



TOWN OF PALM BEACH

Town Manager's Office

TENTATIVE -
SUBJECT TO
REVISION

SPECIAL TOWN COUNCIL MEETING

AGENDA

TOWN COUNCIL CHAMBERS

MONDAY, DECEMBER 2, 2013

10:30 AM

WELCOME!

The progress of this meeting may be monitored by visiting the Town's website (www.townofpalmbeach.com), selecting the "Your Government" and then selecting "Audio (Live and Archived)." If you have questions regarding that feature, please contact the Office of Information Systems (561) 227-6315. The audio recording of the meeting will appear within 24 hours after the conclusion of the meeting.

- I. CALL TO ORDER AND ROLL CALL
 - a. Mayor Gail L. Coniglio
 - b. David A. Rosow, President
 - c. Robert N. Wildrick, President Pro Tem
 - d. William J. Diamond
 - e. Richard M. Kleid
 - f. Michael J. Pucillo
- II. PLEDGE OF ALLEGIANCE
- III. APPROVAL OF AGENDA
- IV. POTENTIAL POSTPONEMENT OF FY14 COASTAL PROTECTION PROJECTS
[Peter B. Elwell, Town Manager]
- V. ANY OTHER MATTERS
- VI. ADJOURNMENT

PLEASE TAKE NOTE:

Disabled persons who need an accommodation in order to participate in the Town Council Meeting are requested to contact the Town Manager's Office at 838-5410 or through the Florida Relay Service by dialing 1-800-955-8770 for voice callers or 1-800-955-8771 for TDD callers, at least two (2) working days before this meeting.

Post Office Box 2029 * 360 South County Road * Palm Beach, Florida 33480
Telephone (561) 838-5410 * Facsimile (561) 838-5411 * townmanager@townofpalmbeach.com

TOWN OF PALM BEACH

Information for Special Town Council Meeting on: December 2, 2013

To: Mayor and Town Council
Via: Peter B. Elwell, Town Manager
From: H. Paul Brazil, P.E., Director of Public Works
Re: FY 2014 Mid-Town Beach Nourishment
Date: November 27, 2013

STAFF RECOMMENDATION

Town staff recommends that the Town Council reject all bids for both the Mid-Town Beach Nourishment (Bid No. 2014-06) and Reach 7 Partial Beach Nourishment/Reach 8 Dune Restoration (Bid No. 2014-08) projects.

Further, staff requests that Town Council provide direction regarding three (3) identified alternatives for an interim storm protection project during the current fiscal year.

GENERAL INFORMATION

Woods Hole Group (WHG) presented their results and recommendations from their “Technical Review of the Town’s Coastal Management Program” to Town Council, at the June 11, 2013, Town Council meeting. At the same meeting, the FY 2014 Coastal Management budget was approved and Town staff moved toward the implementation phase for the Mid-Town Beach Nourishment project.

FY 2014 Coastal Management Program budget included a full Mid-Town Beach Project and a smaller sand placement in Reaches 7 and 8. Dredged sand would be stockpiled on Mid-Town beach and trucked to Reaches 7 and 8. The Town’s project included approximately 875,000 cubic yards in Mid-Town, 100,000 cubic yards for Reach 7, and approximately 50,000 cubic yards for Reach 8.

During the summer of 2013, the U.S. Army Corps of Engineers (USACE) solicited bids for a dredging of the Jupiter Inlet. Both the Town and Palm Beach County provided the USACE staff with our project information to convey to the prospective bidders. It was our intent to “piggyback” on the Federal contract to save mobilization costs and expedite contracting.

However, when the bids were opened, the lowest responsible bidder for the USACE project did not have the capabilities to perform either the County’s or the Town’s beach nourishment projects. The Town immediately began working on bid packages for the Mid-Town Beach Nourishment project and the Reach 7 Partial Beach Nourishment and Reach 8 Dune Restoration project. Following a 30-day public solicitation, the Town opened bids on November 20, 2013.

There were two (2) bids received for the Mid-Town project. The higher bid was Great Lakes Dredge & Dock at \$27,300,883.50 – which included higher than normal unit costs (\$15+ per cubic yard) and a mobilization/demobilization of nearly \$11.2 million. The lowest bid was Manson Construction Company at \$22,931,697.50 – which also included higher than normal unit costs (\$16+ per cubic yard) and a mobilization/demobilization of \$4.7 million. In recent years, mobilization/demobilization costs for such projects have typically been approximately \$2 million and unit costs have typically been \$12 per cubic yard. We believe that these bids indicate that the dredging industry is still impacted by the ongoing projects in the mid-Atlantic and Northeast region as a result of Hurricane Sandy.

The bid opening for the truck haul portion of the Reach 7 Partial Beach Nourishment/Reach 8 Dune Restoration (Bid No. 2014-08) resulted in a low bid from Arbor Tree & Land, Inc. in the amount of \$1,166,744.20. This is below our consultant's project cost estimate. In contrast to the bidding climate for national dredge companies, local trucking companies have "sharpened their pencils." Unfortunately, even though the truck haul bids received for 2014-08 were reasonable, these bids cannot be accepted unless the dredging bids are accepted due to the stockpile component of the project. The combined Manson and Arbor Tree bids total \$24,098,441.70 – nearly \$10 million above the Town's estimate.

A spring bid solicitation, during the time of year when dredging companies are planning their winter work schedule, should attract bids at or closer to the Town's estimate of \$14.35 million for the combined Mid-Town Beach Nourishment and Reach 7 Partial Beach Nourishment/Reach 8 Dune Restoration as included within the FY 2014 Coastal Management Program budget.

Because Palm Beach County is currently in a similar situation as the Town due to the USACE bid award, the County is preparing to solicit bids for their 800,000+ cubic yard project in the spring. Town staff will explore an opportunity to bid our projects together with Palm Beach County to potentially save on mobilization/demobilization costs.

Should Town Council reject all bids for Bid Nos. 2014-06 and 2014-08, Town staff has identified three (3) possible alternatives for providing interim storm protection during the current fiscal year.

ALTERNATIVE 1

Construct Interim Sand Placement in Reaches 3 and 7 – Award a change order to Applied Technology & Management, Inc.'s (ATM) purchase order to redesign and expeditiously permit a truck-haul interim project in Reach 3 and possibly Reach 7 for construction before the 2014 sea turtle nesting season at a cost of approximately \$4 to \$6 million.

As expected, the north end of both the Mid-Town (between Wells Road and Sunrise Avenue) and Reach 7/Phipps Ocean Park (between Sloan's Curve and Phipps Ocean Park) have eroded at a faster rate than the southern portion of the project areas.

Since the bid opening on November 20, 2013, Town staff has been working with our consultant ATM to develop sand placement alternatives in Reaches 3 and 7 that will provide additional storm protection for both the roadway along Ocean Blvd. and the public infrastructure in Phipps Ocean Park.

North Ocean Boulevard runs parallel to the Reach 3 shoreline between Wells Road and Sunrise Avenue (approximately 2,000 linear feet). The last line of defense along this stretch of the Town maintained road is an older seawall which has largely been buried for many decades. The wall is currently exposed to direct waves when rough seas are present. For project durability, sand

should be placed both north and south of the focused area; therefore, extending north to El Mirasol (approximately 500 feet) and south to Sunset Avenue (approximately 400 feet). A preliminary design of approximately 75,000 cubic yards of Ortona sand would provide storm protection at an average density of 18.6 cubic yards per linear foot from El Mirasol to Sunset Avenue. Table 1 provides a brief comparison between an interim project and the full nourishment.

Table 1 - Reach 3 Sand Placement Comparison

Project	Project Limits	Sand Placement Density (between R-91 and R-92, Wells Road to Seminole Ave.)	Width of Berm from Seawall (at R-92, Approximately Seminole Ave.)	Constructed Mean High Water Position from Seawall (at R-92, Approximately Seminole Ave.)	Volume
Interim Project (FY 2014)	El Mirasol to Sunset Avenue	25 cy/lf	50 ft.	150 ft.	75,000 cy
Nourishment (recommended FY 2015)	Casa Bendita to Breakers	60 cy/lf	103 ft.	225 ft.	275,000 cy

Data courtesy of Applied Technology & Management, Inc.

cy=cubic yards

lf=linear foot

ft.=feet

Phipps Ocean Park has approximately 1,100 linear feet of shorefront. This public property does not have a seawall, nor would it qualify for a seawall. The park's dunes are in an eroded condition. Should additional erosion occur from a storm event, the lifeguard tower may become threatened. The last line of defense for this public property is the dunes. In order to enhance storm protection for the dunes, sand placement on the berm and the existing dune on the order of 20 cubic yards per linear foot would give the best opportunity for the sand to remain until construction occurs in either FY2015 (another interim placement with Mid-Town) or FY2016 (planned Reach 7 Beach Nourishment). Dune restoration north of Phipps Ocean Park to Sloan's Curve (approximately 10,000 cubic yards, approximately 5-10 cubic yards per linear foot) would enhance storm protection for the existing dunes along this 2,000 linear foot stretch of shoreline and would continue to feed sand into Phipps Ocean Park.

The volume of sand needed for the activities in Reaches 3 and 7, as described above, would be approximately 105,000 cubic yards. The E.R. Jahna Ortona mine has about 25,000 cubic yards of beach compatible sand available immediately and can have another 80,000 cubic yards ready in approximately two weeks.

For a comparison of trucking 105,000 cubic yards, the Town's truck haul project from the Ortona mine into Reaches 4, 7, and 8 between December 2010 and March 2011 in response to the impacts from Tropical Storm Fay provided approximately 133,000 cubic yards.

ALTERNATIVE 2

Perform Seawall Monitoring and Prepare for Emergency Dune – Award a contract to a coastal consultant to monitor the condition of the public and private seawall that runs along Ocean Boulevard between Wells Road and Sunrise Avenue. In addition, complete the necessary

permitting and purchasing procedures to have a sand placement project ready should conditions require action before 2014 sea turtle nesting season.

Should the roadway protective seawall along North Ocean Boulevard between Wells Road and Sunrise Avenue remain exposed until later in 2014, the integrity of the structures can be monitored monthly (or more often, if conditions warrant). This would require award of a small contract to a coastal engineering firm on the Town's roster. The expected cost of this effort would not be expected to exceed \$25,000.

In addition to the structural monitoring effort, Town staff would take steps to be fully prepared to place sand this spring if conditions worsen. Should time become a concern, an option in the short term to expedite contracting may be to piggyback with a new Palm Beach County continuing services contract with either Rio-Bak or Eastman using the Stewart mine. However, the preferred longer term option is for the Town to solicit for continuing services for truck haul operations. We could then place sand immediately for smaller emergency projects anywhere such action may be needed.

ALTERNATIVE 3

No Additional Activities in FY 2014 – Town staff will continue to actively monitor shoreline conditions and focus all sand placement preparations for FY 2015.

Preparations for Mid-Town Beach Nourishment and Phipps Ocean Park Partial Beach Nourishment with Reach 8 Dune Restoration will continue for springtime bidding and construction on or after November 1, 2014. Storm protection in Reach 3 will be reliant on the existing seawalls – which have performed this task well during the past year and have shown no signs of failure. Storm protection in Phipps Ocean Park would be reliant on the existing dunes – which are eroded, but no structures are currently threatened.

SPECIAL CONDITIONS

1. If a sand placement alternative is chosen by Town Council, staff is confident that the FDEP Beach Management Agreement will allow for swift State permitting. FDEP staff have been very helpful in meeting the Town's individual State project approval needs. However, Federal permitting has been challenging even with the planned FY 2014 Mid-Town Beach Nourishment project. The Town will likely need to significantly coordinate with the USACE and their advisory agencies to obtain Federal approvals for a modified project in time for construction before the 2014 sea turtle nesting season.

2. Town staff has discussed the results from the Mid-Town bidding process with Bob Hamilton of Woods Hole Group and the identified alternatives available to the Town. In preparation for the December 2, 2013 Special Town Council meeting, attached is a letter from Mr. Hamilton.

FUNDING/FISCAL IMPACT

Award of the low bids from Bid Nos. 2014-06 and 2014-08 would result in construction costs that are nearly \$10 million over budget for FY 2014. Staff does not recommend awarding these bids.

Funds for an interim sand placement in Reaches 3 and 7 (between \$4 and \$6 million) have not been included in the FY 2014 budget. Funding for the Mid-Town project could be re-programmed to expedite this project. The potential impact to the long term funding plan for the coastal protection program is presented on the attached four (4) PowerPoint slides prepared by Finance Director Jane

Struder. With a sand placement in Reach 3 of approximately 75,000 cubic yards, most of the sand should remain in the system so volumes for next year in Mid-Town should be incrementally less which may slightly reduce the cost for construction next year.

Anticipated cost of seawall monitoring and reporting would be approximately \$25,000. Funds for this effort could be authorized by the Town Manager and expended from the Public Works Department's operating budget.

PURCHASING REVIEW

This item has been reviewed by the Purchasing Division and approved as recommended.

Attachments

RW

cc: Shore Protection Board
Jane Struder, Director of Finance
Robert Weber, Coastal Coordinator
Lynda Venne, Purchasing Agent

Sent By Electronic Mail

November 27, 2013

Mr. Robert Weber, Coastal Coordinator
Town of Palm Beach

Email: RWeber@TownofPalmBeach.com

Re: FY2014 Mid-Town Beach Nourishment Project

Dear Mr. Weber,

Woods Hole Group reviewed the Draft Memo to Town Council regarding the FY 2014 Mid-Town Beach Nourishment project and alternatives. It is unfortunate that the bids for the Mid-Town project were so high, and we support the Town's recommendation to reject these bids. We also support the Town's plan to rebid the project in spring 2014, anticipating the potential to substantially reduce the cost to a budget more consistent with the Town's plan. Of course, there remains uncertainty in the dredge industry regarding timing of completion of the current high workload associated with Hurricane Sandy and other projects, as well as new pressures that may arise; however, the opportunity to reduce the eight (8) figure differential between the bids and the plan should be pursued.

We also believe the Town conceived three (3) appropriate alternative actions considering the recommendation not to proceed with the full Mid-Town project at this time. We emphasize these alternatives in no way represent a viable long-term option to the Mid-Town Project. Rather, they represent interim measures until the Mid-Town Project can be implemented.

Alternative 1 includes 105,000 cubic yards of truck-hauled sand from Ortona. The primary advantage of Alternative 1 is the introduction of high-quality sand to eroded areas in the short-term, allowing for action now instead of waiting for the dredge marketplace to stabilize. A primary disadvantage is the relatively high cost (likely to be ~\$4.5M), which amounts essentially to half the difference between the elevated dredge bids and the Town's budget for the Mid-Town project. There also is a highly uncertain level of incremental protection provided by the trucked sand identified in Alternative 1. In Reach 3, adding 25 cubic yards per lineal foot (cy/ft) will help absorb the 15-year protection (which existing seawalls may also be able to absorb, subject to the engineering inspection recommended in Alternative 2) and add stability to the structure toe, but will provide limited incremental storm protection as compared to the full Mid-Town footprint. In Reach 7, adding sand from Phipps Park north to Sloans Curve will also provide limited incremental protection. 20 cy/ft at Phipps is small compared to the Phipps nourishment template. 5 cy/ft north to Sloans Curve will be at risk of erosion and redistribution even during a moderate wave condition at a normal high tide, particularly with limited sand south at Phipps Park. Proceeding with Alternative 1 should be done only with limited

expectations on performance. Given the level of interest in prior Reach 7 project performance, the community should be made very clear about the limited expectations on performance should the Town elect to proceed with Alternative 1. As recommended in our technical review of the coastal program, Woods Hole Group strongly encourages the Town to proceed with full template beach nourishment projects having clear engineering design expectations. Scaled-back measures are only recommended in response to a truly short-term emergency condition or critical infrastructure at risk. Woods Hole Group needs to defer to Town staff and local consultants with more recent observations and survey data to determine whether there is presently a critical situation.

Alternative 2 does not include immediate placement of sand, instead relying on more detailed structural and shoreline inspections as the basis for identifying whether urgent conditions arise that require action to protect critical infrastructure. The primary advantage of Alternative 2 is cost savings of some ~\$4.5M not currently in the plan, less approximately ~\$25k for regular structural inspections. The primary risk, of course, is ongoing exposure. If the Town is willing to accept this ongoing risk and there is not a current critical condition, the Alternative 2 approach of having more regular inspections, combined with proactive permitting efforts to allow for emergency sand placement as needed, will allow for an adaptive management approach to help address this short-term risk. It is also important for the Town to stay informed and help ensure the availability of beach quality sand from Ortona or other sources, should an emergency situation arise. The Town should also proactively identify transport companies, so there are services available on short notice.

Alternative 3 recommends the status quo, with no action other than the monthly observations. Given the potential exposure of certain areas in Reaches 3, 7, and 8, the incremental cost of more comprehensive inspections identified in Alternative 2 will help manage this risk. For instance, structures at the north end of Reach 3, which have not been subject to regular wave activity in some time, may be at risk of damage which can be identified through the Alternative 2 engineering inspections to determine whether a critical erosion situation exists or arises.

Woods Hole Group appreciates the opportunity to review these alternatives, and looks forward to the opportunity to work with the Town in the future. Please contact me directly with any questions or requirements for additional information.

Sincerely,

The Woods Hole Group, Inc.



Robert P. Hamilton Jr., M.C.E.

Vice President Business Development/Coastal Engineer

Town of Palm Beach

**Options for Financing
New Temporary Coastal Project**

Scenario 1 - Original Plan

Scenario 1 - Original Plan Presented October 8, 2013 Using Bonds/PAYGO/Internal Loans							
Fiscal Year	Beginning Balance	Revenue for Coastal Program	Project Fund Deposits	Project Costs	Interest Earnings (Expense)	Ending Period Balance	Internal/Other Loan Balance
2013	20,383,545					20,383,545	
2014	20,383,545	750,000	11,900,000	22,136,000	(36,576)	10,860,969	
2015	10,860,969	4,776,607		3,022,000	(369,866)	12,245,710	
2016	12,245,710	4,919,905	-	18,780,000	(321,400)		(1,935,785)
2017	(1,935,785)	5,067,502		1,824,000	(817,752)	489,966	
2018	489,966	5,219,527		1,833,000	(732,751)	3,143,742	
2019	3,143,742	5,376,113		2,508,000	(639,973)	5,371,882	
2020	5,371,882	5,537,397		1,860,000	(561,988)	8,487,291	
2021	8,487,291	5,703,519	-	20,256,000	(452,948)		(6,518,139)
2022	(6,518,139)	5,874,624		1,911,000	(978,138)		(3,532,652)
2023	(3,532,652)	6,050,863		1,926,000	(873,646)		(281,436)
2024	(281,436)	6,232,389		2,000,000	(759,854)	3,191,099	
2025	3,191,099	6,419,360		2,000,000	(638,315)	6,972,145	
Total		61,927,807	11,900,000	80,056,000	(7,183,207)		
Assumes a 3% increase in revenue per year							

Scenario 2

- Additional \$5,000,000 Project Cost
- No New Revenue

Scenario 2 -Original Plan Additional \$5,000,000 Costs Using Bonds/PAYGO/Internal Loans							
Fiscal Year	Beginning Balance	Revenue for Coastal Program	Project Fund Deposits	Project Costs	Interest Earnings (Expense)	Ending Period Balance	Internal/Other Loan Balance
2013	20,383,545					20,383,545	
2014	20,383,545	750,000	11,900,000	13,736,000	(36,576)	19,260,969	
2015	19,260,969	4,776,607		16,422,000	(75,866)	7,539,710	
2016	7,539,710	4,919,905	-	18,780,000	(486,110)		(6,806,495)
2017	(6,806,495)	5,067,502		1,824,000	(988,227)		(4,551,220)
2018	(4,551,220)	5,219,527		1,833,000	(909,293)		(2,073,985)
2019	(2,073,985)	5,376,113		2,508,000	(822,589)		(28,461)
2020	(28,461)	5,537,397		1,860,000	(750,996)	2,897,939	
2021	2,897,939	5,703,519	-	20,256,000	(648,572)		(12,303,115)
2022	(12,303,115)	5,874,624		1,911,000	(1,180,609)		(9,520,099)
2023	(9,520,099)	6,050,863		1,926,000	(1,083,203)		(6,478,440)
2024	(6,478,440)	6,232,389		2,000,000	(976,745)		(3,222,797)
2025	(3,222,797)	6,419,360		2,000,000	(862,798)	333,766	
Total		61,927,807	11,900,000	85,056,000	(8,821,586)		
Assumes a 3% increase in revenue per year							

Scenario 3

- Additional \$5,000,000 Project Cost
- Additional \$500,000 Annual Revenue

Scenario 3 -Additional \$5,000,000 Costs and \$500,000 Additional Annual Revenue Using Bonds/PAYGO/Internal Loans							
Fiscal Year	Beginning Balance	Revenue for Coastal Program	Project Fund Deposits	Project Costs	Interest Earnings (Expense)	Ending Period Balance	Internal/Other Loan Balance
2013	20,383,545					20,383,545	
2014	20,383,545	750,000	11,900,000	13,736,000	(36,576)	19,260,969	
2015	19,260,969	5,276,607		16,422,000	(75,866)	8,039,710	
2016	8,039,710	5,434,905	-	18,780,000	(468,610)		(5,773,995)
2017	(5,773,995)	5,597,952		1,824,000	(952,090)		(2,952,132)
2018	(2,952,132)	5,765,891		1,833,000	(853,325)	127,434	
2019	127,434	5,938,868		2,508,000	(745,540)	2,812,762	
2020	2,812,762	6,117,034		1,860,000	(651,553)	6,418,242	
2021	6,418,242	6,300,545	-	20,256,000	(525,362)		(8,062,575)
2022	(8,062,575)	6,489,561		1,911,000	(1,032,190)		(4,516,204)
2023	(4,516,204)	6,684,248		1,926,000	(908,067)		(666,023)
2024	(666,023)	6,884,775		2,000,000	(773,311)	3,445,441	
2025	3,445,441	7,091,319		2,000,000	(629,410)	7,907,350	
Total		68,331,704	11,900,000	85,056,000	(7,651,899)		
Assumes a 3% increase in revenue per year							

Tax Impact

	Original Plan	Scenario 3
Cost of Program	\$84,189,000	\$89,189,000
Annual Property Tax Revenue Required	\$4,776,607	\$5,276,607
Additional Millage Rate	0.4013	0.4433
Annual Taxes Per \$1 Million	\$401	\$443
Percentage Increase	12.4%	13.7%