

# Monthly Progress Report

Reporting Period: 10/1 through 11/8 2023

## Project Information

Project Name	Port Lavaca Living Shoreline Breakwater
City Resolution	R-050922-5
CDBG-MIT Contract	20-087-001-D226
City PM	Jody Weaver
Mott MacDonald PM	Thomas Everett
Mott MacDonald Project Number	507107066
Date	11/8/2023

## Project Milestones

Milestone Description	Date (Actual=A)	Notes
<b>Task 1: Project Kickoff</b>		
Project Kickoff Meeting	6/8/2022 (A)	
Memorandum of Project Understanding	6/21/2022 (A)	
<b>Task 2: Data Collection and Analysis</b>		
Collect available coastal processes data	7/29/2022 (A)	
Collect USACE historical survey data		Not yet started
Collect new bathymetric and topographic data	8/3/2022 (A)	New data collection complete
Collect new geotechnical data	8/4/2023	Field data 6/26 to 29, 2023; lab work expected 8/4/2023, waiting on response to comments from subcontractor 11/8/2023
Collect new cultural resources data	8/31/2023	Work initiated; progressing
Collect new habitat data	7/21/2023 (A)	Field work complete 6/12-16 2023; report 7/21/2023
Technical memorandum on data collection	10/13/2023 (A)	Complete; as part of 30% report
<b>Task 3: Coastal Analysis, Alts Development, Alt Eval</b>		
Coastal Engineering Analysis	11/4/2022 (A)	Via presentation 11/4/2022
Alternatives Development	11/4/2022 (A)	Via presentation 11/4/2022
Meeting on Alternatives Development	11/4/2022 (A)	Completed in person on 11/4/2022
Alternatives Evaluation	2/20/2023 (A)	complete
Meeting on Alternatives Evaluation	2/22/2023 (A)	complete
Tech Memo on CEA and Alts Analysis	10/13/2023 (A)	Complete; as part of 30% report
<b>Task 4: Preliminary Design</b>		
Prelim design: 30% plans, cost, report	10/13/2023 (A)	Complete; submitted 10/13/2023
<b>Task 5: Regulatory Compliance</b>		
Prepare application and permit plans	11/29/2023	In development
<b>USACE Regulatory Permitting</b>		
USACE pre-application meeting	11/29/2023	In development
Submit USACE Permit Application	12/12/2023	
Issuance of USACE Permit	8/18/2024	Assuming 9 months to issue permit
<b>TXGLO Coastal Lease</b>		
Submit coastal lease application to GLO	2/1/2024	Will time this to wait until we know USACE is preparing approved permit
<b>Task 6: Engineering Design</b>		

Milestone Description	Date (Actual=A)	Notes
Submit 70% Design	3/1/2024	
Submit 95% Design	6/29/2024	
Develop for proposal package	9/18/2024	Set to 1 month after receipt of permit
<b>Task 7: Construction Proposal Solicitation Assistance</b>		
Out to bid	11/2024	
Issue Construction NTP	12/2024	

## Project Budget

Budget Summary	% Complete by Budget	notes
Task 1: Develop Project Understanding	100%	
Task 2: Data Collection and Analysis	96% Mott / 86% by sub	Survey, Geotech, Habitat surveys complete; Geotech lab work in progress, Cultural Resources work in progress
Task 3: Coastal Analysis, Alts Development, Alts Eval	100%	
Task 4: Preliminary Design	100%	
Task 5: Regulatory Compliance	8%	Initiation coordination on habitat and CR surveys
Task 6: Final Design	0%	
Task 7: Bidding Phase Services	0%	
Task 8: Engineering Services during Construction	0%	
Task 9: Project Management	33%	
<b>Overall</b>	<b>43%</b>	

## Activities Performed This Period

### Activity Summary

#### Task 1: Project Kickoff

- Task Completed

#### Task 2: Existing and New Data Collection

- Bathy and magnetometer survey completed 8/3/2022; deliverable received 8/9/2022. Survey deliverable submitted.
- Geotech data collection initiated. Work in field began 6/26/23. Deliverable expected 8/4/23. Waiting on Geotech report comments to be addressed by subcontractor. Internal Geotech analysis for breakwater design has commenced.
- Habitat Survey was conducted 6/12-6/22/2023. Deliverable received 7/21/23
- Cultural resources surveys have been given NTP; Marine and terrestrial Antiquities Permit applications have been submitted to the THC; field survey expected in late November/early December.

#### Task 3: Coastal Analysis, Alts Development, Alts Evaluation

- Coastal data processing and analysis is complete
- Coastal modeling of site is complete
  - Storm surge model is set up for existing conditions; runs complete.
  - Local wave model is set up for existing conditions; runs for existing conditions complete.
  - Modeling of flushing of harbor for existing and w/ project conditions complete.

## Activity Summary

---

- Alternatives development
  - Completed development of alternatives for evaluation.
  - Modeling of proposed alternatives are complete
    - Wave transmission through artificial reefs
    - Typical wave conditions
    - Storm wave conditions
    - Flushing of alternatives
  - Developed and evaluated breakwater modifications based on initial evaluation for improvements to water quality (flushing) and wave protection; work complete.
- Reporting
  - Conducted meeting on CEA and alternatives development with the City and KSBR on 11/4/2022 to discuss avoidance and minimization of impact to habitat
  - Completed drafting of CEA and Alternatives Development and Evaluation memo submitted 10/13/2023.
  - Conducted meeting on Alternatives Analysis with the City and KSBR on 2/22/2023
  - Conducted meeting on Alternatives Analysis results with the City and KSBR 10/24/23
- Revisions to preferred alt required due to results of habitat survey. New alignment was developed and evaluated in the numerical model.

---

### Task 4: Preliminary Design

- 30% design plans complete, submitted 10/13/2023.
- Completed developing preliminary geometric design of structures

---

### Task 5: Regulatory Compliance

- Initiated permit application development. Coordination with subcontractor (Triton) on permit application progress.
- Ongoing coordination with subcontractor (Gray and Pape) on Texas antiquities permit and cultural resources survey.

---

### Task 6: Final Design

- Not yet started

---

### Task 7: Bidding Phase Services

- Not yet started

---

### Task 8: Construction Proposal Solicitation Assistance

- Not yet started

---

### Task 9: Project Management

- Ongoing internal project management e.g. scheduling, invoicing, resourcing, etc.
- 

## Anticipated Effort Next Period

- Complete field work for cultural resources investigations
- Complete preliminary geotechnical engineering
- Preliminary design documentation after receipt of field data (cultural resources) and discussions on Fisher Harbor protection.
- Preparation for USACE JEM meeting
- Continue monthly invoicing against second milestone draw (Final Design).

## Outstanding Items

None

Please do not hesitate to contact me if you have any questions or comments.

Sincerely,

Handwritten signature of Thomas Everett in black ink.

Thomas Everett, PE  
Project Manager; Office: 512-777-3075  
Email: Thomas.Everett@mottmac.com

Handwritten signature of Josh Carter in black ink.

Josh Carter, PE, D. CE  
Project Principal; Office: 504-383-9785  
Email: Joshua.Carter@mottmac.com