



TOWN OF PALM BEACH

Office of The Town Clerk

MINUTES OF THE SHORE PROTECTION BOARD MEETING HELD ON THURSDAY, AUGUST 27, 2009

I. CALL TO ORDER

The meeting of the Shore Protection Board was called to order at 9:03 a.m., on Thursday, August 27, 2009 in the Emergency Operations Center, 355 S. County Road, Palm Beach.

II. ROLL CALL

On roll call, Members found to be present were Vice Chair Frank, Members Lindsay Buck, Katz, Hicks, and Goldstein. Member Raffo had an excused absence. Chair Ecclestone had an unexcused absence.

III. PLEDGE OF ALLEGIANCE

Vice Chair Frank led the Pledge of Allegiance.

IV. APPROVAL OF AGENDA

Town Manager Elwell noted that there will be discussion of the Coral issue that emerged during the past week, the actions the Town Staff has taken, and other actions that may be necessary, be added to the Agenda as ITEM XV.

Motion to approve the Agenda as Amended made by Member Hicks and seconded by Member Katz. On voice vote, the motion carried unanimously 5-0.

V. APPROVAL OF THE MINUTES OF THE JULY 23, 2009 MEETING

Member Katz stated that the minutes were missing information. It was pointed out to him by other Shore Board Members that the response he was referring to was noted in the next page. Town Manager Elwell indicated that the Town Clerk would review the audio again and make any necessary changes. He suggested moving forward with approving the Minutes as Amended.

Vice Chair Frank asked if the corrections he had suggested to the Town Clerk prior to the meeting had been made. Town Clerk Cunningham read the revised portion of the Minutes to the rest of the Shore Protection Board.

1 Motion to approve the Minutes as Amended made by Member Goldstein, seconded by
2 Member Lindsay-Buck. On voice vote, the motion carried unanimously 5-0.
3

4 VI. COMMUNICATIONS FROM SHORE PROTECTION BOARD MEMBERS

5 Member Hicks apologized for missing the last meeting, but stated he had listened to the audio.
6 He asked for a status reports on:

- 7 • USACOE (United States Army Corps. of Engineers) dredging project. Mr. Jim Bowser,
8 Town Engineer, responded that he had attended a pre-construction meeting. The
9 USACOE began dredging in the middle of the previous week. The USACOE has bid
10 150,000 cubic yards of material to be dredged from the entrance channel and the turning
11 basin. He believed those were estimates. They did not have a survey that supported
12 those numbers. Member Hicks asked if it was a lump sum contract. Mr. Bowser
13 indicated that they have not seen the contract, but he believed it was not hourly, but
14 generally by unit price. They have 67 days to complete the project. The dredge had a
15 commitment on September first to dredge the Savannah River entrance. The USACOE
16 will leave Palm Beach at the end of August and return at end of September. They
17 believe they will still have sufficient time to complete their contract. The spoil is to be
18 placed in the nearshore area in minus seventeen feet of water or less. Mr. Bowser
19 observed the dredge on one cycle and it appears Great Lakes had filled the hopper
20 dredge and is not totally full of sand and is still full of water. Great Lakes had been
21 discharging water as it goes down to the discharge site in an effort to get the barge
22 lighter. There is no requirement on the USACOE to have surveys made of the disposal
23 area, although the contractor says that they will have surveys. Mr. Bowser has requested
24 that he be provided with copies of the pre and post dredge surveys. The USACOE
25 informed Mr. Bowser that they are willing to release them if Great Lakes were willing to
26 share them with the USACOE.

27
28 Town Engineer Bowser continued that the USACOE bid in the contract two additional
29 dredging events for next January and again next summer. He does not know if the
30 USACOE have made those awards but unfortunately they have not asked on the winter
31 dredge cycle for the incremental cost difference to put it the dredged sand along the shore
32 or on the shore vs. the nearshore placement. The Town staff will be getting in touch with
33 the USACOE to ask them to request Great Lakes provides a cost for the Town so that the
34 Town Council may consider the sand be placed in the beach in lieu of nearshore
35 placement. The dredge is concentrating on the high spots first, trying to get the channel
36 opened. There was a shoal in the north side of the inlet and there was one right in the
37 middle of the channel, according to the cross sections. They are trying to at least, get the
38 channel opened up to improve the Port's operations first.

- 39
40 • Interlocal Agreement- Director of Public Works Paul Brazil responded stated that The
41 Town's attorney is talking to the County's attorney about some very minor wording. The
42 Agreement will be resubmitted to the Town Council at the September 10, 2009 Meeting,
43 pointing out that they are very minor revisions. The following week it will go to the Board of
44 County Commissioners for approval. If everyone agrees, and it appears that they will. The Town

1 would begin the EIS (Environmental Impact Statement) process on a project that includes the
2 south end of Reach 8 and into the Town of South Palm Beach.

3
4 Member Hicks thanked Director Brazil for his response. He again mentioned that he had listened
5 to the audio from the last meeting and wanted to speak on Member Katz's comments regarding
6 the consultant agreement between Isiminger and Stubbs, and Coastal Technology. In listening to
7 the minutes, he echoes some of Member Katz' concerns or if there would be any weak link in the
8 process between data collection, assessment and analysis while having two different firms
9 working on it. He stated it is not that you cannot do it, but both coastal firms are specialty
10 consultants. He was concerned about having two firms doing the work but in the scopes of work
11 it needs to have sufficient time for coordination. Director Brazil informed Member Hicks that
12 Isiminger and Stubbs have already contacted Coastal Technology and are coordinating together.
13 Town Manager Elwell added that there was direct conversations between the two consultants
14 addressing the Board and the public at the last meeting regarding the level of coordination that
15 had occurred even prior to the meeting and in the formation of the proposal for the work.

16
17 Member Katz stated that he had spoken to Coastal Technology and he made sure that the
18 coordination existed. His question at the meeting was why Coastal Technology did not bid on
19 the entire project. He stated that obviously they will know what the output is, they can provide a
20 better input, but he added that he was assured that there would be coordination. He feels there is
21 extra money paid because of duplication. He indicated with the financial constraints of the
22 Town, should be looked at more carefully.

23
24 Vice Chair Frank commented that the Town Staff and the Shore Protection Board and the Town
25 Council feel comfortable when you have two or more companies, with one that overseeing the
26 other to a degree. They are coordinating but at the same time, there is some pressure to perform
27 and in some cases, have more experience than the Board. He continued that it may cost a bit
28 more, but in the long run, the decision was made by staff and the Shore Protection Board that this
29 was the best way to proceed.

30
31 Member Katz asked Vice Chair Frank to be more specific. He still felt that duplication of efforts
32 was not necessary and did not feel the Town needed to obtain two consultants. The City of Boca
33 Raton has three engineering firms doing all of their projects. The Town of Palm Beach has nine
34 engineering firms. He hoped that there is not any duplication for every project. He also stated
35 that peer review for important projects will be facilitated. There are some very fine engineering
36 companies in the portfolio. If there are nine companies, and they do a specific project, you are
37 going to find a very good engineering company which is not on the list, but you can use it as a
38 peer review. Any money spent on a peer review is a great investment.

39
40 Town Manager Elwell stated that Member Katz' points are well-taken but he wanted to preface
41 his remarks by stating that he does not disagree with Member Katz. Town Manager Elwell
42 clarified and reminded the Board and the public that traditionally, the Town operated with fewer
43 engineers. In fact, it concentrated the vast majority of the work with one particular engineering
44 firm. There was clear direction, not unanimous direction which is why there is still dissension,
45 from the Town Council and the Shore Protection Board to utilize more firms. Staff coordinated
46 that effort as directed, now working and utilizing a broader and more diverse team. Town

1 Manager Elwell hoped that this issue would not be re-visited at every meeting since this was a
2 Shore Board decision and the firms have already been hired.

3
4 Vice Chair Frank added that it was a good system and again, he hoped that the issue would not
5 be brought up again and again. Member Goldstein added that was the decision that was voted
6 upon.

7
8 Member Lindsay Buck stated that she had two comments. She lives in Reach 1 and has observed
9 the dredging for the past five years. This past week she had noticed a big change in the particular
10 company (Great Lakes). They are making a much more concerted effort to drop the sand closer
11 to where it would be helpful to the down drift flow, but they are moving around and placing the
12 sand from parts of Reach 1 to quite deep into Reach 2. She had not seen that in the past. She
13 wanted to complement the staff, or whoever was responsible for that. She noted that the sand by
14 the old Kennedy Estate was very narrow and badly needs the sand and felt the public should
15 know about that.

16
17 Member Lindsay Buck also commented that she wanted to thank the Town Council and in
18 particular, Council President Pro Tem Coniglio for a letter written to the County outlining and
19 asking for more involvement from the County regarding the amount of tax dollars that Palm
20 Beach residents pay. She was very pleased to see the letter and the citizens should know that
21 there really is an active engagement between the Town and County in shoreline protection.

22
23 Member Goldstein commented on the subject of hardbottom. He stated that as of Sunday
24 afternoon there was no hardbottom at the Lake Worth Beach. And 3/8th of a mile from where he
25 lives, there is no hardbottom either. In walking the beach, at the bottom of Reach 6, to the top of
26 Reach 7, his opinion was that the last two groins are causing the sand to flow out to the ocean
27 east rather than flow along the beach south. He felt that was part of the significant problem at the
28 top of Reach 7. He wanted to make sure that both consultants were really focusing and analyze
29 the issue. Public Works Director Brazil responded that they would be discussing this later today
30 under alternative structure analysis in Reach 7. That consultant will be the first one to address
31 Member Goldstein's issue. Member Goldstein noted that he wanted that mentioned in the
32 minutes since it was a very important issue.

33
34 Vice Chair Frank agreed and said that was why the Shore Protection Board was so adamant in
35 the fact that there needed to be work and have an investigation of the groins. The Shore
36 Protection Board made sure their recommendation went to the Town Council and the town
37 Council did the right thing. They allocated the funds needed to further investigate the groins.

38
39 Member Goldstein added that the groins are assets to the town. There are 80-90 groins and if
40 those assets are not reviewed to see what the Town has, then the Shore Board is being derelict in
41 their duty.

42
43 Vice Chair Frank also made comments regarding:

- 44
- 45 • Commended Council President Pro Tem Coniglio for the work that she has done with the
- 46 County, particularly with regard to the last communication she sent and the response
- 47 received back from Dan Bates at DERM (Department of Environmental Resources)

management). It provided answers to the Shore Protection Board's concerns. He stated that the board owes her a thank you for the work that she has done for the Town and for the Shore Board and on behalf of the citizens.

- City of Lake Worth - The City of Lake Worth did not accept the invitation to join the Town in having Reach 8 designated as "critically eroded". It was not done through hurt or any work on the Lake Worth beach, it was done simply because the Town thought in the future, if there was a storm, and it was a designated beach, the Town could get reimbursed from FEMA for restoration. It would be easier to get beach re-nourishment after a storm event, if it were classified as critically eroded. It was felt that if sand were put on both sides of the Lake Worth Beach, not on their beach, but on the sides, would be a great advantage for them as well without any cost. It was unfortunate. He hoped to continue to try to obtain the designation for that portion of Town.
- Lack of Sand - The Town needs to look for more sand. It would be discussed later to identify a new source of sand and be identified as an action item that the Shore Protection Board should work on sooner rather than later. Nothing will work unless there is an investigation of where there is proper sand should be brought to the top of the projects that the Board is working on.

Member Hicks asked for more information on the critically eroded beach designation issue and the City of Lake Worth's decision not to participate. Town Manager Elwell responded that the Town asked the City of Lake Worth to participate in a coordinated effort on two different things. The first was related to the critically eroded beach designation and the other was to allow the Town to use the Lake Worth public beach as an access point for dune restoration. Unfortunately, they did not directly respond to the matters, but their commission decided to have a charter referendum to prohibit the placement of sand on the beaches, which will be decided by the voters of Lake Worth.

Vice Chair Frank read from a newspaper article regarding the Lake Worth issue: Lake Worth would become the first city in Palm Beach County to ban the practice of pumping sand onto the beach from offshore borrow sites if voters approve a proposed Charter Amendment on November 3, 2009. City Commissioners Tuesday approved on Tuesday on First Reading ballot language for a Charter Amendment that would prohibit dredge and fill type re-nourishment projects at Lake Worth Beach and forbid the use of the beach as a staging area for similar projects. Vice Chair Frank stated than rather than cooperate and allow the Town to help them with their beach, they have chosen to go in the opposite direction.

Member Katz stated he wanted to take another look at the issues brought forth today. The Shore Protection Board had been together for nine months and he wanted to share his observations. He wanted Town Manager Elwell to provide answers so that all of the Shore Protection Board Members can be on the same page.

He continued that he has specific observations about what he thinks the Board should approve. He announced he would not be at the next meeting and wished to speak at length today. Vice Chair Frank informed member Katz, that if there are things that are going to be discussed on the agenda to wait. Member Katz responded that they are not agenda based items.

Member Katz began with his total observations. The Board has been here nine months and he has looked at beginning and again now at the faces on the Board. The only one who has a coastal engineering background is Member Hicks. This is a very technical board although you do not have to be a technician. The Town staff is asking the Shore Protection Board to make decisions on technical issues where they get some idea of the complexity or choices of the issues. The Shore Protection Board needs to consider the choices that are being implemented and to be sure they have the information that they need. He said to look at what happened in the last 10-15 years. A few of the Town's projects cost a lot of money and the results speak for themselves. He wants to be proud of anything they do 5-10 years from now. He asked for peace of mind to not repeat the past. He said to ask yourself if what the Shore Protection Board is doing now is different, or is better, and smarter than ten years ago. They should not repeat the same mistakes.

The second thing he wanted to dwell on is having access to the experts. Member Katz indicated that he spoke to Coastal Coordinator Rob Weber. The conversation was very revealing and very good. They discussed sand. If you want to make a cake, you need the flour; if you want to make a beach, you need sand. He asked how you could start a project when you do not know where you are going to get the sand from. Member Katz stated he wanted sand to be the first priority of the Shore Protection Board.

Next Member Katz had specific things to address and see if they can be added to the agenda so that collectively the Board can discuss since the Sunshine Law prevents them from speaking outside of the meetings.

- Agenda setting – he felt his items were not addressed and felt there should be a process. Other Board Members and Town Manager Elwell indicated that there is a process and the Chairman sets the agenda with the Town Manager. Member Katz felt he was being treated differently.
- Defining and Acting on Priorities – he noted that the Board defined three priorities and he wanted to discuss further the selection of the engineering companies that does the work. He disagreed with the process.
- Develop a criteria for project design which has a high chance of being approved and permitted by the regulatory agencies. He requested that the consultants be present at the meetings when they have been assigned with a specific project. They should be available for questions from the Shore Board.
- Member Katz requested immediate notification when any staff or Board Member speaks to the press or there is a new issue that will be in the newspaper. He stated that communication is poor and he should not be educated by the newspaper, but should hear directly from staff first.

Town Manager Elwell responded to Member Katz regarding communication and stated that the Board now receives monthly updates on the Coastal reports after a request was made and the Shore Board Members are emailed when something shoreline related is received. Vice Chair Frank agreed that there is sufficient communications. Member Katz wanted to be informed anytime a Town Council Member speaks to anyone about Shore Board issues.

Vice Chair Frank addressed Member Katz' Agenda issue. Vice Chair Frank stated that the last thing the Board discusses at the end of every meeting are the agenda items for the next meeting. This has been an open item and is discussed monthly. That is already taken care of.

Town Manager Elwell made two announcements. Member Raffo has an excused absence and advised the Town Manager in advance due to a medical reason. Coastal Coordinator Rob Weber was not present because the DEP (Department of Environmental Protection) was in Town today from Tallahassee and he is with them looking at various things.

Vice Chair Frank indicated that Mr. Weber has done a fantastic job. He also noted that Assistant Town Manager Sarah Hannah did a great job for the Shore Protection Board and he wished her well and thanked her for work. The 28th was her last day of working for the Town.

VII. COMMUNICATIONS FROM CITIZENS - 3 MINUTE LIMIT PLEASE

Dr. Sanford Kuvin, East Inlet Drive, stated he wished to speak again when the Board discussed Item IX- Sand Transfer Plant Phase II. Dr. Kuvin announced that he obtained copies of the contract for the current dredging and indicated the company is violating the permit. He announced his difference of opinion with Member Lindsay Buck and other Board Members. He also indicated there have been numerous complaints to the DEP regarding the dredging.

Town Manager Elwell stated he was not aware of any complaints. The critical bottom line for discussion is that the goal is to get sand on the beaches and the Town was disappointed in the poor communication and timing of the project. Because it is currently sea turtle nesting season, USACOE cannot put sand on the beach but can place it as close to beach as possible. The Town has urged the USACOE to do the dredging. He stressed that the Town has *not* urged them to violate state or federal laws to conduct the dredging and should be doing so in an appropriate legal manner.

Member Hicks asked if the Town had a copy of the permit for the USACOE. Town Engineer Jim Bowser responded that he has the dredge plans and personally observed one cycle. The sand was disposed around Reef Road and is within the permitted disposal area. If they are violating the permit then that would be a serious issue. Dr. Kuvin stated his comments are hearsay and there are quasi-experts going to investigate.

Member Lindsay Buck commented that she understood that Reach 2 is within the permit area but not all of Reach 2. Inlet sand is the highest quality sand available and this is a shared compromise. She viewed the project as a sharing and not a taking. She was happy because the sand is being placed where it will drift south.

Town Manager Elwell stated it would be perfectly appropriate to continue to monitor the situation, but not become directly involved. It is beyond our authority from a regulatory and permitting standpoint.

Dr. Kuvin held up a map from DERM and stated that Reach 1 goes from the inlet into Onondaga Avenue. That is the federal spoil area. Town Engineer Bowser said they would provide Dr.

Kuvin with the disposal plans. The disposal area starts between 350-400 feet south of the jetty, it extends 2750 feet. The disposal site extends 1000 feet into Reach 2.

Peter Pettie, 3400 S Ocean Blvd., spoke as a voice of Reaches 7 and 8. The Reach 8 permit was denied in part due to the Town being unable to prove that sand would not flow north. He had sent a letter to the Town regarding the permits that were given for Reach 7 for down drifting of sand and how they were obtained. He stated that he was here to make sure that the entire town has the widest beaches. The south end is asking why they are not getting sand deposited there. Mr. Pettie noted that Member Lindsay Buck was pleased to see the sand is being used downstream. Public Works Director Brazil thanked Town Engineer Bowser for the success. Public Works Director Brazil indicated that the federal government is doing this work and it is not the Town's work.

Council Member Richard Kleid, announced that because of Mr. Katz' concerns regarding communications, Council Member Kleid stated that he has been in an e-mail dialogue with the manager of Ambassador II and noted that all Shore Protection Board Members have been copied on the correspondence and are cognizant of communicating particularly with the Board Members who have been charged with coming up with a plan. He also wanted to correct for the record, what Mr. Pettie said. There are parts of Reach 7 that are bereft of sand but south of the Par 3 down to Lake Worth Bridge, there is ample sand there. It is holding and the dunes and the beaches are quite good.

Member Hicks commented about communications. He appreciated the level that has been received. He asked which e-mails are sent. Town Manager Elwell responded that e-mails are forwarded that are beach related and have substantive concerns. Member Hicks also appreciated the public comments.

Action Items:

VIII. RETAIN CONSULTANT FOR ENGINEERED BEACH DESIGNATION IN REACH 1 [Robert Weber, Coastal Coordinator]

Public Works Director Brazil presented the item since Coastal Coordinator Rob Weber was with DEP. Staff recommended that the Shore Protection Board recommend that the Town Council approve that Applied Technology and Management (ATM) proposal to seek engineered beach designation of the Town's Reach One.

Member Lindsay Buck stated that this item was a no brainer. It would be money well spent and for \$12,000, that after a storm, the Town could possibly be reimbursed for sand and beach erosion.

Town Councilman Bill Diamond asked about the other Reaches. Public Works Director Brazil responded that it has to be an engineered beach. Reaches 3, 4, and 7 are already eligible and are using FEMA money to restore the dunes on those areas currently. Reach 1 has had work and generally meet definitions of an engineered beach but has not been applied for.

Member Hicks asked for clarification about what the money is for, and did that get the designated beach status, or only begin the process. Public Works Director Brazil stated that the money was for the preparation for packet for FEMA. Member Hicks asked if anyone has spoken to FEMA and preliminary discussions have occurred. There is no guarantee, however, that the designation would be successful.

Motion made by Member Katz to recommend to the Town Council to approve the Applied Technology and Management proposal to seek engineered beach designation for Reach 1, seconded by Member Goldstein. On voice vote, the motion carried unanimously.

IX. RETAIN CONSULTANT FOR SAND TRANSFER PLANT PHASE II DESIGN AND PERMITTING [H. Paul Brazil, Director of Public Works]

Staff requested that the Shore Protection Board recommend that the Town Council approve the ATM proposal for the Sand Transfer Plant Phase II Design and Permitting. The cost to complete the designed scope of work is estimated at \$162,670. Funding has been requested in the FY 2010 budget. If adopted, Town staff would proceed with the permitting effort.

Town Manager Elwell added that at some point there may be federal reimbursement for part of the project. This was listed as one of the highest priorities of the Town.

Public Works Director Brazil explained the scope of Phase II and said the purpose was to extend the discharge pipe. The plan is to leave the existing discharge, but have a second discharge about 2000 feet south. There have been many conversations with the people involved, homeowners, surfers, engineers and everyone else. It is not without controversy, but the Town feels it is the correct thing to do. He described the work involved in the project.

Member Lindsay Buck asked about the aesthetics of the pipe extension and stated that an effort needed to be made to screen the discharge pipe so as to improve its appearance. Public Works Director Brazil responded that the current outfall will look as it does now. Town Engineer Bowser added that there needs to be a more structural building, but it would look essentially the same. Conceptually, one will see another discharge pipe 2000 feet south of the existing one.

Council Member Diamond asked about the approvals, what is the cost of the total project, and asked about permitting. Public Works Director Brazil stated there was not a firm cost estimate but may be between \$2-4 million dollars. The biggest cost, according to Town Engineer Bowser is the directional bore pipe.

Vice Chair Frank acknowledged that it was a large amount of money, but trucking in sand would be much more costly. This was the best alternate.

Member Goldstein indicated that if there were no shore protection, the north end would also be under water. Public Works Director Brazil answered the permitting question and stated that they have a permit now.

Council Member Kleid pointed out that the money does not necessarily have to come from the Town Council. There is a newly created Erosion Control Taxing District that could collect the

1 funds. Town Manager Elwell reminded everyone that today's action was to get the process
2 started.

3 Vice Chair Frank indicated that the previous Shore Protection Board also wanted more sand on
4 the beaches and it was decided that the Plant needed to be refurbished and the pipe extended.
5 Before taking a vote, he indicated that he would allow Dr. Kuvin to speak again.

6
7 Dr. Kuvin again voiced his opposition to the project and called it "opening Pandora's Box" and a
8 "pipe dream". He stated that he had a report that showed his property would lose 15 feet of sand
9 per year and the Town would meet opposition in obtaining the easements required from the
10 landowners. He argued that when the beach begins eroding on the North end, the Town is
11 essentially taking private lands from the homeowners.

12
13 Town Manager Elwell responded to Dr. Kuvin's comments and noted that there is opposition to
14 the project from the property owners in the North end. He does still recommend that the Shore
15 Protection Board proceed with the project as presented since this is a way to place some sand on
16 the beaches instead of doing nothing. He noted that the updated figure for Phase II was a new
17 figure, and not an old number, as Dr. Kuvin suggested. He also stated that a nodal point is a
18 good topic to bring up. There is a point of acceleration if sand can be placed past the point of
19 acceleration, sand would be moved more quickly through the system.

20
21 Public Works Director Brazil added that Dr. Kuvin brought up avoidance and mitigation as
22 concerns with the permit issues. It actually is avoidance, minimization and then mitigation. This
23 proposed project is minimization. The Town must provide some form of management approach
24 to prevent more erosion from occurring. Environmental permitting agencies are receptive to this
25 due to the alternative.

26
27 Vice Chair Frank stated that the Shore Protection Board must look at what is best for the entire
28 town and not just the north end owners.

29
30 Member Lindsay Buck indicated that she had grown up in the north end of Reach 2 and now
31 lives in Reach 1. She viewed the Phase II extension as a sharing, not a taking. She regretted
32 that Dr. Kuvin had not attended previous shore board meetings held since December, when this
33 project (the extension) was discussed and made a high priority. The sand moved by the Sand
34 Transfer Plant, if operating normally, provides only about 1/3 of the sand that is lost each year to
35 our island. The Town is losing sand continuously and north end property owners in Reach 1,
36 who have sand, should understand the problem and take a more global (island-wide) view of
37 solving it.

38
39 Vice Chair Frank stated that the sand is for the entire island and right now - it only benefits
40 Reach 1. With this project, he acknowledged the sand would shrink at the north end, but would
41 still be considered wide compared to the other beaches along the shoreline. The decision needed
42 to be based on what is best for the entire Town.

43
44 Member Katz responded to Dr. Kuvin's comments. He noted that the island has lost significant
45 amounts of sand in the last decade. If Palm Beach were to be hit by a storm, there are areas that
46 would have no protection at all. He gave the example of Galveston, Texas and how flooded the

town became. Member Katz about having to do any work on Reach 2 and if that was included in the estimate. Public Works Director Brazil responded that mitigation costs were not included.

Member Hicks commended Member Lindsay Buck and agreed with her comments. He asked a question to Public Work Director Brazil about previous reports from ATM and CPE. Mr. Brazil stated that the reports outlined both positive and negative alternatives. They also discussed from two different approaches and the empirical approach rehashing the thoughts of a nodal point. He did not recall anything that said to not do the project. Member Hicks also asked about an erosion control line. Town Engineer Bowser said there was not one.

Dr. Kuvin again expressed his opposition to the project.

Peter Pettie, 3400 S. Ocean Blvd, suggested that Council Member Kleid see Dr. Kuvin's beach to see a fully nourished beach. He said that is a storm protected beach. There are thousands of residents in the south end who do not have beaches like Dr. Kuvin's. The sand that has been placed in the north end has been paid for by all the taxpayers in the Town. He informed Dr. Kuvin that he has benefited from the residents paying for his private beach. To oppose any transfer of the sand for the rest of the island is a slap in the face of many of the residents. He also discussed the letter that Council Member Kleid referenced and not having any money to fund projects, but then stated there was an erosion control district that could pay for it. You cannot have it both ways.

Robert Foster, 2295 S. Ocean Blvd., stated that Reach 7 has faster running water, and since it runs faster, it erodes the beach away. A second problem is from the co-ops along the south end are discharging pool water and that is causing erosion as well. The seawalls are not all at the same height.

Town Engineer Bowser addressed the comments about the pool water and indicated that Harbor House has been working with the Town for over two years. They need to redirect storm water away from the dune. Harbor House has not followed thru. Town Manager Elwell indicated that staff would follow up on that issue.

Town Manager Elwell spoke of the balance between expecting the Shore Protection Board make its own technical decisions and the staff making them. Unless the Shore Board wanted a 200-300 page back-up for each meeting, providing every detail of every project, there would need to be a happy medium. The Town will continue to provide the summaries with recommendations, but then if they wanted further details, they could be provided.

Member Hicks struggled with being a coastal engineer and wanting to know a lot more detail than his fellow Board Members since he understands the intricacies more vs. what everyone would need to make an informed decision.

Member Katz agreed with Town Manager Elwell and does not need to get so involved in details. He would like to have the consultants in front of the Board when it is time to make a decision. Member Goldstein agreed.

1 Member Hicks asked about the potential for cost sharing with the County and he was informed
2 that not with the county, but possibly with the DEP.

3 **Motion made by Member Hicks, seconded by Member Lindsay Buck to recommend**
4 **approval to Town Council to hire ATM for the Sand Transfer Plant Phase II Design and**
5 **Permitting in the amount of \$162,670. On voice vote, the motion carried unanimously.**
6
7

8
9 X. RETAIN CONSULTANT FOR REACH 7 STRUCTURES STUDY [H. Paul Brazil,
10 Director of Public Works]

11 Staff requested that the Shore Protection Board recommended that the Town Council approve
12 Taylor Engineering Inc. proposal for the Reach 7 Alternative Structures Analysis. The fiscal
13 impact is \$127,734. Public Works Director Brazil noted that Taylor Engineering Inc. is already
14 working with the County on the Reach 8 project and provided further background of the
15 proposal.

16 Member Lindsay Buck asked if there are existing groins in Reaches 6 or 7 and there are in Reach
17 6. She was concerned about having redundancy between other studies and hoped that Isiminger's
18 project would coordinate with this one. Public Works Director Brazil said that the Isiminger
19 project is a physical survey and this study starts the modeling process. The modeling is at the
20 core of what Taylor Engineering Inc. needs to do.

21 Vice Chair Frank noted that Member Lindsay Buck's comments were good thoughts. Vice Chair
22 Frank said that if Taylor Engineering Inc. could start coordinating with Isiminger.
23

24 **Motion made by Member Goldstein to recommend to the Town Council for approval to**
25 **hire Taylor Engineering, Inc. to perform the Reach 7 Alternatives Structures Analysis. The**
26 **motion was seconded by Member Katz.**
27

28 Member Katz commended Public Works Director Brazil for selecting Taylor Engineering
29 because they have no history with the Town on Reach 7. He noted that he felt it should be made
30 available to Taylor Engineering the history and performance, so that they will not be recreating
31 the entire thing. That would waste time and money. People want answers and not studies.
32

33 Member Hicks asked what the alternatives might be. A representative from Taylor Engineering
34 Inc. (Ed Hodgins) provided some examples. He noted solutions that include a groin field,
35 possibly a T groin field, possibly detached breakwaters, assortments or combinations of those,
36 and also bringing in fill alternatives. He stated that genesis modeling is different than the
37 negative connotation. He reminded them that the project is for a feasibility preliminary study. He
38 asked about the data collection criteria as well.

39 Member Hicks was concerned about timing and perhaps waiting until the Isiminger study is
40 done. Taylor Engineering Inc. has a lot of digesting of historical data and while doing that, it
41 would not delay the project. Member Goldstein commented that Isiminger should begin their
42 study with Reach 6 and go back, rather than form the north end down. Member Hicks asked if
43 Isiminger's group was aware of the additional coordination and Public Works Director Brazil
44 indicated that they were not but they are the client of the Town and not each other. Member

Hicks stated that he had a lot of faith in Taylor Engineering Inc. and he was a former employee of their firm.

Council Member Kleid asked Taylor Engineering Inc. that when they come forth with the various alternatives, will they opine their professional opinion or provide the probability of obtaining a permit (high or low). He is concerned about seeing alternative structures and hearing from the consultant as to where the best possibility with the best solution of success would be. Mr. Hodgins said they were to look for the best engineering solution without disregarding environmental and permitting concerns. They will start with engineering decisions and lay out the preferred alternative. Then you look to the other relevant issues that have happened in the county.

On voice vote the motion carried unanimously.

XI. RETAIN CONSULTANT FOR LAKE WORTH INLET MAINTENANCE DREDGING
[H. Paul Brazil, Director of Public Works]

Staff requested that the Shore Protection Board recommend that the Town Council approve the ATM proposal for the Lake Worth Inlet Maintenance Dredging Plan. If the tri-party partners (Town of Palm Beach, Palm Beach County, and the Port of Palm Beach), agree to move forward with the permitting of the Lake Worth Inlet Maintenance Dredging Plan, the Town's share would be 1/3 of the total cost of \$61,507. Town staff has requested \$150,000 in the FY 2010 budget for the project.

Member Hicks asked about obtaining the inlet dredging tri-party permit. He was informed that the goal was to dredge by both jetties and placement where the USACOE currently has a permit to place the sand. Member Hicks noted that he had spoken to a Port of Palm Beach employee (Tom Lundeen) who was concerned about cost and the scope of work.

Member Lindsay Buck asked what the parties would not ask for the permit to extend dredge disposal areas to the south now, and Public Works Director Brazil indicated that it would simply take longer to get one if you started before the agreement is done.

Town Manager Elwell gave a brief history of tri-party regarding cost sharing in the past. The County is more of a supporting player in this agreement. Sometimes it is about keeping the inlet clean for ships and sometimes the goal is about the shoreline. Town Manager Elwell noted that this project is about both. The easiest permit to obtain would be the same one that the USACOE has now. Secondly, the next easy task would be to slowly extend that project south and is also cost effective for our neighbors.

Member Lindsay Buck expressed her concern that once we get a permit from USACOE and DEP to dredge the inlet ourselves, and asked if would there be a chance that the USACOE would stop dredging altogether, resulting in the Town and its tri-party members having to pick up all of the expense. Town Engineer Bowser outlined the complexities and the differences in the permit requirements.

Motion made by Member Goldstein, seconded by Member Katz to recommend to the Town Council approval of ATM for the Lake Worth Inlet Maintenance Dredging Plan. On voice vote, the motion carried unanimously.

Discussion Items:

XII. LESSONS LEARNED AND FOLLOW-UP ACTIONS REGARDING FDEP SECRETARY SOLE'S FINAL ORDER FOR REACH 8 [H. Paul Brazil, Director of Public Works]

A. Beach Nourishment and Offshore Sand Search

Public Works Director Brazil stated it would be oversimplified what resulted from the Reach 8 Administrative Law Judge's decision and DEP Secretary Mike Sole's decision to say the projects were denied over sand. The vast majority of it revolves around sand: the type of material it is, the grain size, its origin, and its future impact.

If there is a dredge material that is frangible and would break up, it would increase the ability to cause sediment. That sediment would negatively impact offshore and nearshore resources. It is also lighter in unit weight, which means it would not stay put as long. It would move very quickly and it could move a great distance. Those things combined led to the ALJ stating that the Town would be causing more impacts than what the permit application and modeling stated. The Town had proposed what met the DEP and the USACOE rules. They were both willing to issue a permit based upon the material the Town was going to use. The bar has now been raised based on what came out of the Reach 8 decision. Even though the Town technically met the definition, the regulatory agencies are now asking for a much more exhaustive study, both before and after construction.

Before construction, there will have to be:

- more tests on the actual materials
- different types and more extensive modeling
- more research to better define what the natural beach consisted of

Public Works Director Brazil continued that the agencies are going to look harder at the long term impacts. The typical borrow areas that the Town has been using and the sand that was proposed for the Reach 8 project is typical of what has been dredged. A new source of sand is going to be needed.

What the Town is proposing in the short term for FEMA work, which is a relatively small project, is that it would be trucked in from an on-land source. The source that is proposed has been widely accepted by the regulatory agencies and the environmentalists.

A different source of affordable inland or offshore sand needs to be found stated Director Brazil. The sources that are approved cost \$40-45 dollars a cubic yard. When you a million cubic yard project, it is extremely expensive. A typical beach nourishment project is 750-1,000,000 cubic yards of sand. The Town simply could not afford it.

1 There are a few alternatives for finding another sand source:

- 2 • Palm Beach County and with the Port of Palm Beach with the tri-party agreement
- 3 • Using the Palm Beach County resource off of another municipality shoreline – political
- 4 ramifications
- 5 • Expand the settling basin
- 6 • DEP indicates there may be good sand in much deeper waters.

7
8 According to Public Works Director Brazil, part of the projects goals are to define the sand
9 source within the scope. The Town proposes to begin a separate study to fund a new sand source
10 search.
11

12 B. Breakwaters

13 Public Works Director Brazil stated that there is a thought that the breakwaters are perhaps, a
14 silver bullet. He doubted it though when it comes to beach management. The Singer Island
15 breakwater project is in the final phases of permitting. After a permit is issued, the next step
16 would be to see if there will be legal challenges. The Town is watching that process. They are
17 also watching the effects of the breakwater project on the Town of Palm Beach, as a neighbor to
18 the south. DEP is looking at that project today.
19

20 The Town is considering working with Palm Beach County on a breakwater project for the
21 south end of Reach 8. He recalled that the Reach 8 project as it was proposed had a truncated
22 section. The very south end would receive a dune only. The reason for that is because there is
23 so much exposed hardbottom. The structures are also pushed very far seaward. It would be
24 difficult to do a full beach nourishment project there. The Town, based on the Shore Protection
25 Board's recommendations, on Town Council's recommendations, are entering into an interlocal
26 agreement to start an environmental impact statement (EIS). The County feels that they may
27 turn into a breakwater project. The Town has only agreed to the EIS and is considered an
28 alternatives study. The whole purpose of the study is to look at the entire area environmentally.
29 This is a long process and will take two years. By that time, the Singer Island breakwater
30 project will have either been permitted or denied. If they are successful, and have overcome
31 legal challenges, that will set the precedent to make a breakwater project in Reach 8 heading
32 south a good regional project to do. If the breakwaters are not permitable, or not practical, the
33 alternative study will leave the Town in a position at that point to know what the next best thing
34 to do. A decision can be made at that time to continue working with Palm Beach County, and
35 do a regional project or not.
36

37 Public Works Director Brazil continued that if breakwaters are successful in that area, there will
38 be a need to keep up communications with residents, environmentalists, and the neighbors to
39 the south of Palm Beach.
40

41 Member Lindsay Buck asked if they understood the negative impacts to Palm Beach from the
42 Singer Island breakwaters project. Public Works Director Brazil responded that he has talked
43 with the staff at Palm Beach County, and asked the same concern. Their response was because
44 of the geometry of the shoreline in that area, they do not anticipate any negative impacts south
45 of the structures. The Town will monitor it closely. They will be given a very rigid monitoring
46 program. If the permit is granted, one of the conditions would be that if the monitoring does

show a negative impact to the south, that it would need to be rectified by mitigating the sand or removing the structure.

Member Lindsay Buck asked if the Town was sure they would have to remove the structure if it negatively impacted the sand flow to Palm Beach. She had heard that the project would block some sand movement and that the Town shoreline would become more starved. She would like the Shore Protection Board to express those concerns in writing about what happens if the impacts to Palm Beach are negative. She wanted to go on the record with her concerns.

Town Manager Elwell announced that they will put the concerns into a more formal letter. Member Lindsay Buck wanted it particularly noted that they would remove the structure if there are negative impacts to our shoreline.

Peter Pettie suggested asking for opinions from various participants involved such as the turtle people who are opposed to breakwaters, the three firms that are retained that work on breakwaters, or Manalapan.

Public Works Director Brazil noted that the professionals are working for their client and have published and given their opinion to the clients. The Town took it further to get another consultant who was not involved previously for the south end of Reach 8.

Mike Brown, Palm Beach Civic Association, asked how to measure the down drift impact and how was it tied to the breakwaters. Public Works Director Brazil answered that it was pre vs. post physical surveys. To have a permit approved, there has to be a lot of historical information.

Member Hicks wanted to discuss sand sourcing. The CPE report did a sand source study and asked how extensive that study was. Public Works Director Brazil indicated a thorough study was done, generally near shore, and confined to the limits of the Town of Palm Beach. CPE identified a limited amount of sand sources relatively near shore and the bathymetric channels shallow. Member Hicks also asked about doing due diligence, but in the end it will come back to good quality sand and finding good sources of sand. He asked that the Shore Protection Board focus on a more extensive sand source investigations, including offshore and other outside areas, possibly Bahamian sand.

Vice Chair Frank agreed with Member Hicks. He stated that the idea of finding a new sand source has risen to the top of the priority list. Town Manager Elwell added it will be a priority.

Town Manager Elwell wanted to clarify the Singer Island project and pointed it out on the wall map of the shoreline. He explained what Dan Bates from DERM has relayed to him about why they are confident the project will not affect the Town's shoreline. Town Engineer Bowser clarified further and pointed out an example of a sand bar on the wall map. He stated that Palm Beach County permits the shoreline for other municipalities. He noted that we have good relations with other municipalities, such as Manalapan.

1 Member Katz asked to make comments about the agenda here. He noted that they have been
2 asked to rank and establish the priorities in order to be able to craft a coastal management plan
3 to present to the Town Council.
4

5 Town Manager Elwell noted that the short answer is "not exactly". He asked Member Katz to
6 listen to what is being asked of the board today, and that may answer some of his questions. He
7 noted that the Shore Board Members were appointed to represent the citizens of the community
8 and to make recommendations to the Town Council, because the level of intensity required for
9 issues this complicated and this important, was greater than what the Town Council was able to
10 do alone. They wanted a Shore Protection Board that would be its representatives of the
11 community to make recommendations about what ought to be done.
12

13 There is a balance to bring the best recommendations of how to proceed, by staff, to the Board,
14 but there is also some policy/recommending/prioritizing role that the Board Members have. In
15 that context, Town staff is trying to assist between now and October in creating a plan the board
16 would be comfortable providing to the Town Council. It is not a plan that is fixed in time and it
17 will be ever changing.
18

19 Town Manager Elwell continued that the first responsibility is to submit a plan to the Town
20 Council by November. In the future, the plan will be ever changing and can be revamped and
21 reprioritized. It is a very expensive undertaking and can be time intensive. He suggested
22 submitting projects that are small, medium and large. The reason for that is because of the cost
23 and the permitting is a lengthy process.
24

25 The small plan would be the minimum that the Town can do, and are the items that are required
26 by either Federal or State laws. That would be a baseline and the Town could not do any less
27 than that. Added to that is maintenance of the Inlet, Sand Transfer Plant, and few other items.
28

29 The maximum plan, as it was shown to the Board Members, may not be enough. What is shown
30 are the items, that if money were not an issue, what would the Town do. All the different
31 possibilities were listed as projects. He added that in reality, there will have to be a combination
32 of both and meet in the middle.
33

34 Member Katz stated that Town Manager Elwell did address most of his concerns. The plan
35 needs to give creditability to the Board. The Shore Protection Board needs to be realistic and
36 there are imminent projects and most have been addressed and money is an issue. Budgets are
37 tight. There also needs to be flexibility in the long term. Projects and the ocean will change.
38 The last thing he suggested was that there are nine engineering firms on contract with the Town,
39 and he asked for a peer review.
40

41 Member Goldstein agreed that having a peer review was a good idea.
42

43 Vice Chair Frank stated that staff has presented numerous ideas and proposals along with their
44 opinions on what order to put them in. He is not sure what more the engineers could provide.
45 Member Hicks agreed with Vice Chair Frank and said it would be difficult to scope the projects
46 without researching themselves. He stated it would be difficult and a long process.
47

Member Katz asked for overall feedback from someone who knows the issues, such as some of the Town consultants. Member Goldstein asked if they could come to the next Shore Protection Board meeting and help the Board with the last step.

Motion made by Member Katz, seconded by Member Goldstein for the Town approach Coastal Technology Inc. and CSI to validate and give input to the Shore Board plan. On voice vote, the motion carried unanimously.

XIII. SHORE PROTECTION BOARD'S COASTAL MANAGEMENT PLAN TO BE SUBMITTED TO TOWN COUNCIL [Robert Weber, Coastal Coordinator]

A. Content of Deliverable

Public Works Director Brazil announced that the large sheets he handed out had a reverse error but the backup that had been provided was correct. The "small" was labeled "large", and "large" was labeled "small". He apologized for the error.

There was a lengthy discussion about how to present the data to the Town Council. It was decided collectively that:

- The mandatory Federal and State expenditures would be noted in some way.
- Town Manager Elwell will create public information materials for the public.
- Include the year 2009 on the sheets, even though the money had been approved and/or spent.
- Include the list of objectives with the spreadsheets, or as part of an introductory narrative memo.
- Regional Sand Search will be added to 2010 and 2011 on the small scale plan.
- Yearly Aerial Photography would be added to the minimum requirement as it becomes a basis for any project.
- Add estimated and actual dollar amounts for projects and show what is reimbursable.
- Identify which projects are town-wide vs. Reach specific.
- Sea walls and privately owned sea walls should be included in the narrative – they are integral to the Town's protection and were not on the spreadsheet.
- Asterisk the minimum required plans, and have only one spreadsheet.
- Town Council directed to have both a short and long term plan – have two sets of priorities and show ten year cycle.
- Add Groin Rehabilitation in 2012 and 2013 in Large Scale Plan
- Continue Lake Worth Inlet Tri-Party Dredging until 2020
- Permitting for projects and could take years
- Show activity and accomplishments from 2009 that the Shore Protection Board has already addressed
- Sand Transfer Plant Phase II will continue for more year
- Reach 2 Dune Restoration if monies become available

- Reach 2 North Ocean Blvd. Seawall carry through to 2012
- Reach 5 add dune project and monitoring in the out-years
- Remove Beach Restoration from in Reach 5
- Add Beach Nourishment long term to Reach 7
- Approach Reach 8 using feeder beach approach
- Place markers for out year dune restoration projects
- Add CCMP to the large scale plan

B. Time Frame For Submittal

Town Manager Elwell indicated that each Shore Board member should individually submit their thoughts to the Coastal Coordinator by September 11, 2009, on the priorities for small, medium and large plans. Balance the needs, wants and resources. They will take the individual input and incorporate that into the next draft. A narrative will be drafted as well as updating the spreadsheets.

At the September 25, 2009, Shore Protection Board Meeting the expectation will be to have a draft plan presented and can be refined. If additional meetings are necessary, they can be decided at that time.

Member Katz thanked Member Lindsay Buck for insisting on holding the meeting today. It was very helpful. Member Goldstein agreed.

Discussion occurred about the logistics of the September 24, 2009 meeting in Fort Lauderdale with the USACOE. Members' names have been submitted and reserved for them. They were reminded to abide by the Sunshine Laws.

The next issue was added to the agenda to be discussed was the Coral issue.

Director of Public Works Brazil indicated that Staghorn and Elkhorn are a species of coral that were thought to be extinct but have recently been discovered off of the shoreline. Last year, a seabed was designated for a protected habitat for the coral for over 500,000 square miles and the Town was successful in limiting that area to south of the Boynton Inlet.

Palm Beach County Reef Rescue asked the National Marine Fisheries Service to increase the seabed to the Lake Worth Inlet. The comment period ended the day before. Director Brazil authorized CSI to prepare a response in order to be active in the process going forward. Due to the short timeframe, the Shore Board was not consulted. The response letter provided by the Town opposed the designation and are prepared to supply additional comments in the future. If the critical habitat designation to the Lake Worth Inlet is approved, it would greatly impact the numerous projects that the Town would undertake. He praised CSI for their in-depth detailed and professional report.

Member Hicks asked about having Jennifer Moore, from the National Marine Fisheries Services come to speak to the Shore Protection Board. Public Works Director Brazil suggested speaking to legal counsel first before inviting them.

Town Manager Elwell indicated that this coral project is moving like a train and they will advise the Shore Board as to what happening at the September 10, 2009 Town Council Meeting. The Town may or may not use Greenberg Traugott. There will be an update provided after the Town Council meeting.

Informational Items:

XIV. MONTHLY SHORELINE CONDITION ASSESSMENT [Robert Weber, Coastal Coordinator]

Photographs were taken pre-storm (tropical Storm Bill) with surveyors per Town Engineer Bowser.

XV. ITEMS FOR FUTURE MEETINGS [Robert Weber, Coastal Coordinator]

Comprehensive Coastal Management Plan (CCMP)

Shore Protection Board's Coastal Management Plan To Be Submitted To Town Council

USACE Road Show Discussion

Groin Assessment Modeling

Critical Beach Erosion Designation In Reach 8

Taxing District

Jocelyn Karaszia, NOAA National Marine Fisheries Service, Reach 7 Discussion

Town Manager Elwell suggested that the Shore Protection Board focus on the draft plan for the next meeting.

Member Goldstein asked Member Katz for his next agenda items. He stated that he wanted an monthly status update, and wants the consultants present every two months. Town Engineer Bowser indicated that will become very expensive. Town Manager Elwell suggested starting with monthly written updates, and that if those reports are not sufficient, then they can come in person at a later date. Member Katz wants them to know that their progress is being monitored.

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XVI. ADJOURNMENT

There being no further business, the Shore Protection Board meeting of Thursday, August 27, 2009 was adjourned at 3:13 p.m.

APPROVED:



E. Llwyd Ecclestone
Chairman