

## EXECUTIVE SUMMARY

**Recommendation to approve and authorize the expenditure of Tourist Development Category “A” Tax funds for Post-Tropical Storm Isaac Analysis of Collier County Beaches by Atkins North American, Inc. under contract No. 09-5262-CZ for a not-to-exceed time and material amount of \$41,453.**

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**OBJECTIVE:** To obtain a post-storm analysis of the impacts to the Collier County coastline after Tropical Storm Isaac.

**CONSIDERATIONS:** This analysis will take place on various beaches and inlets of Collier County indicated below as part of the 2012 Post-Isaac physical beach monitoring (to -7.0 ft NAV88 only). The following is a list of expected monitoring locations. Please refer to previous monitoring reports for exact boundaries, survey locations, ranges and control monuments. Consistency with previous surveys is extremely critical and significant to Collier County. Contractors/consultants will have the responsibility to complete monitoring for the respective beach segment during the times indicated for each segment. Locations and monitoring timing is as follows

- Vanderbilt Beach physical beach monitoring and report performed in November-December this year.
- Park Shore Beach physical beach monitoring and report performed in November-December this year.
- Naples Beach physical monitoring and report performed in November-December this year.
- South Marco Beach physical monitoring and report performed in November-December this year.

**FISCAL IMPACT:** Funding for this project will be from Tourist Development Tax Category “A” funding within Tourist Development Council (TDC) Beach Renourishment Fund 195. Funding is available in Project 80096.

**GROWTH MANAGEMENT IMPACT:** There is no impact to the Growth Management Plan related to this action.

**ADVISORY COMMITTEE RECOMMENDATIONS:** This item will be presented to the CAC at their December 13, 2012 meeting.

**LEGAL CONSIDERATIONS:** This item has been reviewed by the County Attorney’s Office, requires majority vote, and is legally sufficient for Board action. –

**RECOMMENDATION:** To approve and authorize the expenditure of Tourist Development Category “A” Tax funds for Post-Tropical Storm Isaac Analysis of Collier County Beaches by Atkins North American, Inc. under contract No. 09-5262-CZ for a not-to-exceed time and material amount of \$41,453.

**PREPARED BY:** J. Gary McAlpin, P.E., Coastal Zone Management, Natural Resources Department

**ATTACHMENTS:** Proposal

**Professional Engineering Services  
for  
Post-Tropical Storm Isaac Analysis of Collier County Beaches**

**Contract Number 09-5262-CZ**

**November 20, 2012**

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ATKINS is pleased to provide a scope of work for Collier County Coastal Zone Management Department. The intention of this Work Assignment is to provide professional guidance, preparation of project documentation (monitoring reports) and post-storm analysis of the impacts to the Collier County coastline after Tropical Storm Isaac. In accordance with Collier County Contract Number 09-5262-CZ the following scope of work is presented herein.

**SCOPE OF SERVICES**

This analysis will take place on various beaches and inlets of Collier County indicated below as part of the 2012 Post-Isaac physical beach monitoring (to -7.0 ft NAV88 only). The following is a list of expected monitoring locations. Please refer to previous monitoring reports for exact boundaries, survey locations, ranges and control monuments. Consistency with previous surveys is extremely critical and significant to Collier County. Contractors/consultants will have the responsibility to complete monitoring for the respective beach segment during the times indicated for each segment. Locations and monitoring timing is as follows

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**Post-Storm Analysis & Report**

ATKINS shall prepare a report specifically discussing the impact of Tropical Storm Isaac in accordance with the Florida Department of Environmental Protection (FDEP) Bureau of Beaches and Coastal Systems (BBCS) protocol for submittal to Collier County.

The purpose of the post-storm report is to summarize and discuss the topographic & bathymetric data collected by Morgan & Eklund, Inc. and identify erosion and accretion patterns within the monitored area. In addition, the report shall include a comparative review of adverse impacts attributable to the project(s). The survey data collection effort will be limited to *wading depth* at approximately -7.0 ft NAV88 elevation (no boat work is anticipated within this scope). Based on the scope of work requested by Collier County, ATKINS will only address Range Monuments R-23 through R-89, R-139 through R-148, and 9 intermediate lines. ATKINS will review the data and use the information to create a database to identify and characterize trends and current conditions of these reaches of Collier County's coastline. The database will be created to enable visualization and completion of a comparative analysis. The analysis will be limited to comparing Post Tropical Storm Debbie conditions to Post Tropical Storm Isaac conditions in order to identify losses that occurred.

Specific quantities and parameters that will be analyzed, if data are available, include the following:

- Shoreline and volume change rates
- Beach profile evolution
- Identifying and quantifying areas of acute erosion

The above analyses will provide a qualitative understanding of the project and the storm-induced topography and bathymetry changes to the beach. The reports will be submitted as a bound printed report and on a disk in electronic .pdf format.

ATKINS will prepare for, travel to and attend two (2) meetings. The meetings will be held to coordinate the project, meet with County staff, and to provide project updates/results to the County Project Manager and other stakeholder representatives as deemed necessary and appropriate. One ATKINS senior engineer will attend each of these meetings, again as deemed appropriate.

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### **Budget Estimate**

Work for this assignment will be performed for the lump sum amount of **\$41,453**. Work will be billed to the County on a monthly basis based on the percentage of work completed for the preceding month. The budget breakdown per project area is as follows:

Task 1 – Vanderbilt, Park Shore, and Naples Beach Engineering Post-Storm Topographic & Bathymetric Survey.....	\$21,970
Task 2 – Vanderbilt, Park Shore, and Naples Beach Engineering Post-Storm Analysis Report.....	\$10,363
Task 3 – South Marco Island Engineering Post-Storm Topographic & Bathymetric Survey .....	\$5,389
Task 4 – South Marco Island Engineering Post-Storm Analysis Report.....	\$3,731
<b>Total.....</b>	<b>\$41,453</b>

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### **Schedule Estimate**

The following schedule of completion is anticipated.

1. Submit draft reports within **30** calendar days following the Notice-to-Proceed and receipt of all required data (surveys) to complete analysis.

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### **Assumptions**

1. All existing information/documentation including, but not limited to, survey data, project permits, environmental information, previous studies, etc. will be provided to ATKINS by the County.
2. This quote is based upon conversations with County Staff on November 19, 2012.
3. No biological monitoring of artificial reefs or hardbottom are included in this scope of work.
4. No side-scan sonar or diver verification of seagrasses, artificial reefs or hardbottom are included in this scope of work.
5. No aerial photography will be flown per County direction.
6. Surveys will be conducted to wading depth -7.0 ft NAV88 elevation.
7. No boat work is anticipated for this work assignment.
8. The analysis will be limited to comparing Post Tropical Storm Debbie to Post Tropical Storm Isaac.

November 20, 2012

  
 Jeffrey R. Tabar  
 Project Director  
 Atkins North American, Inc.

Date

**PROJECT BUDGET**

Client:

Project:

Project No:

Prepared By: **BDF**

<u>Labor Costs</u>	Task	Task 1	Total	Raw	Multiplied
Personnel Classification	Rate	Monitoring Reports	Manhours	Labor Cost	Labor Cost
Project Manager	\$58.85	8	8	\$471	\$1,436
Senior Engineer	\$42.92	24	24	\$1,030	\$3,142
Project Engineer	\$35.50	24	24	\$852	\$2,599
Engineer EIT	\$30.00	40	40	\$1,200	\$3,660
CAD Technician	\$30.00	40	40	\$1,200	\$3,660
Administrative	\$18.70	8	8	\$150	\$456
<b>Total Hours</b>		<b>144</b>	144		
<b>Raw Labor Cost</b>				\$4,902	
<b>Mult. Labor Cost</b>				\$14,953	\$14,953

<u>Reimbursable Costs</u>	Task No. 1	Reimbursable	Multiplied
		Costs	Costs
Travel	\$0	\$0	\$0
Lodging	\$0	\$0	\$0
Misc.	\$500	\$500	\$500
Geotechnical Analysis	\$0	\$0	\$0
Beach Survey	\$25,500	\$25,500	\$25,500
Graphics/Reproduction	\$500	\$500	\$500
<b>Total Reimbursables</b>	\$26,500	\$26,500	\$26,500
<b>Total Mult. Reimbursables</b>	\$26,500	\$26,500	\$26,500

<b>Total Project Budget</b>	<b>\$26,500</b>		<b>\$41,453</b>
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