

461161 – Galveston Island Coastal Erosion (CAP SEC 204)
8APR2022 Cost Appendix
October 2021 Price Levels

This study focuses on beneficial use of dredged material for beach nourishment on the west end of Galveston Island. Two alternative placement areas were considered. Both extend for 1.7 miles and are offset from each other by approximately 0.5 miles.

Class 4 cost estimates and an Abbreviated Risk Analysis (ARA) were developed for the alternatives. Costs include a Future With Out Project (FWOP) alternative so that the incremental costs above the FWOP state could be found for the other alternatives.

Alternative 2 was selected as the plan with the greatest benefit to cost ratio. Alternative 2 calls for dredge material to be brought to the west end of Galveston Island by a hopper dredge with pumpout capabilities for beach placement beginning at Sunbather Lane and extending 1.7 miles west.

A class 3 cost estimate and an ARA were developed for Alternative 2. The ARA resulted in a 26% contingency, which the PDT deemed as reasonable for this project. The contingency is applied to all costs.

The PDT developed, quality controlled, and verified quantities. The estimate was organized in accordance with the work breakdown structure using the following codes of account.

ACCOUNT CODE 01 - LANDS AND DAMAGES: The Galveston District Real Estate Division developed costs and contingency for Lands and Damages.

ACCOUNT CODE 12 – NAVIGATION PORTS AND HARBORS: H&H Branch provided the quantities associated with this account. It was assumed that the dredge material would come from the Galveston Entrance Channel using traditional dredging methods for the area. The dredging cost was developed using a CEDEP and based on standard operating practices for the Galveston District.

ACCOUNT CODE 30 – PLANNING, ENGINEERING, AND DESIGN: The cost for this account code was developed using a percentage of the construction work and in coordination with the PM/PDT.

ACCOUNT CODE 31 - CONSTRUCTION MANAGEMENT: The cost for this account code was developed using a percentage of the construction work and in coordination with the PM/PDT.

The construction schedule was estimated given CEDEP values for dredging time as well as prior projects of similar scope with regards to beach nourishment. The resulting calendars (Tables 1 and 2) show the resulting project length of four months and the construction schedule estimate. The four months includes 2 months of mobilization and dredging of the ship channel, followed by an additional 2 months of pumping, shaping material, and closeout.

Lastly, the Total Project Cost Summary, attached at the end of the appendix, gives the total cost for a fully funded project. This includes contingency and escalation/inflation before and during project construction. The total project cost is \$18,803,000. Subtracting the cost of dredging (\$7,063,000), which will be funded by Operations and Maintenance funds, the final bottom line total for a fully funded project is **\$11,740,000**.

Table 1
Construction Calendar

--- NEW WORK ---															
P2-461161 - Galveston Island Coastal Erosion (CAP Sec 204) - NED Plan															
Feasibility Study															
October 2021 Price Levels															
VISUAL CALENDAR															
			FY 2024 - YEAR 1												
NO.	DESCRIPTION	DURATION	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
			1	2	3	4	5	6	7	8	9	10	11	12	
CONT 1	Dredging														

Table 2
Contract Calendar

--- NEW WORK ---						
P2-461161 - Galveston Island Coastal Erosion (CAP Sec 204) - NED Plan						
Feasibility Study						
October 2021 Price Levels						
CONTRACT CALENDAR						
CONTRACT	DESCRIPTION	DURATION (month)	DESIGN MIDPOINT	START DATE	MIDPOINT	END DATE
1	Dredging	4	Apr-24 (2024Q3)	Oct-24 (2025Q1)	Nov-24 (2025Q1)	Jan-25 (2025Q2)

Galveston Beach Nourishment

Estimated by Mason McGown
Designed by CESWG-ECE-P
Prepared by U.S. Army Corps of Engineers - Galveston District

Preparation Date 10/29/2021
Effective Date of Pricing 10/1/2021
Estimated Construction Time 30 Days

<u>Description</u>	<u>Quantity</u>	<u>UOM</u>	<u>DirectCost</u>	<u>ProjectCost</u>
Project Cost Summary Report			4,418,451	4,418,451
Contract 1	1.00	JOB	4,418,451	4,418,451
12 Navigation, Ports, and Harbors	1.00	JOB	4,418,451	4,418,451
0001 Mobilization and Demobilization	1.00	JOB	2,112,951	2,112,951
0002 Dredging	530,000.00	CY	2,305,500	2,305,500

Description	Page
Project Cost Summary Report	1
Contract 1	1
12 Navigation, Ports, and Harbors	1
0001 Mobilization and Demobilization	1
0002 Dredging	1

Galveston Beach Nourishment

Estimated by Mason McGown
Designed by CESWG-ECE-P
Prepared by U.S. Army Corps of Engineers - Galveston District

Preparation Date 10/29/2021
Effective Date of Pricing 10/1/2021
Estimated Construction Time 120 Days

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Description	Quantity	UOM	DirectCost	ProjectCost
Project Cost Summary Report			11,708,719	11,708,719
Contract 1				
12 Navigation, Ports, and Harbors	1.00	JOB	11,708,719	11,708,719
0001 Mobilization and Demobilization	1.00	JOB	4,414,072	4,414,072
0002 Pipeline Management & Beach Shaping	1.00	JOB	1,145,396	1,145,396
02 Beach Shaping	376.00	HR	559,344	559,344
03 Floating Pipeline Management	1.00	JOB	55,706	55,706
04 Submerged Pipeline Management	1.00	JOB	167,118	167,118
05 Shoreline Pipeline Management	1.00	JOB	57,311	57,311
06 Mobilize/Demobilize for Beach Restoration	1.00	LS	305,918	305,918
0003 Beach Placement	530,000.00	CY	5,978,400	5,978,400
0004 Endangered Species Monitoring	1.00	JOB	65,000	65,000
0005 Depth of Closure Survey	1.00	JOB	105,851	105,851
09 Upland and Nearshore Profiles	40.00	DAY	62,903	62,903
10 Offshore Profiles	18.00	DAY	41,510	41,510

Description	Page
Project Cost Summary Report	1
Contract 1	1
12 Navigation, Ports, and Harbors	1
0001 Mobilization and Demobilization	1
0002 Pipeline Management & Beach Shaping	1
0003 Beach Placement	1
0004 Endangered Species Monitoring	1
0005 Depth of Closure Survey	1

Abbreviated Risk Analysis

Project (less than \$40M): **461161-Galveston Beach Nourishment CAP sec 204**
 Project Development Stage/Alternative: **Feasibility (Recommended Plan)**
 Risk Category: **Low Risk: Typical Construction, Simple**

Alternative: Alternative 2

Meeting Date: 10/9/2021

Total Estimated Construction Contract Cost = \$ **13,642,000**

	<u>CWWBS</u>	<u>Feature of Work</u>	<u>Estimated Cost</u>	<u>% Contingency</u>	<u>\$ Contingency</u>	<u>Total</u>
	01 LANDS AND DAMAGES	Real Estate	\$ -	0%	\$ -	\$ -
1	01 LANDS AND DAMAGES	Real Estate	\$ 59,000	26%	\$ 15,613	\$ 74,613
2	12 NAVIGATION, PORTS AND HARBORS	Dredging	\$ 11,709,000	26%	\$ 3,098,512	\$ 14,807,512
3	30 PLANNING, ENGINEERING, AND DESIGN	PED	\$ 1,172,000	26%	\$ 310,142	\$ 1,482,142
4	31 CONSTRUCTION MANAGEMENT	Const. Man.	\$ 702,000	26%	\$ 185,768	\$ 887,768
5			\$ -	0%	\$ -	\$ -
6			\$ -	0%	\$ -	\$ -
7			\$ -	0%	\$ -	\$ -
8			\$ -	0%	\$ -	\$ -
9			\$ -	0%	\$ -	\$ -
10			\$ -	0%	\$ -	\$ -
11			\$ -	0%	\$ -	\$ -
12	All Other	Remaining Construction Items	\$ -	0.0%	\$ -	\$ -
13	30 PLANNING, ENGINEERING, AND DESIGN	Planning, Engineering, & Design	\$ -	0%	\$ -	\$ -
14	31 CONSTRUCTION MANAGEMENT	Construction Management	\$ -	0%	\$ -	\$ -
XX	FIXED DOLLAR RISK ADD (EQUALLY DISPERSED TO ALL, MUST INCLUDE JUSTIFICATION SEE BELOW)				\$ -	\$ -

Totals						
	Real Estate	\$ -	0%	\$ -	\$ -	\$ -
	Total Construction Estimate	\$ 13,642,000	26%	\$ 3,610,035	\$ 17,252,035	\$ 17,252,035
	Total Planning, Engineering & Design	\$ -	0%	\$ -	\$ -	\$ -
	Total Construction Management	\$ -	0%	\$ -	\$ -	\$ -
	Total Excluding Real Estate	\$ 13,642,000	26%	\$ 3,610,035	\$ 17,252,035	\$ 17,252,035
		Base		50%	80%	
Confidence Level Range Estimate (\$000's)		\$13,642k	\$15,808k	\$17,252k		

* 50% based on base is at 5% CL.

Fixed Dollar Risk Add: (Allows for additional risk to be added to the risk analysis. Must include justification. Does not allocate to Real Estate.)

461161-Galveston Beach Nourishment CAP sec 204 Alternat

Feasibility (Recommended Plan)

Abbreviated Risk

14305994

Meeting Date: 9-Oct-21

Risk Level					
Very Likely	2	3	4	5	5
Likely	1	2	3	4	5
Possible	0	1	2	3	4
Unlikely	0	0	1	2	3
	Negligible	Marginal	Moderate	Significant	Critical

Risk Register

Risk Element	Feature of Work	Concerns	PDT Discussions & Conclusions (Include logic & justification for choice of Likelihood & Impact)	Impact	Likelihood	Risk Level
Project Management & Scope Growth						40%
PS-1	Real Estate	USACE Funding Constraint	If FED cost share exceeds \$10M, reduce scope of sand placement or sponsor pays excess	Marginal	Possible	1
PS-2	Dredging	USACE Funding Constraint	If FED cost share exceeds \$10M, reduce scope of sand placement or sponsor pays excess	Marginal	Possible	1
PS-3	PED	USACE Funding Constraint	If FED cost share exceeds \$10M, reduce scope of sand placement or sponsor pays excess	Marginal	Possible	1
PS-4	Const. Man.	USACE Funding Constraint	If FED cost share exceeds \$10M, reduce scope of sand placement or sponsor pays excess	Marginal	Possible	1
Acquisition Strategy						30%
AS-1	Real Estate	LERRD Provision - NFS requires a PCA with GLO to provide the capacity	No LERRD - no project. Texas GLO is an active study participant, supports this project as well as previous ones	Significant	Unlikely	2
AS-2	Dredging	LERRD Provision - NFS requires a PCA with GLO to provide the capacity	No LERRD - no project. Texas GLO is an active study participant, supports this project as well as previous ones	Significant	Unlikely	2
AS-3	PED	LERRD Provision - NFS requires a PCA with GLO to provide the capacity	No LERRD - no project. Texas GLO is an active study participant, supports this project as well as previous ones	Significant	Unlikely	2
AS-4	Const. Man.	LERRD Provision - NFS requires a PCA with GLO to provide the capacity	No LERRD - no project. Texas GLO is an active study participant, supports this project as well as previous ones	Significant	Unlikely	2
Construction Elements						15%
CON-1	Real Estate	Hopper Dredge(s) not available	Can postpone sand placement as required sail time increases need for the limited number of hopper dredges	Moderate	Possible	2
CE-2	Dredging	Hopper Dredge(s) not available	Can postpone sand placement as required sail time increases need for the limited number of hopper dredges	Moderate	Possible	2
CE-3	PED	Hopper Dredge(s) not available	Can postpone sand placement as required sail time increases need for the limited number of hopper dredges	Moderate	Possible	2

CE-4	Const. Man.	Hopper Dredge(s) not available	Can postpone sand placement as required sail time increases need for the limited number of hopper dredges	Moderate	Possible	2	
Specialty Construction or Fabrication					Maximum Project Growth		50%
SC-1	Real Estate	NA	NA	Negligible	Unlikely	0	
SC-2	Dredging	NA	NA	Negligible	Unlikely	0	
SC-3	PED	NA	NA	Negligible	Unlikely	0	
SC-4	Const. Man.	NA	NA	Negligible	Unlikely	0	
Technical Design & Quantities					Maximum Project Growth		20%
T-1	Real Estate	requirements	could alter the order of its placement locations	Marginal	Possible	1	
T-2	Dredging	Sand quality and/or quantity not available on schedule due to HSC O&M requirements	Can limit sand scope/ increase schedule. Re: schedule, NFS could alter the order of its placement locations	Marginal	Possible	1	
T-3	PED	Sand quality and/or quantity not available on schedule due to HSC O&M requirements	Can limit sand scope/ increase schedule. Re: schedule, NFS could alter the order of its placement locations	Marginal	Possible	1	
T-4	Const. Man.	Sand quality and/or quantity not available on schedule due to HSC O&M requirements	Can limit sand scope/ increase schedule. Re: schedule, NFS could alter the order of its placement locations	Marginal	Possible	1	
Cost Estimate Assumptions					Maximum Project Growth		25%
EST-1	Real Estate	Cost increases	Storm events can increase costs via fuel inflation & market volatility impacting competition & pricing	Marginal	Possible	1	
EST-2	Dredging	Cost increases	Storm events can increase costs via fuel inflation & market volatility impacting competition & pricing	Marginal	Possible	1	
EST-3	PED	Cost increases	Storm events can increase costs via fuel inflation & market volatility impacting competition & pricing	Marginal	Possible	1	
EST-4	Const. Man.	Cost increases	Storm events can increase costs via fuel inflation & market volatility impacting competition & pricing	Marginal	Possible	1	
External Project Risks					Maximum Project Growth		20%
EX-1	Real Estate	Potential for severe adverse weather	* Adverse weather would increase sand requirement and project duration. Assumed shoreline change between 2019 and 2038 will continue at a similar rate. Cannot predict all probabilities	Marginal	Possible	1	
EX-2	Dredging	Potential for severe adverse weather	* Adverse weather would increase sand requirement and project duration. Assumed shoreline change between 2019 and 2038 will continue at a similar rate. Cannot predict all probabilities such as storm events	Marginal	Possible	1	
EX-3	PED	Potential for severe adverse weather	* Adverse weather would increase sand requirement and project duration. Assumed shoreline change between 2019 and 2038 will continue at a similar rate. Cannot predict all probabilities	Marginal	Possible	1	
EX-4	Const. Man.	Potential for severe adverse weather	* Adverse weather would increase sand requirement and project duration. Assumed shoreline change between 2019 and 2038 will continue at a similar rate. Cannot predict all probabilities	Marginal	Possible	1	

DISTRICT Galveston District
PROJECT NAME Island Coastal
PROJECT NO. 461161
PROJECT LOCATION Galveston, Texas
PROGRAM YEAR 2023 2023Q1
DATE TPCS PREPARED 25-Mar-22 Updated
ENGINEERING REPORT AS BASIS Draft Report, Nov 2021

ENGINEERING & DESIGN PHASE -> 30 ACCOUNT		% of Construc	Districts % Vary	30/31 Account
PROJECT MANAGER, Reuben Trevino	Program Management:	2.5%	1.00%	30.0
CHIEF, DPM, Byron Williams, PE				30.0
CHIEF, PLANNING, Brian Harper	Planning & Environmental Compliance:	1.0%	0.50%	30.0
CHIEF, ENGINEERING, Willie Joe, PE	Engineering & Design:	15.0%	3.75%	30.0
CHIEF, COST ENGINEERING, Martin Regner, PE, CCE	Reviews, ATRs, IEPRs, VE:	1.0%	1.00%	30.0
CHIEF, ENGINEERING, Willie Joe, PE	Life Cycle Updates (cost, schedule, risks):	1.0%	0.50%	30.0
CHIEF, CONTRACTING, Shamekia Chapman	Contracting & Reprographics:	1.0%	0.50%	30.0
CHIEF, ENGINEERING, Willie Joe, PE	Engineering During Construction:	3.0%	1.00%	30.0
CHIEF, PLANNING, Brian Harper (Vacant)	Planning During Construction	2.0%	1.00%	30.0
CHIEF, OPERATIONS, Chris Frabotta	Adaptive Mgmt & Monitoring:	1.0%	0.50%	30.0
CONSTRUCTION PHASE -> 31 ACCOUNT				
CHIEF, CONSTRUCTION, Don Carelock, PE	Supervision & Assurance:	10.0%	4.00%	31.0
CHIEF, OPERATIONS, Chris Frabotta	Project Operation:	2.0%	1.00%	31.0
CHIEF, DPM, Byron Williams, PE	Program Management:	2.5%	1.00%	31.0
REAL ESTATE -> 01 ACCOUNT				
CHIEF, REAL ESTATE, Timothy Nelson				
CULTURAL RESOURCES -> 18 ACCOUNT				
CHIEF, PLANNING, Brian Harper (Vacant)				
SPENT THRU FYXX COSTS				
CHIEF, PM-PB, Nicholas Laskowski, PG, PWS				

**** TOTAL PROJECT COST SUMMARY ****

PROJECT: Galveston Island Coastal Erosion (CAP Sec 204)
PROJECT NO: 461161
LOCATION: Galveston, Texas

DISTRICT: Galveston District

PREPARED: 3/25/2022

POC: CHIEF, COST ENGINEERING, Martin Regner, PE, CCE

This Estimate reflects the scope and schedule in report; Draft Report, Nov 2021

Civil Works Work Breakdown Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)					TOTAL PROJECT COST (FULLY FUNDED)				
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	REMAINING COST (\$K)	Program Year (Budget EC):	TOTAL FIRST COST (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
										Effective Price Level Date:					
										2023 1-Oct-22					
										1-Oct-15					
12	NAVIGATION PORTS & HARBORS	\$4,418	\$1,149	26%	\$5,567	3.2%	\$4,559	\$1,185	\$5,744		\$5,744	6.3%	\$4,846	\$1,260	\$6,105
	CONSTRUCTION ESTIMATE TOTALS:	\$4,418	\$1,149		\$5,567	3.2%	\$4,559	\$1,185	\$5,744		\$5,744	6.3%	\$4,846	\$1,260	\$6,105
01	LANDS AND DAMAGES														
30	PLANNING, ENGINEERING & DESIGN	\$441	\$115	26%	\$556	2.5%	\$452	\$118	\$570		\$570	5.1%	\$475	\$123	\$598
31	CONSTRUCTION MANAGEMENT	\$265	\$69	26%	\$334	2.5%	\$272	\$71	\$342		\$342	5.1%	\$285	\$74	\$360
	PROJECT COST TOTALS:	\$5,124	\$1,332	26%	\$6,457		\$5,282	\$1,373	\$6,656		\$6,656	6.1%	\$5,606	\$1,458	\$7,063

CHIEF, COST ENGINEERING, Martin Regner, PE, CCE

PROJECT MANAGER, Reuben Trevino

CHIEF, REAL ESTATE, Timothy Nelson

CHIEF, PLANNING, Brian Harper (Vacant)

CHIEF, ENGINEERING, Willie Joe, PE

CHIEF, OPERATIONS, Chris Frabotta

CHIEF, CONSTRUCTION, Don Carelock, PE

CHIEF, CONTRACTING, Shamekia Chapman

CHIEF, PM-PB, Nicholas Laskowski, PG, PWS

CHIEF, DPM, Byron Williams, PE

ESTIMATED TOTAL PROJECT COST: \$7,063
ESTIMATED FEDERAL COST: 100% \$7,063
ESTIMATED NON-FEDERAL COST:

22 - FEASIBILITY STUDY (CAP studies):
ESTIMATED FEDERAL COST: 100%
ESTIMATED NON-FEDERAL COST:
ESTIMATED FEDERAL COST OF PROJECT \$7,063

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: Galveston Island Coastal Erosion (CAP Sec 204)
 LOCATION: Galveston, Texas
 This Estimate reflects the scope and schedule in report; Draft Report, Nov 2021

DISTRICT: Galveston District
 POC: CHIEF, COST ENGINEERING, Martin Regner, PE, CCE
 PREPARED: 3/25/2022

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 27-Oct-21		Estimate Price Level: 1-Oct-21		Program Year (Budget EC): 2023		Effective Price Level Date: 1-Oct-22						
		RISK BASED												
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
CONTRACT 1: Dredging and Beach Placement														
12	NAVIGATION PORTS & HARBORS	\$4,418	\$1,149	26.0%	\$5,567	3.2%	\$4,559	\$1,185	\$5,744	2025Q1	6.3%	\$4,846	\$1,260	\$6,105
CONSTRUCTION ESTIMATE TOTALS:		\$4,418	\$1,149	26.0%	\$5,567		\$4,559	\$1,185	\$5,744			\$4,846	\$1,260	\$6,105
01	LANDS AND DAMAGES			26.0%										
30	PLANNING, ENGINEERING & DESIGN													
1.00%	Project Management	\$44	\$11	26.0%	\$55	2.5%	\$45	\$12	\$57	2025Q1	5.1%	\$47	\$12	\$60
0.50%	Planning & Environmental Compliance	\$22	\$6	26.0%	\$28	2.5%	\$23	\$6	\$28	2025Q1	5.1%	\$24	\$6	\$30
3.75%	Engineering & Design	\$166	\$43	26.0%	\$209	2.5%	\$170	\$44	\$214	2025Q1	5.1%	\$179	\$46	\$225
1.00%	Reviews, ATRs, IEPRs, VE	\$44	\$11	26.0%	\$55	2.5%	\$45	\$12	\$57	2025Q1	5.1%	\$47	\$12	\$60
0.50%	Life Cycle Updates (cost, schedule, risks)	\$22	\$6	26.0%	\$28	2.5%	\$23	\$6	\$28	2025Q1	5.1%	\$24	\$6	\$30
0.50%	Contracting & Reprographics	\$22	\$6	26.0%	\$28	2.5%	\$23	\$6	\$28	2025Q1	5.1%	\$24	\$6	\$30
1.00%	Engineering During Construction	\$44	\$11	26.0%	\$55	2.5%	\$45	\$12	\$57	2025Q1	5.1%	\$47	\$12	\$60
1.00%	Planning During Construction	\$44	\$11	26.0%	\$55	2.5%	\$45	\$12	\$57	2025Q1	5.1%	\$47	\$12	\$60
0.50%	Adaptive Management & Monitoring	\$22	\$6	26.0%	\$28	2.5%	\$23	\$6	\$28	2025Q1	5.1%	\$24	\$6	\$30
0.25%	Real Estate In-House Labor	\$11	\$3	26.0%	\$14	2.5%	\$11	\$3	\$14	2025Q1	5.1%	\$12	\$3	\$15
31	CONSTRUCTION MANAGEMENT													
4.00%	Construction Management	\$177	\$46	26.0%	\$223	2.5%	\$181	\$47	\$229	2025Q1	5.1%	\$191	\$50	\$240
1.00%	Project Operation:	\$44	\$11	26.0%	\$55	2.5%	\$45	\$12	\$57	2025Q1	5.1%	\$47	\$12	\$60
1.00%	Project Management	\$44	\$11	26.0%	\$55	2.5%	\$45	\$12	\$57	2025Q1	5.1%	\$47	\$12	\$60
CONTRACT COST TOTALS:		\$5,124	\$1,332		\$6,457		\$5,282	\$1,373	\$6,656			\$5,606	\$1,458	\$7,063

DISTRICT Galveston District
PROJECT NAME Island Coastal
PROJECT NO. 461161
PROJECT LOCATION Galveston, Texas
PROGRAM YEAR **2023** 2023Q1
DATE TPCS PREPARED **25-Mar-22** Updated
ENGINEERING REPORT AS BASIS Draft Report, Nov 2021

		% of Construc	Districts % Vary	30/31 Account
ENGINEERING & DESIGN PHASE -> 30 ACCOUNT				
PROJECT MANAGER, Reuben Trevino	Program Management:	2.5%	1.00%	30.0
CHIEF, DPM, Byron Williams, PE				30.0
CHIEF, PLANNING, Brian Harper	Planning & Environmental Compliance:	1.0%	0.50%	30.0
CHIEF, ENGINEERING, Willie Joe, PE	Engineering & Design:	15.0%	3.75%	30.0
CHIEF, COST ENGINEERING, Martin Regner, PE, CCE	Reviews, ATRs, IEPRs, VE:	1.0%	1.00%	30.0
CHIEF, ENGINEERING, Willie Joe, PE	Life Cycle Updates (cost, schedule, risks):	1.0%	0.50%	30.0
CHIEF, CONTRACTING, Shamekia Chapman	Contracting & Reprographics:	1.0%	0.50%	30.0
CHIEF, ENGINEERING, Willie Joe, PE	Engineering During Construction:	3.0%	1.00%	30.0
CHIEF, PLANNING, Brian Harper (Vacant)	Planning During Construction:	2.0%	1.00%	30.0
CHIEF, OPERATIONS, Chris Frabotta	Adaptive Mgmt & Monitoring:	1.0%	0.50%	30.0
CONSTRUCTION PHASE -> 31 ACCOUNT				
CHIEF, CONSTRUCTION, Don Carelock, PE	Supervision & Assurance:	10.0%	4.00%	31.0
CHIEF, OPERATIONS, Chris Frabotta	Project Operation:	2.0%	1.00%	31.0
CHIEF, DPM, Byron Williams, PE	Program Management:	2.5%	1.00%	31.0
REAL ESTATE -> 01 ACCOUNT				
CHIEF, REAL ESTATE, Timothy Nelson				
CULTURAL RESOURCES -> 18 ACCOUNT				
CHIEF, PLANNING, Brian Harper (Vacant)				
SPENT THRU FYXX COSTS				
CHIEF, PM-PB, Nicholas Laskowski, PG, PWS				

**** TOTAL PROJECT COST SUMMARY ****

PROJECT: Galveston Island Coastal Erosion (CAP Sec 204)
PROJECT NO: 461161
LOCATION: Galveston, Texas

DISTRICT: Galveston District

PREPARED: 3/25/2022

POC: CHIEF, COST ENGINEERING, Martin Regner, PE, CCE

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WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	CNTG (%)	TOTAL (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	REMAINING COST (\$K)	Program Year (Budget EC):	TOTAL FIRST COST (\$K)	ESC (%)	COST (\$K)	CNTG (\$K)	FULL (\$K)
										Effective Price Level Date:					
										2023 1-Oct-22					
										1-Oct-15					
12	NAVIGATION PORTS & HARBORS	\$11,709	\$3,044	26%	\$14,753	3.2%	\$12,080	\$3,141	\$15,221		\$15,221	6.3%	\$12,841	\$3,339	\$16,179
	CONSTRUCTION ESTIMATE TOTALS:	\$11,709	\$3,044		\$14,753	3.2%	\$12,080	\$3,141	\$15,221		\$15,221	6.3%	\$12,841	\$3,339	\$16,179
01	LANDS AND DAMAGES	\$59	\$15	26%	\$74	3.2%	\$61	\$16	\$77		\$77	6.3%	\$65	\$17	\$81
30	PLANNING, ENGINEERING & DESIGN	\$1,172	\$305	26%	\$1,477	2.5%	\$1,201	\$312	\$1,514		\$1,514	5.1%	\$1,262	\$328	\$1,590
31	CONSTRUCTION MANAGEMENT	\$702	\$183	26%	\$885	2.5%	\$720	\$187	\$907		\$907	5.1%	\$756	\$197	\$953
	PROJECT COST TOTALS:	\$13,642	\$3,547	26%	\$17,188		\$14,062	\$3,656	\$17,718		\$17,718	6.1%	\$14,923	\$3,880	\$18,803

CHIEF, COST ENGINEERING, Martin Regner, PE, CCE

PROJECT MANAGER, Reuben Trevino

CHIEF, REAL ESTATE, Timothy Nelson

CHIEF, PLANNING, Brian Harper (Vacant)

CHIEF, ENGINEERING, Willie Joe, PE

CHIEF, OPERATIONS, Chris Frabotta

CHIEF, CONSTRUCTION, Don Carelock, PE

CHIEF, CONTRACTING, Shamekia Chapman

CHIEF, PM-PB, Nicholas Laskowski, PG, PWS

CHIEF, DPM, Byron Williams, PE

O&M PROJECT COST: \$7,063
ESTIMATED INCREMENTAL PROJECT COST: \$11,740

ESTIMATED FEDERAL COST: 65% \$7,631
ESTIMATED NON-FEDERAL COST: 35% \$4,109

22 - FEASIBILITY STUDY (CAP studies): \$450

ESTIMATED FEDERAL COST: 100% \$450
ESTIMATED NON-FEDERAL COST:

ESTIMATED FEDERAL COST OF PROJECT \$8,081

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

PROJECT: Galveston Island Coastal Erosion (CAP Sec 204)
 LOCATION: Galveston, Texas
 This Estimate reflects the scope and schedule in report; Draft Report, Nov 2021

DISTRICT: Galveston District
 POC: CHIEF, COST ENGINEERING, Martin Regner, PE, CCE

PREPARED: 3/25/2022

WBS Structure		ESTIMATED COST				PROJECT FIRST COST (Constant Dollar Basis)				TOTAL PROJECT COST (FULLY FUNDED)				
		Estimate Prepared: 27-Oct-21 Estimate Price Level: 1-Oct-21				Program Year (Budget EC): 2023 Effective Price Level Date: 1-Oct-22								
WBS NUMBER	Civil Works Feature & Sub-Feature Description	COST (\$K)	CNTG (\$K)	RISK BASED		ESC (\$K)	COST (\$K)	CNTG (\$K)	TOTAL (\$K)	Mid-Point Date	ESC (\$K)	COST (\$K)	CNTG (\$K)	FULL (\$K)
				CNTG (%)	TOTAL (\$K)									
A	B	C	D	E	F	G	H	I	J	P	L	M	N	O
CONTRACT 1: Dredging and Beach Placement														
12	NAVIGATION PORTS & HARBORS	\$11,709	\$3,044	26.0%	\$14,753	3.2%	\$12,080	\$3,141	\$15,221	2025Q1	6.3%	\$12,841	\$3,339	\$16,179
CONSTRUCTION ESTIMATE TOTALS:		\$11,709	\$3,044	26.0%	\$14,753		\$12,080	\$3,141	\$15,221			\$12,841	\$3,339	\$16,179
01	LANDS AND DAMAGES	\$59	\$15	26.0%	\$74	3.2%	\$61	\$16	\$77	2025Q1	6.3%	\$65	\$17	\$81
30	PLANNING, ENGINEERING & DESIGN													
1.00%	Project Management	\$117	\$30	26.0%	\$147	2.5%	\$120	\$31	\$151	2025Q1	5.1%	\$126	\$33	\$159
0.50%	Planning & Environmental Compliance	\$59	\$15	26.0%	\$74	2.5%	\$60	\$16	\$76	2025Q1	5.1%	\$64	\$17	\$80
3.75%	Engineering & Design	\$439	\$114	26.0%	\$553	2.5%	\$450	\$117	\$567	2025Q1	5.1%	\$473	\$123	\$596
1.00%	Reviews, ATRs, IEPRs, VE	\$117	\$30	26.0%	\$147	2.5%	\$120	\$31	\$151	2025Q1	5.1%	\$126	\$33	\$159
0.50%	Life Cycle Updates (cost, schedule, risks)	\$59	\$15	26.0%	\$74	2.5%	\$60	\$16	\$76	2025Q1	5.1%	\$64	\$17	\$80
0.50%	Contracting & Reprographics	\$59	\$15	26.0%	\$74	2.5%	\$60	\$16	\$76	2025Q1	5.1%	\$64	\$17	\$80
1.00%	Engineering During Construction	\$117	\$30	26.0%	\$147	2.5%	\$120	\$31	\$151	2025Q1	5.1%	\$126	\$33	\$159
1.00%	Planning During Construction	\$117	\$30	26.0%	\$147	2.5%	\$120	\$31	\$151	2025Q1	5.1%	\$126	\$33	\$159
0.50%	Adaptive Management & Monitoring	\$59	\$15	26.0%	\$74	2.5%	\$60	\$16	\$76	2025Q1	5.1%	\$64	\$17	\$80
0.25%	Real Estate In-House Labor	\$29	\$8	26.0%	\$37	2.5%	\$30	\$8	\$37	2025Q1	5.1%	\$31	\$8	\$39
31	CONSTRUCTION MANAGEMENT													
4.00%	Construction Management	\$468	\$122	26.0%	\$590	2.5%	\$480	\$125	\$604	2025Q1	5.1%	\$504	\$131	\$635
1.00%	Project Operation:	\$117	\$30	26.0%	\$147	2.5%	\$120	\$31	\$151	2025Q1	5.1%	\$126	\$33	\$159
1.00%	Project Management	\$117	\$30	26.0%	\$147	2.5%	\$120	\$31	\$151	2025Q1	5.1%	\$126	\$33	\$159
CONTRACT COST TOTALS:		\$13,642	\$3,547		\$17,188		\$14,062	\$3,656	\$17,718			\$14,923	\$3,880	\$18,803