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THE HOBOKEN HISTORICAL MUSEUM
HOBOKEN STORIES:
REMEMBERING STORM SANDY

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Track #1

AS: First question: Tell us about your connection to Hoboken. How long have you lived in the city? Approximately where in the city do you live? Who do you live with? And what is your profession?

DG: I've lived in Hoboken for thirty-four years. My connection to Hoboken started when I first came as a child in 1957, to meet my Grandparents down at the docks after they arrived by ship from Europe. I came back many times throughout my youth, as it was a good way to get to Madison Square Garden and Leo's and the Clam Broth house were a fun way to start the night. After college, my partner and I decided to go into the real estate development business and out of the many places we researched and visited we decided that Hoboken was the most attractive. The benefits the city had, being close to

Manhattan with an excellent transit link was obvious to us and the vibe of change in the urban landscape as a place people wanted to live was clear. I have served on many boards and committees over the years in supporting the town. I have made many friends in the community and feel a part of the ups and downs that the city has gone through since when I first came. It is my home and I love living here. I currently live on Jefferson Street between First and Newark Street. I have lived there for fifteen years, I live with my wife and my son, who is seventeen years old, and goes to school at Hudson County Schools of Technology, and he plays football for the Hoboken High School football team.

AS: Tell us about your background as a builder and developer. What sort of projects have you worked on in the city, and what insight does that give you into the city and its infrastructure?

DG: I have been involved in projects throughout the city working on renovations, and new construction both on and off the waterfront. This has allowed me to understand the infrastructure of the city from a hands-on view over an extended time. When we

started our business we began by doing gut rehabs, this entailed bringing the building up to the latest codes. New water and sewer services were brought into the buildings, this meant excavating the streets to make the connections. Our first buildings were on 3rd and Park and had living space below street level. One of the issues at the time was definitely the sewer system, and the flooding that occurred. In the early renovation buildings, because of that, we built elaborate sump-pump systems and French drainage systems, in addition to putting check valves in the sewer lines to make sure that water wouldn't infiltrate into lower units. That was the beginning of dealing with the infrastructure issues and the problems the city faced when the sewers were flooded. The Federal Emergency Management Agency (FEMA) had just been created about a year before our first project in 1980 but no standards or codes had yet been put into place.

AS: Would you repeat that again? Just in terms of your experience as a builder -- what insight does that give you into Hoboken's infrastructure?

DG: After our first two projects we began to build new construction and new FEMA regulations were being adopted that needed to be included in the designs. During

the mid 80's, I became very active in working with the city on how it was going to handle its sewage. -The Clean Water Act that Jimmy Carter had set into motion - said that the cities could no longer dump raw sewage into the rivers. So new sewage-treatment plants needed to be built. I became very involved serving on city committees to deal with this issue. The situation of non-action by the city became so bad the State imposed a moratorium on new construction until the plant was built. Along with that, it was apparent to me the plant alone would do little because of how old the sewers were and how they were built. Every time we went into a sewer there were lessons to learn, sewers would often collapse. Many of the sewers were brick others were wood dating back to the 1860's. Even when new sewers were put in as was done on First Street, which made it a lot easier to tap into the sewers, because they wouldn't fall apart there was still flooding issues. So new concrete sewers were put in at many locations throughout the city, but the concrete sewers, were not the only solution that needed to be looked at -- because there was still a lot of flooding.

The sewage treatment plant was built in Hoboken. That decision was made even though alternatives were presented such as tying the system directly into the

Passaic Valley Sewage Treatment plant. The new plant though did little if anything to stop the flooding though under normal conditions fortunately, the Hudson River was getting a lot cleaner. A lot of people believed that the solution to the flooding would be pump stations. It was envisioned that the pump stations would simply pump the water away in -flood conditions. If you have a sewer that doesn't let in any outside water this can work a water pipe is a pressurized pipe and it unaffected by being under water so you can pump water through it no matter the subsurface condition -- but sewers are not meant to be underwater and are not pressurized. The issue with the sewers in Hoboken is that the sewers fill up with water from the aquifer, and the aquifer is fed from the river; and is affected by rainstorms, it also is affected by the tides from the river. If you look at the wonderful old maps of Hoboken -- -- it's great to have them around us right now in the museum, you can see the original topography of the city. I have one of the old maps in my office that was created by, by Jim Hans the founder of the Hoboken Historical museum, who lived two doors down from our first building, in 1980, and we became friends at that time. I remember how in Manhattan I first learnt of the value of the old topographical maps in understanding subsurface conditions

as you could see rivers that appeared to be gone that actually still existed under streets and buildings. In Hoboken on the old maps you can see where the swamps were and the existence of a river and pond filled in many years ago . If you're putting a building in that location, the river is still there. We built the building on the corner of Second and Monroe and Jackson, when we went to hook in the sewer lines and the water lines, at that location, we had to move the sewer and water lines because they were in line with the river-- if you look on the old maps, you'll see that the Hoboken River was there. The river is still down there; we saw it, and had to deal with it just as we had to deal with the tidal issues of the aquifer.

So back to the aquifer. When it rains, the swamps, as they are depicted in the old maps fill up with water, not just from the rainstorm but also from the tidal influence of the river. As the aquifer fills up, the sewers, end up being underwater and because they are not pressurized pipes they let in the water. The water fills up the sewers so you are not just pumping the water that's in the sewage system and the water that's coming from the sky, but you are pumping the aquifer. It's one of the major infrastructure issues that we face.

Are there solutions? There are solutions to these types of things. Everything has a cost to it. But that type of storm and that type of infrastructure issue typical to a Hurricane like Irene-. We see the water rising from the sewers, from below, through the aquifer, and into the streets. I think that was the type of storm that most of us believed was probably the one that's going to be affecting us the most. We looked, over the years, at the Hudson River, and we knew we were in flood-plain elevations, from the onset of our development years. As the codes changed, and as we started doing new construction in 1982 and '83 -- those buildings were living to a new standard, to new flood-plain elevation standards, for equipment and living places.

So we were very aware of the fact that we were building in a flood hazard area. I think most of us, thought that the Hudson River wasn't going to flood its banks. But certain infrastructure things that were done -- elevating buildings, for one. In 1986, the Jefferson Trust Building, at 300 Newark Street, we decided to elevate that building and put nothing underneath it. We did this because it is costly to put parking under a building. We had parking across the street. We elevated the building, and that building, in an area that was tremendously flooded

when the Hudson overflowed, that building was safe. And the transformers and things in that building were safe. The parking lots across the street were not. Planning and developing the Maxwell House project gave me new insights to the river and building so close to the river. Though the waterfront park lands flooded during Sandy none of the residential buildings had any problems and the garage that is below the flood elevation was dry because all entrances are from locations above the flood elevation and the garage is built using construction techniques that do not let in water this type of construction is refereed to as a "bath tub" though really it is a bath tub in reverse.

AS: Besides the flooding and the sewers, were there any other infrastructure challenges that the city faced in this situation? What about in terms of the average building, the average home, the average basement home?

DG: The only other point of infrastructure regarding the sewers that should be mentioned is that currently we have a combined sewer system, which means both the waste and storm water run together. Ultimately plans to build a two-pipe system should be put in place. Other

infrastructure issues such as the overhead electrical lines should be dealt with. It will be much better for the city to have all the electrical services (telephone, cable and power underground not only for esthetic reasons which are obvious but also for assuring that poles and lines are not affected during wind storms by falling trees and other debris. Our water system still has sections that are very old this problem manifest itself when sections break shutting down services. This problem is exasperated during the flooding of the aquifer because the ground shifts due to saturation causing the pipes to break. The gas pipes have the same problem that when the ground shifts this can cause the pipes to move. There was talk during Hurricane Sandy of having to shut down the gas supply for fears of breaks though this fortunately did not have to occur. The zoning pushed to have parking under the buildings, even on single lots, for quite some time. Each family had to have a garage under their house. These requirements on small lots ultimately didn't allow for the type of construction that I just mentioned at the Jefferson Trust Building, where we were able to elevate an entire structure -- 100 units -- and put the parking across the street. Because there was enough property involved in that development that allowed for that. But many projects were much smaller -one, two, or

three lots -- and parking had to be brought on-site. So the bottoms of the buildings became used for that. Also, retail space was allowed under the flood elevation level.

In new buildings the electrical services and equipment like that, phone, cable, and gas meters are "above flood plain grade." Buildings that have sewer drains both waste and storm at the street grade or below are exposed to the danger of flooding when the sewers fill even before the water is seen on the street. I heard that some homeowners were able to plug their sewers and thereby stop this from occurring.

AS: When did you first hear the words "Hurricane Sandy?"

DG: Probably two weeks before the storm. I'm an avid surfer, and I follow the hurricanes.

AS: What did you expect the storm to be like?

DG: I expected the storm would be like another Hurricane Irene, maybe a little worse than that though as we watched the storm coming up and realized the

rain would be light I began to think despite the warning of high winds Hoboken would be spared a fate like Hurricane Irene because the aquifer wouldn't become as saturated.

AS: Did you think the city was prepared, given the infrastructure challenges?

DG: No the city was not prepared but I don't think the city could have been prepared for something like that to happen. I think it took many people by surprise. I don't think we were prepared nor any other community in the region was prepared. In hindsight, it's easy to say we weren't prepared, but the thought that the Hudson River was going to flood its banks and fill in a major portion of Hoboken really was not in people's minds. Flooding was in the mind of the Federal Government who mandated certain building requirements in these regions and the building code officials in the state who mandated those regulations, but I don't think even they had fully contemplated the true danger that faced the city so that it would have been prepared for this.

AS: To the best of your knowledge, what exactly happened during the storm? Why did the city flood?

DG: Strong consistent wind pushing the water mass at high tide caused the Hudson River to overflow its banks. As the flooding came in, it was stopped in most places by the Castle Point hill, but this did not occur on the north and south ends of town where the elevation is flat. As the water rushed in on the south it came in over the railroad tracks, on the north end of Hoboken the water came in by the light rail line, from there the water poured into the back of Hoboken, and filled in from both the south and north, going into the middle of the back of town. The difficulty with Hoboken is the fact I mentioned before is that the back part of Hoboken is a swamp. This includes all the area from Willow Street and the name comes from that because it was where the willows started growing, The water went all the way to the most far western edges of Hoboken where the elevations rises because of the palisade cliffs. When the old swamp area was filled in it was done so at about Elevation 6 (6 feet above sea level). The flood plain elevation -- for residential construction purposes was set at 11. The streets are at Elevation 6, throughout much of the back of Hoboken.

What happened in Hoboken was that the aquifer in the back filled up, and made it more difficult

an issue to deal with because the water stayed there even after the river retreated from the flooding condition. In those areas along the waterfront.

AS: Did your home suffer any damage?

DG: Yes. My house was built in 1997 and I would consider it a new structure having been built under the flood hazard elevation standards. The structure is similar to what I described in the previous question. The building is a two-family condominium building. Each of the units has a garage, which is at the level of the sidewalk. Also on the first floor is the entry door and hallway, storage areas for each unit and an elevator that comes to the lowest level of the building. There was about twenty-one inches (people laugh when I say "about" as they know I measured it) on this level of our building. I think my garage is about Elevation 7, about a foot above the street. So anything that was in the garage, including my and my neighbor's cars, were destroyed. I had a lot of memorabilia, and personal belongings, including power tools and a woodworking shop that ended up damaged or destroyed. The building also suffered damage the sheet rock, insulation, wood framing along with the structural concrete block were soaked. The hallway carpet was one of the first

things ripped out after the water receded. My neighbors heating and air-conditioning system was destroyed and parts of the elevator equipment had been under water.

AS: Did your office suffer any damage?

DG: I was fortunate that my office, which was on the second floor, did not suffer any damage. The building my office was in flooded, and on the first floor there was over four feet of water. The building had been the Burlington coat factory, it is located between Fifteenth and Sixteenth Street, The street there is at about Elevation 5 The electrical panels in the Burlington coat factory were under water, and the along with the transformers, the building was lost beyond repair.

AS: When did you first get an opportunity to leave your home and survey the damage in the city? Where did you go, and what was your initial reaction?

DG: I left the third day after the storm. The water had started to recede. Other than that, I had not gone beyond the street level, in front of my own house. I had some deep-waders, but the waders - yellow rubber construction boots that are just below knee-high were not

high enough for the first day, to keep yourself dry. So we stayed put. Two of my son's friends came to our house and did not leave that day. They both came from places that were dry, and literally waded through the water, to get to our house.

I left the immediate area 3 days after the storm and went down First Street, surveying the damage. I walked with my son all the way down to the waterfront and took a look at what was going on down there-and it was astonishing to see the water had fully receded while in our neighborhood water remained in the street. In front of City Hall, at the time I was down there, it was chaotic. It was a rough moment. There was a lot going on, a lot of people including the National Guard mobilizing in an effort to assist. We were fine walking out in boots and waders, but our neighborhood still had 5 to 6 inches of water in it. You could see that the water had come in and left very quickly on the waterfront, which says a lot about how future solutions even if they are interim can be incorporated into the existing topography. Hoboken has some advantages that other places don't.

AS: Based on the damage that you saw, and the flooding -- is that more or less than what you expected, or thought was possible?

DG: It was much more than I expected. I did not heed the advice my father had always preached which was prepared for the worst and hope for the best. I laugh at myself, because I moved my car for Hurricane Irene, and for some reason I felt, from what I was listening to, it didn't seem like a few of the factors were going to be as bad. The main factor I was basing it on was that the rain event didn't look like it would be as bad. Interestingly, the rain didn't come. It wasn't the rain; it was the wind that hit us. So it was much more than I expected, much more than we ever really dreamed about. The Jefferson Trust Building at 300 Newark Street, when we built it -- we laughed and said we could have gondolas tied up on the outside of this building, and it would be fine. Now that doesn't seem as funny.

AS: Based on the infrastructure challenges that the city faced, how do you think it handled the aftermath of the storm?

DG: The city of Hoboken is an incredible story. It's what drew me here when we started looking at where we wanted to start a business, when we first came to Hoboken thirty-six, thirty-seven years ago, looking for an opportunity. Hoboken is vibrant and alive, and can sustain a lot because of that. We've seen economic hardship in other regions and areas, and Hoboken, this area has continued to be strong. I think, overall, Hoboken has pulled out from this, at least to this moment in time. We have a lot of challenges ahead, but we're very fortunate. Businesses have come back. A lot of businesses were lost, but those businesses that were lost -- new businesses came in and opened up in the shops that had been flooded. On the corner of my block a store that hadn't even opened yet flooded, and they just cleaned it up, went forward, and opened.

But we've come through pretty well. That doesn't mean that we have prepared ourselves properly for another event like Sandy, at the moment; we haven't gone anywhere other than talk from where we were but the city has survived very well.

AS: What, if anything, can Hoboken do to prepare for the next storm, or the next disaster? For example, you talked about the cost. What sorts of steps

would you take to either prepare for the next storm, to mitigate disaster, or even prevent disaster? What steps would you take, and what is the price tag for that?

DG: I think the steps have to be looked at in a progression. There are long-term possible concepts to follow, and short-term desires we need to pursue, to prevent future damage. Both are costly though the long term ones are much more costly and require much more comprehensive planning between waterfront communities. Short-term concepts include barriers that can be put in place to stop the flooding of the back of Hoboken; these could include floodgates along the southern and northern borders of the city. Long-term solutions include waterfront barriers, people have mentioned urban dunes being incorporated into the landscape of the waterfront and how and where to put this is a point that has been viewed in different ways by different people. These solutions need to be put in place along the entire waterfront not just Hoboken. I know there are hopes of funding from different places. I think the amount of funding we're going to see for these types of things is a lot less than a lot of people would like to dream of and if we wait we may not be prepared for the next disaster. And even with funding, a

common goal, a common concept of what the strategy is needs to be adopted. Those are the challenges ahead -- to decide that strategy, what's feasible, and what's going to get it going as soon as possible. Solutions on paper are no good. We don't know what's going to happen this year. I was pleasantly surprised at how Hoboken has come back, and housing prices, in the areas that were flooded, doesn't seem to have been affected that greatly. We'll all live a little bit smarter next time. Everybody's going to move their cars a little quicker than they did, put up things a little bit higher. I think the short-term solutions that need to be looked at -- we need to look at what can best be done that will save the most amount of property within the community, at the right type of pricing.

Being a developer -- I think developers can play a huge role in assisting with this. Developers along with the vision of the community and the politicians have created what I think is one most wonderful waterfront park systems in the state. That type of community vision needs to be put in place for the infrastructure so that damage from storms like Sandy and Irene will be dealt with. The solutions can be assisted by allowing the type of development that can pay for some of the costs. Hoboken is a tremendous opportunity in that there is a desire by

developers to build and if feasible solutions are put in place they can be realized.

AS: Is there anything that can be done to fix or alter the sewers, to better handle flooding, whether it comes from the average rainstorm or from a major storm?

DG: The flooding we talked about with Irene, is this type of flooding where a different sewer system could help -- Sandy flooding came in over the river and therefore the sewers were not the issue other than their capacity to carry the water away after it came in. You need dikes, barricades; there is a cool-sounding concept of urban dunes along the waterfront. In certain places you can't have dunes, obviously -- across railroad tracks and these locations will need to have operable floodgates. Things have to be built in different ways. But that storm is one storm, and that's a storm that creates tremendous amounts of damage, as we've seen. A Hurricane Irene storm, which also created a lot of damage but flooded differently -- and did not create as much damage as the overflowing of the Hudson River during Sandy, but is much more common and that is the flooding of the sewers, again, just pumping water that's in the sewer and coming down from the

rainstorm, we're pumping the river. And the volume of water is so great -- to fix this system means removing the sewers, or relining the sewers, and making them watertight, making a pressurized system -- all expensive fixes. One of the thoughts -- so that's how to fix the overall system. Put a pressurized sewer system in. It pumps all the time, and it's not gravity-fed. The sewers we have now are in most places gravity-fed a few pumps move it along the way but the pipes are basically porous and when submerged in water allow the water to come in. You don't need a pump when the system is flooded as the quantities are too great.

Another system I could envision is to create retention basins in different places in the community. Take Shoprite as an example -- a building and a big parking lot, in an area that has a lot of flooding. If the right-size retention basin could be put into these areas, and these retention basins in themselves become their own, enclosed system you wouldn't need to repair the entire system -- now you need a piping system, to take you from the top of where the sewer line which is the catch basin receptor, connected by a separate piping system, and feeding that retention basin from the place where the catch basin is overflowing. So now we're just trying to accomplish capturing the water in the street. We're not trying to do away with the water

that is underground. Then this retention basin, now, can have a pump that, if you wanted to, you could have a pump that could go above flood plain; or, depending on the size of the storm, you could just keep the water in there, and then pump it back into the sewer system, once the sewers started flowing again. If it's a very bad flood, you might want to start pumping out these retention basins directly into the river, over a wall or a dam.

That's really what happens now. When Hoboken has a rainstorm, and we have, on Eleventh Street, by Maxwell House, one of the stations -- these are filtration systems. When the system is overloaded, on a regular storm, an Irene storm, and it has nowhere to go, the water gets filtered through some screens, and then out through a pipe, into the Hudson River. New York does this a lot, still; Jersey City is still involved in this, the same type of system issues, because our sewers are all combined systems. The water, and the storm water -- the storm water and the sewer water is mixed together within the system.

So that's a concept that I think could help, and I think that is a concept that is helps in our normal storm. I think Sandy is the type of storm that could absolutely happen again. We all hope it won't happen too soon. But, certainly, the streets will flood like they did

during Irene if even if not as bad almost on an annual basis. The streets have flooded since Sandy already. And definitely for those smaller storms, there are solutions.

AS: What advice would you give for new development, to better prepare for flooding? And is there anything that existing buildings can do to mitigate the effects of flooding?

DG: Each building is its own entity. Every building has to be looked at in itself, and what that building can do for flooding. New buildings will build their living spaces higher up is one solution. I was involved with NJIT in an interesting program that they started after the storm, a sustainability group that's studying this. One of their feelings is that the spaces that we build within that flood plain area have to become spaces we can retreat from. It's like a porch. It's something that -- you can take your furniture in; you can pull in from there; and you should decide to live like that. We're involved right now with a project where everybody wants to pull everything up four-feet off the ground, like the Jefferson Trust Building. If you walk by the Jefferson Trust Building at 300 Newark Street, and it's

four-feet high, and the planters are four-feet high -- I sort of laugh why we didn't put the planters maybe a little bit lower, somewhere else. But ultimately you do have this big grade change between the street and the building floor that is not familiar to our urban landscape. We want to be on-grade. We want to be able to walk by the stores; we don't want to have to climb up and down.

So we need to create -- it would be nice to be able to create spaces still within this flood plain area. Obviously, we don't want to park our cars down there. You can build garages like Maxwell House, what we did at Maxwell House, where the cars are parked below flood level but they're parked inside a bathtub, so to speak. It's a sealed area, and entry to it is above the flood plain. So you can build a garage that's below flood plain that will not have a problem as long as your entry is at the right elevation. With smaller projects, you have more of a difficulty, in garages on small sites, if they're going to be used on-grade. Everybody's going to have to know that with certain types of storms, you're going to have to move those systems.

I think that the materials that we use within these areas -- call them the areas we need to retreat from; the areas of possible flooding -- need to be

different. I mentioned in my own house the dry wall, the sheet rock, the insulation, the wood studs, and the masonry walls that were soaked for days with water. I've given a few presentations about the different projects, and the different places, and what we've done over the years. You look at least my house, and the mayor's house, too -- which is a building that we built (I proudly say she's my neighbor and I know she lost her car too). Her elevator suffered damage, too. We're all in this together. I walk around the neighborhood. Most of us have gotten things pretty much back. There is still a carpet here and there that is missing. But really only recently. I'd say up to about a month ago I still saw quite a bit of open walls. A lot of condominiums had issues with funding for this, because most insurance did not cover the modern buildings, like ours are, with the electrical in our living spaces. It's all above the flood, fortunately.

We're involved with a material called autoclaved aerated concrete, and this is a masonry block. This block won't let water soak through it, like a conventional block will. If the walls have been made out of that -- it has thermal qualities. I could have built the whole wall out of that, and all I would have had to do was clean my wall. I could have washed it off with water. No

damaged insulation and no sheet rock destroyed. I would absolutely build in these areas out of different materials in the future. I think the infrastructure, the big infrastructure issues, that we talked about so much earlier, are fascinating opportunities, be it dunes -- I've seen "plans" where people say we should fill in different parts of the river to different heights again, really creating these dunes, creating some protection. Big planning concepts that need to be moved on. We need steps to get there, but in the interim, what are we going to do when we're building, and what types of materials are we going to build? Are we still going to be sheetrocking down in that flood level? Because if we are, then the next storm is going to come, and most of us -- we put back sheetrock. We put back what was there, to the hope that this won't happen for another five-ten years or whatever, until I'm gone from here and somebody else will start worrying about that. At some point, people won't put it back. I think if I had to do it -- if it happened again in another six months or a year from now, I think I might say, "That's it. I'm not going to do it again. This is going to become worse and worse I will replace it in a better way."

So new construction has an opportunity. It also comes to codes, because we have to understand that

FEMA doesn't want us building down there. We have to classify, in the urban areas, a new ability to have street access facilities, and be like an old-style marketplace or something. Again, that you could retreat from; that you can easily move the things that are in that area. Because one thing with Sandy is, you started off with questions with how many weeks. We knew about it. We had plenty of warning of what to do. Goldman Sachs, around their building in Jersey City -- they put six feet of sand all the way around the building, sandbags around the building. They didn't have a drop of water. All around them, there was flooding. If you ask what can people do -- those are extreme solutions. They started that early. They saw it coming, and they said, "We can't have this first floor flood. Buildings in that area that did flood -- 30 Montgomery -- were down for months and months. The electric systems, the telephone systems, everything needed to be rebuilt.

So those are opportunities. I think elevating, obviously, the buildings, which is all required, but we want to still be able to do things within that area, and when we build in that area we use materials that are not going to deteriorate if they get wet.

AS: How did you pass the time during the storm and the aftermath?

DG: During the storm and after was like camping out. The first nights we cooked outside on the grill and ate as much of the food that was slowly warming up in the fridge and freezer. Our neighbors and housemates joined us and we all kept each other's spirits up. Taking care of the home was the primary focus during the day. Cleaning up. Mucking out, ripping out, starting the work of trying to put things back to normal, and figuring out what needed to be done, what we wanted to do as quick as possible and what could wait. We spent time charging batteries and the battery charger. I had a large battery charger. We didn't have electricity, my wife would go to friends who still had power in town, and they invited us to plug in so we would do this for a few hours to charge things. So we were doing things like that. But most of the time was spent cleaning out the mess. As I mentioned, we had storage. Tons of things were put out onto the street. Interestingly, the time -- it's like a snowstorm in Hoboken. It's the only time you see your neighbors. Everybody was out there. Everybody was pitching in. We were

all getting rid of cars, and getting things pulled out for years of storage, and trying to move to the next step.

AS: What did the city of Hoboken learn about itself?

DG: I think the city learned that it's vulnerable, in a way that nobody expected it to be. And the vulnerability is something that is a very extensive, complicated issue. That makes the vulnerability seem greater. As I mentioned, Hoboken rebounded, and Hoboken is an amazing city and community, a great location, which, ultimately, is the benefit, and why we are what we are. It's why Manhattan is what it is. The Hudson River is what makes us and hurts us in this issue, and even in the Irene issues, because even though the Hudson River didn't overflow in Hurricane Irene, the aquifer is affected. When we tied buildings to sewer lines, we used to always look for the tide charts, because you never want to tap the sewer at high tide. Sewers would collapse much quicker because they were full and the tap couldn't be made without flooding the excavation. I was at different jobs where the street just kept caving in and caving in because the tides were so high at certain times of the year.

So Hoboken has come through, even though it has this new vulnerability. A lot of what I hope Hoboken has learned is still out there to see if as a city we have learned, from the experience.

AS: Do you feel that the city has recovered? Was there a moment that made you think, "Hoboken is back?"

DG: Hoboken's first sign that it was coming back was when a few weeks after the storm the High School football team who had their locker room and field flooded hadn't been able to practice, went to the state championship game in Giant Stadium and won. That was a sign from these Hoboken students whose lives had been affected, some losing their homes, that the City and its inhabitants were stronger than the storm. When I see the shops on First Street coming back, and people moving in -- the building next door to us, an old building, that had inhabitants on the ground floor of the building -- those guys, nice guys -- they quickly left. They weren't there when the storm occurred; they came back maybe two weeks later, threw all their stuff onto the street, and left town, sort of, "I'll never come back to this place again." They threw all their shoes out, flat-screen TVs, and left.

These buildings now are re-occupied --cleaned out, re-occupied. People are living there. It's a testament that Hoboken is back. Surprisingly, it hardly missed a beat, in the end. The story is ongoing, as we all know. Every flood, every storm, brings new challenges with it. But Hoboken has survived.

AS: Is there anything that you would like to discuss that I haven't asked about?

DG: Just one second.

Track #2

DG: We've touched on this, but I guess I'd like to underscore the importance of really creating a long-range infrastructure plan, which is tied to a long-term development plan. We think too often in terms of four or five years or less, when we think of growth and development. We need to think in fifty-year terms, when we think of what we expect to be the future. There was a wonderful exhibit here at the museum about the tunnels being built, the vision of the creators of these tunnels recognized not only a current need but what would serve the people for decades to come. I marvel at infrastructure

projects, even the "spectra" pipeline coming into Manhattan right now, which is feeding Manhattan gas that needs to occur to assure that the city can continue to be the economic engine it is. We need to think in the long term when we think of solutions, as much as we need to think of those solutions that can be implemented in the short-term. Long-term solutions should be solutions that we want to leave to the next generations, as the great infrastructure that we've inherited has paved the way for prosperity in our lives.

To sum it up a long-term vision needs to be looked for, accepted, and implemented as soon as possible. This should be done with a grand vision of what the future will be. The sooner we can get going the more we will be able to appreciate the results and the more we will be protected from storms like Hurricane Sandy and Irene.