AMENDMENT NO. 10 TO CONTRACT NO. 2012000050 AGREEMENT BETWEEN CHARLOTTE COUNTY and COASTAL ENGINEERING CONSULTANTS, INC. for STUMP PASS TEN-YEAR MANAGEMENT PLAN

THIS AMENDMENT NO. 10 to Contract No. 2012000050 ("Amendment"), is made and entered into by and between CHARLOTTE COUNTY, a political subdivision of the State of Florida, 18500 Murdock Circle, Port Charlotte, Florida 33948-1094 (the "County") and COASTAL ENGINEERING CONSULTANTS, 28421 Bonita Crossings Boulevard, Bonita Springs, Florida 34135 (the "Consultant").

WITNESSETH

WHEREAS, the County issued Request for Proposal ("RFP") No. 2012000050 to retain a Consultant to provide a ten-year beach and inlet management plan for Stump Pass to include, but not be limited to, an alternative analysis, design, permitting, construction support, and monitoring (the "Project"); and

WHEREAS, through a selection and negotiation process conducted in accordance with the requirements of law and County policy, the County determined that it would be in the best interest of the County to award a contract to Consultant for the rendering of professional services associated with the Stump Pass 10-Year Management Plan Project; and

WHEREAS, the parties entered into Contract No. 2012000050 (the "Contract") on or about April 16, 2012, for Consultant to provide consulting services for the Project; and

WHEREAS, the parties entered into *Amendment No. 1* to the Contract on or about October 18, 2012, to acquire additional consulting services as a result of the impact of Tropical Storm Debby in June of 2012 which impacted the coastline resulting in beach erosion, channel shoaling, and the loss of natural resources and habitats; and

WHEREAS, the parties entered into *Amendment No. 2* to the Contract on or about February 13, 2014, to acquire additional services relating to the 2014 Annual Monitoring, including Physical and Biological Monitoring; and

WHEREAS, the parties entered into *Amendment No. 3* to the Contract on or about March 10, 2015, to acquire additional surveying and consulting services, to perform the 2015 Annual Monitoring and for other services; and

WHEREAS, the parties entered into *Amendment No. 4* to the Contract on or about June 14, 2016, to acquire additional services relating to the Erosion Control Project, to perform the 2016 Annual Monitoring, and for other services; and

WHEREAS, the parties entered into *Amendment #5* to the Contract on April 26, 2017, re-scoping the Project through the reduction of certain Tasks and the addition of additional Tasks related to extended environmental monitoring for shorebirds and seagrass; and

WHEREAS, the parties entered into *Amendment #6* to the Contract on July 13, 2018, for additional Project services to assist the County in completing the first-year monitoring services for the 2017 Erosion Control Project and to reallocate Project Fees from unnecessary Tasks to new Project Tasks; and

WHEREAS, the parties entered into *Amendment #7* to the Contract on May 30, 2019, to include additional services including construction administration of the Erosion Control Project specific to the South Beach Fill (SBF) on Knight-Don Pedro Island and continued monitoring of the Stump Pass Navigation Channel; and

WHEREAS, the parties entered into *Amendment #8* to the Contract on June 16, 2020, rescoping, deleting certain tasks and adding additional services relating to the 2017 Erosion Control Project and the 2021 Stump Pass Dredging and Post-Storm Recovery Beach Renourishment Project as set forth; and

WHEREAS, the parties entered into *Amendment #9* to the Contract on April 1, 2021, to add additional Project services to assist in the administration of the 2021 dredging of Stump Pass Navigation Channel and to complete the permit-required services and provide technical support services for year one of the South Beach Fill construction completed in 2020; and

WHEREAS, the County now wishes to add additional project services to assist Charlotte County to complete the permit-required services and provide technical support services for Stump Pass Dredging which will be completed in 2022 and year two monitoring of South Beach Fill construction; and

WHEREAS, the Consultant desires to provide said services in accordance with this *Amendment No.10*, the Contract and other Contract Amendments.

NOW, THEREFORE, the County and the Consultant, in consideration of the mutual covenants contained herein, do agree as follows:

ARTICLE I INCORPORATION / COMPENSATION / SERVICES

1.1 The above Recitals are hereby incorporated herein and made a part of this Amendment.

- 1.2. The provisions of **Exhibit A, Scope of Services and Exhibit B, Professional Fees**, are attached hereto and incorporated into and made a part of this Amendment.
- 1.3. Consultant shall provide the additional services in this Amendment as set forth in **Exhibit A.**
- 1.4. The County shall pay Consultant an amount not to exceed One Hundred Fifteen Thousand Seven Hundred Seventh-Five Dollars and no cents (\$115,775.00), in accordance with the terms of this Amendment and **Exhibit B** for these additional Project services.
- 1.5. The services provided for in **Exhibit A** will run concurrently with other Contract services and will not affect the term of the Contract, as amended.

ARTICLE II MISCELLANEOUS

- 2.1. Any terms used in this Amendment #10 shall have the same meanings and definitions as they have in the Contract.
- 2.2. All other provisions of the Contract and prior Amendments not in conflict with this Amendment #10 shall remain in full force and effect.

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Amendm 10 to Contract No. 2012000050 Stump Pass Ten-Year Management Plan Coastal Engineering Consultants, Inc.

IN WITNESS WHEREOF, the parties hereto have entered into this Amendment #10 as of the last date written below.

WITNESSES:	COASTAL ENGINEERING CONSULTANTS, INC.
Signed By: To Davis Print Name: The Davis Date: May 26, 2002	Signed By: Print Name: Title: Date:
ATTEST: Roger D. Eaton, Clerk of the Circuit Court and Ex-Officio Clerk to the Board of County Commissioners By: Deputy Clerk	BOARD OF COUNTY COMMISSIONERS OF CHARLOTTE COUNTY FLORIDA By: William G. Truex, Chairman Date: APPROVED AS TO FORM AND LEGAL SUFFICIENCY By: Janette S. Knowlton, County Attorney LR 22-0356

Exhibit List:
Exhibit A – Scope of Services
Exhibit B – Professional Fees



INTRODUCTION

The Charlotte County Erosion Control Project State and Federal permits require annual physical and biological monitoring. The scope of services presented herein is designed for Coastal Engineering Consultants, Inc. (Consultant) to assist Charlotte County (County) complete the permit required services and provide technical support services for Stump Pass dredging, which will be completed in 2022, and year two monitoring of South Beach Fill construction completed in 2020. This scope is based on a companion scope of services for the annual monitoring services for the Manasota Key Beach Restoration Project that was constructed concurrent with the restoration of South Beach Fill. When tasks overlap, the budget is shared among the tasks.

SCOPE OF SERVICES

SOUTH BEACH FILL (SBF) MONITORING SERVICES

TASK 1. SBF PHYSICAL MONITORING

- **1A. Beach Profiles:** Consultant will conduct second year monitoring surveys of the FDEP reference monuments R-29 through R-40. The profile alignments shall be identical to the azimuths previously established for each monument. All R-monument beach profiles shall extend seaward 3,000 feet from the Mean High Water (MHW) or to a depth of -30 feet NAVD88, whichever is less.
- **1B.** Aerial Photography: Consultant will obtain aerial photography of the beach concurrently with the survey and during approximate low water tide on that date. The limits of the photography shall include from R-29 to R-40. The photography shall be color vertical photos with a 30% forward overlap, taken from an elevation of 3,000 feet (1:6,000 negative scale) and centered on the local shoreline. A digital scan of the color photos at a rate of 21 microns with a pixel size of 0.4 feet shall be made and submitted in TIF format (uncompressed).
- 1C. Annual Monitoring Report: Consultant will prepare and submit to the agencies the Monitoring Report to summarize work completed and present beach profile surveys and aerial photographs, compute shoreline and volume calculations to define erosion and accretion trends, assess Project performance, and identify adverse impacts attributable to the Project. Specific assessments include analysis for patterns, trends, or changes between surveys and for cumulative changes over time since project construction; evaluate volume and percentage of advance nourishment lost since construction as measured landward of MHW of most recent survey; evaluate erosion and accretion rates occurring between post-construction survey and monitoring surveys; assess volume of fill remaining within Project area; evaluate beach fill adjustment and volume accumulations outside of Project area and assess alongshore and cross-shore fill movement; and evaluate total measured remaining volume in comparison with total predicted remaining volume on average annual basis based on nourishment cycle.

TASK 2. SBF BIOLOGICAL MONITORING

2A. Sea Turtle Monitoring: County will retain the local marine turtle permit holders (Turtle Consultants). Turtle Consultants will conduct the sea turtle monitoring and reporting as well as escarpment monitoring. County will conduct escarpment monitoring and reporting to USFWS and FFWCC, and contract with local contractor to address escarpment removal. County will conduct the artificial lighting surveys. Consultant will provide technical support to the County and the monitors for implementation of the marine turtle protection

plans, monitoring, and reporting.

2B. Compaction Monitoring: County will contract with local contractor to till beach. Consultant will conduct cone penetrometer testing after contractor has tilled the beach to confirm the tilling was completed in accordance with the Permit requirements.

SBF TECHNICAL SUPPORT SERVICES

TASK 3. SBF PROJECT MANAGEMENT

Specific to SBF, Consultant will attend and serve as the County's representative at stakeholder meetings including but not limited to the Beaches and Shores Committee, Coastal Advisory Committee, Board of County Commissioners, Marine Advisory Committee, and Parks and Recreation Committee. Provide technical support services for the County specific to stakeholder coordination. Manage and coordinate the team's internal efforts. Maintain informal contact with the County and FDEP via email and phone calls.

TASK 4. SBF FUNDING

Consultant will assist the County prepare and submit the annual funding requests to the State of Florida for inclusion in the Beach Management Funding Assistance Program, and respond to the FDEP request for additional information and critique of the funding application specific to SBF. Consultant will prepare and submit the quarterly monitoring reports to FDEP.

TASK 5. SBF STORM SURVEYS & ASSESSMENTS

In the event a significant storm impacts the Project Area, the County may request Consultant conduct pre- and / or post-storm surveys and perform assessments to quantify beach erosion and assist with post-storm recovery assistance.

STUMP PASS NAVIGATION CHANNEL (SPNC) MONITORING SERVICES

TASK 6. SPNC AERIAL PHOTOGRAPHY

Consultant will obtain aerial photography of the beach concurrently with the survey and during approximate low water tide on that date. The limits of the photography shall include from R-15 to R-29. The photography shall be color vertical photos with a 30% forward overlap, taken from an elevation of 3,000 feet (1:6,000 negative scale) and centered on the local shoreline. A digital scan of the color photos at a rate of 21 microns with a pixel size of 0.4 feet shall be made and submitted in TIF format (uncompressed).

TASK 7. SPNC HYDRAULIC MONITORING

Conduct hydraulic monitoring concurrently with post-construction surveys (Tasks 6A and 6B of 2021 Scope of Services (CEC File No. 21.001)). The monitoring shall include measuring the tidal amplitudes on Lemon Bay and the Gulf of Mexico and measuring the current velocities in the channel throat for a full spring tidal cycle. The channel throat cross-section, depth and length shall be measured in the field as part of the monitoring. Three (3) channel sections shall be monitored to help bracket the throat recognizing it may not be obvious where the critical section is. The results of hydraulic monitoring will be included in the post-construction report completed under Task 9B of 2021 Scope of Services (CEC File No. 21.001).

TASK 8. SPNC SEA TURTLE MONITORING

County will retain the local marine turtle permit holders (Turtle Consultants). Turtle Consultants will conduct the 2022 sea turtle monitoring and reporting as well as escarpment monitoring. County will conduct escarpment monitoring and reporting to USFWS and FFWCC, and contract with local contractor to address escarpment removal. County will conduct the artificial lighting surveys. Consultant will provide technical support to the County and the monitors for implementation of the marine turtle protection plans, monitoring, and reporting.

SPNC TECHNICAL SUPPORT SERVICES

TASK 9. SPNC PROJECT MANAGEMENT

Specific to SPNC, attend and serve as the County's representative at stakeholder meetings including but not limited to the Beaches and Shores Committee, Board of County Commissioners, Marine Advisory Committee, and Parks and Recreation Committee. Provide technical support services for the County specific to stakeholder coordination. Manage and coordinate the team's internal efforts. Maintain informal contact with the County and FDEP via email and phone calls.

TASK 10. SPNC FUNDING

Consultant will assist the County prepare and submit the annual funding requests to the State of Florida for inclusion in the Beach Management Funding Assistance Program, and respond to the FDEP request for additional information and critique of the funding application specific to SPNC. Consultant will prepare and submit the quarterly monitoring reports to FDEP.

TASK 11. SPNC CONTINGENCIES

Due to the complex nature of the work involving marine environments, it is anticipated that additional work may be necessary specific to SPNC such as data collection, permitting, stakeholder meetings, or agency coordination. A contingency budget is recommended for these circumstances. All scopes of work under this task must be reviewed and approved by the County Project Manager prior to conducting additional work.

TASK 12. SPNC STORM SURVEYS & ASSESSMENTS

In the event a significant storm impacts the Project Area, the County may request Consultant conduct pre- and / or post-storm surveys and perform assessments to quantify beach erosion and channel shoaling and assist with post-storm recovery assistance.

DELIVERABLES

For all specified deliverables, Consultant will prepare and submit to the County a draft deliverable in electronic format (e.g., pdf file). Consultant will review the draft deliverable with the County, make one (1) round of revisions as may be identified by the County, and submit one (1) hard copy and one (1) digital copy in the appropriate formats (e.g., Word, Excel, PowerPoint, AutoCAD, shape file, etc.) of all deliverables to the County. The following is a list of deliverables to be provided.

Task 1A

Beach Profile Survey Field Notes, Plots, and Data Files

Task 1B

Aerial Photographs and Survey Report

Task 1C

Annual Monitoring Report

Task 2A

2022 Sea Turtle Monitoring Nest Location Aerial Exhibits

Task 2B

Compaction Test Results

Task 3

Stakeholder Meeting Minutes, Stakeholder Coordination Memos, and Schedule Updates

Task 4

- FY23-24 Annual Funding Request Application and Technical Support Documents
- FY23-24 Funding Application RAI Response and FDEP Funding Assessment Critique
- FDEP Quarterly Reports (Quarterly)

Task 5

Beach Profile Survey Field Notes, Plots, Data Files, Erosion Calculations, and Report

Task 6

Aerial Photographs and Survey Report

Task 7

Hydraulic Monitoring Field Notes

Task 8

2022 Sea Turtle Monitoring Nest Location Aerial Exhibits

Task 9

Stakeholder Meeting Minutes, Stakeholder Coordination Memos, and Schedule Updates

Task 10

- FY23-24 Annual Funding Request Application and Technical Support Documents
- FY23-24 Funding Application RAI Response and FDEP Funding Assessment Critique
- FDEP Quarterly Reports (Quarterly)

Task 11

To be determined.

Task 12

Survey Field Notes, Plots, Data Files, Erosion and Shoaling Calculations, and Report



PROFESSIONAL FEES

Presented on the following pages are the fees for the services. Payment for services shall be made on a monthly basis on a percent complete basis. Fees for individual tasks shall not be exceeded.

TABLE 1. FEE SUMMARY

Task Description	
TASKS	TOTAL
TASK 1 - SBF PHYSICAL MONITORING	\$31,199
1A Beach Profiles	\$12,278
1B Aerial Photography	\$7,011
1C Annual Monitoring Report	\$11,910
TASK 2. SBF BIOLOGICAL MONITORING	\$6,824
2A Sea Turtle Monitoring	\$4,207
2B Compaction Monitoring	\$2,617
TASK 3. SBF PROJECT MANAGEMENT	\$9,044
TASK 4. SBF FUNDING	\$7,758
TASK 5, SBF CONTINGENCIES	\$59,606
SBF SUBTOTAL	\$114,431
SBF TRANSFER SUBTOTAL	(\$59,606)
SBF TOTAL	\$54,825
TASK 6. SPNC AERIAL PHOTOGRAPHY	\$7,211
TASK 7. SPNC HYDRAULIC MONITORING	\$13,629
TASK 8. SPNC SEA TURTLE MONITORING	\$4,207
TASK 9. SPNC PROJECT MANAGEMENT	\$9,636
TASK 10. SPNC FUNDING	\$8,054
TASK 11. SPNC CONTINGENCIES	\$4,474
TASK 12. SPNC STORM SURVEYS & ASSESSMENTS	\$22,214
SPNC SUBTOTAL	\$69,425
SPNC TRANSFER SUBTOTAL	(\$8,475)
SPNC TOTAL	\$60,950
ΤΟΤΛΙ	¢115 775

TABLE 2. DETAILS OF PROFESSIONAL FEES BY TASK

				٥	Coastal Engineering Consultants, Inc.	gineerin	d Consul	tants. Inc	١.,									
	Dancinal	Drincinal	Principal	Sanior	Senior	Coastal Managing	Vanadino	Marine	Project	Staff	Senior	Project	2-Man	1-Man				
	President		,			Modeler				IngineerT	achnician	Engineer Technician Coordinator GPS Crew	PS Crew (GPS Crew	Total	Direct	Direct Costs	
Task Description	\$230				+	+	-	 		\$112	\$110	\$83	\$178	\$147	Fees	Amount	Sabs	Total
TASKS										-								
TASK 1 - SBF PHYSICAL MONITORING	5	0	ę	9		88	8	8	2	12	48	9	5	5	\$25,649	\$5,550		\$31,199
1A Beach Profiles	1	٥	4	-	o	12	2	8	0	0	16	0	10	10	\$11,228	\$1,050	Equip	\$12,278
1B Aerial Photography	-		4	0	0	2	0	°	0.	0	8	6	0	0	\$2,511	\$4,500	Aerials	\$7,011
1C Annual Monitoring Report	8	0	2	4	0	24	9	۰	2	12	24	2	0	0	\$11,910	\$0		\$11,910
TASK 2. SBF BIOLOGICAL MONITORING	2	ŀ	٥		8		٥	-	·	°	8	2	0	0	669,9\$	\$126		\$6,824
2A Sea Turtle Monitoring	٦	ю	٥	٥	12	4	o	0	0	٥	8		0	0	\$4,207	0\$		\$4,207
2B Compaction Monitoring	4	ŀ	٥			4	0	ō		0	0	2	0	0	\$2,492	\$126	Equip	\$2,617
TASK 3. SBF PROJECT MANAGEMENT	12	ŀ	٥	ħ	0	8	12			o		12	0	0	\$9,044	\$0		\$9,044
TASK 4. SBF FUNDING	4	٥	٥				5		9		12	9	0	0	891,7\$	0\$		\$7,758
TASK 5. SBF STORM SURVEYS & ASSESSMENTS	12	12	12	12		8	5	40	8	25	43	80	20	20	\$51,206	\$8,400	Equip	\$59,606
SBF SUBTOTAL	40	12	22	37	8	142	7.0	8	82	37	111	38	B		\$100,356	\$14,075		\$114,431
TASK 6. SPNC AERIAL PHOTOGRAPHY	-	ŀ	4		0	2	0	°		0	8	3	0	0	\$2,511	\$4,700	Aeriais	\$7,211
TASK 7. SPNC HYDRAULIC MONITORING	-	2	٥	0	0	12	8	24	۰	0	2	1	0	24	\$10,929	\$2,700	Equip	\$13,629
TASK 8. SPNC SEA TURTLE MONITORING	-	٥	٥	°	72	4	0	°	٥	0	8	3	0	0	\$4,207	\$0		\$4,207
TASK 9. SPNC PROJECT MANAGEMENT	2		٥	12	o	12	12	0	٥	٥	0	12	0	0	\$9,636	0\$		\$9,636
TASK 10. SPNC FUNDING	4	٥		8		5	5	٥	9	0	12	9	0	0	\$8,054	\$0		\$8,054
TASK 11, SPNC CONTINGENCIES	2		7	4	4	4	4	٥	2	2	2	2	0	0	\$4,474	0\$		\$4,474
TASK 12. SPNC STORM SURVEYS & ASSESSMENTS	7	ь	7			4	4	40	8	8	20	2	0	40	_	\$4,200	Equip	\$22,214
SPNC SUBTOTAL	23	2	8	24	46	4.8	38	- 24	16	10	52	29	0	54	\$57,826	\$11,600		\$69,425
AMENDMENT 7 TRANSFERS: SBF																		1007.04
02C Offshore Borrow Area Surveys												-						(35,452)
03D Pipeline Corridor Moniforing																		(440,880)
04F Change Orders and Contract Modifications																		(\$4,106)
04G interpretation of Contract Documents																		(\$3,262)
09 SBF Contingencies																		(\$2,913)
SBF TRANSFER SUBTOTAL																		(\$59,606)
SBF TOTAL																		\$54,825
AMENDMENT 7 TRANSFERS: SPNC																		
11D Wintering Bird Monitoring																		(\$8,475)
SPNC TRANSFER SUBTOTAL																		(\$8,475)
SPNC TOTAL																		\$60,950

Charlotte County 10-Year Beach and Inlet Management Plan 2022 South Beach Fill Monitoring and Technical Support Services 2022 Stump Pass Navigation Channel Monitoring and Technical Support Services

TABLE 3. SUMMARY OF DIRECT COSTS

				_					-	()	Activities of the second	14101
	Jet-Pump	Penetrometer	Dive	Boat-Offshore	Boat-Offshore Hydro System	Tide Gage	Current Meter	Jet-Pump	Survey	ב ני	Supconsularii	<u> </u>
	(day)	(day)	Equipment (day)	(kép)	(kep)	(week)	(week)	(day)	Equipment (day)	Direct	Fees	Direct
Task Description	\$100	-	\$100	\$400	\$600	\$48	\$1,200	\$100	\$50	Costs		Costs
TASKS												
TASK 1 - SBF PHYSICAL MONITORING	0	0		-	-	0	0	0	1	\$1,050	\$4,500	\$5,550
1A.Beach Profiles				~	-				-	\$1,050	\$0	\$1,050
1B Aerial Photography										\$0	\$4,500	\$4,500
1C Annual Monitoring Report										\$0	0\$	\$0
TASK 2. SBF BIOLOGICAL MONITORING	٥	-	B	٥	o	٥	٥	0	0	\$125	0\$	\$125
2A Sea Turtle Monitoring										\$0	\$0	\$0
2B Compaction MonItoring		-								\$125	\$0	\$125
TASK 3. SBF PROJECT MANAGEMENT		٥	٥	o	0	0	0	0	0	\$0	\$0	\$
TASK 4. SBF FUNDING	٥	°	°	٥	٥	0	0	0	0	\$0	\$0	\$\$
TASK 5, SBF STORM SURVEYS & ASSESSMENTS	٥	0	٥	8	8	0	0	0	8	\$8,400	\$0	\$8,400
SBF SUBTOTAL	0	125	0	3600	5400	0	O	0	450	\$9,675	\$4,500	\$14,075

TASK 6. SPNC AERIAL PHOTOGRAPHY	0	0	Đ	0	0	0	0	0	0	\$	\$4,700	\$4,700
TASK 7. SPNC HYDRAULIC MONITORING	2	0	2	-	0	-	,	2	2	\$2,700	0\$	\$2,700
TASK 8. SPNC SEA TURTLE MONITORING	0	٥	0	•	0		o	0	0	0\$	\$0	\$
TASK 9. SPNC PROJECT MANAGEMENT	0	0	0	0	0		0	0	0	0\$	\$0	\$0
TASK 10. SPNC FUNDING	0	٥	0	0	0	٥	0	0	0	0\$	\$	\$0
TASK 11. SPNC CONTINGENCIES	٥	٥	0	0	٥	0	0	٥	0	0\$	\$	8
TASK 12. SPNC STORM SURVEYS & ASSESSMENTS	0	0	٥	4	4	٥	0	٥	4	\$4,200	0\$	\$4,200
SPNC SUBTOTAL	200	•	200	2000	2400	400	1200	200	300	\$6,900	\$4,700	\$11,600