BID DOCUMENTS

For

ITB #17-015 **DOLPHIN PIER REPLACEMENT CITY MARINA AT GARRISON BIGHT**

KEY WEST, FLORIDA MONROE COUNTY



Mayor: **Craig Cates**

Commissioners: Jimmy Weekley

Samuel Kaufman **Billy Wardlow Richard Payne Margaret Romero**

Clayton Lopez

City Manager: James Scholl

Key West Project # GB75511602

Stantec Project No.: 215613443

APRIL 2017



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INVITATION TO BID

Sealed bids for the City of Key West, City Marina at Garrison Bright, will be received at the Office of the City Clerk, City of Key West, 1300 White Street., Key West Florida, 33040 until **3 p.m., May 31, 2017,** and then will be publicly opened and read. Any bids received after the time and date specified will not be considered.

Please submit one (1) original, and two (2) flash drives each, with one single PDF file of the entire bid package. Bid package is to be enclosed in a sealed envelope, clearly marked on the outside "BID FOR ITB#17-015: DOLPHIN PIER REPLACEMENT GB75511602 addressed and delivered to the City Clerk at the address noted above.

The project proposes to demolish the existing concrete and wood Dolphin Pier and replace it with a new floating dock, approximately 170 feet in length, with eight 35ft long finger piers (with up to 16 slips). The proposed facility is located between Palm Avenue Causeway and N. Roosevelt Blvd at City Marina at Garrison Bight. The floating dock facility will include potable water, fire protection, electrical and sanitary sewer systems, and will be access from the south via a new gangway ramp from the existing adjacent concrete / paver walkway.

Drawings and Specifications may be obtained from Demand Star by Onvia and the City of Key West Website. Please contact Demand Star at www.demandstar.com or call 1-800-711-1712 or www.cityofkeywest-fl.gov.

A **Mandatory Pre-Bid meeting** will be held at the City Marina at Garrison Bight Dockmaster Office, 1801 N Roosevelt Blvd, key West, Florida on May 23, 2017 at 2:30 PM.

The successful Bidder will be required to furnish the necessary additional bond(s) for the faithful performance of the Contract, as prescribed in the Bidding Documents. The Bidder will also be required to furnish documentation showing that he is in compliance with the licensing requirements of the State and the provisions of Chapter 66 section 87 of the Code of Ordinances of the City of Key West. Compliance with these provisions is required before the Contractor can enter into the agreement contained in the Contract Documents. Specifically, Bidder shall demonstrate that he holds, as a minimum, the following licenses and certificates required by State Statute and local codes.

EACH BID MUST BE SUBMITTED ON THE PRESCRIBED FORM AND ACCOMPANIED BY BID SECURITY AS PRESCRIBED IN THE INSTRUCTIONS TO BIDDERS, PAYABLE TO THE CITY OF KEY WEST, FLORIDA, IN AN AMOUNT NOT LESS THAN FIVE (5) PERCENT OF THE AMOUNT BID.

THE BIDDER MUST BE A LICENSED CONTRACTOR BY THE STATE OF FLORIDA AND SUBMIT PROOF OF SUCH WITH THE BID.

INVITATION TO BID 00 11 13 - 1

The Bidder shall furnish documentation showing that he is in compliance with the licensing requirements of the provisions of Chapter 66 Section 87 of the Code of Ordinances of the City of Key West within 10 days following the Notice of Award:

- A. City of Key West Business Tax License Receipt.
- B. A valid Certificate of Competency issued by the Chief Building Official of Key West, Florida.

All bid bonds, contract bonds, insurance contracts, and certificates of insurance shall be either executed by or countersigned by a licensed resident agent of the Surety or Insurance Company having his place of business in the State of Florida, and in all ways complying with the insurance laws of the State of Florida. Further, the said Surety or Insurance Company shall be duly licensed and qualified to do business in the State of Florida.

Before a Contract will be awarded for the work contemplated herein, the CITY will conduct such investigation as is necessary to determine the performance record and ability of the apparent low Bidder to perform the size and type of work specified under this Contract. Upon request, the Bidder shall submit such information as deemed necessary by the CITY to evaluate the Bidder's qualifications.

For information concerning the proposed work, contact Karen Olson, Deputy Port and Marine service director by email at kolson@cityofkeywest-fl.gov. Verbal communications, per the City's "Cone of Silence" ordinance are not allowed.

The City may reject bids for any and/or all of the following reasons: (1) for budgetary reasons, (2) if the bidder misstates or conceals a material fact in its bid, (3) if the bid does not strictly conform to the law or is non-responsive to the bid requirements, (4) if the bid is conditional, or (5) if a change of circumstances occurs making the purpose of the bid unnecessary to the City. (6) if such rejection is in the best interest of the City. The City may also waive any minor formalities or irregularities in any bid.

* * * * * *

INSTRUCTIONS TO BIDDERS

1. CONTRACT DOCUMENTS

A. <u>FORMAT</u>

The Contract Documents are divided into parts, divisions, and sections for convenient organization and reference. Generally, there has been no attempt to divide the Specification sections into work performed by the various building trades, work by separate subcontractors, or work required for separate facilities in the Project.

B. DOCUMENT INTERPRETATION

The separate sections contained within these Contract Documents are intended to be mutually cooperative and to provide all details reasonably required for the execution of the proposed work.

Should there be any doubt as to the meaning or intent of said Contract Documents, the Bidder should request of the Engineer, in writing (at least 10 calendar days prior to bid opening) an interpretation thereof. Any interpretation or change in said Contract Documents will be made only in writing, in the form of Addenda to the Documents which will be furnished to all registered holders of Contract Documents. Bidders shall submit with their Bid, or indicate receipt of, all Addenda. The Owner will not be responsible for any other explanation or interpretations of said Documents.

C. DRAWINGS

Details of construction are bound separately.

2. GENERAL DESCRIPTION OF THE PROJECT

A general description of the work to be done is contained in the Invitation to Bid. The scope is specified in applicable parts of these Contract Documents.

3. QUALIFICATION OF CONTRACTORS

The prospective Bidders must meet the statutorily prescribed requirements before award of Contract by the Owner.

Bidders must hold or obtain all licenses or certificates required by federal, state, or local statutes, or regulations in order to bid and perform the work specified herein.

4. BIDDER'S UNDERSTANDING

Each Bidder must inform himself of the conditions relating to the execution of the work, and it is assumed that he will inspect the site and make himself thoroughly familiar with all the Contract Documents. Failure to do so will not relieve the successful Bidder of his obligation to enter into a Contract and complete the contemplated work in strict accordance with the Contract Documents. It shall be the Bidder's obligation to verify for himself and to his complete satisfaction all information concerning site and subsurface conditions.

The Owner will make available to prospective Bidders upon request and at the office of the Engineer, prior to bid opening, any information that he may have as to subsurface conditions and surface topography at the worksite.

Information derived from inspection of topographic maps, or from Drawings showing location of utilities and structures will not in any way relieve the Contractor from any risk, or from properly examining the Site and making such additional investigations as he may elect, or from properly fulfilling all the terms of the Contract Documents.

Each Bidder shall inform himself of, and the Bidder awarded a Contract shall comply with, federal, state, and local laws, statutes, and ordinances relative to the execution of the work. This requirement includes, but is not limited to, applicable regulations concerning minimum wage rates, nondiscrimination in the employment of labor, protection of public and employee safety and health, environmental protection, the protection of natural resources, fire protection, burning and nonburning requirements, permits, fees, and similar subjects.

5. TYPE OF PROPOSAL

A. LUMP SUM

Bidders shall submit a Bid on lump sum basis as set forth in the Bid Form.

The Lump Sum Bid price shall include such amounts as the Bidder deems proper for overhead and profit on account of cash allowances, if any, named in the Contract Documents as provided in paragraph 11.02 of the General Conditions.

6. PREPARATION OF PROPOSALS

A. GENERAL

All blank spaces in the Bid form must be filled in for all schedules and associated parts, as required, preferably in BLACK ink. All price information shall be clearly shown in figures where required. No changes shall be made in

the phraseology of the forms. In case of discrepancy between unit prices and extended totals, unit prices shall prevail.

Any Bid shall be deemed informal which contains omissions, erasures, alterations, or additions of any kind, or prices uncalled for, or in which any of the prices are obviously unbalanced, or which in any manner shall fail to conform to the conditions of the published Invitation to Bid.

Only one Bid from any individual, firm, partnership, or corporation, under the same or different names, will be considered. Should it appear to the Owner that any Bidder is interested in more than one Bid for work contemplated, all Bids in which such Bidder is interested will be rejected.

B. <u>DESCRIPTION OF SUPPLIERS</u>

Any manufacturer's name, trade name, brand name, or catalog number used in the specifications is for the purpose of describing and establishing general quality levels. SUCH REFERENCES ARE NOT INTENDED TO BE RESTRICTIVE. Bids will be considered for any brand, which meets the quality of the specifications for any item.

C. SIGNATURE

The Bidder shall sign his Bid in the blank space provided therefore. If Bidder is a corporation, the legal name of the corporation shall be set forth above, together with the signature of the officer or officers authorized to sign Contracts on behalf of the corporation. If Bidder is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign Contracts in behalf of the partnership. If signature is by an agent, other than an officer of a corporation or a member of a partnership, a notarized power-of-attorney must be on file with the Owner prior to opening of Bids or submitted with the Bid, otherwise the Bid will be regarded as not properly authorized.

D. SPECIAL BIDDING REQUIREMENTS

The Bidder's attention is brought to the hiring practices and licenses and permits of the City of Key West.

The Bidder shall submit with his Bid his experience record showing his experience and expertise in marine construction similar to this project. Such experience record shall provide at least five current or recent projects of similar work, preferably within Florida or the southeastern United States. For each project the following information shall be provided:

- 1. Description and location of work.
- 2. Contract amount.
- 3. Dates work was performed.

- 4. Owner.
- 5. Name of Owner's contact person and phone number.
- 6. Engineer.
- 7. Name of Engineer's contact person and phone number.

E. ATTACHMENTS

Bidder shall complete and submit the following forms with this bid:

- 1. Anti Kickback Affidavit.
- 2. Public Entity Crimes.
- 3. Key West Indemnification Form.
- 4. Domestic Partner Affidavit.
- 5. Local Vendors Form.
- 6. Cone of Silence Affidavit.

H. ANTI-KICKBACK AFFIDAVIT

The Bidder shall submit a signed and notarized Anti-Kickback Affidavit with Bid on the form provided herein.

G. PUBLIC ENTITY CRIMES

A person or affiliate 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 a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list."

H. KEY WEST INDEMNIFICATION FORM

The Bidder shall submit a signed and sealed Key West Indemnification Form with Bid on the form provided herein.

I. DOMESTIC PARTNER AFFIDAVIT

The Bidder shall submit a signed and notarized Domestic Partner Affidavit with Bid on the form provided herein.

7. STATE AND LOCAL SALES AND USE TAXES

Unless the Supplementary Conditions contains a statement that the Owner is exempt from state sales tax on materials incorporated into the work due to the qualification of the work under this Contract, all state and local sales and use taxes, as required by the laws and statutes of the state and its political subdivisions, shall be paid by the Contractor. Prices quoted in the Bid shall include all nonexempt sales and use taxes, unless provision is made in the Bid form to separately itemize the tax.

8. LOCAL PREFERENCE

Under a competitive bid solicitation, when a responsive, responsible non-local business submits the lowest price bid, and the bid submitted by one or more responsive, responsible local businesses within five percent of the price submitted by the non-local business, then the local business with the apparent lowest bid offer may have the opportunity to submit an offer to match the price(s) offered by the lowest, qualified and responsive non-local bidder within three working days of the notice of the intent to award. If the lowest local bidder submits a bid that fully matches the lowest bid from the lowest bid from the lowest non-local bidder tendered previously, then the award shall be made to such local bidder. If the lowest local bidder declines or is unable to match the lowest non-local bid price(s), then the award shall be made to the non-local business.

9. SUBMISSION OF BIDS

All Bids must be submitted not later than the time prescribed, at the place, and in the manner set forth in the Invitation to Bid. Bids must be made on the Bid forms provided herewith. The Bidder shall submit one (1) original, two (2) FLASH DRIVES WITH A SINGLE PDF FILE OF THE FULL PROPOSAL and all required bonds, attachments, and forms.

Each Bid must be submitted in a sealed envelope, so marked as to indicate the Bidder's name and its contents without being opened, and addressed in conformance with the instructions in the Invitation to Bid.

10. MODIFICATION OR WITHDRAWAL OF PROPOSALS

Prior to the time and date designated for receipt of Bids, any Bid submitted may be withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder or by telegram. If by telegram, written confirmation over the signature of the Bidder shall be mailed

and postmarked on or before the date and time set for receipt of Bids. No Bid may be withdrawn after the time scheduled for opening of Bids, unless the time specified in paragraph Award of Contract of these Instructions to Bidders shall have elapsed.

11. BID SECURITY

Bids must be accompanied by cash, a certified check, or cashier's check drawn on a bank in good standing, or a bid bond issued by a Surety authorized to issue such bonds in the state where the work is located, in the amount of 5 percent of the total amount of the Bid submitted. This bid security shall be given as a guarantee that the Bidder will not withdraw his Bid for a period of 60 days after bid opening, and that if awarded the Contract, the successful Bidder will execute the attached Contract and furnish properly executed Performance and Payment Bonds, each in the full amount of the Contract price within the time specified.

The Attorney-in-Fact who executes this bond in behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the bond. Where State Statute requires, certification by a resident agent shall also be provided.

If the Bidder elects to furnish a Bid Bond, he shall use the Bid Bond form bound herewith, or one conforming substantially thereto in form and content.

12. RETURN OF BID SECURITY

Within 15 days after the award of the Contract, the Owner will return the bid securities to all Bidders whose Bids are not to be further considered in awarding the Contract. Retained bid securities will be held until the Contract has been finally executed, after which all bid securities, other than Bidders' bonds and any guarantees which have been forfeited, will be returned to the respective Bidders whose Bids they accompanied.

13. AWARD OF CONTRACT

The award will be made under one Contract by the Owner on the basis of the total Lump Sum Base Bid from the lowest, responsive, responsible Bidder.

Within 90 calendar days after the opening of Bids, the Owner will accept one of the Bids or will act in accordance with the following paragraphs. The acceptance of the Bid will be by written notice of award, mailed to the office designated in the Bid, or delivered to the Bidder's representative. In the event of failure of the lowest responsive, responsible Bidder to sign the Contract and provide an acceptable Performance Bond, Payment Bond, insurance certificate(s) and evidence of holding required licenses and certificates, the Owner may award the Contract to the next lowest responsive, responsible Bidder. Such award, if made, will be made within 120 calendar days after the opening of Bids.

The Owner reserves the right to accept or reject any or all Bids, and to waive any informalities and irregularities in said Bids.

14. EXECUTION OF CONTRACT

The successful Bidder shall, within 10 working days after receiving Notice of Award, sign and deliver to the Owner a Contract in the form hereto attached, together with the insurance certificate examples of the bonds as required in the Contract Documents and evidence of holding required licenses and certificates. Within 10 working days after receiving the signed Contract from the successful Bidder, the Owner's authorized agent will sign the Contract. Signature by both parties constitutes execution of the Contract.

15. CONTRACT BONDS

A. PERFORMANCE AND PAYMENT BONDS

The successful Bidder shall file with the Owner, at the time of delivery of the signed Contract, a Performance Bond and Payment Bond on the form bound herewith, each in the full amount of the Contract price in accordance with the requirements of Florida Statutes Section 255.05 or 713.23, as applicable, as security for the faithful performance of the Contract and the payment of all persons supplying labor and materials for the construction of the work, and to cover all guarantees against defective workmanship or materials, or both, during the warranty period following the date of final acceptance of the work by the Owner. The Surety furnishing this bond shall have a sound financial standing and a record of service satisfactory to the Owner, shall be authorized to do business in the State of Florida, and shall be listed on the current U.S. Department of Treasury Circular Number 570, or amendments thereto in the Federal Register, of acceptable Sureties for federal projects.

B. POWER-OF-ATTORNEY

The Attorney-in-Fact (Resident Agent in state which work is being performed) who executes this Performance and Payment Bond in behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the bond.

All Contracts, Performance and Payment Bonds, and respective powers-of-attorney will have the same date.

16. FAILURE TO EXECUTE CONTRACT AND FURNISH BOND

The Bidder who has a Contract awarded to him and who fails to promptly and properly execute the Contract or furnish the required Bonds shall forfeit the bid security that accompanied his bid, and the bid security shall be retained as liquidated damages by the Owner, and it is agreed that this said sum is a fair estimate of the amount of damages the Owner will sustain in case the Bidder fails to enter into a Contract or furnish the required Bonds. Bid security deposited in the form of cash, a certified check, or cashier's check shall be subject to the same requirement as a Bid Bond.

17. PERFORMANCE OF WORK BY CONTRACTOR

The Contractor shall perform on the site and with his own organization, labor equivalent to at least 40 percent of the total amount of the work to be performed under this Contract and materials. If, during the progress of the work hereunder, the Contractor requests a reduction of such percentage, and the Engineer determines that it would be to the client's advantage, the percentage of the labor required to be performed by the Contractor's own organization may be reduced; PROVIDED prior written approval of such reduction is obtained by the contractor from the Engineer.

Each Bidder must furnish with his Bid a list of the items that he will perform with his own forces and the estimated total cost of these items.

18. TIME OF COMPLETION

The time of completion of the work to be performed under this Contract is the essence of the Contract. Delays and extensions of time may be allowed in accordance with the provisions stated in the General Conditions. The time allowed for the completion of the work authorized is stated in the Bid

The term of this contract is 120 calendar days.

END OF SECTION

NOTE TO BIDDER: Use preferably BLACK ink for completing this Bid form.

BID FORM

10:	The City of Key West	
Address:	1300 White St., Key West, Florida 33040	
Project Title: <u>Dolphin Pier Replacement - City Marina @ Garrison Bight</u>		
City of Key West Project No.: GB75511602 (ITB# 17-015)		
Bidder's person to contact for additional information on this Bid:		
Name:		
Telephone:		

BIDDER'S DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Bid is made without any connection or collusion with any person submitting another Bid on this Contract.

The Bidder further declares that he has carefully examined the Contract Documents for the construction of the project, that he has personally inspected the site, that he has satisfied himself as to the quantities involved, including materials and equipment, and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the Work and to identify the said quantities with the detailed requirements of the Contract Documents, and that this Bid is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Bid.

CONTRACT EXECUTION AND BONDS

The Bidder agrees that if this Bid is accepted, he will, within 10 days, not including Sundays and legal holidays, after Notice of Award, sign the Contract in the form annexed hereto, and will at that time, deliver to the Owner examples of the Performance Bond and Payment Bond required herein, and evidence of holding required licenses and certificates, and will, to the extent of his Bid, furnish all machinery, tools, apparatus, and other means of construction and do the Work and furnish all the materials necessary to complete all work as specified or indicated in the Contract Documents.

CERTIFICATES OF INSURANCE

Bidder agrees to furnish the Owner, before commencing the Work under this Contract, the certificates of insurance as specified in these Documents.

GENERAL INSURANCE REQUIREMENTS

- A. During the term of the Contract, the Contractor shall provide, pay for, and maintain with insurance companies satisfactory to the City of Key West (City), the types of insurance described herein.
- B. 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.
- C. The City shall be specifically included as an additional insured on the Contractor's Marine General Liability, Umbrella Liability and Business Automobile Liability policies including a waiver of subrogation clause in favor of the City of Key West on all policies, 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 the Completed Operations coverage.
- The Contractor shall deliver to the City, prior to the City issuing the Notice to Proceed, D. properly executed "Certificate(s) of Insurance", setting forth the insurance coverage and limits required herein. The Certificates must be personally, manually signed by the authorized representative of the insurance company(s) shown on the Certificate of Insurance with proof that the person signing the certificate is an authorized representative thereof. In addition, certified, true and exact copies of the insurance policies required herein shall be provided the City, on a timely basis, if requested by the City.
- E. Ten days after the City has issued the Notice to Proceed, if Contractor refuses or otherwise neglects to deliver the required Certificate(s) of Insurance personally and manually signed by the authorized representative of the insurance company(s), the City may, at the City's sole discretion,(a) terminate or suspend this Contract and seize the amount of Contractor's bid security (Bid Bond, cash or other security acceptable to the
- F. 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.
- G. 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
- Η. All insurance coverage of the Contractor shall be primary to any insurance or selfinsurance 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 Contract.
- I. The acceptance of delivery to the City of any Certificate of Insurance evidencing the insurance coverage and limits required in the Contract does not constitute approval or agreement by the City that the insurance requirements in the Contract have been met or that the insurance policies shown in the Certificates of Insurance are in compliance with the Contract requirements.
- J. No work or occupancy of the premises shall commence at the site unless and until the required Certificate(s) of Insurance are in effect and the written Notice to Proceed is issued to the Contractor by the City.

- K. The insurance coverage and limits required of the Contractor under this Contract 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 Contract or the possible insurance coverage needed therefore, it should seek professional assistance.
- L. Should any of the required insurances specified in this Contract provide for a deductible, self-insured retention, self-insured amount, or any scheme other than a fully insured program, and the insurance company providing the coverage will not agree in writing to pay the deductible or retention including the costs of defense as provided for in its policy without consideration of the deductible or retention in the settlement of insured claims, then the Contractor agrees, if required by the City to provide, pay for, and maintain a surety bond acceptable to the City from an insurance company acceptable to the City (or a standby irrevocable Letter of Credit acceptable to the City) in the amount of the deductible or retention, guaranteeing payment of the deductible or retention. Said guarantee is to continue for four (4) years following completion of the Work.
- M. All of the required insurance coverage shall be issued as required by law and shall be endorsed, where necessary, to comply with the minimum requirements contained herein.
- N. 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 Contract, except for the application of the Aggregate Limits Provisions.
- O. Renewal Certificate(s) of Insurance shall be provided to the City at least twenty (20) days prior to expiration of current coverage so that there shall be no interruption in the work due to lack of proof of the insurance coverage required of the Contractor in this Contract.
- P. If the Contractor fails to provide or maintain the insurance coverage required in this Contract at any time during the term of the Contract, the City may terminate or suspend this Contract.
- Q. If the Contractor utilizes contractors or sub-contractors to perform any work governed by this agreement, the Contractor will ensure all contractors and sub-contractors maintain the same types and amounts of insurance required of the Contractor. In addition, the Contractor will ensure that the contractors and sub-contractors 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 City upon request.

SPECIFIC INSURANC E COVERAGES AND LIMITS

- A. All requirements in this Insurance Section shall be complied with in full by the Contractor unless excused from compliance in writing by the City.
- B. The amounts and types of insurance must conform to the following minimum 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 Contract for all employees engaged in this work under

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BID FORM
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this Contract, in accordance with the laws of the State of Florida. The minimum acceptable limits shall be:

Workers' Compensation Florida Statutory Requirements

Employer's Liability \$1,000,000.00 Limit Each Accident

\$1,000,000.00 Limit Disease Aggregate

\$1,000,000.00 Limit Disease Each

Employee

United States Longshoremen and Harbor Workers (USL&H) coverage shall be maintained by the Contractor that will respond to the Federal USL&H statute (33 USC sections 901-950). Such coverage shall have minimum limits consistent with 33 USC sections 901-950 and in no case less than \$1,000,000.

Jones Act coverage shall be maintained by the Contractor that will respond to claims filed under the Federal Jones Act (46 U.S.C.A. subsection 688). Such coverage shall have minimum limits of \$1,000,000.

Marine General Liability Insurance shall be maintained by the Contractor on the Full Coverage shall include but not be limited to Premises and Occurrence Form. Operations, Personal Injury, Contractual for this Contract, Independent Contractors, Broad Form Property Damage, and Products & Completed Operations Coverage. Coverage must extend to damage/destruction of vessels being relocated by the Contractor. In addition to the required Certificate(s) of insurance, the Contractor will be required to provide the City will a certified copy of the Contractor's Marine General Liability policy before the City will issue the notice to proceed.

The minimum acceptable limits will be:

Bodily Injury & \$2,000,000.00 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 Final Completion and Acceptance by the CITY.

The use of an Excess and/or Umbrella policy shall be acceptable if the level of protection provided by the Excess and/or Umbrella policy is no less restrictive then the Primary 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 not less than:

Bodily Injury \$1,000,000.00 Limit Each Accident Property Damage Liability \$1,000,000.00 Limit Each Accident

or

Bodily Injury &

\$1,000,000.00 Combined Single Limit Each Property Damage Liability

Accident

Watercraft Liability Insurance The Contractor will be required to maintain Watercraft Liability Insurance with minimum limits of \$2,000,000.

START OF CONSTRUCTION AND CONTRACT COMPLETION TIMES

The Bidder agrees to begin work within 10 calendar days after the date of the Notice to Proceed and to achieve Substantial Completion within 90 calendar days from the date when the Contract Times commence to run as provided in paragraph 2.03.A of the General Conditions, and Work will be completed and ready for final payment and acceptance in accordance with paragraph 14.07 of the General

LIQUIDATED DAMAGES

In the event he Bidder is awarded the Contract, Owner and Bidder recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not completed within the times specified in paragraph Start of Construction and Contract Completion Times above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. Owner and Bidder also recognize the delays, expense, and difficulties involved in proving in a legal or other dispute resolution proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Bidder agree that as liquidated damages for delay (but not as a penalty) Bidder shall pay Owner \$1,000 per day for each day that expires after the time specified for Final completion.

Owner will recover such liquidated damages by deducting the amount owed from the final payment or any retainage held by Owner.

ADDENDA

The Bidder hereby acknowledges that he has received Addenda Nos,,
,, (Bidder shall insert No. of each Addendum received) and agrees that all
addenda issued are hereby made part of the Contract Documents, and the Bidder further agrees
that his Bid(s) includes all impacts resulting from said addenda.

SALES AND USE TAXES

The Bidder agrees that all federal, state, and local sales and use taxes are included in the stated Bid Prices for the Work. Allowances DO NOT include any sales and use tax. Equipment allowance includes taxes as shown in Equipment Suppliers' Bid.

PUBLIC ENTITY CRIMES

"A person or affiliate 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 a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list."

COMBINED UNIT PRICE AND LUMP SUM WORK

The Bidder further proposes to accept as full payment for the Work proposed herein the amounts computed under the provisions of the Contract Documents. For unit price bid items, the estimate of quantities of work to be done is tabulated in the Proposal and, although stated with as much accuracy as possible, is approximate only and is assumed solely for the basis of calculation upon which the award of Contract shall be made. For lump sum bid items, it is expressly understood that the amounts are independent of the exact quantities involved. The Bidder agrees that the amounts for both unit price and lump sum work represent a true measure of labor and materials required to perform the Work, including all allowances for inspection, testing, overhead and profit for each type of work called for in these Contract Documents. The amounts shall be shown in both words and figures. In case of discrepancy, the amount shown in words shall govern.

PERMITS

Prior to issues of the Notice to Proceed the City will have obtained permits from FDEP and ACOE. The CONTRACTOR will be responsible for obtaining required building permits from the City's Building Department.

Dolphin Pier Dock Replacement City Marina at Garrison Bight Key West, Florida, Florida Stantec Project No. 215613443

BID FORM

Bid unit prices stated in this proposal include all costs and expenses for labor, equipment, materials, contractor's overhead and profit. Unit prices for the various work items are intended to establish a total price for completing the project in its entirety. All work and incidental costs shall be included for payment under the several scheduled items of the overall contract, and no separate payment will be made therefore.

Item Description	Quantity	Units	Unit Price	Total
Base Bid	•			
Mobilization/staging and Demobilization, including				
City of Key West Permit	1	LS	\$	\$
Relocation of existing boats to King Fish Pier and				
return to Dolphin Pier at end of project including				
installation and removal of temporary mooring piles	1	LS	\$	\$
Demolition of Existing Wood and Concrete Pier and				
removal of all existing concrete spalling debris that		Ŧ @	*	
has fallen or will fall from existing Pier	1	LS	\$	\$
Furnish and install Main Floating Pier (12'w by 40'l)	480	SF	\$	\$
Furnish and install Main Floating Pier (10'w by 130'l)	1300	SF	\$	\$
Furnish and install Finger Piers (4'wx35'l)	1120	SF	\$	\$
Furnish and install Piles (HSS 20.00 X 0.50) with				
epoxy coating system (Interior and Exterior)	16	EA	\$	\$
Furnish and install Mooring Piles (HSS 14.00 X 0.50)				
with epoxy coating system (Interior and Exterior)	16	EA	\$	\$
Pile Collars	16	EA	\$	\$
Furnish and install Aluminum Access Ramp				
(5'wx30'l)	1	EA	\$	\$
Furnish and install accessories (15" Cleats: Main				
Pier/finger)	80	EA	\$	\$
Electrical System per Stantec Plans and				
Specifications, including new CATV/Phone Cabinet	1	LS	\$	\$
Potable Water System per Stantec Plans and		- ~		
Specifications	1	LS	\$	\$
Sewer System per Stantec Plans and Specifications	1	LS	\$	\$
Fire System per Stantec Plans and Specifications	1	LS	\$	\$
As-builts	1	LS	\$	\$
Product information and Warranty Certificate Binder	1	LS	\$	\$
Performance & Payment Bond	1	LS	\$	\$
Safety Act	1	LS	\$	\$
General Allowance (Only to be used with owners'				
written permission)				\$25,000
		То4	tal Base Bid	\$
		100	ai Dase Diu	Φ

TOTAL LUMP SUM BASE BID

			Dollars
	(Amount written in words has	precedence)	
and	Cents		
SUBCONTRACTORS			
The Bidder further propo awarded subcontracts fo awarded the Contract:	oses that the following subcontractions of the Wo	ting firms or businesses or ork in the event that the E	will be Bidder is
Name			
Street	City	State	Zip
Name			
Street	City	State	Zip
Name			
Street	City	State	Zip
Name			
Street	City	State	Zip
<u>Surety</u>			
		whose a	ddress is
Street	 City	State	Zip

BID FORM 00 41 13 - 8 APRIL 2017

<u>Bidder</u>

City unications concern	State ned with this Bid and with	Zip
unications concern	ned with this Bid and with	1 the Contra
		partnership
	-	ne corporation submitting this Bid, or of the sprincipals are as follows:

APRIL 2017 BID FORM 00 41 13 - 9

If Sole Proprietor or Partnership

IN WITNESS hereto the undersigned has set hi	s (its) hand this day of <u>20</u>	•
	Signature of Bidder	_
	Title	-

If Corporation

IN WITNESS WHEREOF the undersigned corporand its seal affixed by its duly authorized officers	
(SEAL)	
	Name of Corporation
	By:
	Title:
	Attest: Secretary

END OF SECTION

APRIL 2017 BID FORM 00 41 13 - 11

FLORIDA BID BOND

	BOND NO
	AMOUNT: \$
KNOW ALL MEN BY THESE PRESENTS, that	
hereinafter called the Contractor (Principal), and	
a corporation duly organized and existing under and Florida, hereinafter called the Surety, and authorized Florida, as Surety, are held and firmly bound unto T	d to transact business within the State of
(Obligee), in the sum of:	
DOLLARS (\$_payment for which we bind ourselves, our heirs, exe assigns, jointly and severally, firmly by these present	
THE CONDITION OF THIS BOND IS SUCH THA	AT:
WHEREAS, the Principal is herewith submitting his Dolphin Pier Replacement ITB #17-015.	or its Bid Proposal for GB 75511602
WHEREAS, the Principal contemplates submitting of the furnishing of all labor, materials (except those to equipment, machinery, tools, apparatus, means of tra the work covered in the Proposal and the detailed Dr	be specifically furnished by the Owner), ansportation for, and the performance of
WHEREAS, it was a condition precedent to the subscertified check, or bid bond in the amount of 5 percebid as a guarantee that the Bidder would, if awarded Contract with the Owner for the performance of said written notice having been given of the award of the	ent of the base bid be submitted with said the Contract, enter into a written I Contract, within 10 working days after

NOW, THEREFORE, the conditions of this obligation are such that if the Principal within 10 consecutive calendar days after written notice of such acceptance, enters into a written Contract with the Obligee and furnishes the Performance and Payment Bonds, each in an amount equal to 100 percent of the awarded base bid, satisfactory to the Owner, then this obligation shall be void; otherwise the sum herein stated shall be due and payable to the Obligee and the Surety herein agrees to pay said sum immediately upon demand of the Obligee in good and lawful money of the United States of America, as liquidated damages for failure thereof of said Principal.

Signed and sealed this day of	<u>, 20</u> .
	Principal
	Ву:
	Surety
	By: Attorney-In-Fact

END OF SECTION

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA) : SS
COUNTY OF MONROE)
will be paid to any employees of the	i, depose and say that no portion of the sum herein bid City of Key West as a commission, kickback, reward or ny member of my firm or by an officer of the
	By:
Sworn and subscribed before me thisday of, 20	
NOTARY PUBLIC, State of Florida at Large	_
My Commission Expires:	

END OF SECTION

SWORN STATEMENT UNDER SECTION 287.133(3)(A) FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER

AUTHORIZED TO ADMINISTER OATHS.

1.	This sworn statement is submitted with Bid or Proposal for
2.	This sworn statement is submitted by
	whose business address is
	and (if applicable) its Federal Employer
	Identification Number (FEIN) is
signin	(If the entity has no FEIN, include the Social Security Number of the individual g this
	sworn statement
3.	My name is (please print name of individual signing)
	and my relationship to the entity named above is
4.	I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any bid or contract for goods or services to be provided to any public or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.
5.	I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
6	Lunderstand that an "affiliate" as defined in Paragraph 287 133(1)(a) Florida

Statutes, means

- 1. A predecessor or successor of a person convicted of a public entity crime; or
- 2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
- 7. I understand that a "person" as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.
- Based on information and belief, the statement which I have marked below is true in 8. relation to the entity submitting this sworn statement. (Please indicate which statement applies). Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.) There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order). The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer by the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order).

(Please describe any action taken by or pending with the Department of General

Services).

The person or affiliate has not been put on the convicted vendor list.

	(signature	e)
	(date)	
STATE OF		
COUNTY OF		
PERSONALLY APPEAR authority,	RED BEFORE ME, th	ne undersigned
who	o, after first being sw	orn by me, affixed
his/her (name of individual signing)		
signature in the space provided above on this	of	, 20
My commission expires:		
	– NOTARY	Y PUBLIC

CITY OF KEY WEST INDEMNIFICATION FORM

To the fullest extent permitted by law, the CONTRACTOR expressly agrees to indemnify and hold harmless the City of Key West, their officers, directors, agents and employees *(herein called the "indemnitees") 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 CONTRACTOR, its Subcontractors or persons employed or utilized by them in the performance of the Contract. Claims by indemnitees for indemnification shall be limited to the amount of CONTRACTOR'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.

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 CONTRACTOR 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 CONTRACTOR or of any third party to whom CONTRACTOR may subcontract a part or all of the Work. This indemnification shall continue beyond the date of completion of the work.

CONTRACTOR:		SEAL:
	Address	
	Signature	
	Print Name	
	Title	
DATE:		

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

STATE OF)		
: SS		
COUNTY OF)		
I, the undersigned hereby duly sworn, depose	and say that the firm of	
provides benefits to domestic partners of its e to employees' spouses, per City of Key West	1 2	*
By:		
Sworn and subscribed before me this	day of	20
NOTARY PUBLIC, State of Florida at Large		
My Commission Expires:		

* * * * * *

CONE OF SILENCE AFFIDAVIT

STATE OF)
	: SS
COUNTY OF)
	depose and say that all owner(s), partners, officers, ng the firm of
have read and understand the limitations	and procedures regarding communications concerning
City of Key West Code of Ordinances Sec	
By:	
Sworn and subscribed before me this	
day of	
NOTARY PUBLIC, State of	at Large
My Commission Expires:	

CITY OF KEY WEST BUSINESS LICENSE TAX RECEIPT

- 1. A City of Key West Business License Tax Receipt is required for this Project. Contractor must be general contractor or building contractor or engineering contractor.
- 2. A City of Key West Business License Tax Receipt also is required as for subcontracting landscaping contractor, engineering services, and professional surveying.
- 3. A Business License Tax Application can be found on the City's web site.

http://www.keywestcity.com/egov/docs/1162843921181.htm

LOCAL VENDOR CERTIFICATION PURSUANT TO CKW ORDINANCE 09-22 **SECTION 2-798**

The undersigned, as a duly authorized representative of the vendor listed herein, certifies to the best of his/her knowledge and belief, that the vendor meets the definition of a "Local Business." For purposes of this section, "local business" shall mean a business which:

- Principle address as registered with the FL Department of State located within 30 miles of the a. boundaries of the city, listed with the chief licensing official as having a business tax receipt with its principle address within 30 miles of the boundaries of the city for at least one year immediately prior to the issuance of the solicitation.
- Maintains a workforce of at least 50 percent of its employees from the city or within 30 miles of b. its boundaries.
- Having paid all current license taxes and any other fees due the city at least 24 hours prior to the c. publication of the call for bids or request for proposals.
 - Not a local vendor pursuant to Ordinance 09-22 Section 2-798
 - Oualifies as a local vendor pursuant to Ordinance 09-22 Section 2-798

If you qualify, please complete the following in support of the self certification & submit copies of your County and City business licenses. Failure to provide the information requested will result in denial of certification as a local business.

Business Name	Phone:
Current Local Address: (P.O Box numbers may not be used to establish status	Fax:
Length of time at this address	
Signature of Authorized Representative	Date
STATE OFCOUNTY OF	
The foregoing instrument was acknowledged before r By (Name of officer or agent, title of officer or agent)	ne thisday of, 20
(Name of officer or agent, title of officer or agent) or has produced (type of identification)	Name of corporation acknowledging as identification
	Signature of Notary
Return Completed form with Supporting documents to: City of Key West Purchasing	Print, Type or Stamp Name of Notary
	Title or Rank

BIDDER'S CHECKLIST

(Note: The purpose of this checklist is to serve as a reminder of major items to be addressed in submitting a bid and is not intended to be all inclusive. It does not alleviate the Bidder from the responsibility of becoming familiar with all aspects of the Contract Documents and proper completion and submission of his bid.)

1.	All Contract Documents thoroughly read and understood.	L	J
2.	All blank spaces in Proposal filled in, using black ink.	[]
3.	Total and unit prices added correctly.	[]
4.	Addenda acknowledged.	[]
5.	Subcontractors are named as indicated in the Proposal.	[]
6.	Experience record included.	[]
7.	Bid signed by authorized officer.	[]
8.	Bid Bond completed and executed, including power-of-attorney dated the same date as Bid Bond.	[]
9.	Bidder familiar with federal, state, and local laws, ordinances, rules and regulations affecting performance of the work.	[]
10.	Bidder, if successful, able to obtain and/or demonstrate possession of required licenses and certificates within (10) ten calendar days after receiving a Notice of Award.	[]
11.	Bid submitted intact with Bid Bonds and affidavits	Γ	1
12.	Bid Documents submitted in sealed envelope and addressed and labeled	L	J
	in conformance with the instructions in the Invitation to Bid.	[]
13.	Bidder must provide satisfactory documentation of State Licenses	[]
14.	Anti-Kickback Affidavit.	[]
15.	Public Entity Crimes.	[]
16.	Local Vendor Certification.	[]
17.	Domestic Partner Affidavit	[]
18.	City of Key West Indemnification Form.	[]
19.	Cone of Silence Affidavit.	Г	1

APRIL 2017 BIDDER'S CHECKLIST

AGREEMENT

This Agreement, made and entered into this day of	, 20,
by and between the City of Key West, hereinafter called the "Owner," and	d
, hereinafter called the "Con	tractor";
WITNESSETH:	
The Contractor, in consideration of the sum to be paid him by the Owner covenants and agreements herein contained, hereby agrees at his own pro expense to do all the work and furnish all the materials, tools, labor, and a machinery, and appurtenances for Construction of the ITB#17-015 Dolph Replacement – City Marina at Garrison Bight, to the extent of the Bid ma Contractor, dated the day of, 20, all in full con Contract Documents referred to herein.	pper cost and all appliances, nin Pier ade by the
The BIDDING REQUIREMENTS, including the signed copy of the Bid, FORMS, the GENERAL AND SUPPLEMENTARYCONDITIONS OF the SPECIFICATIONS, and the DRAWINGS, which consist of Detailed, 20, are hereby referred to and by reference made a par fully and completely as if the same were fully set forth herein and are mu therewith.	THE CONTRACT, Drawings for dated rt of this Contract as
In consideration of the performance of the work as set forth in these Cont Owner agrees to pay to the Contractor the amount bid in the Bid as adjust with the Contract Documents, or as otherwise herein provided, and to ma the manner and at the times provided in the Contract Documents.	ted in accordance
The Contractor agrees to complete the work within the time specified and payment hereunder the amounts computed as determined by the Contract based on the said Bid.	
The Contractor agrees to remedy all defects appearing in the work or deventerials furnished and the workmanship performed under this Contract operiod after the date of final acceptance of the work by the Owner, and furnidemnify and save the Owner harmless from any costs encountered in redefects.	during the warranty arther agrees to

Liquidated Damages: The Contractor recognizes that time is of the essence and that the Owner will suffer financial loss if the Work is not completed within the times specified in paragraph above, plus any extensions thereof allowed in accordance with Article 12, of the General Conditions.

It is agreed that the Project, based upon the Bid, shall be fully complete within 120 consecutive calendar days from the date the Notice to Proceed is issued.

Owner and Contractor also recognize the delays, expense and difficulties involved in proving in a legal proceeding the actual loss suffered by the Owner, if the Work is not completed on time. Accordingly, instead of requiring any such proof, the Owner and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay the Owner (\$1,000) for each day that expires after the time specified for substantial completion. After Substantial Completion if Contractor shall neglect, refuse or fail to complete the remaining Work within the contract time or any proper extension thereof granted by the Owner, Contractor shall pay the Owner (\$1,000) for each day that expires after the time specified for completion and readiness for final payment. Liquidated damages shall run concurrent.

	CITY OF KEY WEST
	Ву:
	Printed:
	Title:
	Contractor:
	By:
	Printed:
	Title:
Approved as to Form	

END OF SECTION

PERFORMANCE BOND

BOND NO. AMOUNT: \$

KNOW ALL MEN BY THESE PRESENTS , that in accordance with Florida Statutes Section 255.05,
with offices at
hereinafter called the CONTRACTOR (Principal), and
with offices at
a corporation duly organized and existing under and by virtue of the laws of the State of Florida, hereinafter called the SURETY, and authorized to transact business within the State of Florida, as SURETY, are held and firmly bound unto CITY OF KEY WEST , represented by its, hereinafter called the CITY (Obligee), in the sum of:
(\$), lawful money of the United States of America, for the payment of which, well and truly be made to the CITY, the CONTRACTOR and the SURETY bind themselves and each of their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents as follows:
THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT:
WHEREAS, the CONTRACTOR has executed and entered into a certain Contract hereto attached, with the CITY, dated, 20, to furnish at his own cost, charges, and expense all the necessary materials, equipment, and/or labor in strict and express accordance with said Contract and the Contract Documents as defined therein, all of which is made a part of said Contract by certain terms and conditions in said Contract more particularly mentioned, which Contract, consisting of the various Contract Documents is made a part of this Bond as fully and completely as if said Contract Documents were set forth herein;

PROJECT GB75511602 DOLPHIN PIER REPLACEMENT ITB 17-015

NOW THEREFORE, the conditions of this obligation are such that if the above bounden CONTRACTOR:

- 1. Shall in all respects comply with the terms and conditions of said Contract and his obligation there under, including the Contract Documents (which include the plans, drawings, specifications, and conditions as prepared by the CITY, invitation to bid, instructions to bidders, the CONTRACTOR'S bid as accepted by the above CITY, the bid and contract performance and payment bonds, and all addenda, if any, issued prior to the opening of bids), being made a part of this bond by reference, at the times and in the manner prescribed in the contract; and
- 2. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying PRINCIPAL with labor, materials, or supplies, used directly or indirectly by PRINCIPAL in the prosecution of the work provided for in the contract; and
- 3. Pays CITY all losses, costs, expenses, damages, attorney's fees, including appellate proceedings, injury or loss of whatever kind and however arising including, without limitation,

delay damages to which said CITY may be subject by reason of any wrongdoing, misconduct, want of care or skill, negligence, failure of performance, breach, failure to petition within the prescribed time, or default, including patent infringements, on the part of said CONTRACTOR, his agents or employees, in the execution or performance of said Contract; and

4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this obligation shall be void; otherwise, to remain in full force and effect for the term of said Contract.

AND, the said Surety for value received, hereby stipulates and agrees that no change involving any extension of time, or addition to the terms of the Contract Documents, or to the work to be performed, or materials to be furnished there under shall affect said obligation of said Surety on this Bond, and the said Surety does hereby waive notice of any such changes, extension of time, alterations, or additions of the terms of the Contract Documents, or to the work.

Any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes.

IN WITNESS WHEREOF, the above parties bonded together have executed this instrument

this day of of each corporate party being hereto affixed an	, 20, the name and corporate sea
of each corporate party being hereto affixed an representative, pursuant to authority of its govern	
	CONTRACTOR
	By:
(SEAL)	
ATTEST	
	SURETY
	By:
(SEAL)	

ATTEST

PAYMENT BOND

BOND NO. AMOUNT: \$

KNOW ALL MEN BY THESE PRESENTS, that in accordance with Florida Statute
Section 255.05,
with offices at
hereinafter called the CONTRACTOR (Principal), and
with offices at
a corporation duly organized and existing under and by virtue of the laws of the State of, hereinafter called the SURETY, and authorized to transact business within
the State of Florida, as SURETY, are held and firmly bound CITY OF KEY WEST,
represented by its, hereinafter called the City (Obligee), in the sum of,
lawful money of the United States of America, for the payment of which, well and truly
be made to the CITY, and the CONTRACTOR and the SURETY bind themselves and
each of their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents as follows:
severally, fifthly by these presents as follows.
THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT:
WHEREAS, the CONTRACTOR has executed and entered into a certain Contract for attached hereto, with the CITY, dated, 20,
to furnish at his own cost, charges, and expense the necessary materials, equipment, and/or labor in strict and express accordance with said Contract and the plans, drawings
(if any), and specifications prepared by the CITY, all of which is made a part of said
Contract by certain terms and conditions in said Contract more particularly mentioned,
which Contract, consisting of the various Contract Documents specifically mentioned
herein and relative hereto, is made a part of this Bond as fully and completely as if said Contract Documents were set forth herein.

PROJECT GB75511602 DOLPHIN PIER REPLACEMENT ITB 17-015

NOW THEREFORE, the conditions of this obligation are such that if the above bounden CONTRACTOR shall in all respects comply with the terms and conditions of said Contract and his obligation thereunder, including the Contract Documents (which include the plans, drawings, specifications, and conditions prepared by the CITY, invitation to bid, instructions to bidders, the CONTRACTOR'S bid as accepted by the CITY, the bid and contract and payment bonds, and all addenda, if any, issued prior to the opening of bids), and further that if said CONTRACTOR shall promptly make payments to all persons supplying materials, equipment, and/or labor, used directly or indirectly by said CONTRACTOR or subcontractors in the prosecution of the work for said contract is accordance with Florida Statutes, Section 255.05 or Section 713.23, then this obligation shall be void; otherwise to remain in full force and effect for the term of

said contract, including and all guarantee periods as specifically mentioned in said Contract Documents.

AND, the said SURETY for value received, hereby stipulates and agrees that no change involving any extension of time, or addition to the terms of the Contract or to the work to be performed, or materials to be furnished thereunder, or in the Contract Documents and specifications accompanying the said contract shall affect said obligation of said SURETY on this Bond, and the said SURETY does hereby waive notice of any such changes, extension of time, alternations, or additions of the terms of the Contract, or to the work, to the Contract Documents, or to the specifications.

Claimant shall give written notice to the CONTRACTOR and the SURETY as required by Section 255.05 or Section 713.23, Florida Statutes. Any action instituted against the CONTRACTOR or SURETY under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2) or Section 713.23, Florida Statutes.

IN WITNESS WHEREOF, instrument this corporate seal of each corpora by its undersigned representation	day of te party bein	g hereto	affixed a	, 20 nd those prese	_, the name and nts duly signed
			CONTI	RACTOR	
(SEAL)			By:		
ATTEST			CUDET	N 7	
(SEAL)			SURET By:		
ATTEST					

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By







PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE a practice division of the NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN COUNCIL OF ENGINEERING COMPANIES

AMERICAN SOCIETY OF CIVIL ENGINEERS

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The Associated General Contractors of America



Construction Specifications Institute

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
- 1. Addenda--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
- 2. *Agreement*--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
- 3. Application for Payment--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
- 4. Asbestos--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
- 5. *Bid*--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 6. *Bidder*--The individual or entity who submits a Bid directly to Owner.
- 7. Bidding Documents--The Bidding Requirements and the proposed Contract Documents (including all Addenda).
- 8. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, Bid security of acceptable form, if any, and the Bid Form with any supplements.
- 9. Change Order--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract

Times, issued on or after the Effective Date of the Agreement.

- 10. Claim--A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
- 11. Contract--The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
- 12. Contract Documents-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.
- 13. Contract Price--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).
- 14. Contract Times--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.
- 15. *Contractor*--The individual or entity with whom Owner has entered into the Agreement.
- 16. Cost of the Work--See Paragraph 11.01.A for definition.
- 17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
- 18. Effective Date of the Agreement--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 19. *Engineer*--The individual or entity named as such in the Agreement.

- 20. *Field Order--*A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
- 21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.
- 22. Hazardous Environmental Condition--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.
- 23. *Hazardous Waste--*The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
- 24. Laws and Regulations; Laws or Regulations-Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
- 26. *Milestone--*A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
- 27. Notice of Award--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.
- 28. *Notice to Proceed--*A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.
- 29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
 - 30. PCBs--Polychlorinated biphenyls.
- 31. *Petroleum*.-Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and

- 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils
- 32. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
- 33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
- 34. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
- 35. Radioactive Material--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.
- 37. Resident Project Representative--The authorized representative of Engineer who may be assigned to the Site or any part thereof.
- 38. Samples--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
- 39. Schedule of Submittals--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.
- 40. Schedule of Values--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
- 41. Shop Drawings--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
- 42. *Site--*Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and

easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

- 43. Specifications--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.
- 44. Subcontractor--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.
- 45. Substantial Completion--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.
- 47. Supplementary Conditions--That part of the Contract Documents which amends or supplements these General Conditions.
- 48. Supplier--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.
- 49. Underground Facilities--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 50. *Unit Price Work*--Work to be paid for on the basis of unit prices.
- 51. Work--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating

all materials and equipment into such construction, all as required by the Contract Documents.

52. Work Change Directive--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered", "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the "reasonable," "suitable," adiectives "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

- a. does not conform to the Contract Documents, or
- b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or
- c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide

- 1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
- 2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
- 3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, "provide" is implied.
- F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 Delivery of Bonds and Evidence of Insurance

- A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. Evidence of Insurance: Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of

insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 Copies of Documents

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 *Starting the Work*

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 Before Starting Construction

- A. *Preliminary Schedules:* Within 30 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:
- 1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 Preconstruction Conference

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 Initial Acceptance of Schedules

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

- 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
- 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
- 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 Intent

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended

result will be provided whether or not specifically called for at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 Reference Standards

A. Standards, Specifications, Codes, Laws, and Regulations

- 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
- 2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies

- 1. Contractor's Review of Contract Documents Before Starting Work: Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.
- 2. Contractor's Review of Contract Documents During Performance of Work: If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor

shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

B. Resolving Discrepancies

- 1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
 - a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 Amending and Supplementing Contract Documents

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;

- 2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or
- 3. Engineer's written interpretation or clarification.

3.05 Reuse of Documents

A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all

of the Work under a direct or indirect contract with Contractor, shall not:

- 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or
- 2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaption by Engineer.
- B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 Electronic Data

- A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.
- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 Availability of Lands

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 Subsurface and Physical Conditions

- A. Reports and Drawings: The Supplementary Conditions identify:
- 1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and
- 2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.
- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:
- 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed

- by Contractor, and safety precautions and programs incident thereto; or
- 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
- 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 Differing Subsurface or Physical Conditions

- A. *Notice:* If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:
- 1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
- 2. is of such a nature as to require a change in the Contract Documents; or
- 3. differs materially from that shown or indicated in the Contract Documents; or
- 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents:

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. Engineer's Review: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, and/or time required for, performance of the Work; subject, however, to the following:

- a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and
- b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.
- 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:
 - a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
 - b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 4.03.A.
- 3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

- 1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and
- 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all such information and data.
 - b. locating all Underground Facilities shown or indicated in the Contract Documents.
 - c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and
 - d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. Not Shown or Indicated

- 1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- 2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 Reference Points

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 Hazardous Environmental Condition at Site

A. Reports and Drawings: Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:
- 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
- 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
- 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous

Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

- D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.
- E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.
- F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.
- G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous

Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06. G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners. employees, agents, consultants. subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 Performance, Payment, and Other Bonds

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an

agent must be accompanied by a certified copy of the agent's authority to act.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 Licensed Sureties and Insurers

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

5.04 Contractor's Liability Insurance

A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

- 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts:
- claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
- 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
- 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:
 - a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or
 - b. by any other person for any other reason;
- 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
- 6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.
- B. The policies of insurance required by this Paragraph 5.04 shall:
- 1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;
- 2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
 - 3. include completed operations insurance;
- 4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;

- 5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);
- 6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and
- 7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.
 - a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 Owner's Liability Insurance

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 Property Insurance

- A. Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
- 1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;
- 2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to

the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

- 3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
- 4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
- 5. allow for partial utilization of the Work by Owner:
 - 6. include testing and startup; and
- 7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.
- B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.
- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.
- D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any

deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

5.07 Waiver of Rights

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective directors. partners. employees. consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:
- 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct

physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 Receipt and Application of Insurance Proceeds

A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order .

B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 Acceptance of Bonds and Insurance; Option to Replace

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5

on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 Partial Utilization, Acknowledgment of Property Insurer

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 Supervision and Superintendence

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or received from the superintendent shall be binding on Contractor.

6.02 Labor; Working Hours

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 Services, Materials, and Equipment

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.
- B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 Progress Schedule

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.

- 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.
- 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 Substitutes and "Or-Equals"

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

- 1. "Or-Equal" Items: If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,
 - 3) it has a proven record of performance and availability of responsive service; and
 - b. Contractor certifies that, if approved and incorporated into the Work:

- 1) there will be no increase in cost to the Owner or increase in Contract Times, and
- 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

- a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.
- b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.
- c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.
- d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
- 1) shall certify that the proposed substitute item will:
 - a) perform adequately the functions and achieve the results called for by the general design,
 - b) be similar in substance to that specified, and
 - c) be suited to the same use as that specified;
 - 2) will state:
 - a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;
 - b) whether or not use of the proposed substitute item in the Work will require

- a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
- c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;
- 3) will identify:
- a) all variations of the proposed substitute item from that specified, and
- b) available engineering, sales, maintenance, repair, and replacement services;
- 4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,
- B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.
- C. Engineer's Evaluation: Engineer will be allowed 21 days within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "orequal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or-equal." Engineer will advise Contractor in writing of any negative determination.
- D. Special Guarantee: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

- E. Engineer's Cost Reimbursement: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- F. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.
- 6.06 Concerning Subcontractors, Suppliers, and Others
- A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to the Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom the Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.
- B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued . No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.
- C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as

Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

- 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor
- 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.
- E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.
- F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer,, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 Patent Fees and Royalties

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 Permits

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 Laws and Regulations

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas

- 1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.
- 2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
- 3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of

or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

- B. Removal of Debris During Performance of the Work: During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. Cleaning: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. Loading Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 Record Documents

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be maintained on site and available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 Safety and Protection

- A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
- 1. all persons on the Site or who may be affected by the Work;
- 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

- 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
- C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or , or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 Safety Representative

A. Contractor shall designate a qualified and experienced safety representative at the Site who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances and whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 Hazard Communication Programs

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among

employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 Shop Drawings and Samples

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. Shop Drawings

- a. Submit number of copies specified in the General Requirements.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.
- 2. Samples: Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals.
 - a. Submit number of Samples specified in the Specifications.
 - b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.
- B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review

and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures

- 1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:
 - a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto:
 - b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;
 - c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and
 - d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.
- 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.
- 3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

- 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.18 *Continuing the Work*

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
- 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.

- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 - 1. observations by Engineer;
- 2. recommendation by Engineer or payment by Owner of any progress or final payment;
- 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
- 4. use or occupancy of the Work or any part thereof by Owner;
- 5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;
 - 6. any inspection, test, or approval by others; or
 - 7. any correction of defective Work by Owner.

6.20 *Indemnification*

A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that an See City of Key West Indemnification form able to bol under ry to or des Section 00-43-18 Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.

B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or

anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

- C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:
- 1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
- 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 Delegation of Professional Design Services

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.
- If professional design services certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.
- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

- D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 - OTHER WORK AT THE SITE

7.01 Related Work at Site

- A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:
- 1. written notice thereof will be given to Contractor prior to starting any such other work; and
- 2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.
- B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 Coordination

- A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:
- 1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
- 2. the specific matters to be covered by such authority and responsibility will be itemized; and
- 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 Legal Relationships

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.
- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.
- C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 Communications to Contractor

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 Replacement of Engineer

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 Furnish Data

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 Pay When Due

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 Lands and Easements; Reports and Tests

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

8.06 Insurance

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 Inspections, Tests, and Approvals

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 Limitations on Owner's Responsibilities

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the

performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 Undisclosed Hazardous Environmental Condition

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 Evidence of Financial Arrangements

A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 Visits to Site

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but

without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 Project Representative

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 Authorized Variations in Work

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 Rejecting Defective Work

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 Shop Drawings, Change Orders and Payments

- A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.
- B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.
- C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.
- D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 Determinations for Unit Price Work

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 Decisions on Requirements of Contract Documents and Acceptability of Work

- A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question.
- B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.
- C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.
- D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show

partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 Limitations on Engineer's Authority and Responsibilities

- A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 Authorized Changes in the Work

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time

to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 Unauthorized Changes in the Work

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.

10.03 Execution of Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:
- 1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;
- 2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
- 3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract

Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 Claims

- A. Engineer's Decision Required: All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.
- B. Notice: Written notice stating the general nature of each Claim, shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).
- C. Engineer's Action: Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:
 - 1. deny the Claim in whole or in part,
 - 2. approve the Claim, or
- 3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

- D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.
- E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.
- F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

- A. Costs Included: The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.
- 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include. without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
- 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of

- transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
- Payments made by Contractor 3. to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.
- 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
 - 5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.
- B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:
- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

- 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.
- C. Contractor's Fee: When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.
- D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. Cash Allowances

- 1. Contractor agrees that:
- a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
- b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract

Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. Contingency Allowance

- 1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:
- 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
- 2. there is no corresponding adjustment with respect any other item of Work; and
- 3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 Change of Contract Price

- A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.
- B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
- 1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or
- 2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or
- 3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).
- C. *Contractor's Fee*: The Contractor's fee for overhead and profit shall be determined as follows:
 - 1. a mutually acceptable fixed fee; or
- 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will

be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 Change of Contract Times

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 Delays

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract

Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 Notice of Defects

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 Access to Work

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 Tests and Inspections

- A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
- 1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;
- 2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and
- 3. as otherwise specifically provided in the Contract Documents.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.
- E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.
- F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be

uncovered for Engineer's observation and replaced at Contractor's expense.

- B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.
- C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.
- D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 Owner May Stop the Work

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 Correction or Removal of Defective Work

A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but

not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 Correction Period

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

- 1. repair such defective land or areas; or
- 2. correct such defective Work; or
- 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
- 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction

period for that item may start to run from an earlier date if so provided in the Specifications.

- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefore as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 Owner May Correct Defective Work

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action,

Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 Schedule of Values

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 Progress Payments

A. Applications for Payments

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

- 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
- 3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. Review of Applications

- 1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
- 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under

Paragraph 9.07, and to any other qualifications stated in the recommendation); and

- c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
- 3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or
 - b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
- 4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
- 5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Change Orders;
- c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
- d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment

- 1. Owner may refuse to make payment of the full amount recommended by Engineer because:
 - a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
 - b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - c. there are other items entitling Owner to a set-off against the amount recommended; or
 - d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.
- 2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.

3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

14.03 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 Substantial Completion

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and

guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

14.05 Partial Utilization

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.
- 1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
- 2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
- 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
- 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 Final Inspection

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 Final Payment

A. Application for Payment

- 1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.
- 2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;
 - b. consent of the surety, if any, to final payment;
 - c. a list of all Claims against Owner that Contractor believes are unsettled; and
 - d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

- B. Engineer's Review of Application and Acceptance
- 1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and , will be paid by Owner to Contractor.

14.08 Final Completion Delayed

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 Waiver of Claims

- A. The making and acceptance of final payment will constitute:
- 1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and
- 2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 Owner May Suspend Work

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 Owner May Terminate for Cause

- A. The occurrence of any one or more of the following events will justify termination for cause:
- 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);
- 2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
- 3. Contractor's disregard of the authority of Engineer; or
- 4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

- B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:
- 1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),
- 2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and
- 3. complete the Work as Owner may deem expedient.
- C. If Owner proceeds as provided in Paragraph 15.02.B. Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.
- D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.
- E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.
- F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

15.03 Owner May Terminate For Convenience

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
- 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
- 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
- 3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and
- 4. reasonable expenses directly attributable to termination.
- B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04

are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 *Methods and Procedures*

- A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.
- B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.
- C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:
- 1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or
- 2. agrees with the other party to submit the Claim to another dispute resolution process, or
- 3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 - MISCELLANEOUS

17.01 Giving Notice

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

- 1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or
- 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 Computation of Times

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 Cumulative Remedies

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other

provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 Survival of Obligations

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 Controlling Law

A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 Headings

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SUPPLEMENTARY CONDITIONS

REVISIONS AND ADDITIONS TO THE GENERAL CONDITIONS

The General Conditions are hereby revised as follows:

ARTICLE 1.01.A.19 "Engineer"

Add the following:

Wherever in these Documents the word "Engineer" appears, it shall be understood to mean the Construction Manager and their authorized representatives, acting either directly or indirectly as authorized agents of the Owner.

ARTICLE 1.01.A.29 "Owner"

Add the following:

Wherever in these Documents the word "Owner" appears, it shall be understood to mean the City of Key West whose address is 1300 White Street, Key West, Florida 33040

SC-1.01.A.45. Supplement paragraph 1.01.A.43 of the General Conditions as follows:

Substantial Completion is further defined as (i) that degree of completion of the Project's operating facilities or systems sufficient to provide Owner the full time, uninterrupted, and continuous beneficial operation of the Work; and (ii) all required functional, performance and acceptance or startup testing has been successfully demonstrated for all components, devices, equipment, and instrumentation and control to the satisfaction of Engineer in accordance with the requirements of the Specifications.

SC-1.01.A.52. Add a new paragraph immediately following paragraph 1.01.A.52 of the General Conditions as follows:

1.01.A.53. Specialist—The term Specialist refers to a person, partnership, firm, or corporation of established reputation (or if newly organized, whose personnel have previously established a reputation in the same field), which is regularly engaged in, and which maintains a regular force of workers skilled in either (as applicable) manufacturing or fabricating items required by the Contract Documents, or otherwise performing Work required by the Contract Documents. Where the Specifications require the installation by a Specialist, that term shall also be deemed to mean either the manufacturer of the item, a person, partnership, firm, or corporation licensed by the manufacturer, or a person, partnership, firm, or corporation who will perform the Work under the manufacturer's direct supervision.

SC-2.03.A. Delete the third sentence of paragraph 2.03.A *Commencement of Contract Times: Notice to Proceed* of the General Conditions in its entirety.

ARTICLE 4.05 "REFERENCE POINTS"

Add the following:

It will be the Contractor's responsibility to layout the work and to transfer elevations from benchmarks. Where new construction connects to existing facilities, the Contractor shall check and establish the exact location prior to construction of the facilities.

The Contractor shall furnish all surveys, labor, and equipment, including setting all alignment and gradient, grade stakes, batter boards, and everything necessary to lay out his work. The Contractor shall be responsible for maintaining and re-establishing at his expense, all control points. After completion of his construction, he shall reset all permanent monuments at their original locations and elevations.

All layout work may be checked by the Engineer, and the Contractor shall furnish all necessary labor, equipment, and materials, and shall cooperate and assist the Engineer in making such checks.

The dimensions for lines and elevations for grades of the structures, appurtenances, and utilities will be shown on Drawings, together with other pertinent information required for laying out the work. If site conditions vary from those indicated, the Contractor shall notify the Engineer immediately, who will make any minor adjustment as required.

ARTICLE 5.03 CERTIFICATES OF INSURANCE:

- A. During the term of the Contract, the Contractor shall provide, pay for, and maintain with insurance companies satisfactory to the City of Key West (City), the types of insurance described herein.
- B. 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.
- C. The City shall be specifically included as an additional insured on the Contractor's Marine General Liability, Umbrella Liability and Business Automobile Liability policies including a waiver of subrogation clause in favor of the City of Key West on all policies, 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 the Completed Operations coverage.
- D. The Contractor shall deliver to the City, prior to the City issuing the Notice to Proceed, properly executed "Certificate(s) of Insurance", setting forth the insurance coverage and limits required herein. The Certificates must be personally, manually signed by the authorized representative of the insurance company(s) shown on the Certificate of Insurance with proof that the person signing the certificate is an authorized representative thereof. In addition, certified, true and exact copies of the insurance policies required herein shall be provided the City, on a timely basis, if requested by the City.
- E. Ten days after the City has issued the Notice to Proceed, if Contractor refuses or otherwise neglects to deliver the required Certificate(s) of Insurance personally and manually signed

- by the authorized representative of the insurance company(s), the City may, at the City's sole discretion,(a) terminate or suspend this Contract and seize the amount of Contractor's bid security (Bid Bond, cash or other security acceptable to the City).
- F. 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.
- G. 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.
- H. 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 Contract.
- I. The acceptance of delivery to the City of any Certificate of Insurance evidencing the insurance coverage and limits required in the Contract does not constitute approval or agreement by the City that the insurance requirements in the Contract have been met or that the insurance policies shown in the Certificates of Insurance are in compliance with the Contract requirements.
- J. No work or occupancy of the premises shall commence at the site unless and until the required Certificate(s) of Insurance are in effect and the written Notice to Proceed is issued to the Contractor by the City.
- K. The insurance coverage and limits required of the Contractor under this Contract 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 Contract or the possible insurance coverage needed therefore, it should seek professional assistance.
- L. Should any of the required insurances specified in this Contract provide for a deductible, self-insured retention, self-insured amount, or any scheme other than a fully insured program, and the insurance company providing the coverage will not agree in writing to pay the deductible or retention including the costs of defense as provided for in its policy without consideration of the deductible or retention in the settlement of insured claims, then the Contractor agrees, if required by the City to provide, pay for, and maintain a surety bond acceptable to the City from an insurance company acceptable to the City (or a standby irrevocable Letter of Credit acceptable to the City) in the amount of the deductible or retention, guaranteeing payment of the deductible or retention. Said guarantee is to continue for four (4) years following completion of the Work.
- M. All of the required insurance coverage shall be issued as required by law and shall be endorsed, where necessary, to comply with the minimum requirements contained herein.
- N. 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 Contract, except for the application of the Aggregate Limits Provisions.
- O. Renewal Certificate(s) of Insurance shall be provided to the City at least twenty (20) days prior to expiration of current coverage so that there shall be no interruption in the work due to lack of proof of the insurance coverage required of the Contractor in this Contract.
- P. If the Contractor fails to provide or maintain the insurance coverage required in this Contract at any time during the term of the Contract, the City may terminate or suspend this Contract.
- Q. If the Contractor utilizes contractors or sub-contractors to perform any work governed by this agreement, the Contractor will ensure all contractors and sub-contractors maintain the same types and amounts of insurance required of the Contractor. In addition, the Contractor will ensure that the contractors and sub-contractors 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 City upon request.

ARTICLE 5.04 CONTRACTOR'S LIABILITY INSURANCE:

- A. All requirements in this Insurance Section shall be complied with in full by the Contractor unless excused from compliance in writing by the City.
- B. The amounts and types of insurance must conform to the following minimum 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 Contract for all employees engaged in this work under this Contract, in accordance with the laws of the State of Florida. The minimum acceptable limits shall be:

Workers' Compensation Florida Statutory Requirements
Employer's Liability \$1,000,000.00 Limit Each Accident
\$1,000,000.00 Limit Disease Aggregate
\$1,000,000.00 Limit Disease Each

Employee

United States Longshoremen and Harbor Workers (USL&H) coverage shall be maintained by the Contractor that will respond to the Federal USL&H statute (33 USC sections 901-950). Such coverage shall have minimum limits consistent with 33 USC sections 901-950 and in no case less than \$1,000,000.

Jones Act coverage shall be maintained by the Contractor that will respond to claims filed under the Federal Jones Act (46 U.S.C.A. subsection 688). Such coverage shall have minimum limits of \$1,000,000.

Marine General Liability Insurance shall be maintained by the Contractor on the Full Occurrence Form. Coverage shall include but not be limited to Premises and Operations, Personal Injury, Contractual for this Contract, Independent Contractors, Broad Form Property Damage, and Products & Completed Operations Coverage. Coverage must extend to damage/destruction of vessels being relocated by the Contractor. In addition to the required Certificate(s) of insurance, the Contractor will be required to provide the City will a certified copy of the Contractor's Marine General Liability policy before the City will issue the notice to proceed.

The minimum acceptable limits will be:

Bodily Injury & \$2,000,000.00 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 Final Completion and Acceptance by the CITY.

The use of an Excess and/or Umbrella policy shall be acceptable if the level of protection provided by the Excess and/or Umbrella policy is no less restrictive then the Primary 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 not less than:

Bodily Injury \$1,000,000.00 Limit Each Accident Property Damage Liability \$1,000,000.00 Limit Each Accident

or

Bodily Injury &

Property Damage Liability \$1,000,000.00 Combined Single Limit Each

Accident

Watercraft Liability Insurance The Contractor will be required to maintain Watercraft Liability Insurance with minimum limits of \$2,000,000.

ARTICLE 5.04 "CONTRACTOR'S LIABILITY INSURANCE"

Add the following Article:

5.04.A.9 SURETY AND INSURER QUALIFICATIONS

All bonds, insurance contracts, and certificates of insurance shall be either executed by or countersigned by a licensed resident agent of the Surety or insurance company, having his place of business in the State of Florida, and in all ways complying with the insurance laws of the State of Florida. Further, the

said Surety or insurance company shall be duly licensed and qualified to do business in the State of Florida.

ARTICLE 6.03 "SERVICES, MATERIALS AND EQUIPMENT"

6.03.D. Domestic Products:

6.03.D.1. Contractor agrees to use materials, supplies, and products manufactured, mined, processed, or produced in the United States or its territories, if products are available at reasonable and competitive prices and are not contrary to any sole source specification. If Agreement to use domestic products is breached and domestic products are not used, there shall be a downward adjustment in Contract price equal to any realized savings or benefits to Contractor.

6.03.D.2. Contractor agrees to use steel produced within the United States when specifications require the use of steel and do not limit its supply to a sole source specification. Owner has right to waive this requirement in the event of national emergency, national strike, or other cause. If Agreement to use domestic steel is breached and domestic steel is not used, there shall be a downward adjustment in Contract price equal to any realized savings or benefits to Contractor.

ARTICLE 6.09 "LAWS AND REGULATIONS"

Add the following:

The Contractor shall comply with the City of Key West Noise Ordinance.

ARTICLE 6.09 "LAWS AND REGULATIONS"

Add the following subarticles:

Within 10 days of Notice of Award, the successful Bidder must represent that he holds all applicable state, county, and City of Key West licenses and permits required to do business as a contractor with respect to the work described in the Contract Documents.

Further, the successful Bidder must, within 10 days of Notice of Award, furnish documentation showing that, as a minimum, he has complied with the provisions of Chapter 91 of the Code of Ordinances of the City of Key West in order to enter into the Agreement contained in the Contract Documents.

Specifically, within 10 days after Notice of Award, the successful Bidder must demonstrate that he holds, as a minimum, the following licenses and certificates:

A. All licenses or certificates required by federal, state, or local statutes or regulations.

B. Holds a valid occupational license issued by the City of Key West.

ARTICLE 6.13 "SAFETY AND PROTECTION"

Add the following Subarticle:

OCCUPATIONAL SAFETY AND HEALTH

The Contractor and its Sub-Contractors shall observe and comply with all applicable local, state, and federal occupational safety and health regulations during the prosecution of work under this Contract. In addition, full compliance by the Contractor with the U.S. Department of Labor's Occupational Safety and Health Standards, as established in Public Law 91-596, will be required under the terms of this Contract. Refer to Specification 01 35 26 for additional requirements particular to this Contract.

SC-13.03.D. Supplement paragraph 13.03.D of the General Conditions as follows:

Tests required by Contract Documents to be performed by Contractor that require test certificates be submitted to Owner or Engineer for acceptance shall be made by an independent testing laboratory or agency licensed or certified in accordance with Laws and Regulations and applicable state and local statutes. In the event state license or certification is not required, testing laboratories or agencies shall meet following applicable requirements:

- 13.03.D.1. "Recommended Requirements for Independent Laboratory Qualification," published by the American Council of Independent Laboratories.
- 13.03.D.2. Basic requirements of ASTM E329, "Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction" as applicable.
- 13.03.D.3. Calibrate testing equipment at reasonable intervals by devices of accuracy traceable to either the National Bureau of Standards or accepted values of natural physical constants.

ARTICLE 14 "PAYMENTS TO CONTRACTOR AND COMPLETION"

Add the following to the end of Subarticle 14.02.B.1:

Add the following subarticles:

14.02.B1.1 The Owner will deduct from the estimate, and retain as part security, 10 percent of the amount earned for work satisfactorily completed. A deduction and retainage of 10 percent will be made on the estimated amount earned for approved items of material delivered to and properly

stored at the jobsite but not incorporated into the work.

14.02.B1.2 After deducting the retainage and the amount of all previous partial payments made to the Contractor from the amount earned, the amount due will be made payable to the Contractor. Recommendations for payment received by the Owner less than 40 days prior to the scheduled day for payment will not be processed or paid until the following month.

END OF SECTION

ATTACHMENT A

City Ordinance Sec. 2-799

Requirements for City Contractors to Provide Equal Benefits for Domestic Partners

- (a) Definitions. For purposes of this section only, the following definitions shall apply:
 - (1) **Benefits** means the following plan, program or policy provided or offered by a contractor to its employees as part of the employer's total compensation package: sick leave, bereavement leave, family medical leave, and health benefits.
 - (2) **Bid** shall mean a competitive bid procedure established by the city through the issuance of an invitation to bid, request for proposals, request for qualifications, or request for letters of interest.
 - (3) **Cash equivalent** means the amount of money paid to an employee with a domestic partner in lieu of providing benefits to the employee's domestic partner. The cash equivalent is equal to the employer's direct expense of providing benefits to an employee for his or her spouse.

The cash equivalents of the following benefits apply:

- a. For bereavement leave, cash payment for the number of days that would be allowed as paid time off for the death of a spouse. Cash payment would be in the form of the wages of the domestic partner employee for the number of days allowed.
- b. For health benefits, the cost to the contractor of the contractor's share of the single monthly premiums that are being paid for the domestic partner employee, to be paid on a regular basis while the domestic partner employee maintains such insurance in force for himself or herself.
- c. For family medical leave, cash payment for the number of days that would be allowed as time off for an employee to care for a spouse who has a serious health condition. Cash payment would be in the form of the wages of the domestic partner employee for the number of days allowed.
- (4) **Contract** means any written agreement, purchase order, standing order or similar instrument entered into pursuant to the award of a bid whereby the city is committed to expend or does expend funds in return for work, labor, professional services, consulting services, supplies, equipment, materials, construction, construction related services or any combination of the foregoing.
- (5) **Contractor** means any person or persons, sole proprietorship, partnership, joint venture, corporation, or other form of doing business, that is awarded a bid and enters into a covered contract with the city, and which maintains five (5) or more full-time employees.
- (6) **Covered contract** means a contract between the city and a contractor awarded subsequent to the date when this section becomes effective valued at over twenty thousand dollars (\$20,000).

- (7) **Domestic partner** shall mean any two adults of the same or different sex, who have registered as domestic partners with a governmental body pursuant to state or local law authorizing such registration, or with an internal registry maintained by the employer of at least one of the domestic partners. A contractor may institute an internal registry to allow for the provision of equal benefits to employees with domestic partner who do not register their partnerships pursuant to a governmental body authorizing such registration, or who are located in a jurisdiction where no such governmental domestic partnership registry exists. A contractor that institutes such registry shall not impose criteria for registration that are more stringent than those required for domestic partnership registration by the City of Key West pursuant to Chapter 38, Article V of the Key West Code of Ordinances.
- (8) *Equal benefits* mean the equality of benefits between employees with spouses and employees with domestic partners, and/or between spouses of employees and domestic partners of employees.

(b) Equal benefits requirements.

- (1) Except where otherwise exempt or prohibited by law, a Contractor awarded a covered contract pursuant to a bid process shall provide benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses.
- (2) All bid requests for covered contracts which are issued on or after the effective date of this section shall include the requirement to provide equal benefits in the procurement specifications in accordance with this section.
- (3) The city shall not enter into any covered contract unless the contractor certifies that such contractor does not discriminate in the provision of benefits between employees with domestic partners and employees with spouses and/or between the domestic partners and spouses of such employees.
- (4) Such certification shall be in writing and shall be signed by an authorized officer of the contractor and delivered, along with a description of the contractor's employee benefits plan, to the city's procurement director prior to entering into such covered contract.
- (5) The city manager or his/her designee shall reject a contractor's certification of compliance if he/she determines that such contractor discriminates in the provision of benefits or if the city manager or designee determines that the certification was created, or is being used for the purpose of evading the requirements of this section.
- (6) The contractor shall provide the city manager or his/her designee, access to its records for the purpose of audits and/or investigations to ascertain compliance with the provisions of this section, and upon request shall provide evidence that the contractor is in compliance with the provisions of this section upon each new bid, contract renewal, or when the city manager has received a complaint or has reason to believe the contractor may not be in compliance with the provisions of this section. This shall include but not be limited to providing the city manager or

- his/her designee with certified copies of all of the contractor's records pertaining to its benefits policies and its employment policies and practices.
- (7) The contractor may not set up or use its contracting entity for the purpose of evading the requirements imposed by this section.
- (c) Mandatory contract provisions pertaining to equal benefits. Unless otherwise exempt, every covered contract shall contain language that obligates the contractor to comply with the applicable provisions of this section. The language shall include provisions for the following:
 - (1) During the performance of the covered contract, the contractor certifies and represents that it will comply with this section.
 - (2) The failure of the contractor to comply with this section will be deemed to be a material breach of the covered contract.
 - (3) If the contractor fails to comply with this section, the city may terminate the covered contract and all monies due or to become due under the covered contract may be retained by the city. The city may also pursue any and all other remedies at law or in equity for any breach.
 - (4) If the city manager or his designee determines that a contractor has set up or used its contracting entity for the purpose of evading the requirements of this section, the city may terminate the covered contract.
- (d) Enforcement. If the contractor fails to comply with the provisions of this section:
 - (1) The failure to comply may be deemed to be a material breach of the covered contract; or
 - (2) The city may terminate the covered contract; or
 - (3) Monies due or to become due under the covered contract may be retained by the city until compliance is achieved; or
 - (4) The city may also pursue any and all other remedies at law or in equity for any breach;
 - (5) Failure to comply with this section may also subject contractor to the procedures set forth in Division 5 of this article, entitled "Debarment of contractors from city work."
 - (e) Exceptions and waivers.

The provisions of this section shall not apply where:

- (1) The contractor does not provide benefits to employees' spouses.
- (2) The contractor is a religious organization, association, society or any non-profit charitable or educational institution or organization operated, supervised or controlled by or in conjunction with a religious organization, association or society.
- (3) The contractor is a governmental entity.
- (4) The sale or lease of city property.

- (5) The provision of this section would violate grant requirement, the laws, rules or regulations of federal or state law (for example, The acquisition services procured pursuant to Chapter 287.055, Florida Statutes known as the "Consultants' Competitive Negotiation Act").
- (6) Provided that the contractor does not discriminate in the provision of benefits, a contractor may also comply with this section by providing an employee with the cash equivalent of such benefits, if the city manager or his/her designee determines that either:
 - a. The contractor has made a reasonable yet unsuccessful effort to provide equal benefits. The contractor shall provide the city manager or his/her designee with sufficient proof of such inability to provide such benefit or benefits which shall include the measures taken to provide such benefits or benefits and the cash equivalent proposed, along with its certificate of compliance, as is required under this section.
- (7) The city commission waives compliance of this section in the best interest of the city, including but not limited to the following circumstances:
 - a. The covered contract is necessary to respond to an emergency.
 - b. Where only one bid response is received.
 - c. Where more than one bid response is received, but the bids demonstrate that none of the bidders can comply with the requirements of this section.
- (f) City's authority to cancel contract. Nothing in this section shall be construed to limit the city's authority to cancel or terminate a contract, deny or withdraw approval to perform a subcontract or provide supplies, issue a non-responsibility finding, issue a non-responsiveness finding, deny a person or entity prequalification, or otherwise deny a person or entity city business.
- (g) Timing of application. This section shall be applicable only to covered contracts awarded pursuant to bids which are after the date when this section becomes effective.

GENERAL SPECIFICATIONS DOLPHIN PIER REPLACEMENT

Additional Requirements:

- 1. This Work must be completed according to the plans and these specifications in the contract, and within compliance with the conditions of the Florida Department of Environmental Protection (DEP), US Army Corps of Engineers (COE), and local authorizations. All work shall be performed in accordance with Occupational and Safety Health Administration (OSHA) standards for work in or over waters of the United States. Contractor will provide the OWNER with a Safety Plan detailing compliance.
- 2. The geotechnical report indicates the potential for a hard substrate shallower than the pile embedment depth. Due to this subsurface condition, pre-drilling of the pile may be required in order to obtain the full embedment of the piles without cutting or splicing. The CONTRACTOR will perform any additional investigations that the CONTRACTOR deems necessary to determine the conditions of the substrate for the construction.
- 3. Special measures will be taken to prevent bilge pumpage or effluent, chemicals, fuels, oils, greases, and bituminous materials from entering the water.
- 4. Disposal of any demolition debris, materials, wastes, effluent, trash, garbage, oil, grease, chemital, etc. in and adjacent to the project site will not be permitted. If any waste materials are dumped in unauthorized areas the CONTRACTOR will remove the material and restore the area to the original condition before being disturbed. If necessary, contaminated ground or water will be excavated/pumped, disposed of as directed by the ENGINEER, and replaced with suitable fill material.
- 5. Permit drawings will be used in conjunction with technical specifications and site drawings. Consult these permit drawings and the existing permits for other details not shown on the construction drawings. All dimensions and conditions must be verified in the field. Any discrepancies will be brought to the attention of the ENGINEER before proceeding with the affected part of the work. All structures are designed to be self supporting and stable after completion. It is the CONTRACTOR'S responsibility to determine erection procedures and sequencing to insure safety of the structure and its components during erection. This includes the addition of necessary shoring, sheeting, temporary bracing, guys, and/or tie downs.
- 6. The CONTRACTOR will restore or replace, when and as directed by the ENGINEER, any public or private property damaged by his work, equipment or employees, to a condition is at least equal to that existing immediately prior to the beginning of operation. To this end, the CONTRACTOR will do all necessary landscaping work, as required.
- 7. Starting on the first day of work, and during its progress, all the work and the adjacent area will be clean of all rubbish and surplus materials. Damages incurred during the work will be repaired so that the public and property OWNER will be inconvenienced as little as possible.
- 8. Where material or debris has washed or flowed into, or has been placed in water courses, or other areas as a result of the CONTRACTOR'S operations, such material or debris will be immediately entirely removed and satisfactorily disposed of during the progress of the work, and all areas will be kept in a clean and neat condition.

- 9. The CONTRACTOR will comply with the provision of Chapters 253 and 403, Florida Statutes regarding control of air and water pollution and with all rules and regulations of the Department of Environmental Protection.
- 10. In order to ensure that manatees are not adversely affected by the construction activities as described in these specifications, the CONTRACTOR is required to strictly adhere to the July 2011 Standard Manatee Construction Conditions.
- 11. In order to ensure that sea turtle and the smalltooth sawfish are not adversely affected by the construction activities as described in these specifications, the CONTRACTOR is required to strictly adhere to the March 2006 Sea Turtle and Smalltooth Sawfish Construction Conditions.
- 12. The CONTRACTOR will conduct operations required for the construction of the facilities in such a manner as to prevent the disturbing of submerged lands. Incidental bottom scouring from equipment deployment / movement such that a visible turbidity plume is generated is forbidden and subject to the provisions of F.S. 403.121 (1)(b).
- 13. The CONTRACTOR will comply with the water quality standards under section 401 of the Clean Water Act, 33 U.S.C. 1341. If the water quality within the project site ever exceeds State water quality standards, the CONTRACTOR will follow Rule 62-302 of the Florida Administrative Code.
- 14. All necessary state and federal permits will be made available to the selected CONTRACTOR. The CONTRACTOR will immediately notify the ENGINEER in writing of any observed non-compliance with the aforementioned Federal, State, or local laws or regulations. The CONTRACTOR, after giving such notice, will immediately inform the ENGINEER of the proposed corrective action. The CONTRACTOR must get the action approved before continuing. If the CONTRACTOR fails or refuses to comply promptly, the OWNER, through the ENGINEER, may notify the appropriate regulatory agencies and issue and order stopping all, or part, of the work until satisfactory corrective action has been taken. The CONTRACTOR will make no part of the time lost due to any such stop orders the subject of a claim for extension of time or for excess costs or damages. Any costs incurred by the OWNER as a result of such actions may be deduced from the Contract amount due the CONTRACTOR.
 - BUILDING PERMITS: Prior to issuance of a "Notice of Award" permits from the ACOE and the FDEP will have been obtained. Contractor will be responsible for obtaining required Building Permits from the City. Contractor shall include the costs of these permits in his bid.
- 15. If, within one year, after the date of acceptance of the Work, any of the Work (exclusive of acts of God / weather) is found to be defective, incomplete or otherwise not in accordance with the requirements of the Contractor Documents, the CONTRACTOR shall correct it promptly after receipt of written notice from the ONWER or ENGINEER to do so. If the CONTRACTOR fails to correct nonconforming WORK within a reasonable time during that period after receipt of notice from the OWNER or Engineer, the OWNER may correct it at CONTRACTOR'S expense. Floating Dock manufacturer shall provide a minimum Ten Year Warranty on all dock materials.

TECHNICAL SPECIFICATIONS APRIL 2017

<u>CITY OF KEY WEST</u> <u>CITY MARINA AT GARRISON BIGHT</u>

TS-1.0	Mobilization and Demobilization
TS-2.0	Demolition and Disposal
TS-3.0	Professional Surveyor Stakeout and Record Drawings
TS-4.0	Floating Docks Construction, Materials, and Testing
TS-5.0	Gangway Construction, Materials, and Testing
TS-6.0	Tubular Steel Piling
TS-7.0	Dock Accessories
TS-8.0	Turbidity Monitoring
TS-9.0	Permits and Authorizations
TS-10.0	Confirmation of Work

TS-1.0 Mobilization and Demobilization

- TS-1.1 Mobilization will include all activities and costs for transportation of personnel, equipment, and supplies/materials to the site, establishment of offices and other necessary facilities for the Contractor's operations at the site. Mobilization alone will not be considered as work in fulfilling the contract requirement for commencement of work.
- TS-1.2 Demobilization will include all activities and costs for transportation of personnel, equipment, and supplies/materials not used in the Contract, including the disassembly, removal, and site cleanup of any offices or other facilities assembled on the site for the construction. Upon demobilization, the Contractor will restore all access areas to the same condition as prior to mobilization.
- TS-1.3 This line item includes mobilization and demobilization required by the project at the time of award. If additional mobilization and demobilization is required during the performance of the work due to changed, deleted, or added items of work, compensation for such costs will be awarded to the Contractor by the Owner. Additional mobilization and demobilization resulting from an error on the Contractor's part will be solely the responsibility of the Contractor.
- TS-1.4 All equipment and materials will be mobilized and demobilized in accordance with all local, state, and federal laws related to transportation and safety.
- TS-1.5 All relocations of boats shall be fully coordinated with the City Marina Manager. Contractor and its subcontractor(s) are fully responsible for any boat damaged during relocation.

TS1.6 Existing mooring piles at Kingfish Pier that impact the ability to relocate boats shall be removed and disposed of by the contractor. These piles shall be replace at the end of construction

TS-2.0 Demolition and Disposal

- TS-2.1 Demolition will include the WORK as shown in the permit and construction drawings. Installation of turbidity barrier prior beginning any demolition work. All piling must be removed at, or below, the mudline. All demolition material well be removed from the site and disposed of properly. Proper disposal is the responsibility of the Contractor. Demolition is subject to the coral relocation plan and permit.
- TS-2.2 As a matter of project staging, removal of the finger piers located at the Kingfish Pier will be completed first to allow for the vessels moored at the Dolphin Pier to be relocated to the Kingfish Pier. Upon relocation of these vessels, demolition of Dolphin Pier can commence.
- TS-2.3 Contractor should be aware that the existing pier is entirely concrete pile supported. In addition, sections of the pier consist of concrete decking and wood desk overlay.

TS-3.0 Professional Surveyor Stakeout and Record Drawings

- TS-3.1 The Contractor will provide a stakeout by a Professional Surveyor of the existing mooring piling locations. These locations will be coordinated with the floating finger pier installation to ensure that the proposed finger pier alignment "shadows" the outboard mooring piling to prevent intrusion of the mooring piling into the slip mooring space.
- TS-3.2 Upon completion of construction, the Contractor will provide a post-construction record drawing, signed and sealed by a Professional Surveyor. In addition, Contractor will provide two sets of all Operations/Maintenance manuals and warranty certificates in a three ringed binder and two sets on a flash drive

TS-4.0 Floating Docks Construction, Materials, and Testing

TS-4.1 General Materials to be used for the construction of the floating docks are outlined as follows:

Dock Piling 14" or 20" (depending upon plan selected by client) diameter, 0.5" thick

epoxy coated steel tubular piles as specified on the Construction Drawings

Floating Docks Aluminum floating docks will be installed as manufactured by GatorDocks

(gatordock.com), TechnoMarine (technomarine.com), Crane Materials International (gatordock.com), or StructurMarine (structurmarine.com).

Alternate manufacturers may be quoted at the Contractor's option

Freeboard 24" for main dock and finger piers Piling Guides External to the floating system Chases Minimum 6" deep by 12" both sides

TS-4.2 The design conditions for the floating docks will be as follows and assume that the facility is occupied:

Basin Design Depth -7.5' NGVD Pile Elevation +11.14' NGVD Pile Embedment -26.86' NGVD Storm Surge +6.74' NGVD Elevation of Applied Loads +6 26' NGVD **Wave Conditions** Negligible Negligible Currents

Live load 50 psf. – Distributed load

400lb – Point load

Dead Load Based on specific system components and should account for

utilities, marine growth, and all other support features

TS-4.3 The floating dock plans and material specifications will be submitted to the Engineer for approval prior to manufacturing of the aluminum floating docks. If the Engineer requires additional clarification of the methods or calculations, in order to satisfy himself of general conformance, the floating dock manufacturer will promptly provide the requested information. Delays in the project schedule due to inadequate or non-conforming floating dock and anchorage designs will not be grounds for project extension. The plans will include a dimensional layout of floating dock system with pilings, typical sections and details showing flotation, framing, decking, and connections, connection of gangway to the upland, and a signed and sealed letter of design compliance by a Professional Engineer registered in the State of Florida.

TS-4.4 The plastic pontoons will be linear low-density polyethylene such as Permafloat Floatation Drum as Manufactured by Cellofoam, or Engineer's approved equivalent. The base material for all polyethylene shells will conform to the following minimum requirements: minimum density 0.937 g/cc per ASTM D-1505; minimum ultimate tensile strength of 2,560 psi per ASTM D-638; and minimum flexural modulus of 96,000 psi per ASTM D-790. They will be designed for a freeboard under dead load equal to 24 inches (+/- 1 inch). The dead load plus a concentrated live load of 400 lbs applied vertically at any location on the main dock surface will not tilt the dock more than six degrees from horizontal or overstress the framing members. Dead load freeboard distance will be maintained within one inches of that identified in these specifications for a period of five years following installation.

TS-4.5 The dock structure will be constructed using aluminum alloy 6061-T6 and will be in accordance with AA "Specification for Aluminum Structures." All welds will be in accordance with AA "Specifications for Aluminum Structures". All bolts, nuts, and washers will be set square with connecting structural members and the nuts will be drawn tight. All screws, bolts, nuts, and lock washers will conform to ASTM A307 and will be Type 304 Stainless Steel. Lock washers or other devices or techniques will be used to prevent nuts from loosening after being properly tightened. High strength bolts will be used where required in accordance with the American Institute of Steel Construction specifications "Structural Joints Using ASTM A325 or A490 Bolts." Finished metal members will be free from twists, bends, distortions, open joints, sharp edges, and burrs. Ends of exposed metal members will be rounded or beveled. All coping and mitering will be done with care.

TS-4.6 Any lumber used for mounting hardware, fendering, or other applications will be counterbored wherever projecting bolt heads or nuts may damage boats or provide a hazard to pier users. Counter-boring will be sufficiently deep to permit installation of the bolts and nuts with washers well below the surface of the wood. The heads of dome head bolts may project above the surface. All exterior (visible) structural wood and wood fendering in the splash zone will be Southern Yellow Pine No. 1 (or approved equivalent) hand selected - no downgrades allowed - with a minimum CCA (Chromated Copper Arsenate) content equal to 0.6 pcf moisture content not to exceed 19% after treatment, KDAT or S-Dry. All submerged wood members will be treated to 2.5 pcf CCA. Interior (non-visible) structural wood will be minimum Southern Yellow Pine No. 2 (or approved equivalent) and will comply to the treatment and moisture requirements mentioned herein. Timber for decking will be naturally decay-resistant exotic wood species (IPE) or plastic composite manufactured by AZEK (weathered gray color). All IPE boards will be air dried to less than 16% moisture content prior to installation. Deck fasteners will be corrosion resistant stainless steel screws. All decking will be predrilled to prevent cracking or splitting of boards. Connections between floating pier modules or other elements such as lifting rings will not protrude above the level of the deck. Gaps between deck boards will be no less than 1/16 inch and no more than 1/4 inch. There will not be any gap in the walking surface of the floating piers that exceeds 1/2 inch. All deck surfaces will be level and properly drained so that water will not puddle on the deck surface. Adjacent dock modules will have less than 1/8-inch difference in elevation.

TS-4.7 Connections will be designed to permit removal and replacement of connectors without the necessity of removing other components for access. Connectors will be of materials that are easily available and will be positively contained so as to prevent their working free under normal conditions. All connections must be capable of transmitting all loads and forces imposed upon the structure. Any potential corrosive installation of dissimilar materials will be properly insulated to minimize or eliminate corrosion in the marine environment.

TS-4.8 Contractor will submit detailed record drawings for floating docks (including all floating docks, piles, accessories, and utilities), warranty, operations and maintenance manual(s), and listing of typical replacement parts, part numbers, and manufacturer contact information where applicable.

TS-5.0 Gangway Construction, Materials, and Testing

TS-5.1 The aluminum gangway is to be a low profile design with an integral hand railing system meeting ADA requirements and a 36" landing plate. It will be constructed using 6061-T6 aluminum with non-skid surfaces. The aluminum bolts, nuts, and washers will conform to the Federal Specification QQ-A-270a (1) as amended for aluminum alloy 6061-T6. Stainless steel bolts, nuts, washers, and screws where used will be type 18-8 (300 Series). A wear plate will be installed between the landing plate and the floating dock decking. Rollers for gangways will be UHMW polyurethane with black ultra-violet light inhibitor added. The gangway will be securely fastened to the floating dock and allowed to roll on a platform attached to the existing seawall cap.

TS-5.2 The gangway and transition plates will be designed to withstand a minimum uniform live load of 50 psf. applied vertically. Minimum loads for handrail and toe rail will be 250 lbs according to requirements of ADAAG Section 15.2. Gangways will be designed to incorporate the dead load weights of all utilities that traverse the gangway (see utility plans for additional detail and coordinate with utilities Contractor(s)). Additional dead load weight of gangway will be coordinated with the dock manufacturer to ensure adequate flotation under the gangway landing so that the landing area maintains the same freeboard as the rest of the floating docks. All connection and utility routes will be incorporated into the gangway design. Cable, hose, and pipe hangars will be of similar metal to the gangway and designed to support the maximum loaded condition of the utilities to minimize chafing, etc. Appropriate dielectric materials will be used to insulate dissimilar metals.

TS-6.0 Tubular Steel Piling

TS-6.1 Dock piling will be 14" or 20" (depending upon plan selected by client) diameter 0.5" thick epoxy coated steel piles as shown on the Construction Drawings. Piling tops will be set no lower than 11.14' NGVD29, and embedment depth will be as shown on the Construction Drawings. Cutting, splicing, and extending of steel piling will not be allowed.

TS-6.2 Steel piles will be tubular steel minimum ASTM A500 Grade B seamless steel pipe. New steel piles will be 100% cleaned of biological growth, unsound coatings and rust, surface contamination (oils, grease, dirt), surface chloride contamination, and blasted in accordance with SSPC-SP 10, Near White Blast Cleaning. Epoxy coating will extend from the top of the pile to 2 feet below the mudline. In the event that the epoxy coating is damaged during handling or installation the Contractor will repair the epoxy coating in accordance with manufacturer's

specifications. The pile coating will be one coat of Sherwin Williams Fast Clad ER Epoxy Coating B62B630 Series (or approved equal), in accordance with FDOT specification 560. Prior to coating the steel pile, the surface will be prepared per manufacturer's recommendation. The Contractor will grind all steel pile tops 0.5 ft on the inside and paint with a matching protective coating prior to attaching pile cones. After the epoxy coating has cured per the manufacturer's specifications, the epoxy coated pile shall be painted with two coats of Sherwin Williams Acrolon 218 HS Polyurethane Coating B65-600 Series (or approved equal). Two-Part Linear Polyurethane (LP) Coating with gray pigmentation shall match existing piles at Sailfish Pier. Prior to coating the piles the Contractor will provide the Engineer specification sheets for proposed product and a dry sample to verify coloring is to the satisfaction of the Owner.

TS-6.3 The Contractor will provide the Engineer with a pile installation plan that includes the methodology, equipment used, and schedule.

TS-6.4 The geotechnical report indicates the potential for a hard substrate shallower than the pile embedment depth. Due to this subsurface condition, pre-drilling of the pile may be required in order to obtain the full embedment of the piles without cutting or splicing. All costs associated with the need to pre-drill in order to reach the prescribed embedment depth will be borne by the Contractor.

TS-6.5 The Contractor will keep accurate record of each pile driven which will include pile location, diameter, original length, ground elevation, final tip elevation, penetration in blows per foot for the last ten feet (if applicable), hammer data including make, type, and size (if applicable), any unusual pile behavior or circumstances experienced during installation. Within 15 days of completion, records will be turned over to the Engineer.

TS-6.6 Any pile which is cracked or broken because of internal defects or by improper handling or driving, or which is otherwise injured such that their structural capacity to withstand or transfer the design load to the foundation is impaired, or any pile driven out of proper location, will be removed and replaced. All work of removal and cost of replacement will be borne by the Contractor at no additional expense to the Owner.

TS-7.0 Dock Accessories

TS-7.1 Pile guides for floating docks will allow free vertical movement of the dock at all elevations, while minimizing damage due to normal dock movement caused by tides, boat wakes, water fluctuation, and seasonal winds. Piles and external pile guides will be installed in the locations as noted on the Construction Drawings. Where dock manufacturer does not require gussets for structural purposes, exposed pile guides will be framed with bumper and rub rail to protect vessels from impact damage. Finger pier end pile guides, where required for fingers, will be inset to the pier and not extend into the clear fairways indicated on the Construction Drawings. Pile guides will be of a multiple roller type and allow full vertical movement of the pier system without inducing binding or torsion into the system. Guide pile rollers and rub blocks be made of ultra-high molecular weight plastic. Rollers will be mounted on a stainless steel axle. The

mounting bracket will be galvanized after fabrication. Rollers and rub blocks will be configured for simple replacement and be adjustable.

- TS-7.2 Bumper strips will be extruded, non-marring, marine grade vinyl, white in color and similar or same as the fendering on Marine Dock. Each strip will have a minimum height of four inches, minimum thickness of 1/8 inch, and a minimum weight of 1.6 lb/lf. Outside corners will be protected with corner bumpers molded of marine grade vinyl. The bumper strip and corner bumper will be installed with stainless steel screws or aluminum ring shank nails on 4-inch centers along both flanges.
- TS-7.3 Dock utilities will be supplied and installed as described in the Construction Drawings. Floating dock manufacturer shall provide a minimum of 12" wide chases below the dock deck, one on each side of the main access pier for installation of piping and conduits. Stub-up locations, access panels, and junction boxes will be provided in accordance with the plans to accommodate all required utility services to, and on, the docks. Contractor will coordinate requirements of dock utilities with dock manufacturer during design and fabrication process, including access/routing and dead loads. Utility access panels will allow for easy access at regular intervals along the deck surface and provide direct access at all indicated valves, expansion joints, flexible piping connections, etc. as indicated on the plans.
- TS-7.4 The electrical, water, fire suppression and sewage pumpout system has been prepared by Stantec. The Contractor, or Subcontractor(s) is responsible for the constructing the infrastructure design in conformance the engineering, plans, and specifications provide with this package.
- TS-7.5 Cleats will be made of 15" galvanized steel or non-corroding alloys. Almag "S" cleats are prohibited. Cleats will be securely bolted to the dock framework with through bolts rather than lag bolts. The cleats will be placed 10' on center along the finger piers (4 per side/6 per finger), as well as along the main dock just inside the knee bracing as shown on the Construction Drawings. Neoprene isolating membrane will be installed between the cleats and the deck boards to avoid any reaction between the materials.
- TS-7.6 All exposed piling tops will be fitted with conical PVC / HDPE piling caps. Piling caps will be black in color and sized to within ½" of piling diameter. Piling caps to be held in place with a commercial grade adhesive.
- TS-7.7 The Contractor will provide the Engineer with a Materials Submittal List that includes specifications and details (cut sheets) on all products to be installed. Engineer will review and provide recommendations to the Owner for approval of all items prior to purchase and installation. All materials and workmanship shall be free from defects for a period of ten years.

TS-8.0 Turbidity Monitoring

TS-8.1 Turbidity monitoring in accordance with state and federal permits is the responsibility of

the Contractor. Turbidity may not exceed 29 NTU's above the background. The Contractor will be responsible for testing, reporting, and compliance with the permit conditions for turbidity monitoring.

TS-9.0 Permits and Authorizations

TS-9.1 The Contractor will comply will all conditions of the State, the Federal, and all necessary Local authorizations.

TS-9.2 The permits and authorizations relating to the proposed work include the following. It is the responsibility of the Contractor to make sure they have all necessary copies.

FL Department of Environmental Protection
US Army Corps of Engineers
Florida Keys National Marine Sanctuary
Easements if any
City, County Building Permits

TS-10.0 Confirmation of Work

TS-10.1 The Engineer will conduct a pre-construction, on-site meeting with the Contractor, City staff, and appropriate agency representatives to discuss the proposed construction, permits, operating conditions, and day to day monitoring responsibilities. The Engineer will make occasional site visits at construction milestones to observe progress and confirm compliance with the permits, plans, and specifications.

KEY WEST DOLPHIN PIER

SUBMITTAL REQUIREMENTS

CITY OF KEY WEST CITY MARINA AT GARRISON BIGHT

SR-1.0	Prior to Construction
SR-2.0	During Construction
SR-3.0	Post Construction

The following is a list of required submittals for the above project. This list represents typical required submittals for this type of work and is subject to change.

SR-1.0 **Prior to Construction**

The following shall be submitted a minimum of two weeks prior to the pre-construction meeting. Onsite work shall not commence until all the following submittals have been approved in writing. Submittals may be rejected for not complying with plans and specifications. Allow two weeks for the initial review of each submittal. Allow 10 days for the review of each re-submittal if necessary.

SR-1.1 Aluminum Gangway

- SR-1.1.1 Shop Drawings showing complete fabrication details, including the hanger for the utility lines and the connection to the seawall, shall be submitted for approval before the production of docks begins. All drawings and calculations shall bear the seal of a Registered Professional Engineer. (three copies)
- SR-1.1.2 Complete set of gangway hardware samples (one example each)
- SR-1.1.3 Complete set of gangway hardware manufacturer's data sheets (three copies) SR-
- 1.1.4 Gangway rollers sample (one example)
- SR-1.1.5 Wear (transition) plate material plate sample (one example)
- SR-1.1.6 Gangway manufacturer's data sheet with loading certification (three copies)

SR-1.2 Floating Docks

- SR-1.2.1 Shop Drawings showing complete fabrication details, including connections between the dock units, shall be submitted for approval before the production of docks begins. Bolt diameter, lengths and strength shall be shown. All drawings and calculations, including loading and floating, shall bear the seal of a Registered Professional Engineer. (three copies)
- SR-1.2.2 Stakeout by a Professional Surveyor of the existing mooring piling (three copies)
- SR-1.2.3 Plastic pontoon product sample (one example)
- SR-1.2.4 Plastic pontoon manufacturer's data sheet (three copies) SR-1.2.5 Aluminum dock structure product sample (one example) SR-1.2.6 Aluminum dock structure certification (three copies)

- SR-1.2.7 Welding certifications (three copies)
- SR-1.2.8 Complete set of floating dock hardware samples (one example each)
- SR-1.2.9 Complete set of floating dock hardware manufacturer's data sheets (three copies)
- SR-1.2.10 Decking and other lumber, composite, SYP, and/or IPE options, samples (one example each)
- SR-1.2.11 Decking and other lumber, composite, SYP and/or IPE options, manufacturer's/supplier's data sheets (three copies)
- SR-1.2.12 Decking and other lumber treatments manufacturer's data sheets (three copies)
- SR-1.2.13 Dielectric material manufacturer's data sheets (three copies)

SR-1.3 Steel Pilings

- SR-1.3.1 Shop Drawings showing complete fabrication details shall be submitted for approval before the production of docks begins. All drawings and calculations shall bear the seal of a Registered Professional Engineer. (three copies)
- SR-1.3.2 Two-Coat Coal Tar Epoxy-Polyamide System manufacturer's data sheet (three copies)
- SR-1.3.3 Two-Part Linear Polyurethane (LP) Coating with gray pigmentation manufacturer's data sheet (three copies)
- SR-1.3.4 Pile installation plan with methodology and equipment (three sets) SR-1.3.5 Pile guide manufacturer's data sheet (three copes)
- SR-1.3.6 Pile guide roller and/or rub block sample (one example)

SR-1.4 Accessories

- SR-1.4.1 Bumper strip manufacturer's data sheet (three copies) SR-1.4.2 Bumper strip sample (one example)
- SR-1.4.3 Cleat manufacturer's data sheet (three copies) SR-1.4.4 Cleat sample (one example)
- SR-1.4.5 Piling cap manufacturer's data sheet (three copies) SR-1.4.6 Piling cap sample (one example)

SR-1.4 Miscellaneous

- SR-1.4.1 Written authorization from property owner or manager of a commercial disposal site accepting the materials to be disposed and a written release holding harmless the Owner, City, Engineer, and their consultants and employees from responsibility for all negative actions that result from the disposal of materials at the site. (three copies)
- SR-1.4.2 Construction summary and schedule (three copies)
- SR-1.4.3 Best management practices summary including turbidity controls (three copies)

SR-2.0 During Construction

The following shall be submitted weekly throughout construction.

SR-2.1 Miscellaneous

- SR-2.1.1 Pile driving reports (three copies)
- SR-2.1.2 Turbidity monitoring reports as required by permits (three copies)

SR-3.0 Post Construction

The following shall be submitted within two weeks of the final walk through.

SR-3.1 Miscellaneous

- SR-3.1.1 Post-construction record drawings (11"x17"), signed and sealed by a Professional Surveyor (three copies)
- SR-3.1.2 Two sets of all Operations/Maintenance Manuals and Warranty Certificates in a three ringed binder and two sets on a flash drive (three copies)
- SR-3.1.3 List of typical replacement parts, parts numbers, and manufacturer contact information (three copies)

REPORT OF GEOTECHNICAL STUDY

DOLPHIN PIER APPROXIMATELY 600 FEET NORTH OF INTERSECTION OF PALM AVENUE AND N. ROOSEVELT BLVD. KEY WEST, FLORIDA

FOR

STANTEC CONSULTING SERVICES, INC. 901 PONCE DE LEON BLVD., SUITE 900 CORAL GABLES, FLORIDA 33134

PREPARED BY

NUTTING ENGINEERS OF FLORIDA, INC. 2051 NW 112TH AVE, SUITE 126 MIAMI, FLORIDA 33172

ORDER NO. 1661.31

AUGUST 2016



Geotechnical & Construction Materials Engineering, Testing & Inspection Environmental Services

Offices throughout the state of Florida



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August 31, 2016

Mr. Carlos Herdocia, P.E. Stantec Consulting Services, Inc. 901 Ponce de Leon Blvd., Suite 900 Coral Gables, Florida 33134

Phone: (305) 445-2900 x 2224

Cell: (786) 502-0701

Email: carlos.herdocia@stantec.com

Subject: Report of Geotechnical Study

Dolphin Pier

Approximately 600 feet north of

Intersection of Palm Ave. and N. Roosevelt Blvd.

Key West, Florida

Dear Mr. Herdocia:

Nutting Engineers of Florida, Inc. (NE), has performed a Geotechnical Study for the pier replacement at the above referenced site in Key West, Florida. The purpose was to obtain information regarding subsurface conditions at specific test locations in order to provide engineering parameters for the soils as part of the foundation design process. This report presents our findings and a brief geotechnical report based upon the information obtained.

PROJECT INFORMATION

Per your email, we understand that plans call for the demolition and replacement of an existing pier near the intersection of Palm Ave. and N. Roosevelt Blvd. in Key West, Florida. NE should be notified in writing by the client of any changes in the proposed construction along with a request to amend our foundation analysis and/or recommendations within this report as appropriate.

GENERAL SUBSURFACE CONDITIONS

Subsurface Exploration

NUTTING ENGINEERS OF FLORIDA, INC. previously performed two Standard Penetration Test (SPT) borings (ASTM D-1586) to a depth of forty (40) feet below ground surface at the adjacent Sailfish Pier which will be utilized in the analysis of Dolphin Pier. The locations of the test borings are indicated on the Test Boring Location Plan presented in the Appendix of this report. The boring locations were identified in the field using approximate methods; namely, GPS coordinates and available surface controls. As such the soil boring locations should be considered to be approximate.

Test Boring Results

In general, the test borings revealed a two inch layer of asphalt followed by loose to medium dense fine sand and limestone fragments to a depth of approximately six feet, followed by very loose to loose silty sand and trace limestone fragments to depths of approximately fourteen to nineteen feet. Below this layer, we encountered dense fine sand, and limestone to a depth of approximately twenty-nine feet below ground surface, underlain by medium hard to hard silty limestone to a depth of forty feet, the maximum depth explored.

One of the most important characteristics of the limestone formation encountered in this area is the degree of solution. The limestone is often times solufied and filled with unconsolidated sand or silt forming pockets during the geologic past. A detailed description of the soil/rock interlayering is given on the test boring logs in the Appendix.

Groundwater Table Observation

The immediate groundwater level was measured at the boring locations at the time of drilling. The groundwater level was encountered at approximately three and a half to four feet below the existing ground surface at the time of drilling.

The immediate depth to groundwater measurements presented in this report may not provide a reliable indication of stabilized or longer term depth to groundwater at this site. Water table elevations can vary dramatically with time through rainfall, droughts, storm events, flood control activities, nearby surface water bodies, tidal activity, pumping and many other factors. For these reasons, this immediate depth to water data **should not** be relied upon alone for project design considerations.

Further information regarding stabilized groundwater elevations at the site could be developed upon specific request. Additional evaluation might include monitoring of peizomenters, survey of the project area for evidence of current groundwater elevation influences such as wellfields, obvious construction dewatering, tidal activity, flood control canals and other surface water bodies.



Water Depths

Water depths were measured along the existing pier, on the east and west side as well as the northern facing end. The measurements were taken starting from the top of the dock to the mudline. Depths generally ranged from approximately six and a half to eleven feet. Please see the appendix for more detailed information regarding depths and locations.

Generalized Soil Parameters

In order to analyze the lateral and axial loading conditions of foundation alternatives, the study of soil parameters for each stratum was conducted and obtained from the empirical correlations and our experience based on the review of the field and lab test data. The parameters obtained include N value, internal friction angle (ϕ) , total unit weight, and subgrade reaction modulus.

The following table, Table 1, presents the soil parameters for each stratum as well as generalized subsurface soil profiles as encountered at the proposed structure location. Details regarding the relatively complex interlayering of the subsoils are shown on the Soil Profile Sheet in the Appendix. A detailed description for the site is presented as follows:

General Subsurface Profiles and Soil Parameters (B-1 & B-2)

Approx. Depth* (Feet)	Soil Description	N-Values (Blows/ft)	Internal Friction Angle ϕ (degrees)	Submerged Unit Weight (pcf)	Consistency and Relative Density
0-6	SAND and LIMESTONE fragments	7-12	32-38	53	Medium Dense
6-19	SILTY SAND	2-7	28	38	Very Loose
19-29	Fine SAND, and LIMESTONE	31-44	32-38	58	Dense
29-40	SILTY LIMESTONE	21-47	-	68	Medium Hard to Hard

^{*}measured from ground surface



ANALYSIS AND RECOMMENDATIONS

We were not provided with design loading conditions/parameters including unsupported length and other specific conditions for a detailed analysis of the support system. Once this information is available, we should be contacted for specific analysis. The following sections present our recommendations based on the information to date.

We understand that precast concrete piles are the preferred foundation alternative for the project. Therefore, we have presented recommendation for said piles. If other alternatives are desired, we are available for discussions with the design team to evaluate other pile systems.

Square precast concrete driven piles are a widely used and proven foundation system in South Florida. Precast prestressed piles are readily available and generally have a lower cost per ton of capacity than other pile types. Because of the dense subsoil conditions found at some of the boring locations, it is our opinion that driving of the piles to the recommended depths may be difficult, and induce high driving stresses which could potentially damage the piles. However, these concerns of driving through dense soils can be minimized through the use of pre-drilled pile holes to achieve the recommended penetration.

Lateral Pile Analysis

A lateral pile capacity analysis was performed utilizing the ALLPILE computer software program.

The analysis was performed assuming that the piles were installed vertically, with pile lengths of 30 feet for the proposed pier. Our analysis was performed to calculate the available lateral load and to locate the point of fixity with the necessary factors of safety included. The piles were modeled using a lateral load placed directly at the surface of the pier (assumed to be approximately at the grade of nearby land) and with a cantilever of approximately eleven feet between the pile head and the mudline. Storm surge and or other high water parameters have not been provided to us. We should be copied on the information as it becomes available.

Prepared in the table below are the results of the study. We have provided results for piles with a free head condition. These calculations are based on the assumption that the pile and dock can safely withstand a horizontal deflection of approximately 0.5 inches.



LATERAL PILE ANALYSIS TABLE

Pile Size (inches)	Tip Depth Below Mudline (ft)	Free Head Allowable Lateral Capacity ¹ (kips)	Free Head Max. Moment (kips-ft.)
12	19	0.8	10.8
14	19	1.4	19.4
18	19	2.7	39.4
24	19	7.0	112.5

Load estimated to cause ½ inch lateral deflection when applied at the pile head

CONSTRUCTION RECOMMENDATIONS

Pile installation procedures should be conducted in accordance with the FDOT standard specification A455. Pile driving should be as continuous an operation as possible and should proceed without stopping over the last 10 feet of penetration.

Pile Installation

The FDOT Standard Specifications Section A455 shall be used as a guideline for pile driving requirements. In addition, the following items emphasize concerns that the structural engineer may need to consider in preparing the construction plans.

- 1. A Wave Equation Analyses (WEA) should be performed to assess the drivability of the prestressed concrete piles in the type of subsurface conditions encountered at the site, for the contractor's proposed hammer, hammer cushion, and pile cushion. In addition, the results of the WEA should be used to predict the driving tensile and compressive stresses developed in the pile and estimate the delivered energy for assessing hammer performance during pile driving operations.
- 2. A dynamic load test should be performed using a Pile Driving Analyzer (PDA) in order to confirm pile capacities.
- 3. Pile spacing center to center shall be at least (3) times the least width of the pile.
- 4. The hammer should be capable of driving the pile to 3.0 times the design load in less than 120 blows per foot material without overstressing the pile in tension or compression. Allowable compression and tension capacity within the pile section during driving can be assessed according to FDOT Standard Specification Section A455. At all times, the hammer should be operated at the chamber pressure, speed, etc. recommended by the manufacturer.



- 5. During pile installation, the contractor should exercise caution as not to overstress the piles. Piles shall not be driven beyond practical refusal (as defined in the FDOT Standard Specifications) to meet the bearing requirements. Penetration aids such as performed pile holes will be required when piles cannot be driven to the required penetration without reaching practical refusal. We recommend that jetting should not be allowed as a method of predrilling. Some variations in length should be expected due to normal variations in soil conditions.
- 6. The contractor should exercise caution in pile driving so that the effects of heave are minimized. Careful monitoring by the contractor for possible heave during driving should be exercised. All piles that heave ¼ inch or more should be re-driven unless otherwise instructed by the Geotechnical Engineer.
- 7. Driven piles should be monitored during installation for penetration, blow counts during driving, and hammer action.
- 8. We recommend that the precast concrete piles be provided with an appropriate pile top cushion consisting of a minimum thickness of 6 inches of soft wood during driving in order to minimize pile top damage. This cushion should be changed frequently since it becomes compressed and hardened under repeated use.

GENERAL INFORMATION

Our client for this geotechnical evaluation was:

of Florida Inc. | Established 1967

Stantec Consulting Services, Inc. 901 Ponce de Leon Blvd., Suite 900 Coral Gables, Florida 33134

The contents of this report are for the exclusive use of the client and the City of Key West for the purpose of the design package. Information conveyed in this report shall not be used or relied upon by other parties or for other projects without the expressed written consent of Nutting Engineers of Florida, Inc. This report discusses geotechnical considerations for this site based upon observed conditions and our understanding of proposed construction for foundation support. Environmental issues including (but not limited to), soil and/or groundwater contamination are beyond our scope of service for this project. As such, this report should not be used or relied upon for evaluation of environmental issues.

If conditions are encountered which are not consistent with the findings presented in this report, or if proposed construction is moved from the location investigated, this office shall be notified immediately so that the condition or change can be evaluated and appropriate action taken.

The pile installation may cause vibrations that could be felt by persons within nearby buildings and could potentially induce structural settlements. Additionally, preexisting settlements may exist within these structures that could be construed to have been caused or worsened by the

proposed vibratory compaction after the fact. Pre- and post conditions surveys of these structures along with the vibration monitoring during piling installation could be performed to better evaluate this concern. The contractor should exercise due care during the performance of the piling operations with due consideration of potential impacts on existing structures. If potential vibrations and impacts are not considered tolerable, then alternate foundation modification techniques should be considered.

Nutting Engineers of Florida, Inc. shall bear no liability for the implementation of recommended inspection and testing services as described in this report if implemented by others. Nutting has no ability to verify the completeness, accuracy or proper technique of such procedures if performed by others.

The Geotechnical Engineer warrants that the findings, recommendations, specifications, or professional advice contained herein, have been presented after being prepared in accordance with general accepted professional practice in the field of foundation engineering, soil mechanics and engineering geology. No other warranties are implied or expressed.

We appreciate the opportunity to provide these services for you. If we can be of any further assistance, or if you need additional information, please feel free to contact us.

Sincerely,

NUTTING ENGINEERS OF FLORIDA, INC.
Paul C. Calledge, P.E. #68448

Senior Engineer

Appendix:

Boring Location Plan

Test Boring Logs

Approximate Water Depths Limitations of Liability Soil Classification Criteria



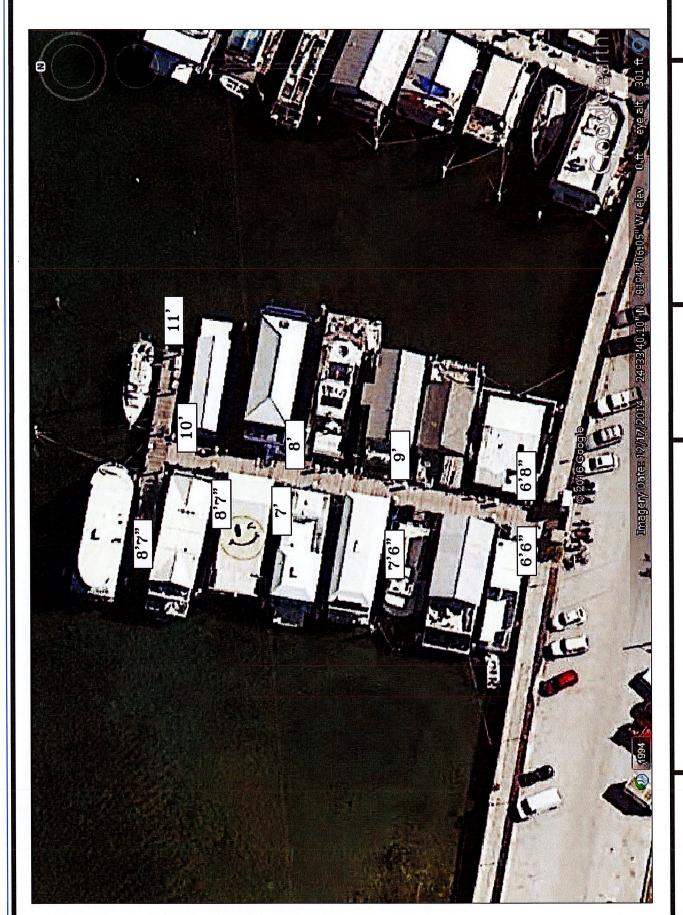
NOT TO SCALE

APPROXIMATE TEST LOCATIONS

DOLPHIN PIER
APPROX 600 FT NORTH OF INTERSECTION
OF PALM AVE AND N ROOSEVELT BLVD
KEY WEST, FL

ENGINEERS ESTABLISHED 1967 BULLING

NOT TO SCALE



APPROXIMATE WATER DEPTHS

DOLPHIN PIER
APPROX 600 FT NORTH OF INTERSECTION
OF PALM AVE & N ROOSEVELT BLVD
KEY WEST, FL

---- OF FLORIDA, INC. ENGINEERS ESTABLISHED 1967 SVILLING



1310 Neptune Drive Boynton Beach Fl. 33426 Telephone: 5617364900

BORING NUMBER B-1

PAGE 1 OF 1

	NT S	Florida Inc. Established 1967 Fax: 5617379975 Stantec Consulting Services, Inc. LOCATION Approx 500 feet North of Intersection o	PROJE	CT NAME	ER <u>1661.9</u> Sailfish Pier Roosevelt Blvd., I	Key W	est, FL		
DRILI LOGO	LING I GED E	RTED 6/17/15 COMPLETED 6/17/15 METHOD Standard Penetration Boring BY Serco CHECKED BY P. Catledge MATE LOCATION OF BORING As located on site plan	GROUN ∑AT	ND WATEF	TION REFERENCE LEVELS: DRILLING 3.4 ft		me as roa	ad crown	<u> </u>
O DEPTH	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	Blows	N-Value	10 PL 20	T N VAL 20 30 MC 40 60 S CONTEN 40 60	40 LL 80 NT (%) \square
-		2-inch ASPHALT Lt. gray SAND and LIMESTONE FRAGMENTS		SS 1	20-17-13-12	30		A	
<u> </u>		$ar{\Sigma}$		$\left \begin{array}{c} \operatorname{SS} \\ 2 \end{array}\right $	9-6-6-8	12	A		
5				SS 3	6-4-3-3	7			
-		Lt. gray fine SILTY SAND		SS 4	3-3-2-2	5			
10				SS 5	3-1-1-1	2	A		
15		Gray to lt. brown SANDY LIMESTONE Lt. gray LIMESTONE and fine SAND		SS 6	1·2·5 6·20·26	7 46			
25				SS 8	14-21-26	47	_		•
30	干	Lt. brown SANDY SILTY LIMESTONE		$- \begin{array}{ c c } \hline & SS \\ 9 \\ \hline \end{array}$	8-15-16	31			<u> </u>
15		Gray SANDY SILTY LIMESTONE Bottom of hole at 40.0 feet.		SS 10	10-10-11	21	-	A	
IESI NUI IING B(DOLIOITI OI NOIE AT 40.0 TEET.							



INC.- SAILFISH PIER.GPJ GINT US.GDT

TEST NUTTING BOREHOLE 2-1661.9 STANTEC CONSULTING SERVICES,

1310 Neptune Drive Boynton Beach Fl. 33426 Telephone: 5617364900

BORING NUMBER B-2

PAGE 1 OF 1

Fax: 5617379975 PROJECT NUMBER 1661.9 CLIENT Stantec Consulting Services, Inc. PROJECT NAME Sailfish Pier PROJECT LOCATION Approx 500 feet North of Intersection of Palm Ave and N Roosevelt Blvd., Key West, FL SURFACE ELEVATION REFERENCE Same as road crown DATE STARTED 6/17/15 COMPLETED 6/17/15 DRILLING METHOD Standard Penetration Boring **GROUND WATER LEVELS:** ∇ AT TIME OF DRILLING 3.8 ft ft LOGGED BY Serco CHECKED BY P. Catledge APPROXIMATE LOCATION OF BORING As located on site plan ▲ SPT N VALUE ▲ SAMPLE TYPE NUMBER GRAPHIC LOG 20 30 40 DEPTH (ft) N-Value MATERIAL DESCRIPTION Blows **-1** 80 40 60 ☐ FINES CONTENT (%) ☐ 40 2-inch ASPHALT SS 23-11-8-13 19 Lt. brown SAND and LIMESTONE FRAGMENTS SS 10-6-4-3 10 ∇ SS 4-3-4-3 Lt. gray fine SILTY SAND, trace limestone SS 2-2-1-1 3 SS 10 1-1-1 2 Lt. gray fine SILTY SAND 15 10-12-19 31 Lt. brown fine SAND, some limestone fragments and silt 42 11-21-21 25 SS 18-19-25 44 Lt. gray SANDY SILTY LIMESTONE 30 14-11-16 27 Gray to It. brown SANDY SILTY LIMESTONE 35 18-14-16 30 Bottom of hole at 40.0 feet.

LIMITATIONS OF LIABLILITY

WARRANTY

We warranty that the services performed by Nutting Engineers of Florida, Inc. are conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession in our area currently practicing under similar conditions at the time our services were performed. *No other warranties, expressed or implied, are made.* While the services of Nutting Engineers of Florida, Inc. are a valuable and integral part of the design and construction teams, we do not warrant, guarantee or insure the quality, completeness, or satisfactory performance of designs, construction plans, specifications we have not prepared, nor the ultimate performance of building site materials or assembly/construction.

SUBSURFACE EXPLORATION

Subsurface exploration is normally accomplished by test borings; test pits are sometimes employed. The method of determining the boring location and the surface elevation at the boring is noted in the report. This information is represented in the soil boring logs and/or a drawing. The location and elevation of the borings should be considered accurate only to the degree inherent with the method used and may be approximate.

The soil boring log includes sampling information, description of the materials recovered, approximate depths of boundaries between soil and rock strata as encountered and immediate depth to water data. The log represents conditions recorded specifically at the location where and when the boring was made. Site conditions may vary through time as will subsurface conditions. The boundaries between different soil strata as encountered are indicated at specific depths; however, these depths are in fact approximate and dependent upon the frequency of sampling, nature and consistency of the respective strata. Substantial variation between soil borings may commonly exist in subsurface conditions. Water level readings are made at the time and under conditions stated on the boring logs. Water levels change with time, precipitation, canal level, local well drawdown and other factors. Water level data provided on soil boring logs shall not be relied upon for groundwater based design or construction considerations.

LABORATORY AND FIELD TESTS

Tests are performed in *general* accordance with specific ASTM Standards unless otherwise indicated. All criteria included in a given ASTM Standard are not always required and performed. Each test boring report indicates the measurements and data developed at each specific test location.



The geotechnical report is prepared primarily to aid in the design of site work and structural foundations. Although the information in the report is expected to be sufficient for these purposes, it shall not be utilized to determine the cost of construction nor to stand alone as a construction specification. Contractors shall verify subsurface conditions as may be appropriate prior to undertaking subsurface work.

Report recommendations are based primarily on data from test borings made at the locations shown on the test boring reports. Soil variations commonly exist between boring locations. Such variations may not become evident until construction. Test pits sometimes provide valuable supplemental information that derived from soil borings. If variations are then noted, the geotechnical engineer shall be contacted in writing immediately so that field conditions can be examined and recommendations revised if necessary.

The geotechnical report states our understanding as to the location, dimensions and structural features proposed for the site. Any significant changes of the site improvements or site conditions must be communicated in writing to the geotechnical engineer immediately so that the geotechnical analysis, conclusions, and recommendations can be reviewed and appropriately adjusted as necessary.

CONSTRUCTION OBSERVATION

Construction observation and testing is an important element of geotechnical services. The geotechnical engineer's field representative (G.E.F.R.) is the "owner's representative" observing the work of the contractor, performing tests and reporting data from such tests and observations. The geotechnical engineer's field representative does not direct the contractor's operations construction means. methods. personnel. The G.E.F.R. does not interfere with the relationship between the owner and the contractor and, except as an observer, does not become a substitute owner on site. The G.E.F.R. is responsible for his/her safety, but has no responsibility for the safety of other personnel at the site. The G.E.F.R. is an important member of a team whose responsibility is to observe and test the work being done and report to the owner whether that work is being carried out in general conformance with the plans and specifications. The enclosed report may be relied upon solely by the named client.



SOIL AND ROCK CLASSIFICATION CRITERIA

SAND/SILT

CLAY/SILTY CLAY

RELATIVE DENSITY
Very Loose
Loose
Medium
Dense
Very dense
Refusal

N-VALUE (bpf)	UNCONFINED COMP. STRENGTH (tsf)	CONSISTENCY
<2	<0.25	v. Soft
2 – 4	0.25 - 0.50	Soft
5 – 8	0.50 - 1.00	Medium
9 – 15	1.00 - 2.00	Soft
16 – 30	2.00 – 4.00	v. Stiff
>30	>4.00	Hard

ROCK

N-VALUE (bpf)	RELATIVE HARDNESS
N≥ 100	Hard to v. hard
25≤ N ≤ 100	Medium hard to hard
5≤ N ≤ 25	Soft to medium hard

ROCK CHARACTERISTICS Local rock formations vary in hardness from soft to very hard within short vertical and horizontal distances and often contain vertical solution holes of 3 to 36 inch diameter to varying depths and horizontal solution features. Rock may be brittle to split spoon impact, but more resistant to excavation.

PARTICLE SIZE

DESCRIPTION MODIFIERS

Boulder	>12 in.	0 - 5%	Slight trace
Cobble	3 to 12 in.	6 - 10%	Trace
Gravel	4.76 mm to 3 in.	11 - 20%	Little
Sand	0.074 mm to 4.76 mm	21 - 35%	Some
Silt	0.005 mm to 0.074 mm	>35%	And
Clay	<0.005 mm		

Ma	ajor Divisior	าร	Group Symbols	Typical names		Laboratory classification	n criteria
	action is ize)	Clean gravels (Little or no fines)	GW	Well-graded gavels, gravel-sand mixtures, little or no fines	'epend- , coarse- ystems**	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4	$; C_z = \frac{(D_{30})^2}{D_{10} x D_{60}} between 1 \text{ and } 3$
sieve size)	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)	Clean (Little or	GP	Poorly graded gravels, gravel-sand mixtures, little or no fines	on percentages of sand and gravel from grain-size curve. Depend-on percentage of fines (fraction smaller than No. 200 sieve size), coarse-sined soils are classified as follows: Less than five percent	Not meeting all gradation rec	quirements for GW
No. 200 s	Gra han half of ger than No	Gravels with fines (Appreciable amount of fines)	GW* d	Silty gravels, gravel-sand-silt mixtures	m grain-siz n No. 200 N, SP M, SC ases requir	Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are border-
ained soils larger than	Coarse-grained solls Coarse-grained solls Gravels Sonds An half of coarse fraction is (More than half of coarse freet than No. 4 sieve size)		GC	Clayey gravels, gravel-sand-clay mixtures	gravel front maller than sistem with GP, SV, GP, SV, orderline or	Atterberg limits above "A" line with P.I. greater than 7	line cases requiring use of dual symbols.
Coarse-gr naterial is	action is size)	Clean sands (Little or no fines)	sw	Well-graded sands, gravelly sands, little or no fines	Determine percentages of sand and ging on percentage of fines (fraction sn grained soils are classified as follows: Less than five percent	$C_u = \frac{D_{60}}{D_{10}}$ greater than 6	$C_z = \frac{(D_{30})^2}{D_{10} x D_{60}} between 1 \text{ and } 3$
in half of r	Sands f of coarse fr 1 No. 4 sieve	Clean (Little or	SP	Poorly graded sands, gravelly sands, little or no fines	entages of ge of fines e classified e percent 2 percent	Not meeting all gradation red	quirements for SW
(More tho	Sands More than half of coarse fraction is smaller than No. 4 sieve size)	Sands with fines (Appreciable amount of fines)	SM* d	Silty sands, sand-silt mixtures	Determine percentages of inas ing an percentage of fines grained soils are classified Less than five percent More than 12 percent 5 to 12 percent	Atterberg limits below "A" line or P.I. less than 4	Limits plotting in hatched zone with P.I. between 4 and 7 are
	(More t	Sands v (Appr amount	sc	Clayey sands, sand-clay mixtures	Deter ing or grain Le MA	Atterberg limits above "A" line with P.I. more than 7	borderline cases requiring use of dual system.
size)	Fine-grained soils (More than half of material is smaller than No. 200 sieve size) Silts and days Silts		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	60		
200 sieve			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy, clays, silty clays, lean clays	50		СН
soils er than No.			OL	Organic silts and organic silty clays of low plasticity	Plasticity Index		
ne-grained rial is small			мн	Inorganic silts, micaceous or diatoma- ceous fine sandy or silty soils, elastic silts	20	op'the	OH and MH
Fir alf of mate			СН	Inorganic clays or high plasticity, fat clays	10	CL ML and OL	
ore than ho			ОН	Organic clays of medium to high plasticity, organic silts	0	10 20 30 40 50 Liquid Limit	60 70 80 90 100
W)	Highly organic soils		PT	Peat and other highly organic soils		Plasticity Cl	nart





Florida Department of Environmental Protection

Carlos Lopez-Cantera

Rick Scott

Governor

South District
Post Office Box 2549
Fort Myers, Florida 33902-2549
SouthDistrict@dep.state.fl.us

Lt. Governor

Ryan E. Matthews Interim Secretary

Permittee/Authorized Entity:

City of Key West c/o Jim Scholl 525 Angela Street Key West, FL 33040

Dock Reconfiguration

Authorized Agents:

Sean Compel
Stantec
901 Ponce de Leon Boulevard, Suite 900
Coral Gables, FL 33134
sean.compel@stantec.com

Victoria Brisson
Terramar Environmental Services, Inc.
1241 Crane Boulevard
Sugarloaf Key, FL 33042
victoria.brisson@att.net

Environmental Resource Permit
State-owned Submerged Lands Authorization – Not Applicable
U.S. Army Corps of Engineers Authorization – Separate Corps Authorization
Required

Permit No.: 0116528-010-EI

Permit Issuance Date: March 13, 2017 Permit Construction Phase Expiration Date: March 13, 2022

Environmental Resource Permit

Permittee: City of Key West Permit No: 116528-010-EI

PROJECT LOCATION

The activities authorized by this permit are located within Garrison Bight City Marina, 1801 North Roosevelt Boulevard, Key West, Florida 33040, in Section 32, Township 67 South, Range 25 East in Monroe County, at Latitude 24° 33' 39.00" North and Longitude -81° 47' 46.00" West.

PROJECT DESCRIPTION

The permittee is authorized to replace a pile supported dock with a floating dock and install finger piers and mooring pilings within Garrison Bight City Marina, a Class III Waterbody. There is no increase in slips authorized by this permit. Authorized activities are depicted on the attached exhibits.

AUTHORIZATIONS Dock replacement

Environmental Resource Permit

The Department has determined that the activity qualifies for an Environmental Resource Permit. Therefore, the Environmental Resource Permit is hereby granted, pursuant to Part IV of Chapter 373, Florida Statutes (F.S.), and Chapter 62-330, Florida Administrative Code (F.A.C.).

Sovereignty Submerged Lands Authorization

As staff to the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), the Department has determined the activity is not on submerged lands owned by the State of Florida. Therefore, your project is not subject to the requirements of Chapter 253, F.S., or Rule 18-21, F.A.C.

Federal Authorization

Your proposed activity as outlined on your application and attached drawings does not qualify for Federal authorization pursuant to the State Programmatic General Permit and a **SEPARATE** permit or authorization may be required from the Corps. A copy of your permit application has been forwarded to the Corps for their review. The Corps will issue their authorization directly to you or contact you if additional information is needed. If you have not heard from the Corps within 30 days from the date your application was received at the local FDEP Office, contact the Corps at 9900 SW 107th Avenue, Suite 203, Miami, FL 33176-2785 or 305-526-7181, for status and further information. Failure to obtain Corps authorization prior to construction could subject you to federal enforcement action by that agency.

Coastal Zone Management

Issuance of this authorization also constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

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Water Quality Certification

This permit also constitutes a water quality certification under Section 401 of the Clean Water Act, 33 U.S.C. 1341

Other Authorizations

You are advised that authorizations or permits for this activity may be required by other federal, state, regional, or local entities including but not limited to local governments or municipalities. This permit does not relieve you from the requirements to obtain all other required permits or authorizations.

The activity described may be conducted only in accordance with the terms, conditions and attachments contained in this document. Issuance and granting of the permit and authorizations herein do not infer, nor guarantee, nor imply that future permits, authorizations, or modifications will be granted by the Department.

PERMIT CONDITIONS

The activities described must be conducted in accordance with:

- The Specific Conditions
- The General Conditions
- The limits, conditions and locations of work shown in the attached drawings
- The term limits of this authorization

You are advised to read and understand these conditions and drawings prior to beginning the authorized activities, and to ensure the work is conducted in conformance with all the terms, conditions, and drawings herein. If you are using a contractor, the contractor also should read and understand these conditions and drawings prior to beginning any activity. Failure to comply with these conditions, including any mitigation requirements, shall be grounds for the Department to revoke the permit and authorization and to take appropriate enforcement action.

Operation of the facility is not authorized except when determined to be in conformance with all applicable rules and this permit, as described.

SPECIFIC CONDITIONS – ADMINISTRATIVE

1. All required submittals, such as certifications, monitoring reports, notifications, etc., shall be submitted to the Florida Department of Environmental Protection, South District Office, Submerged Lands and Environmental Resource Permitting, P.O. Box 2549, Fort Myers, FL 33902-2549 or via e-mail to FTMERP_Compliance@dep.state.fl.us. All submittals shall include the project name and indicated permit number when referring to this project.

Note: In the event of an emergency, the Permittee should contact the Department by calling (800)320-0519. During normal business hours, the permittee should call (305)289-7070.

SPECIFIC CONDITIONS – CONSTRUCTION ACTIVITIES

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- 2. Best management practices (primarily turbidity screens) for erosion and turbidity control shall be implemented and maintained at all times during construction and operation of the permitted activity to prevent siltation and turbid discharges in excess of State water standards pursuant to Rule 62-302, F.A.C. The Permittee shall be responsible for ensuring that erosion and turbidity control devices and procedures are inspected and maintained daily during all phases of construction authorized by this permit until all areas that were disturbed during construction are sufficiently stabilized to prevent erosion, siltation, and turbid discharges.
- 3. The Permittee shall avoid temporary or permanent impacts to the surrounding seagrass bed(s) during construction.
- 4. The project shall comply with applicable State Water Quality Standards of Chapters 62-302 and 62-4, F.A.C., namely:

62-302.500 – Minimum Criteria for All Waters at All Times and All Places 62-302.530 – Surface Water Quality Criteria

SPECIFIC MANATEE PROTECTION CONDITIONS

- 5. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with, and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- 6. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels shall follow routes of deep water whenever possible.
- 7. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers shall not impede manatee movement.
- 8. All on-site project personnel are responsible for observing water-related activities for the presence of manatees. All in-water operations, including vessels, shall be shutdown if a manatee comes within 50 feet of the operation. Activities shall not resume until every manatee has moved beyond the 50-foot radius of the project operation, or until 30 minutes has elapsed wherein a manatee has not reappeared within 50 feet of the operation. Animals shall not be herded away or harassed into leaving.
- 9. Any collision with or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-FWCC. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com.

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10. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Awareness signs that have already been approved for this use by the Florida Fish and Wildlife Conservation Commission (FWC) must be used. One sign measuring at least 3 ft. by 4 ft. which reads *Caution: Manatee Area* must be posted. A second sign measuring at least 8 1/2" by 11" explaining the requirements for "Idle Speed/No Wake" and the shutdown of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

GENERAL CONDITIONS FOR INDIVIDUAL PERMITS

The following general conditions are binding on all individual permits issued under chapter 62-330, F.A.C., except where the conditions are not applicable to the authorized activity, or where the conditions must be modified to accommodate project-specific conditions.

- 1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.
- 2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.
- 3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the *State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007*), and the *Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008*), which are both incorporated by reference in subparagraph 62-330.050(9)(b)5., F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.
- 4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice," [October 1, 2013], which is incorporated by reference in paragraph 62-330.350(1)(d), F.A.C., indicating the expected start and completion dates. A copy of this form may be obtained from the Agency, as described in subsection 62-330.010(5), F.A.C. If available, an Agency website that fulfills this notification requirement may be used in lieu of the form.

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- 5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.
- 6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
 - a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit" [Form 62-330.310(3)]; or
 - b. For all other activities "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].
 - c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.
- 7. If the final operation and maintenance entity is a third party:
 - a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as-built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
 - b. Within 30 days of submittal of the as-built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.
- 8. The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.
- 9. This permit does not:
 - a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
 - b. Convey to the permittee or create in the permittee any interest in real property;
 - c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
 - d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.
- 10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S.

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Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.

- 11. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.
- 12. The permittee shall notify the Agency in writing:
 - a. Immediately if any previously submitted information is discovered to be inaccurate; and
 - b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.
- 13. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.
- 14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.
- 15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.
- 16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.
- 17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate

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the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.

18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with subsection 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rule 28-106.201, F.A.C., a petition for an administrative hearing must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, any email address, any facsimile number, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
 - (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

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In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within 21 days of receipt of such notice, regardless of the date of publication. The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the applicable deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

FLAWAC Review

The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when this order is filed with the Clerk of the Department.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the

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appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Executed in Lee County, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart District Director South District Office

JMI/edy

Attachments:

9 project drawings

'Post Issuance' forms: http://www.dep.state.fl.us/water/wetlands/erp/forms.htm

Copies furnished to:

U.S. Army Corps of Engineers, Miami Corp (seappls@usace.army.mil) Monroe County Property Appraiser (rshaw@mcpafl.org)

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this permit, including all copies, were mailed before the close of business on March 13, 2017, to the above listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52(7), F.S., with the designated Department clerk, receipt of which is hereby acknowledged.

March 13, 2017

Date

Permittee: City of Key West Permit No: 116528-010-EI

Page 10 of 10

Permit Expiration: March 13, 2022



CITY OF KEY WEST DOLPHIN PIER DOCK REPLACEMENT



MONROE COUNTY, FLORIDA STANTEC PROJECT NO. 215613443

SECTION: 32 TOWNSHIP: 67S RANGE: 25E LATITUDE: 24°33'83"

LONGITUDE: 81°47'04"

INDEX OF SHEETS

SHEET NO.	SHEET DESCRIPTION
C01	COVER
C02	OVERALL AERIAL PLAN
C03	EXISTING CONDITIONS PLAN
C04	EXISTING CONDITIONS PLAN
C05	DEMOLITION / RELOCATION PLAN
C06	GEOMETRY PLAN
C07	DOCK DETAIL
C08	DOCK / RAMP CROSS SECTIONS
C09	UTILITY PLANS



LOCATION MAP Scale: N.T.S.



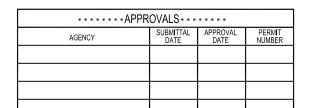
MAYOR & COUNCIL:

Craig Cates, Mayor
Jimmy Weekley, Commissioner
Samuel Kaufman, Commissioner
Billy Wardlow, Commissioner
Richard Payne, Commissioner
Margaret Romero, Commissioner
Clayton Lopez, Commissioner

City Manager: James Scholl

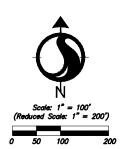
PERMIT SET
NOVEMBER, 2016

APPROVED BY





CARLOS M. HERDOCIA REGISTERED ENGINEER NO. 47660 STATE OF FLORIDA







NOTE: WATER ELEVATION DATA WAS OBTAINED FROM THE LAND BOUNDARY INFORMATION SYSTEM WEBSITE (LABINS.ORG) AND IS REFERENCED TO TIED INTERPOLATION POINT #3262.
MEAN HIGH WATER EL. =0.94' NGVD29
MEAN LOW WATER EL. =-0.09' NGVD29.

SITE SURVEY INFORMATION FROM:
FLORIDA KEYS LAND SURVEYORS
19960 OVERSEAS HIGHWAY
SUGARLOAF KEY, FL 33042
FIELD WORK DATE: 8/16/16 THRU 9/14/16
SIGNED AND SEALED BY:
ERIC ISAACS LS 7847
OCTOBER 15, 2016



Revision By Appd. YY,MM.DD

Issued By Appd. YY,MM.DD

Consultants

CARLOS M. HERDOCIA, P.E. REGISTERED ENGINEER NO. 47660 STATE OF FLORIDA



The Contractor shall verify and be responsible for all dimensions, DO NOT scale the drawing, any errors or omissions shall be reported to Stantec without delay, The Copyrights to all designs and drawings are the property of Strantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

CITY OF KEY WEST DOLPHIN PIER DOCK REPLACEMENT Key West, Florida

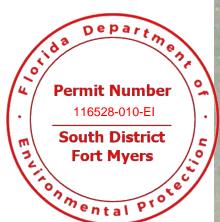
 OVERALL PLAN

 Project No.
 Scale

 215613443
 SEE PLANS

 Drawing No.
 Sheet
 Revision

 C02
 of



Received Electronically South District

NOTE: WATER ELEVATION DATA WAS OBTAINED FROM THE LAND BOUNDARY INFORMATION SYSTEM WEBSITE (LABINS.ORG) AND IS REFERENCED TO TIED INTERPOLATION POINT #3262. MEAN HIGH WATER EL. =0.94' NGVD29 MEAN LOW WATER EL. = -0.09' NGVD29.

SITE SURVEY INFORMATION FROM: FLORIDA KEYS LAND SURVEYORS 19960 OVERSEAS HIGHWAY SUGARLOAF KEY, FL 33042 FIELD WORK DATE: 8/16/16 THRU 9/14/16 SIGNED AND SEALED BY: ERIC ISAACS LS 7847 OCTOBER 15, 2016

CONSTRUCTION NOTE: Location of existing facilities as shown on construction Location of existing facilities as shown on construction drawings are from available records. The Engineer assumes no responsibility for the accuracy of the facilities shown or for any facility not shown. Verify the elevation, type of pipes and location of existing facilities prior to construction. If an existing facility is found to conflict with the proposed construction upon excavation the contractor shall immediately notify the engineer of record so that appropriate measures can be taken to resolve the problem. Contractor to notify Owner and Sunshine State One Call of Florida. De. 20 811 at least Sunshine State One Call of Florida, Inc. @ 811 at Least Forty Eight (48) Hours Prior to Excavating. Evidence of such notice shall be furnished to Stantec prior to



By Appd. YY.MM.DD Revision

By Appd. YY.MM.DD

CARLOS M. HERDOCIA, P.E.

REGISTERED ENGINEER NO. 47660 STATE OF FLORIDA

Coral Gables, Florida 33134

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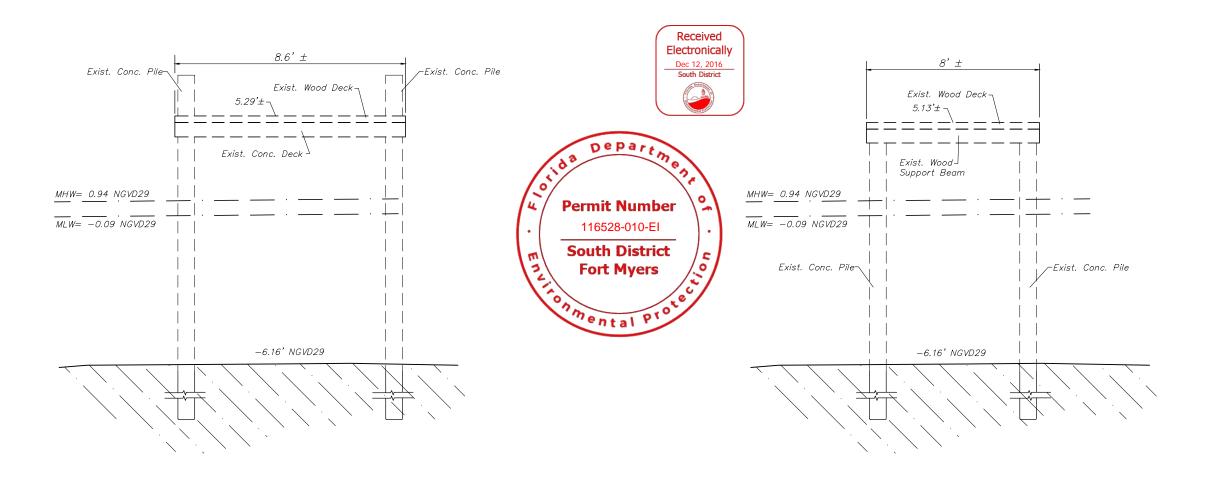
Key West, Florida File Name:
 RM
 CMH
 CMH
 16.10.08

 Dwn.
 Chkd.
 Dsgn.
 YY.MM.DD

CITY OF KEY WEST DOLPHIN PIER DOCK REPLACEMENT

EXISTING CONDITIONS Project No. SEE PLANS 215613443 Drawing No. Revision C03

ORIGINAL SHEET - ANSI D HORIZ



SECTION E-E

SECTION F-F

Consultants CITY OF KEY WEST **EXISTING CROSS SECTIONS** DOLPHIN PIER DOCK REPLACEMENT Project No. Scale Coral Gables, Florida 33134 215613443 SEE PLANS Key West, Florida www.stantec.com Drawing No. Sheet The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantee without delay, the Copyrights to all designs and drawings are the property of Stantee. Reproduction or use for any purpose other than that authorized by Stantee is forbidden. CARLOS M. HERDOCIA, P.E. REGISTERED ENGINEER NO. 47660 STATE OF FLORIDA
 RM
 CMH
 CMH
 16.10.08

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 YY.MM.DD
 File Name: By Appd. YY.MM.DD By Appd. YY.MM.DD C04 Issued Revision

ORIGINAL SHEET - ANSI



Fort Myers

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NOTE: WATER ELEVATION DATA WAS OBTAINED FROM THE LAND BOUNDARY INFORMATION SYSTEM WEBSITE (LABINS.ORG) AND IS REFERENCED TO TIED INTERPOLATION POINT #3262. MEAN HIGH WATER EL. =0.94' NGVD29 MEAN LOW WATER EL. =-0.09' NGVD29.

By Appd. YY.MM.DD







CARLOS M. HERDOCIA, P.E.

REGISTERED ENGINEER NO. 47660 STATE OF FLORIDA

By Appd. YY.MM.DD

Coral Gables, Florida 33134

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CITY OF KEY WEST DOLPHIN PIER DOCK REPLACEMENT

Project No. Scale 215613443 Key West, Florida Drawing No. File Name:
 RM
 CMH
 CMH
 16.10.08

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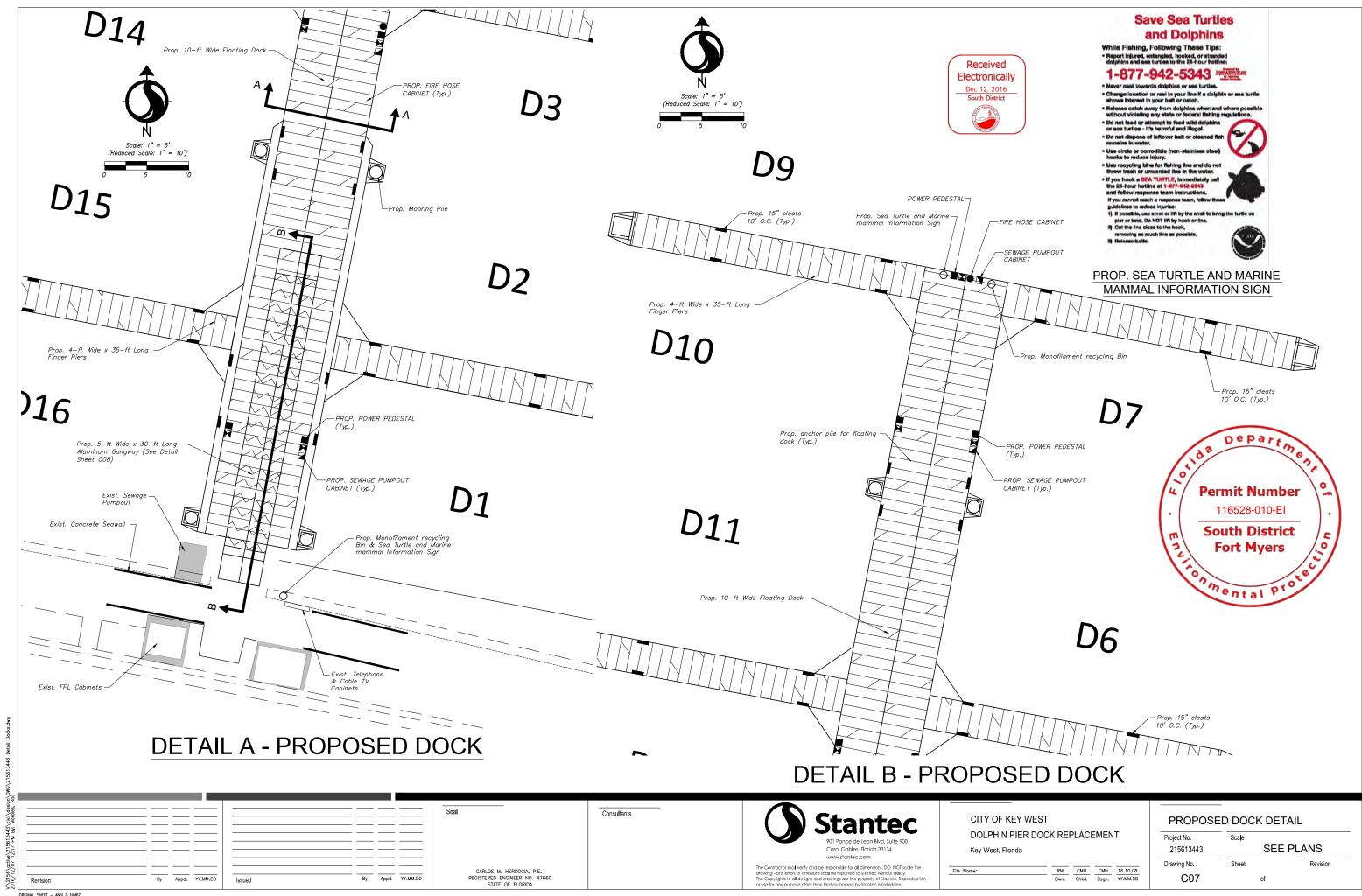
SEE PLANS

Revision

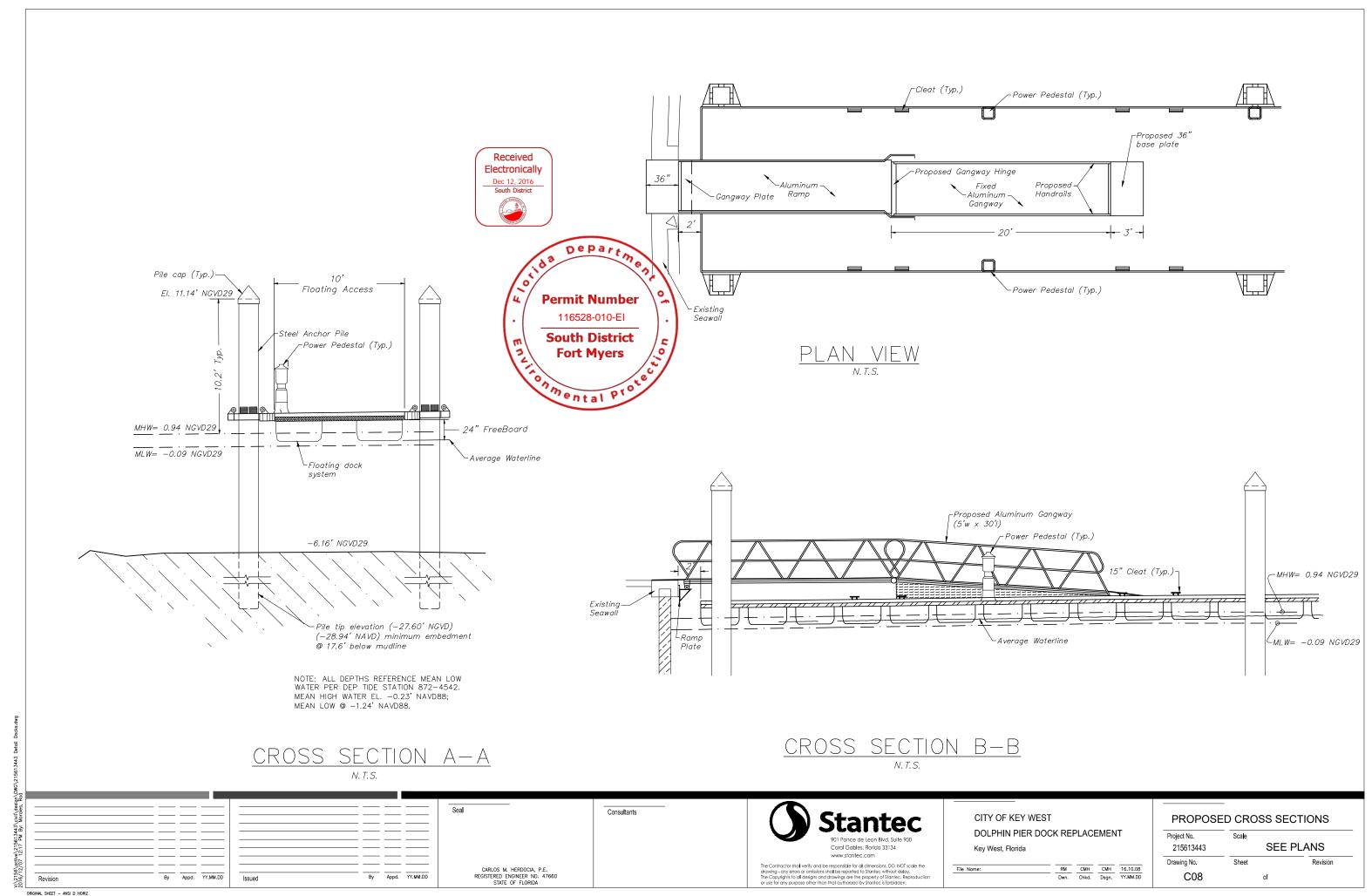
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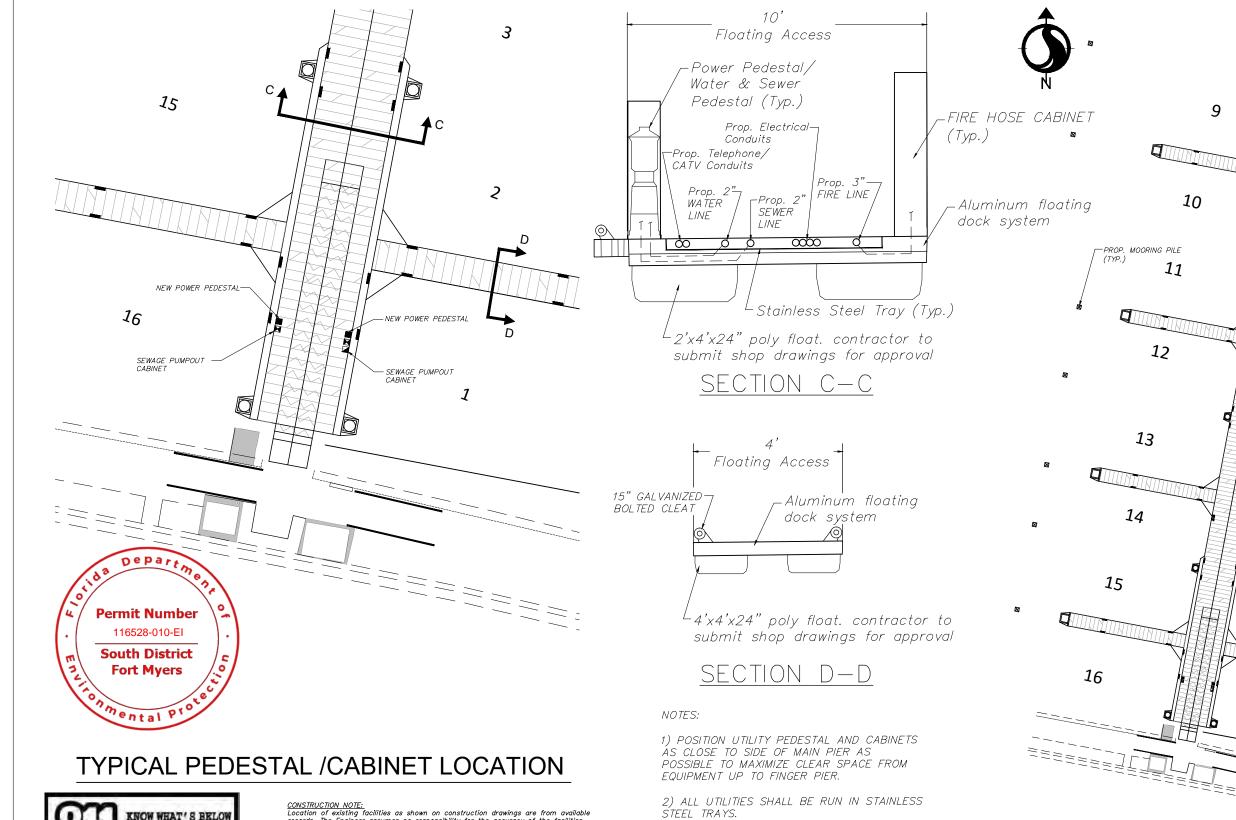


ORIGINAL SHEET - ANSI D HORIZ



ORIGINAL SHEET - ANSI D HOR







By Appd. YY.MM.DD

CONSTRUCTION NOTE:
Location of existing facilities as shown on construction drawings are from available records. The Engineer assumes no responsibility for the accuracy of the facilities shown or for any facility not shown. Verify the elevation, type of pipes and location of existing facilities prior to construction. If an existing facility is found to conflict with the proposed construction upon excavation the contractor shall immediately notify the engineer of record so that appropriate measures can be taken to resolve the problem. Contractor to notify Owner and Sunshine State One Call of Florida, Inc. @ 811 at Least Forty Eight (48) Hours Prior to Excavating. Evidence of such notice shall be furnished to Stantec prior to excavating.

By Appd. YY.MM.DD

3) SEWER LINE, WATER LINE, FIRE LINE, POWER LINE SHOWN FOR COORDINATION ONLY. SEE CONSTRUCTION PLANS OF OTHER TRADES FOR ADDITIONAL INFORMATION.

Consultants

CARLOS M. HERDOCIA, P.E.

REGISTERED ENGINEER NO. 47660 STATE OF FLORIDA

OVERALL PEDESTAL CABINET LOCATION

Stantec
901 Ponce de Leon Bildo Suite 900
Corol Gables, Florida 33134
www.stantlec.com

www.stantec.com
The Contractor shall verify and be responsible for all dimensions. DO NOT scale the
drawing - any errors or omissions shall be reported to Stantec without delay.
The Copyrights to all designs and drawings are the property of Stantec. Reproduction
or use for any purpose other than that outhorized by Stantec is forbidden.

CITY OF KEY WEST
DOLPHIN PIER DOCK REPLACEMENT
Key West, Florida

 Key West, Florida
 RM
 CMH
 CMH
 16.10.08

 File Name:
 RM
 Chkd.
 Dsgn.
 YY.MM.DD

 UTILITY PLAN

 Project No.
 Scale

 215613443
 SEE PLANS

 Drawing No.
 Sheet
 Revision

 CO9
 of

PROP. MOORING PILE

Received

Electronically

Dec 12, 2016 South District

-FIRE HOSE CABINET

4

3

POWER PEDESTAL

-SEWAGE PUMPOUT CABINET

V:\2156\active\215613443\civil\design\DWG\215613443_ut 2016/12/07 12:17 PM Bv: Mordles. Rod

DEPARTMENT OF THE ARMY



JACKSONVILLE DISTRICT CORPS OF ENGINEERS 9900 SW 107TH AVENUE, SUITE 203 MIAMI, FLORIDA 33176-2785

March 30, 2017

REPLY TO ATTENTION OF

South Permits Branch Miami Permits Section SAJ-1999-05418 (LP-JMH)

City of Key West c/o James Scholl, City Manager 525 Angela Street Key West, Florida 33040

Dear Mr. Scholl:

This is in reference to your request for a Department of the Army (DA) permit to perform work in or affecting waters of the United States. If you determine the permit provided is acceptable in its entirety and you have chosen to proceed with the authorized activity, then upon recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), you are authorized under a Letter of Permission

to remove an existing T-shaped dock and mooring piles, to install a new 10 foot wide by 168 foot long (1,680 square foot) floating dock with 8 associated pilings and an aluminum gangway, to install eight 4 foot wide by 35 foot long (140 square foot each) floating finger piers with a total of 8 associated pilings, to install 14 mooring pilings, and to install temporary floating turbidity barriers around all work areas that are in/over U.S. navigable waters

at Dolphin Pier, 1801 N. Roosevelt Boulevard; legally described as 33 67 25 KW Garrison Bight G30-330-332, in Section 32, Township 67 South, Range 25 East, Key West, Monroe County, Florida. RE# 00072070-000000.

Geographic Position: Latitude: 24.561152°

Longitude: -81.785048°

The project must be completed in accordance with the enclosed construction drawings date stamped by the Corps on January 10, 2017 (Sheets 1-9), and the general and special conditions which are incorporated in, and made a part of, the permit.

Special Conditions:

- 1. REPORTING ADDRESS: The Permittee shall submit all reports, notifications, documentation and correspondence required by the conditions of this permit shall be submitted to the following address:
- a. For standard mail: U.S. Army Corps of Engineers, Regulatory Division, Enforcement Branch, 9900 Southwest 107th Avenue, Suite 203, Miami, Florida 33176.

b. For electronic mail: CESAJ-ComplyDocs@usace.army.mil (not to exceed 10 MB).

The Permittee shall reference this permit number, SAJ-1999-05418 (LP-JMH), on all submittals.

- 2. SELF-CERTIFICATION: Within 60 days of completion of the work authorized by this permit, the Permittee shall complete the attached "Self-Certification Statement of Compliance" form (Attached) and submit it to the Corps. In the event that the completed work deviates in any manner from the authorized work, the Permittee shall describe the deviations between the work authorized by this permit and the work as constructed on the "Self-Certification Statement of Compliance" form. The description of any deviations on the "Self-Certification Statement of Compliance" form does not constitute approval of any deviations by the Corps.
- 3. COMMENCEMENT NOTICE: Within ten (10) days from the date of initiating the authorized work, the Permittee shall provide to the Corps a written notification of the date of commencement of work authorized by this permit.
- 4. ASSURANCE OF NAVIGATION AND MAINTENANCE: The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 5. SEA TURTLE AND SMALLTOOTH SAWFISH CONDITIONS: The Permittee shall comply with National Marine Fisheries Service's "Sea Turtle and Smalltooth Sawfish Construction Conditions" dated March 23, 2006 (Attached).
- 6. MANATEE CONDITIONS: The Permittee shall comply with the "Standard Manatee Conditions for In-Water Work 2011" (Attached).
- 7. POSTING OF PERMIT: The Permittee shall ensure that all contractors, sub-contractors, and entities associated with the implementation of the project review, understand, and comply with the approved plans and special conditions made part of this permit. The Permittee shall inform all parties associated with the activity of the construction area boundaries, and the location of adjacent aquatic resources to be avoided. Complete copies of the permit and approved plans shall be available at the

construction site at all times. Failure to comply with the approved plans and permit special conditions may subject the Permittee to enforcement action.

8. AGENCY CHANGES/APPROVALS: Should any other agency require and/or approve changes to the work authorized or obligated by this permit, the Permittee is advised a modification to this permit instrument is required prior to initiation of those changes. It is the Permittee's responsibility to request a modification of this permit from the Miami Permits Section. The Corps reserves the right to fully evaluate, amend, and approve or deny the request for modification of this permit.

9. CULTURAL RESOURCES/HISTORIC PROPERTIES:

- a. No structure or work shall adversely affect impact or disturb properties listed in the National Register of Historic Places (NRHP) or those eligible for inclusion in the NRHP.
- b. If during the ground disturbing activities and construction work within the permit area, there are archaeological/cultural materials encountered which were not the subject of a previous cultural resources assessment survey (and which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes, evidence of structures or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall immediately stop all work and ground-disturbing activities within a 100-meter diameter of the discovery and notify the Corps within the same business day (8 hours). The Corps shall then notify the Florida State Historic Preservation Officer (SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) to assess the significance of the discovery and devise appropriate actions.
- c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with the above Special Condition; and if deemed necessary by the SHPO, THPO(s), or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.
- d. In the unlikely event that unmarked human remains are identified on non-federal lands, they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the

medical examiner, Corps, and State Archeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO and THPO(s). Based, on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the State Archeologist and from the Corps.

- 10. NOTICE PERMIT: The Permittee shall complete and record the Notice of Department of the Army Permit (Attached) with the Clerk of the Circuit Court, Registrar of Deeds or other appropriate official charged with the responsibility of maintaining records of title to or interest in real property within the county of the authorized activity. Within 90 days from the effective date of this permit the Permittee shall provide a copy of the recorded Notice of Permit to the Corps clearly showing a stamp from the appropriate official indicating the book and page at which the Notice of Permit is recorded and the date of recording.
- 11. TURBIDITY BARRIERS: Prior to the initiation of any of the work authorized by this permit the Permittee shall install floating turbidity barriers with weighted skirts that extend to within one foot of the bottom around all work areas that are in, or adjacent to, surface waters. The turbidity barriers shall remain in place and be maintained until the authorized work has been completed and all erodible materials have been stabilized. Turbidity barriers shall be removed upon stabilization of the work area.
- 12. ENDANGERED SPECIES: The permittee agrees to comply with all of the activity specific Project Design Criteria (PDCs) listed in the National Marine Fisheries Service's (NMFS) Statewide Programmatic Biological Opinion (SWPBO), dated December 4, 2015. Failure to comply with these conditions could result in enforcement action by the Corps and/or NMFS.
- 13. RIGHT WHALE PROTECTION: It is illegal to approach within 500 yards of a right whale by vessel, aircraft, or any other means (50 CFR 224.103 (c). Any vessel finding itself within 500 yards of a right whale must depart immediately at a slow speed.

14. TURBIDITY CONTROLS:

- Shall be used throughout construction to control erosion and siltation and ensure that turbidity levels within the project area do not exceed background conditions.
- b. Shall be made of material in which listed species cannot become entangled (i.e., reinforced impermeable polycarbonate vinyl fabric [PVC]), and shall be monitored to ensure listed species are not entangled or trapped in the project area.

- c. Shall be removed promptly when the work is complete and the water quality in the project area has returned to background conditions.
- d. Shall not block entry to or exit from designated critical habitat.
- 15. SPECIES REPORTING: Any collision(s) with and/or injuries to any sea turtle, sawfish, whale, or sturgeon occurring during the construction of a project, shall be reported immediately to NMFS's Protected Resources Division (PRD) at (727-824-5312) or by email to takereport.nmfsser@noaa.gov and CESAJ-ComplyDocs@usace.army.mil. Sea turtle and marine mammal stranding/rescue organizations' contact information is available by region at http://www.nmfs.noaa.gov/pr/health/networks.htm. Smalltooth sawfish encounters shall be reported to http://www.flmnh.ufl.edu/fish/sharks/sawfish/sawfishencounters.html. *Failure to report take of a federally listed threatened or endangered species may lead to suspension, revocation, or modification of this authorization. (From Section 3(18) of the Federal Endangered Species Act: The term 'take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.)
- 16. MARINE LIFE ENTRAPMENT: Neither structure nor material or the method of construction shall pose more than minimal risk of entrapping fish, marine turtles, or marine mammals. In-water lines must be industrial grade metal or heavy cables that do not readily loop and tangle. All in-water lines (rope and cable) must be rigid and cannot have excess line in the water. Lines may be enclosed in a plastic or rubber sleeve/tube to add rigidity.
- 17. NOISE EFFECTS BMPS: All projects shall comply with the requirements of the attached "Noise Best Management Practices (BMPs) for Piling Installation" (Attached)
- 18. MONOFILAMENT RECYCLING BINS: Monofilament recycling bins must be installed and maintained in accordance with the information provided http://mrrp.myfwc.com.
- 19. EDUCATIONAL SIGNAGE: The permittee shall install Educational signs in a visible location on the structure(s) to alert the public of listed species in the area susceptible to vessel strikes or hook-and-line captures. The most current version of the signs are available at

(http://sero.nmfs.noaa.gov/protected_resources/section_7/protected_species_educational_signs/index.html).

If the work authorized is not completed on or before <u>March 30, 2022</u>, authorization, if not previously revoked or specifically extended, shall cease and be null and void.

Instructions for Objecting to Permit Terms and Conditions: This letter contains an initial proffered permit for your proposed project/permit application. If you object to certain terms and conditions contained within the permit, you may request that the permit be modified. Enclosed you will find a Notification of Administrative Appeal Options and Process fact sheet and Request for Appeal (RFA) form. If you choose to object to certain terms and conditions of the permit, you must follow the directions provided in Section 1, Part A and submit the completed RFA form to the letterhead address.

Should you have any questions regarding this letter, please contact the project manager Jessica Hogan in writing the letterhead address, by telephone at 305-779-6052, or by email at Jessica.M.Hogan@usace.army.mil.

The Corps Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to take a few minutes to visit http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey and complete our automated Customer Service Survey. Your input is appreciated – favorable or otherwise.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

for Jason A. Kirk, P.E. Colonel, U.S. Army District Commander

Enclosures

Copy/ies Furnished: CESAJ-RD-PE (w/ enclosures)

REQUEST PERMIT TRANSFER: PERMIT NUMBER: SAJ-1999-05418 (LP-JMH)

When the structures or work verified by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, the present permittee and the transferee should sign and date below. This document must then be provided to the U.S. Army Corps of Engineers, Regulatory Division, Post Office Box 4970, Jacksonville, Florida 32232-0019.

(TRANSFEREE SIGNATURE)	(DATE)		
(Name - Printed)	Lot/Block of site		
(Street Address)			
(City, State, and Zip Code)			

Flood Plain Information:

This Department of the Army permit does not give absolute authority to perform the work as specified on your application. The proposed work may be subject to local building restrictions. You should contact the local office in your area that issues building permits to determine if your site is located in a flood-prone or floodway area, and if you must comply with the local building requirements mandated by the National Flood Insurance Program. If your local office cannot provide you the necessary information, you may request a flood hazard evaluation of the site by providing this office with a letter and a small scale map showing the location of the site. The request should be addressed to the Chief, Flood Control and Floodplain Management Branch, Jacksonville District, U.S. Army Corps of Engineers, P.O. Box 4970, Jacksonville, Florida 32232-0019. Phone inquiries may be made at 904-232-2515.

GENERAL CONDITIONS 33 CFR PART 320-330 PUBLISHED FR DATED 13 NOVEMBER 1986

- 1. The time limit for completing the work authorized ends on the date noted in the permit letter. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
- 2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
- 3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort of if the site is eligible for listing in the National Register of Historic Places.
- 4. If you sell the property associated with this permit you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
- 5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
- 6. You must allow a representative from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applica	ant: City of Key West	File Number: SAJ-1999-05418	Date: March 30, 2017
Attach	ed is:		See Section below
Х	INITIAL PROFFERED PERMIT (Standard Permit or Let	ter of permission)	А
	PROFFERED PERMIT (Standard Permit or Letter of pe	rmission)	В
	PERMIT DENIAL		С
•	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331. A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.
- B: PROFFERED PERMIT: You may accept or appeal the permit
- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.
- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO		
REASONS FOR APPEAL OR OBJECTIONS: (Describe you		
initial proffered permit in clear concise statements. You may		this form to clarify where
your reasons or objections are addressed in the administrative	re record.)	
ADDITIONAL INFORMATION: The appeal is limited to a revi	ew of the administrative record	the Corps memorandum for
the record of the appeal conference or meeting, and any sup		
is needed to clarify the administrative record. Neither the app		
to the record. However, you may provide additional informati		
administrative record.	•	,
POINT OF CONTACT FOR QUESTIONS OR INFORMATIO	N:	
If you have questions regarding this decision you may	If you have questions regarding	ng the appeal process you
contact:	may contact:	ig the appear process year
	may comacu	
Project Manager as noted in letter	Dale Beter (904) 232-1361	
RIGHT OF ENTRY: Your signature below grants the right of	entry to Corps of Engineers pe	ersonnel, and any government
consultants, to conduct investigations of the project site durin		
15 day notice of any site investigation, and will have the opportunity	rtunity to participate in all site i	nvestigations.
	Date:	Telephone number:
Signature of appellant or agent.		

DOLPHIN PIER DOCK REPLACEMENT CITY OF KEY WEST

MONROE COUNTY, FLORIDA STANTEC PROJECT NO. 215613443

LATITUDE: 24'33'83" SECTION: 32 TOWNSHIP: 67S RANGE: 25E

LONGITUDE: 81'47'04"



INDEX OF SHEETS

SHEET DESCRIPTION	COVER	OVERALL AERIAL PLAN	EXISTING CONDITIONS PLAN	EXISTING CONDITIONS PLAN	DEMOLITION / RELOCATION PLAN	GEOMETRY PLAN	DOCK DETAIL	DOCK / RAMP CROSS SECTIONS	UTILITY PLANS
SHEET NO.	C01	C02	C03	C04	C05	900	C07	80O	600



LOCATION MAP Scale: N.T.S.



901 Ponce de Leon Blvd. Suite 900 Coral Gables, Florida, 33134 Tel. 305-445-2900 Fox. 305-445-3344

SAJ-1999-05418/City of Key West (Page 1 of 9) January 10, 2017

MAYOR & COUNCIL:

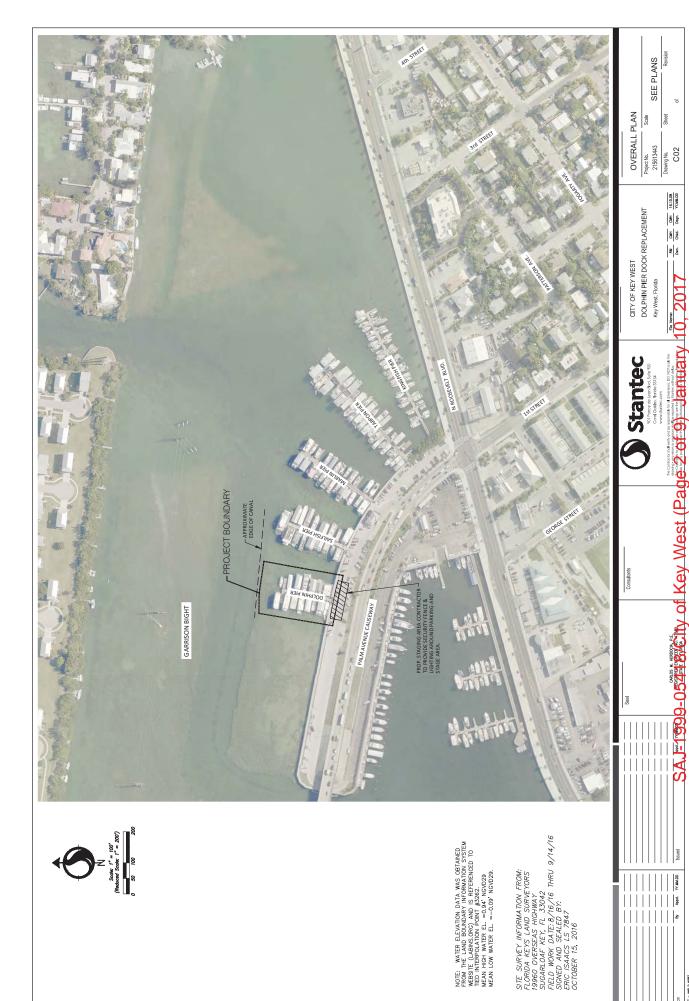
Samuel Kaufman, Commissioner Margaret Romero, Commissioner Jimmy Weekley, Commissioner Richard Payne, Commissioner Billy Wardlow, Commissioner Clayton Lopez, Commissioner Craig Cates, Mayor

City Manager: James Scholl

NOVEMBER, 2016 PERMIT SET

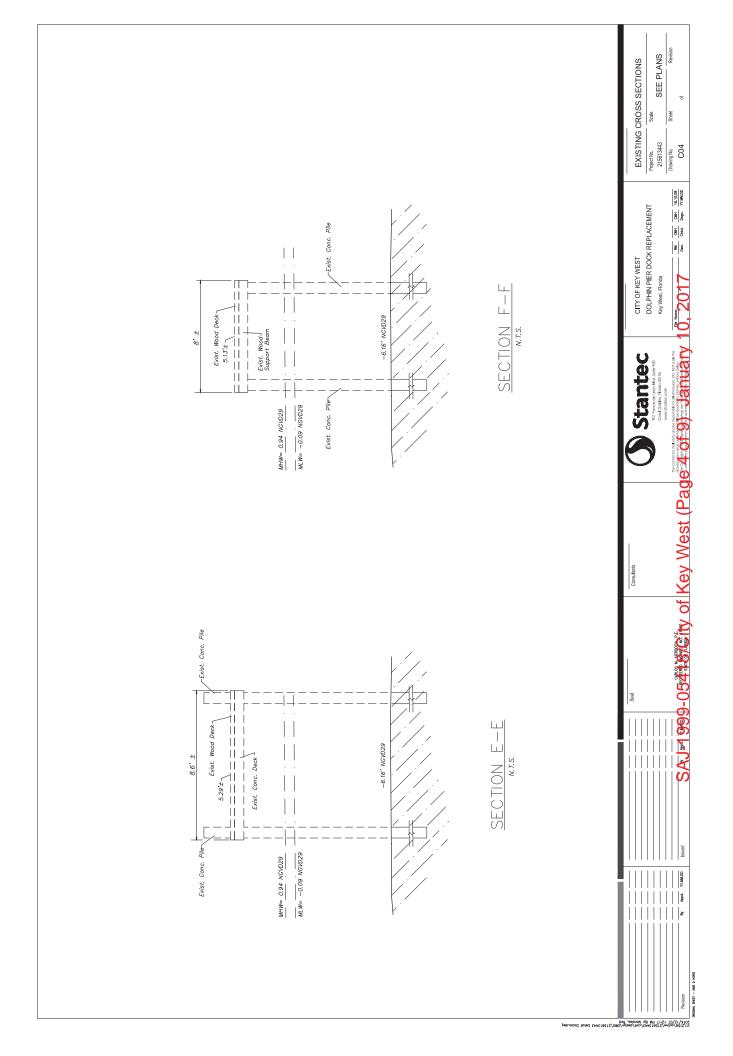
APPROVED BY

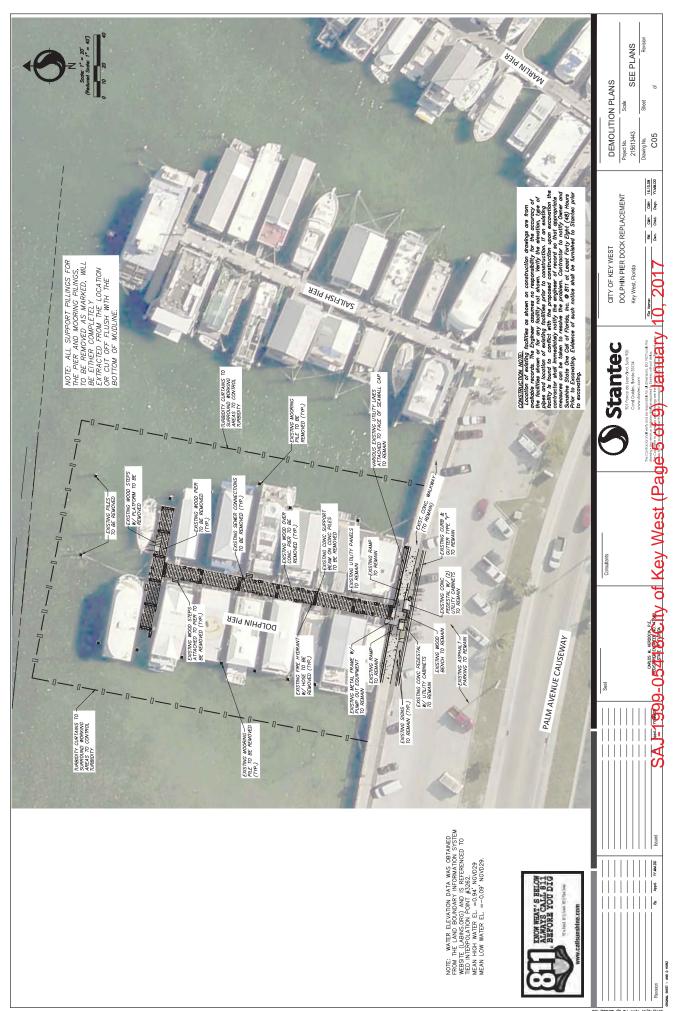
REGISTERED ENGINEER NO. 47660 STATE OF FLORIDA CARLOS M. HERDOCIA



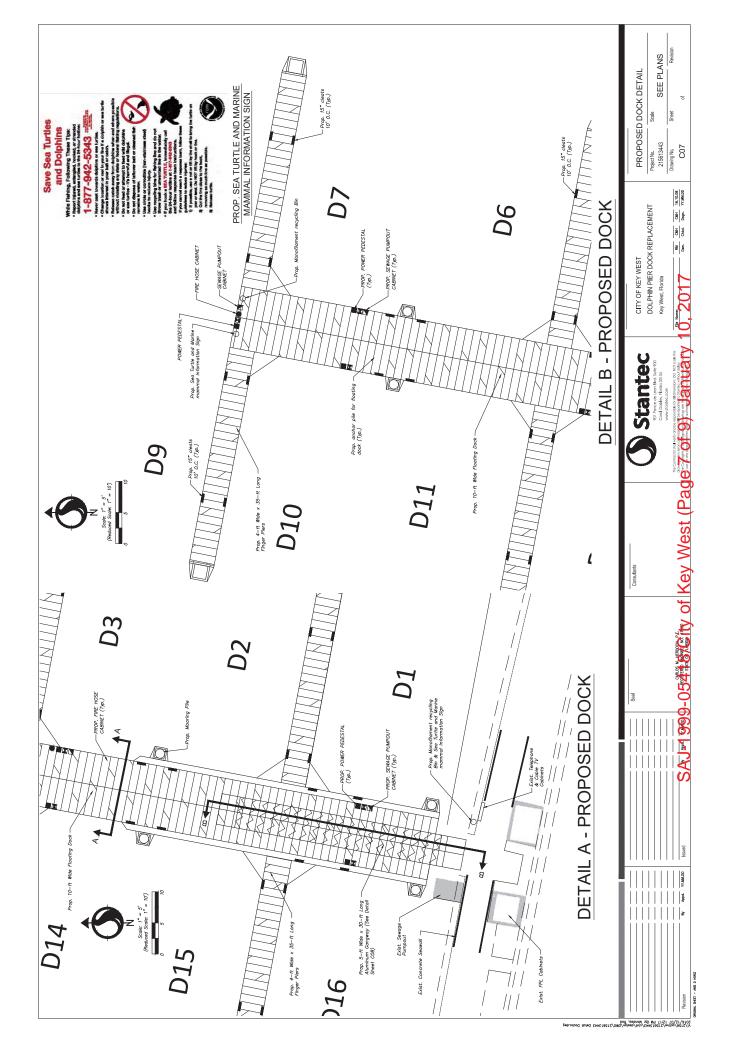
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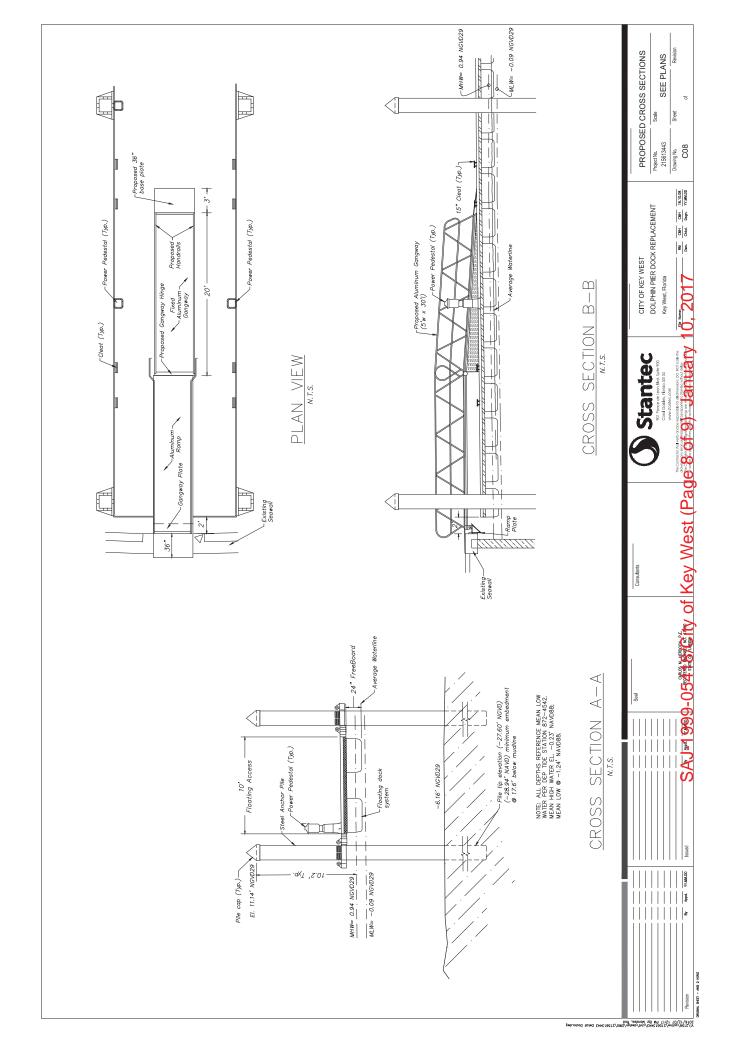


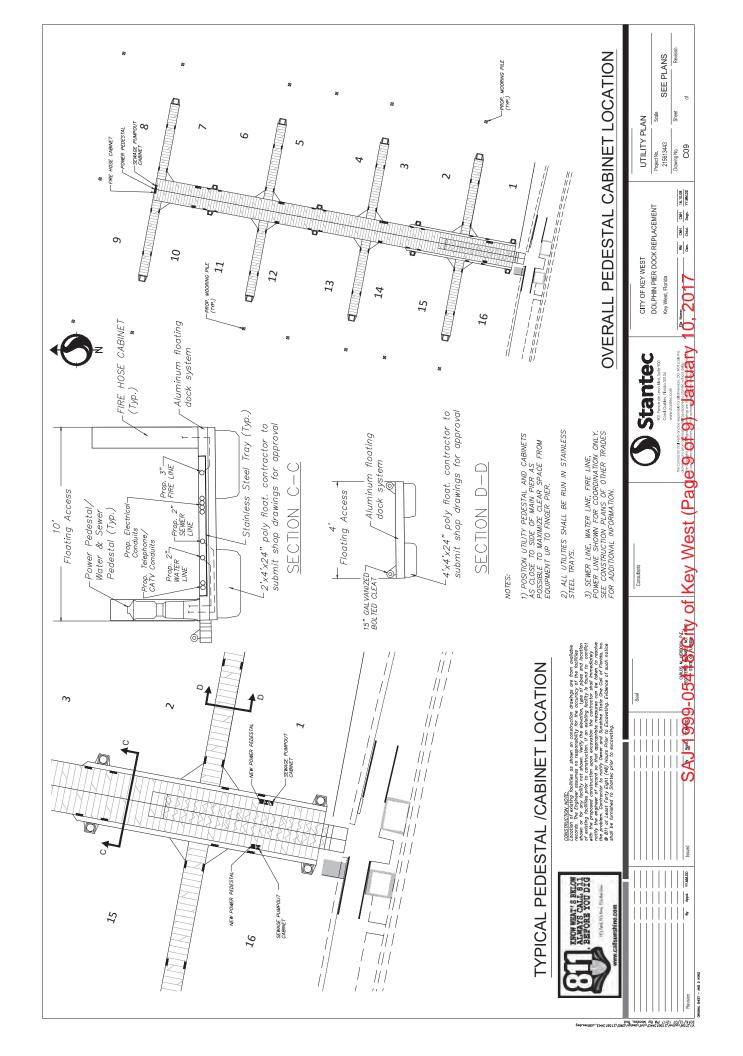












STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at lmperiledSpecies@myFWC.com
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:

Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC





UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office 263 13th Avenue South St. Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc



Noise Best Management Practices (BMPs) for Piling Installation

The following best management practices are designed to reduce the exposure to sea turtles, smalltooth sawfish, and sturgeon to potential harmful daily noise exposure levels associated with pile driving during dock and seawall construction activities.

Noise BMP Plan A (For all projects): Sea Turtle, Smalltooth Sawfish, and Sturgeon Construction Conditions

The permittee shall comply with the following protected species construction conditions:

- a. All construction personnel are responsible for observing water-related activities to detect the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing species protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which protected species cannot become entangled, be properly secured, and be regularly monitored to avoid protected species' entrapment. Barriers may not block protected species entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. If a protected species is seen within 100 yd of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 ft of a protected species. Operation of any mechanical construction equipment shall cease immediately if a protected species is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- e. Any injury to a protected species shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- f. All work must occur during daylight hours.

Noise BMP Plan B (for Impact Pile-Driving Installation of 6 or More Concrete Piles per Day)

The permittee shall follow all conditions defined in the Noise BMP Plan A above plus the conditions provided below:

- 1. It must be determined if the project occurs in open water or a confined space. This differentiation is important because if a project occurs in a confined space, an animal may not move through or past a noise source to escape it. A confined space is defined as any area that has a solid object (e.g., shoreline, seawall, jetty) or structure within 150 feet (ft) of the pile installation site that would effectively serve as a barrier or otherwise prevent animals from moving past it to exit the area. This does not include objects such as docks or other pile-supported structures that would not stop animal movement or significantly reflect noise.
- 2. If the project is located in open water, up to 10 concrete piles measuring up to 24-in diameter may be installed per day.
- 3. If the project is located in a confined space, up to 5 concrete piles measuring up to 24-in diameter may be installed per day.
- 4. If more than 5 piles will be installed per day in a confined space, noise abatement measures (below) are required for all of the concrete piles installed that day with a maximum of 10 piles installed per day.

Noise Abatement Measures: Approved noise abatement measures include noise attenuation piles (TNAP) and/or bubble curtains.

TNAP design must be constructed of a double-walled tubular casing (a casing within a larger casing), with at least a 5-inwide hollow space completely filled with closed-cell foam or other noise dampening material between the walls. The TNAP must be long enough to be seated firmly on the sea bottom, fit over the pile being driven, and extend at least 3 ft above the surface of the water.

Bubble curtain design must adhere to the guidelines for unconfined and confined bubble curtains defined below, and be followed as detailed in the USACE permit application. The use of *any* other alternative noise control method must receive prior approval by NMFS and the USACE.

If the required noise abatement measure discussed above cannot be used, then the pile must be installed by a different method using the appropriate noise BMPs defined in this document. (e.g., concrete piles may be installed by vibratory hammer instead, following BMP Plan A).

Bubble Curtain Specifications for Pile Driving

When using an impact hammer to drive or proof concrete piles, use one of the following sound attenuation methods:

1. If water velocity is equal to or less than 1.6 ft per second (1.1 miles per hour) for the entire installation period, surround the pile being driven by a confined or

unconfined bubble curtain that will distribute small air bubbles around 100% of the pile perimeter for the full depth of the water column.

- a. General An unconfined bubble curtain is composed of an air compressor(s), supply lines to deliver the air, distribution manifolds or headers, perforated aeration pipe, and a frame. The frame facilitates transport and placement of the system, keeps the aeration pipes stable, and provides ballast to counteract the buoyancy of the aeration pipes in operation.
- b. The aeration pipe system shall consist of multiple layers of perforated pipe rings, stacked vertically in accordance with the following:

Water Depth (m)	No. of Layers
0 to less than 5	2
5 to less than 10	4
10 to less than 15	7
15 to less than 20	10
20 to less than 25	13

- c. The pipes in all layers shall be arranged in a geometric pattern which shall allow for the pile being driven to be completely enclosed by bubbles for the full depth of the water column and with a radial dimension such that the rings are no more than 0.5 m from the outside surface of the pile.
 - The lowest layer of perforated aeration pipe shall be designed to ensure contact with the substrate without burial and shall accommodate sloped conditions.
 - ii. Air holes shall be 1.6 millimeter (mm) (1/16-in) in diameter and shall be spaced approximately 20 mm (3/4 in) apart. Air holes with this size and spacing shall be placed in 4 adjacent rows along the pipe to provide uniform bubble flux.
 - iii. The system shall provide a bubble flux 3.0 m³ per minute per linear meter of pipe in each layer (32.91 ft³ per minute per lin ft of pipe in each layer). The total volume of air per layer is the product of the bubble flux and the circumference of the ring:

 $V_t = 3.0 \text{ m}^3/\text{min/m} * \text{Circumference of the aeration ring in m}$

V_t = 32.91 ft³/min/ft * Circumference of the aeration ring in ft

iv. Meters shall be provided as follows:

- Pressure meters shall be installed at all inlets to aeration pipelines and at points of lowest pressure in each branch of the aeration pipeline.
- Flow meters shall be installed in the main line at each compressor and at each branch of the aeration pipelines at each inlet. In applications where the feed line from the compressor is continuous from the compressor to the aeration pipe inlet, the flow meter at the compressor can be eliminated.

Flow meters shall be installed according to the manufacturer's recommendation based on either laminar flow or non-laminar flow.

- 2. If water velocity is greater than 1.6 ft per second (1.1 miles per hour) at any point during installation or if constructing a seawall, surround the pile or area being driven by a confined bubble curtain (e.g., a bubble ring surrounded by a fabric or non-metallic sleeve). The confined bubble curtain will distribute air bubbles around 100% of the pile perimeter for the full depth of the water column, according to specifications below.
 - a. General A confined bubble curtain is composed of an air compressor(s), supply lines to deliver the air, distribution manifolds or headers, perforated aeration pipe(s), and a means of confining the bubbles.
 - b. The confinement shall extend from the substrate to a sufficient elevation above the maximum water level expected during pile installation such that when the air delivery system is adjusted properly, the bubble curtain does not act as a water pump (i.e., little or no water should be pumped out of the top of the confinement system).
 - c. The confinement shall contain resilient pile guides that prevent the pile and the confinement from coming into contact with each other and do not transmit vibrations to the confinement sleeve and into the water column (e.g., rubber spacers, air-filled cushions).
 - d. In-water less than 15 m deep, the system shall have a single aeration ring at the substrate level. In-waters greater than 15 m deep, the system shall have at least 2 rings: 1 at the substrate level and the other at mid-depth.
 - e. The lowest layer of perforated aeration pipe shall be designed to ensure contact with the substrate without sinking into the substrate and shall accommodate for sloped conditions.

- f. Air holes shall be 1.6 mm (1/16-in) in diameter and shall be spaced approximately 20 mm (3/4 in) apart. Air holes with this size and spacing shall be placed in 4 adjacent rows along the pipe to provide uniform bubble flux.
- g. The system shall provide a bubble flux of 2.0 m³ per minute per linear meter of pipe in each layer (21.53 ft³ per minute per lin ft of pipe in each layer). The total volume of air per layer is the product of the bubble flux and the circumference of the ring:

Vt = 2.0 m3/min/m * Circumference of the aeration ring in m or Vt = 21.53 ft3/min/ft * Circumference of the aeration ring in ft

h. Flow meters shall be provided as follows: Pressure meters shall be installed at all inlets to aeration pipelines and at points of lowest pressure in each branch of the aeration pipeline.

- ii. Flow meters shall be installed in the main line at each compressor and at each branch of the aeration pipelines at each inlet. In applications where the feed line from the compressor is continuous from the compressor to the aeration pipe inlet, the flow meter at the compressor can be eliminated.
- iii. Flow meters shall be installed according to the manufacturer's recommendation based on either laminar flow or non-laminar flow.

Prepared by:	
Permittee:	
Address:	
Phone:	

NOTICE OF DEPARTMENT OF THE ARMY PERMIT

TAKE NOTICE the U.S	5. Army Corps o	of Engineers (Corps) has issued D	epartment of
the Army Permit SAJ-	- to	(Permittee)	on , 2	200 ,
authorizing impacts to v	waters of the Ui	nited States (includi	ng wetlands) i	n accordance
with Section 404 of the	Clean Water A	ct on a parcel of lar	nd known as Fo	olio/Parcel ID:
		e	ncompassing _	acres
located within a portion	of Section	, Township		south, Range
east,		_,	County,	Florida.

Within 30 days of any transfer of interest or control of that portion of the premises containing the area authorized to be filled (or any portion thereof), the Permittee must notify the Corps in writing of the property transfer by submitting the completed permit transfer page of the permit. Notification of the transfer does not by itself constitute a permit transfer. Therefore, purchasers of that portion of the premises containing the area authorized to be filled (or any portion thereof) are notified that it is unlawful for any person to construct, alter, operate, maintain, remove or abandon any works, including dredging or filling, without first having obtained a permit from the Corps in the purchaser's name.

The subject Permit concerns only that portion of the property determined to fall within the jurisdiction of the Corps and this notice is applicable only to those portions of the subject property containing areas authorized to be filled and wetland mitigation/conservation areas subject to the Permit.

Conditions of the Permit: The Permit is subject to General Conditions and Special Conditions which may affect the use of the subject property. Accordingly, interested parties should closely examine the entire Permit, all associated applications, and any subsequent modifications.

To obtain a copy of the permit in its entirety submit a written request to: U.S. Army Corps of Engineers
Regulatory Division - Special Projects & Enforcement Branch
Post Office Box 4970
Jacksonville, Florida 32232-0019

Questions regarding compliance with these conditions should be directed to:
U.S. Army Corps of Engineers
Enforcement Section
Post Office Box 4970
Jacksonville, Florida 32232-0019

Conflict Between Notice and Permit

This Notice of Permit is not a complete summary of the Permit. Provisions in this Notice of Permit shall not be used in interpreting the Permit provisions. In the event of conflict between this Notice of Permit and the Permit, the Permit shall control.

This Notice is Not an Encumbrance

My Commission Expires_____

This Notice is for informational purposes only. It is not intended to be a lien, encumbrance, or cloud on the title of the premises.

This Notice may not be released or renwritten consent of the Corps.	noved from the public records without the prior
20 This document is being subm	is day of, itted for recordation in the Public Records of as part of the requirement imposed by J issued by the Corps.
	Permittee:
	Address:
	Phone:
STATE OF FLORIDA COUNTY OF	
The foregoing instrument was acknowled, 20, by me or has produced	, who is personally known to
(seal)	Notary Public
	Print

SELF-CERTIFICATION STATEMENT OF COMPLIANCE

Permit Number: SAJ-1999 -05418 (LP -JMH)

Permittee's Name & Address (please print or type):			
Telephone Number:			
	Date Work Completed:		
	BLE WITHOUT PRIOR NOTIFICATION: YESNO AT CTION		
Description of the Work (e.g. b etc.):	ank stabilization, residential or commercial filling, docks, dredging,		
Acreage or Square Feet of Impa	acts to Waters of the United States:(if applicable):		
	Permit (attach drawing(s) depicting the deviations):		
	********************** gation (if applicable) was done in accordance with the limitations and ermit. Any deviations as described above are depicted on the attached		
	Signature of Permittee		
	Date		