



INDIAN RIVER COUNTY
SOLID WASTE DISPOSAL DISTRICT
BOARD MEMORANDUM



Date: April 2, 2018
To: Jason E. Brown, County Administrator
From: Vincent Burke, P.E., Director of Utility Services
Prepared By: Himanshu H. Mehta, P.E., Managing Director, Solid Waste Disposal District
Subject: Award of Bid for Landfill Segment 3 Cell 2 Expansion, Segment 2 Partial Closure and Landfill Gas System Expansion (Bid #2018025)

DESCRIPTIONS AND CONDITIONS:

The Indian River County (IRC) Solid Waste Disposal District (SWDD) requested the solicitation of bids for the construction of the Landfill Segment 3 Cell 2 Expansion, Segment 2 Partial Closure and Landfill Gas System Expansion. SWDD utilized CDM Smith to provide the design, permitting and bidding assistance for this project in accordance with the approved Work Order No. 1 dated July 18, 2017, and Amendment No. 1 to Work Order No. 1 dated October 3, 2017.

The proposed new cell is Cell 2 of Segment 3 (approximately 10.6 acres in size), which will be located immediately to the east of the existing Segment 3, Cell 1. The proposed partial closure of Segment 2 (approximately 25 acres in size) includes closure of the Segment 1 infill vertical expansion area and the final elevations of Segment 2. Expansion of the landfill gas system within Segment 2 is proposed to be constructed concurrently with the partial closure of Segment 2 so that the final components can be installed prior to the closure cap being constructed.

BID RESULTS:

Advertising Date: January 1, 2018
Bid Opening Date: March 1, 2018
Demandstar Broadcast to: 656 Subscribers
Specifications/Plans Downloaded by: 52 Vendors
Replies: 3 Vendors

Bidder	Location	Total Bid
Thalle Construction Company, Inc.	Hillsborough, North Carolina	\$16,196,200.00
West Construction, Inc.	Lantana, Florida	\$17,307,931.94
Southeast Environmental Contracting, Inc.	Hahira, Georgia	\$18,543,800.00

ANALYSIS:

SWDD is required by the Florida Department of Environmental Protection (FDEP) to properly close landfill cells that have reached final capacity. In addition, SWDD is required to maintain disposal capacity of the landfill to handle current and future waste from IRC residents.

The Segment 2 area has reached its final permitted capacity elevation of 180 ft and therefore partial closure of the north, south and western portion, including the top, must be completed. The current Segment 3 Cell 1 is approximately 50% full; therefore, a new Segment 3 Cell 2 must be constructed to maintain future capacity.

In addition, this project provides the expansion of the landfill gas system, which will provide additional odor control, reduce the possibility of a fire/explosion, and provide a potential to market the landfill gas. Also, this project includes the expansion of the water main system to the interior parts of the landfill with the installation of a fire hydrant near the yard waste processing site, which can provide critical water protection in case of a fire.

ENGINEER’S ESTIMATES:

The 2014 Solid Waste Master Plan prepared by Neel-Schaffer, Inc. estimated the Segment 2 Partial Closure and Landfill Gas Expansion project cost at \$6,500,000.00 and the Segment 3 Cell 2 Expansion project cost at \$4,505,000.00 for a total cost of \$11,005,000.00 in 2014 dollars.

On March 1, 2018, CDM Smith provided a 100 Percent Opinion of Probable Construction Cost for the project in the amount of \$19,200,000.00 as included in Attachment 2. The Segment 2 Partial Closure and Landfill Gas Expansion project was estimated at a cost of \$11,700,000.00, and the Segment 3 Cell 2 Expansion project was estimated at a cost of \$7,500,000.00. CDM Smith provided this estimate based on the material prices obtained from recognized suppliers and review of recent bids such as the St. Lucie County and Pinellas County expansion and closure projects.

ENGINEER’S BID EVALUATION:

On March 1, 2018, the Indian River County Purchasing Division provided a summary of the bid tabulation confirming that each of the bidders was responsive in submitting all of the required information in the bid documents. See Attachment 1 for the Bid Tabulation.

On March 26, 2018, CDM Smith provided the evaluation of bids for this project as summarized below.

Bidder	Grand Total Base Bid Items No. 1-6	Bid Item No. 7 Contingency (10%)	Grand Total Base Bid Item Nos. 1 -7
Thalle Construction Company, Inc. ⁽¹⁾	\$14,576,600.00	\$1,457,660.00	\$16,034,260.00
West Construction, Inc. ⁽²⁾	\$15,723,097.14	\$1,572,309.71	\$17,295,406.85
Southeast Environmental Contracting, Inc.	\$16,858,000.00	\$1,685,800.00	\$18,543,800.00

(1) Per CDM Smith, Thalle calculated the 10 percent contingency as 10 percent of the total bid, i.e., \$1,619,600.00 for a total bid of \$16,196,200.00, not as an additional 10 percent of the Base Bid Items 1-6. Therefore, the actual contingency is \$1,457,660.00 and the Grand Total Base Bid for Items Nos. 1-7 is \$16,034,260.00.

(2) Per CDM Smith, West Construction had some minor calculation differences when taking the bid quantities times their unit bid prices. Therefore, CDM Smith reduced their Grand Total Base Bid Items No. 1-6 from \$15,734,483.58 to \$15,723,097.14 which is a minor difference of \$11,386.44. The contingency was reduced accordingly for a Grand Total Base Bid Item Nos. 1-7 of \$17,295,406.85.

CDM Smith also found each of the bidders responsive and performed a positive reference check on the apparent low bidder. CDM Smith recommends that the construction contract be awarded to the “lowest, responsive, responsible bidder”, Thalle Construction Company, Inc. of Hillsborough, North Carolina for IRC Bid No. 2018025. See Attachment 3 for CDM Smith’s evaluation of bids as well as summary below. CDM Smith recommends the award of a contract Base Bid Items 1-6 in the amount of \$14,576,600.00 with a contingency of 10% of the base bid in the amount of \$1,457,660.00, with a grand total amount of \$16,034,260.00. All contingency amounts will require approval on a case-by-case basis for inclusion in the project.

SUMMARY OF CONSTRUCTION COSTS		
DESCRIPTION	AMOUNT	PERCENTAGE
Construction – Segment 3 Cell 2	\$6,467,800.00	44.4%
Construction – Segment 2 Closure	\$8,108,800.00	55.6%
Grand Total Base Bid Item Nos. 1 -6	\$14,576,600.00	100.00%
Contingency (10%)	\$1,457,660.00	
Grand Total Base Bid Item Nos. 1 -7	\$16,034,260.00	

PERMITTING STATUS:

On January 26, 2018, CDM Smith submitted to the FDEP a landfill intermediate modification to permit 0128769-022-SC (construction) and minor modification to permit 0128769-023-SO (operations). On March 12, 2018, the FDEP issued a “Notice of Intent to Issue Permit Modification Nos. 0128769-026-SC-IM & 0128769-027-SO-MM”. Per FDEP requirements, SWDD published this notice in the Press Journal on March 15, 2018. On April 2, 2018, the FDEP issued the permit to SWDD to proceed with the construction of this project.

On March 14, 2018, CDM Smith submitted to the FDEP a Notice of Intent to use the General Permit for Construction of Water Main Extensions. On March 21, 2018, the FDEP issued a “Notification of Acceptance of Use of a General Permit”.

The contractor would be responsible for obtaining any other necessary construction/building permits identified in the bid documents.

FUNDING:

The Segment 3 Cell 2 Expansion and Segment 2 Partial Closure projects are funded from separate revenue sources; specifically, the closure cost is paid from an escrow account long established per FDEP requirements. Annually, CDM Smith prepares a Financial Assurance Report in which they recommend amounts that the SWDD should collect and place in the closure escrow account.

The Segment 2 Partial Closure project has been given a substantial completion time of 180 calendar days, and the Segment 3 Cell 2 expansion project has been given a substantial completion time of 360 calendar days. Therefore, both projects will include work/invoicing in the current fiscal year and next fiscal year.

Please note, there will be engineering construction services that will be required to oversee the project due to its technical and involved construction process. These costs are provided in more detail in a separate agenda item for SWDD Board approval. However, a summary of these costs is included below to provide an overall budgetary impact from these projects.

SUMMARY OF ENGINEERING SERVICES				
DESCRIPTION	EXPANSION	CLOSURE	AMOUNT	APPROVAL DATE
Phase I – Update/Revise Drawings for Final Design	\$43,334.00	\$88,486.00	\$131,820.00	07-18-2017
Phase II – Final Design and Bid and Permitting Services	\$330,964.00	\$227,715.00	\$558,679.00	10-03-2017
Phase III – Engineering Services During Construction	\$570,627.00	\$751,523.00	\$1,322,150.00	Pending 04-10-18
Total Engineering Services	\$944,925.00	\$1,067,724.00	\$2,012,649.00	

Below is a summary of both the engineering and construction costs in terms of the two revenue funding sources.

SUMMARY OF ENGINEERING AND CONSTRUCTION COSTS BY FUNDING SOURCE			
DESCRIPTION	EXPANSION	CLOSURE	TOTAL
Phase I – CDM Smith	\$43,334.00	\$88,486.00	\$131,820.00
Phase II – CDM Smith	\$330,964.00	\$227,715.00	\$558,679.00
Phase III – CDM Smith	\$570,627.00	\$751,523.00	\$1,322,150.00
Total Engineering Costs	\$944,925.00	\$1,067,724.00	\$2,012,649.00
Total Base Bid – Thalle Construction Company	\$6,467,800.00	\$8,108,800.00	\$14,576,600.00
Construction Contingency (10%)	\$646,780.00	\$810,880.00	\$1,457,660.00
Total Construction Costs	\$7,114,580.00	\$8,919,680.00	\$16,034,260.00
Total Engineering and Construction Costs	\$8,059,505.00	\$9,987,404.00	\$18,046,909.00

In the current Fiscal Year 2017/18, we have budgeted \$2,252,500 for the Segment 3 Cell 2 Expansion with a projected Capital Improvement Plan of \$2,252,500 for Fiscal Year 2018/19. This will not be sufficient to cover the estimated construction cost of \$6,467,800 plus the 10% contingency in the amount of \$646,780 for a total estimated amount of \$7,114,580 for Thalle Construction Company, Inc. When combining the engineering services for Segment 3 Cell 2 Expansion in the amount of \$944,925, the total overall expansion project cost is \$8,059,505. Therefore, approximately \$5,807,005.00 will need to be budgeted in the Fiscal Year 2018/19.

Based on the previous recommendations from CDM Smith, we have approximately \$12,300,000.00 in the escrow account for the Segment 2 Partial Closure project, which is sufficient to cover the estimated construction cost of \$8,108,800 plus the 10% contingency in the amount of \$810,880 for a total estimated amount of \$8,919,680 for Thalle Construction Company, Inc. The escrow account is also sufficient to cover the engineering construction services for closure in the amount of \$1,067,724 which brings the total overall closure cost to \$9,987,404.

DESCRIPTION	EXPANSION	CLOSURE
Total Needed Budget	\$8,059,505.00	\$9,987,404.00
Total Available Budget (as of FY17-18)	\$2,252,500.00	\$12,300,000.00 (*)
Total Projected Budget (for FY18-19)	\$5,807,005.00	\$0.00
* Please note, per FDEP, funding in the escrow account is strictly to be used for closure purposes only.		

As with any construction project, there is a possibility of delays due to weather and other unforeseen circumstances that may impact the overall schedule and budget of both the engineering and/or construction costs.

BID NO. 2018025 AWARD TO THALLE CONSTRUCTION COMPANY, INC.		
DESCRIPTION	ACCOUNT	AMOUNT
Construction – Segment 3 Cell 2 Expansion	411-169000-17025	\$ 7,114,580.00
Construction – Segment 2 Closure	411-239006 (Escrow)	\$ 8,919,680.00
Grand Total Base Bid Item Nos. 1 -7		\$16,034,260.00

RECOMMENDATION:

Staff recommends that its Board approve the following:

- a) Approve award of Bid No. 2018025 to Thalle Construction Company, Inc. of Hillsborough, North Carolina as the lowest responsive responsible bidder for the Segment 3 Cell 2 Expansion, Segment 2 Partial Closure and Landfill Gas System Expansion project for a Grand Total Base Bid Items 1-6 in the amount of \$14,576,600 with a contingency of 10 percent in the amount of \$1,457,660 for a Grand Total Base Bid Items 1-7 in the amount of \$16,034,260 with inclusion in the contract for allowance to direct purchase of certain items by the Indian River County Purchasing Division, if necessary.

- b) Approve and authorize the Chairman to execute the Sample Agreement, as presented, pending receipt of bonds and insurance requirements and final approval by the County Attorney as to form and legal sufficiency.

ATTACHMENT:

- 1. Bid Tabulation
- 2. CDM Smith 100 Percent Opinion of Probable Construction Cost
- 3. CDM Smith Evaluation of Bids
- 4. Sample Agreement