

**GREEN BROOK FLOOD CONTROL COMMISSION
MEETING MINUTES**

LOCATION: Virtual Meeting

DATE: October 6, 2021

MEETING CONVENED: 7:30PM

Chairman Murray opened the meeting and took role call along with leading the Pledge of Allegiance. He recited compliance with the Open Public Meeting Act.

IN ATTENDANCE:

Raymond Murray . GBFCC Chairman - GB	Harry Allen . North Plainfield
William Crosby . GBFCC Treasurer- NP	Theodore Bassman . Scotch Plains
Rich O'Connor - Engineer, GBFCC	Alice Tempel . South Plainfield
Rob Zucker . Winning Strategies	John Ferguson . South Plainfield
Alek Peterson . USACE NY District	Freddie Hayeck . Watchung
Tom Slowinski . NJDEP	Linda Brnicevic . Bound Brook Resident
Doug Greenfield . Middlesex County	Stacey Edwards . Bound Brook Resident
Jessica Dunne . Dunellen	Kathleen Kleinbeck . Bound Brook Resident
Rich Pinder . Dunellen	Matt Mrowicki . Dunellen Resident
Paul Woska . Middlesex	Thomas Keen . Middlesex Resident

On the call, but not identified:

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MINUTES

The minutes were approved. A copy of approved minutes is available on the GBFCC website.

BILLS

Bills submitted from the usual vendors and payment was approved. Budget proposal for 2022 was distributed & will be voted on at next meeting.

ARMY CORPS OF ENGINEERS . Alek Peterson, Project Manager

Alek Petersen gave a brief overview of the ongoing construction and proposed upcoming work for the Green Brook Flood Risk Management (FRM) project over the next few years.

- Segments C2, Contract 1 and Segment C1 are currently under construction.
- Segments C2 & H, C3 & C4, and B4 & C5 are scheduled for construction award in FY22-FY24.
- \$40 million in carryover funding from FY21 plus \$40 million in total budgeted for FY22 provides approximately \$80 million for the construction of the project in FY22.

The team will be reaching out to potential participants for nonstructural FRM in Bridgewater and Piscataway to help determine what measures will be implemented. The team is gathering feedback to hold public meetings for Rights of Entry (ROEs) in Green Brook Township, Middlesex Borough, and the Dunellen Township as part of upcoming investigation work for Segments C6, C7, D, and IJK.

The District submitted a Validation Report concluding that construction should continue in the Lower Basin and Stony Brook and a GRR initiated to examine flood risk management alternatives in the Upper Basin. Some funding is on hand for this effort and more may be available this FY22. The District is waiting for HQUSACE concurrence to begin GRR study.

Mr. Petersen related that Hurricane Ida caused significant damage in various areas of the Green Brook Basin. New York District Commander Colonel Matthew Luzzatto and North Atlantic Division Commander General Thomas Tickner toured the damage areas in Bound Brook Borough and Middlesex.

Bound Brook Borough experienced significant flooding due to a disabled train in the RR closure gate and sewage backup. The completed Segment URT system in Bound Brook prevented severe flooding and damages within the Borough.

Middlesex Borough had hundreds of homes with significant flooding. Construction of the flood risk management Segments CHBD in Middlesex is ongoing.

Mr. Petersen related that the Corps would appreciate floodmarks or other data from the storm be provided.

QUESTIONS for ARMY CORPS of ENGINEERS

Ms. Jessica Dunne: Some properties in Dunellen were damaged and condemned during Hurricane Ida. I'm wondering if there is any way to get into Dunellen sooner to start making assessments and having discussions as those people decide whether they are going to rebuild or sell their properties. If the Commission is going to ask some of those properties for real estate acquisition, it seems like there may be an opportunity to do that sooner rather than later.

Mr. Peterson: Right now, we are looking to determine which properties we need rights of entry for within Dunellen and Green Brook Township, within Segments I, J, K to do HDRW, geotechnical borings, utility surveys, environmental delineations in preparations for design. At this time, we are not typically at a point where we would begin real estate acquisition with I, J, K. Once we award a design contract, following the initial investigations, we typically begin to acquire real estate when we are at 65% level of plans and specs. That is when the design is firm enough to know the required real estate, easements, and acquisition we need. I have spoken about this with Ray separately. We have an internal meeting tomorrow and I will raise the issue to the team and see if there are any acquisitions we can do preliminarily. I can't promise anything, but I do know with Ida and all the devastation and damages their maybe people willing to sell now.

Ms. Dunne: If you or Ray could reach back out to me after the meeting to follow up, that would be great. Thank you.

Mr. Slowinski: How many residences in Dunellen were condemned? Or were they substantially damaged?

Ms. Dunne: One of the residents is on the call here. There was a total of 8 condemned properties right up by the Green Brook on Washington Ave and some along 4th Street. They are in various states of disrepair. I have spoken to at least two residents that are in the position of deciding whether to rebuild or sell. I don't know if any of them would ultimately be in that acquisition stage. One of them is right next to the current pumping station right next to the Brook. I don't want to

make the determination on whether or not they would be up for acquisition but all 8 are in that general area on Washington Ave by the Green Brook, whether directly on Washington or one of the immediate side streets that back up the Brook.

Mr. Murray: I did make that request of him by email last week for him to take a look and see if there are any known properties that were identified as buyouts in the initial plan. The copy of the 1986 plan that I have, does not show any in the area that are known to be buy-outs. The stream does move over time. If there are any based on that 65% design would there be any that are close enough and maybe need the property. Would be nice to take a sooner rather than later approach to looking at those things. Just to see if there are people that are kind of caught in a quandary - do I rebuild, or do I just leave it as is and try to get out of this situation? They did promise to take a look to see what they could do to figure any of that out. My first look at the maps from 1986, don't indicate anything in that area that would qualify. There's a couple that are marked as flood proofs on the original. On the full-size pictures that are about the size of my conference room table, I took a look at that and there were very few that were marked in yellow, to indicate that they were either going to be flood-proofed individually or possible buy-out. The Corps did say that they would discuss it in their internal meeting tomorrow and see if they can get any kind of an answer back on for any of those property owners.

Ms. Dunne: I appreciate it. And then an estimate for the 65% in terms of a general timeframe? If we are we looking at it for FY25, is that a year from now, two years from now?

Mr. Peterson: It's probably going to be a couple years out before we would have 65% design. The first thing we must do is get ROEs from homeowners in the area so we could figure out what's there and that gives the designer some background information to begin designing. Then we look to award a design contract. Design typically takes up to a couple of years. We're probably looking at a couple of years, maybe FY24 before we would have 65% design. But I will raise that at the internal meeting tomorrow and see if there's anything we can do.

I have a question for you. Does anybody in Dunellen or Greenbrook, have had any flood marks from Ida? As part of our analysis and moving into design, they're trying to calibrate the level of the storm and what was affected, and it would help could help the design.

Ms. Dunne: Specifically, up in that area, or anywhere in Dunellen?

Mr. Peterson: Anywhere in Dunellen.

Ms. Dunne: I can ask. I am not up in the I, J, K region. I'm closer to the Bonygutt Brook. There was a line on our garage door, but I don't know if over the past month it's may have worn away. Matt, I don't want to put you on the spot, but is there anything up by you? Otherwise, we can get back to you.

Mr. Matt Mrowick, Dunellen Resident: Yes, we have watermarks on our house. It's over the foundation, not quite to the first floor. I could provide a photo if that will help. I would guess three or four feet, something like that. We absolutely have several watermarks, but that the high one is pretty clear. I could send Jessica a photo.

Mr. Tom Slowinski: What's your address?

Mr. Mrowicki: 816 North Washington Ave.

Mr. Slowinski: I'd try to get a visit out to you in the next week.

Mr. Mrowicki: Absolutely . you are more than welcome.

Mr. Murray: As I mentioned, Alec, I think we have a very clear mark here at the Greenbrook Municipal building. About 58 ½ inches above the rear stairwell entrance.

Mr. Peterson: Anything I get will be passed on to our civil resources branch. That's the group within engineering that does the hydrology and hydraulic modeling for the project.

Ms. Dunne: I'll reach out to our Borough Administrator and see if they have anything more broadly. Then I'll try to see you what we can get from the residents themselves or have some coordinated effort from the Borough.

Mr. Harry Allen: Are you interested in the same thing in North Plainfield? Or did you get it already?

Mr. Slowinski: We have some records. We have some pictures, and high-water marks but it's good to get them everywhere. Because it establishes points for when the Corps does their modeling. That hydraulic modeling gets tricky. Anytime you can add more data, the better.

Mr. Allen: I have the FEMA flood maps and I was comparing some of the town to the FEMA flood maps. It's pretty close to the 1973 Flood for North Plainfield.

Mr. Slowinski: Probably follow the 500-year line.

Mr. Allen: I know there's a spot on Greenbrook Road where the flood line is right at the curb and now it went into the buildings, so it's different. It was pretty strong coming through.

Mr. Murray: Also noted in North Plainfield, it was strong enough to actually move two sections of the barrier on Route 22 and overtopping of the barrier throughout North Plainfield and Greenbrook. Plenty of water rescues from cars from all the way down to the Mountain Avenue overpass in Bound Brook.

Of note for us in Greenbrook, the police building, which at the time was about to be renovated into the police building during Hurricane Floyd, did not take on water during Floyd, but did take on two inches of water in this storm. I would say at that building location about 6 inches higher than it was during Floyd. And pretty comparable to pictures that I saw from 1973 of the buildings on Washington Avenue and Greenbrook almost spot on to elevation.

Mr. Allen: I found the same thing on the road near me on Townsend Avenue in North Plainfield. I marked that high watermark before, and it was just about the same place as it was on the flood map. You know how it is in our basin.

Mr. Murray: Anybody who has the high watermarks, if they want to email those to me, I'd be happy to come out and take some photos and try to get some points of reference for Alec for this upcoming meeting.

Mr. Allen: It wasn't a uniform rain over the entire area so they're actually isolated streams that probably exceeded the values that we had in the past. Overall the whole overall flows close to 1973 I think.

Mr. Ted Bassman: We can find anything up in the north end of town, but the south end got some damage but that's in a different basin.

Mr. Murray: The quick concentration did not help in this storm. Culverts that normally would take the water, did not in this storm. Many are still filled with debris from washing down from the Watchung mountains.

Tom, we're going to switch gears real quick if you have anything to add from NJDEP perspective because we know you have another meeting to go to.

Mr. Slowinski: I really don't have a report. I did want to say that this was an epic storm. Depending on where you were, it matched or exceeded Floyd & Irene, so this was a big one. I have been studying it a little bit. I'm not a meteorologist or a hydraulic expert or anything, but I think we're going to have one of these every seven and a half years. We have to prepare for that. Hopefully the job will progress a lot more. We had a few snags here and there, but to get that floodwall levee built it's going to help more people.

I also want to say regarding what I saw on the Middle Brook and on the Stony Brook, that you cannot stop Mother Nature from ripping trees out of the side banks with the velocity of that storm. A lot of times you're going to get clogs at the culverts and the bridges. Route 22 at the Chimney Rock Road there in Bridgewater going into Bound Brook really took a big hit.

But one of the things that kind of irks me, every town in New Jersey has just been given new floodplain ordinances as directed by the National Flood Insurance Program, NFIP, FEMA, and our office with the state of New Jersey. You're not supposed to pile and store anything in a floodplain. I don't know how many pieces of wood I saw that were cut, ready to be split, that came down the middle Brook, down where the train broke down over a Talmage Avenue.

It is up to each individual town, especially if you are in the community rating system, you need to enforce these rules. You'll get a lower rating and cheaper flood insurance, and you'll cause less heartache in the end. Again, you can't stop Mother Nature. She will rip any tree out that She sees fit! But what I saw was something that was stockpiled in the floodplain. And then not only that, but there was also a lot of debris and stockpiled things, it was really outrageous. It is up to the individual towns to enforce their floodplain ordinances. Even if they want to strengthen them. What was sent to them recently was just a standard, and it's pretty strict. The town can actually increase that and make it even tougher. And again, that will reflect on your in your community rating system, and hopefully, less a burden on flood insurance.

QUESTIONS for NJDEP

Mr. Bassman: We sit in two different basins. The Rahway River down in the south, and the Green Brook, up in the north. Now the Rahway River had its project cancelled. And they have recently, a couple of years ago, kind of in the same boat as the Upper Basin is. They've gone on and in the 2020 WRDA (Water Resources Development Act) they put their Project back into play. They have a lot of flooding; this is in Cranford a whole lot. Well, here we look in the newspaper and they are getting all this verbiage from the governor on down about what they're going to do for flooding in there. The Upper Basin doesn't have a piece of paper that says it's dead. We are in this regulatory, bureaucratic Disneyland, where we can't get anything done. We can't try to press to have the GRE pushed all because we never come up with a piece of paper. When is this going to end?

Mr. Murray: I think Ted, from my perspective, there's a lot of work to be done on the Upper Basin. Not the least of which is because somebody went out of their way to build in the way of the project. The Upper Basin needs to be re-studied. That's what the whole effort to do a new GRR for the Upper Basin is all about.

Mr. Bassman: We have a regulatory thing that is preventing a piece of paper from coming out that saying that the old plan up there is dead and that is what's holding it up.

Mr. Murray: My understanding of what is actually holding anything up, is the fact that the regulations require a full study to show that it can't be built when they did not do a full study, because it seemed ridiculous to study something that they knew could not be built. They didn't want to waste \$5 million doing a study showing that it couldn't be built and because of that, we don't have a clear direction on getting the GRR approved for the Upper Basin.

Mr. Bassman: Exactly. Nothing is going on. Nothing can move forward. And again, it's their own internal policies that are really holding us up here. This flooding, it goes down Park Avenue and proceeds to go down into South Plainfield. We're in the same boat with the Watchung there. Thanks, Watchung, for coming for the first time in months but it's good to have you here.

How do we get off the dime? I mean, let's put it this way. We don't hear anything from our County. Our Municipal Manager happens to be the Chairman of Union County Commissioners. I have the idea of when I have a meeting pretty soon with my mayor, he's going to be getting an earful on this.

Mr. Murray: To shed a little light on this certainly would not hurt. In the days after the storm. I got a call from Mayor Mapp of Plainfield and his question to me was "How did the project work? How did things go in Bound Brook?" And I said, to be honest with you, if not for the track issue on the on the west end of town and primarily a sewage backing up issue on the east end of town, Bound Brook was in really good shape.

There's been a follow up call about the train issue in Bound Brook with New Jersey Transit. It turns out, that the reason that the project reaches out to New Jersey Transit is to tell them we have to close the gate. The benchmark that they use is when the Raritan will be cresting at such and such elevation, we need to close the gate and Bound Brook. As it came out in that meeting, the train was stuck on the track due to debris from the Middle Brook for about three hours before New Jersey Transit was even notified that the gate was going to have to close. The benchmark was not, when is the Middle Brook going to be overtopping onto the track, but rather, when is the Raritan going to be high enough that it's going to back up the Middle Brook, and back into Bound Brook. The train was stuck on the tracks long before there was any consideration to even reach out to New Jersey Transit, which is unfortunate.

My point in that meeting with New Jersey Transit is we've got to come up with a new metric, with a new benchmark, on the Middle Brook so that even if there's no reason to close the gate, New Jersey Transit should be aware that there's debris that is about to get on to the tracks so that they are not in the position where the train gets stuck, and then causes this heartache on the west end Bound Brook. New Jersey Transit said: We were out there, as soon as we could get out there. We did everything we could do to try to get the debris out from under the train. But in order to move that train in any manner, all of the airlines needed to be reconnected. We could just not get enough of the debris out from under the train in time to get all the airlines reconnected so that it could be moved. One of the things that they're investigating is some cameras on the Middle Brook. That would give them a view from the operation center. They would be aware of what's going on

long before any need for a call would come through to them. The unfortunate thing on the west end of Bound Brook was that the train was stuck for three hours already before they even got contacted that the gate was going to need to be closed. wasn't about the Raritan river backing up into Bound Brook, but rather debris on the track that made the train disabled.

Mr. Bassman: Ray, when we were doing the planning for the construction of that gate, this is going back at least five years, Joe Skupien bought up that normally, the Raritan Valley line closes down way before that gate has to be closed before the flooding further out to the West and it isn't the Middle Brook that closes down that line. So, something here utterly failed.

Mr. Murray: It's not so much that something failed, Ted. It's that the Middle Brook crested twice. The Middle Brook crested because of the flash flooding on the Middle Brook, the water coming down the mountain. Then receded, and then came up again, as the Raritan and the tides in the Raritan brought the Raritan River up.

Mr. Slowinski: The second peak came up even higher, Ray. The first peak is the Middle Brook on its own then it recedes. Then the Raritan peak is higher than the original peak, and debris was already there. It is unfortunate that if it made it another 150 feet going towards the ballpark in Somerset, or in Bridgewater, it would have made it and they would have been able to close it.

Mr. Murray: That was the point of the conversation. Even if it's not going to be to protect Bound Brook, it's going to protect the train, the trains operation, and the people on the train. New Jersey Transit needs a way of being aware that the track is going underwater. That's what their investigation into a camera system for that will be, as well as trying to get an earlier warning to them when the Middle Brook is going to crest and make that track compromised.

Mr. Bassman: As I said before, the tracks flood out further to the west before, and the trains can't run before that gate has to be closed. So, you have the question, why is that train trying to get through?

Mr. Murray: To be honest with you, Ted, it was the speed at which everything came up and the intensity on the Middle Brook. It was pointed out a little earlier, that the amount of water that came down, in that area completely washed out portions of Route 22. There are sewer lines that were compromised in the area. The two car dealerships are immediately next to the Middle Brook were completely wiped out with water running through the showrooms and hundreds of new cars being underwater.

I understand that the dealerships are doing the best that they can. A picture that came to me from one of the salesman under a tent, I don't know what he was selling, because they certainly didn't have any cars in the lot. The Middle Brook really just came up. We saw the same thing here in Green Brook, I came back into work after the tornado watch ended. Specifically went into the municipal building to get keys so that I could move cars that had already been moved once, to even higher ground. I got out of my car onto wet, but not puddling water. When I got back to my car, 15 to 20 minutes later, the water was about three inches from the top of my tire. In that 15-to-20-minute time frame that water came up about a foot and a half, which is an incredible amount of rise for that area. Saturated ground and how much came off of the mountain and kind of all at once, really made the rivers and every culvert overtopped. Every culvert in Green Brook was overtopped with rock and debris. The stuff was coming off Washington Rock State Park. We took about 40 truckloads of soil and rock out of a culvert on a street on the side of the mountain. On Friday, we visited several swales and detention basins in town with the township engineer. We have weeks and weeks of work to empty these culverts and get the stone and the mud out of

them. To the point that we are not even going to do much effort with our own staff. It is going to be all contracted out because our staff is still picking up wet couches from the side of the road. It is just a lot of water coming down the mountain at the same time and that's what really happened in the Middle Brook is that it completely washed all this debris up onto the tracks long before they even needed to close the gates.

As Joe Skupien pointed out in the project meeting, you are thinking six hours ahead or eight hours ahead of where the elevation is going to be when you start making some of these motions, such as putting the stop log structures in place in Bound Brook on the on the other set of tracks. It's a six-hour operation to get the stop logs, get them out on site and get them completely installed. You must be thinking eight hours ahead for each of these activities. The idea that the Middlebrook was going to come up that quickly just was not part of the equation, but it will be going forward.

Mr. Thomas Keene, Middlesex resident: My name is Thomas Keene and from Middlesex Borough from Lee Drive. Just looking for a location for the map that the individual from the Army Corps of Engineers was talking about. He's using a total language that we have no reference to about the sections. We are looking at the wall across the street through the woods here. Carbro or the Army Corps of Engineers hasn't been around here for about four months, and our water situation here is worse than ever. What we get now, and the amount of water that's retained here is much worse than ever. Then we are looking at an unfinished wall back here. I would like to look at a map. So when that individual talks about things that are not going to be done, and things that are going to be put off, we'd like to know what he's talking about. Is there a website?

Mr. Murray: If you go to the Green Brook Flood Control Commission website, there are copies of some of these maps on there. There's a copy of the bubble map on there, which shows the various contracts. From the time that it was posted, at least the thought process of when those contracts would be awarded. Some of the timing on those has changed. Most notably, that the portions that are at the top of the map, as you're looking at it in color in a pale yellow - it's known as Segment-D on the Greenbrook side, and Segment-C 6 & 7 on the Middlesex side - those portions of the project will not be built right away. Those portions of the project won't be built right away, because if those portions were built, that would cause flooding further up in Greenbrook, and in Dunellen, and the edge of Plainfield. As they get to Mountain View Park in Middlesex, we're actually going to stop work for a little while, do some work up here in Greenbrook, and Dunellen, and Plainfield and then go back and complete the work behind Middlesex High School and behind Mountain View Park.

Go to the Flood Control Commission's website, there are some maps there that will help with some of this. There's the overall project map which gives the segments by very generic look of the map. It says Segment-C is this whole portion of Middlesex basically from Borough Hall down behind Mountain View Park, but the bubble map gives it greater detail and broken down into smaller sub segments. Both of those maps are up on that on the Commission website.

Mr. Doug Greenfeld: I'm just wondering, given all the investment that's occurred thus far, what worked?

Mr. Murray: What worked and what didn't work? The only area that has real true complete protection is the Borough of Bound Brook for the project. That, by and large worked, if not for the train being stuck on the west end and having a sewage backup on the east end, the project works. I toured Bound Brook with Mayor Fazen, the Saturday after the storm. We drove to various parts of the Borough and we saw what we needed to see in each of those parts. On the East End in the Billion Park Area there was there was flooding, which was primarily because the pump station

on River Road on the Bound Brook, Piscataway Middlesex border was completely overrun by the waters of the Raritan. It could only pump for a certain period and then it was basically just taking on river water. The gravity line from that station continue to operate but the pump line was not running throughout the later portion of the storm. Sewage that was in the system in Bound Brook backed up on the east end of town. On the west end of town there was the issue with the train being stuck exactly where the gate needed to close. They did what they could. They closed the one side of the gate completely. The other side of the gate they closed up against the train and they tried to sandbag as best they could. That was about all they could do, because they could not physically move the train.

By and large, the mayor was very happy with the results. If you have a storm that is exactly the elevation on the Raritan as it was during Floyd, and you've got water that's only curb high on Main Street, that's a win. That's what Mayor Mapp from Plainfield was asking about; how did it do overall. So that's the only portion that has 100% completion and you would expect to work 100%.

In Middlesex Borough, there are smaller homeruns. The areas near segment B-1, B-2, that would be where the Green Brook meets the Bound Brook, I believe their level of protection there, Alec can correct me if I'm wrong, is only about a 40-year storm, pending additional work on the B side of the stream. It certainly helped quite a bit. It's unfortunate for the folks, such as the gentleman, Mr. Keen here from Lee Drive, the project is not complete in that area. You have flood walls, but then you have gaps in the flood wall. You might have further down a section of flood wall, but then there's no closure gate that's yet to be constructed across North Lincoln Ave. So there's portions of the project that are there, but they can't be tied in until other things are accomplished because the water will be basically going in a circle around that segment, or, it's just not complete. You can't complete it because you're going to induce flooding on the other side. Those are the real difficult parts of this as you want to get this all built as quickly as possible. They are working towards it. If you have a property owner, that's just not cooperative, sometimes that will throw the monkey wrench in and can delay a segment for a year or even longer. We saw that on Segment B- 2 where one property owner wanted more money. There were only seven properties that needed real estate on that portion. Because one property owner was holding out for more money that Segment did not get awarded for two fiscal years.

Real Estate division is working through a lot of issues, in and around Lee Drive areas. Some of the commercial properties that back up to where the Bound Brook makes that hard turn there. There's one in particular that they're not making any headway. They're going up the food chain and going to make an effort to condemn the property or condemn the portion of the property they need in US District Court, so that they can move that portion of the project forward and they can build what they need to build there.

The portions that are complete are working great. The portions that are partially complete are working okay. They are working about to the level that you would expect. We saw the same thing before Bound Brook was complete. They didn't have complete protection at the closure gate of all places. During the storm, they were basically pushing dirt up to try to create a berm just to try to lessen the amount of water that was going to get in and a portion of the project that was not yet complete. The project did its job in Bound Brook and the Mayor was very happy with the work that had been done in the Borough. Less than a foot on Main Street versus maybe 15 feet in some areas, was a save for Bound Brook.

Mr. Peterson: That is an excellent summary, Ray. I would add that at our last meeting with Mayor Fazen, he mentioned that Main Street in Bound Brook had 14 feet of water on it during Floyd. This time it was barely up to the curb level. We actually toured the project the day after Ida when

the Raritan River was still peaking. We were over in Billion Park by Segment-T and the floodwater on the Ambrose Brook side was basically to the top of the of the Segment-T levee. The same with the flood wall and levee over by the R-2 pump station flood water was basically to the top. In Bound Brook, Ida produced floodwaters with high watermark slightly higher than Floyd. There's a good chance that Bound Brook would have been devastated if Segments U, R, T hadn't been in place.

Mr. Murray: Again, in some of the photos that the core is assembled for the project, you can see how dangerously high this water got to the very top of some of the levees. There were some areas in R-2 area where the Raritan meets the levee, where there was actually some slight overtopping of the levee. Nothing that would cause any kind of real damage. It's good to see that the project worked the way that it did.

We can always put another foot on it. Congress will only pay for so much. We had the question come years ago, then Assemblyperson Stender said, "Why don't we build to a 500-year standard?" Because the levees would have to be just that much higher, it would cost a lot more money, there would be more real estate that would be required to make the either the levee wider or the flood wall higher. We are only congressionally authorized to that 150-year level. It would be nice to be able to build something that would be 100% resilient all the time. Just getting that 150-year level with a storm like this, really did the job for the most part. We will keep working to move this thing along as quickly as we can.

Ms. Kathleen Klienbeck, Bound Brook resident: I live on the west end of Bound Brook. I work in North Plainfield. I wanted to say that on this past Monday, we did not have a huge storm but driving on Route 22 was treacherous. It seems that maybe the over development up in the mountains and a lack of drainage, but I think something urgently needs to be done with Route 22.

I also wanted to say that at 8:00 pm the night of hurricane Ida the water was pouring through my basement. I live three houses in from T St and right above West High St. The levee protected the street from flooding, but not my house. I think it is from the clay soil. The water pouring into my basement from 5 or 6 locations. There were holes in the basement. It sounded like a river. The stench was river water. So, I understand the train was the cause. I am trying to figure this out. It seems to me that it was river water, not rainwater, coming in my basement. Are there more buy outs happening? Even though my house is not considered in a flood zone, I just got an estimate for over \$10,000 to put in a whole new drainage system. It is just not feasible. I'm wondering what is possible for homeowners that have this problem ongoing, even though technically it is not a flood zone.

Mr. Murray: First and foremost, the ground saturation definitely had a big effect on this storm. Henri was just a week before, making for a very wet ground and affected how much the ground could take in. As we mentioned before, the amount of water coming off the mountain is a big factor. Realize that most of the drainage on Route 22 is built to a 25-year flood standard. Not designed for people to navigate in storms like this. The drainage is for a much lower volume storm. That creates a difficulty. Then to what end if you do one area and unless that is draining to a river, you would have to keep going down Route 22 further and further and becomes an incredibly expensive endeavor to get Route 22 to be passable in a heavy storm. That has a lot to do with the drainage issues on Route 22. And again, with the storm & saturation, and the fact that the DOT isn't even done with all the repairs that are needed on Route 22 corridor. There are still piles of stone that were pushed out of roadway that are obscuring drains. There's a lot more work for DOT to do to get Route 22 back in shape. I drove through North Plainfield and there was a pile of stone that looks like one good storm will put it right back on route 22. They got the stone into the

pile off 22 and then had to move on to the next emergent area. There's a lot that DOT has to do to get that roadway back to draining better.

Ms. Klienbeck: I appreciate that but is there a way to get the Governor to declare a State of Emergency much earlier? This past Monday it was treacherous getting home. It was shocking to me that the flash flooding has started in spots & it was dangerous. That's why I am wondering? Why is it like this? If it was only built to the 25-year flood standard, that doesn't work anymore with the change in weather that we are getting more. Maybe the road needs to be closed during those times? I am afraid there will be a lot of accidents. I just don't see how it is safe.

Mr. Murray: I would agree. There has been some criticism about when the State of Emergency started. Not that I am here to disavow or anything of that nature, but the day before the storm in our Emergency Management meetings here in Green Brook, we were being told we would have a storm with 4 to 5 inches of rain. The morning of the storm it was up to 6-inch storm, which we knew would be significant. What we actually got was somewhere between 8 to 9 inches of rain. The storm came up and was a lot stronger than was anticipated going into it. I also think that weather fatigue has a lot to do with it. Every time you turn on the news and hear it is going to be the storm of the century, you tend to think we have heard this before and think it isn't going to be anything. I think a lot of people disregard the forecast because they have heard it all before. That is a real problem. I saw in Green Brook where folks were being told to evacuate and they didn't want to go, and three hours later there were firemen in a boat trying to get them out. It's a combination of things. It's the saturation. It's the fact that the storm was worse than we thought. It certainly didn't help that we were under tornado watch for a portion of time. I couldn't get back to the office to do what I needed to do because I was told under no circumstance are to hit the road before 8:15 when the tornado watch ends. I was rolling my eyes at the thought and then while I was watching Wheel of Fortune, they break in to say there is a tornado watch over Green Brook! I was like well alright I guess its time to go down to my basement. It did not help the situation. Many people were on way home from work and became disabled cars on the roadway. Then others tried to go around the disabled cars, and they became disabled. A much bigger mess because too many people were out on the road. If people had heard it was going to be a blizzard, they might have been likely to listen, as opposed to hearing we are going to get a lot of rain from this tropical storm. People disregarded some of the forecasts and it was a factor.

There have been FEMA representatives around the area. Green Brook Township was visited by FEMA representatives yesterday & today. They went to every area that we highlighted on our map as river flood areas. They took a list from us of any of the non-traditional areas where flooding occurred. It could be flooding coming off the mountain, or my sump pump went out and I lost my finished basement. Any properties that we knew about, we gave FEMA that list. They were not actively engaging people because of COVID, but they were going around and leaving flyers. If someone engaged with them, they would carry on that conversation about what they can do. There is a FEMA center at firehouse 3 in Manville. Not only FEMA, but also representatives from the Small business Administration there. Several resources there. Sometimes is worth reaching out a second time just to be sure in case you don't qualify on the first go round. What FEMA told us was some folks applied for aid and the initial result they got was they did not qualify for a grant. But on the second go round, you may get referred to the SBA which has low-cost loans available for people, not only businesses, but that are also suffering from storm damage. It's a good resource. You might have to pay it back, but it is certainly better than not having the ability to do that. FEMA has an online way to apply: www.disasterassistance.gov or call 800-621-6623. It's not perfect, but it is something.

Jessica, perhaps you & I can talk offline about this. The State has a Blue Acres program that will buy out properties substantially compromised because of this damage. Tom will back me on this. If there is a 50% loss, it might qualify for a buy-out through the Blue Acres program. I will try to get whatever information I can on that program & get it over to you. That might be a resource for the Washington Ave & Mountainview Terrace folks. If the house has taken that much of a hit, they may be able to apply through the program. I'm sure there is a long line of people that are trying to go that route right now. It is another opportunity to try to better their situation.

Ms. Linda Brnicevic, Bound Brook Resident: The County needed to contact NJ Transit, is that the process? Can you go through that one more time? I understand your suggested remediation is to add camera because they didn't see the disabled train or that water was as high as it was.

Mr. Murray: The problem in this storm is that the Middle Brook rose very quickly and got debris onto the railroad tracks. The reason that Somerset County is involved in the equation at all is that the County needs to know when they are going to need to close the gate at the rotary, the gate on East St and the other things they need to do. They have benchmarks that are built into their warnings systems. i.e. When X feature gets to this elevation, we are going to do this, this & this+. The Operations Manual that they have basically tells them when to close the gates across the railroad tracks based on when the water of the Raritan gets to a certain elevation. Once they know there is an anticipation of the water getting that high, they need to warn NJ Transit because can't have them operating a live train when the gates are closed. The problem in this scenario was that it had nothing to do with the Raritan's elevation. The train got stuck because of the water level on the Middle Brook, which was not part of the equation. You could have a scenario where they are never going to need to close the gate across the railroad tracks because the water is not going to get that high, but you could still have debris wash up onto the tracks. That is the problem. There might not be any need to close the gate and you think why would we reach out to NJ Transit? The problem is for their operations, NJ Transit, needs to know for their own operations that there is an opportunity for the tracks to be compromised from debris. That was the point made on the call with NJ Transit, and several others on that call, we need to take a new look at the warning system so it benefits NJ Transit and their riders. 46 people were stuck on the train in this case along with the staff members and they are put in jeopardy. It wasn't part of the warning system, but I feel it needs to be part of the warning system going forward so there is greater awareness. If they do install the cameras, they will have visuals of what is going on near the tracks from their operations center. We talked about the same thing here in Green Brook for our Municipal Complex. Because we could not get here due to the tornado watch, we knew water was rising but we didn't know how much, because of that we couldn't react any quicker than we did. The last thing that we would possibly want to do, when we have police officers wading through water on Route 22 to pull people out of cars, would be to call on the police to have them go look at the Municipal Building to see if there was water in the parking lot. I put a purchase order in today for a camera for behind our building that will be web-enabled so we can remotely monitor what is going on. My building sits along the Municipal Brook which connects to the Green Brook right behind the Municipal Pond here. I will have a camera installed so that I can see what is going on in the back parking lot here and can make those determinations even if I can't get here.

Ms. Brnicevic: Okay thank you. There is a lot of debris in the Middle Brook now from Ida. It is almost like a dam. Are there plans to clear that out?

Mr. Murray: I'm sure that will be a topic of conversation at next week's Project Meeting. Unfortunately, it is a no man's land situation. In that you have debris in the Brook - who is responsible for it? In some communities, the municipality would just go and get it. Some communities don't have the where with all to do that. Some partner with the County. Some Counties do that on their own. It is a gray area. Traditionally, we have tried to leverage every

avenue that we can when we have a storm like this to get debris removed. There is a general permit . is it 15, Tom? . where you can go in de-snag and take the materials out of the way, so they don't cause more damage. The best thing I could offer is to reach out to the Administration or Engineering Department in Bound Brook to see if they have any plans to do anything directly or if they are planning to work with Somerset County to do it. I am sure the topic will be brought up at the project meeting with the Corps and the State of NJ to see if there are areas immediately near ongoing construction zones that could be taken out by the contractor. Its only going to put the project in jeopardy or cause erosion. Debris getting stuck will cause trouble.

Ms. Brnicevic: There is not a representative from Bound Brook on the call tonight?

Mr. Murray: Gail is not on the call tonight. But I'm sure if you reach out tomorrow you can get some information.

Ms. Brnicevic: And just a question about the pumps. The pumps need power to run, right? I'm just wondering if there is a separate source of power for the pumps just to avoid another potential screw up related to power supply if power gets cut.

Mr. Murray: The pumps all have backup generators. They do have the ability to run, even in a storm. Depending on the severity, if you have a pump that fails because of a mechanical issue, they have the ability to bring in by-pass pumps to handle the load during a storm.

Ms. Brnicevic: I see the level was recorded at 42.13 which is the same as Floyd. It looks like the meter stopped working at some point. Was that the actual height of the Raritan?

Mr. Murray: The meter did stop working from what I hear. It stopped broadcasting the height, but they went back in to fill in the information based off the meters after the storm. Now I will say that they are reporting the same elevation as Floyd, which is quite high, but here is Green Brook we saw some elevations that were higher than Floyd. The police building did not take on water during Floyd and it did take on 2 inches of water in this storm. A photo that came through from the Corps today, it showed that high water mark was about 6 inches higher. In some areas, it was definitely higher than Floyd. Being even with Floyd is certainly bad enough.

Ms. Brnicevic: I live down on Drake & Talmage . on the dead end of Talmage . one of the lowest points in Bound Brook. We did take on some water down in that area. My house did not get anything in the basement, thank goodness, but at the end of street at Linden & Van Keuren Avenues they did. I guess we can't speculate, but I am assuming that if the system was working, we would not see any water? We have not seen a significant flood. Is that what is intended?

Mr. Murray: It is only designed to a certain standard. If the storm exceeds that standard, there will be water. Again, we can only build it so high & so rugged; basically, up to the level that the Federal Government will pay for. There is always the opportunity that you might have something that exceeds that. Assemblywoman Stender was pushing in our meeting in Scotch Plains many years ago to build to a higher standard. The fact of the matter is that we are not allowed to design to a higher standard.

Ms. Brnicevic: I know we reengineered after Floyd. Would the pumps have pumped that out? Was this a situation because of water coming in from train? If you are interested in any photos, I could send you what the area looked like if it is helpful.

Mr. Murray: That would be great. You have my email from our last exchange.

Ms. Brnicevic: And then one more follow-up on the levee damage from dirt bikes that I had brought up in a previous meeting. I did follow up with the police & town here, bringing it to their attention. Wondering if there are any updates about the levee damage? Do you need any support from the public?

Mr. Murray: I don't know that anything that occurred there with the dirt bikes had any effect. There were some areas near Rock Machine Park where there was some slight overtopping of the levees. The County employees took pictures over water coming across the levee, but not significant at that location because it goes right back into the Raritan. Not a big concern there.

Mr. Slowinski: We had some scour in R-1, just south of Route 28 on Union Ave, just about where the little league field is off T street. There was a big log that fetched up against one of the drainage structures and it diverted some flow to overtop the levee there, not breach it, but we had some scour. Not major, but not too minor either. We are looking at it & the County will probably address it themselves as far as the repair goes.

Ms. Brnicevic: You had mentioned earlier about having pictures from the Corps, is there an online album kept somewhere so that the public can look at some of these photos?

Mr. Murray: I don't think there is. It is more for internal planning to see elevations & levels and good information for future design. As we saw in Billions Park for example, those levees were built and we some overtopping. When we had the post-Katrina standards kick in, we were able to go back and make those repairs and raise the levees to post-Katrina standards.

Thank you for all your efforts. Even as crippled as the system might have been . no thanks to NJ Transit there . we would have been in bad, bad shape here! Not having any water in our basement is remarkable.

Mr. Murray: That's good to hear.

GBFCC ENGINEER . Rich O'Connor
Nothing to report.

COMMENTS FROM THE COUNTIES

Middlesex County – Doug Greenfield
Nothing to report.

Somerset County
Not present.

Union County
Not present.

WINNING STRATEGIES (WSW) . Rob Zucker

One of the things that we focus on for the Commission is funding of the project heading into the FY22. Other people have discussed what is currently underway by the Corps. When we last met,

I think it was already public, we had discussed how the House version of the Energy & Water Appropriations legislation included \$30 million for FY22. That is consistent with the budget request. The subsequent main development is that the Energy & Water spending bill in the Senate is one of three of twelve annual spending bills that were actually released, and Committee took action on. Nine of the twelve were not. In that version of the legislation, we are allocated for \$30 million as well. The work that both members of Congress, led by Congresswoman Watson-Coleman on the House side & the work by the senators, has been successful thus far.

You probably have been reading a fair amount about the protracted negotiations on anything related to the FY22 Resolution. Just last week, they agreed on a Continuing Resolution that will keep the government open until December. We don't expect any of the protracted deliberations to affect our project. Although I am a little less optimistic, that the FY22 would actually be resolved by the next time we talk in December, but we would likely have it by later that month. At the same level, \$30 million in both bills, we would hope to remain fully funded in the final bill.

In the rest of the quarter this year, I will be working with the Commission to prepare in anticipation of making requests for next year and setting the groundwork with the members of Congress, Senators and their staff in terms of what that needs to look like. Hoping we can get a robust allocation included in the FY23 budget. Be glad to answer any questions.

Mr. Murray: Before anyone gets to questions, I wanted to add that NJDEP have indicated that they will be able to completely match the \$30 million federal in FY22 and will be able to come up with their \$10 million share. That is good news on that front. They were able to get the full allocation for FY21 which was slightly over \$10 million to match the \$30.9 million in the Federal budget.

QUESTIONS / COMMENTS for the COMMISSION

None.

Mr. Murray thanks everyone for joining the meeting.

MEETING ADJOURNED: 9:00 PM

Upcoming 2021 GBFCC meeting dates:

Wednesday, December 1, 2021, 7:30 pm (virtual)