



PROPOSAL STATEMENT OF WORK

PORT AND MARINE SERVICES TASK #TBD: LIVEABOARD SEAWALL DIVING, STRUCTURAL ENGINEERING ASSESSMENT

Key West, FL

This proposal has been prepared in accordance with the current General Environmental Engineering Services Agreement between the City of Key West and Tetra Tech, Inc, Resolution No. 20-039, dated March 24, 2020. The work described herein will be performed on a Time & Expense basis in accordance with the fee schedule established in this agreement. Fees shall be not-to-exceed unless approved in writing by the City of Key West. This proposal is valid for a period of 90 days from the date on this page.

Prepared by: TETRA TECH, Inc.
November 15th, 2022



TETRA TECH, INC.

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PROPOSAL / STATEMENT OF WORK

Tetra Tech will work with the City of Key West Port and Marine Services (City) to perform an engineering assessment for the approximately 1,180 LF segment of seawall located along the NE corner of the Garrison Bight, east of the bridge and north of the Palm Avenue Causeway

PROJECT LIMITS FOR STRUCTURAL ASSESSMENT TO LIVEABOARD SEAWALL



Insert 1: Limits of Structural Inspection

Task 1 –Structural Diving Inspection

Tetra Tech will mobilize a team of divers to perform a structural inspection of the seawall for both waterside and upland areas adjacent to the seawall. Tetra Tech will document the seawall's condition, including locations of observed deficiencies. Tetra Tech will take measurements of the shelf at the mudline for the project limits to assist with the design of seawall replacement options. An engineer will be present during the entire inspection to monitor the inspection and for preparation of the report. It is expected that the underwater structure inspection will take 4 days inclusive of travel.

(1) Structural Diving Inspection: \$ 34,342

Task 2 – Engineering Assessment with Repair Alternatives and Opinion of Probable Cost

Tetra Tech will provide a written engineering assessment of the wall conditions observed during the site evaluation, underwater structure inspection and the surface inspection. The intent of this report is to record the specific conditions of the wall segment to determine the exact locations, limits and extent of any repairs that will be required. Tetra Tech will attempt to provide 2-3 repair options (if practical) with



opinions of probable construction cost for each and will meet with Port & Marine Services to discuss, prior to finalizing the report and submitting a plan for permitting.

The deliverables in this report will include:

1. Engineering Investigation/Assessment Report
 - Existing Condition of Wall
 - Wall Repair Design Options
 - Opinion of Probable Cost
 - Videos of Inspection

(2) Engineering Assessment with Repair Alternatives **\$ 18,000**
and Opinion of Probable Cost Subtotal: _____

PROJECT ASSUMPTIONS

1. Observations will be limited to those that can be seen with the naked eye. No testing, either destructive or non-destructive, will be performed.
2. The Garrison Bight bay bottom is deeded to the City of Key West and, consequently, no modifications will be required to any Submerged Lands Leases.

PROJECT EXCLUSIONS

This proposal does not include:

- Investigation into the mangrove area to the east end of the project limits
- Investigation into the pier systems projecting from the seawall (including Dolphin, Sailfish, Marlin, Tarpon or Kingfish piers)
- Boundary, Topographic, MHW or Other Survey
- Geotechnical Investigation
- Structural assessment of boat lifts, piers, or other site features beyond the seawall.
- Structural Assessment of the bridge, bridge abutment, or other features within the Palm Avenue Causeway or channel
- Benthic Assessment
- Permitting
- Coral relocation
- Preparation of construction documents
- Final engineering
- Utility engineering
- Bid support
- Services during construction

Task	Description	Amount
1	Structural Diving Inspection	\$34,342
2	Engineering Assessment with Repair Alternatives and Opinion of Probable Cost Subtotal	\$18,000
TOTAL		\$ 52,342



City of Key West Port & Marine Services, Key West Bight
Liveboard Seawall Diving, Structural Assessment

Cost Model

CITY OF KEY WEST (CLIENT 55111)			TASK 01		TASK 02		TOTAL	
LIVEBOARD SEAWALL CONDITION ASSESSMENT			DIVING INSPECTION		ENGINEERING ASSESSMENT			
NAME	TITLE	UNIT RATE	QTY	PRICE	QTY	PRICE	QTY	PRICE
TETRA TECH STAFF								
Dave Frodsham	Eng/Sci/Planner Senior Staff II	\$ 175.00	20.0	\$3,500	48.0	\$8,400	68.0	\$11,900
Tom Mueller	Eng/Sci/Planner Senior Staff III	\$ 185.00					-	
Francisco Martinez	Eng/Sci/Planner Staff III	\$ 120.00					-	
Dennis Polski	Eng/Sci/Planner Staff III	\$ 120.00	48.0	\$5,760	64.0	\$7,680	112.0	\$13,440
Nicole Goldy	Eng/Sci/Planner Staff IV	\$ 130.00					-	
Lori Boberg	Project Support Services II	\$ 92.00	6.0	\$552			6.0	\$552
Caprice Warren	Project Support Services III	\$ 124.00					-	
Ana McDonald	Project Support Services Manager	\$ 172.00	2.0	\$344			2.0	\$344
Megan Reising	Eng/Sci/Planner Senior Staff II	\$ 175.00	40.0	\$7,000			40.0	\$7,000
Mike Mendoza	Eng/Sci/Planner Staff III	\$ 120.00	40.0	\$4,800	16.0	\$1,920	56.0	\$6,720
Tracy Lybolt	Eng/Sci/Planner Staff IV	\$ 130.00	40.0	\$5,200			40.0	\$5,200
-	-	\$ -					-	
-	-	\$ -					-	
TOTAL LABOR COST			196.0	\$27,156	128.0	\$18,000	324.0	\$45,156
TRAVEL								
R/T Airfare		\$ 500.00					-	
Mileage		\$ 0.625	266.0	\$166			266.0	\$166
Rental Car w/Fuel		\$ 80.00	10.0	\$800			10.0	\$800
Misc. Travel Costs (gas, parking, tolls)		\$ 50.00	20.0	\$1,000			20.0	\$1,000
Lodging	Key West Per diem plus Tax Allowance	\$ 240.00	16.0	\$3,840			16.0	\$3,840
Meals & Incidental Expenses		\$ 69.00	20.0	\$1,380			20.0	\$1,380
TOTAL TRAVEL COSTS				\$7,186				\$7,186
OTHER DIRECT COSTS / RENTAL EQUIPMENT/LABORATORY								
Shipping		\$ 10.00					-	
Misc. Equip & Supplies		\$ 100.00					-	
Permitting Fees		\$ 500.00					-	
							-	
							-	
							-	
							-	
							-	
TOTAL OTHER DIRECT COSTS								
GRAND TOTAL				\$34,342		\$18,000		\$52,342