kind of time frame based on what you find."

Director Specht replied, "That is correct. The sewer lines are easy to look at because we can get in there with a camera but water mains are very difficult and you generally have to buy some electronic equipment to assess them or you have to dig some test pits with actual equipment and take a look at the main. Most of our mains are ductile iron and we are experiencing some corrosion issues particularly in Cedar Village where we have had some problems with soil issue so we want to get that assessed."

Comm. Curtis asked, "We don't have the capabilities to do any of this with our own people?"

Director Specht advised, "I would recommend that we move ahead with a consulting engineer to perform this work for us because the rest of my staff is busy fixing water mains and things of that nature."

Comm. Olsen asked, "So it's not an expertise issue it's a manpower issue?"

Director Specht replied, "And expertise also. There is no doubt about it. We don't have the full time expertise on staff now so I would recommend we go to our consultants for this."

Comm. Cartine stated, "Why don't you talk about the break that we had on Route 70 at the Metedeconk River. It was in the summer. It was in July when we were called out. We had this major break underwater. This is a water main that runs under water I guess east and west parallel to Route 70."

Director Specht replied, "Yes it runs basically from River Watch all the way under past Lightning Jacks to the other side basically up by the Rainbow Diner. We have a 16 inch main there."

Comm. Cartine stated, "And I think we really lucked out on that because it would have been worse than it was. We had to bring in divers. We couldn't turn the water off. We had to bring in divers basically to get at it and the pressure was so great it was just pushing the divers away from the break. I saw the whole thing and we took photos of it and all that. It is a critical break and we were fortunate enough that we were able to cap the break without the loss of service to most of our customers particularly along the Prince Avenue area."

Director Specht replied, "We did not lose service to anyone except Lightning Jacks that would be it. It was very expensive. Any work you do on an emergency basis becomes very expensive. We had to get in there and put line stops in and then back them up with 16 inch butterfly valves. Very specialized construction methods and we found out it was a hole in the steel pipe underneath the western branch of the Metedeconk and we were able to get in there and just put a clamp around it and that has held thus far, but again that is why we want to assess these mains so in the event that we determine that we have ten years left in the main we should start moving ahead with the replacement."

Director Lacey advised, "And we did have another break and I think 14A was the other one right, Cartegena wasn't that it?"

Director Specht replied, "We had a number of breaks on Cartegena at the lagoon crossing that gives us a loop in that section of town and we need to assess that to make a determination if we can repair that lagoon crossing. It's an 8 inch main that goes under the lagoon. It is a difficult area to create a loop so right now it has been isolated and we have one feed into the Bay Wood section of the town back there. We need to have that assessed also. With regard to Cartegena this was brought up earlier this year. The Township is moving ahead with a roadway improvement project in this area and we want to make sure we replace our main if it needs to be replaced. However, if there are mains that still have a good thirty years left in their life no sense in replacing them. It is important that we assess it that way."

Comm. Flynn asked, "Is there a reason that you are going with three different people for condition assessment as opposed to offering all three to one?"

Director Specht replied, "These are all pretty major projects and it is probably best to handle it this way the way I have it listed. That was my recommendation. Could you lump them all into one. I'm sure you could but just based on the capital budget I think this is the best way to do it."

Comm. Flynn stated, "Well you're proposing to do them all at once anyway so the budget is the budget right?"

Director Specht replied, "Well the budget is the budget but it is more important that you have one engineer work in one area and another engineer work in another area of town because this is basically

throughout the whole town. I mean we could do it that way but this is my recommendation as to how we should do it."

Comm. Flynn asked, "But if you go to all three of them, Suburban, H2m and PS&S and gave them all three the three jobs that you are looking to do. No? Would there be any savings there?"

Director Specht replied, "Yeah I think if you divide it up a little more between your consultants you get the work done a little faster."

Comm. Cartine added, "I don't think you want to throw all your eggs in one basket particularly because these are major projects."

Comm. Flynn stated, "I don't know exactly what this is so I'm trying to see why it is going all over the place."

Chairman Cevalasco stated, "It's just three separate professional groups."

Comm. Flynn stated, "It's three groups and three projects that are all actually the same."

Chairman Cevalasco responded, "Not really."

Comm. Flynn stated, "No? It's condition assessment."

Chairman Cevalasco stated, "They are a little bit different and the other thing is that one consulting firm to take on all three projects they would have to take that very seriously to work on all three projects at the same time so the results of their assessment."

Comm. Flynn stated, "I don't actually know what is entailed in that specific thing. I'm just looking at the..."

Chairman Cevalasco stated, "Oh I understand and if they were all in the same area. Like we've got a project we are doing in conjunction with Howell Township where we are using the Howell township engineering firm to help us with one of our projects – Sunset Drive. Because it makes sense they are doing work in the Howell border. It is one project that they were trying to reroute with storm water and it would fit right in with ours so it didn't make sense to go to different engineering firms."

Comm. Flynn asked, "How long do you estimate all of this will take?"

Director Specht advised, "Item No. A is a full blown assessment design construction administration. That will be a replacement project. I have to assess first what will need to be replaced, whether it is 1,000 feet of main or 3,000 feet. I need to get that assessed first similar to what we did with KnollCrest. We determined that whole length needs to be replaced. The other two would not require any construction or design service at this time, unless they come up with something that indicates we have a problem. And that is again, I am specifically just looking. These are a little more detailed when you look at these crossings and then the third one is actually our sanitary sewer force mains. We did an assessment back in 2007 on our three major pump stations, Riverside Drive, Bay Harbor and Drum Point as well as the Laurelbrook crossing and now it is time to assess our other force mains within the Township. Again I will probably wind up doing all of them and I recommend we go with the approval of

PSS on that. So if we could get back to that Mr. Chairman, 14c the request for Proposal for PS&S for the condition assessment of various sanitary sewer force mains. That list will be determined on how many to include in the RFP."

- c. Request for Proposal to PS&S for the Condition Assessment of Various Sanitary Sewer Force Mains (list to be determined prior to issuing the RFP)
- d. Request for Proposal to Maser Consulting, PA for the Design, Bidding, Construction Administration/Management/Inspection for the Parkway Service Territory Additional Interconnections on Cherry Lane and Redbud Lane, the East Granada Drive Water Main Extension and the Winding River Lane Water Main Upgrade

Comm. Cartine made a motion to approve Item Nos. 14a, 14b, 14c and 14d. Seconded by Comm. Fozman

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

- e. Request for Proposal to CME for Engineering design services for the replacement of the Authority generator system and relocation of the disinfection system to the Generator Building

Director Maggio advised, "We are requesting authorization to request proposals from CME for the engineering design and construction services for the replacement of the Authority Generator System and relocation of the disinfection system to the generator building. This is basically the project that we just saw the presentation on and we are going to ask CME to give us a proposal to move on to the next Phase of Design."

Comm. Cartine made a motion to approve this action. Seconded by Comm. Fozman

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

15. EXEMPT SESSION
(Personnel, Contracts & Potential Litigation Only)

16. ADOPTION OF PERSONNEL ACTIONS

Comm. Cartine made a motion to accept the Personnel Actions. Seconded by Comm. Fozman

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

17. OLD BUSINESS

17.1 Presentation by CME Associates Conceptual Design Plan for Standby Generator System, Sodium Hypochlorite Disinfection, Centralized Chemical Storage, and Relocation of Existing Disinfection System at the William Miller Water Treatment Plant

(Handled at the Top of the Meeting.)

18. NEW BUSINESS

18.1 Request to Utilize Reservoir (Memorialization)

Organization: Girl Scout of the Jersey Shore (Troop 170) Description of Event: Walking of dogs for animal shelter (BFF Dog Rescue NJ) and collecting donations.

Date: Saturday, June 13, 2015 from 10:00 a.m. to 1:00 p.m.

No. of Participants: 15

Contact: Diane McQueen

Event Status: 2nd time

Director Specht advised, "This event actually already took place back in late May. I polled the Board and I got positive feedback from everyone that the activity by the Girl Scouts of the Jersey Shore Troop 170 was acceptable. We just need to memorialize this use permit."

Comm. Cartine made a motion to memorialize this use permit. Seconded by Comm. Fozman

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco

NAYS: None

ABSTAIN: None

19. RESOLUTIONS

52-15 A Resolution for the Purchase and Installation of the PAX Active Mixer for the Virginia Drive Standpipe in the Amount of \$35,850.00 from Utility Service Company, Inc.

Director Maggio advised, "Resolution 52-15 is for the Purchase and Installation of the PAX Active Mixer for the Virginia Drive Standpipe in the Amount of \$35,850.00 from Utility Service Company, Inc. This will be charged to Account 715003. Virginia Avenue Drive we were not able to draw down the tank very low. We are very limited in the amount of water we can draw from it on a regular basis to maintain pressure in the surrounding area. Because of that we don't get a great amount of exchange of the water and poor exchange in water particularly during the summer can ultimately lead to water quality problems particularly bacteria growth. The PAX mixer system will continuously mix the water in the tank so it is all of uniform water age and this is to improve water quality and allow us to continue with operation of the tank hopefully worry free."

Comm. Curtis made a motion to adopt Resolution No. 52-15. Seconded by Comm. Fozman

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco

NAYS: None

ABSTAIN: None

54-15 Adoption of Cash Management Plan

Director Planko stated, "Our next resolution is 54-15 which is the adoption of the Cash Management Plan. It is our normal process and is also an audit requirement that we adopt a cash management plan each year which I usually do in June. I believe I circulated a copy of that plan to all the Board members. It contains various financial information, including the Authority's accounts and the transfer of funds. I talk about investments in that particular plan and financial reporting issues. Additionally my monthly report each month is relative to that cash management plan. I discussed it in detail at the Finance Committee Meeting which I believe was on June 11th. Upon passing of this resolution I also have to send a copy to DLGS and again it is an annual requirement."

Comm. Cartine made a motion to adopt Resolution No. 54-15. Seconded by Comm. Bayard

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalco

NAYS: None

ABSTAIN: None

55-15 Adoption of Employee Incentives Program for Required Licensing

Chairman Cevalco stated, "Before we go into this resolution, I would like to thank Commissioner Olsen and Commissioner Flynn for all the work that they did on this one and Mr. Lacey if you will proceed."

Director Lacey stated, "Yes Mr. Chairman this is the employee incentive program and as you just mentioned Commissioners Flynn and Olsen worked on it a long time. This came about quickly when one of our employees who had the T4 and W4 license left to another jurisdiction and that kind of left us in a quandary because we didn't have anybody that was running the plant that had it and we had to go back to some of our other employees that happened to have it and turned it over to them. The thought is as they get older and they look at retirement and we are a T4 Plant and a W4 Plant and this is just part of it for this whole scenario, but two very important parts of this. To get to the four designation it takes ten years. It doesn't matter you could have all the experience in the world and be the smartest person, but if you don't go through the program and take the tests and put the time in you don't get the license. It takes you approximately two and a half years to get a T1, then two and a half years later you can probably get your T2. But we are a T4, W4 and C4 Plant. This incentive along with some other things, people get different pesticide certifications to give them the incentive to do that and go ahead with that and they get it to stay here. They work very hard on it and I think I said it was very difficult putting it together because it was very complicated talking about it takes only a couple of minutes, but putting it together took a long time so as not to affect certain things. It affects all different groups, the Union and the bargaining groups and it keeps us current."

Chairman Cevalco thanked Commissioners Olsen and Flynn again for a job well done.

Comm. Curtis made a motion to adopt Resolution No. 55-15. Seconded by Comm. Fozman

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

56-15 Award of Pipe and Appurtenances Bid

Director Planko stated, " 56-15 is the award of our pipe and appurtenances bid. This is an annual bid. This is usually coordinated between both our Operations and Inventory Personnel as to items that we need and the quantities that we need. This year we have 65 items that were awarded to three different vendors for a total of \$36,007.07. I discussed this with both the Construction and Finance Committee and it was reviewed by Counsel."

Comm. Bayard made a motion to adopt Resolution No. 56-15. Seconded by Comm. Fozman

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

57-15 Award of a Public Contract to Pillari Brothers Construction, Inc. in the Amount of \$1,102,515.74 for Contract No. 713001; Knoll Crest Avenue Water Main Replacement

Director Specht advised, "57-15 is for the award of Public Contract to Pillari Brothers Construction, Inc., in the Amount of \$1,102,515.74 for Contract No. 713001; Knoll Crest Avenue Water Main Replacement. We received seven bids on June 4th ranging from the low bidder all the way up to \$1.9 million. The second bidder was only \$14,000 more than the low bidder Pillari Brothers. The engineer's estimate was about \$909,000. We looked at the capital budget and we do have funding available and I would recommend that we award this contract to Pillari Brothers."

Comm. Curtis made a motion to adopt Resolution No. 57-15. Seconded by Comm. Cartine

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

58-15 A Resolution Rejecting Bids for Stormwater Detention Basin Retrofit and Proposed Bioretention Basins at Moses Milch Drive Project

Director Maggio advised, "Resolution 58-15 is a resolution Rejecting Bids for Stormwater Detention Basin Retrofit and Proposed Bioretention Basins at Moses Milch Drive Project. This is a grant funded project and the low bid was \$436,236 which was in excess not only 30% over the Engineer's Estimate but above our grant budget. So we do recommend rejecting these bids. We talked to our design engineer and had modifications made to these plans that we believe will have significant cost savings while still preserving the water quality intent of this project and we would also be looking to rebid in very short order. We are looking to possibly rebid sometime this week."

Comm. Cartine asked, "How many bids did we get on that job?"

Director Maggio replied, "We got eight total and they ranged from \$436,000 in change to

\$743,000."

Comm. Cartine asked, "And even the \$400,000 one was still higher than our Engineer's Estimate"

Director Maggio replied, "Not only our Engineer's Estimate but also the budget that we have from the grant to do this. I don't know if I should say the numbers in public because there will be more bidding on this. It was over that amount by a good portion."

Comm. Flynn asked, "How much was the grant?"

Director Maggio advised, "The grant total was \$660,000 but monies are remaining that are in the range of \$300,000 to \$350,000."

Comm. Cartine asked, "Do you think we are going to be able to get someone who is going to bid within our budget?"

Director Maggio replied, "We hope to. We have made significant changes to the design. We reduced the scope and we have a schedule of values when you see the bids so you know what dollars were bid for various aspects. We were able to reduce a lot of the quantities of the bigger ticket items and yet still maintain water quality improvement."

Comm. Flynn asked, "Does that mean the water quality will be the same as it was with all this other stuff or do.. what did we lose?"

Director Maggio replied, "We believe so. We reduced the plantings. There are going to be plants installed that will provide some treatment so we reduce the number of plantings. They will naturally propagate. It may not be as immediate as we would like to see but also reduced some of the removal of soil and replaced it with sand."

Comm. Flynn asked, "Is that stuff that you could do later on if you get more grant money that would bring it back to that original level?"

Director Maggio advised, "The engineer feels that we won't really see a big detrimental impact on water quality with the removal of fill and the sand."

Comm. Curtis made a motion to adopt Resolution No. 58-15. Seconded by Comm. Bayard

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco

NAYS: None

ABSTAIN: None

59-15 A Resolution Memorializing the Brick Utilities Adopt-A-Spot at the Intersection of Route 70 and Brick Blvd. Jug handle.

Director Lacey advised, "This is an Adopt A Spot request, this is at the fork in the road at Brick Blvd. and Route 70. There are plantings there. It is not the first place you come into from the north from Monmouth County but certainly it is the gateway into our commercial area. The people that take care of

the plantings on that point come in here and get a meter, hook it up to our hydrant and as you all know we don't want people opening our hydrants. You got to do them slow. You have to open them completely and then you have to close them slow because if you don't it undermines everything. And now there is that new through lane so now the people are right on the highway and it is a safety hazard. We would just like to adopt a spot by putting a water service in house in the center with a little pony hydrant with a hose bib on it and that would be our contribution. We pay for it and it would keep it nice and green and we don't have to give them meters so they can hook up to our hydrants. It's all around nice stuff. Just like we take care of the adopt a spot over there on the Forge Pond where people launch their kayaks and canoes. We do not own it or maintain it but we do rake it. We do pick up the bottles and cans and we kind of police the area. We don't own it but it makes us good wardens of the water if you will."

Comm. Cartine asked, "Does anybody have that Adopt a Spot now?"

Director Lacey replied, "The people that take care of the actual gardening are the ones who want the water. They come here and they get the meter. We are just going to adopt it along with them to give them the water, and they will maintain it. We are just helping them with the water. We thought by doing this we won't get other requests to provide water, because then you get them all over the place. We already have one and they were the first ones in. This is our spot that we decided to adopt."

Comm. Curtis made a motion to adopt Resolution No. 59-15. Seconded by Comm. Cartine

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevasco
NAYS: None
ABSTAIN: None

60-15 Task Change Order Maser Consulting for the Laboratory Pilot Test Analysis of the Finished Water in the amount not to exceed \$32,000.00

Director Maggio advised, "Resolution 60-15 is a task order change order for Maser Consulting for the laboratory pilot test analysis of our finished water in the amount not to exceed \$32,000.00. This is all related to the work that we are doing to improve our corrosion control. As the Board knows we have done multiple changes to our process to improve corrosion control because of the problems we saw last summer. We have recently done sampling of the 17 of the highest lead levels that we got from last summer. And we got results back and we saw significant improvements in the lead levels. Over 50% reduction in lead however that is not adequate for us to say that we are in compliance at this point with the lead and copper rule. Maser is not doing this work they have been gracious enough to oversee a sub consultant who is Dr. Mark Edwards of the University of Virginia who is a nationally recognized expert in corrosion control at water treatment plants. He will be doing benchtop analyses of our water to evaluate and optimize or we hope to optimize the processes that we do going forward to bring us into compliance with the lead and copper rule. Some of the things that we may find is that some of the parallel treatment changes that we have done may actually ultimately be competing with each other as opposed to helping each other. This optimization is really essential for us to comply with the lead and copper rule. We can either reduce or eliminate some of the many processes we are doing now for corrosion control. This could pay for itself very quickly in terms of cost savings. Of course cost savings are not the reason we are doing this but that could be a benefit going forward. This ultimately is driven by water quality."

Comm. Fozman made a motion to adopt Resolution No. 60-15. Seconded by Comm. Curtis

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevasco
NAYS: None
ABSTAIN: None

61-15 A Resolution Authorizing H2M Architects+Engineers to Provide Professional Services for the Design of Conceptual Plans for Storm water Improvements on the Brick Township Municipal Utilities Authority Campus in the not to exceed amount of \$79,100

Director Maggio advised, "This resolution authorized Architects+Engineers to Provide Professional Services for the Design of Conceptual Plans for Storm water Improvements on the Brick Township Municipal Utilities Authority Campus in the not to exceed amount of \$79,100. The primary project that we are asking them to look at is we have a storm water outfall that drains a good deal of the storm water from what I call our campus as well as storm water that enters our campus from Forge Pond Road and actually discharges to a location that is upstream of our intake. The primary project is we are asking them to relocate that outfall to downstream of our raw water intake so that way there is no chance to it impacting water quality that is brought into the plant. In addition to that we are also asking them to look at storm water management in the entire campus. They are going to be doing conceptual designs for projects that we could do at our discretion around the campus to improve our storm water management with all the work and you saw the resolution we passed opening this meeting. We are really leaders in the protection of the Metedeconk Water Shed. It is really inherent upon us to set an excellent example and make sure that we are doing everything possible to make sure that the storm water leaving our campus and entering into the Metedeconk is of the highest quality possible."

Chairman Cevasco asked, "We have two projects going on right now."

Director Specht replied, "That's right Mr. Chairman we have my staff under the supervision of Dan Reilly and Bill Duckworth. We are basically taking the water from our roofs and putting them into rain gardens. We have one that has been completed for the addition to the administration building that goes out the side here and we are now working on the rain garden between the parking lots in the back here that will take the water from the Operations Building part of the parking lot itself as well as half of the warehouse. So we are working on those to get those done in house right now. As we get them complete we will move onto the next one."

Comm. Curtis asked, "Didn't we just request the developer to move their storm drains southeast of our intake and we have one that is above it?"

Chairman Cevasco replied, "That is why we are moving it because it is above the intake."

Comm. Cartine stated, "You have to understand that when we went into business back in the early 70's this was not on the radar and what the heck did we know about dumping water into the river or into the Reservoir, it wasn't an issue. We were operating under the Clean Water Act at the time when we first got our license to become a company but it wasn't even on the radar at the time. So now as we get educated and find out how we can conserve and protect our waterways this is a necessity. It is something we have to do and I'm happy that we are going to be taking care of that."

Comm. Curtis made a motion to adopt Resolution No. 61-15. Seconded by Comm. Fozman

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

62-15 A Resolution Authorizing the Purchase of a Motor Control Cabinet for Well 11 from Vendor Applied Analytics through State Contract #A85089 in the Amount of \$60,918

Chairman Cevalasco asked, "This motor control for this particular pump, will that have any impact on the motor control center we will be moving because of the generators?"

Director Maggio replied, "No this is located outside in the cabinet next to the well. This is a resolution authorizing the purchase of a motor control cabinet for Well 11 from vendor Applied Analytics through State Contract A85089 in the amount of \$60,918. This cabinet is very old and this has been a project that has been on the radar for about the past seven plus years. We are in a position where we really think we need to do this now. This is part of addressing the vulnerabilities to Well 11. Well 11 is a critical component of our source water strategy. We are also going to be doing as part of this project replacing the main power cable from the street to the well. This well does not work off our power grid. It has its own power source. I don't know what had happened, but at some point road improvements that were done on Forge Pond Road damaged that power cable. Right now we are looking to purchase the motor control cabinet because there is about a twelve week lead time and probably next month we anticipate coming to the Board to also request approval to move forward with the purchases to replace the power cable. I do have one thing that is in the resolution to modify. We are calling for this money to be funded by Capital Project No. 799008, but it is actually 799008 subject to task B so it is a minor typo. I just want it to be correct."

Comm. Fozman made a motion to adopt Resolution No. 62-15. Seconded by Comm. Bayard.

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevalasco
NAYS: None
ABSTAIN: None

63-15 A Resolution Recognizing the Winners of Brick Utilities' 2015 Metedeconk Watershed Mascot and Slogan Contest with the Brick Township Schools

Previously Adopted at start of meeting.

64-15 A Resolution Authorizing the Donation of a Surplus Flir Infrared Camera to the Laurelton Fire Department

Chairman Cevalasco asked for a motion to table resolution 64-15.

Comm. Cartine made a motion to table Resolution No. 64-15. Seconded by Comm. Bayard.

AYES: Comm. Bayard, Fozman, Curtis, Cartine, Cevasco
NAYS: None
ABSTAIN: None

20. PUBLIC DISCUSSION

In order to provide all necessary information to the Authority and to provide sufficient time for members of the public to speak, each member of the public will be limited to five minutes and should provide their name and address.

Joe Maestri stated, "I know you have a lot of buildings on campus that face south and I was wondering if the Authority is looking into any kind of solar panels on these buildings?"

Chairman Cevasco replied, "Not at this point in time."

21. COMMENTS FROM COMMISSIONERS, PROFESSIONALS & STAFF

Director Vaccaro advised he had nothing further to report.

Mr. Theodos stated, "I just wanted to report we have completed the review of the GIS Tax maps and made some recommendations back to the staff. Upon completion we will be in a position to submit to the State Division of Taxation for approval."

Director Planko advised he had nothing further to report.

Mr. Fallon advised, "We are going to start our audit on Wednesday Mr. Chairman."

Director Maggio advised, "I had a lot of things on the agenda today and certain things were very critical, particularly the generator project. I really appreciate the support and foresight that the board had approving us moving forward on that."

Director Specht advised he had nothing further to report.

Counselor Ben Montenegro stated, "Nothing further from the legal department."

Ms. Sylvester advised, "Nothing further to report."

Director Lacey advised, "I thought it was a good meeting. I think we got a lot accomplished. We had a lot of important things to get done tonight and we did them."

Comm. Flynn asked, "I have a question, I probably should have brought it up under personnel but I noticed a letter from someone that is retiring at the end of the year Glenn Hamelink. I'm looking at the organizational chart that I got a while ago and I see that under Rob Karl there is four positions of which one was vacant and now this fellow Glenn is leaving. I'm just curious does anything that we worked should we be, should somebody be doing something?"

Director Lacey replied, "We'll post the position and it will begin. People will apply and people that are qualified will be interviewed."

Comm. Flynn asked, "Is there anything in the employee development thing that would push them towards this? I mean we have some time before the end of the year."

Chairman Cevalasco stated, "I think just approving the employee development program that you and Commissioner Olsen put together will be some incentive because there really was no incentive before."

Comm. Flynn asked, "I don't know if it applies to that position."

Director Lacey advised, "I think that position is going to be more of an educational background like degree."

Chairman Cevalasco stated, "If I remember correctly he was part of the emergency response team a few years ago.":

Director Maggio replied, "The prior group, way back. Actually our watershed staff there are some members that really have like a pilot employee development program in terms of them going for schooling for GIS. They have all gone for Watershed Specialist Certifications."

Comm. Flynn asked, "So you already have it figured out who is going to replace this individual?"

Director Maggio replied, "We are looking at it organizationally at what to do best with that position and the qualifications that would best serve us in that department working for Rob. The needs and responsibilities of Rob's group in Watershed have changed dramatically over the last year. But we will look to replace him but it may not be Glenn's role but it will definitely fill in the vacancies and gaps and help us fulfill performance in that department."

Comm. Bayard had nothing further to report at this time.

Comm. Olsen stated, "I do have a brief comment about the sewer comments - the sore subject. We all know Mr. Planko doesn't personally waste the water every month so rather than shoot the messenger perhaps we should embark on some kind of PR campaign to educate the public on just how much is wasted. I think if we went back at every public meeting and added up the gallons that we give credits for that were wasted and that is a shocking number. It is just for this month alone. I'm sure the annual figure would be huge. We could present that to the public about just how much is wasted and maybe engage them in being more watchful. Similar to the Homeland Security what is it - see something say something program. But rather than just be upset about it every month which we all are perhaps we want to take a proactive step and add that to the PR campaign."

Director Planko stated, "As Commissioner Cartine said a lot of them are just so careless about it. Even though they have to pay for it they are just so careless."

Comm. Cartine stated, "Just so you understand. I wasn't shooting the messenger and I take affront to that. I am very frustrated with the fact that we are wasting water and the only answer we have is a bureaucratic one. Now having said what you said maybe a little education out to the public might be something, but don't ever accuse me of shooting the messenger. I am just doing my job and I am frustrated and everybody here at this table should be frustrated when we see this month after month and

we have to know that some of this is just down out theft of our services but we can't prove it. I find it very frustrating."

Comm. Olsen stated, "It is but my point is the magnitude of the annual waste is a number that would open folks eyes than a couple of thousand gallons here, ten thousand gallons there. When you talk about annually what that number is and how many swimming pools does that fill. How many lakes does that fill up, put that into a number that is visible for people to understand the shock value of how much is waste and you might start to get more people to buy into it. That's my point."

Director Lacey advised, "There is technology that I know we are looking at. One of the things is the radio reads there is all these technologies now that you can have and Joe correct me if I'm wrong but some of the telemetry will allow you to monitor when there is a problem before it becomes a problem in real time. Like if someone's meter is not right they notify you that they are only here in the summer and the computer does a quick read and it sees that the water in this house is running. We will know then and we can contact somebody. We are not there. Part of the problem is when there is a break and no one is there and they are not paying attention to it. Unless someone finds it and I'll give you a perfect example. At the Pilot House when that pipe broke, we didn't find it - a good citizen did. We didn't know it could have been a wake from a boat. It was a citizen that said I think you got a problem here. That's how the call came in and who knows how long the water was running."

Chairman Cevalco asked, "Wasn't there not too long ago a pipe broke at Point Pleasant Beach?"

Director Lacey replied, "Yes and I will tell you that story. Joe's assistant gives us a weekly read a daily average and I go through them and I get Lakewood, Point Beach and Borough. I'm reading through it and I'm going they are at summer time levels. So I call over there and everybody is not around. I start reaching around and I get hold of someone in the water plant, a third string guy down there. Yeah I think we have a main break and if we hadn't reached out to them they wouldn't have known. And it was only because I read it because one of our people put the numbers in. Better than them to ask for a credit of four or five thousand gallons a day. So we kind of nipped it in the bud and it is a waste of water. We caught it, not them. We caught it."

Chairman Cevalco stated, "It's kind of hard to get people to do what they should do because water comes too easy."

Director Lacey advised, "Joe sent out one of our main guys to read Point Beach's meter ahead of time just to see because if it was a leak we might as well find out now rather than two or three days later when we lose another million gallons of water and of course it was up to like 700,000. They were in summer time reads in February."

Chairman Cevalco stated, "People just don't realize how much water can leak out of a small opening. Mr. Specht gave me a little ruler and it's amazing how much water will leak out of a pinhole over time."

Director Lacey stated, "The thing is they didn't catch it. Nobody caught it at their water plant."

Director Maggio stated, "If we opt to go with an automatic meter read system which we are working on once that system is rolled out we should be able to detect possible leaking toilets within 24 hours. We will get increased consumption based on data analysis."

Comm. Curtis stated, "Over the past few months we have seen a lot of laborers leaving and a little higher than laborers leaving. I think as part of the employee development we have to look at keeping people."

Chairman Cevasco stated, "That's one of the reasons we're doing it."

Comm. Curtis stated, "Right now you're talking incentives for people that are here to move up. There is nothing in the works for people starting. For instance the guy that left and went to New Jersey American he probably doubled his salary going there. I know that for a fact. We taught him. He probably got his CDL here and he went right to New Jersey American."

Director Specht commented, "And a very good employee too."

Comm. Curtis continued, "That's my point. We have to do something. The \$11.50/hour laborer thing just isn't cutting it anymore. We have to do something as Commissioners to keep these people who are good employees."

Chairman Cevasco stated, "With this development program it is a start."

Comm. Curtis stated, "I understand it is a start but we've had this conversation about trying to keep the people we got."

Chairman Cevasco replied, "I think but what this thing does is it give the people who are going to go for their T license. Mr. Planko correct me if I'm wrong if I were an employee here and I went for a T license I would have to come up with the \$900 and some dollars for the course. But now they will be able to apply the same as they would for a college program to where. I think someone that is making \$12 an hour it's a hard nut to crack to come up with \$900 to take one of these classes."

Comm. Curtis stated, "I understand that part of it, but I am looking at the laborers and the entry employees. They are not looking at T4 and other licenses. They are looking for something. I don't know the foreman the crew leader whatever you want to call him he's not looking at a W4 license or a T-4 License."

Director Lacey responded, "I think the personnel committee has got to look at starting wage and things like that. Vis a vis the incentive program is for going to get the certificates. Correct me if I'm wrong but.."

Comm. Olsen stated, "Right. Part of it was to incentivize so we just talked about a presentation where we had \$2 million proposed to invest in equipment. We are trying to invest in staff and personnel. We can have the best most fantastic modern equipment possible, but if we don't have educated, trained and motivate staff we might as well close because you can't run without the other."

Director Lacey stated, "But that is in addition to a salary issue. They are two separate things."

Comm. Flynn stated, "I think what Tom is talking about the basic \$11.50 an hour is low."

Comm. Olsen stated, "To roll this out in two waves to do everything at once is two overwhelming. So if the first year is really addressing rolling out that phasing and to get the licensing and back up needed to stay operational the second wave I would hope would be around a starting wage, a living wage. What is really a living wage in Brick Township in Ocean County and how do we adjust from there fiscally, administratively and organizationally. That is definitely a Phase II. It is not forgotten. I think the first was deliberately chosen so that we can address the licensing issues but the other piece was certainly discussed and I think equally as important."

Comm. Cartine stated, "What we are looking at \$11.50 an hour is not getting the very best people that we can find out there. I am talking about entry level jobs which are basically unskilled labor even at that level you look at some of the applications we get and some of these people that fill out an application can't even fill out an application correctly. We are getting what we pay for. We are not getting the very best so these are people also statistically that you are not going to be able to depend upon in the future because their salaries are not going to be increased at any substantial rate to keep them here to begin with. So we just have turnover and we have a rollover of these lower salaried employees rather than developing them at this point and it seems to me the beginning of this is basically when you go back to negotiate a contract you have to look at a higher starting salary to compete with some decent labor out there. At \$11.50 an hour I don't know. You do get benefits and that is why some people come here just for the benefits, but still at \$11.50 we are not getting the right people in here."

Comm. Olsen stated, "To add to that if I may there is a cost associated with retraining and turnover. It is very hard to identify what that cost is but I think we all agree there is a cost to that. So if you look at that adding on to a starting salary it may seem like it's costing you more but really over time when you have \$11.50 an hour and you are retraining four guys in a year there is a cost associated with that. If you started at \$13 or \$14 you may see more of an impact initially but over time I think that really saves you money."

Director Lacey advised, "Usually after their 80 or 90 days I forget which, they are different for each group usually they get the \$2.50 raise."

Comm. Cartine stated, "I think you would probably get candidates if you advertise for a position from the outside or whatever you are going to get more candidates for that position if you are offering a better salary rather than one or two you are going to five or six and you are going to have a better pool to pick from."

Chairman Cevalco stated, "One of the things that Director Lacey and I have talked about this at length one of the things that we have to look at is if we do increase the starting salary at this time without looking at the overall picture what do we do to those people... we would wind up with the same scenario that the State was in when Governor Kean started his teacher' salary at \$18,500 and there were teachers with five to seven years' experience who were not making \$18,500. What I was looking at was easing into it."

Comm. Cartine stated, "And from Frank Planko's point of view it impacts the budget and it is certainly multiplies itself into your rate plans and whether or not you are increasing your operation costs and what you have to do to increase your revenue. So I mean it is a complex thing but I have to tell you quite frankly people ask me how much do we pay our people and I say \$11.50 an hour and I'm ashamed to say it in this day and age."

Comm. Olsen added, "Yes. I agree."

Comm. Fozman stated, "I would like to thank Comm. Olsen for her work on that incentives program. I thought that was a great program. Mr. Lacey was working on it too. I thought that was a great idea for that to come out like that. Just going through the capital checking, I'm looking here and I see – just a little update maybe on ASR Well No. 15a. Where are we with that?"

Director Specht advised, "We are hooking up our SCADA system now and start up will be at the end of this month."

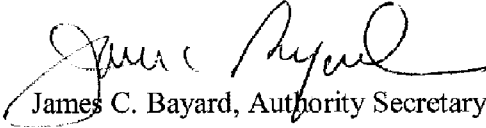
22. CLOSING STATEMENT

Ms. Sylvester advised that, *"The next Regular Public Meeting will take place on Monday, July 27, 2015 at 7:00 p.m. All meetings take place in the Main Conference Room of the Authority's Administration Building located at 1551 Highway 88 West"*

23. ADJOURNMENT

There being no further business to discuss the meeting adjourned at 8:50 p.m.

Respectfully submitted,


James C. Bayard, Authority Secretary

JCB/mas

The Brick Township Municipal Utilities Authority

1

Conceptual Design Plan for Capital Improvement Project at the William Miller Water Treatment Plant

June 22, 2015



Project Objective

2

Develop a **Conceptual Design Plan** to define the scope of a **Capital Improvement Project** that will enhance the:

- Reliability;
- Resiliency;
- Safety; and
- Effectiveness

of Brick Utilities operations.



Conceptual Design Plan Scope

3

Conceptual Design Plan scope included consideration of:

- Replacement of the current **emergency generator system** with a new generator system;
- Feasibility of using a **sodium hypochlorite disinfection system**;
- Need for **centralized chemical storage** and feed systems; and
- Relocation of existing **gas chlorine disinfection system**.



Project Scope

4

- Replacement of the current **emergency generator system** with new generators located outside in standalone enclosures;
- Replacement of existing **switchgear, MCC and main electrical distribution**; and
- Relocation of existing **gas chlorine disinfection system** to the existing Generator Building.



Generator System

5

- The existing emergency generators are barely able to meet existing peak electrical demands and are 25 years old. As a result, the existing units should not be part of a future generator system.
- The Plant future peak electrical demand is estimated to be 2060 kilowatts (kW) for a projected Plant capacity of 22 million gallons per day (MGD).
- Three 1250 kW diesel powered generator units are capable of meeting the peak future demand with one unit out of service and the two online units operating at 80% of rated capacity.



Generator System

6

- The three 1250 kW generators cannot be installed in the existing Generator Building without modifications to the building and therefore would be situated outside in standalone enclosures.
- The most feasible location for placing three new generator units outside of the existing Generator Building appears to be just south of the existing Finished Water Pump Station and Storage Tank.
- Brick Utilities should replace the existing switchgear, MCC, main electrical distribution, transformers and associated equipment at the same time as the installation of new generators and relocate these units to the upper level of the Generator Building. Consideration should be given for the replacement of the main transformers.



Generator System

7



Relocation of Gas Chlorine

8

- Due to the long term successful track record of using gas chlorine for disinfection, Brick Utilities is considering the relocation of the existing gas chlorine system from the Chlorine Room area adjacent to the Control Building to the lower level of the existing Generator Building.
- There is adequate room in the lower level of the Generator Building to relocate the gas chlorine disinfection system to that location.



Relocation of Gas Chlorine

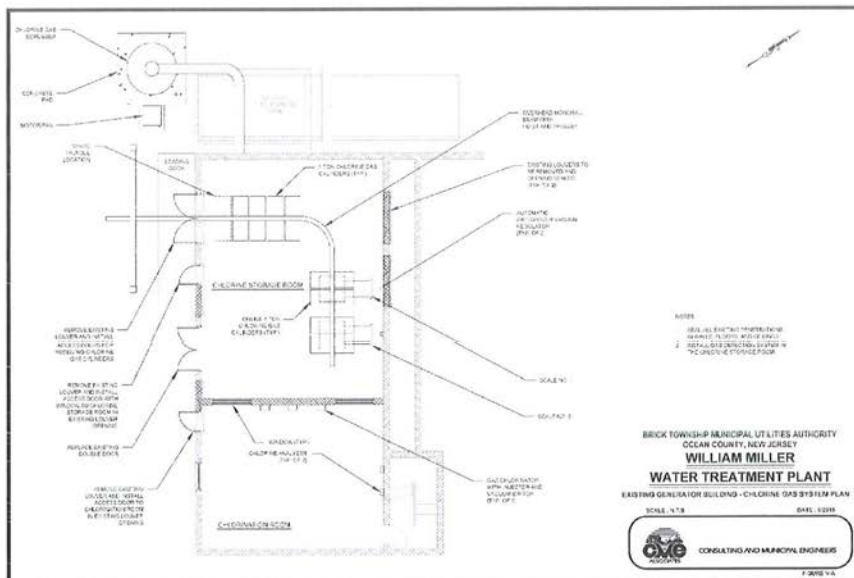
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- Required modifications to the Generator Building include the relocation of the generators and electrical equipment, as well as, building improvements to allow for installation of the chlorine gas equipment.
- The existing space in the lower level of the Generator Building would be divided into two separate areas, a chlorine storage room and a chlorination room.
- A chlorine gas scrubber would be provided.



Relocation of Gas Chlorine

10



Project Cost Estimate

11

Preliminary pre-design project cost estimates are:

- Installation of three new emergency 1250 kW generators- **\$6.6M**
- Relocation of MCC and electrical equipment to the upper level of the Generator Building- **\$2.9M**
- Relocation of gas chlorine disinfection system to lower level of the current Generator Building- **\$2.4M**

Total- \$11.9M



Project Sequencing

12

Implementation of the project would take place in a **phased approach** as follows:

- Installation of new emergency generators at a location just south of the existing Finished Water Pump Station and Storage Tank and relocation of electrical equipment to the upper level of the Generator Building.
- Commissioning of new generators and electrical equipment.
- Decommissioning of existing generators and electrical equipment.

- Construction of building modifications to the Generator Building and installation of a new gas chlorine disinfection system in the lower level of the current Generator Building.
- Decommissioning of the existing gas chlorine system.



Questions

13



BRICK UTILITIES
The Brick Township Municipal Utilities Authority

