

ASDRP teleconference call held on January 19, 2016 at 2pm

Present:

Mayor Greg Letica

Deputy Mayor Pierce

Robert Holmes, Member of the ASDRP Committee

Aram V. Terchunian with First Coastal Corp. via Teleconference

Representatives with ACOE via Teleconference

Representatives with NYSDEC via Teleconference

Below is a transcript of the questions and answers discussed:

--Why are we using wave and dispersion metrics from buoys in the Atlantic instead of the Sound?

They are using wave metrics from the ocean and not the sound because the ocean metrics have wave direction (in addition to wave height and wave period) and the models require wave direction.

\*We can look for more localized data from prior studies for comparison and supply them to you.

AVT asked if they can ground truth the LIS buoys for wave height and period as well.

--What is your modeling confidence level with Options 1, 4, and 5 as presented?

\*After the initial statement that the estimates are conservative, the lead scientist indicated that there was broad risk to the numbers presented, and that the high uncertainty levels were, hopefully, addressed with contingency estimates. When further pressed on this as pertains to the sand and renourishment along the 100-200 address stretch, he indicated that there was no confidence level extending beyond 'normal' events, i.e., storms are not included. He further added (repeatedly) that the engineers' preferred option was Option 5, without which no assurance of sand retention could be expected.

The engineer (David Yang) made several statements.

First, that the annualized loss was based on normal, non-storm events. This is because the annualized sand re-nourishments are based on long term data, not on storm data. The implication here is that storm events are accounted for separately, not ignored.

In other words, the initial project design is developed to resist a storm event with a 1 in 44 year return period (beach and dune of a specified height and width). An additional amount of sand is placed seaward of the design beach and dune as “advance nourishment” to account for up to five years of annualized, non-storm events. Therefore, the design beach and dune is always at or above the design storm level.

At five year intervals more sand will be placed to account for the next five years of non-storm losses. If a storm occurs at any point in time, than the design beach will provide protection up to the design level (1 in 44 year return period). The project benefits of reduced storm damage will then be realized. When a design storm occurs, the project is assumed to be depleted and the project benefits provided. The project provides benefits in excess of the cost or in other words has a positive benefits cost ratio.

At that point, the project would need to be rebuilt to the design level with advanced nourishment placed seaward of the design beach and dune. If the storm event that depletes the project is a federally declared disaster, then the Corps of Engineers would be responsible for up to 100% of the project rebuilding cost under Public Law 84-99 (the actual percentage is based upon specific emergency legislation passed by Congress which after Hurricane Sandy was 100%). The subsequent re-nourishments (advanced placement) would then be cost shared as per the agreement.

This often misunderstood distinction between storm and non-storm conditions is critical. This separation storm impacts is critically important to understand and express correctly.

Second, Mr. Yang expressed a general opinion that projects which contain sand retention structures (such as groins) typically have more predictable and lower sand losses over time. Sand-only fill projects have higher sand losses. This is reflected in the annualized nourishment amounts. Regardless of the sand loss rates, all of the calculations are considered “conservative”. However, no specific error bars were offered.

--What sources of compatible sand are available for renourishment?

\*After lengthy meanderings, the answer is that no other sources of 0.9mm grain sand have been identified other than those in the offshore Borrow

Source A where 'limited borings' suggest there is ample supply for the upfront needs. However, "...a renourishment source of sufficient grain size is not currently in the budget."

The Corps also discussed the possibility of mixing sands in order to achieve the desired grain size.

--What is your comfort level with the proposed sediment budget (volume) and may we have additional data from your sediment budgets over the last 10-15 years of the study?

\*"It may be that the cost estimates are underrepresented..." especially since the former tracing did not account for needed compatibility. We'll try to get you the other budgets to review.

The Corps agreed to assemble the available sediment budgets including the Corps of Engineers, Village of Asharoken and the Power Plant for review and comparison. In addition, the Corps acknowledged that they had not considered grain size compatibility for the bypassed sand (both natural and dredged) nor for previously trucked in material.

--What allowance is made for downdrift mitigation at the berm to the left of the bluff in the plan?

\*We cannot confirm bluff protection without more data. We can only describe design features, but we cannot fully quantify the cost of full protection. Also, much of this will be addressed in the Design phase, which only begins after plan approval.

The Corps confirmed that the mitigation features included a tapered fill and a high berm located west of Area 1A. However, the quantity of this mitigation will be developed during the design phase.

--Who owns the land in front of the seawall since it is now below the tide line?

\*The State of NY.

--Then isn't it the State's responsibility and, similarly, since the groins are below MHT, why is public access or title purchase needed at these points?

\*The groins have landward toeholds.

These toeholds extend on to private land and therefore will require some form of fee purchase.

--Why hasn't there been more local, on-site analysis in plan preparation instead of near-complete reliance on Genesis software modeling?

\*The Corps does not do that level of specificity until the final design stage.

The Corps' project planning process includes a defined series of steps beginning with a feasibility study and proceeding to initial design, final design, plans and specifications, construction drawings and as built drawings. This project is currently completing the feasibility stage which is intended to determine whether or not it is feasible to continue to the design phase. Accordingly, it is not intended to be definitive and specific but rather to provide sufficient information to determine whether or not it is feasible to move to the next level. Typically, a feasibility study will include a review of all relevant past studies, collection and analysis of all available data and the application or modeling of that data and information to the subject problem. It does not typically include the collection of new information or the long term monitoring of a project to determine whether the modeled information is reflective of actual processes.

--Then what happens if the estimates all dramatically change in the Design phase, i.e., how can the Village conduct a fiscally responsible analysis? What if you put down the sand in the 100-200 area and it quickly disappears, as it has in the past; how would the Corps respond?

\*We had a similar project where estimates were based on a 10 year renourishment cycle, but we needed to readdress the issue within a year. We learned we had to redo the model to account for the changes and we accelerated the renourishment schedule.

The Corps has adopted a procedure call "Adaptive Management". This process relies upon project monitoring and scientific observation to reduce uncertainties in project design.

<http://www.iwr.usace.army.mil/Portals/70/docs/iwrreports/2013-R-Benchmarks Adaptive Mgmt Report 1.pdf>

Therefore, Adaptive Management at Asharoken could follow what has happened at other sites or could be tailored to the specific experience at Asharoken.

--At whose expense?

\*All parties.

The responsibility for Adaptive Management could be spelled out in the Project Partnership Agreement (PPA). The PPA could assign initial construction cost sharing to Adaptive Management (70/30) versus O&M cost sharing (50/50).

--Did you conduct worst case scenarios for costs and renourishment? If so, can we have them so that we can get a handle on the variability we are being asked to consider?

\*Yes, but we'll have to confirm them first.

--Why is so little of the issue ascribed to LIPA? Your report indicates that if the flow pipes and jetties were removed, Asharoken's beach could return to normal within 10 years without additional intervention. Similarly, your plan indicates that the current LIPA configuration creates a "total littoral block." Why do you not present alternatives that address the power plant impact and or its responsibility in rectifying the situation?

\*We calculated the annual LIPA contribution as a zero sum game wherein the 15k cy/yr offsets the blockage.

--But if there is no binding agreement for LIPA to make that contribution in perpetuity, how can the cost and volume be ignored.

\*We think there is a perpetual LIPA obligation based on an agreement reached in 1977. But if you believe that is a periodically renewable obligation, we need to look further into that.

--Your study area includes the Town of Huntington, including at least 500 feet in a critical zone, yet they have been left completely out of this process or any of your findings. Why?

\*Because this project began years ago with the Village as the local sponsor.

--What happens if the Village insists on Option 1?

\*We need a letter of support for an option which meets both State and Corps criteria. Without that letter, the project will be shelved. That said, the Corps presented Options 1 and 4 as very similar alternatives so we could make an argument that Option 1 should be the preferred alternative given the strong preference of the local sponsor. However, if there is an increase in the cost between the Corps/DEC preferred alternative and that chosen by the local sponsor, then the local sponsor is responsible for 100% of those incremental costs.

The Village is in the driver's seat. However, the car they drive is limited to Alternatives 1, 4 or 5 since they are the only alternatives with a positive benefit cost ratio (BCR). The Corps is apparently willing to consider all three of these alternatives as equal despite minor differences in the BCR.

However, there are a number of practical considerations. First, the Corps is apparently focused on the Village of Asharoken project and thus there is a significant amount of institutional momentum. Second, the Village's representation at the Federal level is significant, engaged and influential. Subsequent representation may not be. For example, the city of Long Beach declined to support a Corps project in 2006 and subsequent to Hurricane Sandy had to reinitiate the entire project beginning with feasibility. The result was substantial damage to the community during Hurricane Sandy because of

a lack of flood and erosion protection and the need to expend considerable effort just to get back to even.

--What level of confidence can we have in the fully loaded projections? Can you tell us the cost of a cubic yard of sand delivered in 2069 at the end of this project? What guarantee does the Village have that the funds will be available to pay for the project down the road?

\*There is no 100% guarantee of funding. It is a matter of budget appropriations at the federal and state levels. We have done extensive modeling of similar projects and believe we have included contingencies for changes in cost over time.

The funding of the project is backed by the full faith and credit of the United States of America and the State of New York. As a matter of law, a present Congress or Legislature cannot bind a future Congress or Legislature in the same way that the present Village Trustees cannot bind future Village Trustees. The need for future project funding will require that the Village stay engaged with the Federal and State agencies to ensure that the Village's interests are properly represented.

The Corps present project budget estimate includes both contingencies and cost escalators to account for budget uncertainties.

--How can no benefit be ascribed to real estate values both in the Village and in Eaton's Neck when you analyze this project? Obviously, if there is a breach, the value of a home on the Neck would decrease dramatically.

\*Since the late eighties, the Corps has ruled out what was called the Intensification Benefit, and taken the position that real estate value maintenance (or dilution) can not be ascribed any quantifiable benefit in our cost/benefit analyses.

Moreover, the Corps' analysis assumes that a breach in Asharoken Avenue would be rapidly repaired and that thus any potential loss in real estate value would be both temporary and extremely difficult to effectively model.

--But how does that correlate with ascribing little or no economic benefit to beach lots, using that as the basis for an easement valuation, but then ignoring the fact that the value of the lot is lost with public access?

\*We have a variety of models to arrive at easement valuations based on a great deal of data. Much of the costs attributable to the real estate portion of the plan are for 'incidental' costs, which include additional appraisal analysis, as well as title work, and other clarifications needed to proceed.

There are two factors contributing to the need for an easement and the valuation of that easement.

First, neither the State of New York nor the Federal Government can conduct a public works project on private land. The vast majority of public work projects are constructed solely on land that is held in fee simple ownership by a public entity. In the Asharoken case (and on Fire Island) the Corps and the DEC have developed a property rights instrument called a "Perpetual Beach Storm Damage Reduction Easement". The Perpetual Beach Storm Damage Reduction Easement has been created to comply with the law. Without this easement, there can be no project because it would violate the Constitution of the United States and New York State in that public funds would be used to improve private property.

Second, the value of the easement must be quantified by examining the "with/without" project condition. I have attached a Zillow listing for one beach lot that is currently advertised for sale at a price of \$28,500.

[http://www.zillow.com/homes/for\\_sale/pmf.pf\\_pt/40.957425,-73.360069,40.931363,-73.40556\\_rect/14\\_zm/](http://www.zillow.com/homes/for_sale/pmf.pf_pt/40.957425,-73.360069,40.931363,-73.40556_rect/14_zm/)

The Corps has allocated 5.9 million dollars for real estate including 2.2 million dollars for easement acquisition over approximately 200 lots or roughly \$10,000 per lot. Moreover, the Corps has allocated 3 million dollars for incidental costs including easement valuation and legal expenses with an additional \$600,000 in contingency for the above.

--Do you have any similar project history dealing with predominantly private lands, particularly with a project where the vast majority of benefit does not accrue to the private property owners asked to provide access and funds?

\*Not really. 99% of our efforts deal with public shorelines.



--Who is responsible for the seawall; its repair and/or replacement?

\*This led to a mildly heated debate between Corps members. The call leader stated it is a federal responsibility to maintain that wall in perpetuity. Counsel argued that it was part of a temporary solution and never intended to carry a long-term responsibility other than with the occurrence of a catastrophic event. When reminded the wall was repaired/replaced at federal expense in 2010 after a 'non fema' event, their internal argument continued without resolution. When told that the plan states that the local sponsor is 100% responsible for maintenance of the wall, the Village was asked to provide a plan reference (it is in several sections, including page 6 of Appendix D) so that they could get back to us.

--How can you rationalize ascribing zero benefit to recreational use or public access, yet require it as a condition precedent to the project and load it with about \$6million in project costs?

\*We have no basis to assume increased recreational use nor do we. In fact, the Village might be better off if we don't further analyze this issue because it could result in additional burdens (presumably facility requirements, etc.). Perhaps, you are unaware that it is both a federal and state requirement that where any sand is placed using public funds the beach must offer public access. (We declined playing regulatory attorney at this point.)

The perpetual easement is required in order for the project to be constructed and thus the cost of purchasing that easement is a reasonable project cost.

--What if this project were to be categorized as a Corps Coastal Demonstration Project, would that obviate the need for public access?

\*Silence, then 'not likely, but we will look into it.'

Don't hold your breath.

--What exactly are the next steps between 1/29 and May 1 when it was indicated the Village would need to sign on?

\*There is a comments extension until 2/10. After that date, the Corps will address the comments and, where appropriate, incorporate them in the revised

report. By May 1 we would like a confirmation of Village Support before proceeding to the ADM (a new term...Agency Decision Milestone). By June 1, at the latest, this support confirmation would need to be in writing so that the Colonel can present the plan as a comprehensive proposal to the powers that be in D.C. for their review and comment. Assuming the go ahead, we would look to have the final report to HQ by 8/1, which would then take several months to review it.

--So are you saying that the Village needs to actually agree to the plan before the costs are finalized because many of these costs cannot be better estimated until the Design phase which can only occur after the Plan is approved?

\*Yes.

However, the Village can use an Excel spreadsheet to investigate several financial scenarios using the cost information developed by the Corps for construction costs and cost sharing. Additional uncertainties can be included in this cost analysis.

--Will the Village ever see a revised plan incorporating our questions and comments so that we can discuss it before it goes to D.C.?

\*Yes, but on a very limited basis. We will try to allow you up to a week to review it before submission, but at that point it is assumed all parties have come to a consensus.

--How can the plan not address the bayside contribution to the flooding, which both closes the Avenue and required a new Village Hall? What about drainage solutions as part of the overall plan?

\*All of the evaluated bayside mitigation and structural options were deemed impractical. As a rule, the Corps does not engage in any drainage projects as part of the mitigation plans.

--If the plan goes forward with public access, what responsibility for liability issues will be borne by the state or federal governments?

\*None.

In fact, the Corps and the State will both require a release of liability by the Village naming the United States Government and New York State be “ held harmless” in the event of any liability issues.

--In addition to the major question of \$6million in real estate costs generating no benefits, what about all of the other benefits that were not assigned any value ranging from protecting the wetlands, breach implications, emergency aid, etc. There are hundreds excluded, yet the Corps and the DEC use cost/benefit analysis to approve projects and determine funding requirements.

\*Many of those were addressed in the questions submitted. And we will be responding to them in the revision.

--Does your real estate budget include legal costs to pursue condemnations or takings via eminent domain for those unwilling to agree to public access easements voluntarily? Is there a level, such as a 50% refusal rate, which causes you to stop the project? What if the numbers are grossly underestimated?

\*There is money included for legal efforts likely required, but there is no specific threshold percentage. It is the Village’s responsibility to commence the eminent domain actions and those efforts are accounted for as part of the local sponsor’s contribution. Until we get closer to the final Design and implementation it is not possible to determine the exact numbers needed.

--Do you have prior experience with the proposed local sponsor not being able to afford its cost of sponsorship? If the Village recognizes it cannot be the sole, financial local sponsor, what happens?

\*This is a unique situation, in part, because the Village is small. In Long Beach we have four local sponsors. We encourage you to pursue any avenues with the Town or the County, but that is not our responsibility.

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