

AGREEMENT

between

CITY OF KEY WEST

and

for

**PROFESSIONAL SERVICES FOR KEY WEST
COMPREHENSIVE ADAPTATION AND RESILIENCE
IMPLEMENTATION PLAN**

KEY WEST, FLORIDA

This is an Agreement between: CITY OF KEY WEST, its successors and assigns, hereinafter referred to as "CITY," and Tetra Tech, Inc a corporation organized under the laws of the State of Delaware, its successors and assigns, hereinafter referred to as "CONSULTANT".

WITNESSETH, in consideration of the mutual terms and conditions, promises, covenants and payments hereinafter set forth, CITY and CONSULTANT agree as follows:

ARTICLE 1

DEFINITIONS AND IDENTIFICATIONS

For the purposes of this Agreement and the various covenants, conditions, terms and provisions which follow, the definitions and identifications set forth below are assumed to be true and correct and are agreed upon by the parties.

- 1.1. Agreement:** This document, Articles 1 through 7, inclusive. Other terms and conditions are included in the CITY's RFQ# 22-001, CONSULTANT's Response to RFQ dated January 11, 2023, exhibits, Task Orders, and supplemental documents that are by this provision expressly incorporated herein by reference.
- 1.2. Commissioners:** Members of the City Commission with all legislative powers of the CITY vested therein.
- 1.3. CONSULTANT:** The firm selected to perform the services pursuant to this Agreement.
- 1.4. Contract Administrator:** The ranking managerial employee of the CITY or some other employee expressly designated as Contract Administrator by the City Manager, who is the representative of the CITY. In the administration of this Agreement, as contrasted with matters of policy, all parties may rely upon instructions or determinations made by the Contract Administrator; provided, however, that such instructions and determinations do not change the Scope of Services.
- 1.5. Contractor:** The person, firm, corporation or other entity that enters into an agreement with CITY to perform the construction work for the Task Order.
- 1.6. CITY:** City of Key West.
- 1.7. Task Order:** A detailed description of a particular service or services to be performed by CONSULTANT under this Agreement.

ARTICLE 2

PREAMBLE

In order to establish the background, context and frame of reference for this Agreement and generally to express the objectives and intentions of the respective parties hereto, the following statements, representations and explanations shall be accepted as predicates for the undertakings and commitments included within the provisions which follow and may be relied upon by the parties as essential elements of the mutual considerations upon which this Agreement is based.

- 2.1. The CONSULTANT is not entitled to receive, and the CITY is not obligated to pay, any fees or expenses in excess of the amount budgeted for Task Orders authorized under this Agreement in each fiscal year (October 1-September 30) by CITY. The budgeted amount may only be modified per City Ordinance(s).
- 2.2. The CITY has met the requirements of the Consultants' Competitive Negotiation Act, as set forth in Section 287.055, Florida Statutes, and has selected CONSULTANT to perform the services hereunder based on the Request for Qualifications # 22-001 incorporated by reference and made a part hereof and the Response to the Request for Qualifications from Consultant dated January 11, 2023, incorporated by reference and made part of.
- 2.3. Negotiations pertaining to the services to be performed by CONSULTANT were undertaken between CONSULTANT and staff selected by the Commission, and this Agreement incorporates the results of such negotiations.
- 2.4. This project is funded with Federal and State dollars, specifically CDBG-MIT funding provided by The U.S. Department of Housing and Urban Development and Florida Department of Environmental Protection Office of Resilience and Coastal Protection. The CONSULTANT shall ensure that all of its activities under this Contract shall be conducted in conformance with these provisions, as applicable: 45 CFR Part 75, 29 CFR Part 95, 2 CFR Part 200, 20CFR Part 570 subpart I, et seq., and all other applicable federal laws, regulations and policies governing the funds provided as now in effect and as may be amended from time to time.

ARTICLE 3

SCOPE OF SERVICES AND STANDARD OF CARE

- 3.1. CONSULTANT's services may include but are not limited to the following in regard to the Agreement:
- 3.2. CONSULTANT's services shall include comprehensive full-scale engineering, design, surveying, permit preparation, preparing contract specifications, preparing bid and proposal documents and assisting the City with technical review and ranking of the same to attain qualified contractors for work, environmental assessments, construction administration and owner project representation services relating to operation, new construction, permit modification, construction improvements, rehabilitation and or retrofits, and any other lawful professional Engineering services that the CONSULTANT is qualified to provide, and that the CITY authorizes the CONSULTANT to undertake in connection with this Agreement. CONSULTANT shall provide all necessary, incidental and related activities and services as required.
- 3.3. CONSULTANT and CITY acknowledge that the Scope of Services does not delineate every detail and minor work task required to be performed by CONSULTANT to complete any particular task order. If, during the course of the performance of the services included in this Agreement, CONSULTANT determines that work should be performed to complete the Task Order which is, in the CONSULTANT's opinion, outside the level of effort originally anticipated, whether or not the Scope of Services identifies the work items, CONSULTANT shall notify Contract Administrator in writing in a timely manner before proceeding with the work. If CONSULTANT proceeds with such work without notifying the Contract Administrator, the work shall be deemed to be within the original level of effort, whether or not specifically addressed in the Scope of Services. Notice to Contract Administrator does not constitute authorization or approval by CITY to perform the work. Performance of work by CONSULTANT outside the originally anticipated level of effort without prior written CITY approval or modification of Task Order is at CONSULTANT's sole risk.
- 3.4. The specific services to be provided by the CONSULTANT and the compensation for such services shall be as mutually agreed to in separate Task Orders to this AGREEMENT. Each Task Order when fully executed shall become a supplement to and a part of this AGREEMENT.
 - 3.4.1. Each Task Order shall be supported by appropriate cost and pricing data and such other documentation as required by the CITY.
 - 3.4.2. Task Orders shall be numbered consecutively as specified by CITY. Each Task Order shall include a description of the scope of services and specified deliverables, time of completion, total estimated costs of services, and method of compensation. Additional information shall be provided to the CITY if required. Amended Task Orders shall include substantially the same information and be submitted to the CITY for approval.
 - 3.4.3. The CITY may make or approve changes within the general Scope of Services in any Task Order. If such changes affect the CONSULTANT's cost of or time required for

performance of the services, an equitable adjustment shall be made through an amendment to the Task Order.

- 3.4.4. A Task Order may be terminated at any time, with or without cause, by the CITY upon written notice to CONSULTANT. CONSULTANT shall perform no further work upon receipt of this notice unless specifically authorized by the City Manager of the City of Key West. On termination, the CONSULTANT shall be paid for all authorized services performed up to the termination date plus, if terminated for the convenience of the CITY, reasonable expenses incurred during the close-out of the Task Order. The CITY shall not pay for anticipatory profits. The termination of this Agreement pursuant to Paragraph 7.2, hereof, shall constitute the termination of any and all outstanding Task Orders.
- 3.4.5. The CONSULTANT shall begin services under any Task Order when authorized by a Purchase Order issued by the CITY and delivered to CONSULTANT.
- 3.5. The CITY and CONSULTANT may negotiate additional scopes of services, compensation, time of performance and other related matters for each Task Order as allowed by this Agreement. If CITY and CONSULTANT cannot contractually agree, CITY shall have the right to immediately terminate negotiations at no cost to CITY and procure services from another source.
- 3.6. CONSULTANT shall perform the professional services under this Agreement at the level customary for competent and prudent professionals in CONSULTANT'S field performing such services at the time and place where the services are provided. In the event CONSULTANT does not comply with this standard, and omissions or errors are made by CONSULTANT, CONSULTANT will correct such work that contains errors or omissions.
- 3.7. CONSULTANT is required to perform the Task Orders consistent with current applicable Federal, State and City laws, codes and regulations that pertain to the Task Order. In all Task Orders, where changes to any laws, codes or regulations affecting the Task Order have a Task Ordered effective date or are anticipated to be effective at a future date, or if knowledge of anticipated changes is available to CONSULTANT or any sub-consultant, CONSULTANT shall present options for their use or implementation.
- 3.8. Construction Responsibility - Notwithstanding anything in this Agreement, CONSULTANT shall not have control or charge of and shall not be responsible for construction means, methods, techniques, sequences or procedures, or for safety measures, precautions and programs including enforcement of Federal and State safety requirements, in connection with construction work performed by CITY's construction contractors.
- 3.9. Estimates - Since CONSULTANT has no control over local conditions, the cost of labor, materials, equipment or services furnished by others, or over competitive bidding or market conditions, CONSULTANT does not guarantee the accuracy of any opinions of probable construction cost as compared to construction contractor's bids or the actual cost to the CITY.

ARTICLE 4

TERM OF AGREEMENT; TIME FOR PERFORMANCE; CONTRACTOR DAMAGES;

The term of this Agreement shall be for a period not to exceed four (4) years from the effective date of the Agreement with the option of yearly renewal. The Agreement will be in effect upon execution by both parties. The Agreement may be renewed at the discretion of the CITY.

- 4.1. CONSULTANT shall perform the services described in each Task Order within the time periods specified. Each such time period shall commence from the date of the purchase order issued for such services.
- 4.2. CONSULTANT must receive written approval from the Contract Administrator prior to beginning the performance of services in any subsequent Task Order. Prior to granting approval for CONSULTANT to proceed to a subsequent Task Order, the Contract Administrator may, at his or her sole option, require CONSULTANT to submit any deliverables/documents for the Contract Administrator's review.
- 4.3. In the event CONSULTANT is unable to complete the above services because of delays resulting from untimely review by CITY or other governmental authorities having jurisdiction over the Task Order, and such delays are not the fault of CONSULTANT, or because of delays which were caused by factors outside the control of CONSULTANT, CITY shall grant a reasonable extension of time for completion of the services and shall provide reasonable compensation, if appropriate. It shall be the responsibility of CONSULTANT to notify CITY within 10 days in writing whenever a delay in approval by a governmental agency, including CITY, is anticipated or experienced, and to inform the Contract Administrator of all facts and details related to the delay.
- 4.4. In the event the Contractor fails to substantially complete the Task Order on or before the substantial completion date specified in its agreement with CITY or if Contractor is granted an extension of time beyond said substantial completion date, and CONSULTANT's services are extended beyond the substantial completion date, through no fault of CONSULTANT, CONSULTANT shall be compensated in accordance with Article 5 for all services rendered by CONSULTANT beyond the substantial completion date.
- 4.5. In the event Contractor fails to substantially complete the Task Order on or before the substantial completion date specified in its agreement with CITY, and the failure to substantially complete is caused in whole or in part by a negligent act, error or omission of CONSULTANT, then CONSULTANT shall pay to CITY its proportional share of any claim or direct damages to Contractor or CITY to the extent arising out of the delay. This provision shall not affect the rights and obligations of either party as set forth in Paragraph 7.8, INDEMNIFICATION OF CITY.

ARTICLE 5

COMPENSATION AND METHOD OF PAYMENT

5.1. AMOUNT AND METHOD OF COMPENSATION

The types of compensation methods, which shall be used to pay for the CONSULTANT's services, are limited to the following:

- 5.1.1. Lump sum payment/Not-to-Exceed, which includes compensation for all the CONSULTANT'S salaries, general overhead costs, direct expenses, and profit.
 - 5.1.1.1 If Work timing deviates from the assumed schedule for causes beyond CONSULTANT's control, CONSULTANT and/or the CITY reserves the right to request renegotiation of those portions of the lump sum affected by the time change. During construction contract administration, if tasked, it is agreed by both parties that whether construction is completed earlier or later, that a proportional part of the compensation will be adjusted and either given to CONSULTANT for additional work or deleted from the amount owed CONSULTANT for less time required.
 - 5.1.1.2 In the event of a change of scope, CITY shall authorize in writing an appropriate decrease or increase in compensation.
 - 5.1.1.3 Monthly invoicing will be based on an estimate of the percent of work completed at the end of the preceding month.
 - 5.1.1.4 The CONSULTANT shall submit wage rates and other actual unit costs supporting the compensation. The CONSULTANT shall submit a Truth in Negotiation Certificate stating that all data supporting the compensation is accurate, complete, and current at the time of contracting.
- 5.1.2. Cost Reimbursable-Per Diem (Time and Expenses)
 - 5.1.2.1. Per diem rates are those hourly or daily rates charged for work performed on the WORK by CONSULTANT's employees of the indicated classifications and include all salaries, overheads, and profit, but do not include allowances for Direct Expenses. These rates are subject to annual adjustments based on the Consumer Price Index Urban U.S. City Average All Items U.S. Department of Labor Bureau of Labor Statistics.
 - 5.1.2.2. Hourly rates for the contract (CONSULTANT AND Sub-consultants): See attached Exhibit A.
 - 5.1.2.3. A Not-to-Exceed budgetary amount will be established for the Work. This budgetary amount shall not be exceeded unless prior written approval is provided by the CITY. CONSULTANT shall make reasonable efforts to complete the Work within the budget and will keep CITY informed of progress toward that end so that the budget or work effort can be adjusted if found necessary.
 - 5.1.2.4. CONSULTANT is not obligated to incur costs beyond the indicated budgets, as may be adjusted, nor is CITY obligated to pay CONSULTANT beyond these limits.

- 5.1.2.5. When any budget has been increased, CONSULTANT's excess costs expended prior to such increase will be allowable to the same extent as if such costs had been incurred after the approved increase.

5.2 REIMBURSABLE EXPENSES

- 5.2.1.1 Direct non-salary expenses, entitled Reimbursable Expenses, directly attributable to the Work shall be charged at actual cost, and shall be limited to the following:
- 5.2.1.2 Identifiable transportation expenses in connection with the Work, subject to the limitations of Section 112.061, Florida Statutes. There shall be no mileage reimbursement for travel within the City of Key West. Transportation expenses to locations outside the City area or from locations outside the City will not be reimbursed unless specifically pre-authorized in writing by the Contract Administrator.
- 5.2.1.3 Identifiable per diem, meals and lodgings, taxi fares, automobile rental, and miscellaneous travel- connected expenses for CONSULTANT's personnel subject to the limitations of Section 112.061 Florida Statutes. Meals for class C travel inside the City of Key West will not be reimbursed. Lodging will be reimbursed only for room rates equivalent to Hampton Inn or Best Western located within the City of Key West city limits.
- 5.2.1.4 Identifiable communication expenses approved by Contract Administrator, long distance telephone, courier and express mail utilized to render the services required by this Agreement.
- 5.2.1.5 Cost of printing, reproduction or photography that is required by or of CONSULTANT to deliver services set forth in this Agreement.
- 5.2.1.6 Identifiable testing costs approved by Contract Administrator.
- 5.2.1.7 All permit fees paid to regulatory agencies for approvals directly attributable to the Work. These permit fees do not include those permits required for the Contractor.
- 5.2.2 It is acknowledged and agreed to by CONSULTANT that the dollar limitation set forth in Paragraphs 5.2.1.1 through 5.2.1.7 is a limitation upon, and describes the maximum extent of, CITY's obligation to reimburse CONSULTANT for direct, non-salary expenses. If CITY or Contract Administrator requests CONSULTANT to incur expenses not contemplated in the amount for Reimbursable Expenses, CONSULTANT shall notify Contract Administrator in writing before incurring such expenses. Any such expenses shall be reviewed and approved by CITY prior to incurring such expenses.
- 5.2.3 All sub-consultants' hourly rates shall be billed in the actual amount paid by CONSULTANT. Sub- consultant Reimbursable Expenses are limited to the items in Paragraphs 5.2.1.1 through 5.2.1.7 described above when the sub-consultant's agreement provides for reimbursable expenses.

5.3. METHOD OF BILLING

5.3.1. Lump Sum Compensation

CONSULTANT shall submit billings identifying type of work completed on a monthly basis in a timely manner. These billings shall identify the nature of the work performed and the estimated percent of work accomplished. The statement shall show a summary of fees with accrual of the total and credits for portions paid previously. When requested, CONSULTANT shall provide backup for past and current invoices that record hours, personnel, and expense costs on a task basis, so that total hours and costs by task may be determined.

5.3.2. Cost Reimbursable-Per Diem (Time and Expenses) Compensation

CONSULTANT shall submit billings identifying the type of work completed on a monthly basis in a timely manner for all personnel hours and reimbursable expenses attributable to the Work. These billings shall identify the nature of the work performed, the total hours of work performed and the employee category and name of the individuals performing same. Billings shall itemize and summarize reimbursable expenses by category and identify same as to the personnel incurring the expense and the nature of the work with which such expense was associated. Where prior written approval by Contract Administrator is required for reimbursable expenses, a copy of the approval shall accompany the billing for such reimbursable. The statement shall show a summary of salary costs and reimbursable expenses with accrual of the total and credits for portions paid previously. External reimbursable expenses and sub-consultant fees must be documented by copies of invoices or receipts that describe the nature of the expenses and contain the purchase order number or other identifier that clearly indicates the expense is identifiable to the Work. Subsequent addition of the identifier to the invoice or receipt by the CONSULTANT is not acceptable except for meals and travel expenses. Appropriate CONSULTANT's cost accounting forms with a summary of charges must document internal expenses by category. When requested, CONSULTANT shall provide backup for past and current invoices that records hours and rates by employee category, reimbursable expenses by category, and subcontractor fees on a task basis, so that total hours and costs by task may be determined.

- 5.3.3. If requested, CONSULTANT shall provide copies of past paid invoices to any subcontractor or sub-consultant prior to receiving currently invoiced payment. CITY reserves the right to pay any subcontractor or sub-consultant, if CONSULTANT has not paid them timely (subject to any rightful dispute CONSULTANT may have with their invoice) and the services of the subcontractor or sub-consultant are necessary to complete the Work.

5.4. METHOD OF PAYMENT

- 5.4.1 CITY shall pay CONSULTANT within forty-five (45) calendar days from receipt of CONSULTANT's proper invoice with documentation as provided above.
- 5.4.2 In the event CONSULTANT has utilized a Sub-consultant to perform the Work, CONSULTANT will be required to provide documentation that Sub-consultant and Sub-consultants of Sub-consultants have been paid (subject to CONSULTANT's rightful dispute of any such payments) prior to currently invoiced payment being made to CONSULTANT.
- 5.4.3. Payment will be made to CONSULTANT at:

Brian Proctor
Tetra Tech, Inc
759 S. Federal Highway, Suite 134
Stuart, FL 34994

ARTICLE 6

CITY 'S RESPONSIBILITIES

- 6.1. CITY shall assist CONSULTANT by placing at CONSULTANT's disposal all information CITY has available pertinent to the Task Order including previous reports and any other data relative to design or construction of the Task Order. CONSULTANT shall have the right to rely, without independent verification, on information provided by the CITY's Steering Committee staff.
- 6.2. CITY shall arrange for access to, and make all provisions for, CONSULTANT to enter upon public and private property as required for CONSULTANT to perform its services.
- 6.3. CITY shall review the CONSULTANT's itemized deliverables/documents identified in the Task Orders and respond in writing with any comment within the time set forth in the Task Order or within a reasonable time.
- 6.4. CITY shall give prompt written notice to CONSULTANT whenever CITY observes or otherwise becomes aware of any development that affects the scope or timing of CONSULTANT's services or any defect in the work of any Contract.
- 6.5 CITY shall review discriminatory vendors list prior to making any awards.
- 6.6 CITY shall follow §200.318-§200.327 for procurements involving federal awards.

ARTICLE 7

MISCELLANEOUS

7.1. OWNERSHIP OF DOCUMENTS

All finished or unfinished documents, data, data matrices and calculations generated and used to evaluate and compute the construction or material requirements for the Task Order, studies, surveys, drawings, maps, models, photographs and reports prepared or provided by CONSULTANT in connection with this Agreement, whether in hard copy or electronic form, shall become the property of CITY, whether the Task Order for which they are made is completed or not. If applicable, CITY may withhold any payments then due to CONSULTANT until CONSULTANT complies with the provisions of this Article. CONSULTANT is not responsible for damages caused by the unauthorized re- use by others of any of the materials for another Task Order.

7.2. TERMINATION

7.2.1. This Agreement may be terminated with or without cause by CITY at any time.

7.2.2. Notice of termination shall be provided in accordance with paragraph 7.12 NOTICES of this Agreement.

7.2.3. In the event this Agreement is terminated, CONSULTANT shall be paid for any services performed to the date the Agreement is terminated. Compensation shall be withheld until all documents specified in Section 7.1 of this Agreement are provided to the CITY. Upon being notified of CITY's election to terminate, CONSULTANT shall refrain from performing further services or incurring additional expenses under the terms of this Agreement. Under no circumstances shall CITY make payment of profit for services that have not been performed.

7.3. AUDIT RIGHT AND RETENTION OF RECORDS

7.3.1. CITY shall have the right to audit the books, records, and accounts of CONSULTANT that are related to any Task Order. CONSULTANT shall keep such books, records, and accounts as may be necessary in order to record complete and correct entries related to the Task Order.

7.3.2. CONSULTANT shall preserve and make available, at reasonable times for examination and audit by CITY, all financial records, supporting documents, statistical records, and any other documents pertinent to this Agreement for the required retention period of the Florida Public Records Act (Chapter 119, Fla. Stat.), if applicable, or, if the Florida Public Records Act is not applicable, for a minimum period of three (3) years after termination of this Agreement. If any audit has been initiated and audit findings have not been resolved at the end of the retention period or three (3) years, whichever is longer, the books, records, and accounts shall be retained until resolution of the audit findings. If the Florida Public Records Act is determined by CITY to be applicable to CONSULTANT's records, CONSULTANT shall comply with all requirements thereof; however, CONSULTANT shall violate no confidentiality or non-disclosure requirement of either federal or state law. Any incomplete or incorrect entry in such books, records, and accounts shall be a basis for CITY's disallowance and recovery of any payment upon such entry.

7.4. NONDISCRIMINATION, EQUAL EMPLOYMENT OPPORTUNITY, AMERICANS WITH DISABILITIES ACT, AND EQUAL BENEFITS FOR DOMESTIC PARTNERS

7.4.1. CONSULTANT shall not unlawfully discriminate against any person in its operations and activities in its use or expenditure of the funds or any portion of the funds provided by this Agreement and shall affirmatively comply with all applicable provisions of the Americans with Disabilities Act (ADA) in the course of providing any services funded in whole or in part by CITY, including Titles I and II of the ADA (regarding nondiscrimination on the basis of disability), and all applicable regulations, guidelines, and standards.

7.4.2. CONSULTANT's decisions regarding the delivery of services under this Agreement shall be made without regard to or consideration of race, age, religion, color, gender, sexual orientation, gender identity or expression, national origin, marital status, physical or mental disability, political affiliation, or any other factor that cannot be lawfully or appropriately used as a basis for service delivery. CONSULTANT shall comply with Title I of the Americans with Disabilities Act regarding nondiscrimination on the basis of disability in employment and further shall not discriminate against any employee or applicant for employment because of race, age, religion, color, gender, sexual orientation, national origin, gender identity or expression, marital status, political affiliation, or physical or mental disability. Such actions shall include, but not be limited to, the following: employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff, termination, rates of pay, other forms of compensation, terms and conditions of employment, training (including apprenticeships), and accessibility.

- 7.4.3. Consultant shall comply with City Ordinance Sec. 2-799 Requirements for City Contractors to Provide Equal Benefits for Domestic Partners

7.5. PUBLIC ENTITY CRIMES ACT

- 7.5.1. CONSULTANT represents that the execution of this Agreement shall not violate the Public Entity Crimes Act (Section 287.133, Florida Statutes), which essentially provides that a person or affiliate who is a contractor, consultant or other provider and who has been placed on the convicted vendor list following a conviction for a Public Entity Crime may not submit a bid on a contract to provide any goods or services to CITY, may not submit a bid on a contract with CITY for the construction or repair of a public building or public work, may not submit bids on leases of real property to CITY, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with CITY, and may not transact any business with CITY in excess of the threshold amount provided in Section 287.017, Florida Statutes, for category two purchases for a period of 36 months from the date of being placed on the convicted vendor list. Violation of this section shall result in termination of this Agreement and recovery of all monies paid hereto and may result in being barred from CITY's competitive procurement activities.
- 7.5.2. In addition to the foregoing, CONSULTANT further represents that there has been no determination, based on an audit, that it or any sub-consultant, has committed an act defined by Section 287.133, Florida Statutes, as a "public entity crime" and that it has not been formally charged with committing an act defined as a "public entity crime" regardless of the amount of money involved or whether CONSULTANT has been placed on the convicted vendor list.
- 7.5.3. CONSULTANT shall promptly notify CITY if it or any subcontractor or sub-consultant is formally charged with an act defined as a "public entity crime" or has been placed on the convicted vendor list.

7.6. SUB-CONSULTANTS

CONSULTANT may use the sub-consultants identified in the proposal that was a material part of the selection of CONSULTANT to provide the services under this Agreement. The CITY reserves the right to accept the use of a sub-consultant or to reject the selection of a particular sub-consultant and to inspect all facilities of any sub-consultants in order to make determination as to the capability of the sub-consultant to perform properly under this Contract. The CITY's acceptance of a sub-consultant shall not be unreasonably withheld. CONSULTANT shall obtain written approval of Contract Administrator prior to changing or adding to the list of sub-consultants. The list of sub-consultants submitted and currently approved is as follows:

- a) Erin L Deady, PA
- b) Clearview Geographic
- c) Stantec Engineering
- d) SEARCH, Inc
- e) Balmoral Group

f) Brizaga, Inc

Hourly rates for such said Sub-consultants are as on attached Exhibit A.

7.7. ASSIGNMENT AND PERFORMANCE

- 7.7.1. Neither this Agreement nor any interest herein shall be assigned, transferred, or encumbered by either party and CONSULTANT shall not subcontract any portion of the work required by this Agreement except as authorized pursuant to Section 7.6.
- 7.7.2. CONSULTANT represents that all persons delivering the services required by this Agreement have the knowledge and skills, either by training, experience, education, or a combination thereof, to adequately and competently perform the duties, obligations, and services set forth in the Scope of Services and to provide and perform such services to CITY's satisfaction for the agreed compensation.
- 7.7.3. CONSULTANT shall perform its duties, obligations, and services under this Agreement in a skillful and respectable manner. The quality of CONSULTANT's performance and all interim and final product(s) provided to or on behalf of CITY shall be in accordance with the standard of care set forth in Paragraph 3.6.
- 7.7.4. CONSULTANT shall not change or replace overall project manager identified in the CONSULTANT's response to the RFQ without the Contract Administrator's prior written approval.

7.8. INDEMNIFICATION OF CITY

- 7.8.1. To the fullest extent permitted by law, the CONSULTANT expressly agrees to indemnify and hold harmless the City of Key West, their officers, directors, agents, and employees (herein called the "indemnities") from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees and court costs, such legal expenses to include costs incurred in establishing the indemnification and other rights agreed to in this Paragraph, to persons or property, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the CONSULTANT, its Subcontractors or persons employed or utilized by them in the performance of the Contract. Claims by indemnities for indemnification shall be limited to the amount of CONSULTANT's insurance or \$1 million per occurrence, whichever is greater. The parties acknowledge that the amount of the indemnity required hereunder bears a reasonable commercial relationship to the Contract and it is part of the project specifications or the bid documents, if any.
- 7.8.2. The indemnification obligations under the Contract shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONSULTANT under workers' compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any

actions brought by or in the name of any employee of the CONSULTANT or of any third party to whom CONSULTANT may subcontract a part or all of the Work. This indemnification shall continue for a period of one (1) year beyond the date of completion of the Work.

7.9. INSURANCE

7.9.1. GENERAL REQUIREMENTS

- 7.9.1.01 During the Term of the Agreement, the Contractor shall provide, pay for, and maintain with insurance companies satisfactory to the City of Key West, Florida ("City"), the types of insurance described herein.
- 7.9.1.02 All insurance shall be from responsible insurance companies eligible to do business in the State of Florida. The required policies of insurance shall be performable in Monroe County, Florida, and shall be construed in accordance with the laws of the State of Florida.
- 7.9.1.03 The City shall be specifically included as an additional insured on the Contractor's Liability policies with the exception of the Contractor's Worker's Compensation/Employer's Liability and Professional Liability policies (if required) and shall also provide the "Severability of Interest" provision (a/k/a "Separation of Insured's" provision). The City's additional insured status should be extended to all Completed Operations coverages.
- 7.9.1.04 The Contractor shall deliver to the City, prior to commencing work/activities under the Agreement, properly executed "Certificate(s) of Insurance" setting forth the insurance coverage and limits required herein. The Certificates must be signed by the authorized representative of the insurance company(s) shown on the Certificate of Insurance. In addition, certified, true, and exact copies of the insurance policies required herein shall be provided to the City, on a timely basis, if requested by the City.
- 7.9.1.05 If the Contractor fails to provide or maintain the insurance coverages required in this Agreement at any time during the Term of the Agreement and if the Contractor refuses or otherwise neglects to deliver the required Certificate(s) of Insurance signed by the authorized representative of the insurance company(s) to the City, the City may, at the City's sole discretion, terminate or suspend this Agreement and seize the amount of Contractor's performance bond, letter of credit, or other security acceptable to the City).
- 7.9.1.06 The Contractor shall take immediate steps to make up any impairment to any Aggregate Policy Limit upon notification of the impairment. If at any time the City requests a written statement from the insurance company(s) as to any impairment to the Aggregate Limit, the Contractor shall promptly authorize and have delivered such statement to the City.
- 7.9.1.07 The Contractor authorizes the City and/or its insurance consultant to confirm all information furnished to the City, as to its compliance with its Bonds and Insurance Requirements, with the Contractor's insurance agents, brokers, surety, and insurance carriers.

- 7.9.1.08 All insurance coverage of the Contractor shall be primary to any insurance or self-insurance program carried by the City. The City's insurance or self-insurance programs or coverage shall not be contributory with any insurance required of the Contractor in this Agreement.
- 7.9.1.09 The acceptance of delivery to the City of any Certificate of Insurance evidencing the insurance coverage and limits required in the Agreement does not constitute approval or agreement by the City that the insurance requirements in the Agreement have been met or that the insurance policies shown in the Certificates of Insurance are in compliance with the Agreement requirements.
- 7.9.1.10 No work/activity under this Agreement shall commence or continue unless and until the required Certificate(s) of Insurance are in effect and the written Notice to Proceed is issued by the City.
- 7.9.1.11 The insurance coverage and limits required of the Contractor under this Agreement are designed to meet the minimum requirements of the City. They are not designed as a recommended insurance program for the Contractor. The Contractor alone shall be responsible for the sufficiency of its own insurance program. Should the Contractor have any question concerning its exposures to loss under this Agreement or the possible insurance coverage needed therefore, it should seek professional assistance.
- 7.9.1.12 During the Term of this Agreement, the City and its agents and contractors may continue to engage in necessary business activities during the operations of the Contractor. No personal property owned by City used in connection with these business activities shall be considered by the Contractor's insurance company as being in the care, custody, or control of the Contractor.
- 7.9.1.13 Should any of the required insurances specified in this Agreement provide for a deductible, self-insured retention, self-insured amount, or any scheme other than a fully insured program, the Contractor shall be responsible for all deductibles and self-insured retentions.
- 7.9.1.14 All of the required insurance coverages shall be issued as required by law and shall be endorsed, where necessary, to comply with the minimum requirements contained herein.
- 7.9.1.15 All policies of insurance required herein shall require that the insurer give the City thirty (30) days advance written notice of any cancellation, intent not to renew any policy and/or any change that will reduce the insurance coverage required in this Agreement, except for the application of the Aggregate Limits Provisions.
- 7.9.1.16 Renewal Certificate(s) of Insurance shall be provided to the City upon the expiration of current coverage so that there shall be no termination of the Agreement due to lack of proof of the insurance coverage required of the Contractor.
- 7.9.1.17 If the Contractor utilizes contractors or sub-contractors to perform any operations or activities governed by this Agreement, the Contractor will ensure all contractors and sub-contractors to maintain the same types and amounts of insurance required of the Contractor. In addition, the Contractor will ensure that the contractor and sub-contractor insurances comply with all of the Insurance Requirements specified

for the Contractor contained within this Agreement. The Contractor shall obtain Certificates of Insurance comparable to those required of the Contractor from all contractors and sub-contractors. Such Certificates of Insurances shall be presented to the City upon request. Contractor's obligation to ensure that all contractor's and sub-contractor's insurance as provided herein shall not exculpate Contractor from the direct primary responsibility Contractor has to the City hereunder. The City will look directly to Contractor for any such liability hereunder and shall not be obligated to seek recovery from any contractor or subcontract or under such contractor's or sub-contractor's insurance coverages.

7.9.2 SPECIFIC INSURANCE REQUIREMENTS

- 7.9.2.01 All requirements in this Insurance Section shall be complied with in full by the Contractor unless excused from compliance in writing by the City.
- 7.9.2.02 The amounts and types of insurance must conform to the following requirements. Current Insurance Service Office (ISO) or National Council on Compensation Insurance (NCCI) policies, forms, and endorsements or broader shall be used where applicable. Notwithstanding the foregoing, the wording of all policies, forms, and endorsements must be acceptable to the City.

Workers' Compensation and Employers' Liability Insurance shall be maintained in force during the Term of this Agreement for all employees engaged in this work under this Agreement, in accordance with the laws of the State of Florida. The acceptable limits shall be:

Workers' Compensation	Florida Statutory Requirements
Employer's Liability	\$100,000.00 Limit Each Accident
	\$500,000.00 Limit Disease Aggregate
	\$100,000.00 Limit Disease Each Employee

If the Contractor has less than four (4) employees and has elected not to purchase Workers' Compensation/Employers Liability coverage as permitted by *Florida Statutes*, the Contractor will be required to issue a formal letter (on the Contractor's letterhead) stating that it has less than four (4) employees and has elected not to purchase Workers' Compensation/Employers Liability coverage as permitted by *Florida Statutes*. This exception does **not** apply to firms engaged in construction activities.

Commercial General Liability Insurance shall be maintained by the Contractor on a Full Occurrence Form. Coverage shall include, but not be limited to, Premises and Operations, Personal Injury, Contractual for this Agreement, Independent Contractors, and Products & Completed Operations Coverage. The limits of such coverage shall be :

Bodily Injury &	\$1,000,000.00 Combined Single Limit each
Property Damage Liability	Occurrence and Aggregate

Completed Operations Liability Coverage shall be maintained by the Contractor for a period of not less than four (4) years following expiration or termination of this Agreement.

The use of an Excess, Umbrella and/or Bumbershoot policy shall be acceptable if the level of protection provided by the Excess, Umbrella and/or Bumbershoot policy is equal to or more comprehensive than the Primary Commercial General Liability policy.

Business Automobile Liability Insurance shall be maintained by the Contractor as to ownership, maintenance, use, loading and unloading of all owned, non-owned, leased, or hired vehicles with limits of such coverage of :

Bodily Injury	\$500,000.00 Limit Each Accident
Property Damage Liability	\$500,000.00 Limit Each Accident

or

Bodily Injury & Property Damage Liability	\$500,000.00 Combined Single Limit Each Accident
--	--

If the Contractor does not own any vehicles, this requirement can be satisfied by having the Contractor's Commercial General Liability policy endorsed with "Non-Owned and Hired Automobile" Liability coverage.

Professional Liability Insurance shall be maintained by the Contractor which will respond to damages resulting from any claim arising out of the performance of professional services or any error or omission of the Contractor arising out of activities governed by this Agreement. The acceptable limits of liability shall be \$1,000,000 per Occurrence and \$2,000,000 Annual Aggregate. If the policy is structured on a "Claims Made" basis, the policy must contain a "Retroactive Date" of no later than the commencement date of the Agreement and will have an extended reporting period of four (4) years following expiration or termination of the Agreement.

7.10. REPRESENTATIVE OF CITY AND CONSULTANT

- 7.10.1. The parties recognize that questions in the day-to-day conduct of the Task Order will arise. The Contract Administrator, upon CONSULTANT's request, shall advise CONSULTANT in writing of one (1) or more CITY employees to whom all communications pertaining to the day-to-day conduct of the Task Order shall be addressed.
- 7.10.2. CONSULTANT shall inform the Contract Administrator in writing of CONSULTANT's representative to whom matters involving the conduct of the Task Order shall be addressed.

7.11. ALL PRIOR AGREEMENTS SUPERSEDED

- 7.11.1. This document incorporates and includes all prior negotiations, correspondence, conversations, agreements or understandings applicable to the matters contained herein; and the parties agree that there are no commitments, agreements or understandings concerning the subject matter of this Agreement that are not contained in this document and the exhibits attached. Accordingly, the parties agree that no deviation from the terms hereof shall be predicated upon any prior representations or agreements whether oral or written.
- 7.11.2. It is further agreed that no modification, amendment or alteration in the terms or conditions contained herein shall be effective unless contained in a written document executed with the same formality and of equal dignity herewith.

7.12. NOTICES

Whenever either party desires to give notice unto the other, such notice must be in writing, sent by certified United States mail, return receipt requested, addressed to the party for whom it is intended at the place last specified; and the place for giving of notice shall remain such until it shall have been changed by written notice in compliance with the provisions of this paragraph. For the present, the parties designate the following as the respective places for giving of notice:

FOR CITY OF KEY WEST:

City Manager
City of Key West
1300 White Street
Key West, FL 33040

AND

Grants Manager
City of Key West
1300 White Street
Key West, FL33040

FOR CONSULTANT:

Brian Proctor
Vice President Southeast Operations
Tetra Tech, Inc
759 S. Federal Highway, Suite 314
Stuart, FL 34994

7.13. TRUTH-IN-NEGOTIATION CERTIFICATE

Signature of this Agreement by CONSULTANT shall act as the execution of a truth-in negotiation certificate stating that wage rates and other factual unit costs supporting the compensation of this Agreement are accurate, complete, and current at the time of contracting. The original contract price for any Task Order and any additions thereto shall be adjusted to exclude any significant sums, by which CITY determines the contract price was increased due to inaccurate, incomplete, or non-current wage rates and other factual unit costs. All such contract adjustments shall be made within one (1) year following the end of this Agreement.

7.14. INTERPRETATION

The language of this Agreement has been agreed to by both parties to express their mutual intent and no rule of strict construction shall be applied against either party hereto. The headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. All personal pronouns used in this Agreement shall include the other gender, and the singular shall include the plural, and vice versa, unless the context otherwise requires. Terms such as "herein," "hereof," "hereunder," and "hereinafter" refer to this Agreement as a whole and not to any particular sentence or paragraph where they appear, unless the context otherwise requires. Whenever reference is made to a Paragraph or

Article of this Agreement, such reference is to the Paragraph or Article as a whole, including all of the subsections of such Paragraph, unless the reference is made to a particular subsection or subparagraph of such Paragraph or Article.

7.15. CONSULTANT'S STAFF

- 7.15.1. CONSULTANT shall provide the key staff identified in their proposal for Task Order as long as such key staffs are in CONSULTANT's employment.
- 7.15.2. CONSULTANT shall obtain prior written approval of Contract Administrator to change key staff. CONSULTANT shall provide Contract Administrator with such information as necessary to determine the suitability of proposed new key staff. Contract Administrator shall be reasonable in evaluating key staff qualifications.
- 7.15.3. If Contract Administrator desires to request removal of any of CONSULTANT's staff, Contract Administrator shall first meet with CONSULTANT and provide reasonable justification for said removal.
- 7.15.4. The CITY reserves the right to approve the members of the Consulting Team and the roles they will undertake in the assignment. The CITY's acceptance of a team member shall not be unreasonably withheld.
- 7.15.5. Each assignment issued under this Agreement by the CITY to the Consultant, the Consultant will at the CITY's request, disclose the role, qualifications and hourly rate of each individual working on the assignment.
- 7.15.6. The CITY reserves the right to require replacement of any of the members of the Consulting Team. Any proposed addition or change of members of the Consulting Team initiated by the Consultant must obtain the CITY Representative's prior written approval.
- 7.15.7. In the event of the death, incapacity or termination of employment of any member of the Consulting Team before Completion of the Services, the Consultant shall at its own expense and as soon as reasonably practicable arrange to substitute or replace the individual member concerned.
- 7.15.8. The Consultant shall ensure that the substitute or replacement is no less qualified in terms of relevant experience and qualifications than the outgoing individual and is available at the relevant time to act as such replacement or substitute. The Consultant shall without delay forward curriculum vitae of the proposed substitute or replacement to the CITY. The deployment of such substitute or replacement shall be subject to the CITY's consent.
- 7.15.9. The Consultant shall solely be responsible for all direct, indirect and consequential costs or losses that may arise from the substitution or replacement of nonperforming members of the Consulting Team.

7.16. INDEPENDENT CONTRACTOR

CONSULTANT is an independent contractor under this Agreement. Services provided by CONSULTANT shall be subject to the supervision of CONSULTANT. In providing the

services, CONSULTANT or its agents shall not be acting and shall not be deemed as acting as officers, employees, or agents of the CITY, nor shall they accrue any of the rights or benefits of a CITY employee. The parties expressly acknowledge that it is not their intent to create any rights or obligations in any third person or entity under this Agreement.

7.17. THIRD PARTY BENEFICIARIES

Neither CONSULTANT nor CITY intend directly or substantially to benefit a third party by this Agreement. Therefore, the parties agree that there are no third party beneficiaries to this Agreement and that no third party shall be entitled to assert a claim against either of them based upon this Agreement. No subcontractor or sub-consultant, whether named or unnamed, shall be a third party beneficiary of this Agreement.

7.18. CONFLICTS

- 7.18.1. Neither CONSULTANT nor its employees shall have or hold any continuing or frequently recurring employment or contractual relationship that is substantially antagonistic or incompatible with CONSULTANT's loyal and conscientious exercise of judgment related to its performance under this Agreement.
- 7.18.2. CONSULTANT agrees that none of its officers or employees shall, during the term of this Agreement, serve as an expert witness against CITY in any legal or administrative proceeding in which he or she is not a party, unless compelled by court process, nor shall such persons give sworn testimony or issue a report or writing, as an expression of his or her expert opinion, which is adverse or prejudicial to the interests of CITY or in connection with any such pending or threatened legal or administrative proceeding. The limitations of this section shall not preclude such persons from representing themselves in any action or in any administrative or legal proceeding.
- 7.18.3. In the event CONSULTANT is permitted to use sub-consultants to perform any services required by this Agreement, CONSULTANT agrees to prohibit such sub-consultants from having any conflicts as within the meaning of this section and shall so notify them in writing.

7.19. CONTINGENCY FEE

CONSULTANT warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for CONSULTANT, to solicit or secure this Agreement and that it has not paid or agreed to pay any person, company, corporation, individual or firm, other than a bona fide employee working solely for CONSULTANT, any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Agreement. For a breach or violation of this provision, CITY shall have the right to terminate this Agreement without liability at its discretion, or to deduct from the Agreement price or otherwise recover the full amount of such fee, commission, percentage, gift, or consideration.

7.20. WAIVER OF BREACH AND MATERIALITY

7.20.1. Failure by CITY to enforce any provision of this Agreement shall not be deemed a waiver of such provision or modification of this Agreement. A waiver of any breach of a provision of this Agreement shall not be deemed a waiver of any subsequent breach and shall not be construed to be a modification of the terms of this Agreement.

7.20.2. CITY and CONSULTANT agree that each requirement, duty, and obligation set forth herein is substantial and important to the formation of this Agreement and, therefore, is a material term hereof.

7.21. COMPLIANCE WITH LAWS

CONSULTANT shall comply with federal, state, and local laws, codes, ordinances, rules, and regulations in performing its duties, responsibilities, and obligations related to this Agreement applicable at the time the scope of services was drafted for this agreement. In addition, at the time each Task Order is executed, any revisions to applicable federal state, and local laws, codes, ordinances, rules and regulations shall apply.

7.22. SEVERABILITY

In the event this Agreement or a portion of this Agreement is found by a court of competent jurisdiction to be invalid, the remaining provisions shall continue to be effective unless CITY or CONSULTANT elects to terminate this Agreement.

7.23. JOINT PREPARATION

Preparation of this Agreement has been a joint effort of CITY and CONSULTANT and the resulting document shall not, solely as a matter of judicial construction, be construed more severely against one of the parties than any other.

7.24. PRIORITY OF PROVISIONS

If there is a conflict or inconsistency between any term, statement, requirement, or provision of any exhibit attached hereto, any document or events referred to herein, or any document incorporated into this Agreement by reference and a term, statement, requirement, or provision of this Agreement, the term, statement, requirement, or provision contained in Articles 1 through 7 of this Agreement shall prevail and be given effect.

7.25. APPLICABLE LAW AND VENUE

The laws of the State of Florida govern the validity of this Agreement, its interpretation and performance, and any claims related to it. The venue for mediation, arbitration or any other legal proceeding shall be Monroe County, Florida.

7.26. **INCORPORATION BY REFERENCE**

The attached exhibits are incorporated into and made a part of this Agreement:


- Exhibit B - 2 CFR Appendix II to Part 200: Contract Provisions for Non-Federal Entity Contracts Under Federal Awards
- Exhibit C - Housing and Development Act, Section 3 Compliance
- Exhibit D - FDEO Reporting Forms
- Exhibit E - FDEO Agreement MT010
- Exhibit F - FDEP Agreement 22PLN64

7.27. **COUNTERPARTS**

This Agreement may be executed in three (3) counterparts, each of which shall be deemed to be an original.


IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the respective dates under each signature.

By: CITY OF KEY WEST


Albert Childress, City Manager

23rd day of Aug., 2023

By: CONSULTANT


Brian Proctor, Vice President Southeast Operations, Tetra Tech, Inc


24 day of August, 2023

Attest:


Cheryl Smith, City Clerk
KERI O'BRIEN

23rd day of August, 2023

Attest:


(Signature)
Marirose Insogna
(Print Name and Title)

24th day of August, 2022 2023

Reviewed for Legal Sufficiency
RL 8/23/23
Ronald J. Ramsingh, City Clerk

Exhibit A - Hourly Fee Schedule

TETRA TECH, INC.	
Schedule of Hourly Rates	
Engineers / Scientists / Planners / GIS / Project Support	
CLASSIFICATION	RATE
Principal III	\$298.00
Principal II	\$287.00
Principal I	\$276.00
Senior Consultant IV	\$266.00
Senior Consultant III	\$255.00
Senior Consultant II	\$243.00
Senior Consultant I	\$232.00
Manager V	\$221.00
Manager IV	\$212.00
Manager III	\$204.00
Manager II	\$195.00
Manager I	\$186.00
Senior Staff V	\$177.00
Senior Staff IV	\$168.00
Senior Staff III	\$160.00
Senior Staff II	\$151.00
Senior Staff I	\$143.00
Project Staff V	\$134.00
Project Staff IV	\$126.00
Project Staff III	\$117.00
Project Staff II	\$109.00
Project Staff I	\$100.00
Junior Staff III	\$92.00
Junior Staff II	\$83.00
Junior Staff I	\$74.00
Technician V	\$65.00
Technician IV	\$57.00
Technician III	\$49.00
Technician II	\$42.00
Technician I	\$35.00

Rates are good through 2023 only and are subject to annual escalation thereafter.

Rates include direct labor, overhead, G&A, and fee.

Expert Witness Testimony will be negotiated if needed.

All other direct costs and subcontract costs will be charged at cost plus 10% .

2023 Rate Schedule

STANDARD RATE SCHEDULE	
<u>TITLE(S)</u>	<u>HOURLY RATE</u>
Principal	\$ 250.00
Director	\$ 220.00
Project Manager	\$ 180.00
Senior Scientist	\$ 180.00
Project Engineer	\$ 150.00
Outreach Director	\$ 150.00
Staff Scientist	\$ 120.00
Coordinator	\$ 120.00
Junior Engineer	\$ 120.00
CADD/Designer	\$ 100.00
Senior Associate	\$ 75.00
Associate	\$ 65.00
Administrative Assistant	\$ 60.00

Clearview Geographic	
Clearview Geographic GIS Developer	\$200.00
Clearview Geographic Environmental Scientist I	\$100.00
Clearview Geographic Environmental Scientist II	\$125.00
Clearview Geographic Environmental Scientist III	\$150.00
Clearview Geographic GIS/IT/ENV Technician	\$75.00
Clearview Geographic GIS Analyst	\$80.00
Clearview Geographic GIS Specialist I	\$100.00
Clearview Geographic GIS Specialist II	\$125.00
Clearview Geographic GIS Specialist III	\$150.00
Clearview Geographic IT Specialist I	\$100.00
Clearview Geographic IT Specialist II	\$150.00
Clearview Geographic IT Specialist III	\$175.00

CLASSIFICATION	RATE
Stantec	
Senior Project Manager	\$ 219
Infrastructure Engineer	\$ 232
Associate Project Manager	\$ 198
Balmoral Group	
Principal	\$ 290
Erin Deady, PA	
Principal	\$ 215
Project Manager	\$ 150

2023 SEARCH HOURLY RATES



ARCHAEOLOGY	RATE
Senior Principal Investigator	\$185.00
Lead Principal Investigator	\$155.00
Principal Investigator	\$125.00
Survey Operations Manager	\$120.00
Field Survey Manager	\$95.00
Senior Archaeologist	\$95.00
Lead Archaeologist	\$85.00
Archaeologist	\$75.00
Senior Archaeological Technician	\$70.00
Archaeological Technician	\$65.00
SOI-Qualified Monitor	\$125.00
Archaeological Monitor	\$95.00
Forensic Archaeologist	\$125.00
Tribal Consultation Lead	\$235.00
Tribal Consultation Liaison	\$195.00

LABORATORY	RATE
Laboratory Manager	\$120.00
Bioarchaeologist, Osteologist	\$125.00
Zooarchaeologist	\$125.00
Lead Laboratory Archaeologist	\$85.00
Laboratory Archaeologist	\$75.00
Laboratory Technician	\$65.00
Laboratory Assistant	\$52.00

MARITIME	RATE
Dive Safety Manager	\$135.00
Senior Maritime Principal Investigator	\$185.00
Lead Maritime Principal Investigator	\$155.00
Maritime Principal Investigator	\$135.00
Senior Maritime Archaeologist	\$105.00
Sr. Submerged Precontact Archaeologist	\$105.00
Lead Maritime Archaeologist	\$95.00
Submerged Precontact Archaeologist	\$92.00
Maritime Archaeologist	\$85.00
Maritime Technician & Archivist	\$75.00
Maritime Assistant	\$60.00
Qualified Maritime Archaeologist (QMA)	\$155.00
QMA Ride-Along Monitor	\$155.00
Maritime Monitor	\$135.00
Lead Remote-Sensing Specialist	\$155.00
Remote-Sensing Specialist	\$135.00
Maritime Data Analyst	\$140.00
Submersible/ROV/AUV Archaeologist	\$92.00
Scientific Diver	\$92.00

GEOPHYSICAL & GIS	RATE
Geomorphologist	\$200.00
GIS Manager	\$120.00
Senior GIS Specialist	\$105.00
Lead GIS Specialist	\$80.00
GIS Technician	\$65.00
Senior GPR Operator/Analyst	\$105.00
GPR Operator/Analyst	\$95.00
Geospatial Analyst	\$80.00
Aerial Imagery Specialist	\$75.00

LOGISTICS	RATE
FSO & ITPSO	\$225.00
Health & Safety Manager	\$145.00
Health & Safety Specialist	\$115.00
Executive Administrative Coordinator	\$115.00
Administrative Specialist	\$75.00
Survey Operations Manager	\$120.00
Field Survey Manager	\$95.00
Lead Logistics Specialist (Equip., Fleet)	\$85.00
Logistics Specialist (Travel)	\$75.00

ARCHITECTURAL HISTORY	RATE
Senior Architectural Historian	\$165.00
Architectural Historian, Principal Investigator	\$125.00
Architectural Historian	\$115.00
Lead Architectural History Specialist	\$90.00
Architectural History Specialist	\$80.00

HISTORY	RATE
Paleographer	\$200.00
Cultural Ethnographer	\$125.00
Historian	\$120.00
Lead History Specialist	\$80.00

MUSEUM SERVICES	RATE
Lead Museum Services Project Manager	\$145.00

<i>Collections</i>	
Project Manager, Collections Management	\$115.00
Senior Collections Specialist	\$95.00
Senior Collections Technician	\$75.00

<i>Archives</i>	
Certified Archivist	\$125.00
Senior Archivist	\$105.00
Lead Archivist	\$95.00
Archivist	\$85.00
Maritime Technician & Archivist	\$75.00
Senior Archives Technician	\$75.00

<i>Conservation</i>	
Conservator	\$125.00
Senior Conservation Specialist	\$105.00
Conservation Specialist	\$85.00
Maritime Conservator	\$135.00
Senior Maritime Conservation Specialist	\$110.00
Maritime Conservation Specialist	\$95.00

<i>Creative Services</i>	
Marketing Manager	\$155.00
Exhibits & Design Manager	\$135.00
Digital Media Manager	\$135.00
Creative Specialist, Principal Investigator	\$125.00
Senior Creative Specialist	\$95.00
Creative Specialist	\$75.00
Graphic Designer	\$95.00
Senior Photographer/Videographer	\$115.00
Photographer/Videographer	\$100.00

<i>Data Management</i>	
Data Manager	\$110.00
Senior Data Management Specialist	\$95.00
Data Management Specialist	\$85.00

EDITORIAL	RATE
QA/QC Director	\$250.00
Technical Editor	\$115.00
Lead Editorial Specialist	\$80.00

MANAGEMENT	RATE
Director	\$250.00
Senior Project Director	\$235.00
Senior Project Manager	\$195.00
Project Manager	\$155.00
Assistant Project Manager	\$125.00
Maritime Project Manager	\$155.00
Assistant Maritime Project Manager	\$140.00

2023 Burdened Hourly Rates, 24% G&A applies to all ODCs

Exhibit B - 2 CFR Appendix II to Part 200
Contract Provisions for Non-Federal Entity Contracts Under Federal Awards

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

(A) Contracts for more than the simplified acquisition threshold, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

(B) All contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

(C) Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

(D) Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

(E) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40

U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of “funding agreement” under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

(G) Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended - Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

(H) Debarment and Suspension (Executive Orders 12549 and 12689) – A contract award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352) - Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

(J) See § 200.323.

(K) See § 200.216.

(L) See § 200.322.

Exhibit C – Housing and Development Act, Section 3 Compliance

24 CFR § 135.38 - Section 3 clause.

All section 3 covered contracts shall include the following clause (referred to as the section 3 clause):

- A. The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.
- E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.
- F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
- G. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and sub contracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

Exhibit D – FDEO Reporting

- 1) **Monthly** (within 10 Calendar Days after the end of the month)
 - A. Project Detail Budget: Detailed report measuring actual cost versus projected cost
 - B. Updated Activity Work Plan, documenting/justifying any changes – if no changes so state.
 - C. Changes to original timeline milestones (with justification)
- 2) **Quarterly Reporting** (no later than the 10th of every April, July, October and January)
 - A. Updated organization chart
 - B. Any staffing changes made during the quarter
 - C. Progress report including 1) Accomplishments, 2) Issues or risks faced and resolutions & 3)
 - D. Projected activities to be completed in upcoming quarter
- 3) **Infrequent Reporting (two or less times per year)**
 - A. Submit HUD Form 60002 Section 3 Summary Report (July 31)
 - B. Submit HUD Form 2516 Contract and Subcontract Activity (Apr 15 & Oct 15)

Exhibit E – FDEO Agreement MT010

The FDEO Agreement can be found here:

<http://keywest.legistar.com/gateway.aspx?M=F&ID=4cb51dd4-4226-4540-9878-8be2b341464e.pdf>

Exhibit F - FDEP Agreement 22PLN64

The FDEP Agreement can be found here:

<http://keywest.legistar.com/gateway.aspx?M=F&ID=b0e0fdf7-4b5a-459d-8e0d-adeb6419593a.pdf>

Exhibit G

Task Order 6 23 CARIP

**PROFESSIONAL SERVICES FOR KEY WEST COMPREHENSIVE ADAPTATION AND
RESILIENCE IMPLEMENTATION PLAN**

This TASK ORDER 6 23 CARIP is issued under the terms and conditions of this PROFESSIONAL SERVICES FOR KEY WEST COMPREHENSIVE ADAPTATION AND RESILIENCE IMPLEMENTATION PLAN ("AGREEMENT") between the City of Key West ("CITY") and Tetra Tech Inc. ("CONSULTANT").

A. SCOPE OF SERVICES

Specific services which the CONSULTANT agrees to furnish are summarized on the attached statement entitled TASK ORDER 6 23 CARIP "SCOPE OF SERVICES." The "Scope of Services" defines the work effort anticipated for this Task Order.

B. TIME OF COMPLETION

Work under this Task Order will begin immediately following acceptance and be completed expeditiously subject to coordination with the City of Key West staff.


C. COMPENSATION

Compensation for the labor portions of TASK ORDER 6 23 CARIP, will be on a lump sum fee basis as stipulated in Article 2, Paragraph 2.1 of the AGREEMENT. Compensation for all expenses will be on a Cost Reimbursable-Per Diem basis as stipulated in Article 2, Paragraph 2.2 of the AGREEMENT. The estimated compensation is shown on the attached statement entitled TASK ORDER 6 23 CARIP COMPENSATION.

D. ACCEPTANCE


By signature, the parties each accept the provisions of this TASK ORDER 6 23 CARIP and authorize the CONSULTANT to proceed at the direction of the CITY's representative in accordance with the "SCOPE OF SERVICES." Start date for this project will be no later than two (2) days after execution of this authorization.

For TETRA TECH, INC.

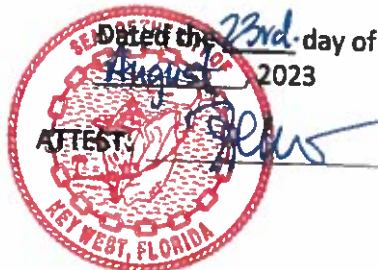


Brian Proctor, Vice President
Southeast Operations, Tetra Tech,
Inc

For CITY OF KEY WEST



Albert Childress
City Manager



Reviewed for Legal Sufficiency
RR 8/22/23

Ronald J. Ramsingh, City Attorney

TASK ORDER 6-23 CARIP

PROFESSIONAL SERVICES FOR KEY WEST COMPREHENSIVE ADAPTATION AND RESILIENCE IMPLEMENTATION PLAN

SCOPE OF SERVICES

XB.1: Climate Vulnerability Assessment

The central task of the CVA is to evaluate the vulnerability to climate threats across each asset category (e.g., people, property, critical facilities, infrastructure, economy, natural resources); and estimate the likelihood and magnitude of potential losses.

The consultant/consultant team (consultant) will work with city staff, community representatives, regional agencies and other experts to develop a comprehensive CVA that: (1) determines the assets to be included in the vulnerability assessment (e.g. water supply, infrastructure, public health); (2) conducts a sensitivity analysis for selected assets; (3) evaluates the adaptive capacity of the systems associated with the assets; and (4) complete an assessment of how vulnerable those systems are to the effects of climate change. The expected outcome and deliverable will be a City of Key West Climate Vulnerability Assessment, which will be used to make City policy and resource allocation decisions and to develop climate adaptation plans for the City.

Risk is the chance of a loss and the negative consequence of the loss. The consultant will utilize a method of their selection to estimate the likelihood and magnitude of losses resulting from each climate threat. A detailed risk analysis is not required, though proposals should include an explanation of the risk analysis method to be used. The consultant will produce outputs of the risk scoping, as well as spatial maps of risk. Outputs shall include planning level cost estimates for the projected damage or loss due to the climate threats assessed for each asset category assuming no adaptation strategies have been put into place.

Vulnerability is a measure of the degree to which an asset of a system is susceptible to and able/unable to cope with adverse effects of climate change/threats. To assess climate vulnerability, this task needs to document how the selected assets are affected by climate threats in terms of the following:

- a) Exposure: the presence of people, assets, and ecosystems in places where they could be adversely affected by hazards
- b) Sensitivity: the degree to which a system, population or resource is or might be affected by hazards/threats.
- c) Adaptive Capacity: the ability of a person, asset, or system to adjust to a hazard, and/or take advantage of new opportunities or cope with change.

The consultant will apply one or more supporting tools to assess the vulnerability of assets with respect to each climate threat and asset. Because of the breadth of assets impacted, approaches to assessing vulnerability may not be one size fits all. These tools may be publicly or privately sourced (e.g., EPA's Climate Resilience Evaluation and Awareness tool, U.S. Resilience Toolkit, the Social Vulnerability Index, Asset-Threat Comparison, or various GIS mapping tools). In their proposals, consultants are expected to identify and describe the tools and analysis to be used and the asset categories that will be covered in each; and to justify why the approach will be appropriate for each asset. If the consultant has a proprietary tool or model to assess a threat, the consultant must explain the tool's assessment capacity, assumptions, and sensitivity parameters, and provide examples of the tool's output analysis. Naval Air Station – Sector Key West is currently undergoing a Military Installation Resiliency Review, which includes a CVA, Risk Assessments and Decision Framework for Project Ranking. The consultant is expected to review their process and product in order to ensure that the City and Navy can align initiatives to

collaboratively pursue funding.

The consultant will then run the assessments using the selected tools and analyses, and produce outputs (e.g., asset-threat sheets, consequence matrix) as well as spatial maps illustrating the vulnerability of each asset/attribute to each climate threat. Given the dynamic nature of the data (e.g., new 2020 Census, continued advancement in availability and understanding of climate data, etc.) the proposals should address how the assessments can be updated, adjusted, or reinterpreted as more recent and accurate information becomes available.

XB. 2 Adaptation Plan:

The City of Key West has chosen 8 sectors/chapters to individually prioritize adaptation actions and 10-Year budget timelines for: Infrastructure (Roads/Buildings/Systems), Historic/Cultural, Housing and Shelter, Power and Water, Environment, Policy and Implementation, Economic, and Health and Equity.

For each Chapter, the consultant will develop a comprehensive list of adaptation strategies to include both structural and non-structural measures at both the regional and community scale. The following is a representative, but not exhaustive, list of the types of adaptation strategies to consider.

- Asset- or site-specific protective measures, including nature-based solutions, to reduce or at least minimize prolonged service interruptions and risk.
- Potential design guidelines for future infrastructure upgrades/designs or changes in operations that assist in mitigating risk.
- Potential design guidelines for existing and future property development (buildings and landscape) that mitigate risks.
- Assets that may be considered for relocation, as well as parcels that are unsuitable for additional asset development or should remain as undeveloped open space.
- Policies that can protect property values in highly vulnerable areas (e.g., transfer of development rights)
- Community outreach methods and education efforts to improve communication of threats and adaptive measures that can be or have been taken to protect sensitive populations.
- Program or communications strategies to address vulnerable communities.
- Insurance tools or novel financial programs that address risk reduction.
- Voluntary land acquisition goals and strategies for neighborhood level adaptive techniques.

The consultant will prioritize all potential adaptive measures based on their potential to reduce vulnerability, the ability and feasibility of implementation, cost/benefit ratio, and other criteria established by that Chapter's Working Group and the consultant.

For all prioritized adaptive measures, the consultant will identify available programs and strategies to fund and/or finance their implementation. These may include federal and state funding sources, best practices with respect to special taxing districts, revolving loan funds, public-private partnerships, innovative insurance tools, and other practices.

For all prioritized adaptive measures, the consultant will develop a planning level cost estimate for comparison with estimated costs of the impacts to the assets were no adaptation strategies implemented. This will be known as the cost/benefit ratio.

After presenting the priorities to the Working Group, the consultant will present the final agreed upon priorities at a Public Workshop and collect comments and questions. The Working Group will convene one last time to consult on the outcome of the Workshop, and then set a date for the Consultant to present the draft to the City Commission.

XB.3 Interactive Mapping:

The future implementation of selected adaptation strategies will require ongoing analysis and occasional updates. Therefore, the consultant will provide an interactive mapping platform/tool which staff and the public can access, view, and interact with perpetually. The consultant will develop a GIS-based interactive mapping tool that allows users to view multiple data layers and data sets, as well as aggregate and disaggregate vulnerabilities by asset type, threat type, time horizon and/or climate change model. The tool should allow the user to zoom in and out to different geographic levels to examine vulnerabilities at different scales. The tool also needs to offer the capability to assign permission levels to restrict access to sensitive data and protect the integrity of data sets. The datasets underlying the mapping tool must be provided for future update, as well as metadata describing the datasets used. The map shall host results from the CVA as well as all prioritized projects from each Chapter. The proposal must include the cost of perpetual platform access and use after the project is complete.

XB.4 Public Engagement Plan:

Steering Committee: The entire project will have a Steering Committee that the City will identify and convene that will oversee the whole process to ensure cross-disciplinary guidance. Each Chapter will have its own working group that the City will identify and convene. The consultant will be expected to create a Public Engagement Plan that includes a Kickoff meeting with the Project Steering Committee and a minimum of 3 meetings with each Goal Working Group (in conjunction with the Steering Committee): Kick Off with Preliminary Findings, Pre-Draft Prioritization, and Pre-Public Workshop Draft.

Engagement Plan: The Public Engagement Plan will also outline how the consultant proposes to maximize public participation and understanding of the Adaptation Plan process and projects.

XB.5. Grant Goals and Tasks

Goal 1 – Kick off and Staff Steering Committee (FDEP Task 1)

The following tasks pertain to the administration of the entire project and all of its components.

After a notice-to-proceed is issued, the City and consultant will meet to develop an overall project management plan and to address initial actions. Meeting attendees should discuss the project scope, project goals, schedule, key milestones, and deliverables in order to develop a consistent project approach. The kick-off meeting will be hosted by the City. Prior to the meeting, the Consultant will prepare the sign-in sheet, draft project schedule, and other meeting materials as necessary. The City will prepare a draft list of representatives to serve on the Project Steering Committee.

The City will review and approve the steering committee list and then distribute the draft email prepared in Task 1.1 to the steering committee members. The email requests steering committee member participation and to provide confirmation of acceptance or denial.

The Consultant and City will coordinate and schedule the dates, times, and locations for the project Kick-off meeting, 4 Project Steering Committee and 4 Vulnerability Assessment Working Group meetings, based on critical decision

points in the project process. The purpose of the meetings is to assist in reviewing the goals of the project, review draft materials, appropriate modeling methodologies, assist in identifying available data and resources, identify relevant assets, and review project findings and recommendations. A minimum of two major Project Steering Committee meetings is recommended, at the beginning and end of the project, with smaller Chapter related meetings to assist with selecting Chapter steering committees and final Chapter Review and may be necessary to provide guidance at critical decision points throughout the project process.

Deliverables: The Consultant will provide the following for a total of at least 9 meetings:

- 1.1) Meeting agendas to include location, date, and time of meeting.
- 1.2) Meeting sign-in sheets with attendee names and affiliation.
- 1.3) A copy of the presentation(s) and any materials created for distribution at the meeting, as applicable.
- 1.4) A summary report of committee recommendations and guidance, to include attendee input, meeting outcomes, methodologies selected, appropriate resources and data, relevant assets and review of study deliverables for accuracy and applicability.

GOAL 2: Acquire Background Data

(FDEP Task 2)

The Consultant will research and compile the data needed to perform the VA, based on the requirements as defined in Section 380.093, F.S. Three main categories of data are required to perform a VA: 1) critical and regionally significant asset inventory, 2) topographic data, and 3) flood scenario-related data. GIS metadata should incorporate a layer for each of the four asset classes as defined in paragraphs 380.093(2)(a) 1-4, F.S. GIS files and associated metadata must adhere to the Resilient Florida Program’s GIS Data Standards (Exhibit I), and raw data sources shall be defined within the associated metadata.

The City has created preliminary list of asset categories that should be included in the Vulnerability Assessment. This proposed list of asset categories and the types of community assets in each category is included in Appendix A for the consultant’s consideration and the Working Groups final approval. A preliminary assessment of the GIS data available for each asset category is also included in Appendix A.

Sea level rise projection data shall include the most recent National Oceanic and Atmospheric Administration (NOAA) intermediate-high and intermediate-low projections for 2040 and 2070, at a minimum. Other projections can be used at the City’s discretion. Storm surge data used must be equal to or exceed the 100-year return period (1% annual chance) flood event. In the process of researching background data, the Consultant shall identify data gaps, where missing data or low-quality information may limit the VA’s extent or reduce the accuracy of the results. The City shall rectify any gaps of necessary data.

The following Tasks should be in accordance with Section 380.093, F.S.

Task 2.1 Acquire Background Data & Technical Report with data gap actions

Task 2.2 GIS Files and Metadata for Critical and Regionally Significant Assets

Deliverables: The Consultant will provide the following:

- 2.1) Technical Report 2.1: Outlining the data compiled and findings of the gap analysis; to include recommendations to address the identified data gaps and proposed actions taken to rectify them.
- 2.2) GIS files with appropriate metadata of the data compiled, to include locations of critical assets owned or maintained by the City as well as regionally significant assets that are classified and as defined in paragraphs 380.093(2)(a) 1-4, F.S.

Goal 3: Public Outreach

(FDEP Task 3)

The Consultant will conduct at least three public outreach meetings during the project.

Public Outreach Meeting #1: Initial Data Collection & Critical Assets - The purpose of the first meeting is to allow the public to provide input during the initial data collection stages, to include input on preferred methodologies, data for analyzing potential sea level rise impacts and/or flooding, guiding factors to consider, and critical assets important to the community. The Consultant will conduct a second public meeting to present the results from the exposure analysis, sensitivity analysis, and draft VA.

Public Outreach Meeting #2: Draft Vulnerability Assessment - The purpose of the second meeting is to allow the public to provide community-specific input on the results of the analyses and to reconsider methodologies and assumptions used in the analysis for refinement. Additionally, during this meeting, the Consultant will conduct exercises to encourage the public to prioritize focus areas of flooding, and the critical assets in preparation for the development of adaptation strategies and project development. Criteria should be established to guide the public's input for the selection of focus areas. The Consultant will prepare all social media notifications, meeting invitations, meeting materials, presentations, and graphics utilized during the meeting, as applicable.

Public Outreach Meeting #3: Focus Areas and Critical Asset Priorities - The purpose of the third public meeting is to present the final VA to the City Commission and provide recommendations of actions for adaptation strategies and future project funding. The presentation will also inform the public of the results and the future risk of sea level rise and increased flooding and encourage community participation when identifying mitigation strategies to address the flooding vulnerabilities. Public meeting #3 will debut the public facing, easy-to-use interactive map for Vulnerability data, including Focus areas and future Adaptation Plan projects.

<u>Task 3.1</u>	<u>Public Outreach Meeting #1: Initial Data Collection & Critical Assets</u>
<u>Task 3.2</u>	<u>Public Outreach Meeting #2: Draft Vulnerability Assessment</u>
<u>Task 3.3</u>	<u>Public Outreach Meeting #3: Focus Areas and Critical Asset Priorities</u>

Deliverables: The Consultant will submit Summary Reports for tasks 3.1, 3.2 and 3.3 that provide the following:

- 3.1) Meeting agendas to include location, date, and time of meeting.
- 3.2) Meeting sign-in sheets with attendee names and affiliation (i.e., local stakeholder, resident, steering committee member, local government staff).
- 3.3) A copy of the presentation(s) and any materials created in preparation of or for distribution at the meeting (i.e. social media posts, public announcements, graphics and online materials), as applicable;
- 3.4) A copy of the file or weblink of the video or audio recording from the meeting, if applicable; and
- 3.5) A summary report including attendee input and meeting outcomes.
- 3.6) For Task 3.3 only, url for the Published Interactive Map

Goal 4 – Draft CLIMATE VULNERABILITY ASSESSMENT **(FDEP Task 4)**

This goal entails a complete assessment of the climate related threats including sea level rise, affecting the City of Key West. Per the requirements defined in Section 380.093, Florida Statute (F.S.), Vulnerability Assessments must include the following:

- A. Assets and Topography
 - a) Will encompass entire City and include all critical and regionally significant assets owned or maintained by the City and its locally based partners.
 - b) Will use the most recent publicly available Digital Elevation Model and generally accepted modeling techniques.

- B. The depth of:
 - a. Tidal flooding, including future high tide flooding, which must use thresholds published and provided by the department. To the extent practicable, the analysis should also geographically display the number of tidal flood days expected for each scenario and planning horizon.
 - b. Current and future storm surge flooding using publicly available NOAA or FEMA storm surge data. The initial storm surge event used must equal or exceed the current 100-year flood event. Higher frequency storm events may be analyzed to understand the exposure of a critical asset.
 - c. To the extent practicable, rainfall-induced flooding using spatiotemporal analysis or existing hydrologic and hydraulic modeling results. Future boundary conditions should be modified to consider sea level rise and high tide conditions.
 - d. To the extent practicable, compound flooding or the combination of tidal, storm surge, and rainfall-induced flooding.
- C. The following scenarios and standards:
 - a. At least two local sea level rise scenarios, which must include the 2017 NOAA Intermediate-Low and Intermediate-High sea level rise projections.
 - b. At least two planning horizons that include planning horizons for the years 2040 and 2070.
- D. Data Standards
 - c. All analyses in NAVD 88.
 - d. Raw data sources shall be identified with metadata.

All future Chapters will build off this data and adhere to these standards.

Exposure Analysis - The Consultant will perform an exposure analysis to identify the depth of water caused by each sea level rise, storm surge, and/or flood scenario. The water surface depths (i.e., flood scenarios) used to evaluate assets shall include the following data: Tidal flooding, current and future storm surge flooding, rainfall-induced flooding, and compound flooding, all as applicable. Scenarios and standards used for the exposure analysis shall be pursuant to s. 380.093, F.S.

Sensitivity Analysis - The Consultant will perform the sensitivity analysis to measure the impact of flooding on assets and to apply the data from the exposure analysis to the inventory of critical assets created in the analysis to the inventory of critical assets created in Task 2.1, Acquire Background Data. The sensitivity analysis should include an evaluation of the impact of flood severity on each asset type and at each flood scenario and assign a risk level based on percentages of land area inundated and number of critical assets affected.

Metadata - GIS files with appropriate metadata of the data compiled for Tasks 4.1 and 4.2, to include locations of critical assets owned or maintained by the City as well as regionally significant assets that are classified and as defined in s. 380.093(2) 1-4, F.S. Raw data sources shall be defined within the associated metadata GIS files and associated metadata must adhere to the Resilient Florida Program's Exhibit F GIS Data Standards (Appendix B)

Deliverables: The Consultant will provide the following:

- 4.1) A draft Vulnerability Assessment report that provides details on the findings of the exposure analysis and the sensitivity analysis and includes visual presentation of the data via maps and tables, based on the statutory-required scenarios and standards and details on the modeling process, type of models utilized, and resulting tables and maps illustrating flood depths for each flood scenario.

4.2) An initial list of critical and regionally significant assets that are impacted by flooding. The list of critical and regionally significant assets must be prioritized by area or immediate need and must identify which flood scenario(s) impacts each asset.

4.3) GIS files with results of the exposure analysis for each flood scenario as well as the appropriate metadata that identifies the methods used to create the flood layers.

Goal 5 – Final Vulnerability Assessment Report, Maps, and Tables (FDEP Task 5)

The Consultant will finalize the Vulnerability Assessment (VA) report pursuant to the requirements in Section 380.093, Florida Statute (<http://laws.flrules.org/2021/28>) and based upon the steering committee and public outreach efforts. The final VA must include all results from the exposure and sensitivity analyses, as well as a summary of identified risks and assigned focus areas. It should contain a list of critical and regionally significant assets that are impacted by flooding and sea-level rise, specifying for each asset the flood scenario(s) impacting the asset. GIS files and associated metadata must adhere to the Resilient Florida Program’s GIS Data Standards (Exhibit I), and raw data sources shall be defined within the associated metadata. The final VA must include all results from the exposure and sensitivity analyses, as well as a summary of identified risks and assigned focus areas. .

Deliverables: The Consultant will provide the following:

- 5.1: Final Vulnerability Assessment Report that provides details on the results and conclusions, including illustrations via maps and tables, based on the statutory-required scenarios and standards in Section 380.093, Florida Statute (<http://laws.flrules.org/2021/28>).
- 5.2: A final list of critical and regionally significant assets that are impacted by flooding. The list of critical and regionally significant assets must be prioritized by area or immediate need and must identify which flood scenario(s) impacts each asset.
- 5.3: All electronic mapping data used to illustrate flooding and sea level rise impacts identified in the VA, to include the geospatial data in an electronic file format and GIS metadata; and
- 5.4: A signed Vulnerability Assessment Compliance Checklist Certification. (Appendix C)

Goal 6 –Adaptation Plan (FDEP Task 6)

The Consultant will complete a draft Adaptation Plan that is consistent with the Florida Adaptation Planning Guidebook and includes the following: assessment of adaptive capacities, prioritization of adaptation needs, and identification of adaptation strategies. The Grantee may also include optional subtasks such as identifying adaptation action areas and integrating the proposed AP into existing APs. The AP will also include a list of prioritized projects for each asset class as defined in subsection 380.093(2), F.S., for consideration and implementation. The AP will include funding analyses and strategy as well as policy recommendations for implementation. Assets that can be hardened, elevated, or otherwise physically adapted to reduce or eliminate flood risk will have sufficiently detailed plans to be ready for subsequent design, permitting, and construction. The lower ranked assets will have preliminary adaptation recommendations that the Grantee can use to prioritize projects for future detailed analyses and, where relevant, prepare for the design, permitting and construction phases to adapt them to future conditions.

Funding Analysis - For all prioritized adaptive measures, the consultant will develop a planning level cost estimate for comparison with estimated costs of the impacts to the assets were no adaptation strategies implemented. This will be known as the benefit cost analysis ratio. For all prioritized adaptive measures, the consultant will identify

available programs and strategies to fund and/or finance their implementation. These may include federal and state funding sources, best practices with respect to special taxing districts, revolving loan funds, public-private partnerships, innovative insurance tools, and other practices.

Policy Recommendations - Policy and Implementation involves the identification of asset specific adaptive measures to build community resilience to climate threats, by reducing vulnerability, or supporting response and recovery efforts in the event that a threat occurs. Potential strategies may include, but not be limited to, updating design and/or operational guidelines, , development and zoning code modifications, creation of Adaptation Action Areas, and educational approaches. Strategies may be identified by considering those that have been effective in communities dealing with similar vulnerabilities and risks.

Prioritize Projects - The AP will also include a list of prioritized projects for each asset class as defined in subsection 380.093(2), F.S., for consideration and implementation. The identified adaptation strategy projects for each asset will have preliminary adaptation recommendations that the City can use to prioritize projects for future detailed analyses and, where relevant, prepare for the design, permitting and construction phases to adapt them to future conditions.

Final Adaptation Plan - The Consultant will complete an Adaptation Plan that is informed by all other Goal 6 Tasks that is consistent with the Florida Adaptation Planning Guidebook and includes the following: assessment of adaptive capacities, prioritization of adaptation needs, and identification of adaptation strategies. The AP will also include a list of prioritized projects for each asset class as defined in subsection 380.093(2), F.S., for consideration and implementation. For all prioritized adaptive measures, the consultant will develop a planning level cost estimate for comparison with estimated costs of the impacts to the assets were no adaptation strategies implemented. This will be known as the cost/benefit ratio.

The AP will include funding analyses and strategy as well as policy recommendations for implementation. Assets that can be hardened, elevated, or otherwise physically adapted to reduce or eliminate flood risk will have sufficiently detailed conceptual plans to be ready for subsequent design, permitting, and construction. The lower ranked assets will have preliminary adaptation recommendations that the City can use to prioritize projects for future detailed analyses and, where relevant, prepare for the design, permitting and construction phases to adapt them to future conditions.

Deliverables: The Consultant will provide the following:

- 6.1) A Draft Adaptation Plan.
- 6.2) Funding Analysis Report 5.2 for all prioritized measures in Deliverable 5.1.
- 6.3) Policy Recommendations 5.3 from Deliverable 5.1
- 6.4) Project Prioritization, identifying at least 115 projects across the 7 Chapters
- 6.5) Final Adaptation Plan.

Goal 7 – Adaptation Plan Program Implementation (FDEO Deliverable 1)

The City shall identify and convene a Working Groups (WGs) to assist the consultant in development of the seven (7) Adaptation Plan Chapters. Representatives to participate in the WGs will be solicited from each of the City of Key West’s departments, and other regional/community technical stakeholders. The consultant shall:

- Conduct an online kick-off meeting with all WGs to brief the group on the background and process of development of an Adaptation Chapter and potential data and information needs.
- Conduct at least 2 more online meetings (Pre-Draft Prioritization, and Pre-Public Workshop Draft). with the following WG groupings:
 - Infrastructure; Power/Water

- Housing & Shelter; Health & Social; Economics
- Historical & Cultural; Environmental

Online meetings for each “grouping” above are expected to be half day meetings (4 hours each) for a total of 6 working group meetings in addition to the initial kick off meeting.

Deliverables: The **Consultant** will provide the following:

- List of all WG Group members. Minimum of 7 Summaries from each WG meeting, including attendees, presentations given, questions and comments given, and any decisions made.

Goal 8 – Data Collection, Analysis and Risk Assessment (All Chapters) [\(FDEO Deliverable 2\)](#)

The Consultant will identify focus areas Based on the exposure and sensitivity analyses, the Consultant will assign focus areas to locations or assets that are particularly vulnerable and require the development of adaptation strategies across all 8 Implementation Chapters. GIS files and associated metadata must adhere to the Resilient Florida Program’s Exhibit F GIS Data Standards (Appendix B) and raw data sources shall be defined within the associated metadata. Refer to C.3 in Appendix A for potential Focus Areas.

Task 8.1 ID Focus Areas:

Based on the GIS database from the Task 6 Final Vulnerability Assessment and following the guidelines in Chapter 2 of the Florida Adaptation Planning Guidebook identify Chapter focus areas that should be addressed in the next 10 years. Include known issues from C.3 in Appendix A

Deliverables: Summary Report 8.1 Risk Assessment Findings

Task 8.2 Identify Data Gaps

Determine gaps in knowledge and data to address these areas.

Deliverables: Summary Report 8.2: Identified Data Gaps

Task 8.3 GIS Database & Interactive Map

Create new GIS database layers with color coded maps for all chapter/focus area assets in the community. See suggested data/assets in C.3 in Appendix A.

Deliverable: Hyperlink and Copy of the GIS database created including maps and populated for the project.

Task 8.4 Preliminary Project List

Prioritize a preliminary list of projects per Chapter based on obtainable data, 40 for Infrastructure and 30 for each of the other 6 chapters.

Deliverable: Prioritized list of projects.

Task 8.5 Finalize List of 15 Projects

Meet with WG for SWOT Analysis (Strengths, Weaknesses, Opportunities and Threats), and finalize Prioritized Project List of Chapter projects (25 Infrastructure Projects and 15 projects for all other Chapters)

Deliverable: Goal Report 8 pulling together Tasks 8.1-8.5: Defining risk assessment findings, preliminary and final prioritized project lists as well as identified data gaps for all Chapters.

Goal 9 – Adaptation and Strategy (all Chapters)

FDEO Deliverable 3

Task 9.1 Propose Adaptation Options

Develop list of potential adaptation measures for each prioritized project from Task 8, with planning-level pricing and expected results.

Task 9.2 Prioritize Adaptation Measures

Meet with WGs to prioritize adaptation measures via STAPLEE or comparable evaluation. (Task 7.1)

Task 9.3 Public Workshop #4

Actively publicize and host interactive Public Workshop #4 to gather feedback and gauge community priorities.

Deliverables:

- Goal 9 Summary Report of Tasks 9.1-9.3: including the approach for identifying potential adaptation measures; a comprehensive list and description of adaptation strategies (including planning-level costs, cost of doing nothing and expected results); and a list of potential funding mechanisms for implementation of adaptive measures.

Goal 10 – Draft and Present Adaptation Plan (All Chapters)

FDEO Deliverable 4

Task 10 Draft and Present Adaptation Plan with 10-year budget

This task incorporates the summary reports developed in previous tasks to create a draft Adaptation Plan, with associated 10-year timeline of actions, budgets, project specific financing options and proposed policy changes. This Final will include an updated and published Interactive Map and a City Commission Workshop.

Deliverables:

- Draft Adaptation Plan
- Workshop notice, agenda, presentations, sign-in sheets, minutes, comments/feedback.
- Copies or Links to updated Interactive Map

Goal 11 – Complete Final Adaption Plan

FDEO Deliverable 5

Final Infrastructure Adaptation Chapter with 10-year Action Plan, Budget, and Policy changes.
Final Dataset of Assets in each Asset Category/Chapter.

Deliverables:

- Final Adaptation Plan, as an ADA accessible document.
- All electronic mapping data, to include the geospatial data in an electronic file format and GIS metadata; and

Goal 12 – Integrate into Existing Plans

FDEO Deliverable 6

Produce summary and, when applicable, strike through and underline language to integrate the Adaptation Chapters into existing Plans and laws (Comp Plan, Ordinances, PDRRP, Stormwater Master Plan, etc.)
Potential strategies may include, but not be limited to, physical protective measures, updating design and/or operational guidelines, nature-based strategies, development and zoning code modifications, creation of Adaptation Action Areas, and educational approaches.

Task 12.1 Updated Interactive Map.

Task 12.2 Written Ordinance and Comprehensive Plan Changes with summarized supporting analysis

Task 12.3 Record of Change

Task 12.4 Presentation to City Commission

Deliverables:

- Updated Interactive Map.
- Written Ordinance and Comprehensive Plan Changes with summarized supporting analysis
- Record of Change Summary, including pages from documents this Plan was integrated with.
- Presentation to City Commission

Goal 13 – Final Assimilation

FDEO Deliverable 7

When the last Chapter is complete, the consultant will revisit all chapters to check for and fix inconsistencies, as well as create a master financing list of all chapters across all 10 budget years.

The consultant will prepare a non-technical Executive Summary of the major findings of the entire agreement product for digital distribution to the public and to promote community engagement.

Task 13.1 Assemble Final Summary of all Plan Integration across Chapters

Task 13.2 Workplans and Budgets for next 10 years.

Deliverables:

- Copy of Final Plan
- Copies of Workplans and Budgets for the next 10 years.

Goal 14 – Post Plan Implementation Assistance (CITY)

Provide expertise, if and when needed by Task Order to ensure capacity and success in implementing Adaptation Plan projects and financing goals.

Task 14.1 – When requested, create cost scope for Task Order

Task 14.2 – Once Task Order is approved, fulfill Task.

Deliverable

- Completed Task Order

XB.6 Completed Work:

All final deliverables will be ADA compliant under Section 508 of the Rehabilitation Act of 1973 and formatted to meet the Working Group's requirements. The consultant is expected to provide a preliminary draft and a complete final draft, and to incorporate a minimum of two rounds of revisions by the team prior to finalization and printing.

XB.7 General Administration and Reporting:

The consultant will assist the City with compliance with FDEO and FDEP Reporting.

TASK ORDER 6-23 CARIP SCHEDULE & DUE DATES

The following schedule provided is in compliance with grant document deliverable dates.

	2023												2024												2025			
Description	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR			
FDEP Task 1																												
Kickoff																												
Assemble Steering Committee and WG's																												
Steering Committee Meeting																												
FDEP Task 2																												
Acquire Background Data																												
Technical Report																												
GIS Files & Metadata																												
Critical and Reg Significant Assets																												
FDEP Task 3																												
Public Meeting 1 - Initial Data Collection Efforts & Critical Assets																												
Public Meeting 2 - Draft VA																												
Public Meeting 3 - Focus Areas and and critical asset priorities																												
FDEP Task 4																												
Exposure Analysis for flooding scenarios																												
Sensitivity Analysis - impacts of flooding on assets																												
GIS metadata																												
Draft VA																												
FDEP Task 5																												
Draft Adaptation Plan accordance with Guidebook																												
Funding Analysis																												
Policy Recommendations																												
Prioritize Projects																												
Final FDEP Adaptation Plan																												
FDEP Task 6																												
Final VA																												
List of Assets																												
Electronic mapping data																												
Compliance Checklist																												

FDEO No 1 - Program Implementation																												
Working Group Meetings (Kick-off, Pre-draft, Pre-workshop)																												
FDEO No 2- Data Collection, Analysis and Risk Assessment																												
ID Focus Areas for next 10 years (All Chapters)																												
ID Data Gaps																												
GIS database to ID assets & map																												
Prioritize 30 projects (All Chapters)																												
Finalize list of 15 Projects																												
FDEO 3 - Adaptation Strategy																												
ID adaptation measures for prioritized projects																												
Prioritize Adatpation measures w WG (part of Deliverable 1)																												
Draft and Present Adaptation Plan (10-year timeline) (All Chapters)																												
Public Workshop to obtain community priorities (1)																												
FDEO 4 - Draft and Present Environmental Adaptaiton Plan																												
Draft Adaptation Plan (all Chapters)																												
City Commission Workshop																												
Update and Publish Interactive Map																												
FDEO 5 - Complete Final Plan																												
Update Adaptation Plan																												
Final Datasets fo Assets in each Category																												
Summary Report of Commission Meeting																												
FDEO 6 Integrate into Existing Plans																												
New Interactive Map Layer																												
Written Ordinacne and Comp Plan Changes (all Chapters)																												
FDEO 7 - Final Assimilation																												
Assemble Final Summary of all Plan Integration across Chapters																												
Create Master Financing List consisting of all Chapters across all 10 Budget Years																												

TASK ORDER 6-23 CARIP COMPENSATION

Payment will be received in the form of a lump sum task order. The City of Key West will be billed monthly based on % complete in compliance with the list of fees stated within the stipulations of the grant document.

Task #	Task Name	Grant Task	Payment
--------	-----------	------------	---------

1 – Kickoff & Staff Steering Committee FDEP \$64,500

1.1	Kick off Meetings (1)	FDEP 1	\$20,000
1.2	Assemble Project Steering Committee		\$0
1.3	Conduct 4 Project Steering Committee Meetings and 4 Vulnerability Assessment Working Group Meetings	FDEP 1	\$44,500

2 – Acquire Background Data FDEP \$60,000

2.1	Acquire Background Data & Technical Report	FDEP 2	\$50,000
2.2	GIS Files and Metadata for Critical and Regionally Significant Assets	FDEP 2	\$10,000

3 – Public Outreach FDEP \$64,000

3.1	Public Outreach Meeting #1 – Initial Data & Critical Assets	FDEP 3	\$21,500
3.2	Public Outreach Meeting #2 – Draft VA	FDEP 3	\$21,500
3.3	Public Outreach Meeting #3 – Focus Areas and Asset Priorities	FDEP 3	\$21,000

4 – Draft Vulnerability Analysis FDEP \$190,000

4.1	Draft Vulnerability Assessment	FDEP 4	\$110,000
4.2	GIS Metadata	FDEP 4	\$10,000
4.3	Initial list of Critical and Regionally Significant Assets	FDEP 4	70,000?

5– Final Vulnerability Analysis FDEP \$225,000

5.1	Final Vulnerability Assessment	FDEP 6	\$120,000
5.2	List of Assets	FDEP 6	\$50,000
5.3	Electronic Mapping Data	FDEP 6	\$40,000
5.4	Compliance Checklist	FDEP 6	\$15,000

6 –Adaptation Plan FDEP \$302,000

6.1	Draft Adaptation Plan	FDEP 5	\$100,000
6.2	Funding Analysis	FDEP 5	\$50,000
6.3	Policy Recommendations	FDEP 5	\$70,000
6.4	Prioritize Projects	FDEP 5	\$50,000
6.5	Final Adaptation Plan	FDEP 5	\$32,000

7 – Adaptation Program Implementation FDEO1 81,500

7.1	Working Group Meetings (Kick off, Pre-Draft, Pre Workshop)	FDEO 1	\$81,500
-----	--	--------	----------

8 – Data Collection, Analysis and Risk Assessment (All Chapters) FDEO2 \$81,500

8.1	ID Focus Areas for next 10 years	FDEO 2	\$10,000
8.2	ID Data Gaps	FDEO 2	\$20,000
8.3	Review Provided Resources	FDEO 2	\$0
8.3	ID Assets and Map in GIS Database	FDEO 2	\$20,000
8.4	Prioritize 30 projects	FDEO 2	\$20,000
8.5	Finalize list of 15 projects	FDEO 2	\$11,500

9 – Adaptation Strategies (All Chapters) FDEO3 \$81,500

9.1	ID Adaptation measures & pricing for prioritized projects	FDEO 3	\$50,000
9.2	Prioritize Adaptation measures with Working Group (FDEO 1)		\$0
9.3	Draft and Present Adaptation Plan <u>Measures/Strategies</u> w 10-year budget timeline for prioritized projects	FDEO 3	\$20,000
9.4	Public Workshop to obtain community priorities	FDEO 3	\$11,500

10 – Draft and Present Adaptation Plan (All Chapters) FDEO4 \$81,500

10.1	Complete Draft Adaptation Plan (budgets, financing, policies, etc.)	FDEO 4	\$60,000
10.2	City Commission Workshop	FDEO 4	\$10,000
10.3	Update and Publish Interactive Map	FDEO 4	\$11,500

11 – Complete Final Adaptation Plan (All Chapters) FDEO5 \$81,500

	Pre-Final Adaptation Plan	FDEO 5	\$51,500
11.1	Final Datasets of Assets in each Asset Category	FDEO 5	\$30,000

12 – Integrate into Existing Plans (All Chapters) FDEO6 \$81,500

12.1	New Interactive Map Layer	FDEO 6	\$26,500
12.2	Written Ordinance and Comp Plan Changes – Develop changes for each chapter, combined into one deliverable.	FDEO 6	\$55,000
12.3	Record of Change	FDEO 6	
	Presentation to City Commission.		

13 - Final Assimilation (All Chapters) FDEO7 \$11,000

13.1	Assemble Final Plan	FDEO 7	\$6,000
13.2	Workplans and Budgets for the next 10 years	FDEO 7	\$5,000

Total Fee for this scope of services is: **\$1,405,500.00**

CONTRACT APPENDIX A
SUPPORTING MATERIAL

C.1 Datasets

Key West Data Matrix: “Y” means yes, we have it available. “M” means we might be able to make it happen

Attributes	Avail?	Notes
Boundaries	Y	
Buildings	Y	with year-built data
Buildings, Historic	Y	National Register Listed Sites and Buildings List of Contributing Buildings
Bridge Clearance	M	
Cemetery	Y	
Critical Facilities	Y	
Elevation Certificates	M	
Flood Zones	Y	
Parcels	Y	with building footprints.
Parks/Natural Areas	Y	
Roads, highways, bridges	Y	
Canals, with ownership	M	
Critical beach erosion line	M	
Coastline	Y	
Coastline, Historic	Y	
Coastline, Suggested Adaptation	M	
Commercial Use	M	
Green space parcels	M	
Land Use	Y	
LiDAR	Y	2022 Mobile LiDAR for ROWs 2021 Flown LiDAR for all else
Reclaimed water pipes	M	
Reclaimed water structures	M	
Sewer Pipes	Y	
Sewer Structures	Y	
Storm evacuation areas	M	
Stormwater pipes	Y	
Stormwater Structures	Y	
Wastewater treatment plants	Y	
Water pipes	M	
Water Structures	M	
Water Supply Sources	M	
Water Treatment Plant	M	
Wellfield protection areas	M	
Zoning	Y	
Areas of economic susceptibility (CRA)	Y	
Attractions	M	
Boat Ramps	M	
Known Areas of King Tide Flooding	M	
Lifeguard stands	M	
Marinas, Restaurants, Hotels	M	
Piers	M	
Signs/Signals	Y	
Stormwater Master Plan	Y	
Vulnerable Populations	Y	

C.2 Assets

a) Asset Categories:

1) Transportation

- Facilities (Airport, Greyhound, Transit, Ports/Marinas)
- Bridges
- Roads, by type
- Major bikeways
- Major pedestrian zones
- Levels of Service
- Evacuation Routes
- Delivery Routes

2) Critical Infrastructure

- Wastewater treatment facilities
- Lift stations
- Stormwater treatment facilities
- Pump Stations
- Drinking water facilities
- Water Utility conveyance systems
- Electric production and supply
- Solid and hazardous waste facilities
- Military installations

3) Critical Facilities

- Public Safety (fire, police)
- Emergency medical services
- Communications
- Schools, Colleges
- Community Centers
- Correctional facilities
- Disaster Recovery center
- Government Facilities
- Health care facilities
- Hospitals
- Logistical staging areas,
- Affordable public housing
- Risk shelter inventory
- State Govt facilities

4) Natural /Environmental

- Conservation Lands
- Coastline
- Natural Areas
- Green Infrastructure
- Parks
- Surface Waters/Wetlands
- Champion Trees

5) Historical/Cultural Assets

- Historical Buildings/Sites
- Archeological Areas
- Working Waterfront

6) Economic

- Commercial Properties
 - Annual Sales Volumes
 - Jobs
- Major Industries
 - Tourism
 - Water Based
 - Military

7) Housing/Shelter

- Rented/Owned

8) Health/Equity

- Social Vulnerability Index
- Food SNAP Retailers
- Public Housing
- Median Household income

9) Land Use

- Residential Popn density
- Major employment centers
- Census Data
- Existing Drainage
- Alleyways

b) Hazard Identification:

- Sea Level Rise
- Tidal Flooding
- Storm Surge
- Rainfall Induced Flooding
- Groundwater Inundation
- Saltwater Intrusion

- Shoreline Erosion
- Extreme Heat
- High Winds
- Drought
- Pest and Disease Outbreaks

c) Quantifiers: Evaluate and assign value to:

- Exposure
- Sensitivity

- Adaptive Capacity
- Vulnerability Ranking

C.3 Chapter Specific Guidance

C.3 Chapter Specific Guidance

Vulnerability Assessment

- Military Installation Resilience Review – Naval Air Station Key West
- Monroe County Road Vulnerability Study
- Monroe County Vulnerability Assessment

Infrastructure Adaptation Plan Chapter

The Infrastructure Adaptation Chapter of the Adaptation Plan involves the identification of asset specific adaptive measures to build community resilience to climate threats, by reducing vulnerability, or supporting response and recovery efforts in the event that a threat occurs. Potential strategies may include, but not be limited to, physical protective measures, updating design and/or operational guidelines, nature-based strategies, development and zoning code modifications, creation of Adaptation Action Areas, and educational approaches. Strategies may be identified by considering those that have been effective in communities dealing with similar vulnerabilities and risks. Focus Areas could include: road segments, critical facilities, city-owned buildings, stormwater infrastructure, wastewater infrastructure)

Review Monroe County Roadway Vulnerability Assessment

Infrastructure Based Assets:

- Data associated with these assets should also include criticality, condition, useful life, ROW width, & Land Use.

Specific Issues to Consider:

- No True Retreat Options
- Transportation
- Critical Facilities
- Marina/Ports

Potential Priority Projects:

- Neighborhoods: Indigenous Park Neighborhood
- Major Corridors: Atlantic Avenue, Jose Marti
- Critical Facilities: Fire Station 3, Mt Trashmore, Airport, HOB,
- Uses of Glass?

Historical/Cultural Adaptation Plan Chapter

Potential strategies may include, but not be limited to, physical protective measures, updating design and/or operational guidelines, nature-based strategies, development and zoning code modifications, creation of Adaptation Action Areas, and educational approaches.

Review HARC Guidelines, Sanborn Maps, Historic Photos, US Secretary of the Interior's Standards for Rehabilitation and Guidelines on Flood Adaptation for Rehabilitating Historic Buildings (2021), Historic Preservation Element of the Key West Comprehensive Plan, and Miami Beach's "Buoyant City: Historic District Resiliency & Adaptation Guidelines (2020).

Archeologic and architecture-based assets in the community:

- Data associated with these assets should also include first floor elevation, significant type, characteristics, condition, land use, historic shorelines, flood zone and past storm damage,

Specific Issues to Consider:

- Historical Preservation Guidance: Hardening, Elevation, Materials, Post Disaster Rebuild
- Working Waterfront

Potential Priority Projects:

- Diesel Plant
- Cable Huts
- Garrison Bight / Charter Boat Row
- Preservation Grants/Loans

Housing & Shelter Adaptation Plan Chapter

Potential strategies may include, but not be limited to, physical protective measures, updating design and/or operational guidelines, nature-based strategies, development and zoning code modifications, creation of Adaptation Action Areas, and educational approaches.

Review Key West Affordable Housing Needs Solutions White Paper 2014

(<https://drive.google.com/file/d/1mI3fuLh2g728e2CdTVpGTXFJYAugSNVT/view?usp=sharing>) , and materials from Key West's Affordable Housing Workshop (Jan 2021)

(<http://keywest.legistar.com/View.ashx?M=A&ID=834583&GUID=A69EC0B2-7A70-4F8F-B333-6AD03D4C4281>)

Housing and Shelter Based Assets:

- Data associated with these assets should also include affordable/subsidized housing, retirees & working class, sub-standard housing, shelters, hurricane shelter, refuges of last resort, LMI, transit stops/transportation options

Specific Issues to Consider:

- Affordable Housing
- Pre-FIRM residential bldgs./mobile homes. subject to storm surge / winds.
- Density Changes
- Severe Repetitive Loss
- First Floor Elevations
- Temporary Shelter and Transitioning
- Rebuilding Materials
- Shelter: Increase Shelter in Place options

Potential Priority Projects:

- Residential Building Materials
- Poinciana Redevelopment
- Publix Plaza Redevelopment
- Revolving Loan Fund
- Voluntary Buyouts / Conservation Easements

Power and Water Adaptation Plan Chapter

Potential strategies may include, but not be limited to, physical protective measures, updating design and/or operational guidelines, nature-based strategies, development and zoning code modifications, creation of Adaptation Action Areas, and educational approaches.

Review City of Orlando Energy & Water Efficiency Strategy (<https://www.orlando.gov/Initiatives/Building-Energy-Water-Efficiency-Strategy>), Key West Reuse Feasibility Report Update 2018 (https://drive.google.com/file/d/1L-D59ZBGmkpDcHm4_es5-rMXht8o-l5/view?usp=sharing), and best management practices for EV infrastructure.

Power and Water based assets the community draws from:

- Data associated with these assets should also include assets, type, useful life, criticality, service area, projected needs, population served,

Specific Issues to Consider:

- Water: Produce own
- Power: Alternative Energy, Energy efficiency, Burying Electric lines

Potential Priority Projects:

- Power: 100% Renewable
- Toilet to Tap (Reverse Osmosis)
- Lateral Line breakage
- Facilities for Electric Vehicles
- Mt Trashmore Waste to Energy

Environmental Adaptation Plan Chapter

Potential strategies may include, but not be limited to, physical protective measures, updating design and/or operational guidelines, nature-based strategies, development and zoning code modifications, creation of Adaptation Action Areas, and educational approaches.

Review: The Nature Conservancy's Coastal Resilience Shoreline Suitability for Resilience Projects data, Living Shoreline Best management practices.

Environmental and Coastline based assets:

- Data associated with these assets should also include condition, ownership, coastline type, habitat type, greenways/drainage features, alleys, 600' mean high water zone, brownfields, fueling stations and protected species.

Specific Issues to Consider:

- Wetlands storage / Green Infrastructure
- Living Shorelines
- Cisterns as Stormwater Storage
- Coral/Seagrass/Mangrove/Dune Restoration
- Heat Islands
- Endocrine Disruptors

Potential Priority Projects:

- Living Shorelines: South Roosevelt, WWTP

- Funding: Pervious Fees
- Triple Restoration
- Mt Trashmore
- Tree Canopy Restoration

Economic Adaptation Plan Chapter

Potential strategies may include, but not be limited to, physical protective measures, updating design and/or operational guidelines, nature-based strategies, building and zoning code modifications, creation of Adaptation Action Areas, and educational approaches.

Review The Business Case for Resilience in Southeast Florida (2020), Reworking Tourism.

Economy based assets:

- Data associated with these assets should also include type of business, size of business, tourism specific, hotel data, airport data, ports and marinas, military, government employees, census data: who's working, unemployment numbers, 2nd Homes, transient rentals, substandard buildings.

Specific Issues to Consider:

- Private Sector as ESF (Emergency Support Function)
- Business credentialing for early return
- Diversification
- Telecommuting
- Property ownership
- Workforce Retention
- Future as Venice

Potential Priority Projects:

- Private Sector ESF
- Robust Internet – Smart City
- Incubators
- Mixed Use Plazas = New Economic Area Development?
- Business Resiliency Training/Certification
- Marinas/Ports

Health and Equity Adaptation Plan Chapter

Potential strategies may include, but not be limited to, physical protective measures, updating design and/or operational guidelines, nature-based strategies, development and zoning code modifications, creation of Adaptation Action Areas, and educational approaches.

Review Monroe County's Community Health Improvement Plan (2019) http://monroe.floridahealth.gov/programs-and-services/community-health-planning-and-statistics/documents/Monroe_CHIP1.pdf, CDC's Climate Effects on Health <https://www.cdc.gov/climateandhealth/effects/default.htm>, Southeast Florida Regional Compact on Climate Change Resources for Implementing Social Equity Recommendations <https://southeastfloridacompact.org/resources/social-equity/>).

Housing and Shelter based assets the community relies upon:

- Data associated with these assets should also include affordable/subsidized housing, retirees & working class, sub-standard housing, shelters, hurricane shelter, refuges of last resort, LMI, transit stops/transportation options

Specific Issues to Consider:

- Health and Human Services: Telehealth, Behavioral, childcare,
- Environmental Exposures: lead, mold, disrepairs, building materials
- Social Health: communications, cohesion, quality housing, green space, noise.
- Renewable Energy (meds, fresh food) LiHEAP, WAP
- Active Living: Physical activity, multimodality, safety.
- Healthy Eating: food access, gardens, clean water (cisterns)

Potential Priority Projects:

- Trailer Parks
- Resilience Hubs
- Home inspections and repairs (WAP)
- Revolving Loan Fund
- Community Gardens

Policy & Implementation Chapter (Integration into Existing Plans)

This task incorporates all summary reports developed in previous tasks from this Goal to create a draft Policy and Implementation Adaptation Chapter, with associated 10-year timeline of actions, budgets, project specific financing options and proposed policy changes.

Review EPA's Smart Growth Fixes for Climate Adaptation and Resilience

(https://www.epa.gov/sites/default/files/2017-01/documents/smart_growth_fixes_climate_adaptation_resilience.pdf), Model

Resilient Zoning Code Framework with Equity

(https://s3.amazonaws.com/bizzabo.file.upload/mH4FHAYHRQGLRQ1JeIUM_C03_A%20Model%20Resilient%20Zoning%20Code%20With%20Equity_Handout_11.9.2020.pdf), and best management practices for

Resilience Overlay Zones.

Policy and Implementation based assets:

- Data associated with these assets should also include: habitats, drainage areas, & density.

Specific Issues to Consider:

- Adaptation Action Areas / Recovery Zones
- Future Land Use Maps / Redevelopment Patterns
- Post Disaster Building / Quality of Reconstruction
- Use of Alleyways

Potential Priority Projects:

- Adaptation Action Areas
- Voluntary buyouts for Green/Blue Corridors

CONTRACT APPENDIX B

RESILIENT FLORIDA PROGRAM'S EXHIBIT I GIS DATA STANDARDS

Pursuant to section 380.093 (3)(c), Florida Statutes, grantees who receive funding to complete a vulnerability assessment shall submit to the Florida Department of Environmental Protection (DEP) all electronic mapping data used to illustrate the flooding and sea level rise impacts identified in the assessment. The grantees shall also submit the associated metadata for each geospatial item. These items must be compatible with DEP's Geographic Information System (GIS) infrastructure and tools and mapping coordinate reference systems. To aid in the compliance with this requirement, the following list has been compiled of acceptable digital data formats, metadata standards and required mapping datums.

Digital File Formats:

- **Vector Data Formats**
 - File Geodatabase Feature Class – Feature classes are homogeneous collections of common features, each having the same spatial representation, and containing both the geometric shape of each feature as well as descriptive attributes. Feature classes can only be stored inside a geodatabase. This is an Esri proprietary format.
 - Shapefile – A shapefile is a vector data storage format that stores the location, shape, and attributes of geographic features with the same geometry type and the same spatial reference. This is an Esri proprietary format.
 - KML – is an XML notation for expressing geographic annotation and visualization within two-dimensional maps and three-dimensional Earth browsers, initially developed for use with Google Earth. This is an open standard format.
 - GeoJSON – GeoJSON is a geospatial data interchange format designed to represent simple geographic features and their nonspatial attributes, based on JavaScript Object Notation (JSON). This is an open standard format.
- **Raster Data Formats:**
 - File Geodatabase Raster – Native data model for storing raster datasets inside a geodatabase. This is an Esri proprietary format.
 - TIFF/GeoTIFF – A TIFF is an image file format for storing raster graphic images. GeoTIFF is a metadata standard which allows georeferencing information to be embedded within a TIFF raster file. These are open standard formats.
 - Other – For a more detailed list of acceptable raster formats, please see Supported Raster Formats reference link.
- **Data Package Formats:**
 - Esri Project Package – A project package is a file that contains all maps and the data referenced by its layers, as well as folder connections, toolboxes, geoprocessing history, and attachments. This is an Esri proprietary format.
 - OGC GeoPackage – A GeoPackage is a platform-independent and standards-based data format for transferring geospatial information, implemented as an SQLite database container. This is an open standard format.

Datums and Coordinate Reference Systems:

- Geospatial data shall be delivered projected into the appropriate Florida State Plane Coordinate System.
- Horizontal Datum: North American Datum of 1983 with 1990 Adjustments (NAD83/90), or later.
- Vertical Datum: North American Vertical Datum of 1988 (NAVD88).

Metadata Standards:

- Metadata shall be compliant with the Content Standard for Digital Geospatial Metadata (CSDGM) developed by the Federal Geographic Data Committee (FGDC). Acceptable formats are:
 - File Geodatabase FGDC-CSDGM Metadata – format for creating and editing the metadata of Esri items. The metadata is embedded in the item it describes. This is an Esri proprietary format.
 - XML – Extensible Markup Language (XML) is a markup language and file format for storing, transmitting, and reconstructing arbitrary data. This is an open standard format.
- The Department encourages metadata to include the following information, as applicable:
 - Title – Name for the dataset.
 - Summary – Short summary of what the dataset represents.
 - Description – Basic information about the dataset and its purpose.
 - Process Summary – Steps in creating the dataset or layer.
 - Dates of Data Collection – Collection date of the dataset.
 - Date of Publication – Date of publishing or last update of the dataset.
 - Contact Person – Person responsible for the maintenance of the dataset.
 - Credits – Person or entity responsible for the compiling the dataset.
 - Use Limitation – Restrictions or legal prerequisites to using the dataset.

Critical Assets Attributes

- To standardize information for all the critical assets across the state, delivered critical asset datasets should have following attributes, as applicable:
 - Entity Name – Name of entity (i.e., County, city, local government, etc).
 - Asset Name – Asset label or description (i.e., hydrant, stormwater pipe, cell tower, etc).
 - Asset Type – Statutory asset type (i.e., airports, bridges, roadways, marinas, etc).
 - Asset Class – Statutory asset group (i.e., transportation and evacuation route, critical infrastructure, critical community and emergency facilities, etc).
 - Asset Owner/Operator – The owner or maintainer of the asset.
 - Asset Elevation – Elevation of the asset.
 - Asset Size/Capacity Data (i.e., capacity for wastewater facilities, acres, etc.)
 - Asset Unique ID – Unique identifier of the asset.
- Pursuant to 380.093(2) Definitions, Asset Type refers to the individual asset, and Asset Class refers to the broader asset category. See classification table below:

Asset Type	Asset Class
Airports	Transportation and Evacuation Routes
Bridges	Transportation and Evacuation Routes
Bus	Transportation and Evacuation Routes
Ports	Transportation and Evacuation Routes
Major Roadways	Transportation and Evacuation Routes
Marinas	Transportation and Evacuation Routes
Rail	Transportation and Evacuation Routes
Railroad Bridges	Transportation and Evacuation Routes
Wastewater Treatment Facilities and Lift Stations	Critical Infrastructure
Stormwater Treatment Facilities and Pump Stations	Critical Infrastructure
Drinking Water Facilities	Critical Infrastructure
Water Utility Conveyance Systems	Critical Infrastructure
Electric Production and Supply Facilities	Critical Infrastructure
Solid and Hazardous Waste Facilities	Critical Infrastructure

Military Installations	Critical Infrastructure
Communications Facilities	Critical Infrastructure
Disaster Debris Management Sites	Critical Infrastructure
Schools	Critical Community & Emergency Facilities
Colleges and Universities	Critical Community & Emergency Facilities
Community Centers	Critical Community & Emergency Facilities
Correctional Facilities	Critical Community & Emergency Facilities
Disaster Recovery Centers	Critical Community & Emergency Facilities
Emergency Medical Service Facilities	Critical Community & Emergency Facilities
Emergency Operation Centers	Critical Community & Emergency Facilities
Fire Stations	Critical Community & Emergency Facilities
Health Care Facilities	Critical Community & Emergency Facilities
Hospitals	Critical Community & Emergency Facilities
Law Enforcement Facilities	Critical Community & Emergency Facilities
Local Government Facilities	Critical Community & Emergency Facilities
Logistical Staging Areas	Critical Community & Emergency Facilities
Affordable Public Housing	Critical Community & Emergency Facilities
Risk Shelter Inventory	Critical Community & Emergency Facilities
State Government Facilities	Critical Community & Emergency Facilities
Conservation Lands	Natural, Cultural, and Historical Resource
Parks	Natural, Cultural, and Historical Resource
Shorelines	Natural, Cultural, and Historical Resource
Surface Waters	Natural, Cultural, and Historical Resource
Wetlands	Natural, Cultural, and Historical Resource
Historical and Cultural Assets	Natural, Cultural, and Historical Resource

References:

- Esri, File Geodatabases: <https://pro.arcgis.com/en/pro-app/latest/help/data/geodatabases/manage-file-gdb/file-geodatabases.htm>
- Esri, Feature Classes: <https://pro.arcgis.com/en/pro-app/latest/help/data/feature-classes/feature-classes.htm>
- Esri, Shapefiles in ArcGIS Pro: <https://pro.arcgis.com/en/pro-app/latest/help/data/shapefiles/working-with-shapefiles-in-arcgis-pro.htm>
- Open Geospatial Consortium, OGC KML Standard: <https://www.ogc.org/standards/kml>
- GeoJSON, GeoJSON: <https://geojson.org/>
- Esri, Supported Raster Formats: <https://pro.arcgis.com/en/pro-app/latest/help/data/imagery/supported-raster-dataset-file-formats.htm>
- Open Geospatial Consortium, OGC GeoTIFF Standard: <https://www.ogc.org/standards/geotiff>
- Esri, Share a Project Package: <https://pro.arcgis.com/en/pro-app/latest/help/sharing/overview/project-package.htm>
- Open Geospatial Consortium, OGC GeoPackage Encoding Standard: <https://www.ogc.org/standards/geopackage>
- Federal Geographic Data Committee, Content Standard for Digital Geospatial Metadata: <https://www.fgdc.gov/metadata/csdgm-standard>
- Esri, Create FGDC CSDGM Metadata: <https://pro.arcgis.com/en/pro-app/latest/help/metadata/create-fgdc-csdgm-metadata.htm>

CONTRACT APPENDIX C
VULNERABILITY ASSESSMENT COMPLIANCE CHECKLIST CERTIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
RESILIENT FLORIDA GRANT PROGRAM
VULNERABILITY ASSESSMENT COMPLIANCE CHECKLIST CERTIFICATION

FDEP Exhibit I

Required for all grant agreements.

DEP Agreement Number: _____

Project Title: _____

Grantee: _____

By signing this Vulnerability Assessment Compliance Checklist Certification (hereinafter “Checklist Certification”) the Grantee certifies that, upon execution of the Agreement, it will have reviewed the statutory requirements for vulnerability assessments in subsection 380.093(3), F.S., and provided this signed Checklist Certification to the Department, which gives the Department of Environmental Protection (Department) partial assurance that any and all vulnerability assessments the Grantee may utilize for its individual project will adhere to the relevant statutory requirements in subsection 380.093(3), F.S., regardless of the party actually completing the work (e.g., subcontractors).

To give the Department the remaining assurance it requires, the Grantee also certifies that it will deliver a fully completed and signed Vulnerability Assessment Compliance Checklist to the Department, in the form included in this exhibit, at a yet-to-be-determined time mutually agreed upon by both parties to this Agreement but prior to close out of the Grantee’s individual project. The completed Vulnerability Assessment Compliance Checklist and this Checklist Certification will be joined and attached to the Agreement together as a single “Exhibit I.”

By signing below, I certify on behalf of the Grantee that the Grantee or its designee(s) will have reviewed the statutory requirements in subsection 380.093(3), F.S., prior to execution of the Agreement. I further certify on behalf of the Grantee that, prior to close out of the grant, either myself or the Grantee’s designated grant manager will provide to the Department a Vulnerability Assessment Compliance Checklist form that has been fully completed in the manner described in this Checklist Certification.

Grantee's Grant Manager Signature

Signature

Date

For Future Use. No need to sign to ratify Agreement

VULNERABILITY ASSESSMENT COMPLIANCE CHECKLIST

In accordance with subsection 380.093(3), F.S., the following components, scenarios, data, and information are required for a comprehensive Vulnerability Assessment (VA). The checklist must be completed and submitted with the final VA Report deliverable, pursuant to Attachment 3, Grant Work Plan. The Grantee must abide by the Department's GIS Data Standards found on the Resilient Florida Program webpage at the link below:

<https://floridadep.gov/rcp/resilient-florida-program/documents/resilient-florida-program-gis-datastandards>

Part 1 – Subparagraph 380.093(3)(c)2., F.S.

Item ID	Check if Included	Item Description	Page Reference in VA Report (if applicable)
a.	<input type="checkbox"/>	Final Vulnerability Assessment Report that provides details on the results and conclusions, including illustrations via maps and tables.	
All electronic mapping data used to illustrate flooding and sea level rise impacts that are identified in the VA must be provided in the format consistent with the Department's GIS Data Standards and include the following three (3) items:			
b.	<input type="checkbox"/>	Geospatial data in an electronic file format.	
c.	<input type="checkbox"/>	GIS metadata.	
d.	<input type="checkbox"/>	List of critical assets for each jurisdiction, including regionally significant assets, that are impacted by flooding and sea level rise. The list must be prioritized by area or immediate need and must identify which flood scenario(s) impacts each asset	

Part 2 – Subparagraphs 380.093(3)(d)1. and 380.093(3)(d)2., F.S.

Item ID	Check if Included	Item Description	Page Reference in VA Report (if applicable)
e.	<input type="checkbox"/>	Peril of Flood Compliance Plan amendments developed that address paragraph 163.3178(2)(f), F.S., if applicable. <input type="checkbox"/> Not applicable <input type="checkbox"/> Already in compliance	
f.	<input type="checkbox"/>	Depth of tidal flooding, including future high tide flooding, using thresholds published and provided by the Department.	
g.	<input type="checkbox"/>	To the extent practicable, analysis geographically displays the number of tidal flood days expected for each scenario and planning horizon. (optional)	
h.	<input type="checkbox"/>	Depth of current and future storm surge flooding using publicly available NOAA or FEMA storm surge data. (check one) <input type="checkbox"/> NOAA data <input type="checkbox"/> FEMA data	
i.	<input type="checkbox"/>	Initial storm surge event equals or exceeds current 100-year flood event.	
j.	<input type="checkbox"/>	Higher frequency storm analyzed for exposure of a critical asset. (optional, but must provide additional detail if included)	
k.	<input type="checkbox"/>	To the extent practicable, rainfall-induced flooding was considered using spatiotemporal analysis or existing hydrologic and hydraulic modeling results. (required if item e is not applicable)	

l.	<input type="checkbox"/>	Future boundary conditions have been modified to consider sea level rise and high tide conditions. (optional)	
m.	<input type="checkbox"/>	Depth of rainfall-induced flooding for 100-year storm and 500- year storm event. (required if item e is not applicable)	
n.	<input type="checkbox"/>	To the extent practicable, compound flooding or the combination of tidal, storm surge, and rainfall-induced flooding. (optional)	

Part 3 – Subparagraph 380.093(3)(d)3., F.S.

Item ID	Check if Included	Item Description	Page Reference in VA Report (if applicable)
o.	<input type="checkbox"/>	All analyses performed in North American Vertical Datum of 1988.	
p.	<input type="checkbox"/>	Includes at least two local sea level rise scenarios, which must include the 2017 NOAA intermediate-low and intermediate high sea level rise projections.	
q.	<input type="checkbox"/>	Includes at least two planning horizons, which must include years 2040 and 2070.	
r.	<input type="checkbox"/>	Utilizes local sea level data that has been interpolated between the two closest NOAA tide gauges.	
s.	<input type="checkbox"/>	Local, publicly available, sea level data was taken from one of the two closest NOAA tide gauges, which must be the gauge with the highest mean sea level (if so, provide Department approval).	

I certify that, to the Grantee's knowledge, all information contained in this completed Vulnerability Assessment Compliance Checklist is true and accurate as of the date of the signature below.

Grantee's Grant Manager Signature

Date

For Future Use, No need to sign to ratify Agreement