



February 25, 2011

MEMO

TO: Cliff Ogburn, Town of Nags Head (NC)

FROM: Haiqing L Kaczowski (PE), Project Engineer

Timothy W Kana (PG), Project Director

RE: Nags Head Beach Nourishment [CSE 2203]

**Evaluation of Bids Received, and Recommendation for Award**

Bids for the Nags Head Beach Nourishment project were received on Tuesday, 22 February 2011. **Three** (3) bids were opened and read aloud at 2:00 p.m. in the conference room of Nags Head Fire Station 16. The bid form (Section C-410), noncollusion affidavit (C-420), bid bond (C-430), list of subcontractors (C-440), equipment list (C-450), with supporting documentation and bidder's North Carolina license number were enclosed in the submitted bid package.

We have reviewed the three bids that were submitted from Great Lakes Dredge & Dock Company (GLDD), Manson Construction Company (Manson), and Weeks Marine (Weeks). Based on the bid items submitted by each bidder, we evaluated the bids in two ways: (1) to evaluate the bids by the **Total Cost** of the Work of 4.6 million cubic yard of sand (permitted maximum scope of work) and (2) to evaluate the bids by the **Total Volume** of sand each bidder can accomplish under the Town's \$32 million construction budget. The itemized bid tabulation for all of the bids submitted and the bid evaluation are enclosed for your information.

- (1) **Total Cost:** Based on the bid items submitted by GLDD, the construction cost of the maximum permitted 4.6 million cubic yards of Work is in the amount of \$30,184,000 for Bid A (8-month schedule) and \$28,394,000 for Bid B (16-month schedule). These amounts include the cost of mobilization/demobilization, dredging, placement, grading and environmental protection as specified under federal and state permits. For Bid A, GLDD's bid is \$8.266 million less than the bid provided by Weeks and \$9.936 million less than the bid provided by Manson; and \$9.056 million and \$8.256 million less than the other two bidders (respectively) for Bid B.
- (2) **Total Volume:** If the Town's construction budget is \$32 million, GLDD will not only be able to accomplish dredging and placing the maximum permitted volume of sand (ie – 4.6 million cubic yards), but will also be about \$1.82 million under the Town's budget for Bid A and about \$3.61 million under budget for Bid B. Weeks will be able to accomplish about 3.77 million cubic yards of sand for Bid A and about 3.85 million cubic yards for Bid B.



Manson's bid is similar to Weeks' bid. The total volume of sand that can be accomplished by Manson will be about 3.39 million cubic yards for Bid A and about 3.83 million cubic yards for Bid B.

In conclusion, evaluated by either total cost or total volume, **GLDD provided the lowest bid and is the Apparent Low Bidder for the project.**

Regarding GLDD's two bids for Bid A (8-month schedule) and Bid B (16-month schedule), Bid B costs about \$1.8 million less than Bid A, or Bid B would provide ~350,000 cubic yards more sand for a given budget. We have weighed the lower construction cost or extra sand against the expected annual erosion losses of ~275,000 cubic yards per year. We believe that project performance as well as perceptions of improvement will be better if the entire project is constructed over a shorter period. Therefore, **CSE recommends the Town accept GLDD's Bid A (ie – complete maximum permitted 4.6 million cubic yards of Work by December 2011).**

Founded in 1890, GLDD is America's largest dredging contractor and a major international competitor. They have accomplished beach nourishment projects throughout the U.S. coast. GLDD has extensive experience in beach restoration projects, some as large as 6 million cubic yards. CSE has worked with GLDD on projects at Seabrook Island (SC, 1990), Pine Knoll Shores & Indian Beach (NC, 2001), Edisto Beach & Hunting Island (SC, 2006) and Emerald Isle, Pine Knoll shores & Indian Beach (NC, 2007). GLDD has the largest fleet of ocean-certified dredges in the United States. They identified four (4) dredges that may be available for this project and anticipate accomplishing 650,000 to 750,000 cubic yards per month per dredge. We believe the production estimates are realistic based on previously completed projects, and GLDD would be able to accomplish the Work within budget and on schedule.

Coming in with extensive experience, up to four available dredges, and a bid 27 percent lower than the second lowest bid, GLDD is clearly the Apparent Low Bidder. **CSE recommends GLDD be issued the Notice of Award for the project.**

Once the Town makes a decision and awards the Work, CSE will coordinate with the Contractor and the Town and determine an Order of Work prior to construction, which will be efficient and in consideration of the town's scheduled activities along the oceanfront.

# BID TABULATION

Beach Nourishment - Nags Head, North Carolina  
2 p.m., 22 February 2011

	Bidder 1	Bidder 2	Bidder 3
<b>Name</b>	Great Lakes Dredge & Dock Co. 2122 York Road Oakbrook, Illinois Zip code: 60523	Manson Construction 4309 Pablo Oaks Court Suite 1 Jacksonville, Florida Zip code: 32224	Weeks Marine 304 Gaille Drive Innwoods business Park Covington, Louisiana Zip code: 70433
Addendum Acknowledged	1√ 2√ 3√	1√ 2√ 3√	1√ 2√ 3√
<b>Bid Items</b>			
Base Bid A - Dredging and Placement A1	17,400,000	24,000,000	23,250,000
Base Bid A - Mob/Demob A2	2,399,000	5,400,000	2,550,000
Base Bid A lump sum = A1 + A2	19,799,000	29,400,000	25,800,000
Base Bid A unit price (\$/cubic yard)	5.80	8.00	7.75
Alternate Bid A - unit price A3	5.08	6.70	7.75
Alternate Bid A - Mob/Demob A4	2,257,000	0	250,000
Base Bid B - Dredging and Placement B1	15,150,000	22,500,000	21,750,000
Base Bid B - Mob/Demob B2	4,700,000	4,550,000	3,850,000
Base Bid B lump sum = B1 + B2	19,850,000	27,050,000	25,600,000
Base Bid B unit price	5.05	7.50	7.25
Alternate Bid B - unit price B3	5.34	6.00	7.25
Alternate Bid B - Mob/Demob B4	0	0	250,000
Suspension Cost (\$/day)	180,000	250,000	175000
<b>Document List</b>			
Bid Form C-410	√	√	√
Noncollusion Affidavit C-420	√	√	√
Bid Bond C-430	√	√	√
List of Subcontractors C-440	√	√	√
Equipment List C-450	Hopper 3 Cutterhead 1	Hopper 2 Cutterhead 0	Hopper 2 Cutterhead 0
License Number	61566	67410	63823

## BID EVALUATION

	Bidder 1	Bidder 2	Bidder 3
<b>Name</b>	Great Lakes Dredge & Dock Co.	Manson Construction Co.	Weeks Marine, Inc.
<b>Evaluated by Total Cost (\$) of permitted 4.6 million cubic yard of Work</b>			
Bid A (completed by December 12, 2011)	30,184,000	40,120,000	38,450,000
Bid B (completed by August 12, 2012)	28,394,000	36,650,000	37,450,000
<b>Evaluated by Total Volume (cubic yards) if construction budget is \$32 million</b>			
Bid A (completed by December 12, 2011)	> 4.6 million cy	3,388,060	3,767,742
Bid B (completed by August 12, 2012)	> 4.6 million cy	3,825,000	3,848,276