



PROPOSAL STATEMENT OF WORK

CITY PLANNING DEPARTMENT TASK TBD: MALLORY SQUARE SEAWALL INSPECTION

Key West, FL

This proposal has been prepared in accordance with the current General Engineering Services Agreement between the City of Key West and Tetra Tech, Inc, dated March 29, 2023. The work described herein will be performed on a Time & Materials 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.
September 13th, 2023





PROPOSAL / STATEMENT OF WORK

Tetra Tech understands that the City of Key West wishes to perform an underwater Level I (non-destructive) structural condition assessment of the seawall abutting Mallory Square. Through our discussions with City Staff, we understand that the seawall was designed by Moffatt & Nichol in 1985 and that the Mallory Pier was designed by CH2MHill in 2008.

Tetra Tech will work with the City of Key West’s Planning Department (City) and our subconsultant, EMC Divers, Inc. to perform a Structural Diving Inspection and develop a Structural Condition Assessment Report with Repair Alternatives and Opinion of Probable Cost for the approximately 550 LF of seawall along and adjacent to the Mallory Square. This proposal is limited to the portions of seawall depicted in Insert 1 by the dotted line.

PROJECT LIMITS FOR MALLORY SQUARE SEAWALL INSPECTION



Insert 1: Limits of Field Work

Task 1 – Structural Diving Inspection

Tetra Tech will mobilize a team of commercial divers to perform an underwater structural inspection of the visual sections of the waterward side of the seawall. Tetra Tech will document the seawall’s condition, including locations of observed deficiencies. Tetra Tech will take measurements, where possible, of the exposed seawall height and the separation distance between the seawall cap and the nearest pier pile cap. The separation distance between the seawall cap and the pier pile cap will indicate whether a new



seawall can be installed waterward of the existing seawall. The inspection team will be led in the field by an on-site professional engineer who will direct the diver to help identify areas of interest. The engineer will be present during the entire inspection and will be responsible for the preparation of the report. It is expected that the underwater structure inspection will take 5 days inclusive of travel.

(1) Structural Diving Inspection: \$ 56,433

Task 2 – Structural Condition Assessment Report with Repair Alternatives and Opinion of Probable Cost

Tetra Tech will provide a written engineering assessment of the seawall condition that was visually observed during the underwater structure inspection and the surface inspection of the seawall cap. 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 or seawall replacement that will be required. Tetra Tech will attempt to provide repair options (if practical) with opinions of probable construction cost for each and will meet virtually with City to discuss, prior to finalizing the report.

The deliverables in this report will include:

1. Engineering Investigation/Assessment Report
2. Existing Condition of Wall
3. Wall Repair Design Options
4. Opinion of Probable Cost
5. Videos of Inspection

(2) Structural Condition Assessment Report with Repair Alternatives and Opinion of Probable Cost: \$ 33,428

SCHEDULING & ACCESS

The inspection will be contingent upon the absence of cruise ships moored at Mallory Pier for the duration of the inspection and unrestricted access to Mallory Square to stage our dive trailer and equipment.

PROJECT ASSUMPTIONS

1. The City of Key West will furnish Tetra Tech with the design plans for the Mallory Square, inclusive of those performed by Moffatt & Nichol, Sasaki, and CH2MHill. Tetra Tech will reserve the right to rely upon those plans.
2. Observations will be limited to those that can be seen with the naked eye. No testing, either destructive or non-destructive, will be performed.
3. This proposal is contingent upon:
 - a. The absence of cruise ships moored at Mallory Pier for the duration of the inspection.
 - b. Unrestricted access to Mallory Square to stage our dive trailer and equipment.
 - c. Five (5) consecutive ten (10) hour workdays.
4. The City will provide Tetra Tech with a secured fenced parking location for overnight parking of the dive trailer.
5. If the work cannot be performed in five (5) consecutive days, additional funding may be required via change order.



PROJECT EXCLUSIONS

This proposal does not include:

- Investigation of the Mallory Pier or its supporting pilings or structural members.
- Boundary, Topographic, MHW or Other Survey
- Geotechnical Investigation
- Structural assessment of piers, mooring piles, bridges, bridge abutments, or other site features beyond the seawall.
- 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	\$ 56,433
2	Structural Condition Assessment Report with Repair Alternatives and Opinion of Probable Cost Subtotal	\$ 33,428
TOTAL		\$ 89,861



COST MODEL

CITY OF KEY WEST			TASK 01		TASK 02		TOTAL	
MALLORY PIER SEAWALL INSPECTION			STRUCTURAL DIVING INSPECTION		STRUCTURAL CONDITION ASSESSMENT			
NAME	TITLE	UNIT RATE	QTY	PRICE	QTY	PRICE	QTY	PRICE
TETRA TECH STAFF								
Dave Prodsham	Manager I	\$ 186.00	20.0	\$3,720	20.0	\$3,720	40.0	\$7,440
Tom Mueller	Manager II	\$ 195.00					-	
Francisco Martinez	Project Staff IV	\$ 126.00			40.0	\$5,040	40.0	\$5,040
Nicole Goldy	Project Staff V	\$ 134.00					-	
Ana McDonald	Manager III	\$ 204.00					-	
Caprice Warren	Senior Staff I	\$ 143.00	7.0	\$1,001			7.0	\$1,001
Lori Boberg	Junior Staff III	\$ 92.00	4.0	\$368	4.0	\$368	8.0	\$736
Gerry Poshka	Senior Staff I	\$ 143.00					-	
Pat Zuloaga	Senior Consultant I	\$ 232.00					-	
Mike Mendoza	Project Staff V	\$ 134.00	60.0	\$8,040			60.0	\$8,040
Rob Baron	Manager I	\$ 186.00					-	
Becky Serra	Senior Consultant II	\$ 243.00	50.0	\$12,150	100.0	\$24,300	150.0	\$36,450
TOTAL LABOR COST			141.0	\$25,279	164.0	\$33,428	305.0	\$58,707
EXTERNAL SUBCONTRACTOR								
EMC Divers		\$ 23,900.00	1.0	\$23,900			1.0	\$23,900
							-	
							-	
							-	
TOTAL EXTERNAL SUBCONTRACTOR			1.0	\$23,900	-	-	-	\$23,900
TRAVEL								
R/T Airfare		\$ 500.00					-	
Mileage		\$ 0.655	266.0	\$174			266.0	\$174
Rental Car w/Fuel		\$ 80.00	8.0	\$640			8.0	\$640
Misc. Travel Costs (gas, parking, tolls)		\$ 50.00	18.0	\$900			18.0	\$900
Lodging		\$ 240.00	12.0	\$2,880			12.0	\$2,880
Meals & Incidental Expenses		\$ 69.00	15.0	\$1,035			15.0	\$1,035
TOTAL TRAVEL COSTS				\$5,629		\$5,629		\$5,629
OTHER DIRECT COSTS / RENTAL EQUIPMENT / LABORATORY								
Shipping		\$ 10.00					-	
Misc. Equip & Supplies		\$ 100.00					-	
Trailer		\$ 325.00	5.0	\$1,625			5.0	\$1,625
TOTAL OTHER DIRECT COSTS				\$1,625		\$1,625		\$1,625
TETRA TECH OWNED EQUIPMENT								
							-	
TOTAL TT EQUIPMENT								
GRAND TOTAL				\$56,433		\$33,428		\$89,861