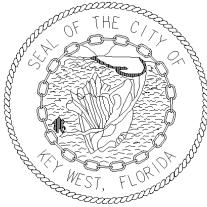


CONTRACT DOCUMENTS FOR:



ITB # 23-015

STAPLES AVENUE BRIDGE

JUNE 2023

CITY OF KEY WEST

MAYOR: TERI JOHNSTON

COMMISSIONERS:

JIMMY WEEKLEY

SAMUEL KAUFMAN

BILLY WARDLOW

LISSETTE CAREY

MARY LOU HOOVER

CLAYTON LOPEZ

PREPARED BY:
Engineering Department

CITY OF KEY WEST

KEY WEST, FLORIDA

DOCUMENTS

For

STAPLES AVENUE BRIDGE

ITB # 23-015

CONSISTING OF:

BIDDING REQUIREMENTS
CONTRACT FORMS
CONDITIONS OF THE CONTRACT
GENERAL REQUIREMENTS
TECHNICAL SPECIFICATIONS
ENGINEERED DRAWINGS

JUNE 2023

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PART 1

BIDDING REQUIREMENTS

INVITATION TO BID

Sealed Bids for City of Key West “**ITB #23-015 STAPLES AVENUE BRIDGE**” addressed to the City of Key West, will be received at the office of the City Clerk, 1300 White Street, Key West, Florida until **3:00 p.m.**, local time, on **July 5th, 2023**, and then will be publicly opened and read.

Please submit one (1) original bid package and two (2) electronic copies on USB drives with a single PDF file of the entire bid package. Bid package shall be enclosed in a sealed envelope, clearly marked on the outside “**ITB #23-015 STAPLES AVENUE BRIDGE**” addressed and delivered to the City Clerk at the address noted above.

The CITY is seeking BIDS from qualified contractors to remove the existing bridge structure and replace with a prefabricated aluminum bridge, along with the construction of an ADA compliant ramp system for pedestrian use, as well as foundation, ramp segments, site related work, landscape transplanting and ancillary features, all in accordance with the Scope of Services and engineered drawings.

The full Invitation to Bid may be obtained from Demand Star by Onvia. Please contact Demand Star at www.demandstar.com or call 1-800-711-1712.

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.

For information concerning the proposed work please contact Ryan Stachurski, Multimodal Transportation Coordinator, Engineering Services by email at Ryan.Stachurski@cityofkeywest-fl.gov. Please include:

“**ITB #23-015 STAPLES AVENUE BRIDGE**” in the subject line of email requests. Verbal communications, per the City’s “Cone of Silence” ordinance are not allowed.

As stated above at the time of the BID submittal the Bidder must provide satisfactory documentation of State Licenses. The Bidder shall furnish documentation showing that he/she is in compliance with the licensing requirements of County, and City licenses as would be required within ten days of the award. The successful Bidder must also be able to satisfy the City Attorney as to such insurance coverage and legal requirements as may be demanded by the Proposal in question. The CITY may reject BID for any and/or all of the following reasons: (1) for budgetary reasons, (2) if the proposer misstates or conceals a material fact in its bid, (3) if the proposal does not strictly conform to the law or is non-responsive to the bid requirements, (4) if the proposal is conditional, or (5) if a change of circumstances occurs making the purpose of the proposal 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 proposal.

The City retains the right to award bid to the bidder that best meet the needs of the City.

* * * * *

INSTRUCTIONS TO BIDDERS

1. CONTRACT DOCUMENTS

A. FORMAT

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

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

Should there be any doubt as to the meaning or intent of said Contract Documents, the Bidder should request of the City Engineer, in writing **at least 9 calendar days prior (June 26, 2023) 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 Bids an indication of receipt of all Addenda. The Owner will not be responsible for any other explanation or interpretations of said Documents.

2. SCOPE OF SERVICES

Project includes all construction related activities per attached engineered drawings including the following:

Removal of the existing bridge structure to allow replacement with a prefabricated aluminum bridge, along with the construction of an ADA compliant ramp system for pedestrian use, as well as foundation, ramp segments, site related work, landscape transplanting, and ancillary features, all in accordance with the Scope of Services and engineered drawings.

Project additionally includes 102 LF of FDOT Design Standard Type D curb to construct planting locations nearby for the transplanted protected trees within the project area.

The existing bridge currently accommodates approximately 1,700 trips a day, and the Contractor will be responsible to install and maintain a Maintenance of Traffic (MOT) plan to divert bicycle traffic to Flagler Boulevard. From 8th Street to 10th Street two-way bicycle traffic will need to be detoured to Flagler Boulevard by shutting down one of the west bound lanes. It is important to have materials staged appropriately to minimize the downtime for the removal of the existing structure and installation of the new facility so as to minimize the MOT duration. The focus should be on getting the bridge and approach ramp sections installed first, before the ADA ramps are constructed.

The intent of this Scope of Work is to describe a functionally complete project (or part thereof) to be constructed in accordance with all applicable codes. Any work, materials, or

equipment that may reasonably be inferred from this Scope of Work, as being required to produce the intended result shall be supplied whether or not specifically called for.

3. **REQUIRED QUALIFICATIONS**

The prospective Proposers must meet the statutorily prescribed requirements before award of Contract by the City. Proposers must hold or obtain all licenses and/or certificates as required by the State and Local Statutes in order to bid and perform the work specified herein.

4. **BIDDER'S UNDERSTANDING**

Each Proposer must inform himself/herself of the conditions relating to the execution of the work and make himself/herself thoroughly familiar with all the Contract Documents. Failure to do so will not relieve the successful Proposer of his/her obligation to enter into a Contract and complete the contemplated work in strict accordance with the Contract Documents.

Each Proposer shall inform himself/herself of, and the Proposer 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, permits, fees, and similar subjects.

5. **TYPE OF BID**

UNIT PRICE

The Bid for the work is to be submitted on Unit Price basis. All items required to complete the work specified but not included in the BID shall be considered incidental to those set forth in the Proposal. Payment to the Contractor will be made on work actually performed by the Contractor, as specified in the Contract Documents.

The total contract base bid price shall be the sum of the extended prices for all work described in the City of Key West's drawings and specifications.

6. **PREPARATION OF BIDS**

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 both words and figures where required. No changes shall be made in the phraseology of the forms. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures. 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. SIGNATURE

The Bidder shall sign his/her BID in the blank space provided therefor. 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.

C. SPECIAL BIDDING REQUIREMENTS

The Bidder's attention is brought to the hiring practices and licenses and permits of the City of Key West. These are defined in the addition to Article 39, ORDINANCES, PERMITS, AND LICENSES, as set forth in the Supplementary Conditions.

The Bidder shall submit with his/her Bid his/her experience record showing his/her experience and expertise in *roadway and sidewalk construction* and related work. Such experience record shall provide at least five current or recent projects of similar work, not more than 5 years old within the State Florida and preferably Monroe County. 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.

The bidder shall submit at least 3 references from the above work experience.

D. ATTACHMENTS

Bidder shall complete and submit the following forms with his/her bid:

1. Anti-Kickback Affidavit
2. Public Entity Crimes Form
3. City of Key West Indemnification Form
4. Equal Benefits for Domestic Partners Affidavit
5. Cone of Silence
6. Local Vendor Certification
7. Non-Collusion Affidavit
8. Scrutinized Companies List Certification
9. Proof of Required Insurance

E. PUBLIC ENTITY CRIMES FORM

Pursuant to the requirements of Chapter 287.133, Laws of Florida, pertaining to the sworn statement on Public Entity Crimes and the Convicted Vendor List, all Bidders shall submit a signed and notarized statement with their 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, the CONTRACTOR, as required by the laws and statutes of the state and its political subdivisions, shall pay all state and local sales and use taxes. 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. SUBMISSION OF BID PROPOSALS

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 Proposal forms provided herewith, submit one (1) original and two (2) USB drives each with a single file of the entire bid proposal package.

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.

9. MODIFICATION OR WITHDRAWAL OF BID

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.

10. 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 five (5) percent of the total amount of the Proposal submitted. This bid security shall be given as a guarantee that the Bidder will not withdraw his/her BID for a period of ninety (90) 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. Agent and Surety phone numbers must be provided.

The Attorney-in-Fact who executes this bond in behalf of the Surety must attach a notarized copy of his/her power-of-attorney as evidence of his/her 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/she shall use the Bid Bond form bound herewith, or one conforming substantially thereto in form and content.

11. **RETURN OF BID SECURITY**

Within fifteen (15) days after the award of the Contract, the City 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(s) has been finally executed, after which all Bid securities, other than Bidder's Bonds and any guarantees which have been forfeited, will be returned to the respective Bidders whose Bids they accompanied.

12. **AWARD OF CONTRACT**

Within ninety (90) calendar days after the opening of Bids the City will accept one of the Bids. 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. The City reserves the right to accept or reject any or all Bids and to waive any formalities and irregularities in said Bids.

13. **BASIS OF AWARD**

The award will be made by the Owner on the basis of the BID from the lowest, responsive, responsible BIDDER which, in the Owner's sole and absolute judgment will best serve the interest of the Owner.

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 CITY, 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 CITY. The Surety furnishing this bond shall have a sound financial standing and a record of service satisfactory to the CITY, 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. The CONTRACTOR shall supply the OWNER with phone numbers, addresses, and contacts for the Surety and their agents. Pursuant to Section 255.05(7), Florida Statutes, in lieu of the bond required by law, the contractor may file with the city an alternative form of security in the form of cash, a money order, a certified check, a cashier's check or an irrevocable letter of credit.

B. **POWER-OF-ATTORNEY**

The Attorney-in-Fact (Resident Agent) who executes this Performance and Payment Bond on behalf of the Surety must attach a notarized copy of his/her power-of-attorney as evidence of his/her 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/her and who fails to promptly and properly execute the Contract or furnish the required Bonds shall forfeit the bid security that accompanied his/her bid, and the bid security shall be retained as liquidated damages by the CITY, and it is agreed that this said sum is a fair estimate of the amount of damages the CITY 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. **PUBLIC RECORDS REQUIREMENTS**

In addition to other contract requirements provided by law, each public agency contract for services must include a provision that requires the contractor to comply with public records laws, specifically to (a) keep and maintain public records that ordinarily and necessarily would be required by the public agency in order to perform the service; (b) provide the public with access to public records on the same terms and conditions that the public agency would provide the records and at a cost that does not exceed the cost provided in this chapter or as otherwise provided by law; (c) ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law; and (d) meet all requirements for retaining public records and transfer, at no cost, to the public agency all public records in possession of the contractor upon termination of the contract and destroy any duplicate public records that exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the public agency in a format that is compatible with the information technology systems of the public agency. If a contractor does not comply with a public records request, the public agency shall enforce the contract provisions in accordance with the contract.

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

18. **PERFORMANCE OF WORK BY SUBCONTRACTOR**

Each Bidder must furnish with his/her proposal a list of SUBCONTRACTOR performed items and the estimated value of each item.

19. **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 only be allowed in accordance with the provisions stated in the General Conditions. Time allowed for completion of the work authorized is stated in Bid.

When the Contractor receives a Notice to Proceed, he/she shall commence work and shall complete all work within the number of calendar days stipulated in the Contract.

The term of this contract will be one hundred and twenty (**120**) calendar days.

BID FORM

To: City of Key West, Florida

Address: 1300 White Street, Key West, Florida 33040

Project Title: STAPLES AVENUE BRIDGE

Project No.: ITB # 23-015

Bidder's person to contact for additional information on this Bid:

Company Name: _____

Contact Name & Telephone #: _____

Email Address: _____

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/she has carefully examined the Contract Documents, that he/she has personally inspected the Project, that he/she has satisfied himself/herself 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 Proposal.

The Bidder further agrees that the Owner may "non-perform" the work in the event that the low bid is in excess of available funding. Non-performance will be determined prior to Notice of Award.

The intent of the Bid Documents is to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents. Any work, materials, or equipment that may reasonably be inferred from the Contract Documents, as being required to produce the intended result shall be supplied, whether or not specifically called for in the Contract Documents.

CONTRACT EXECUTION AND BONDS

The Bidder agrees that if this Bid is accepted, he/she will, within 10 days after Notice of Award, sign and deliver the Contract in the form annexed hereto, and will also at that time, deliver to the City the Performance Bond and Payment Bond required herein, and evidence of holding required licenses and certificates, and will, to the extent of his/her Bid, furnish all machinery, tool, 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 City, before commencing the work under this Contract, the certificates of insurance as specified in these Documents.

START OF CONSTRUCTION AND CONTRACT COMPLETION TIME

The Bidder agrees to begin work upon receipt of the Notice to Proceed and to fully complete all work under this contract within One Hundred & Twenty (**120**) calendar days.

This Contract will automatically expire and be terminated on final acceptance by the Owner.

LIQUIDATED DAMAGES

In the event the Bidder is awarded the Contract and fails to complete the work within the time limit or extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages shall be paid to the Owner at the rate of **\$250.00** per day for all work awarded until the work has been satisfactorily completed as provided by the Contract Documents. Sundays and legal holidays shall be excluded in determining days in default.

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/she has received Addenda No's. _____, _____, _____, _____. (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/her 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.

LUMP SUM WORK ITEMS

The Proposal for the work is to be submitted on lump sum basis. All items required to complete the work specified but not included in the Proposal shall be considered incidental to those set forth in the Proposal. Payment to the Contractor will be made on work actually performed by the Contractor, as specified in the Contract Documents.

The Bidder further proposes to accept as full payment for the Work proposed herein, the amounts computed under the provisions of the Contract Documents and based on the following individual lump sum amounts. The Bidder agrees that the lump sum pricing include all allowances for overhead and profit for each type and unit of work called for in these Contract Documents.

* * * * *

BID PROPOSAL FORM
STAPLES AVENUE BRIDGE
ITB 23-015

LUMP SUM BID AND SCHEDULE OF VALUES

Bid prices stated in this proposal include all costs and expenses for labor, equipment, materials, disposal and contractor's overhead and profit. Prices for the various work line 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.

The Bidder shall submit a Schedule of Values with the Bid. It shall be broken down by trade and type of work and it shall be used as a basis for payment. The Bidder will be considered non-responsive if Schedule of Values is not included in the Bid package.

1. Mobilization, General/Supp. Conditions, Demobilization	1	LS	\$ _____
2. Bridge and Foundation	1	LS	\$ _____
3. Site Work, Ramps, and Landscaping	1	LS	\$ _____

TOTAL OF ALL LINE ITEMS (1-3):

Total of lump sum items \$ _____
(numeric)

_____ Dollars
(amount written in words)

& _____ Cents

NOTE: THE TOTAL BID WILL BE THE BASIS OF EVALUATING LOW BIDDER AND BASIS OF AWARD

CONTRACTOR'S PROJECTED OPERATIONS LOAD AND COST ESTIMATE

List items to be performed by Contractor's own forces and the estimated total cost of these items.
(Use additional sheets if necessary.)

SUBCONTRACTORS

The Bidder further proposes that the following subcontracting firms or businesses will be awarded subcontracts for the following portions of the work in the event that the Bidder is awarded the Contract:

Portion of Work

Name

Street _____, _____, _____, _____, Zip _____

Portion of Work

Name

Street _____, _____, _____, _____, Zip _____

Portion of Work

Name

Street _____, _____, _____, _____, Zip _____

Portion of Work

Name

Street _____, _____, _____, _____, Zip _____

SURETY

BIDDER

email address

which is the address to which all communications concerned with this Bid and with the Contract shall be sent

The names of the principal officers of the corporation submitting this Bid, or of the partnership, or of all persons interested in this Bid as principals are as follows:

Name _____ Title _____

If Sole Proprietor or Partnership

IN WITNESS hereto the undersigned has set his/her (its) hand this ____ day of _____ 2023.

Signature of Bidder

Title

If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this ____ day of _____ 2023.

(SEAL)

Name of Corporation

By _____

Title _____

Attest _____
Secretary

EXPERIENCE OF BIDDER

The Bidder states that he/she is an experienced Contractor and has completed similar projects within the last five (5) years.

(List similar projects, with types, names of owners, construction costs, Engineers, and references with phone numbers. Use additional sheets if necessary.)

* * * * *

FLORIDA BID BOND

BOND NO. _____

AMOUNT: \$ _____

KNOW ALL MEN BY THESE PRESENTS, that _____

hereinafter called the PRINCIPAL, and _____

a corporation duly organized under the laws of the State of _____

having its principal place of business at _____

_____ in the State of _____, and authorized to do business in the State of Florida, as SURETY, are held and firmly bound unto

hereinafter CITY OF KEY WEST called the OBLIGEE, in the sum of _____

_____ DOLLARS (\$_____) for the payment for which we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these present.

THE CONDITION OF THIS BOND IS SUCH THAT:

WHEREAS, the PRINCIPAL is herewith submitting his/her or its Bid Proposal for **ITB #23-015 STAPLES AVENUE BRIDGE**, said Bid Proposal, by reference thereto, being hereby made a part hereof.

WHEREAS, the PRINCIPAL contemplates submitting or has submitted a bid to the OBLIGEE for the furnishing of all labor, materials (except those to be specifically furnished by the CITY), equipment, machinery, tools, apparatus, means of transportation for, and the performance of the work covered in the Proposal and the detailed Scope of Work, entitled:

ITB #23-015
STAPLES AVENUE BRIDGE

WHEREAS, it was a condition precedent to the submission of said bid that a cashier's check, certified check, or bid bond in the amount of 5 percent of the base bid be submitted with said bid as a guarantee that the Bidder would, if awarded the Contract, enter into a written Contract with the CITY for the performance of said Contract, within 10 working days after written notice having been given of the award of the Contract.

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 base bid, satisfactory to the CITY, 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 _____, 2023.

By _____
PRINCIPAL

SURETY

By _____
Attorney-In-Fact

ANTI-KICKBACK AFFIDAVIT

STATE OF _____)

: SS

COUNTY OF _____)

I, the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employees of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

By: _____

Sworn and subscribed before me this _____ day of _____ 2023.

NOTARY PUBLIC, State of Florida at Large

My Commission Expires:

* * * * *

**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 _____
(name of entity submitting sworn statement)
whose business address is _____

and (if applicable) its Federal Employer Identification Number (FEIN) is _____

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 guilty, 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. I understand 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.

8. Based on information and belief, the statement which I have marked below is true in 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 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 of 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.)

The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

(signature)

(date)

STATE OF _____

COUNTY OF _____

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

_____ who, after first being sworn by me, affixed his/her
(name of individual signing)

signature in the space provided above on this _____ day of _____, 2023.

My commission expires:

NOTARY 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 employees on the same basis as it provides benefits to employees' spouses, per City of Key West Code of Ordinances Sec. 2-799.

By: _____

Sworn and subscribed before me this _____ day of _____ 2023.

NOTARY PUBLIC, State of Florida at Large

My Commission Expires:

* * * * *

CONE OF SILENCE AFFIDAVIT

STATE OF _____)

: SS

COUNTY OF _____)

I, the undersigned hereby duly sworn, depose and say that all owner(s), partners, officers, directors, employees and agents representing the firm of _____
have read and understand the limitations and procedures regarding communications concerning
City of Key West Code of Ordinances Sec. 2-773 Cone of Silence.

By: _____

Sworn and subscribed before me this

_____ day of _____ 2023.

NOTARY PUBLIC, State of _____ at Large

My Commission Expires: _____

NON-COLLUSION AFFIDAVIT

STATE OF FLORIDA)
SS COUNTY OF MONROE)

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

By: _____

Sworn and subscribed before me this

____ day of _____, 2023.

NOTARY PUBLIC, State of Florida at Large

My Commission Expires: _____

**LOCAL VENDOR CERTIFICATION
PURSUANT TO CITY OF KEY WEST CODE OF ORDINANCES 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:

- a. Principle address as registered with the FL Department of State located within 30 miles of the 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.
- b. Maintains a workforce of at least 50 percent of its employees from the city or within 30 miles of its boundaries.
- c. Having paid all current license taxes and any other fees due the city at least 24 hours prior to the publication of the call for bids or request for proposals.
 - Not a local vendor pursuant to Code od Ordinances Section 2-798
 - Qualifies as a local vendor pursuant to Code od Ordinances 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:

Fax:

(P.O Box numbers may not be used to establish status)

Length of time at this address

Signature of Authorized Representative

Date

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 2023.
By _____, of _____
(Name of officer or agent, title of officer or agent) _____ Name of corporation acknowledging)
or has produced _____ as identification
(type of identification)

Signature of Notary

Return Completed form with
Supporting documents to:

Print, Type or Stamp Name of Notary

City of Key West Purchasing

Title or Rank

**VENDOR CERTIFICATION REGARDING
SCRUTINIZED COMPANIES LISTS**

Respondent Vendor Name:	<hr/>		
Vendor FEIN:	<hr/>		
Vendor's Authorized Representative Name and Title:	<hr/>		
Address:	<hr/>		
City:	State:	Zip:	<hr/>
Phone Number:	<hr/>		
Email Address:	<hr/>		

Section 287.135(2)(a), Florida Statutes, prohibits a company from bidding on, submitting a proposal for, or entering into or renewing a contract for goods or services of any amount if, at the time of contracting or renewal, the company is on the Scrutinized Companies that Boycott Israel List, created pursuant to section 215.4725, Florida Statutes, or is engaged in a boycott of Israel. Section 287.135(2)(b), Florida Statutes, further prohibits a company from bidding on, submitting a proposal for, or entering into or renewing a contract for goods or services over one million dollars (\$1,000,000) if, at the time of contracting or renewal, the company is on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, both created pursuant to section 215.473, Florida Statutes, or the company is engaged in business operations in Cuba or Syria.

As the person authorized to sign on behalf of Respondent, I hereby certify that the company identified above in the section entitled "Respondent Vendor Name" is not listed on either the Scrutinized Companies that Boycott Israel List, Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List I understand that pursuant to section 287.135, Florida Statutes, the submission of a false certification may subject such company to civil penalties, attorney's fees, and/or costs and termination of the contract at the option of the awarding governmental entity.

Certified By: _____, Print Name _____, Print Title _____,

who is authorized to sign on behalf of the above referenced company.

Authorized Signature: _____.

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/her bid.)

1. All Contract Documents thoroughly read and understood
2. All blank spaces in Bid filled in black ink.
3. Total and unit Prices added correctly.
4. Addenda acknowledged.
5. Subcontractors are named as indicated in the Bid.
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 days after receiving a Notice of Award.
11. Bid submitted intact with the volume containing the Bidding Requirements, Contract Forms and Conditions of the Contract, one (1) original, two (2) USB drives.
12. Bid Documents submitted in sealed envelope and addressed and labeled in conformance with the instructions in the Invitation to Bid.
13. Anti-kickback Affidavit.
14. Public Entity Crime Form.
15. City of Key West Indemnification.
16. Equal Benefits for Domestic Partners Affidavit.
17. Cone of Silence.
18. Non-Collusion Affidavit.

- 19. Local Vendor Certification.
- 20. Scrutinized Companies List Verification.
- 21. Proof of Required Insurance.

* * * * *

PART 2

CONTRACT FORMS

DRAFT CONTRACT AGREEMENT

This Contract, made and entered into _____ day of _____ 2023, by and between the City of Key West, hereinafter called the "Owner", and _____, hereinafter called the "Contractor";

WITNESSETH:

The Contractor, in consideration of the sum to be paid him/her by the Owner and of the covenants and agreements herein contained, hereby agrees at his/her own proper cost and expense to do all the work and furnish all the materials, tools, labor, and all appliances, machinery, and appurtenances

Key West, Florida to the extent of the Bid made by the Contractor, dated the _____ day of _____, 2023, all in full compliance with the Contract Documents referred to herein.

The BIDDING REQUIREMENTS, including the signed copy of the BID FORM, the CONTRACT FORMS, DRAWINGS and/or SUPPLEMENTAL INFORMATION (if any), are hereby referred to and by reference made part of this Contract as fully and completely as if the same were fully set forth herein and are mutually cooperative therewith.

In consideration of the performance of the work as set forth in these Contract Documents, the Owner agrees to pay to the Contractor the amount bid in the Bid as adjusted in accordance with the Contract Documents, or as otherwise herein provided, and to make such payments in the manner and at the times provided in the Contract Documents.

The Contractor agrees to complete the work days and to accept as full payment hereunder the amounts computed as determined by the Contract Documents and based on the said Bid.

The Contractor agrees to remedy all defects appearing in the work or developing in the materials furnished and the workmanship performed under this Contract during the warranty period after the date of final acceptance of the work by the Owner, and further agrees to indemnify and save the Owner harmless from any costs encountered in remedying such defects.

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 dates specified in the paragraphs above, plus any extensions thereof allowed, in accordance with Article 58 of the General Conditions.

In the event the Contractor fails to complete the work within the time limit or extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages shall be paid at a rate of **\$250.00** per day. Sundays and legal holidays shall be included in determining days in default.

This contract will automatically expire upon completion of the project. Contractors warranty obligations remain in effect.

IN WITNESS WHEREOF, we, the parties hereto, each herewith subscribe the same this

_____ day of _____, A.D., 2023.

CITY OF KEY WEST

By _____

Printed Albert Childress,

Title City Manager

CONTRACTOR

By _____

Printed _____

Title _____

APPROVED AS TO FORM

Attorney for Owner

* * * * *

FLORIDA 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 the **CITY OF KEY WEST**, hereinafter called the CITY (Obligee), in the sum of:

_____ DOLLARS (\$ _____), 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 _____, 2023, to furnish at his/her 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;

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/her obligation there under, including the Contract Documents (which include the scope of work 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 (Not required as part of this contract), 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/her 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 _____, 2023, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACTOR

By: _____

(SEAL)

ATTEST

SURETY

By: _____

(SEAL)

ATTEST

FLORIDA PAYMENT 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 _____

_____, 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, hereinafter called the City (Obligee), in the sum of:

_____**DOLLARS(_____),**
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:

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT:

WHEREAS, the CONTRACTOR has executed and entered into a certain Contract for

ITB # 23-015 STAPLES AVENUE BRIDGE, attached hereto, with

the CITY, dated _____, 2023, to furnish at his/her 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.

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/her obligation thereunder, including the Contract Documents, which include Scope of work 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 (Not required as part of this contract), 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, the above parties bounded together have executed this instrument

this _____ day of _____, 2023, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACTOR

(SEAL)

By: _____

ATTEST

SURETY

(SEAL)

ATTEST

By: _____

PART 3

CONDITIONS OF THE CONTRACT

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DEFINITIONS

Whenever in the Contract Documents the following terms are used, the intent and meaning shall be interpreted as follows:

1. AS APPROVED

The words "as approved", unless otherwise qualified, shall be understood to be followed by the words "by the ENGINEER for conformance with the Contract Document".

2. AS SHOWN, AND AS INDICATED

The words "as shown" and "as Indicated" shall be understood to be followed by the words "on the Drawings".

3. BIDDER

The BIDDER is person or persons, partnership, firm, or corporation submitting a Bid for the work contemplated.

4. CONTRACT DOCUMENTS

The "Contract Documents" consist of the Bidding Requirements, Contract Forms, Conditions of the Contract, Specifications, Drawings, all modifications thereof incorporated into the Documents before their execution, Change Orders, and all other requirements incorporated by specific reference thereto. These form the Contract.

5. CONTRACTOR

The "CONTRACTOR" is person or persons, partnership, firm, or corporation who enters into the Contract awarded him/her by the OWNER.

6. CONTRACT COMPLETION

The "Contract Completion" is the date the OWNER accepts the entire work as being in compliance with the Contract Documents, or formally waives nonconforming work to extent of nonconformity, and issues the final payment in accordance with the requirements set forth in Article, "Final Payment" of these General Conditions.

7. DAYS

Unless otherwise specifically stated, the term "days" will be understood to mean calendar days. Business day or working day means any day other than Saturday, Sunday, or legal holiday.

8. DRAWINGS

The term "Drawings" refers to the official Drawings, Profiles, cross sections, elevations, details, and other working drawings and supplementary drawings, or reproductions thereof, signed by the ENGINEER, which shows the location, character, dimensions, and details of the work to be performed. Drawings may either be bound in the same book as the balance of the Contract Documents, or bound in separate sets, and are a part of the Contract Documents, regardless of the method of binding, and may also be referred to as PLANS.

9. ENGINEER

Wherever in these Documents the word "ENGINEER" appears, it shall be understood to mean the City Engineer or his/her authorized representative, who will perform the Contract administrative and field inspections as authorized agents of the OWNER.

10. NOTICE

The term "notice" or the requirement to notify, as used in the Contract Documents or applicable state or federal statutes, shall signify a written communication delivered in person or by registered mail to the individual, or to a member of the firm, or to an officer of the corporation for whom it is intended. Certified or registered mail shall be addressed to the last business address known to him/her who gives the notice.

11. OR EQUAL

The term "or equal" shall be understood to indicate that the "equal" Product is equivalent to or better than the Product named in function, performance, reliability, quality, and general configuration. Determination of equality in reference to the Project design requirements will be made by the ENGINEER. Such equal Products shall not be purchased or installed by the CONTRACTOR without written authorization.

12. OWNER

Wherever in these Documents the word "OWNER" appears, it shall be understood to mean the City of Key West whose address is P.O. Box 1409, Key West, Florida 33041-1409.

13. SPECIFICATIONS

The term "Specifications" refers to those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards, and workmanship as applied to the work and certain administrative details applicable thereto. Where standard specifications, such as those of FDOT, ASTM, AASHTO, etc., have been referred to, the applicable portions of such standard specifications shall become a part of these Contract Documents. If referenced specifications conflict with specifications contained herein, the requirements contained herein shall prevail.

14. SUBCONTRACTOR

The "SUBCONTRACTOR" is person or persons, partnership, firm or corporation who enters into a contract with the CONTRACTOR to perform work awarded to the CONTRACTOR by the OWNER.

15. NOTICE TO PROCEED

A written notice given by the OWNER to the CONTRACTOR (with a copy to the ENGINEER) fixing the date on which the Contract time will commence to run and on which the CONTRACTOR shall start to perform his/her obligation under the Contract Documents. The Notice to Proceed will be given within 30 days following the execution of the Contract by the OWNER.

16. SUBSTANTIAL COMPLETION

"Substantial Completion" shall be that degree of completion of the Project or a defined portion of the Project, as evidenced by the ENGINEER's written notice of Substantial Completion, sufficient to Provide the OWNER, at his/her discretion, the full-time use of the Project or defined portion of the Project for the purposes for which it was intended. "Substantial Completion" of an operating facility shall be that degree of completion that has Provided a minimum of 7 continuous days of successful, trouble-free, operation, which period shall begin after all performance and acceptance testing has been successfully demonstrated to the ENGINEER. All equipment contained in the work, plus all other components necessary to enable the OWNER to operate the facility in a manner that was intended, shall be complete on the substantial completion date.

17. WORK

The word “work” within these Contract Documents shall include all material, labor, tools, and all appliances, machinery, transportation, and appurtenances necessary to perform and complete the Contract, and such additional items not specifically indicated or described which can be reasonably inferred as belonging to the item described or indicated and as required by good Practice to Provide a complete and satisfactory system or structure. As used herein, “Provide” shall be understood to mean “furnish and install, complete in-place”.

CONTRACT DOCUMENTS

18. INTENT OF CONTRACT DOCUMENTS

The Contract Documents are complementary, and what is called for by one shall be as binding as if called for by all. The intent of the Documents is to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any work, materials, or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result shall be supplied whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe work, materials, or equipment, such words shall be interpreted in accordance with that meaning.

Reference to standard specifications, manuals, or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or laws or regulations in effect on the first published date of the Invitation to Bid, except as may be otherwise specifically stated. However, no Provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their consultants, agents, or employees from those set forth in the Contract Documents, nor shall it be effective to assign to ENGINEER, or any ENGINEER’s consultants, agents, or employees, any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibility contrary to the Provisions of Article LIMITATIONS ON ENGINEER’S RESPONSIBILITIES.

19. DISCREPANCIES AND OMISSIONS

Any discrepancies or omissions found in the Contract Documents shall be reported to the ENGINEER immediately. The ENGINEER will clarify discrepancies or omissions, in writing, within a reasonable time.

In resolving inconsistencies among two or more sections of the Contract Documents, Precedence shall be given in the following order:

- A. CONTRACT
- B. BID
- C. SUPPLEMENTARY CONDITIONS
- D. INVITATION TO BID
- E. INSTRUCTIONS TO BIDDERS
- F. GENERAL CONDITIONS
- G. SPECIFICATIONS
- H. DRAWINGS

Addenda shall take Precedence over all sections referenced therein. Figure dimensions on Drawings shall take precedence over scale dimensions. Detailed Drawings shall take precedence over general Drawings.

20. CHANGES IN THE WORK

The OWNER, without notice to the Sureties and without invalidating the Contract, may order changes in the work within the general scope of the Contract by altering, adding to, or deducting from the work, the Contract being adjusted accordingly. All such work shall be executed under the conditions of the original Contract, except as specifically adjusted at the time of ordering such change.

In giving instructions, the ENGINEER may order minor changes in the work not involving extra cost and not inconsistent with the purposes of the Project, but otherwise, except in an emergency endangering life and Property, additions or deductions from the work shall be performed only in pursuance of an approved Change Order from the OWNER, countersigned by the ENGINEER.

If the work is reduced by alterations, such action shall not constitute a claim for damages based on loss of anticipated Profits.

21. EXAMINATION AND VERIFICATION OF CONTRACT DOCUMENTS

The CONTRACTOR shall thoroughly examine and become familiar with all of the various parts of these Contract Documents and determine the nature and location of the work, the general and local conditions, and all other matters, which can in any way affect the work under this Contract. Failure to make an examination necessary for this determination shall not release the CONTRACTOR from the obligations of this Contract. No verbal agreement or conversation with any officer, agent, or employee of the OWNER or with the ENGINEER either before or after the execution of this Contract shall affect or modify any of the terms or obligations herein contained.

22. DOCUMENTS TO BE KEPT ON THE JOBSITE

The CONTRACTOR shall keep one copy of the Contract Documents on the job- site, in good order, available to the ENGINEER and to his/her representatives.

The CONTRACTOR shall maintain on a daily basis at the jobsite, and make available to the ENGINEER on request, one current record set of the Drawings which have been accurately marked to indicate all modifications in the completed work that differ from the design information shown on the Drawings. Upon Substantial completion of the work, the CONTRACTOR shall give the ENGINEER one complete set of these marked up record Drawings.

23. ADDITIONAL CONTRACT DOCUMENTS

Copies of Contract Documents or Drawings may be obtained on request from the ENGINEER and by paying the actual cost of reproducing the Contract Documents or Drawings.

24. OWNERSHIP OF CONTRACT DOCUMENTS

All portions of the Contract Documents, and copies thereof furnished by the ENGINEER are instruments of service for this Project. They are not to be used on other work and are to be returned to the ENGINEER on request at the completion of the work. Any reuse of these materials without specific written verification or adaptation by the ENGINEER will be at the risk of the user and without liability or legal expense to the ENGINEER. Such user shall hold the ENGINEER harmless from any and all damages, including reasonable attorneys' fees, from any and all claims arising from any such reuse. Any such verification and adaptation shall entitle the ENGINEER to further compensation at rates to be agreed upon by the user and the ENGINEER.

THE ENGINEER

25. AUTHORITY OF THE ENGINEER

The ENGINEER will be the OWNER's representative during the construction period. His/Her authority and responsibility will be limited to the Provisions set forth in these Contract Documents. The ENGINEER will have the Authority to reject work that does not conform to the Contract Documents. However, neither the ENGINEER's authority to act under this Provision, nor any decision made by him/her in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the ENGINEER to the CONTRACTOR, any SUBCONTRACTOR, their respective Sureties, any of their agents or employees, or any other person performing any of the work.

26. DUTIES AND RESPONSIBILITIES OF THE ENGINEER

The ENGINEER will make visits to the site at intervals appropriate to the various stages of construction to observe the Progress and quality of the work and to determine, in general, if the work is proceeding in accordance with the intent of the Contract Documents. He/She will not make comprehensive or continuous review or observation to check quality or quantity of the work, and he/she will not be responsible for construction means, methods, techniques, sequences, or Procedures, or for safety Precautions and Programs in connection with the work. Visits and observations made by the ENGINEER shall not relieve the CONTRACTOR of his/her obligation to conduct comprehensive inspections of the work and to furnish materials and perform acceptable work, and to provide adequate safety Precautions, in conformance with the intent of the Contract.

The ENGINEER will make recommendations to the OWNER, in writing, on all claims of the OWNER or the CONTRACTOR arising from interpretation or execution of the Contract Documents. Such recommendations will be of factual and/or technical nature, and will not include the legal interpretation of the Contract Documents. Any necessary legal interpretation of the Contract Document will be made by the OWNER. Such recommendation shall be necessary before the CONTRACTOR can receive additional money under the terms of the Contract. Changes in work ordered by the ENGINEER shall be made in compliance with Article CHANGES IN THE WORK.

One or more Project representatives may be assigned to observe the work. It is understood that such Project representatives shall have the authority to issue notice of nonconformance and make decisions within the limitations of the authority of the ENGINEER. The CONTRACTOR shall furnish all reasonable assistance required by the ENGINEER or Project representatives for Proper observation of the work. The above-mentioned Project representatives shall not relieve the CONTRACTOR of his/her obligations to conduct comprehensive inspections of the work and to furnish materials and perform acceptable work, and to provide adequate safety Precautions, in conformance with the intent of the Contract.

27. LIMITATIONS ON ENGINEER'S RESPONSIBILITIES

ENGINEER will not be responsible for CONTRACTOR's means, methods, techniques, sequences, or Procedures of construction, or the safety Precautions and Programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR's failure to perform or furnish the work in accordance with the Contract Documents.

ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any SUBCONTRACTOR, any supplier, or of any other person or organization performing or furnishing any of the work.

Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed", "as approved", or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "Proper", or "satisfactory", or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of ENGINEER as to the work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to ENGINEER any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibility contrary to the Provisions of this Article.

28. REJECTED WORK

Any defective work or nonconforming materials or equipment that may be discovered at any time prior to expiration of the warranty period shall be removed and replaced by work which shall conform to the Provisions of the Contract Documents. Any material condemned or rejected shall be removed at once from the Project site.

Failure on the part of the ENGINEER to condemn or reject bad or inferior work or to note nonconforming materials or equipment on CONTRACTOR submittals shall not be construed to imply acceptance of such work. The OWNER shall reserve and retain all of its rights and remedies at law against the CONTRACTOR and its Surety for correction of any and all latent defects discovered after the guarantee period.

29. LINES AND GRADES

Lines and grades shall be established as provided in the supplementary conditions. All stakes, marks, and other reference information shall be carefully preserved by the CONTRACTOR, and in case of their careless or unnecessary destruction or removal by him/her or his/her employees, such stakes, marks, and other information shall be replaced at the CONTRACTOR's expense.

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/her work. The CONTRACTOR shall be responsible for maintaining and re-establishing at his/her expense, all control points. After completion of his/her construction, he/she shall reset all permanent monuments at their original locations and elevations through the use of registered surveys.

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 attached to each Work Order, 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.

30. SUBMITTALS

After checking and verifying all field measurements and after complying with applicable Procedures specified in Division I, GENERAL REQUIREMENTS, CONTRACTOR shall submit to ENGINEER, in accordance with the schedule for submittals for review, shop drawings, electrical diagrams, and catalog cuts for fabricated items and manufactured items (including mechanical and electrical equipment), which shall bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submittal. All submittals shall be identified as ENGINEER may require. The data shown shall be complete with respect to quantities, dimensions specified, performance and design criteria, materials, and similar data to enable ENGINEER to review the information. CONTRACTOR shall also submit to ENGINEER for review, with such promptness as to cause no delay in work, all samples required by the Contract Documents. All samples shall have been checked by and accompanied by a specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission and shall be identified clearly as to material, supplier, pertinent data such as catalog numbers and the use for which intended.

Before submission of each submittal, CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar data with respect thereto and reviewed or coordinated each submittal with other submittals and with the requirements of the work and the Contract Documents.

At the time of each submission, CONTRACTOR shall give ENGINEER specific written notice of each variation that the submittal may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each shop drawing submitted to ENGINEER for review and approval of each variation.

ENGINEER will review submittals with reasonable Promptness, but ENGINEER's review will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences, or Procedures of construction (except where a specific means, method, technique, sequence, or Procedure of construction is indicated in or required by the Contract Documents) or to safety Precautions or Programs incident thereto. The review of a separate item as

such will not indicate review of the assembly in which the item functions. 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. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on Previous submittals.

ENGINEER's review of submittals shall not relieve CONTRACTOR from the responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of submission and ENGINEER has given written approval of each such variation by a specific written notation thereof incorporated therein or accompanying the shop drawing or sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for errors or omissions in the shop drawings or from responsibility for having complied with the Provisions herein.

Where a shop drawing or sample is required by the specifications, any related work performed prior to ENGINEER's review and approval of the pertinent submission shall be at the sole expense and responsibility of the CONTRACTOR.

31. DETAIL DRAWINGS AND INSTRUCTIONS

The ENGINEER will furnish, with reasonable Promptness, additional instructions by means of Drawings or otherwise, if, in the ENGINEER's opinion, such are required for the Proper execution of the work. All such Drawings and instructions will be consistent with the Contract Documents, true developments thereof, and reasonably inferable there from.

THE CONTRACTOR AND HIS/HER EMPLOYEES

32. CONTRACTOR, AN INDEPENDENT AGENT

The CONTRACTOR shall independently perform all work under this Contract and shall not be considered as an agent of the OWNER or of the ENGINEER, nor shall the CONTRACTOR's SUBCONTRACTORS or employees be subagents of the OWNER or of the ENGINEER.

A. ASSIGNMENT OF CONTRACT

Assignment of any part or the whole of this Contract shall be subject to review and approval of the City Commission

33. SUBCONTRACTING

Unless modified in the Supplementary Conditions, within 10 days after the execution of the Contract, the CONTRACTOR shall submit to the ENGINEER the names of all SUBCONTRACTORS Proposed for the work, including the names of any SUBCONTRACTORS that were submitted with the Bid. The CONTRACTOR shall not employ any SUBCONTRACTORS to which the OWNER may object to as lacking capability to properly perform work of the type and scope anticipated.

The CONTRACTOR is as fully responsible to the OWNER for the acts and omissions of his/her SUBCONTRACTORS and of persons either directly or indirectly employed by them as he/she is for the acts and omissions of persons directly employed by him/her.

Nothing contained in the Contract Documents shall create any contractual relationship between any SUBCONTRACTOR and the OWNER or ENGINEER.

34. INSURANCE AND LIABILITY

CONTRACTOR shall maintain limits no less than those stated below:

GENERAL INSURANCE REQUIREMENTS

- 1.01 During the Term of the Agreement, the Contractor shall provide, pay for, and maintain with insurance companies satisfactory to the City of Key West, Florida ("City"), the types of insurance described herein.
- 1.02 All insurance shall be from responsible insurance companies eligible to do business in the State of Florida. The required policies of insurance shall be performable in Monroe County, Florida, and shall be construed in accordance with the laws of the State of Florida.
- 1.03 The City shall be specifically included as an additional insured on the Contractor's Liability policies with the exception of the Contractor's Professional Liability policies (if required) and shall also provide the "Severability of Interest" provision (a/k/a "Separation of Insured's" provision). The City's additional insured status should be extended to all Completed Operations coverages.
- 1.04 The Contractor shall deliver to the City, prior to commencing work/activities under the Agreement, properly executed "Certificate(s) of Insurance" setting forth the insurance coverage and limits required herein. The Certificates must be signed by the authorized representative of the insurance company(s) shown on the Certificate of Insurance. In addition, certified, true, and exact copies of the insurance policies required herein shall be provided to the City, on a timely basis, if requested by the City.
- 1.05 If the Contractor fails to provide or maintain the insurance coverages required in this Agreement at any time during the Term of the Agreement and if the Contractor refuses or otherwise neglects to deliver the required Certificate(s) of Insurance signed by the authorized representative of the insurance company(s) to the City, the City may, at the City's sole discretion, terminate or suspend this Agreement and seize the amount of Contractor's performance bond, letter of credit, or other security acceptable to the City).
- 1.06 The Contractor shall take immediate steps to make up any impairment to any Aggregate Policy Limit upon notification of the impairment. If at any time the City requests a written statement from the insurance company(s) as to any impairment to the Aggregate Limit, the Contractor shall promptly authorize and have delivered such statement to the City.
- 1.07 The Contractor authorizes the City and/or its insurance consultant to confirm all information furnished to the City, as to its compliance with its Bonds and Insurance Requirements, with the Contractor's insurance agents, brokers, surety, and insurance carriers.
- 1.08 All insurance coverage of the Contractor shall be primary to any insurance or self-insurance program carried by the City. The City's insurance or self-insurance programs or coverage shall not be contributory with any insurance required of the Contractor in this Agreement.
- 1.09 The acceptance of delivery to the City of any Certificate of Insurance evidencing the insurance coverage and limits required in the Agreement does not constitute approval or agreement by the City that the insurance requirements in the Agreement have been met or that the insurance policies shown in the Certificates of Insurance are in compliance with the Agreement requirements.
- 1.10 No work/activity under this Agreement shall commence or continue unless and until the required Certificate(s) of Insurance are in effect and the written Notice to Proceed is issued by the City.
- 1.11 The insurance coverage and limits required of the Contractor under this Agreement are designed to meet the minimum requirements of the City. They are not designed as a recommended insurance program for the Contractor. The Contractor alone shall be responsible for the sufficiency of its own insurance program. Should the Contractor have any question concerning its exposures to loss under this Agreement or the possible insurance coverage needed therefore, it should seek professional assistance.
- 1.12 During the Term of this Agreement, the City and its agents and contractors may continue to engage in necessary business activities during the operations of the Contractor. No personal

property owned by City used in connection with these business activities shall be considered by the Contractor's insurance company as being in the care, custody, or control of the Contractor.

1.13 Should any of the required insurances specified in this Agreement provide for a deductible, self-insured retention, self-insured amount, or any scheme other than a fully insured program, the Contractor shall be responsible for all deductibles and self-insured retentions.

1.14 All of the required insurance coverages shall be issued as required by law and shall be endorsed, where necessary, to comply with the minimum requirements contained herein.

1.15 All policies of insurance required herein shall require that the insurer give the City thirty (30) days advance written notice of any cancellation, intent not to renew any policy and/or any change that will reduce the insurance coverage required in this Agreement, except for the application of the Aggregate Limits Provisions.

1.16 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 termination of the Agreement due to lack of proof of the insurance coverage required of the Contractor.

1.17 If the Contractor utilizes contractors or sub-contractors to perform any operations or activities governed by this Agreement, the Contractor will ensure all contractors and sub-contractors to maintain the same types and amounts of insurance required of the Contractor. In addition, the Contractor will ensure that the contractor and sub-contractor insurances comply with all of the Insurance Requirements specified for the Contractor contained within this Agreement. The Contractor shall obtain Certificates of Insurance comparable to those required of the Contractor from all contractors and sub-contractors. Such Certificates of Insurances shall be presented to the City upon request. Contractor's obligation to ensure that all contractor's and sub-contractor's insurance as provided herein shall not exculpate Contractor from the direct primary responsibility Contractor has to the City hereunder. The City will look directly to Contractor for any such liability hereunder and shall not be obligated to seek recovery from any contractor or subcontract or under such contractor's or sub-contractor's insurance coverages.

SPECIFIC INSURANCE COVERAGES AND LIMITS

2.01 All requirements in this Insurance Section shall be complied with in full by the Contractor unless excused from compliance in writing by the City.

2.02 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 Agreement for all employees engaged in this work under this Agreement, in accordance with the laws of the State of Florida. The minimum acceptable limits shall be:

Workers' Compensation Employer's Liability	Florida Statutory Requirements \$100,000.00 Limit Each Accident \$500,000.00 Limit Disease Aggregate \$100,000.00 Limit Disease Each Employee
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If the Contractor has less than four (4) employees and has elected not to purchase Workers' Compensation/Employers Liability coverage as permitted by *Florida Statutes*, the Contractor will be required to issue a formal letter (on the Contractor's letterhead) stating that it has less than four (4) employees and has elected not to purchase Workers' Compensation/Employers Liability coverage as permitted by *Florida Statutes*. This exception does **not** apply to firms engaged in construction

activities.

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

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 expiration or termination of this Agreement.

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

Business Automobile Liability Insurance shall be maintained by the Contractor as to ownership, maintenance, use, loading and unloading of all owned, non-owned, leased, or hired vehicles with limits of such coverage of not less than:

Bodily Injury	\$300,000.00	Limit Each Accident
Property Damage Liability	\$200,000.00	Limit Each Accident

or

Bodily Injury &		
Property Damage Liability	\$300,000.00	Combined Single Limit Each Accident

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

NO PERSONAL LIABILITY OF PUBLIC OFFICIALS

In carrying out any of the Provisions hereof in exercising any authority granted by the Contract, there will be no personal liability upon any public official.

B. 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/her 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. If requested, CONTRACTOR shall Provide Proof of Florida Licensure for all insurance companies. The City of Key West shall be named as Additional Insured on the insurance certificates.

35. INDEMNITY

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 the Work. This indemnification shall continue beyond the date of completion of the work.

36. EXCLUSION OF CONTRACTOR CLAIMS

In performing its obligations, the ENGINEER and its consultants may cause expense for the CONTRACTOR or its SUBCONTRACTORS and equipment or material suppliers. However, those parties and their sureties shall maintain no direct action against the ENGINEER, its officers, employees, agents, and consultants for any claim arising out of, in connection with, or resulting from the engineering services performed or required to be performed.

37. TAXES AND CHARGES

The CONTRACTOR shall withhold and pay any and all sales and use taxes and all withholding taxes, whether State or Federal, and pay all Social Security charges and also all State Unemployment Compensation charges, and pay or cause to be withheld, as the case may be, any and all taxes, charges, or fees or sums whatsoever, which are now or may hereafter be required to be paid or withheld under any laws.

38. REQUIREMENTS OF STATE LAW FOR PUBLIC WORKS PROJECTS

When the Contract Documents concern public works of the state or any county, municipality, or political subdivision created by its laws, the applicable statutes shall apply. All parties to this Contract shall determine the contents of all applicable statutes and comply with their Provisions throughout the performance of the Contract.

39. CODES, ORDINANCES, PERMITS AND LICENSES

The CONTRACTOR shall keep himself/herself fully informed of all local codes and ordinances, as well as state and federal laws, which in any manner affect the work herein specified. The CONTRACTOR shall at all times comply with said codes and ordinances, laws, and regulations, and Protect and indemnify the OWNER, the ENGINEER and their respective employees, and its officers and agents against any claim or liability arising from or based on the violation of any such laws, ordinances, or regulations. All permits, licenses and inspection fees necessary for Prosecution and completion of the work shall be secured and paid for by the CONTRACTOR, unless otherwise specified.

A. PERMIT FOR WORK WITHIN LOCAL RIGHTS OF WAY

The CONTRACTOR shall obtain from the City of Key West the necessary permits for work within the rights of way. The CONTRACTOR shall abide by all regulations and conditions, including maintenance of traffic. RIGHT OF WAY Permit fees will be waived by the City for work within the City's RIGHT OF WAY

B. HISTORIC ARCHITECTURAL REVIEW COMMISSION (HARC) APPROVAL

Prior to beginning construction within the Historic District of Key West, the CONTRACTOR shall obtain a Certificate of Appropriateness from the City of Key West Historic Planner's office.

C. NOISE ORDINANCE

City of Key West has a noise ordinance that allows working hours between 8:00 AM to 7:00 PM, Monday through Friday. No work should be performed during weekends or City Holidays, State Holidays and National Holidays. Any construction operations outside these hours and these days will require a variance from the City of Key West Commission.

D. "LICENSES"

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

2. Within 10 days of Notice of Award, the successful Bidder must represent that he/she holds all applicable, 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.
3. Further, the successful Bidder must, within 10 days of Notice of Award, furnish documentation showing that, as a minimum, he/she has complied with the provisions of Chapter 18 of the Code of Ordinances of the City of Key West to enter the Agreement contained in the Contract Documents.
4. Specifically, within 10 days after Notice of Award, the successful Bidder must demonstrate that he/she holds, as a minimum, the following licenses and certificates:
 - a.) City of Key West Tax License Receipt;
 - b.) A valid Certified CONTRACTORs License issued by the State of Florida.
 - c.) A valid occupational license issued by the City of Key West, Florida.

E. WORK DURING HOLIDAYS

There shall be no work during City Holidays, State Holidays and National Holidays. Any construction operations during these days shall be approved by the City Manager.

40. SUPERINTENDENCE

The CONTRACTOR shall keep at the project site, competent supervisory personnel. The CONTRACTOR shall designate, in writing, before starting work, a Project superintendent who shall be an employee of the CONTRACTOR and shall have complete authority to represent and to act for the CONTRACTOR. ENGINEER shall be notified in writing prior to any change in superintendent assignment. The CONTRACTOR shall give efficient supervision to the work, using his/her best skill and attention. The CONTRACTOR shall be solely responsible for all construction means, methods, techniques, and Procedures, and for providing adequate safety Precautions and coordinating all portions of the work under the Contract. It is specifically understood and agreed that the ENGINEER, its employees and agents, shall not have control or charge of and shall not be responsible for the construction means, methods, techniques, procedures, or for providing adequate safety precautions in connection with the work under Contract.

The CONTRACTOR shall keep at the project site, competent supervisory personnel, able to read, write and speak English to effectively communicate with City staff.

41. RECEPTION OF ENGINEER'S COMMUNICATIONS

The superintendent shall receive for the CONTRACTOR all communications from the ENGINEER. Communications of major importance will be confirmed in writing upon request from the CONTRACTOR.

The ENGINEER may schedule Project meetings for the purposes of discussing and resolving matters concerning the various elements of the work. Time and place for these meetings and the names of persons required to be

Present shall be as determined by the ENGINEER. CONTRACTOR shall comply with these attendance requirements and shall also require his/her SUBCONTRACTORS to comply.

42. SAFETY

The CONTRACTOR shall be solely and completely responsible for conditions of the jobsite, including safety of all persons (including employees) and Property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. Safety Provisions shall conform to U.S. Department of Labor (OSHA), and all other applicable federal, state, county, and local laws, ordinances, codes, and regulations. Where any of these are in conflict, the more stringent requirement shall be followed. The CONTRACTOR's failure to thoroughly familiarize himself/herself with the aforementioned safety Provisions shall not relieve him/her from compliance with the obligations and penalties set forth therein.

The CONTRACTOR shall develop and maintain for the duration of this Contract, a safety Program that will effectively incorporate and implement all required safety Provisions. The CONTRACTOR shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the safety Program. The duty of the ENGINEER to conduct construction review of the work does not include review or approval of the adequacy of the CONTRACTOR's safety Program, safety supervisor, or any safety measures taken in, on, or near the construction site. The CONTRACTOR, as a part of his/her safety Program, shall maintain at his/her office or other well-known place at the jobsite, safety equipment applicable to the work as Prescribed by the aforementioned authorities, all articles necessary for giving first-aid to the injured, and shall establish the Procedure for the immediate removal to a hospital or a doctor's care of persons (including employees) who may be injured on the jobsite.

If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to both the ENGINEER and the OWNER. In addition, the CONTRACTOR must promptly report in writing to the ENGINEER all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.

If a claim is made by anyone against the CONTRACTOR or any SUBCONTRACTOR on account of any accident, the CONTRACTOR shall promptly report the facts in writing to the ENGINEER, giving full details of the claim.

A. OCCUPATIONAL SAFETY AND HEALTH

The CONTRACTOR 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.

43. PROTECTION OF WORK AND PROPERTY

The CONTRACTOR shall at all times safely guard and Protect from damage the OWNER's Property, adjacent Property, and his/her own work from injury or loss in connection with this Contract. All facilities required for Protection by federal, state, or municipal laws and regulations and local conditions must be provided and maintained. The CONTRACTOR shall Protect his/her work and materials from damage due to the nature of the work, the elements, carelessness of other CONTRACTORS, or from any cause whatever until the completion and acceptance of the work. All loss or damages arising out of the nature of the work to be done under these Contract Documents, or from any unforeseen obstruction or defects which may be encountered in the Prosecution of the work, or from the action of the elements, shall be sustained by the CONTRACTOR.

A. HISTORIC PRESERVATION

The CONTRACTOR shall comply with Florida's Archives and Historic Act (Florida Statutes, Chapter 267) and the regulations of the local historic preservation board as applicable and protect against the potential loss or destruction of significant historical or archaeological data, sites, and properties in connection with the project.

44. RESPONSIBILITY OF CONTRACTOR TO ACT IN AN EMERGENCY

In case of an emergency which threatens loss or injury of Property, and/or safety of life, the CONTRACTOR shall act, without previous instructions from the OWNER or ENGINEER, as the situation may warrant. The CONTRACTOR shall notify the ENGINEER thereof immediately thereafter. Any claim for compensation by the CONTRACTOR, together with substantiating documents in regard to expense, shall be submitted to the OWNER through the ENGINEER and the amount of compensation shall be determined by agreement.

45. MATERIALS AND APPLIANCES

Unless otherwise stipulated, the CONTRACTOR shall Provide and pay for all materials, labor, water, tools, equipment, heat, light, fuel, power, transportation, construction equipment and machinery, appliances, telephone, sanitary facilities, temporary facilities and other facilities and incidentals necessary for the execution and completion of the work.

Unless otherwise specified, all materials shall be new, and both workmanship and materials shall be of good quality. The CONTRACTOR shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

In selecting and/or approving equipment for installation in the Project, the OWNER and ENGINEER assume no responsibility for injury or claims resulting from failure of the equipment to comply with applicable federal, state, and local safety codes or requirements, or the safety requirements of a recognized agency, or failure due to faulty design concepts, or defective workmanship and materials.

46. CONTRACTORS' AND MANUFACTURERS' COMPLIANCE WITH STATE SAFETY, OSHA, AND OTHER CODE REQUIREMENTS

The completed work shall include all necessary permanent safety devices, such as machinery guards and similar ordinary safety items required by the state and federal (OSHA) industrial authorities and applicable local and national codes. Further, any features of the work subject to such safety regulations shall be fabricated, furnished, and installed (including OWNER-furnished equipment) in compliance with these requirements. CONTRACTORS and manufacturers of equipment shall be held responsible for compliance with the requirements included herein. CONTRACTORS shall notify all equipment suppliers and SUBCONTRACTORS of the Provisions of this Article.

47. SUBSTITUTION OF MATERIALS

Except for OWNER-selected equipment items, and items where no substitution is clearly specified, whenever any material, article, device, Product, fixture, form, type of construction, or Process is indicated or specified by patent or Proprietary name, by name of manufacturer, or by catalog number, such specifications shall be deemed to be used for the purpose of establishing a standard of quality and facilitating the description of the material or Process desired. This Procedure is not to be construed as eliminating from competition other Products of equal or better quality by other manufacturers where fully suitable in design, and shall be deemed to be followed by the words "or equal". The CONTRACTOR may, in such cases, submit complete data to the ENGINEER for consideration of another material, type, or Process that shall be substantially equal in every respect to that so indicated or specified. Substitute materials shall not be used unless approved in writing. The ENGINEER will be the sole judge of the substituted article or material.

48. TESTS, SAMPLES, AND OBSERVATIONS

The CONTRACTOR shall furnish, without extra charge, the necessary test pieces and samples, including facilities and labor for obtaining the same, as requested by the ENGINEER. When required, the CONTRACTOR shall furnish certificates of tests of materials and equipment made at the point of manufacture by a recognized testing laboratory.

The OWNER, ENGINEER, and authorized government agents, and their representatives shall at all times be

Provided safe access to the work wherever it is in Preparation or Progress, and the CONTRACTOR shall Provide facilities for such access and for observations, including maintenance of temporary and permanent access.

If the Specifications, laws, ordinances, or any public authority require any work, to be specially tested or approved, the CONTRACTOR shall give timely notice of its readiness for observations. If any work should be covered up without approval or consent of the ENGINEER, it shall, if required by the ENGINEER, be uncovered for examination at the CONTRACTOR's expense.

Reexamination of questioned work may be ordered by the ENGINEER, and, if so ordered, the work shall be uncovered by the CONTRACTOR. If such work is found to be in accordance with the Contract Documents, the OWNER will pay the cost of uncovering, exposure, observation, inspection, testing and reconstruction. If such work is found to be not in accordance with the Contract Documents, the CONTRACTOR shall correct the defective work, and the cost of reexamination and correction of the defective work shall be paid by the CONTRACTOR.

49. ROYALTIES AND PATENTS

The CONTRACTOR shall pay all royalty and licenses fees, unless otherwise specified. The CONTRACTOR shall defend all suits or claims for infringement of any patent rights and shall save the OWNER and the ENGINEER harmless from any and all loss, including reasonable attorneys' fees, on account thereof.

50. CONTRACTOR'S RIGHT TO TERMINATE CONTRACT

If the work should be stopped under an order of any court or other public authority for a period of more than 3 months, through no act or fault of the CONTRACTOR, its SUBCONTRACTORS, or respective employees or if the ENGINEER should fail to make recommendation for payment to the OWNER or return payment request to CONTRACTOR for revision within 30 days after it is due, or if the OWNER should fail to pay the CONTRACTOR within 30 days after time specified in Article PARTIAL PAYMENTS, any sum recommended by the ENGINEER, then the CONTRACTOR may, upon 15 days' written notice to the OWNER and the ENGINEER, stop work or terminate this Contract and recover from the OWNER payment for all acceptable work performed and reasonable termination expenses, unless said default has been remedied.

51. CORRECTION OF DEFECTIVE WORK DURING WARRANTY PERIOD

The CONTRACTOR hereby agrees to make, at his/her own expense, all repairs or replacements necessitated by defects in materials or workmanship, Provided under terms of this Contract, and pay for any damage to other works resulting from such defects, which become evident within 2 years after the date of final acceptance of the work or within 2 years after the date of substantial completion established by the ENGINEER for specified items of equipment, or within such longer period as may be Prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents. Un-remedied defects identified for correction during the warranty period but remaining after its expiration shall be considered as part of the obligations of the warranty. Defects in material, workmanship, or equipment which are remedied as a result of obligations of the warranty shall subject the remedied portion of the work to an extended warranty period of 2 years after the defect has been remedied.

The CONTRACTOR further assumes responsibility for a similar guarantee for all work and materials provided by SUBCONTRACTORS or manufacturers of packaged equipment components. The effective date for the start of the guarantee or warranty period for equipment qualifying as substantially complete is defined in Article SUBSTANTIAL COMPLETION, AND Article SUBSTANTIAL COMPLETION DATE, in these General Conditions.

The CONTRACTOR also agrees to hold the OWNER and the ENGINEER harmless from liability of any kind arising from damage due to said defects. The CONTRACTOR shall make all repairs and replacements promptly upon receipt of written order for same from the OWNER. If the CONTRACTOR fails to make the repairs and replacements promptly, or in an emergency where delay would cause serious risk, or loss, or damage, the OWNER may have the defective work corrected or the rejected work removed and replaced, and the CONTRACTOR and his/her Surety shall be liable for the cost thereof.

PROGRESS OF THE WORK

52. BEGINNING OF THE WORK

Following execution of the Contract, the CONTRACTOR shall meet with the OWNER and ENGINEER relative to his/her arrangements for prosecuting the work.

53. SCHEDULES AND PROGRESS REPORTS

Prior to starting the construction, the CONTRACTOR shall Prepare and submit to the ENGINEER, a Progress schedule showing the dates on which each part or division of the work is expected to be started and finished, and a Preliminary schedule for submittals. The Progress schedule for submittals shall be brought up to date and submitted to the ENGINEER at the end of each month or at such other times the ENGINEER may request.

The CONTRACTOR shall forward to the ENGINEER, at the end of each month, an itemized report of the delivery status of major and critical items of purchased equipment and material, including shop drawings and the status of shop and field fabricated work. These Progress reports shall indicate the date of the purchase order, the current percentage of completion, estimated delivery, and cause of delay, if any.

If the completion of any part of the work or the delivery of materials is behind the submitted Progress schedule, the CONTRACTOR shall submit in writing a plan acceptable to the OWNER and ENGINEER for bringing the work up to schedule.

The OWNER shall have the right to withhold Progress payments for the work if the CONTRACTOR fails to update and submit the Progress schedule and reports as specified.

54. PROSECUTION OF THE WORK

It is expressly understood and agreed that the time of beginning, rate of Progress, and time of completion of the work are the essence of this Contract. The work shall be prosecuted at such time, and in or on such part or parts of the Project as may be required, to complete the Project as contemplated in the Contract Documents and the Progress schedule.

If the CONTRACTOR desires to carry on work at night or outside the regular hours, he/she shall give timely notice to the ENGINEER to allow satisfactory arrangements to be made for observing the work in Progress.

55. OWNER'S RIGHT TO RETAIN IMPERFECT WORK

If any part or portion of the work completed under this Contract shall Prove defective and not in accordance with the Drawings and Specifications, and if the imperfection in the same shall not be of sufficient magnitude or importance as to make the work dangerous or unsuitable, or if the removal of such work will create conditions which are dangerous or undesirable, the OWNER shall have the right and authority to retain such work but will make such deductions in the final payment therefore as may be just and reasonable.

56. OWNER'S RIGHT TO DO WORK

Should the CONTRACTOR neglect to Prosecute the work in conformance with the Contract Documents or neglect or refuse at his/her own cost to remove and replace work rejected by the ENGINEER, then the OWNER may notify the Surety of the condition, and after 10 days' written notice to the CONTRACTOR and the Surety, or without notice if an emergency or danger to the work or public exists, and without Prejudice to any other right which the OWNER may have under Contract, or otherwise, take over that portion of the work which has been improperly or non-timely executed, and make good the deficiencies and deduct the cost thereof from the payments then or thereafter due the CONTRACTOR.

57. OWNER'S RIGHT TO TRANSFER EMPLOYMENT

If the CONTRACTOR should abandon the work or if he/she should persistently or repeatedly refuse or should fail to make prompt payment to SUBCONTRACTORS for material or labor, or to persistently disregard laws, ordinances, or to prosecute the work in conformance with the Contract Documents, or otherwise be guilty of a substantial violation of any Provision of the Contract or any laws or ordinance, then the OWNER may, without Prejudice to any other right or remedy, and after giving the CONTRACTOR and Surety 10 days' written notice, transfer the employment for said work from the CONTRACTOR to the Surety. Upon receipt of such notice, such Surety shall enter upon the Premises and take possession of all materials, tools, and appliances thereon for the purpose of completing the work included under this contract and employ by Contract or otherwise, any qualified person or persons to finish the work and Provide the materials therefore, in accordance with the Contract Documents, without termination of the continuing full force and effect of this contract. In case of such transfer of employment to such Surety, the Surety shall be paid in its own name on estimates according to the terms hereof without any right of the CONTRACTOR to make any claim for the same or any part thereof.

If, after the furnishing of said written notice to the Surety, the CONTRACTOR and the Surety still fail to make reasonable Progress on the performance of the work, the OWNER may terminate the employment of the CONTRACTOR and take possession of the Premises and of all materials, tools, and appliances thereon and finish the work by whatever method he/she may deem expedient and charge the cost thereof to the CONTRACTOR and the Surety. In such case, the CONTRACTOR shall not be entitled to receive any further payment until the work is finished. If the expense of completing the Contract, including compensation for additional managerial and administrative services, shall exceed such unpaid balance, the CONTRACTOR and the Surety shall pay the difference to the OWNER.

A. TERMINATION FOR CONVENIENCE AND RIGHT OF SUSPENSION

OWNER shall have the right to terminate this Contract without cause by written notice of Termination to the Contractor. In the event of such termination for convenience, the Contractor's recovery against the OWNER shall be limited to that portion of the Contract amount earned through the date of termination, together with any retainage withheld and reasonable termination expenses incurred. CONTRACTOR shall not be entitled to any other or further recovery against the OWNER, including, but not limited to, damages or any anticipated profit on portions of the Work not performed.

The OWNER shall have the right to suspend all or any portions of the Work upon giving the CONTRACTOR prior written notice of such suspension. If all or any portion of the Work is so suspended, the CONTRACTOR shall be entitled to reasonable costs, expenses and time extension associated with the suspension.

58. DELAYS AND EXTENSION OF TIME

If the CONTRACTOR is delayed in the Progress of the work by any act or neglect of the OWNER or the ENGINEER, or by any separate CONTRACTOR employed by the OWNER, or by strikes, lockouts, fire, adverse weather conditions not reasonably anticipated, or acts of Nature, and if the CONTRACTOR, within 48 hours of the start of the occurrence, gives written notice to the OWNER of the cause of the potential delay and estimate of the possible time extension involved, and within 10 days after the cause of the delay has been remedied, the CONTRACTOR gives written notice to the OWNER of any actual time extension requested as a result of the aforementioned occurrence, then the Contract time may be extended by change order for such reasonable time as the ENGINEER determines. It is agreed that no claim shall be made or allowed for any damages, loss, or expense which may arise out of any delay caused by the above referenced acts or occurrences other than claims for the appropriate extension of time. No extension of time will be granted to the CONTRACTOR for delays occurring to parts of the work that have no measurable impact on the completion of the total work under this Contract. No extension of time will be considered for weather conditions reasonably anticipated for the area in which the work is being performed. Reasonably anticipated weather conditions will be based on official records of monthly Precipitation and other historical data. Adverse weather conditions, if determined to be of a severity that would impact Progress of the work, may be considered as cause for an extension of Contract completion time.

Delays in delivery of equipment or material purchased by the CONTRACTOR or his/her SUBCONTRACTORS, including OWNER-selected equipment shall not be considered as a just cause for delay, unless the OWNER determines that for good cause the delay is beyond the control of the CONTRACTOR. The CONTRACTOR shall be fully responsible for the timely ordering, scheduling, complete the work is the per-diem rate, as stipulated in the Bid. The said amount is hereby agreed upon as a reasonable estimate of the costs, which may be accrued by the OWNER after the expiration of the time of completion. It is expressly understood and agreed that this amount is not to be considered in the nature of a penalty, but as liquidated damages which have accrued against the CONTRACTOR. The OWNER shall have the right to deduct such damages from any amount due, or that may become due the CONTRACTOR, or the amount of such damages shall be due and collectible from the CONTRACTOR or Surety.

59. DIFFERING SITE CONDITIONS

The CONTRACTOR shall promptly, and before the conditions are disturbed, give a written notice to the OWNER and ENGINEER of:

- 1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract,
- 2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

The ENGINEER will investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the CONTRACTOR's cost of, or the time required for, performing any part of the work under this Contract, whether or not changed as a result of the conditions, and equitable adjustment shall be made under this Article and the Contract modified in writing accordingly.

No request by the CONTRACTOR for an equitable adjustment to the Contract under this Article will be allowed, unless the CONTRACTOR has given the written notice required; provided that the time prescribed above for giving written notice may be extended by the OWNER.

No request by the CONTRACTOR for an equitable adjustment to the Contract for differing site conditions will be allowed if made after final payment under this Contract.

60. LIQUIDATED DAMAGES

Should the CONTRACTOR fail to complete the work or any part thereof in the time agreed upon in the Contract Documents or within such extra time as may have been allowed for delays by extensions granted as provided in the Contract, the CONTRACTOR shall reimburse the OWNER for the additional expense and damage for each calendar day that project outlined in Contract Documents remains uncompleted after the completion date. Liquidated damages shall be assessed. It is agreed that the amount of such additional expense and damage incurred by reason of failure to complete the work is the per diem rate as stipulated in the Bid. The said amount is hereby agreed upon as a reasonable estimate of the costs which may be accrued by the OWNER after the expiration of the time of completion. It is expressly understood and agreed that this amount is not to be considered in the nature of a penalty but as liquidated damages, which have accrued against the CONTRACTOR. The OWNER shall have the right to deduct such damages from any amount due or that may become due the CONTRACTOR or the amount of such damages shall be due and collectible from the CONTRACTOR or Surety.

61. OTHER CONTRACTS

The OWNER reserves the right to let other Contracts in connection with the work. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the

execution of their work and shall properly connect and coordinate his/her work with theirs.

If any part of the work under this Contract depends for Proper execution or results upon the work of any other CONTRACTOR, utility service company or OWNER, the CONTRACTOR shall inspect and Promptly report to the ENGINEER in writing any patent or apparent defects to deficiencies in such work that render it unsuitable for such Proper execution and results. The CONTRACTOR's failure to so report shall constitute and acceptance of the work by others as being fit and Proper for integration with work under this Contract, except for latent or non-apparent defects and deficiencies in the work.

62. USE OF PREMISES

The CONTRACTOR shall confine his/her equipment, the storage of materials and the operation of his/her workers to limits shown on the Drawings or indicated by law, ordinances, permits, or directions of the ENGINEER, and shall not unreasonably encumber the Premises with his/her materials. The CONTRACTOR shall provide, at his/her own expense, the necessary rights-of-way and access to the work, which may be required outside the limits of the OWNER's Property and shall furnish the ENGINEER copies of permits and agreements for use of the Property outside that provided by the OWNER.

The CONTRACTOR shall not load nor permit any part of the 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.

63. SUBSTANTIAL COMPLETION DATE

The ENGINEER may issue a written notice of substantial completion for the purpose of establishing the starting date for specific equipment guarantees, and to establish the date that the OWNER will assume the responsibility for the cost of operating such equipment. Said notice shall not be considered as final acceptance of any portion of the work or relieve the CONTRACTOR from completing the remaining work within the specified time and in full compliance with the Contract Documents. See SUBSTANTIAL COMPLETION under DEFINITIONS of these General Conditions.

64. PERFORMANCE TESTING

Operating equipment and systems shall be performance tested in the Presence of the ENGINEER to demonstrate compliance with the specified requirements. Performance testing shall be conducted under the specified design operating conditions or under such simulated operating conditions as recommended or approved by the ENGINEER. Schedule such testing with the ENGINEER at least one week in advance of the planned date for testing.

65. OWNER'S USE OF PORTIONS OF THE WORK

Following issuance of the written notice of Substantial Completion, the OWNER may initiate operation of the facility. Such use shall not be considered as final acceptance of any portion of the work, nor shall such use be considered as cause for an extension of the Contract completion time, unless authorized by a Change Order issued by the OWNER.

66. CUTTING AND PATCHING

The CONTRACTOR shall do all cutting, fitting, or patching of his/her work that may be required to make its several parts come together Properly and fit it to receive or be received by work of other CONTRACTORS shown upon or reasonably implied by the Drawings.

67. CLEANING UP

The CONTRACTOR shall, at all times, keep Property on which work is in Progress and the adjacent Property free from accumulations of waste material or rubbish caused by employees or by the work. Upon completion of the

construction, the CONTRACTOR shall remove all temporary structures, rubbish, and waste materials resulting from his/her operations.

PAYMENT

68. PAYMENT FOR CHANGE ORDERS

The OWNER's request for quotations on alterations to the work shall not be considered authorization to proceed with the work expediting, delivery, and installation of all equipment and materials. Within a reasonable period after the CONTRACTOR submits to the OWNER a written request for an extension of time, the ENGINEER will Present his/her written opinion to the OWNER as to whether an extension of time is justified, and, if so, his/her recommendation as to the number of days for time extension. The OWNER will make the final decision on all requests for extension of time.

Prior to the issuance of a formal Change Order, nor shall such request justify any delay in existing work. Quotations for alterations to the work shall include substantiating documentation with an itemized breakdown of CONTRACTOR and SUBCONTRACTOR costs, including labor, material, rentals, approved services, overhead, and profit. OWNER may require detailed cost data in order to substantiate the reasonableness of the proposed costs.

Any compensation paid in conjunction with the terms of a Change Order shall comprise total compensation due the CONTRACTOR for the work or alteration defined in the Change Order. By signing the Change Order, the CONTRACTOR acknowledges that the stipulated compensation includes payment for the work or alteration plus all payment for the interruption of schedules, extended overhead, delay, or any other impact claim or ripple effect, and by such signing specifically waives any reservation or claim for additional compensation in respect to the subject Change Order.

At the OWNER's option, payment or credit for any alterations covered by a Change Order shall be determined by one or a combination of the methods set forth in A, B, or C below, as applicable:

A. UNIT PRICES

Those unit Prices stipulated in the Bid shall be utilized where they are applicable. In the event the Change Order results in a change in the original quantity that is materially and significantly different from the original bid quantity, a new unit Price shall be negotiated upon demand of either party. Unit Prices for new items included in the Change Order shall be negotiated and mutually agreed upon.

B. LUMP SUM

A total lump sum for the work negotiated and mutually acceptable to the CONTRACTOR and the OWNER. Lump sum quotations for modifications to the work shall include substantiating documentation with an itemized breakdown of CONTRACTOR and SUBCONTRACTOR costs, including labor, material, rentals, approved services, overhead, and Profit, all calculated as specified under "C" below.

C. COST REIMBURSEMENT WORK

The term "cost reimbursement" shall be understood to mean that payment for the work will be made on a time and expense basis, that is, on an accounting of the CONTRACTOR's forces, materials, equipment, and other items of cost as required and used to do the work.

If the method of payment cannot be agreed upon Prior to the beginning of the work, and the OWNER directs by written Change Order that the work be done on a cost reimbursement basis, then the CONTRACTOR shall furnish labor, and furnish and install equipment and materials necessary to complete the work in a satisfactory manner and within a reasonable period of time. For the work performed, payment will be made for the documented actual cost of the following:

1. Labor including foremen for those hours they are assigned and participating in the cost reimbursement work (actual payroll cost, including wages, fringe benefits as established by negotiated labor agreements, labor insurance, and labor taxes as established by law). No other fixed labor burdens will be considered, unless approved in writing by the OWNER.
2. Material delivered and used on the designated work, including sales tax, if paid by the CONTRACTOR or his/her SUBCONTRACTOR.
3. Rental or equivalent rental cost of equipment, including necessary transportation for items having a value in excess of \$100. Rental or equivalent rental cost will be allowed for only those days or hours during which the equipment is in actual use. Rental and transportation allowances shall not exceed the current rental rates prevailing in the locality. The rentals allowed for equipment will, in all cases, be understood to cover all fuel, supplies, repairs, and renewals, and no further allowances will be made for those items, unless specific agreement to that effect is made.
4. Additional bond, as required and approved by the OWNER.
5. Additional insurance (other than labor insurance) as required and approved by the OWNER.

In addition to 1 through 5 above, an added fixed fee of 15 percent (%) for general overhead & profit shall be allowed for the CONTRACTOR (or approved SUBCONTRACTOR) executing the Cost Reimbursement work.

An additional fixed fee of 5% will be allowed the CONTRACTOR for the administrative handling of portions of the work that are executed by an approved SUBCONTRACTOR. No additional fixed fee will be allowed for the administrative handling of work executed by the SUBCONTRACTOR of a SUBCONTRACTOR.

The added fixed fees shall be considered to be full compensation, covering the cost of general supervision, overhead, Profit, and any other general expense. The CONTRACTOR's records shall make clear distinction between the direct costs of work paid for on a cost reimbursement basis and the costs of other work. The CONTRACTOR shall furnish the ENGINEER report sheets in duplicate of each day's cost reimbursement work no later than the working day following the performance of said work. The daily report sheets shall itemize the materials used, and shall cover the direct cost of labor and the charges for equipment rental, whether furnished by the CONTRACTOR, SUBCONTRACTOR or other forces. The daily report sheets shall provide names or identifications and classifications of workers, the hourly rate of pay and hours worked, and also the size, type, and identification number of equipment and hours operated.

Material charges shall be substantiated by valid copies of vendors' invoices. Such invoices shall be submitted with the daily report sheets, or, if not available, they shall be submitted with subsequent daily report sheets. Said daily report sheets shall be signed by the CONTRACTOR or his/her authorized agent.

The OWNER reserves the right to furnish such materials and equipment as he/she deems expedient and the CONTRACTOR shall have no claim for profit or added fees on the cost of such materials and equipment. To receive partial payments and final payment for cost reimbursement work, the CONTRACTOR shall submit to the ENGINEER, detailed and complete documented verification of the CONTRACTOR's and any of his/her SUBCONTRACTORS' actual costs involved in the cost reimbursement work. Such costs shall be submitted within 30 days after said work has been performed.

69. PARTIAL PAYMENTS

A. GENERAL

Nothing in this Article shall be construed to affect the right, hereby reserved, to reject the whole or any part of the aforesaid work, should such work be later found not to comply with the Provisions of the Contract Documents. All estimated quantities of work for which partial payments have been made are subject to review and correction on the final estimate. Payment by the OWNER and acceptance by the CONTRACTOR of partial payments based on periodic estimates of quantities of work performed shall not, in any way, constitute acceptance of the estimated quantities used as a basis for computing the amounts of the partial payments.

B. ESTIMATE

No more than once each month the CONTRACTOR shall submit to the ENGINEER a detailed estimate of the amount earned during the preceding month for the separate portions of the work and request payment. As used in this Article the words "amount earned" means the value, on the date of the estimate, for partial payment of the work completed in accordance with the Contract Documents and the value of approved materials delivered to the project site suitably stored and protected prior to incorporation into the work. Payment will be made by the Owner to the CONTRACTOR within 40 days receipt of the written recommendation of payment from the ENGINEER. Payment will be made by the OWNER to the CONTRACTOR within 40 days receipt of the written recommendation of payment from the ENGINEER.

ENGINEER will, within 7 days after receipt of each request for payment, either indicate in writing a recommendation of payment and present the request to OWNER, or return the request to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may, within 7 days, make the necessary corrections and resubmit the request.

ENGINEER may refuse to recommend the whole or any part of any payment if, in his/her opinion, it would be incorrect to make such representations to OWNER. ENGINEER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended to such an extent as may be necessary in ENGINEER's opinion to protect the OWNER from loss because:

1. The work is defective, or completed work has been damaged requiring correction or replacement;
2. Written claims have been made against OWNER or Liens have been filed in connection with the work;
3. The Contract Price has been reduced because of Change Orders;
4. OWNER has been required to correct defective work or complete the work in accordance with Article OWNER'S RIGHT TO DO WORK;
5. Of CONTRACTOR's unsatisfactory Prosecution of the work in accordance with the Contract Documents; or
6. CONTRACTOR's failure to make payment to SUBCONTRACTORS or for labor, materials, or equipment.

C. DEDUCTION FROM ESTIMATE

Unless modified in the Supplementary Conditions, deductions from the estimate will be as described below:

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. When the work is 90 percent complete, the OWNER may reduce the retainage to 5 percent of the dollar value of all work satisfactorily completed to date provided the CONTRACTOR is making satisfactory progress and there is no specific cause for a greater retainage. The OWNER shall hold retainage for an individual Work Order until such time as work associated with that Work Order is deemed complete by the OWNER.

D. QUALIFICATION FOR PARTIAL PAYMENT FOR MATERIALS DELIVERED

Unless modified in the Supplementary Conditions, qualification for partial payment for materials delivered but not yet incorporated into the work shall be as described below:

1. Materials, as used herein, shall be considered to be those items which are fabricated and manufactured material and equipment. No consideration shall be given to individual purchases of less than \$200 for any one item.
2. To receive partial payment for materials delivered to the site, but not incorporated in the work, it shall be necessary for the CONTRACTOR to include a list of such materials on the Partial Payment Request. At his/her sole discretion, the ENGINEER may approve items for which partial payment is to be made. Partial payment shall be based on the CONTRACTOR's actual cost for the materials as evidenced by invoices from the supplier. Proper storage and Protection shall be provided by the CONTRACTOR, and as approved by the ENGINEER. Final payment shall be made only for materials actually incorporated in the work and, upon acceptance of the work, all materials remaining for which advance payments had been made shall revert to the CONTRACTOR, unless otherwise agreed, and partial payments made for these items shall be deducted from the final payment for the work.
3. 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 at the time of payment free and clear of all liens, claims, security interests, and encumbrances.
4. If requested by the ENGINEER, the CONTRACTOR shall provide, with subsequent pay requests, invoices receipted by the supplier showing payment in full has been made.

E. PAYMENT

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.

70. CLAIMS FOR EXTRA WORK

In any case where the CONTRACTOR deems additional time or compensation will become due him/her under this Contract for circumstances other than those defined in Article DELAYS AND EXTENSION OF TIME, the CONTRACTOR shall notify the ENGINEER, in writing, of his/her intention to make claim for such time or compensation before he/she begins the work on which he/she bases the claim, in order that such matters may be settled, if possible, or other appropriate action taken. The notice of claim shall be in duplicate, in writing, and shall state the circumstances and the reasons for the claim but need not state the amount. If such notification is not given or if the ENGINEER is not afforded proper facilities by the CONTRACTOR for keeping strict account of actual cost, then the CONTRACTOR hereby agrees to waive the claim for such additional time or compensation. Such notice by the CONTRACTOR, and fact that the ENGINEER has kept account of the cost as aforesaid, shall not in any way be construed as proving the validity of the claim.

No extension of time will be granted to the CONTRACTOR for delays resulting from extra work that have no measurable impact on the completion of the total work under this Contract. Claims for additional time or compensation shall be made in itemized detail and submitted, in writing, to the OWNER and ENGINEER within 10 days following completion of that portion of the work for which the CONTRACTOR bases his/her claim. Failure to make the claim for additional compensation in the manner and within the time specified above shall constitute waiver of that claim. In case the claim is found to be just, it shall be allowed and paid for as provided in Article PAYMENT FOR CHANGE ORDERS.

71. RELEASE OF LIENS OR CLAIMS

The CONTRACTOR shall indemnify and hold harmless the OWNER from all claims for labor and materials furnished under this Contract. Prior to the final payment, the CONTRACTOR shall furnish to the OWNER, as part of his/her final payment request, a certification that all of the CONTRACTOR's obligations on the project have been satisfied and that all monetary claims and indebtedness have been paid. The CONTRACTOR shall furnish complete and legal effective releases or waivers, satisfactory to the OWNER, of all liens arising out of or filed in connection with the work.

72. FINAL PAYMENT

Upon completion of the work the CONTRACTOR shall notify the ENGINEER, in writing, that he/she has completed it and shall request final payment. The CONTRACTOR shall be responsible for keeping an accurate and detailed record of his/her actual construction. Upon completion of construction and before final acceptance and payment the CONTRACTOR shall furnish the ENGINEER as-built drawings of his/her construction. Upon receipt of a request for final payment and the as-built drawings the ENGINEER will inspect and, if acceptable, submit to the OWNER his/her recommendation as to acceptance of the completed work and as to the final estimate of the amount due the CONTRACTOR. Upon approval of this final estimate by the OWNER and compliance by the CONTRACTOR with provisions in Article RELEASE OF LIENS OR CLAIMS, and other provisions as may be applicable, the OWNER shall pay to the CONTRACTOR all monies due him/her under the provisions of these Contract Documents.

A. Acceptance and Final Payment

Whenever the CONTRACTOR has completely performed the work provided for under the Contract and the ENGINEER has performed a final inspection and made final acceptance and subject to the terms of the ENGINEER will prepare a final estimate showing the value of the work as soon as the ENGINEER makes the necessary measurements and computations. The ENGINEER will correct all prior estimates and payments in the final estimate and payment. The OWNER will pay the estimate, less any sums that the OWNER may have deducted or retained under the provisions of the Contract, as soon as practicable after final acceptance of the work, provided the CONTRACTOR has met the requirements of (1) through (4) below.

1. The CONTRACTOR has agreed in writing to accept the balance due or refund the overpayment, as determined by the OWNER, as full settlement of his/her account under the Contract and of all claims in connection therewith, or the CONTRACTOR, accepted the balance due or refunded the overpayment, as determined by the OWNER, with the stipulation that his/her acceptance of such payment or the making of such refund does not constitute any bar, admission, or estoppel, or have any effect as to those payments in dispute or the subject of a pending claim between the CONTRACTOR and the OWNER. To receive payment based on a FINAL PAYMENT CERTIFICATE, The CONTRACTOR further agrees, by submitting a FINAL PAYMENT CERTIFICATE that any pending or future arbitration claim or suit is limited to those particulars, including the itemized amounts, defined in the original FINAL PAYMENT CERTIFICATE , and that he/she will commence with any such arbitration claim or suit within 15 calendar days from and after the time of final PAYMENT of the work and that his/her failure to file a formal claim within this period constitutes his/her full acceptance of the ENGINEER's final estimate and payment. The overpayment refund check from the CONTRACTOR, if required, will be considered a part of any Acceptance Letter executed.
2. The CONTRACTOR has properly maintained the project, as specified hereinbefore.
3. The CONTRACTOR has furnished a sworn affidavit to the effect that the CONTRACTOR has paid all bills and no suits are pending (other than those exceptions listed, if any) in connection with work performed under the Contract and that the CONTRACTOR has not offered or made any gift or gratuity to, or made any financial transaction of any nature with, any employee of the OWNER in the performance of the Contract.
5. Final payment will not be released until the OWNER receives Certified As-built drawings in Auto Cad & Adobe format.

73. NO WAIVER OF RIGHTS

Neither the inspection by the OWNER, through the ENGINEER or any of his/her employees, nor any order by the OWNER for payment of money, nor any payment for, or acceptance of, the whole or any part of the work by the

OWNER or ENGINEER, nor any extension of time, nor any possession taken by the OWNER or its employees, shall operate as a waiver of any Provision of this Contract, or any power herein reserved to the OWNER, or any right to damages herein Provided, nor shall any waiver of any breach in this Contract be held to be a waiver of any other or subsequent breach. Acceptance or final payment shall not be final and conclusive with regards to latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the OWNER's rights under the warranty.

74. ACCEPTANCE OF FINAL PAYMENT CONSTITUTES RELEASE

The acceptance by the CONTRACTOR of the final payment shall release the OWNER and the ENGINEER, as representatives of the OWNER, from all claims and all liability to the CONTRACTOR for all things done or furnished in connection with the work, and every act of the OWNER and others relating to or arising out of the work except claims Previously made in writing and still unsettled. No payment, however, final or otherwise, shall operate to release the CONTRACTOR or his/her Sureties from obligations under this Contract and the Performance Bond, Payment Bond, and other bonds and warranties, as herein provide.

END OF SECTION

PART 4: GENERAL REQUIREMENTS

01001: GENERAL REQUIREMENTS

PART 1 - GENERAL

1.1 PROJECT DESCRIPTION

- A. A brief description of the work is stated in the Invitation to Bid. To determine the full scope of the project or of any part of the project, coordinate the applicable information in the several parts of these Contract Documents.

1.2 MOBILIZATION AND DEMOBILIZATION

- A. CONTRACTOR shall be responsible for mobilization and demobilization of labor, materials and equipment. Payment for mobilization and demobilization will be included in the unit price for MOBILIZATION indicated in the BID. Parking for vehicles used on site will be determined by the ENGINEER prior to mobilization.
- B. DAILY REPORTS (If Required)
 - 1) The CONTRACTOR shall submit daily reports of construction activities for each site, including non-work days. The report shall include:
 - a) Manpower, number of workers by craft
 - b) Quality Control
 - c) Equipment on the Project
 - d) Major deliveries
 - e) Activities worked
 - f) New problems
 - g) Other pertinent information
 - 2) A similar report shall be submitted for/by each SUBCONTRACTOR.
 - 3) The reports shall be submitted to the ENGINEER upon request.

1.3 SCHEDULING

- A. Prior to starting the work, confer with the ENGINEER and OWNER's representative to develop an approved work schedule. Which will permit the surrounding facilities to function as normally as practical. It may be necessary to do certain parts of the work outside normal working hours to avoid undesirable conditions. The CONTRACTOR shall do this work at such times and at no additional cost to the OWNER.
- B. SPECIAL EVENTS: CONTRACTOR may be asked to stop work during special events. Individual days where work is stopped at the city's request due to special events shall not count toward the total number of contract days.

1.4 COORDINATION

- A. CONTRACTORS shall cooperate in the coordination of their separate activities in a manner that will provide the least interference with the OWNER's operations and other CONTRACTORS and utility companies working in the area, and in the interfacing and connection of the separate elements of the overall project work.

- B. If any difficulty or dispute should arise in the accomplishment of the above, the problem shall be brought immediately to the attention of the ENGINEER.
- C. CONTRACTOR shall notify all residents and proprietors adjacent to construction site of work to be performed, more specifically the notice shall state the day and time construction will begin, the name and phone number of the CONTRACTOR's representative responsible for the completion of the proposed improvements. Notice shall also include the OWNER's representative for the project.
- D. All CONTRACTORS working on the site are subject to this requirement for cooperation and all shall abide by the OWNER's decision in resolving project coordination problems without additional cost to the OWNER.

1.5 SITE INVESTIGATION AND REPRESENTATION

- A. The CONTRACTOR acknowledges satisfaction as to the nature and location of the work, the general and local conditions, particularly those bearing upon availability of transportation, access to the site, disposal, handling and storage of materials, availability of labor, water, electric power, roads, and uncertainties of weather, or similar physical conditions at the site, the conformation and conditions at the site, the character of equipment and facilities needed preliminary to and during the prosecution of the work, and all other matters which can any way affect the work or the cost thereof under this Contract.
- B. The CONTRACTOR further acknowledges satisfaction as to character, quality, and quantity of surface and subsurface materials to be encountered from his/her inspection of the site and from reviewing any available records of exploratory work furnished by the OWNER or included in these Documents. Failure by the CONTRACTOR to become acquainted with the physical conditions of the site and all available information will not relieve the CONTRACTOR from responsibility for properly estimating the difficulty or cost of successfully performing the work.
- C. The CONTRACTOR warrants that as a result of examination and investigation of all the aforesaid data, the CONTRACTOR can perform the work in a good and workmanlike manner and to the satisfaction of the OWNER.
- D. The OWNER assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of this Contract, unless (1) such representations are expressly stated in the Contract, and (2) the Contract expressly provides that the responsibility therefore is assumed by the OWNER.

1.6 INFORMATION ON SITE CONDITIONS

- A. General: Any information obtained by the ENGINEER regarding site conditions, subsurface information, water level, existing construction of site facilities as applicable, and similar data will be available for inspection at the office of the ENGINEER upon request. Such information is offered as supplementary information only. Neither the ENGINEER nor the

OWNER assumes any responsibility for the completeness or interpretation of such supplementary information.

B. The CONTRACTOR shall provide a color audio-video recording showing the entire preconstruction site. All videos shall be taken by a professional commercial video photographer. The video photographer shall be an established enterprise that routinely provides these services. The videos shall be in DVD format or .wav files on removable USB drive, indicating the date, project name, and a brief description of the location where the video was taken. The CONTRACTOR shall submit one (1) copy of the preconstruction audio-video to the OWNER.

1.7 DIFFERING SUBSURFACE CONDITIONS

A. The ENGINEER shall investigate such conditions promptly and following this investigation, the CONTRACTOR shall proceed with the work, unless otherwise instructed by the ENGINEER. If the ENGINEER finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for performing the work, the ENGINEER will recommend to the OWNER the amount of adjustment in cost and time he/she considers reasonable. The OWNER will make the final decision on all Change Orders to the Contract regarding any adjustment in cost or time for completion.

1.8 UTILITIES

A. During excavation, the CONTRACTOR shall be responsible for determining, at his/her cost, the locations of all known utilities in the project area.

B. CONTRACTOR shall notify utility location service (e.g. Call Sunshine 1-800-432-4770) a minimum for 48 hours prior to work order mobilization. Assigned notification number shall be maintained at the job site at all times and recorded in the daily reports.

1.9 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

A. Where the CONTRACTOR's operations could cause damage or inconvenience to telephone, television, gas, water, sewer, or irrigation systems, the operations shall be suspended until all arrangements necessary for the protection of these utilities and services have been made by the CONTRACTOR.

B. Notify all utility offices, which are affected by the construction operation at least 48 hours in advance. Under no circumstances expose any utility without first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose, and provide temporary support for all existing underground utilities.

C. The CONTRACTOR shall be solely and directly responsible to the OWNER and operators of such properties for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this Contract

- D. Neither the OWNER nor its Officers or agents shall be responsible to the CONTRACTOR for damages as a result of the CONTRACTOR's failure to protect utilities encountered in the work.
- E. In the event of interruption to domestic water, sewer, storm drain, or other utility services as a result of accidental breakage due to construction operations, promptly notify the proper authority. Cooperate with said authority in restoration of service as promptly as possible and bear all costs of repair. In no case shall interruption of any water or utility service be allowed to exist outside working hours unless prior approval is granted.
- F. In the event the CONTRACTOR encounters water service lines that interfere with trenching, he/she may, by obtaining prior approval of the property owner, Florida Keys Aqueduct Authority (FKAA), or Fire Department as applicable, and the ENGINEER, cut the service dig through, and restore service with similar and equal materials at the CONTRACTOR's expense.
- G. The CONTRACTOR shall replace, at his/her own expense, all existing utilities or structures removed or damaged during construction, unless otherwise provided for in these Contract Documents or ordered by the ENGINEER.

1.10 PROTECTED VEGETATION

- A. Trees and shrubs are regulated and protected. Prior to any trimming or pruning, the CONTRACTOR shall contact the City of Key West Urban Forestry Manager and obtain approval to perform the trimming and pruning work. This work is considered to be incidental to the project cost.
- B. Preserve and protect existing trees and plants at site which are designated to remain, and those adjacent to site. Tree protection and preservation measures shall be per the 2023 FDOT Standard Plans Index 110-100 and these specifications.
- C. Consult with the ENGINEER and the City's Urban Forestry Manager and remove agreed-on roots and branches which interfere with construction. Employ a qualified tree surgeon to remove branches and treat cuts. No trees or roots shall be removed without approval and/or a permit issued by the City Tree Commission.
- D. Protect root zones of trees and plants:
 1. Do not allow vehicular traffic or parking.
 2. Do not store materials or products.
 3. Prevent dumping of refuse or chemically injurious materials or liquids.
 4. Prevent puddling or continuous running water.
- E. Carefully supervise excavating, grading and filling, and other construction operations, to prevent damage.
- F. Replace, or suitably trim trees and plants designated to remain which are damaged or destroyed due to construction operations.

1.11 TEMPORARY WATER

- A. The CONTRACTOR shall make his/her own arrangements to obtain suitable water for any need and shall pay all costs.

1.12 TEMPORARY ELECTRIC POWER

- A. The CONTRACTOR shall make his/her own arrangements to obtain and pay for electrical power used until final acceptance by the OWNER.

1.13 SAFETY REQUIREMENTS FOR TEMPORARY ELECTRIC POWER

- A. Temporary electric power installation shall meet the construction Safety requirements of OSHA, State, and other governing agencies.

1.14 SANITARY FACILITIES

- A. The CONTRACTOR shall provide and maintain sanitary facilities for his/her employees and his/her SUBCONTRACTOR's employees that will comply with the regulations of the local and State Departments of Health and as directed by the OWNER.

1.15 STORAGE OF MATERIALS

- A. Materials shall be so stored as to ensure the preservation of their quality and fitness for the work. When considered necessary, they shall be placed on wooden platforms or other clean hard surfaces and not on the ground. Stored materials shall be located so as to facilitate prompt inspection. Stored materials on city property must be safe and secured from the general public and if necessary they must be fitted with lights at night. Private property shall not be used for storage purposes without the written permission of the OWNER or lessee. Materials shall not be stored where access to any structure, plot, or road is blocked. Location of stored materials approved by the ENGINEER or his/her designee.
- B. Delicate instruments and materials subject to vandalism shall be placed under lock cover and, if necessary, provided with temperature control as recommended by the manufacturer.

1.16 CONSTRUCTION SAFETY PROGRAM

- A. The CONTRACTOR shall develop and maintain for the duration of this Contract, a safety program that will effectively incorporate and implement all required safety provisions. The CONTRACTOR shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the safety program.
- B. The duty of the ENGINEER to conduct construction review of the CONTRACTOR's performance is not intended to include a review or approval of the adequacy of the CONTRACTOR's safety supervisor, the safety program or any safety measures taken in, on, or near the construction site.

- C. The CONTRACTOR shall do all work necessary to protect the public from hazards, including, but not limited to, surface irregularities, or unramped grade changes on pedestrian walkways and docks. Barricades, lights, and proper signs shall be furnished in sufficient amount to safeguard the public and the work.
- D. The performance of all work shall be in accordance with the applicable governing safety authorities.

1.17 ACCIDENT REPORTS

- A. If death or serious injuries or serious damages are caused; the CONTRACTOR must promptly report by telephone or messenger to the ENGINEER. In addition, the CONTRACTOR must promptly report in writing to the ENGINEER all accidents whatsoever arising out of or in connection with, the performance of the work whether on, or adjacent, to the site, giving full details and statements of witnesses.
- B. If a claim is made against the CONTRACTOR or any SUBCONTRACTOR on account of any accident, the CONTRACTOR shall promptly report the facts in writing to the ENGINEER, giving full details of the claim.

1.18 TRAFFIC MAINTENANCE AND SAFETY

- A. Comply with all rules and regulations of the state, county, and city authorities regarding closing or restricting the use of public streets or highways. No public or private road shall be closed, except by express permission of the OWNER. Conduct the work so as to assure the least possible obstruction to traffic and normal commercial pursuits. Protect all obstructions within traveled roadways by installing approved signs, barricades, and lights where necessary for the safety of the public. The convenience of the general public and residents adjacent to the project and the protection of persons and property are of prime importance and shall be provided for in an adequate and satisfactory manner.
- B. Maintenance of Traffic shall be maintained at all construction sites until the work is either completed or any open trenches have been properly covered and all equipment is properly stored. CONTRACTOR shall maintain Maintenance of Traffic (MOT) signs in good repairs and required MOT lights should be operative at all times. The OWNER shall stop work if MOT is not properly maintained; there shall not be any additional cost to the OWNER for this downtime.
- C. When flagmen and guards are required by regulation, permits, or when deemed necessary for safety, they shall be furnished with approved orange wearing apparel and other regulation traffic-control devices. Flaggers shall be certified by State approved agency.
- D. MOT plans shall be in accordance with Florida Department of Transportation standard details for MOT and the Manual on Uniform Traffic Control Devices (MUTCD). MOT

plans shall be submitted with the Temporary Right-of-Way Permit application for review and approval by the Engineering Department.

1.19 STREET MAINTENANCE

- A. CONTRACTOR shall notify all residents and proprietors adjacent to construction site of work to be performed, more specifically the notice shall state the day and time construction will begin, the name and phone number of the CONTRACTOR's representative responsible for the completion of the proposed improvements. Notice shall also include the OWNER's representative for the project.

1.20 PROTECTION OF PROPERTY

- A. Protect stored materials located adjacent to the proposed work. Notify property OWNERS affected by the construction at least 48 hours in advance of the time construction begins. During construction operations, construct and maintain such facilities as may be required to provide access by all property OWNERS to their property. No person shall be cut off from access to his/her residence or place of business for a period exceeding 8 hours, unless the CONTRACTOR has made special arrangements with the affected persons.
- B. The CONTRACTOR shall identify and isolate his/her work zone in such a manner as to exclude all personnel not employed by him, the ENGINEER, and the OWNER.

1.21 FIRE PREVENTION AND PROTECTION

- A. The CONTRACTOR shall perform all work in a fire-safe manner and shall supply and maintain on the site adequate fire-fighting equipment capable of extinguishing incipient fires. The CONTRACTOR shall comply with applicable federal, state, and local fire-prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed.

1.22 SITE RESTORATION AND CLEANUP:

- A. At all times during the work keep the premises clean and orderly and upon completion of daily work repair all damage caused by equipment and leave the project free of rubbish or excess materials of any kind.
- B. Stockpile excavated materials in a manner that will cause the least damage to adjacent lawns, grassed areas, gardens, shrubbery, or fences regardless of whether these are on private property, or State, County, or City rights-of-way. Remove all excavated materials from grassed and planted areas, and leave these surfaces in a condition equivalent to their original condition.

1.23 FINISHING OF SITE AND STORAGE AREAS

- A. Upon completion of the project, all areas used by the CONTRACTOR shall be properly cleared of all temporary structures, rubbish and waste materials and properly graded to drain and blend in with the abutting property. Areas used for the deposit of waste materials shall be finished to properly drain and blend in with the surrounding terrain.

1.24 AREA CLEANUP DURING CONSTRUCTION

- A. Thoroughly clean all spilled dirt, gravel, sand or other foreign materials caused by the construction operations from all streets and roads, grass, pathways, docks or concrete walkways and from adjacent areas at the conclusion of each day's operation. Truck or equipment wash down is not to be performed on City Property.

1.25 SUBMITTALS

- A. See Submittals section of the specifications

1.26 PAYMENT

- A. The cost of the work in this section is considered incidental to the contract.

END OF SECTION

01014: ENVIRONMENT PROTECTION

PART 1 GENERAL

1.1 GENERAL

- A. The CONTRACTOR shall maintain all work areas within and outside the project boundaries free from environmental pollution, which would be in violation to any federal, state, or local regulations.
- B. The work specified in this Section consists of designing, providing, maintaining and removing temporary erosion and sedimentation controls as necessary.
- C. Temporary erosion controls include, but are not limited to, grassing, mulching, watering, and reseeding on-site surfaces and spoil and borrow area surfaces and providing interceptor ditches at ends of berms and at those locations which will ensure that erosion during construction will be either eliminated or maintained within acceptable limits as established by the OWNER.
- D. Temporary sedimentation controls include, but are not limited to, silt dams, traps, barriers, and appurtenances at the foot of sloped surfaces which will ensure that sedimentation

pollution will be either eliminated or maintained within acceptable limits as established by the OWNER.

- E. CONTRACTOR is responsible for providing effective temporary erosion and sediment control measures during construction or until final controls become effective.

1.2 PROTECTION OF AIR QUALITY

- A. The air pollution likely to occur due to construction operations shall be minimized by wetting down bare soils during windy periods, requiring the use of properly operating combustion emission control devices on construction vehicles and equipment used by the CONTRACTOR, and by encouraging the shutdown of motorized equipment not actually in use.
- B. Trash burning will not be permitted on the construction site.
- C. CONTRACTOR shall provide dust control for any asphalt / concrete removal and during the asphalt milling operations.

1.3 CONSTRUCTION NOISE CONTROL

- A. The CONTRACTOR shall conduct all his/her work, use appropriate construction methods and equipment, and furnish and install acoustical barriers, all as necessary so that no noise emanating from the process or any related tool or equipment will exceed legal noise levels, as set forth in the Code of Ordinances, City of Key West, Florida.

1.5 PAYMENT

- A. Payment for the work associated with this Section will be incidental to the contract.

PART 2 – Not used

PART 3 – Not used

END OF SECTION

01020: SUMMARY OF WORK

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work Included: Furnishing all materials, equipment and labor for the construction of the proposed project, including all site clean-up, and all necessary appurtenances and incidental work to provide a complete and serviceable project.. The CONTRACTOR will receive a Notice to Proceed with the work authorized. The CONTRACTOR shall complete all work in within the number of calendar days stipulated in the
- B. Related requirements in other parts of the Contract Documents: Include but not limited to:
 - 1. General Conditions of the Contract for Construction.

1.2 CONTRACTOR'S DUTIES:

- A. In addition to provisions stipulated in other portions of the Contract Documents, the CONTRACTOR shall:
 - 1. Secure permits as necessary for proper execution and completion of the work.
 - 2. All conditions of the permit must be adhered to by the CONTRACTOR.
 - 3. Notify (in writing) all vendors, residents and proprietors adjacent to construction site of work to be performed, more specifically the notice shall state the day and time construction will begin, hours of work, the name and phone number of the CONTRACTOR's Superintendent and an end date for the project.
- B. The CONTRACTOR shall be totally responsible for securing and complying with all, required permits and payment of associated fees. CONTRACTOR shall ensure that construction complies with all applicable local, state, and federal codes.
- C. Provide an experienced, qualified, and competent Superintendent able to read, write and speak English to oversee the work and perform quality assurance inspections. Prior to starting construction, the proposed Superintendent's qualifications shall be submitted in writing to the City for approval. The approved Superintendent shall be expected to remain for the duration of the Project, unless the City or ENGINEER deem him/her inadequate and requests his/her removal or the CONTRACTOR cannot continue his/her services to the Project for a reason or reasons that shall be communicated in writing to the City.
- D. The Superintendent shall provide to the City, upon request, Construction Reports for each week of construction, the reports shall be in English, legible, and signed. CONTRACTOR, upon request, shall provide PDF copies monthly. Reports shall include quantity control checks.
- E. It shall be the CONTRACTOR's responsibility to comply with the City's Ordinance

Chapter 26 Environment, Article IV. Sound Control below:

Sec. 26-193. - Exceptions.

A. The prohibitions contained in this article shall not apply to the following:

1. Construction/demolition. Sound levels produced from tools and equipment in commercial construction, demolition, drilling, or reasonably similar activities. However, such sound levels are limited to the hours of 8:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturday. The tools and equipment must be muffled and maintained equal to the functional standards of the industry. No exceptions contained in this subsection shall apply on Thanksgiving Day, Christmas Day and New Year's Day.
- B. The CONTRACTORs is responsible for the construction of the above mentioned project, concrete walkways and all associated items used in the completion of the project. CONTRACTOR is further responsible for all costs associated with the disposal of materials and must dispose of in an environmentally responsible manner.
- C. The CONTRACTOR shall provide material safety data sheets (2 copies) for chemicals, paints, coatings and materials used on-site prior to initiation of work.

1.3 CONTRACTOR'S USE OF PREMISES

- A. Work shall be scheduled as to not interfere with on-going area activities.
- B. Coordinate use of premises and requirements for security under direction of City.
- C. Assume full responsibility for the protection and safekeeping of products, under this Contract, stored on the site.
- D. Obtain and pay for the use of additional storage or work areas needed for operation.

1.4 MAINTENANCE OF EXISTING UTILITIES OPERATION

- A. Provide at least three weeks' notice prior to interruption of utility services for temporary or permanent connections.
- B. Keep interruption of utility services, and utility outages during disconnection, moving, and reconnection to a minimum.
- C. Keys Energy shall be notified two weeks in advance in writing by the CONTRACTOR for any KEYS support equipment required by the CONTRACTOR during construction. CONTRACTOR is responsible for all impact fees. No additional payment will be paid for this coordination.

END OF SECTION

01025: MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 GENERAL

- A. The CONTRACTOR shall receive and accept the compensation as provided in the BID and the Contract in full payment for performing all operations necessary to complete the work under this Contract, and also in full payment for all loss or damages arising from the nature of the work, until the final acceptance by the OWNER.
- B. The Unit prices stated in the Bid include all costs and expenses for performing and completing the work as ordered and as described in the Contract Documents, details, technical specifications, and specified herein. Measurement and payment for an item at a Unit Price or Lump Sum shown in the Bid shall be in accordance with the description of the item in this section.
- C. The CONTRACTOR'S attention is called to the fact that the quotations for various items of work are intended to establish a total price for completing the work. Should the CONTRACTOR feel that the cost for an item has not been established in the BID, or this section, they shall include the cost for that work in an applicable BID item, so that this bid reflects his/her total Unit Prices and Aggregate Sums for completing the work in its entirety.
- D. The quantities for payment under this Contract shall be determined by actual measurement of completed items, in-place, and ready for service and accepted by the OWNER, in accordance with the applicable method of payment therefore contained herein. The CONTRACTOR shall designate and provide a representative to be present at, to witness, and to assist in the making of field measurement of payment.

1.2 MEASUREMENT GENERAL

- A. Whenever pay quantities of material are determined by weight, the material shall be weighed on scales furnished by CONTRACTOR and certified accurate by the state agency responsible. A weight or load slip shall be obtained from the scale operator and delivered to the OWNER'S representative at the point of delivery of the material.
- B. Vehicles used to haul material being paid for by weight shall be weighed empty daily and at such additional times as required by ENGINEER. Each vehicle shall bear a plainly legible identification mark.
- C. All materials which are specified for measurement by the cubic yard "measured in the vehicle" shall be hauled in vehicles of such type and size that the actual contents may be readily and accurately determined. Unless all vehicles are of uniform capacity, each vehicle must bear a plainly legible identification mark indicating its water level capacity. All vehicles shall be loaded to at least their water level capacity. Loads hauled in vehicles not meeting the above requirements or loads of a quantity less than the capacity of the vehicle, measured after being leveled off as above provided, will be subject to rejection, and no compensation will be allowed for such

material.

D. Units of measure shown on the Bid shall be as follows unless specified otherwise.

<u>Item</u>	<u>Method of Measurement</u>
CY	Cubic Yard: Field Measure Calculated by ENGINEER within the limits specified or shown
EA	Each: Field Count by ENGINEER
LF	Linear Foot: Field Measure by ENGINEER
LS	Lump Sum: Unit is one; no measurement will be made
SF	Square Foot: Measurement & calculation by ENGINEER
SY	Square Yard: Measurement & calculation by ENGINEER
TN	Ton: Haul tickets signed by ENGINEER
AC	Acres: Haul tickets signed by ENGINEER
AS	Assembled: Field Count by ENGINEER
GM	Gross Mile: Measurement & calculation by ENGINEER

1.3 PAYMENT

- A. General: Progress payments will be made monthly based on the date of Notice to Proceed issuance.
- B. Payment for all Work shown or specified in the Contract Documents is included in the Contract Price. No measurement or payment will be made for individual items except as itemized herein as unit price items.
- C. Payment will not be made for following:
 1. Loading, hauling, and disposing of rejected material.
 2. Quantities of material wasted or disposed of in manner not called for under Contract Documents.

3. Rejected loads of material, including material rejected after it has been placed by reason of failure of CONTRACTOR to conform to provisions of Contract Documents.
4. Material not unloaded from transporting vehicle.
5. Defective Work not accepted by OWNER.
6. Material remaining on hand after completion of Work.

1.4 DESCRIPTION OF BID ITEMS

See Bid Proposal Form

01050: FIELD ENGINEERING

PART 1 - GENERAL

1. DESCRIPTION:

A. Work Included:

1. Provide field-engineering services required for the Project, including but not limited to survey work required in execution of the Work.

B. Related Work:

1. General Conditions of the Contract.
2. Section 01020 Summary of Work.

1.2 SUBMITTALS:

- A. Upon request of the City's Engineer, submit documentation to verify accuracy of field engineering work.
- B. Upon request, submit certificates signed by the Surveyor certifying that elevations and locations of the work of this Project are in conformance, or non-conformance, with the Contract Documents.

1.3 INSURANCE:

- A. Surveying work constitutes a professional service, requiring the CONTRACTOR to maintain a minimum \$1,000,000 professional liability insurance policy per occurrence.

PART 2 – MATERIALS (not used)

PART 3 - EXECUTION

3.1 EXAMINATION AND PREPARATION OF SITE

- A. Before starting operations, CONTRACTOR shall examine work site to acquaint himself/herself with conditions to be encountered.
- B. Compare actual site with drawings and specifications.
- C. Report discrepancies affecting work or cost thereof to the OWNER.
- D. Verify exact locations of sewers, water mains, gas mains, above or below ground electrical wires and conduits and structures which may interfere with work.

E. No extra compensation will be allowed for any extra work made necessary due to conditions or obstacles encountered during progress of work, which could have been determined by examination of site or by contacting OWNERS of utilities, pipelines and conduits before starting operations.

F. Comply with State law concerning Sunshine State One Call of Florida, State Statute Title 33, Chapter 556.

3.2 LINES AND GRADES

- A. Prior to staking out work, CONTRACTOR shall verify established base line, benchmarks, and control points provided.
- B. CONTRACTOR shall furnish and maintain lines and grades.
- C. CONTRACTOR shall take immediate steps to correct errors or inconsistencies in lines and grades of work to be in conformity with Contract Documents.
- D. CONTRACTOR shall be fully responsible for accuracy of lines and grades of work and control and checking and immediate correction of it.

3.3 RESTORATION

- A. Items to remain which are disturbed, damaged, or removed when performing required work or for convenience of CONTRACTOR or to expedite his/her operations shall be restored, repaired, reinstalled, or replaced with new work and refinished, as appropriate, so as to be left in as good condition as existed before work commenced and such restoration shall be considered incidental to the work.
- B. Any sidewalks or pavement replaced or installed shall meet ADA requirements.
- C. Existing items to be altered, extended, salvaged, or relocated and reused, if found to be defective in any way, shall be reported to the OWNER before items are disturbed.
- D. Materials and workmanship used in restoring work shall conform in type and quality to original existing construction.

3.4 PAYMENT

- A. Payment for work specified in this section will be incidental to the contract.

END OF SECTION

01300: SUBMITTALS

PART 1 - GENERAL

1.1 GENERAL

- A. Inquiries: Direct to ENGINEER regarding procedure, purpose, or extent of Submittal.
- B. Submittal Submission Procedures: As provided in General Conditions, as specified herein, and as may otherwise be established during the preconstruction conference.
- C. OWNER's Authorization: At any time, OWNER may authorize changes to procedures and requirements for Submittals, as necessary to accomplish specific purpose of each Submittal. Such authorization will be by Field Order or Work Change Directive.
- D. Timeliness: Make submissions in accordance with requirements of individual Specification sections, as shown on the current accepted schedule of Submittals submissions, and in such sequence as to cause no delay in Work or in work of other CONTRACTORS.
- E. Identification of Submittals:
 - 1. Complete, sign, and transmit with each Submittal package, one Transmittal of CONTRACTOR's Submittal Form attached at the end of this section.
 - 2. Identify each Submittal with numbering and tracking system reviewed by ENGINEER:
 - a. Sequentially number each Submittal.
 - b. Resubmission of a Submittal will have original number with sequential alphabetic suffix.
 - 3. Show date of submission and dates of previous submissions.
 - 4. Show Project title and OWNER's contract identification and contract number.
 - 5. Show names of CONTRACTOR, SUBCONTRACTOR or Supplier, and manufacturer as appropriate.
 - 6. Identify, as applicable, Contract Document section and paragraph to which Submittal applies.
 - 7. Clearly identify revisions from previous submissions.

F. Incomplete Submittal Submissions:

- 1. At ENGINEER's sole discretion, ENGINEER will either (i) return the entire Submittal for CONTRACTOR's revision/correction and resubmission, or (ii) retain portions of the Submittal and request submission/resubmission of specified items or as noted thereon.
- 2. Submittals which do not clearly bear CONTRACTOR's specific written indication of CONTRACTOR review and approval of Submittal or which are transmitted with an unsigned or uncertified submission form or as may otherwise be required under

Contract Documents, will be returned to CONTRACTOR unreviewed for resubmission in accordance with Contract Documents.

3. Delays, re-sequencing or other impact to Work resulting from CONTRACTOR's submission of unchecked or unreviewed, incomplete, inaccurate or erroneous, or nonconforming Submittals, which will require CONTRACTOR's resubmission of a Submittal for ENGINEER's review, shall not constitute a basis of claim for adjustment in Contract Price or Contract Times.

G. Non-specified Submissions: Submissions not required under these Contract Documents and not shown on schedule of Submittals submissions will not be reviewed and will be returned to CONTRACTOR.

H. Transmit submittals in accordance with current accepted schedule of Submittal submissions, and deliver to the ENGINEER designated by the Engineering Department of the City of Key West.

I. Disposition of Submittals: As specified herein for administrative Submittals. ENGINEER will review, stamp, and indicate requirements for resubmission or acceptance on Submittal as follows:

1. No Exceptions Taken.
2. Reviewed as Noted:
 - a. Reference the General Conditions for intent.
 - b. CONTRACTOR may proceed to perform Submittal related Work.
 - c. One copy for ENGINEER's file.
 - d. One copy returned to CONTRACTOR.
3. Revise and Resubmit (Revise/Correct or Develop Replacement and Resubmit):
 - a. Revise/correct in accordance with ENGINEER's comments and resubmit.
 - b. One copy to ENGINEER's file.
 - c. One copy returned to CONTRACTOR appropriately annotated.

J. Payment for the work in this section will be incidental to the contract.

PART 2 - Not used

PART 3 - Not used

END OF SECTION

01390: PRECONSTRUCTION AUDIO-VIDEO RECORDINGS

PART 1 – GENERAL

1.1 REQUIREMENTS

- A. The CONTRACTOR shall provide a color audio-video recording showing the entire preconstruction site. The videos shall be in DVD format or .wav files on removable USB drive, indicating the date, project name, and a brief description of the location where the video was taken. The CONTRACTOR shall submit one (1) copy of the preconstruction audio-video to the OWNER.
- B. All video recordings shall, by electronic means, display on the screen the time of day, the month, day, and year of the recording.

PART 2 – PRODUCTS (Not used)

PART 3 – EXECUTION

3.1 GENERAL

- A. The following shall be included with the audio-video documentation:
 1. Coverage is required within and adjacent to the right of way, easements, storage, and staging areas where the work is to be constructed.
 2. Documentation of the conditions of the adjacent properties or any affected structures as a result of the impending construction.
 3. Videos shall be properly identified by PROJECT name and number
- B. There will be no separate payment for this preconstruction audio-video recording. The cost will be incidental to the contract.

END OF SECTION

01500: TESTING SERVICES

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. The CONTRACTOR shall employ and pay for the services of a qualified commercial independent testing laboratory acceptable to the OWNER to perform specified services.
- B. Inspection, sampling, and testing is required for:
 - 1. Backfill
 - 2. Paving and surfacing
 - 3. Concrete
 - 3. Additional quality checks as required by the ENGINEER
- C. Employment of a testing laboratory shall in no way relieve the CONTRACTOR of his/her obligation to perform work in accordance with the Contract.

PART 2 - PRODUCTS

2.1 SUBMITTALS

- A. Submit two copies of reports of inspections and tests to ENGINEER promptly upon completion of inspections and tests, including: Provide one copy in PDF.
 - 1. Date issued.
 - 2. Project title and job number.
 - 3. Testing laboratory name and address.
 - 4. Name and signature of inspector.
 - 5. Date of inspection or sampling.
 - 6. Record of temperature and weather.
 - 7. Date of test.
 - 8. Location of inspection or test.
 - 9. Identification of product and specification section.
 - 10. Type of inspection or test.
 - 11. Observation regarding compliance with the Contract Documents.

PART 3 - EXECUTION

3.1 LABORATORY DUTIES - LIMITATIONS OF AUTHORITY

- A. Cooperate with the OWNER and CONTRACTOR; provide qualified personnel promptly on notice.
- B. Perform specified inspections, sampling, and testing of materials and methods of construction:

1. Comply with specified standards; ASTM, other recognized standards, authorized and as specified.
2. Ascertain compliance with requirements of Contract Documents.

C. Notify the ENGINEER and CONTRACTOR immediately of irregularities or deficiencies of work that are observed during performance of services.

D. Perform additional services as required by the ENGINEER.

3.2 ON SITE TESTING

- A. On site testing must be performed by technical staff certified/accredited by state approved agencies and industry standards.
- B. Testing as required by other sections of this document.

3.3 PAYMENT

- A. Payment for the work in this section will be incidental to the respective unit price items.

END OF SECTION

01530: BARRIERS

PART 1 – GENERAL

1.1 REQUIREMENTS

- A. Furnish, install, and maintain suitable barriers as required to prevent public entry, and to protect the work, existing facilities, trees, and plants from construction operations; remove when no longer needed, or at completion of work.

1.2 RELATED REQUIREMENTS

- A. Section 01020 Summary of Work.

PART 2 - PRODUCTS

2.1 MATERIALS – GENERAL

- A. Materials may be new or used, suitable for the intended purpose, but must not violate requirements of applicable codes and standards.

2.2 FENCING

- A. Minimum fence height shall be four feet. Open-mesh orange plastic fence shall be used to prohibit public access to the construction site.

2.3 BARRIERS

- A. Materials are CONTRACTOR's option, as appropriate to serve required purpose and should comply with industry accepted standards.

2.4 NO PARKING SIGNS

- A. The Contactor is responsible to furnish and place “No Parking” signs when necessary to perform work.

PART 3 - EXECUTION

3.01 GENERAL

- A. Install facilities in a neat and reasonably uniform appearance, structurally adequate for the required purposes.
- B. Maintain barriers during entire construction period.
- C. Relocate barriers as required by the progress of construction.

3.02 FENCES

- A. Provide and maintain fences necessary to assure security of the site during construction to keep unauthorized people and animals from the site when construction is not in progress.
- B. Provide additional security measures as deemed necessary and approved by the OWNER.

3.03 TREE AND PLANT PROTECTION

- A. Preserve and protect existing trees and plants at site which are designated to remain, and those adjacent to site. Tree protection and preservation measures shall be per the 2023 FDOT Standard Plans Index 110-100 and these specifications.
- B. Consult with the ENGINEER and the City's Urban Forestry Manager and remove agreed-on roots and branches which interfere with construction. Employ a qualified tree surgeon to remove branches and treat cuts. No trees or roots shall be removed without approval and/or a permit issued by the City Tree Commission.
- C. Protect root zones of trees and plants:
 - 1. Do not allow vehicular traffic or parking.
 - 2. Do not store materials or products.
 - 3. Prevent dumping of refuse or chemically injurious materials or liquids.
 - 4. Prevent puddling or continuous running water.
- D. Carefully supervise excavating, grading and filling, and other construction operations, to prevent damage.
- E. Replace, or suitably trim trees and plants designated to remain which are damaged or destroyed due to construction operations.

3.04 REMOVAL

- A. Completely remove barricades when construction has progressed to the point that they are no longer needed and when approved by the OWNER.
- C. Repair damage caused by construction. Fill and grade areas of the site to the required elevations, and clean up the entire area impacted by construction activities.

3.05 PAYMENT

- A. Payment for the work in this section will be incidental to the respective unit price items.

END OF SECTION

01700: CONTRACT CLOSEOUT

PART 1 – GENERAL

1.1 REQUIREMENTS

- A. Project completion includes completion of all Work, final inspection after completion, final cleaning, CONTRACTOR's closeout submittals, and final adjustment of accounts.

1.2 FINAL INSPECTION AFTER COMPLETION

- A. When the CONTRACTOR considers the Work complete with all minor deficiencies completed or corrected, he/she shall submit written certification that:

1. Contract Document requirements have been met.
2. Work has been inspected for compliance with Contract Documents.
3. Work has been completed in accordance with Contract Documents.
4. All minor deficiencies have been corrected or completed and the Work is ready for final inspection.
5. Project record documents are complete and submitted.

- B. Within a reasonable time upon receipt of such certification, the OWNER will make an inspection to verify the status of completion.

- C. Should the OWNER determine that the work is incomplete or defective:

1. The OWNER will promptly notify the CONTRACTOR in writing, listing the incomplete or defective work.
2. CONTRACTOR shall remedy the deficiencies in the work and send a second written certification to the OWNER that the project is complete.
3. Upon receipt of the second certification, the OWNER will review the Work.

- D. When the OWNER determines that the work is acceptable under the Contract Documents, the CONTRACTOR shall provide all closeout submittals.

1.3 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean site; sweep paved areas, rake clean other surfaces.

- C. Remove waste and surplus materials, rubbish, and construction facilities from the Project and from the site.

1.5 CONTRACTOR'S CLOSEOUT SUBMITTALS

A. Project Record Documents

1. At Contract Closeout, submit documents with transmittal letter containing date, project title, CONTRACTOR's name and address, list of documents, and signature of CONTRACTOR.
2. Changes made by Field Order or by Change Order.

B. Evidence of payment and Release of Liens.

1.6 FINAL ADJUSTMENT OF ACCOUNTS

- A. Submit a final statement of accounting to the OWNER.
- B. Statement shall reflect all adjustments to the Contract Sum.
 1. The original Contract sum.
 2. Additions and deductions resulting from:
 - a. Previous change orders or written amendment.
 - b. Allowances
 - c. Unit prices
 - d. Deductions for uncorrected work.
 - e. Deductions for liquidated damages
 - f. Other adjustments
 3. Total contract sum as adjusted
 4. Previous payments
 5. Sum remaining due

PART 2 - PRODUCTS (not used)

PART 3 - EXECUTION (not used)

END OF SECTION

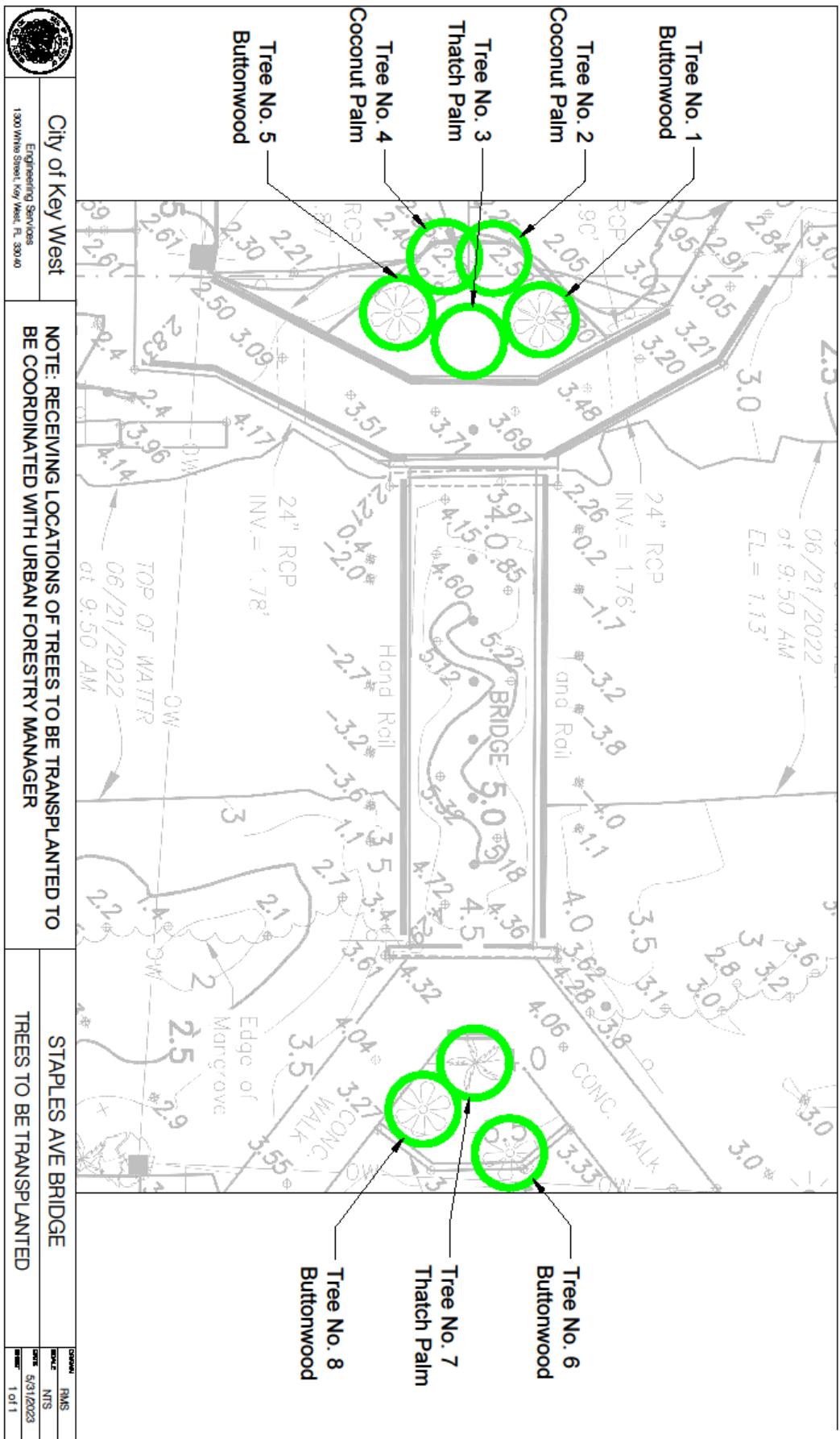
PART 5: TECHNICAL SPECIFICATIONS / ENGINEER OF RECORD

NOTE:

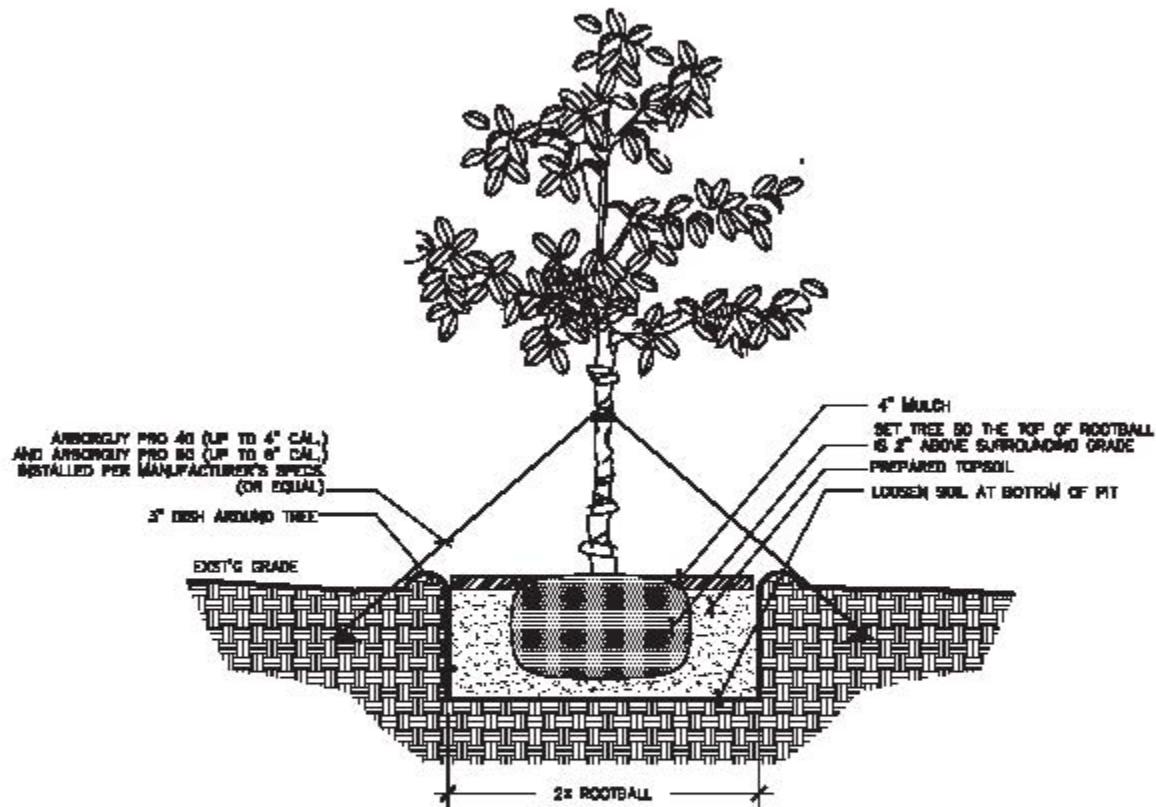
The Technical Specifications for the proposed work are included in the Engineered Plans.

INCLUDED:

- Trees to be Transplanted
- Tree Planting Detail
- Tree Notes
- Topographic Route-Of-Line Survey
- Geotechnical Exploration Report



 City of Key West Engineering Services 1300 White Street, Key West, FL 33040	NOTE: RECEIVING LOCATIONS OF TREES TO BE TRANSPLANTED TO BE COORDINATED WITH URBAN FORESTRY MANAGER	
	STAPLES AVE BRIDGE TREES TO BE TRANSPLANTED	ORIGIN RMS ROUTE NTS DATE 5/31/2023 1 of 1



TREE PLANTING DETAIL

ALL TREES ARE TO BE POSITIONED VERTICALLY REGARDLESS OF THE SLOPE OF THE GROUND IN WHICH THEY ARE PLANTED. WATER RINGS ARE TO BE CONSTRUCTED AT RIGHT ANGLES TO THE TREE OR SHRUB OR IN A MANNER IN WHICH THEY WILL MOST EFFECTIVELY SERVE THE PURPOSE OF RETAINING WATER AT THE BASE OF THE PLANT.

THE ROOTBALL OF THE TREE SHOULD BE POSITIONED IN THE HOLE SO THAT THE FINISH GRADE OF THE BACKFILL SOIL AND LANDSCAPE SOIL IS 2" LOWER THAN THE TOP OF THE ROOTBALL. MULCH SHOULD COVER THE EDGE OF THE ROOTBALL, DO NOT MULCH ON TOP OF ROOTBALL.

TREE BRACING NOTES:

2" AND LARGER CALIPER TREES BRACED BY GUYING:

1. CHOOSE THE CORRECT SIZE AND NUMBER OF STAKES AND SIZE OF HOSE AND WIRE. GUYING SHALL BE COMPLETED WITHIN 48 HOURS OF PLANTING THE TREE
2. CUT LENGTHS OF STAKING HOSE TO EXTEND 2 INCHES PAST TREE TRUNK WHEN WRAPPING AROUND.
3. SPACE STAKES EVENLY ON OUTSIDE OF WATER RING AND DRIVE EACH FIRMLY INTO GROUND. STAKES SHOULD BE DRIVEN AT A 30 DEGREE ANGLE WITH THE POINT OF THE STAKE TOWARD THE TREE UNTIL 4 TO 5 INCHES ARE LEFT SHOWING.
4. PLACE THE HOSE AROUND THE TRUNK JUST ABOVE THE LOWEST BRANCH.
5. THREAD THE WIRE THROUGH THE HOSE AND PAST THE STAKE, ALLOWING APPROXIMATELY 2 FEET OF EACH OF THE TWO ENDS BEYOND THE STAKE BEFORE CUTTING THE WIRE.
6. TWIST WIRE AT RUBBER HOSE TO KEEP IT IN PLACE
7. PULL WIRE DOWN AND WIND BOTH ENDS AROUND STAKE TWICE. TWIST WIRE BACK ONTO ITSELF TO SECURE IT BEFORE CUTTING OFF THE EXCESS.
8. THE ABOVE PROCEDURES ARE TO BE FOLLOWED FOR EACH STAKE, KEEPING THE TREE STRAIGHT AT ALL TIMES. THERE SHOULD BE A 1 TO 3 INCH SWAY IN THE TREE (THE WIRES SHOULD NOT BE PULLED TIGHT) FOR BEST ESTABLISHMENT.
9. FLAG THE GUY WIRES WITH SURVEYORS FLAGGING OR APPROVED EQUAL FOR SAFETY.
10. GUYS ARE NOT TO BE REMOVED UNTIL APPROVED BY LANDSCAPE CONTRACTOR.

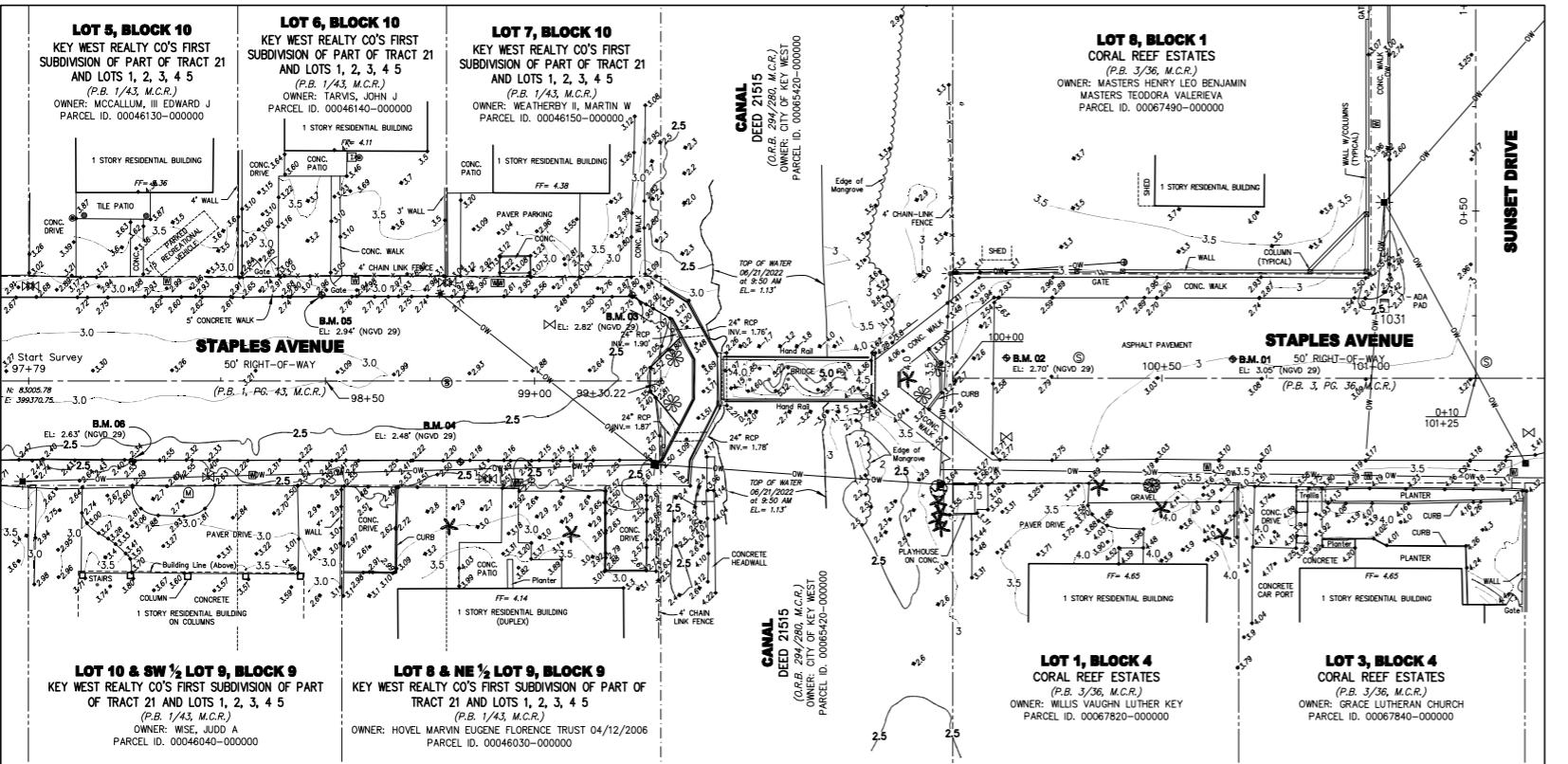
SPECIMEN TREES AND TALL PALMS BRACED WITH PROPS:

11. CHOOSE THE CORRECT SIZE, LENGTH, AND NUMBER OF PROPS TO BE USED (PRESSURE TREATED (PT) 2"X4", 4"X4").
12. WRAP AT LEAST 5 LAYERS OF BURLAP AROUND TRUNK OF THE PALM AT LEAST 4 INCHES WIDER THAN THE BATTENS BEING USED. BATTENS SHOULD BE MOUNTED AT A POINT $\frac{1}{3}$ OF THE DISTANCE FROM GROUND TO THE CLEAR TRUNK OF THE TREE OR PALM, BUT NOT LESS THAN 4 FEET, WHICHEVER IS GREATER.
13. SELECT THE PROPER LENGTH AND SIZE OF BATTENS (PT 2"X4"X12"-16")
14. USE THE SAME NUMBER OF BATTENS AS PROPS BEING USED.
15. PLACE THE BATTENS VERTICALLY AND EVENLY SPACED AGAINST THE BURLAP.
16. PLACE THE BATTENS IN PLACE WITH METAL OR PLASTIC BANDING STRAPS. **DO NOT NAIL INTO TREE.**
17. WEDGE LOWER END OF PROP INTO SOIL AND SECURE WITH A 2"X4"X30' STAKES. PROPS SHOULD BE INSTALLED AT A 30 TO 40 DEGREE ANGLE FROM THE BATTENS AND OF SUFFICIENT LENGTH TO REACH THE GROUND. **NOTE: ON STRAIGHT TREES OR PALMS, SPACE PROPS EQUAL DISTANCE AROUND TREE OR PALM. ON CURVED PALMS OR TREES, SPACE PROPS AGAINST THE FRONT OF THE CURVE OF THE PALM OR TREE.**
18. CUT A SMOOTH ANGLE AT THE END OF THE PROPS. ALIGN WITH AND NAIL INTO BATTENS. **DO NOT PENETRATE TREE OR PALM WITH NAILS.**
19. IF IT APPEARS THAT ADDITIONAL CONSTRUCTION WORK WILL TAKE PLACE NEAR TO OR IN VICINITY OF THE NEWLY BRACED TREES OR PALMS, THEN PROPS ARE TO BE CLEARED LABELED WITH THE STATEMENT "DO NOT REMOVE".
20. PROPS ARE NOT TO BE REMOVED UNTIL APPROVED BY THE LANDSCAPE CONTRACTOR.

END

PART 6: ENGINEERED PLANS

TOPOGRAPHIC ROUTE SURVEY OF:
STAPLES AVENUE BRIDGE
 SECTION 04-68S-25E, CITY OF KEY WEST, MONROE COUNTY, FLORIDA



NOTE
 ELEVATIONS SHOWN HEREON
 ARE BASED ON THE NATIONAL
 GEODETIC VERTICAL DATUM OF 1929
 (NGVD 1929)

0 20 40
 GRAPHIC SCALE IN FEET
 1:20

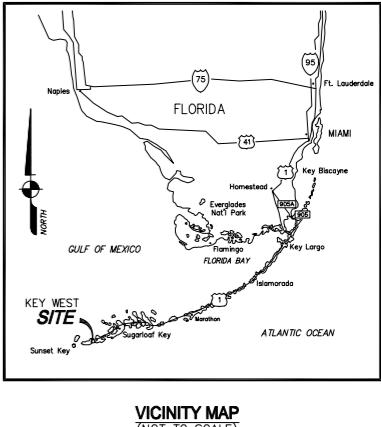
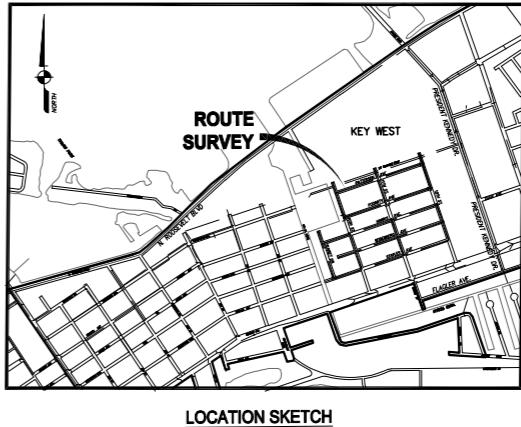
BENCH MARK LIST

BM No.	Northing (NAD 83)	East (NAD 83)	Elevation (NGVD 29)	Description of Bench Mark
01	83104.75	399641.17	3.05	Set nail & disk "AVIROM TRAVERSE"
02	83087.27	399589.96	2.70	Set nail & disk "AVIROM TRAVERSE"
03	83072.34	399500.49	2.82	Set nail & disk "AVIROM TRAVERSE"
04	83021.19	399474.66	2.48	Set nail & disk "AVIROM TRAVERSE"
05	83048.12	399430.29	2.94	Set nail & disk "AVIROM TRAVERSE"
06	82995.61	399400.53	2.63	Set nail & disk "AVIROM TRAVERSE"

TREE LEGEND
 PALM (DIA)
 BUTTONWOOD (DIA)
 GUMBO LIMBO (DIA)
 FICUS (DIA)

INVERTS TABULATION

Structure No.	Rim (NGVD 29)	Invert N (TYPE)	Invert S (TYPE)	Invert E (TYPE)	Invert W (TYPE)
11022	2.91	-0.88 6" PVC	-0.86 6" PVC	-0.94 6" PVC	-0.99 8" PVC



SURVEYOR'S REPORT:

1. Reproductions of this Sketch are not valid without the signature and the electronic signature of a Florida Licensed Surveyor and Mapper. Additions or deletions to this survey map or report by other than the signing party is prohibited without written consent of the signing party.
2. No Title Opinion or Abstract to the subject property has been provided. It is possible that there are Deeds, Easements, or other instruments (recorded or unrecorded) which may affect the subject property. No search of the Public Records has been made by the Surveyor.
3. The sub-surface utilities, if any are shown hereon have been located from found reference marks generated by others on the ground. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated, although he does certify that the reference marks are located accurately. The surveyor has not physically located the underground utilities. The sub-surface utilities were located by an unknown source and is shown for informational purposes only. It is the responsibility of the end user to verify the invert and pipe size dimensions prior to design of new facilities.
4. Pipe size, material and invert of sewer and drainage structures were obtained where accessible. Due to the nature of obtaining the data where the structures are in use and the actual invert may be obscured, the information obtained is the best approximation of the true measurements. It is the responsibility of the end user to verify the diameter and material utilizing as-build drawings or other resources prior to construction.
5. Coordinates shown hereon were established by a Real-time Kinematic (RTK) GPS Control Survey which is certified to a 2 centimeter local accuracy and are based on the 2011 Adjustment of the North American Datum of 1983 (NAD 83/2011, Epoch 2010.00), of the Florida State Plane Coordinate System (Transverse Mercator Projection), East Zone.
6. Elevations shown hereon are in feet and based on the National Geodetic Vertical Datum of 1929 established by a three-wire closed-loop differential leveling run to the following National Geodetic Survey's (NGS) benchmarks:
 "TIDAL BENCHMARK 872 4580 TIDAL 25", (PID AA 0004) Elevation 5.108 (NGVD 1929) or 3.766 (NAVD 88); "872 4580 TIDAL BASIC", (PID AA 0008) Elevation 14.324 (NGVD 1929) or 12.982 (NAVD 88). To convert NGVD 1929 elevations to North American Vertical Datum of 1988 (NAVD 1988) for this site, the model value of (-) 1.342 must be added algebraically to the NGVD 1929 height. Transformation is derived from the NGS Data sheet for "872 4580 TIDAL 25".
7. Data shown hereon was compiled from instrument(s) of record and does not constitute a boundary survey.
8. Right-of-way lines and lot lines are graphically delineated from information obtained by this firm from recorded plats and/or right-of-way maps, at the time of the survey. This information is spatially placed within the digital file of the topographic survey, based on recovered monumentation to depict the lines relative to the topographic locations. This is not a boundary survey and the information should not be relied on as such. It is strongly recommended that if the design is contingent on accurate boundary placement and especially prior to construction, a boundary survey should be performed to establish the lines. We will not be responsible for the misuse of the topographic survey for purposes it was not intended. No attempt was made to resolve conflicts between the recovered boundary information and occupational lines, if any.
9. Symbols shown hereon and in the legend may have been enlarged for clarity. These symbols have been plotted at the center of the field location and may not represent the actual shape or size of the feature.
10. This map is intended to be displayed at a scale of 1:240 ("1=20").
11. Adjacent property ownership information and parcel identification information shown hereon were obtained from the Monroe County Property Appraiser's website and reflects the current data during the epoch of the survey.
12. Units of measurement are in U.S. Survey Feet and decimal parts thereof. Well identified features in this survey were field measured to a horizontal positional accuracy of 0.05'. The elevations on impervious surfaces were field measured to 0.04' and on ground surfaces to 0.1'.
13. Abbreviation Legend: BLDG. = Building; B.M.= Benchmark; B= Baseline of Survey; C= Centerline; C.L.F.= Chain-Link Fence; CONC.= Concrete; DIA.= Diameter; D.I.P. = Ductile Iron Pipe; E= Elevation; F.F. = Finished Floor; H.D.P.E. = High-Density Polyethylene; INV. = Invert; LB= Licensed Business; M.C.R.= Monroe County Records; N= Northing; NAVD= National Geodetic Vertical Datum of 1929; OW = Overhead Wires; O.R.B.= Official Records Book; P.B.= Plot Book; PG= Page; PID= Point Identifier; P.L.S.= Professional Land Surveyor; P.V.C. = Polyvinyl Chloride; RCP= Reinforced Concrete Pipe; R/W= Right-of-Way; T.O.P. = Top of Pole; TYP= Typical; W/ = With.

CERTIFICATION:

I HEREBY CERTIFY that the attached Topographic Route Survey of the herein delineated property is true and correct to the best of my knowledge and belief as surveyed in the field under my direction. I FURTHER CERTIFY that this Topographic Route Survey meets the Standards of Practice set forth in Chapter 5j-17, Florida Administrative Code, pursuant to Chapter 472, Florida Statutes.

Date: 06/21/2022

Keith M. Chee-A-Tow

Digitally signed by Keith M. Chee-A-Tow, PLS
 Date: 2022.08.04 15:07:22 -04'00'

KEITH M. CHEE-A-TOW, P.L.S.
 Florida Registration No. 5328
 AVIROM & ASSOCIATES, INC.
 L.B. No. 3300
 E-Mail: Keith@AviromSurvey.com



**TOPOGRAPHIC ROUTE-OF-LINE SURVEY
 STAPLES AVENUE BRIDGE**
 SECTION 04-68S-25E
 CITY OF KEY WEST,
 MONROE COUNTY, FLORIDA

SCALE:	1" = 20'	DATE:	06/21/2022
BY:	K.C.	CHECKED:	K.M.C.
F.B.:	PG. 43	RECHECKED:	11406-12
REVISIONS	NAD 83/2011 SECTION ALONG BRIDGE	217749	06/04/2022
DATE:		K.M.C.	
F.B./PG.:		REVISIONS	
BY:		DATE:	
C.K.D.		F.B./PG.:	
		BY:	
		C.K.D.	

**REPORT OF
GEOTECHNICAL EXPLORATION**

**STAPLES AVENUE PEDESTRIAN BRIDGE
APPROX. 2627 STAPLES AVENUE
KEY WEST, FLORIDA**

FOR

**PEREZ ENGINEERING & DEVELOPMENT, INC.
1010 KENNEDY DRIVE, SUITE 202
KEY WEST, FLORIDA 33040**

PREPARED BY

**NUTTING ENGINEERS OF FLORIDA, INC.
24478 OVERSEAS HIGHWAY
SUMMERLAND KEY, FLORIDA 33042**

ORDER NO. 1977.4

JULY 2022

July 15, 2022

Mr. Allen E. Perez
Perez Engineering & Development, Inc.
1010 Kennedy Drive, Suite 202
Key West, FL 33040
Phone: 305-293-9440
Email: aperez@perezeng.com

Re: Report of Geotechnical Exploration Services
Staples Avenue Pedestrian Bridge
Approximately 2627 Staples Avenue
Key West, Florida

Dear Mr. Perez:

Nutting Engineers of Florida, Inc. (NE), has performed a Geotechnical Exploration at the referenced site in Key West, Florida. The purpose of this exploration was to obtain information concerning the site and subsurface conditions at specific locations in order to provide site preparation and foundation design recommendations for support of the planned construction. The following presents our findings and recommendations.

PROJECT INFORMATION

Per your email dated May 9, 2022 and review of the aerial provided, we understand that plans for this project include installing a manufactured pedestrian bridge to be supported on concrete spread footings with nominal 16-inch diameter auger anchors at the referenced site. Currently, there is an existing bridge which will be replaced.

We anticipate that final elevations will remain within one to two feet of present elevations; however, the final elevation should be determined by a professional architect, civil engineer, or other qualified professional.

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 Soil Exploration

NUTTING ENGINEERS OF FLORIDA, INC. performed two (2) Standard Penetration Test (SPT) borings (ASTM D-1586) to depths of thirty feet below land surface. The locations of the test borings are indicated on the boring location plan presented in the Appendix of this report. The boring locations were identified in the field using approximate methods; namely, a measuring wheel and available surface controls. As such the soil boring locations should be considered to be approximate.

The appended boring logs present information and descriptions of the subsurface conditions at each specific test boring location. Representative samples collected from the SPT boring were visually reviewed in the laboratory by a geotechnical engineer in order to confirm the field classifications. The Standard Penetration Test N-values, the number of successive blows required to drive the sampler into the soil one foot, are presented on the individual boring logs. The SPT N value has been empirically correlated with various soil properties and is considered to be indicative of the relative density of cohesionless soils and the consistency of cohesive soils. The correlation of penetration resistance with relative density is presented in the Soil Classification Criteria attached in the Appendix.

Soil Survey Maps

A review of the Soil Survey for Monroe County indicates that at the time the survey was conducted, the soils at the site were described as Urban Land 0 to 2 percent slopes, frequently flooded. This map unit is in upland areas adjacent to areas of water throughout the keys. Individual areas are subject to flooding from hurricanes and other tropical storms. We note that the maximum depth of the soil survey was approximately six feet.

Test Boring Results

In general, the test borings recorded a soft to very hard light brown limestone with varying amounts of fine sand throughout the soil profile to thirty feet, the maximum depth explored. A detailed description of the soil/rock interlayering is given on the test boring logs in the Appendix.

Rock Formation Note:

Generally, rock in the Florida Keys area may include limestone or sandstone which have irregularities and discontinuities including vertical and horizontal solution features, varying surface and bottom elevations, and varying degrees of hardness. The rock features may also contain intervening sand and other material filled lenses. Solution features can be very common in rock strata in Southeast Florida and the Florida Keys. Also given the brittle nature of some rock strata, rocks may readily shatter when hit by the split spoon. Despite this, these strata may present significant resistance to excavation.

Groundwater Information

The immediate groundwater level was measured at the boring locations at the time of drilling. The groundwater level was encountered at a depth of approximately two feet below the existing ground surface.

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 depth to water data should not be relied upon alone for project design considerations.

ANALYSIS AND RECOMMENDATIONS

The test borings performed for this project generally revealed soft to very hard limestone and sand throughout the soil profile. Therefore, it is our opinion that shallow foundations should provide sufficient support for the proposed construction, provided foundation criteria and site preparations are followed as discussed in this report.

Additionally, per Monroe County Code section 122-3(c) which states: "All building foundations shall rest directly on natural rock, on concrete piling driven to rock or on friction piling (concrete or wood) and shall be anchored to such rock support by holes, 16 inches in minimum diameter, augered into such rock a minimum depth of three feet and reinforced by a minimum of four #5 vertical rods extending up into the piers above a minimum of 18 inches and tied to the vertical steel of the pier".

Based on the above information, new footings will need to be installed to a below existing ground depth of at least two feet and anchor piles should be installed to a depth of approximately five feet below the bottom of the footings to comply with the building code requirements.

Alternatively, the structure could be supported using augercast piles as this may be more economical due to the Monroe County Ordinance. The ordinance does not require the anchor piles to be designed for any capacities, they just need to be installed to meet the requirements of the ordinance. If augercast piles are desired, structural loading conditions and other details will be needed to provide the proper analysis. Discussions should be held with all interested parties to provide input concerning this issue.

Foundation Design – Shallow Foundations

Once the site preparation recommendations have been implemented as described in this report, the site may be developed with the proposed bridge using a shallow foundation designed for an allowable bearing pressure of **3,000 pounds per square foot**.

Foundation Settlement

Shallow foundations designed and constructed in accordance with the recommendations of this report are estimated to sustain total settlements of less than one inch. Settlement of the foundations will occur as an elastic response of the soil to the loads applied. In this case, nearly all of the settlement of the foundations due to dead loads is expected to take place during construction. The portion of the settlement due to the live load of the structure will generally take place soon after the first application of this load.

Differential settlement between adjacent foundations should be approximately half of an inch. Distortions that occur along the wall footings due to differential settlement should not be more than 1 in 500.

Site Preparation

After demolition of the existing features, any unsuitable soils as determined by the Geotechnical Engineer will need to be removed within the construction area and to a lateral distance of at least 2 feet beyond the footprint limits, where practical. A Nutting Engineer's representative should be present to observe that the stripping operations are performed as we have discussed herein. Once the excavations have reached the bottom of the footing depth, the soils should be compacted to achieve a minimum density of 98 percent of the modified Proctor maximum dry density to at least 12 inches below the compacted surface.

Any structural fill needed to bring the site to construction grade may be placed in lifts not exceeding twelve inches in loose thickness. Each lift should be thoroughly compacted until densities equivalent to at least 98 percent of the modified Proctor maximum dry density are uniformly obtained. Fill should consist of granular soil, with less than 10% passing the No. 200 sieve, free of rubble, organics (5% or less) clay, debris and other unsuitable material. The fill should have ASTM designation (D-2487) of GP, GW, SP, or SW, with a maximum particle size of no more than 3 inches or as otherwise approved by Nutting Engineers.

GENERAL INFORMATION

The contents of this report are for the exclusive use of the client, the client's design & construction team and governmental authorities for this specific project exclusively. 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, environmental issues related to fill, methane, and other environmental considerations 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.

Nutting Engineers of Florida, Inc. (NE), recommends that we be contracted to provide input to the design team and owner during the foundation and earthwork design process and that we review final foundation drawings and specifications to verify that our report recommendations and design intent have been properly implemented. NE shall also perform testing and inspections during the earthwork and foundation construction as recommended in this report. If NE is not engaged to perform these services as detailed herein, the Client agrees that NE shall bear no liability for the interpretation, implementation of our report, its recommendations and/or inspection and testing services as described in this report if implemented 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.

This item has been digitally signed and sealed by Richard C. Wohlfarth
on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed
and the signature must be verified on any electronic copies.

Richard C. Wohlfarth, P.E. #50858
Director of Engineering

Attachments: Boring Location Plan
Test Boring Logs
Limitations of Liability
Soil Classification Criteria





Perez Engineering & Development, Inc.
Staples Avenue Pedestrian Bridge
Approx. 2627 Staples Avenue
Key West, Florida

PROJECT NO. 1977.4

APPROXIMATE
TEST LOCATION
PLAN

GEOTECHNICAL EXPLORATION

FIG. 1



Nutting Engineers of Florida

BORING NUMBER B-1

PAGE 1 OF 1

CLIENT Perez Engineering & Development, Inc.

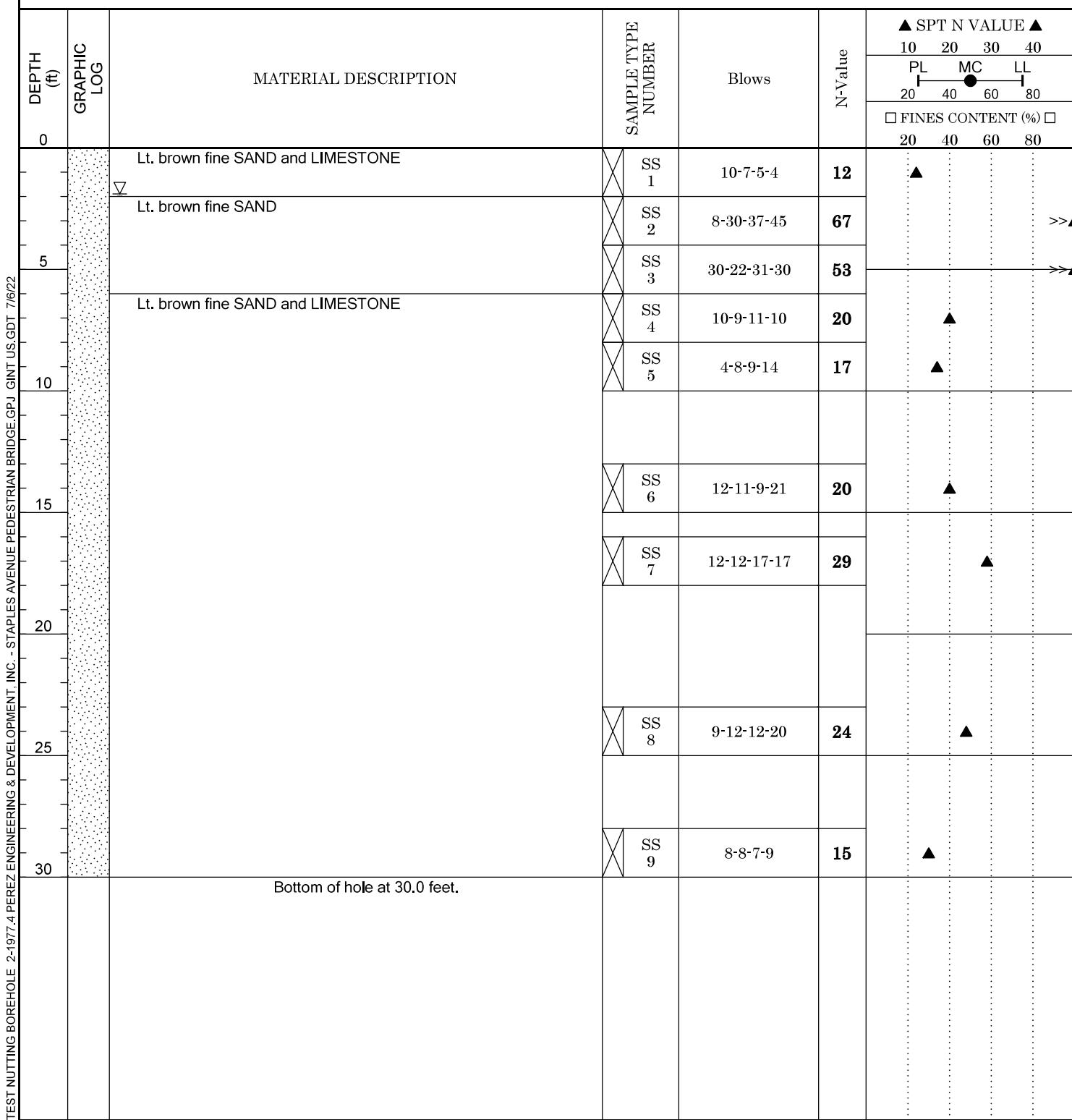
PROJECT NUMBER 1977.4

PROJECT LOCATION Approx. 2627 Staples Avenue, Key West, FL

PROJECT NAME Staples Avenue Pedestrian Bridge

DATE STARTED 7/1/22 COMPLETED 7/1/22 SURFACE ELEVATION REFERENCE Same as road crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY JR Precision CHECKED BY C. Hernandez AT TIME OF DRILLING 1.9 ftAPPROXIMATE LOCATION OF BORING As located on site plan



Nutting Engineers of Florida

BORING NUMBER B-2

PAGE 1 OF 1

CLIENT Perez Engineering & Development, Inc.

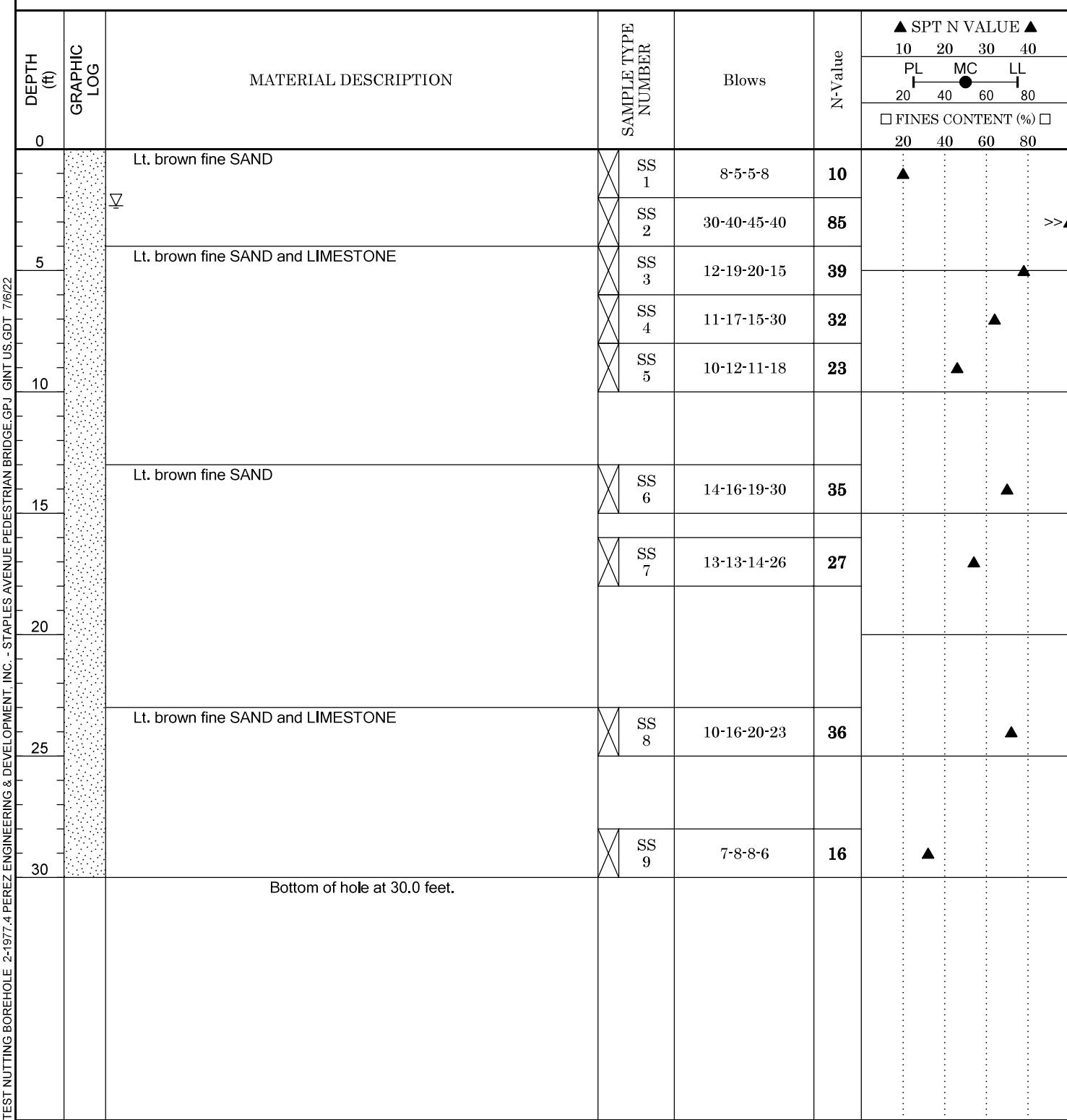
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PROJECT LOCATION Approx. 2627 Staples Avenue, Key West, FL

PROJECT NAME Staples Avenue Pedestrian Bridge

DATE STARTED 7/1/22 COMPLETED 7/1/22 SURFACE ELEVATION REFERENCE Same as road crown

DRILLING METHOD Standard Penetration Boring GROUND WATER LEVELS:

LOGGED BY JR Precision CHECKED BY C. Hernandez AT TIME OF DRILLING 2.3 ftAPPROXIMATE LOCATION OF BORING As located on site plan

LIMITATIONS OF LIABILITY

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.

ANALYSIS AND RECOMMENDATIONS

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 construction means, methods, operations or 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

N-VALUE (bpf)	RELATIVE DENSITY
0 – 4	Very Loose
5 – 10	Loose
11 – 29	Medium
30 – 49	Dense
>50	Very dense
100	Refusal

CLAY/SILTY CLAY

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	Stiff
16 – 30	2.00 – 4.00	v. Stiff
>30	>4.00	Hard

ROCK

N-VALUE (bpf)	RELATIVE HARDNESS	ROCK CHARACTERISTICS
$N \geq 100$	Hard to v. hard	
$25 \leq N \leq 100$	Medium hard to hard	
$5 \leq N \leq 25$	Soft to medium hard	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

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		

DESCRIPTION MODIFIERS

Major Divisions		Group Symbols	Typical names	Laboratory classification criteria	
Coarse-grained soils (More than half of material is larger than No. 200 sieve size)	Sands (More than half of coarse fraction is smaller than No. 4 sieve size)	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_z = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3
		Clean gravels (little or no fines)	GP	Poorly graded gravels, gravel-sand mixtures, little or no fines	Not meeting all gradation requirements for GW
		Gravels with fines (Appreciable amount of fines)	GW*	Silty gravels, gravel-sand-silt mixtures	Atterberg limits below "A" line or P.I. less than 4
		Clean sands (little or no fines)	d		Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols.
			u	GC	
	Sands with fines (Appreciable amount of fines)	Clean sands (little or no fines)	GW*	Clayey gravels, gravel-sand-clay mixtures	Atterberg limits above "A" line with P.I. greater than 7
			d	SW	
		Sands with fines (Appreciable amount of fines)	u	Well-graded sands, gravelly sands, little or no fines	$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_z = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3
			SP	Poorly graded sands, gravelly sands, little or no fines	Not meeting all gradation requirements for SW
		SM*	SC	Silty sands, sand-silt mixtures	Atterberg limits below "A" line or P.I. less than 4
	Sils and clays (liquid limit less than 50)	ML	CL	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	Limits plotting in hatched zone with P.I. between 4 and 7 are borderline cases requiring use of dual system.
			OL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	
			MH	Organic silts and organic silty clays of low plasticity	
		CH	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	
			CH	Inorganic clays or high plasticity, fat clays	
			OH	Organic clays of medium to high plasticity, organic silts	
	Highly organic soils	PT		Peat and other highly organic soils	

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:
Less than five percent.....GW, GP, SW, SP
More than 12 percent.....GM, GC, SM, SC
5 to 12 percent.....Borderline cases requiring dual systems**

Plasticity Chart

STAPLES AVE PEDESTRIAN BRIDGE

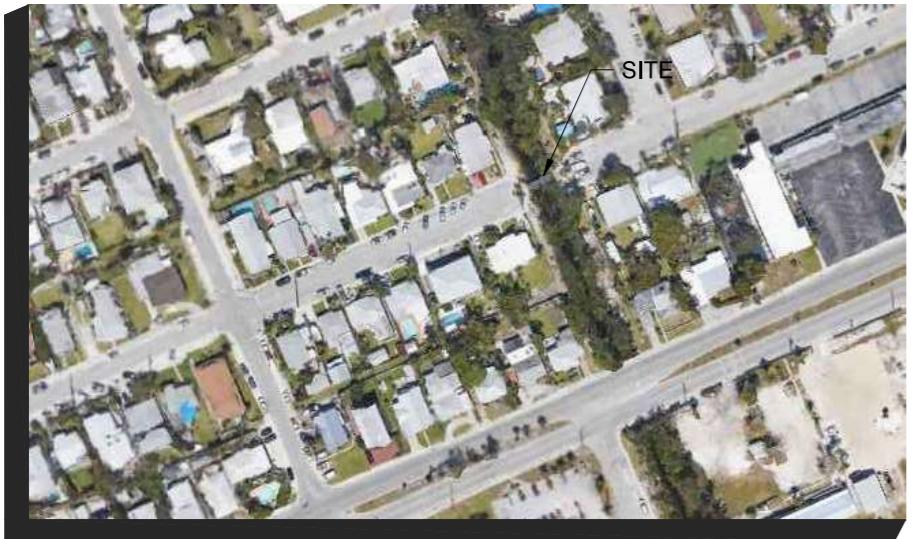
STAPLES AVENUE
KEY WEST, FLORIDA



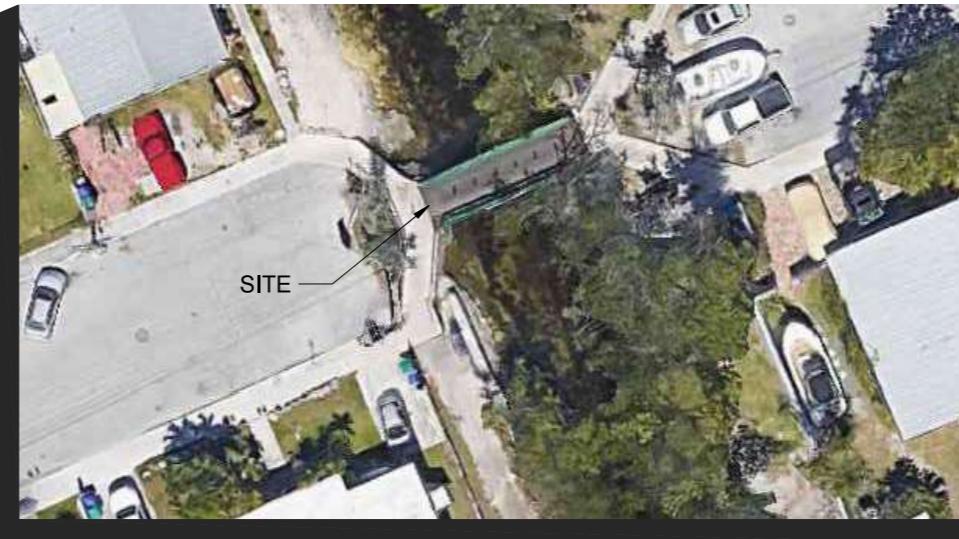
DATE: JUNE 2023
PROJECT NUMBER: 22034
PROJECT NAME: STAPLES AVE PEDESTRIAN BRIDGE
PREPARED BY: PEREZ ENGINEERING & DEVELOPMENT, INC.
PREPARED FOR: CITY OF KEY WEST
PLANS DESCRIPTION: BID SET

BID SET

KEY WEST
FLORIDA



VICINITY MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

PROJECT LOCATION
KEY WEST, FLORIDA

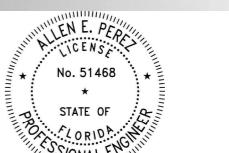
PREPARED FOR:
CITY OF KEY WEST
1300 WHITE ST.
KEY WEST, FL 33040

REVISIONS: _____ DATE: _____
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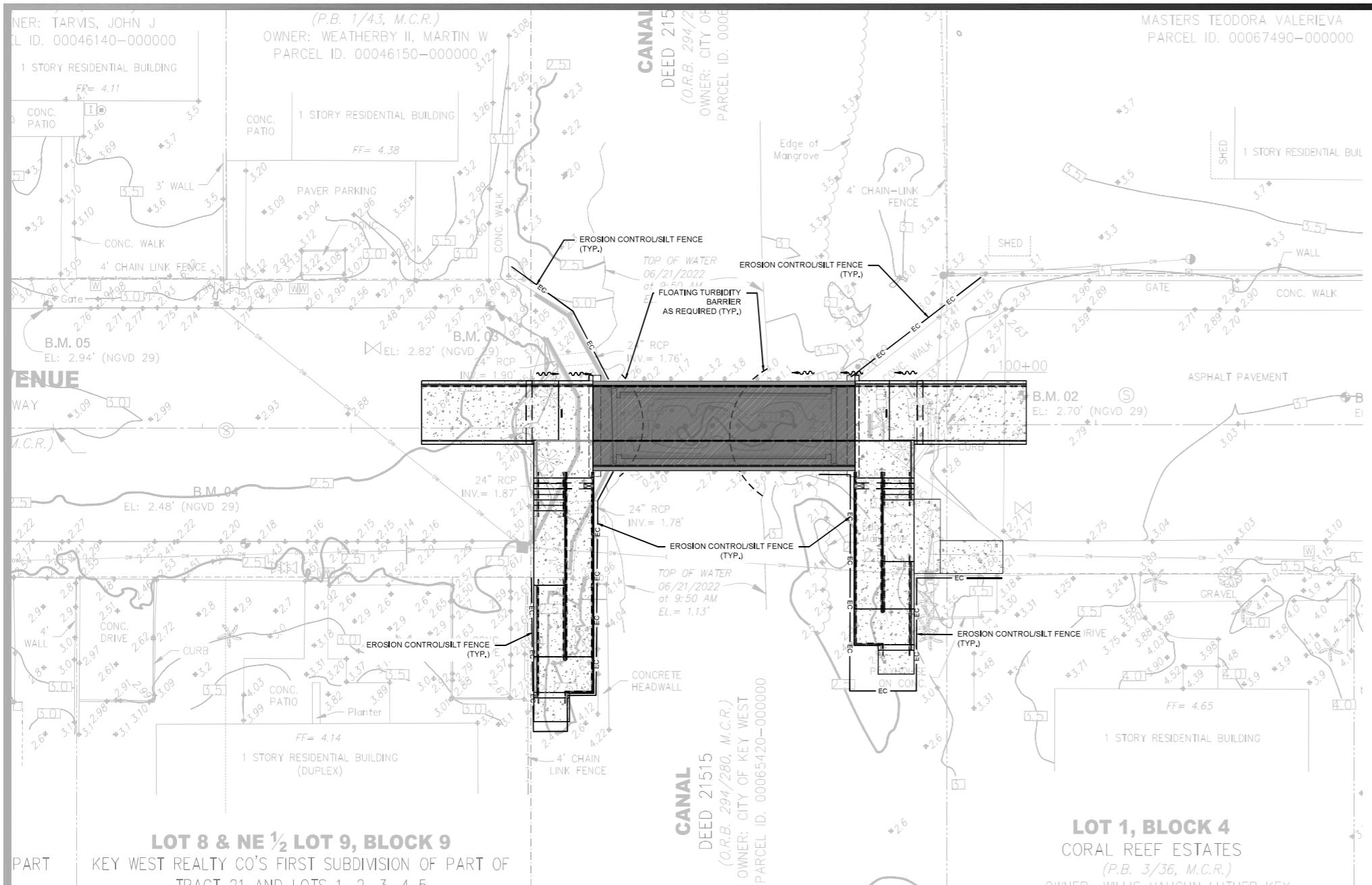
PEREZ ENGINEERING & DEVELOPMENT, INC.
1010 KENNEDY DRIVE, SUITE 202
KEY WEST, FLORIDA
(305) 293-9440

PERMIT AGENCY	PERMITS TYPE	NUMBER	STATUS

Digitally signed
by Allen E Perez
Date:
2023-06-02
16:23:09-04'00'
DATE

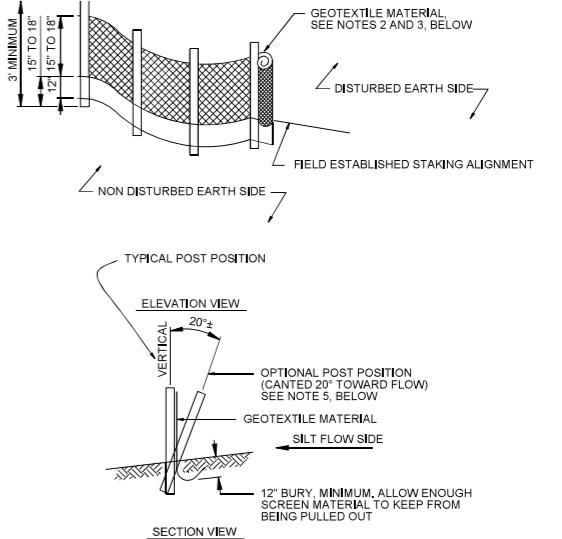


Printed copies of this document are not
considered signed and sealed. This signature
must be verified on any electronic copies.
(SEAL)



**Know what's below.
Call before you dig.**

SCALE 1"=10'
BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF
NOT TWO INCHES ON THIS SHEET ADJUST SCALES
ACCORDINGLY



NOTES:
1. POST-2"X6" WOOD, P.T. OR 2-1/2"Ø STEEL AT 6' CENTERS, MAXIMUM.
2. GEOTEXTILE BURSTABLE AT 30 LBS, TRAPEZOIDAL TEAR AT 35 LBS, MULLEN BURST AT 180 PSI.
3. GEOTEXTILE MATERIAL SHALL BE BURIED IN THE GROUND A MINIMUM OF 12" AND BACK FILLED.
4. ALSO SEE FDOT INDEX 199, "GEOTEXTILE CRITERIA". EROSION CLASS.
5. OPTIONAL POST POSITION REQUIRED WHEN SLOPE IS GREATER THAN 1:2.

1 Staked Silt Barrier Detail

EROSION CONTROL PLAN

SCALE:1"=1000

EROSION CONTROL NOTES

1. EROSION, SEDIMENT, AND TURBIDITY CONTROL MEASURES SHALL BE PROVIDED THROUGHOUT CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND REPAIRING ALL SLOPES AND SURFACES THROUGHOUT CONSTRUCTION AND UNTIL A STABLE SURFACE CONDITION EXISTS. THE CONTRACTOR SHALL MINIMIZE THE EXPOSED AREA AT ANY POINT DURING CONSTRUCTION AS MUCH AS PRACTICAL.
2. FILTER FABRIC SILT FENCE SHALL BE IN CONFORMANCE WITH FDOT STANDARDS AND SPECIFICATIONS.
3. CONTRACTOR SHALL INSTALL EROSION CONTROLS NOTED ON DRAWINGS AND APPLICABLE PERMITS, EROSION CONTROLS SHALL BE MAINTAINED UNTIL A PERMANENT STAND OF GRASS IS PLANTED ON SITE.
4. BALED HAY OR STRAW BARRIERS SHALL BE CONSTRUCTED AND MAINTAINED IN CONFORMANCE WITH FDOT STANDARDS AND SPECIFICATIONS.
5. SILT FENCE LOCATIONS SHOWN HEREON ARE FOR CLARITY ONLY AND SHOULD BE CONSTRUCTED WITHIN PROPERTY LINES.
6. PROVIDE EROSION CONTROL MEASURES CONSISTING OF STAKED SILT FENCES AND FILTER SOCK ALONG THE PROPOSED LIMITS OF CONSTRUCTION AS INDICATED ON THE DRAWINGS. PROVIDE ADDITIONAL MEASURES AS NECESSARY TO AVOID ADVERSE IMPACTS TO JURISDICTIONAL AREAS (WETLANDS OR WATER BODIES) AND OFF-SITE LANDS AND WATERBODIES. MAINTAIN THESE MEASURED DAILY UNTIL CONSTRUCTION ACCEPTANCE BY THE OWNER AND THEN REMOVE AND LEGALLY DISPOSE OF SAID MEASURES.
7. EROSION CONTROL SHALL MAINTAINED WITHIN CONSTRUCTION AREA BY QUICKLY STABILIZING DISTURBED AREA TO PREVENT THE RELEASE OF SEDIMENT. THIS SHALL BE ACCOMPLISHED USING GRASS COVER, FILTER SOCK AND OTHER MEANS ACCEPTABLE TO OWNER, ENGINEER AND REGULATORY AGENCIES.
8. DURING CONSTRUCTION, THE CONTRACTOR SHALL, AT THE REQUEST OF THE OWNER OR AS NECESSARY MODIFY, RELOCATE THE ENVIRO-FENCE AND/OR SILT FENCE TO ALLOW FOR ACCESS AND TO COMPLETE CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ADEQUATE EROSION CONTROL AT ALL TIMES.
9. DURING CONSTRUCTION, THE CONTRACTOR WILL PROVIDE TEMPORARY SEEDING AND MULCHING FOR AREA THAT HAVE BEEN CLEARED (INCLUDING AREAS OF CONCRETE AND PAVEMENT REMOVAL) AND NOT REWORKED WITHIN 7 CALENDAR DAYS DURING THE WET SEASON (APRIL THROUGH SEPTEMBER) AND 14 CALENDAR DAYS DURING THE DRY SEASON (OCTOBER THROUGH MARCH). ALSO, ALL SIDE SLOPES SHALL BE SODDED OR SEEDED AND MULCHED WITHIN 7 DAYS DURING WET SEASON AND 14 DAYS DURING THE DRY SEASON.
10. ALL SURFACE WATER DISCHARGE FROM SITE, INCLUDING DEWATERING DISCHARGE SHALL MEET STATE WATER QUALITY STANDARDS (LESS THAN 29 NTU ABOVE BACKGROUND) PRIOR TO REACHING ANY WATERS OF THE STATE INCLUDING WETLAND.
11. IN THE EVENT THAT THE EROSION PREVENTION AND CONTROL DEVICES SHOWN IN THESE PLANS PROVE NOT TO BE EFFECTIVE, ALTERNATE METHODS FOR MAINTAINING STATE WATER QUALITY STANDARDS FOR DISCHARGE FROM THE CONSTRUCTION SITE WILL BE REQUIRED. ANY ALTERNATE EROSION PREVENTION AND CONTROL DEVICES MUST BE APPROVED BY THE CITY AND SFWMDO COMPLIANCE PERSONNEL PRIOR TO PLACEMENT.

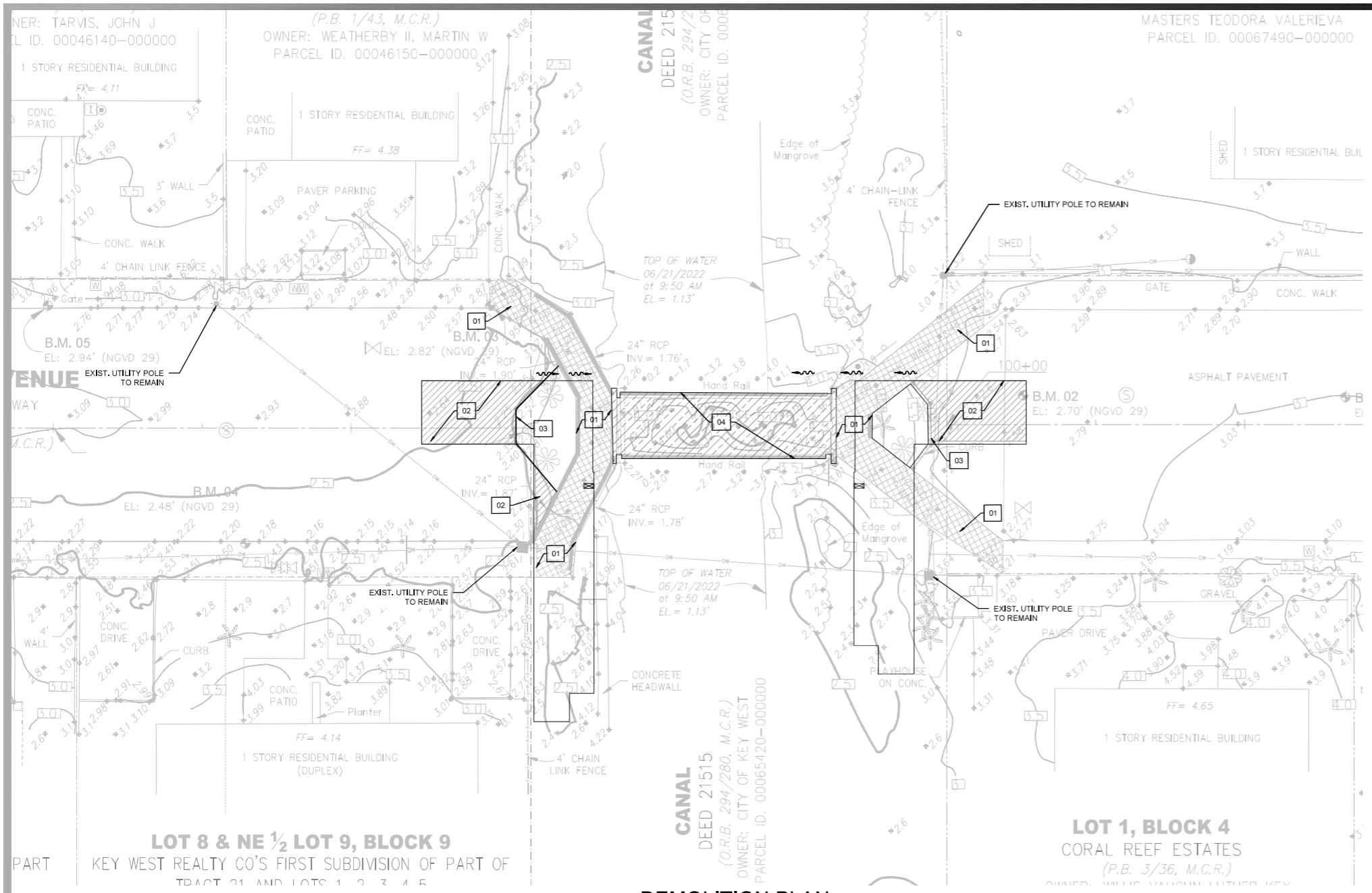
SWPPP GENERAL NOTES

- ALL AREAS WITHIN THE PROJECT LIMITS WILL BE SUBJECTED TO SOIL DISTURBANCE.
- THE DEPICTED BEST MANAGEMENT PRACTICES (BMP'S) DETAILS AND SPECIFICATIONS ARE ONLY A SUGGESTED APPROACH DEVELOPED FOR USE BY THE OWNER/CONTRACTOR TO ASSIST THEM IN IMPLEMENTING APPROPRIATE POLLUTION PREVENTION TECHNIQUES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING THE SWPPP.
- THE CONTRACTOR SHALL SUBMIT A "NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES, DEP FORM 62-621.300(4)(B)," ALSO KNOWN AS NOTICE OF INTENT OR NOI, TO THE DEPARTMENT; AND SUBMIT THE PERMIT FEE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT THE BEST MANAGEMENT PRACTICES AS OUTLINED IN THE CIVIL DOCUMENTS AND THE STORMWATER POLLUTION PREVENTION PLAN.
- THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENT CONTROL PLAN FOR APPROVAL PRIOR TO STARTING CONSTRUCTION.

CITY OF KEY WEST		STAPLES AVE PEDESTRIAN BRIDGE	CITY IMPROVEMENTS	KEY WEST, FL 33040	EROSION CONTROL PLAN
1300 WHITE STREET					
					
REVISIONS:	ORIGINAL: <u>JUNE 2023</u>				
1					
2					
3					
4					
5					
6					
ALLEN E. PEREZ, P.E. Florida P.E. NO. 51468 June 2, 2023					
<u>PEREZ ENGINEERING</u> <u>& DEVELOPMENT, INC.</u> <small>CERTIFICATE OF AUTHORIZATION NO. 8379</small> <small>1010 East Kennedy Drive, Suite 202</small> <small>Key West, Florida 33040</small> <small>Tel: (305) 233-9440</small>					

JOB NO. 221034
DRAWN AEP
DESIGNED AEP
CHECKED AEP

SHEET C-100

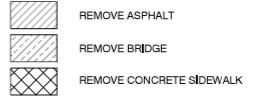


Know what's below.
Call before you dig.

SCALE 1 = 10'
BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF
NOT TWO INCHES ON THIS SHEET ADJUST SCALES
ACCORDINGLY

DEMOLITION NOTES/LEGEND:

- 01 EXISTING CONCRETE SIDEWALK TO BE REMOVED
- 02 EXISTING ASPHALT TO BE REMOVED
- 03 EXISTING CONCRETE CURB TO BE REMOVED
- 04 EXISTING BRIDGE TO BE REMOVED AND REPLACED



LOT 1, BLOCK 4
CORAL REEF ESTATES
(P.B. 3/36, M.C.R.)

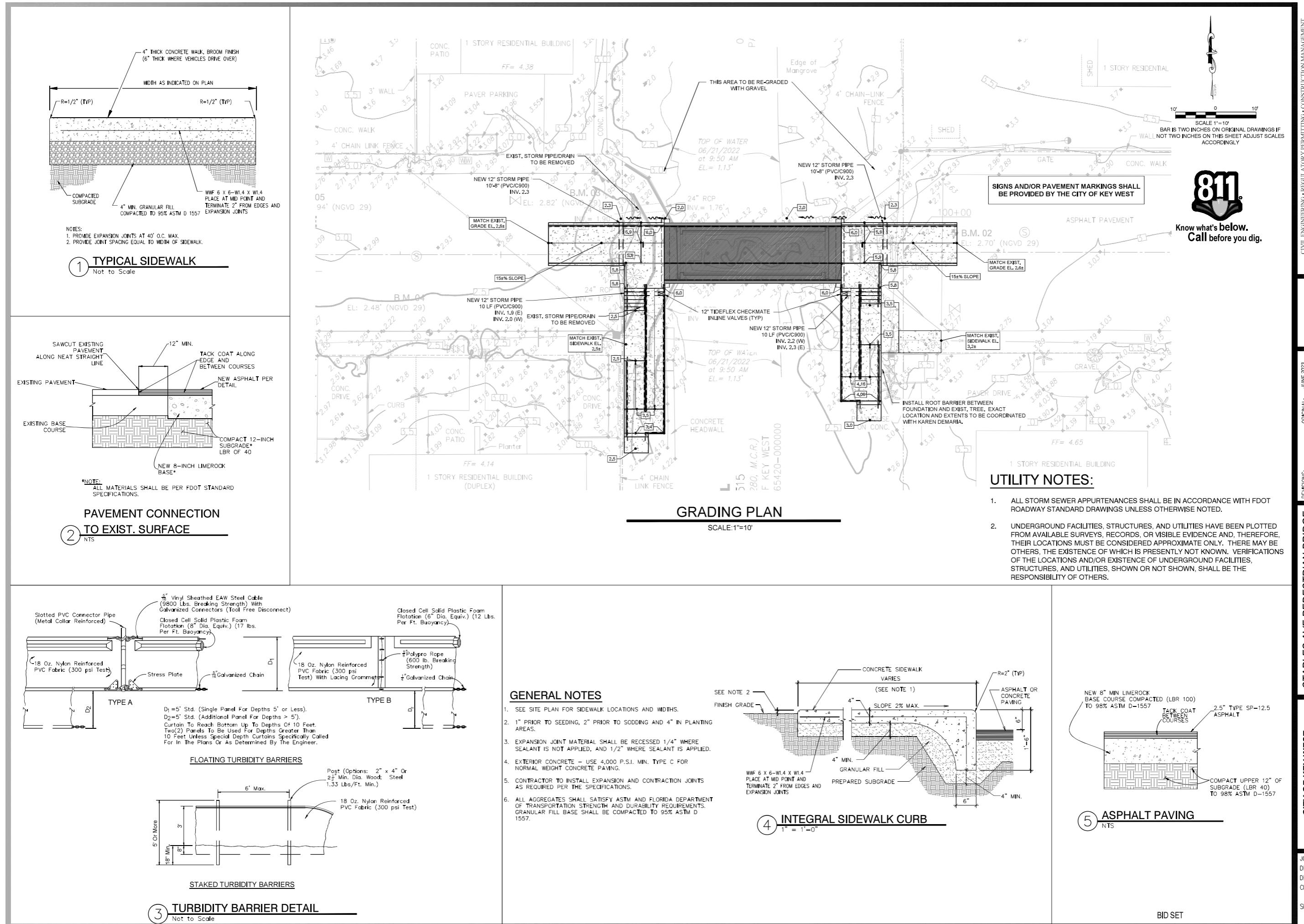
DEMOLITION NOTES:

1. DEMOLITION SHALL BE IN ACCORDANCE WITH PROJECT DRAWINGS AND NOTES.
2. CONTRACTOR TO INSTALL TEMPORARY CHAIN LINK FENCE AND SCREENING AS NEEDED TO PROVIDE AN ENCLOSED AND SECURE CONSTRUCTION SITE.
3. BACKFILL SUBSURFACE STRUCTURES (MANHOLES AND INLETS) NOT REMOVED WITH AGGREGATE MATERIAL AFTER BOTTOM HAS BEEN CHECKED TO PERMIT FREE DRAINAGE OF WATER. (RECYCLED ASPHALT PAVEMENT MATERIAL WILL NOT BE PERMITTED AS BACKFILL MATERIAL FOR SUBSURFACE STRUCTURES.)
4. PIPE CONNECTIONS AT MANHOLES TO BE ABANDONED SHALL BE CAPPED. ALL ABANDONED PIPES SHALL BE FILLED WITH FLOWABLE FILL IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. ABANDONED MANHOLE TOPS AND SPACERS SHALL BE REMOVED BELOW THE PROPOSED PAVEMENT SUBGRADE LEVEL. THE REMAINING MANHOLE STRUCTURE SHALL BE BACKFILLED WITH AGGREGATE MATERIAL.
5. COORDINATE THE SHUT OFF AND DEMOLITION OF WATER LINES AND SANITARY SEWER LINES WITH THE APPROPRIATE AGENCIES.
6. REMOVE SUBSURFACE UTILITY LINES IN THE AREAS INDICATED ON THE DRAWINGS. LINES NOT REQUIRED TO BE REMOVED SHALL BE ABANDONED. ABANDONED LINES LARGER THAN 4" SHALL BE GROUTED WITH A FLOWABLE FILL.
7. DEMOLISH MISCELLANEOUS SITE FEATURES NOT REQUIRED FOR FUTURE DEVELOPMENT, i.e. SIGNS, BOLLARDS, STAIRS, WOODEN POSTS, CURBS, ETC.

DEMOLITION PLAN

SCALE:1"=1

CITY OF KEY WEST	
1300 WHITE STREET	
KEY WEST, FL. 33040	
JOB NO.	221034
DRAWN	AEP
DESIGNED	AEP
CHECKED	AEP
SHEET C-200	



STRUCTURAL DESIGN DATA

THE WORK DEPICTED HEREIN WAS DESIGNED TO MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, 7TH EDITION (2020) - BUILDING ASCE 7-16, ASCE 24-14

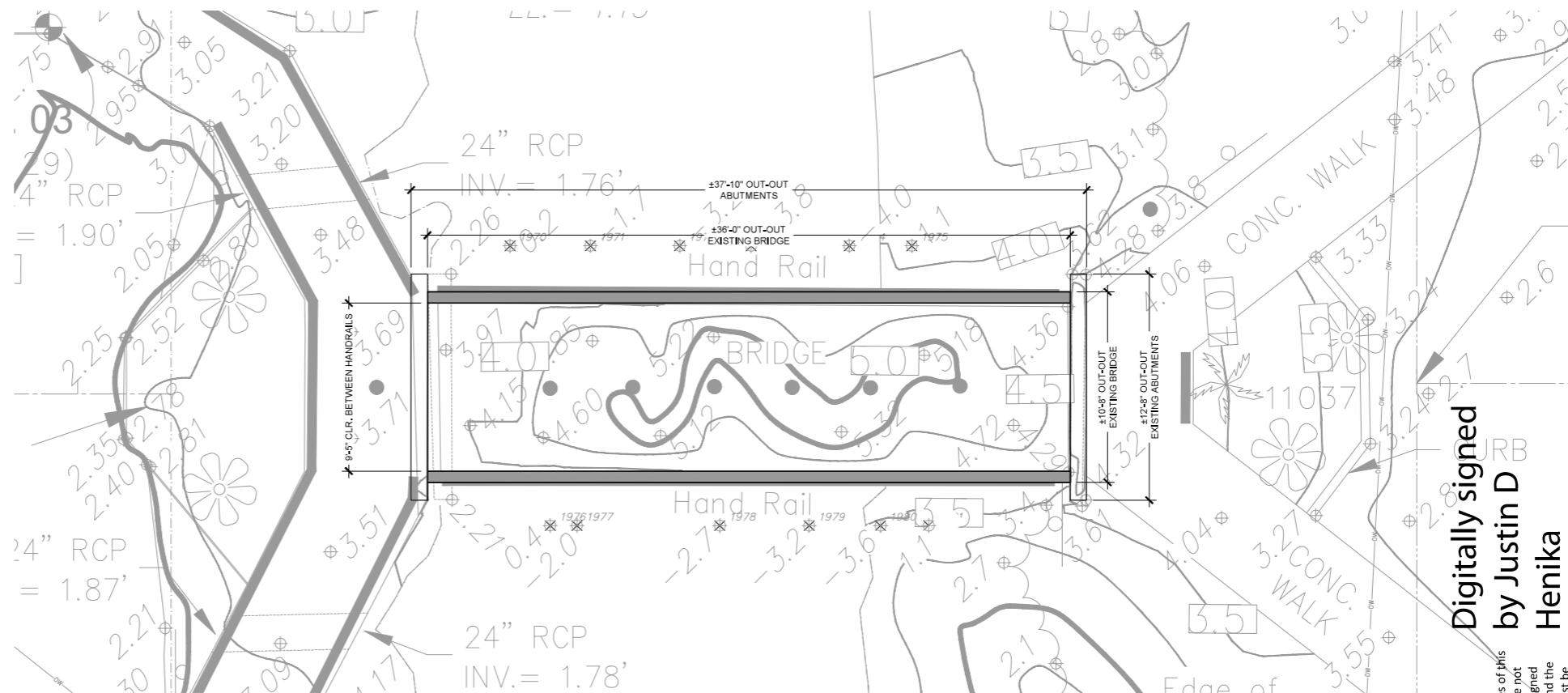
THE FOLLOWING LOADINGS WERE USED:
 FLOOD ZONE: AE8
 FUTURE PROPOSED FLOOD ZONE: AE8 NAVD = 9.4 NGVD29
 DESIGN FLOOD ELEVATION (D.F.E.): 9.4 + 1.0 FREEBOARD = 10.4 NGVD29
 [PER FEMA "NON-COASTAL AE" FLOOD ZONE, STRUCTURE IS NOT DESIGNED FOR HYDRODYNAMIC LOADS (I.E. NOT DESIGNED FOR MOVING WATER OR WAVE HEIGHTS EXCEEDING 1.5')]
 WIND LOAD: 180 MPH (ASCE 7-16) 3 SECOND GUST, EXPOSURE D, RISK CATEGORY II
 FLOOR LIVE LOAD: 100 PSF

INDEX OF STRUCTURAL DRAWINGS

S-1 - BRIDGE PLAN
 S-2 - BRIDGE ELEVATION/SECTION
 S-3 - FOUNDATION PLAN
 S-4 - FOUNDATION DETAILS/SECTIONS
 S-5 - RAILING PLAN & CONCRETE CONTROL JOINTS
 S-6 - RAILING DETAILS

GENERAL NOTES

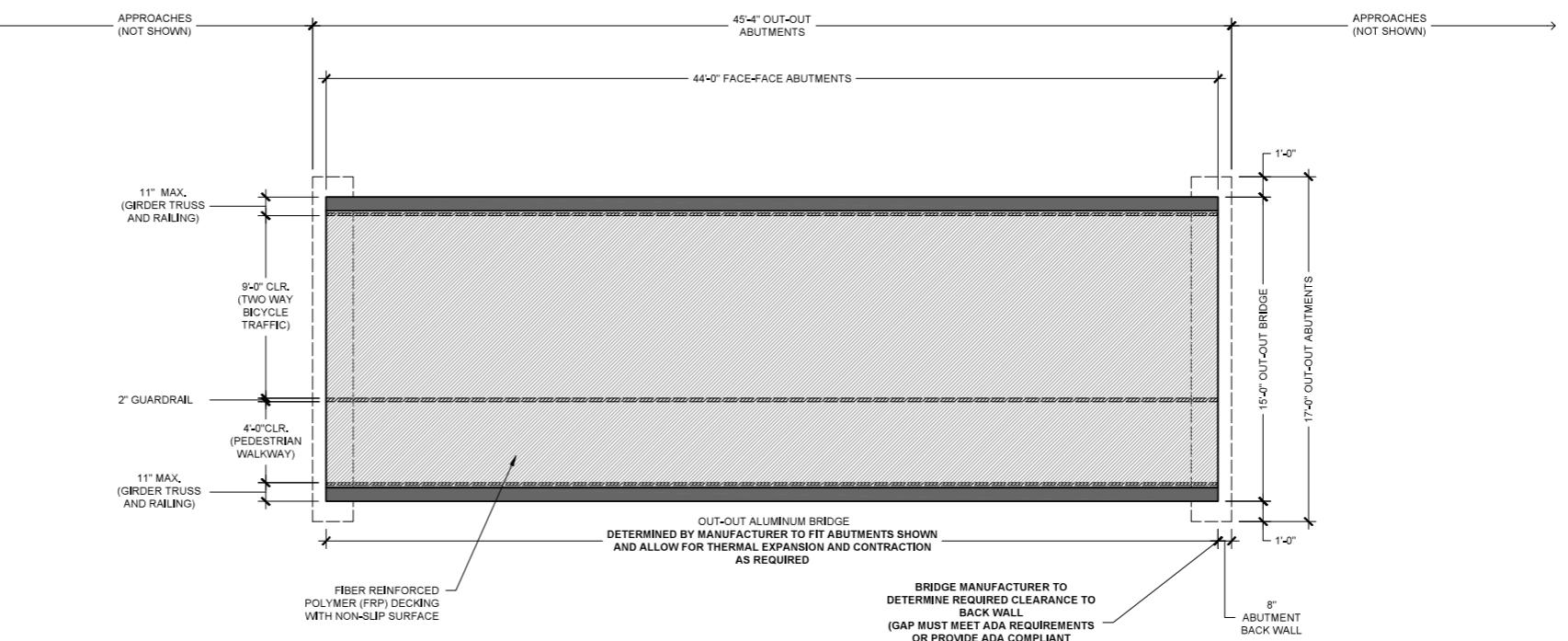
1. THESE PLANS ARE FOR THE WORK AT THE LOCATION SO DESIGNATED HEREIN.
2. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT AND SUPERVISION NECESSARY TO COMPLETE THE WORK AND MAKE STRUCTURE READY FOR USE.
3. THERE SHALL BE NO DEVIATION FROM THESE PLANS WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD.
4. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS BEFORE BID, CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE WORK SITE AND REPORT ANY DISCREPANCIES, DIFFERENCES OR CONDITIONS TO THE ENGINEER OF RECORD.
5. AND THE ENGINEER OF RECORD, IMMEDIATELY OF ANY DISCREPANCIES, DIFFERENCES, UNSATISFACTORY OR UNSAFE CONDITIONS, ANY MODIFICATIONS OR CHANGES MADE WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER AND ENGINEER OF RECORD SHALL NOT BE ALLOWED, ANY REWORK, RESTORATION OR OTHER IMPACT AS A RESULT OF NOT OBTAINING SUCH PRIOR APPROVAL WILL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST OR COMPENSATION FROM THE OWNER.
6. THE CONTRACTOR SHALL PROVIDE FOR THE SAFETY, PREVENTION OF INJURY OR OTHER LOSS AT THE JOB TO ALL PERSONS EMPLOYED IN THE WORK, PERSONS VISITING THE WORK AND THE GENERAL PUBLIC. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE PREVENTION OF DAMAGE, DUE TO THE WORK, TO MATERIALS OR EQUIPMENT AND OTHER PROPERTY WHETHER OWNED OR ADJACENT THERETO.
7. AND AS MUCH AS TO THE PRESENCE OF UNDERGROUND UTILITIES HAS BEEN INCLUDED ON OR PERFORMED FOR THIS PROJECT, CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING SUNSHINE UTILITY LOCATE SERVICE PRIOR TO ANY CONSTRUCTION WITHIN ANY PUBLIC RIGHT-OF-WAY OR OTHER AREAS WHERE UNDERGROUND UTILITIES MAY BE PRESENT (I.E. IN AND AROUND UTILITY EASEMENTS, ETC.)
8. THE GENERAL CONTRACTOR SHALL PROVIDE AN ON-SITE DUMPSTER IN A LOCATION COORDINATED WITH THE OWNER FOR THE DISPOSAL OF REMOVED MATERIAL AND CONSTRUCTION DEBRIS. THE DUMPSTER SHALL BE EMPTIED AT APPROPRIATE INTERVALS TO PREVENT OVERFLOW AND UNSIGHTLY CONDITIONS.
9. THE CONTRACTOR SHALL PERFORM ALL WORK IN STRICT CONFORMANCE WITH THE PLANS, THE FLORIDA BUILDING CODE, 7TH EDITION (2020), LOCAL CODES AND ORDINANCES, MANUFACTURER RECOMMENDATIONS AND ACCEPTABLE TRADE PRACTICE. ANY CONFLICT BETWEEN THESE REQUIREMENTS AND THE MOST STRINGENT REQUIREMENTS SHALL GOVERN THE WORK.
10. SHOP DRAWINGS OF ALL PREFABRICATED STRUCTURAL FLOOR AND ROOF SYSTEMS SHALL BEAR THE SEAL OF A FLORIDA PROFESSIONAL ENGINEER AS REQUIRED BY THE FLORIDA BUILDING CODE, 7TH EDITION (2020) AND SHALL BE SUBMITTED TO THE ENGINEER OF RECORD BY THE CONTRACTOR FOR APPROVAL PRIOR TO FABRICATION AND INSTALLATION.
11. THE CONTRACTOR SHALL NOT SCALE DRAWINGS, ANY INFORMATION THAT THE CONTRACTOR CANNOT OBTAIN FROM DIMENSION, DETAIL OR SCHEDULE SHALL BE OBTAINED FROM THE ENGINEER OF RECORD.
12. THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES TO PREVENT ANY CONFLICTS.
13. THE CONTRACTOR SHALL FURNISH ALL SUBCONTRACTORS WITH A COMPLETE SET OF PLANS, ALL CHANGES SHALL BE NOTED ON THE DRAWINGS AND (2) COMPLETE AS-BUILT SETS SHALL BE DELIVERED TO THE OWNER AFTER COMPLETION OF WORK.



EXISTING PLAN - BRIDGE

SHOWN FOR REFERENCE

SCALE: 1/4"=1'-0"



PROPOSED PLAN - BRIDGE

SCALE: 1/4"=1'-0"

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



DANIEL HENIKA
PE, No. 86478
KEY WEST, FL 33042
BRIDGE PLAN

STATE OF FLORIDA
PROFESSIONAL
ENGINEERING
LICENSING
BOARD

CITY OF KEY WEST

1300 WHITE STREET

KEY WEST, FL 33040

STAPLES AVE PEDESTRIAN BRIDGE

CITY IMPROVEMENTS

KEY WEST, FL 33042

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

Key West Office

1010 East Kennedy Drive, Suite 202
Key West, Florida 33040
tel 305.255.4400

PEREZ ENGINEERING
& DEVELOPMENT, INC.

CERTIFICATE OF AUTHORIZATION No. 8779
June 2, 2023

JOB NO. 221034
DRAWN AJH
DESIGNED JDH
CHECKED JDH

SHEET S-1

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REQUIREMENTS FOR MANUFACTURED BRIDGE

1. GENERAL

1.1 SCOPE

1.1.1 All engineering design and related detailing of the bridge shall be provided by the supplier. The design and detailing shall conform to these plans and the Applicable Codes and Standards listed in the section 2 below.

1.1.2 The bridge and its attachments shall be fully fabricated by the supplier as outlined in this document.

1.1.3 Supplier shall be responsible for the delivery of all bridge materials.

1.1.4 These specifications are for a fully engineered clear span bridge of aluminum construction and shall be regarded as minimum standards for design and construction.

1.1.5 The bridge manufacturer shall have been in the design and fabrication of aluminum pedestrian bridges for a minimum of five (5) years.

1.2 WARRANTY

1.2.1 The bridge shall be provided with a warranty in accordance with the Owner's (City of Key West) requirements.

2. APPLICABLE CODES AND STANDARDS

2.1 GOVERNING CODES AND STANDARDS

2.1.1 The bridge shall be designed in accordance with the AASHTO, Guide Specification for Design of Pedestrian Bridges, latest edition, where applicable and unless otherwise stated in section 3 & 4 of this document.

2.2 REFERENCE CODES AND STANDARDS

- AASHTO LRFD Guide Specification for Design of Pedestrian Bridges, 2009
- AASHTO LRFD Bridge Design Specifications, 2020, 9th Edition
- The Aluminum Association, Aluminum Design Manual, 2015
- ASCE 7-16, Minimum Design Loads for Buildings and Other Structures
- American Welding Society, Structural Welding Code, D1.2, latest edition

3. GENERAL FEATURES OF DESIGN

3.1 SPAN Bridge span shall be as shown on these plans. Note: the bridge manufacturer is responsible for determining out-to-out bridge length considering requirements for expansion and contraction and the abutments shown on these plans.

3.2 WDTW Bridge width shall be as shown on these plans.

3.3 SYSTEM

3.3.1 Bridge shall be a Pratt style aluminum truss bridge with vertical end post, as shown on these plans; or similar in look and function. Style must be approved by owner prior to fabrication.

3.3.2 Bridge shall be fabricated and delivered as one continuous and pre-assembled structure. No mid-span splicing shall be used. No bolted connections shall occur other than decking to bridge structure and bridge to abutments.

3.3.3 The top of the top chord shall not be less than 48" above the finished deck.

3.4 CAMBER Bridge shall be cambered to offset the dead load.

3.5 SLOPE Bridge shall be designed for abutments constructed at the same elevation as indicated in these plans.

3.6 DECK Bridge shall have an integrated, slip resistant deck in accordance with section 5.2 of this document.

3.7 BEARING PADS Bridge shall include bearing pads, which shall allow the bridge to expand and contract as needed without binding, in accordance with section 5.3 of this document.

3.8 SAFETY & HAND RAILS

3.8.1 Bridge shall incorporate a Vertical Picket railing.

3.8.2 Top of top chord shall not be less than 48" above the finished deck.

3.8.3 Clear opening between pickets shall reject the passage of a 4" diameter sphere up to the height of 42" above the deck. Clear openings above 42" shall reject passage of an 8" sphere.

3.8.4 Clear opening between bottom rail and finished deck shall reject the passage of a 2" diameter sphere.

3.8.5 A handrail shall be provided as shown on these plans. A 1.5" clear distance between wall and handrail must be maintained.

3.8.6 All geometry is to be smooth with no sharp corners.

3.9 MAXIMUM WEIGHT Bridge shall be designed to such that the maximum shipped weight (aka total dead load of all parts) does not exceed 15,000 lbs. Note: This is the design limit of the concrete bridge foundations.

4. ENGINEERING

4.1 DESIGN LOADS

4.1.1 DEAD LOAD The bridge shall be designed considering its own dead load including the structure and the originally designed decking.

4.1.2 PEDESTRIAN LIVE LOAD Bridge shall be designed for a uniformly distributed live load of **100 pounds per square foot**. No live load reduction allowed. Additionally, partial (aka unbalance) distributed live load shall be considered.

4.1.3 VEHICLE LOAD The bridge shall be designed for an occasional 2,500 lb vehicle loading, where 70% of the load is considered to act on the rear axle and 30% on the front. Loads shall be positioned at a maximum wheelbase of 6 feet and maximum width of 4 feet, positioned to produce the maximum load effect on each bridge member. Note: The loading outlined in this section shall supersede AASHTO suggested loading requirements. No vehicle impact or dynamic loading requirements are required.

4.1.4 WIND LOADS The bridge shall be designed for applicable wind loads related to 180 miles per hour 3 second gust, exposure D, risk category II, in accordance with ASCE 7-16 and/or AASHTO requirements. Wind load analysis shall consider both horizontal and uplift forces.

4.1.5 FLOOD LOADS The bridge shall be designed to resist buoyancy in a fully submerged flood event. Note: the bridge is located in a 'Non-Coastal AE' flood zone and is not required to resist hydrodynamic flood loads.

4.1.6 TOP CHORD/RAIL LOAD The top chord, top rail, and vertical posts shall be designed for a simultaneous vertical AND horizontal load of 50 pounds per linear foot or a 200 pound point load, whichever is greater, positioned to produce the maximum load effect.

4.1.7 VERTICAL PICKETS The picket system shall be designed for a 200 pound point load, applied transversely over an area of 1 square foot.

4.2 LOAD LIMIT SIGNAGE The bridge load limit shall be permanently affixed to each end of the bridge according to AASHTO requirements.

4.3 DESIGN LIMITATIONS

4.3.1 DEFLECTION The vertical deflection of the main truss due to any load combination shall not exceed $L/360$, where L is the length of the unsupported span. The horizontal deflection of the structure due to any load combination shall not exceed $L/360$, where L is the length of the unsupported span.

4.3.2 TOP CHORD STABILITY The top chord shall be designed to resist all applicable failure modes, including lateral torsional buckling.

4.3.3 VIBRATION The bridge shall be designed against vibrations that cause discomfort and concern to users according to AASHTO LRFD Guide Specification for Design of Pedestrian Bridges

4.3.4 FATIGUE The bridge and all of its component and connections (including welds) shall be designed for fatigue in accordance with the Aluminum Design Manual, 2015.

4.3.5 MINIMUM THICKNESS OF METAL The minimum thickness of all structural members shall be one-fourth of an inch (1/4") nominal.

4.4 ANALYSIS

4.4.1 LOAD COMBINATIONS The bridge shall be designed to resist all applicable load combinations in accordance with ASCE 7-16 and/or AASHTO requirements.

4.4.2 FREQUENCY Frequency analysis shall be completed to determine that the bridge frame is sufficient to avoid resonance due to frequencies likely encountered under normal use.

5. MATERIALS

5.1 STRUCTURAL MEMBERS All primary structural members are to be 6061-T6 aluminum for its high strength and corrosion resistance. Secondary members are to be 6060 aluminum for corrosion resistance.

5.2 DECK Decking shall be Fiber Reinforced Polymer decking (with non-slip surface) designed to resist all applicable loads. Deck shall meet ADA requirements and all gaps shall be less than 1/2" clear width.

5.3 FASTENERS All fasteners required for assembly shall be stainless steel type 316. Insulating washers shall be provided where stainless steel and aluminum contact is anticipated to minimize the potential for galvanic action.

5.4 BEARING PADS All bearing pads shall be 1/2" thick UHMW adequately dimensioned to provide support to the structure over the full travel resulting from expansion and contraction.

5.5 SPLICE FASTENERS **No splices shall occur. Bridge shall be fabricated and delivered as one continuous and pre-assembled structure. No bolted connections shall occur other than decking to bridge structure and bridge to abutments.**

6. FABRICATION & ASSEMBLY

6.1 WELDING All aluminum members shall be welded using 5356 aluminum filler wire in accordance with AWS D1.2. All welding operators shall be AWS D1.2 certified

6.2 EXPANSION SLOTS Slots shall be cut into bridge bearing area to allow for proper expansion and contraction of the bridge.

6.2.1 EXPANSION JOINTS AT CONCRETE ABUTMENTS bridge manufacturer shall determine required clearance to concrete abutment backwalls (as shown on these plans). Bridge manufacturer shall supply an ADA compliant expansion joint where this gap may exceed 1/4".

7. SUBMITTALS

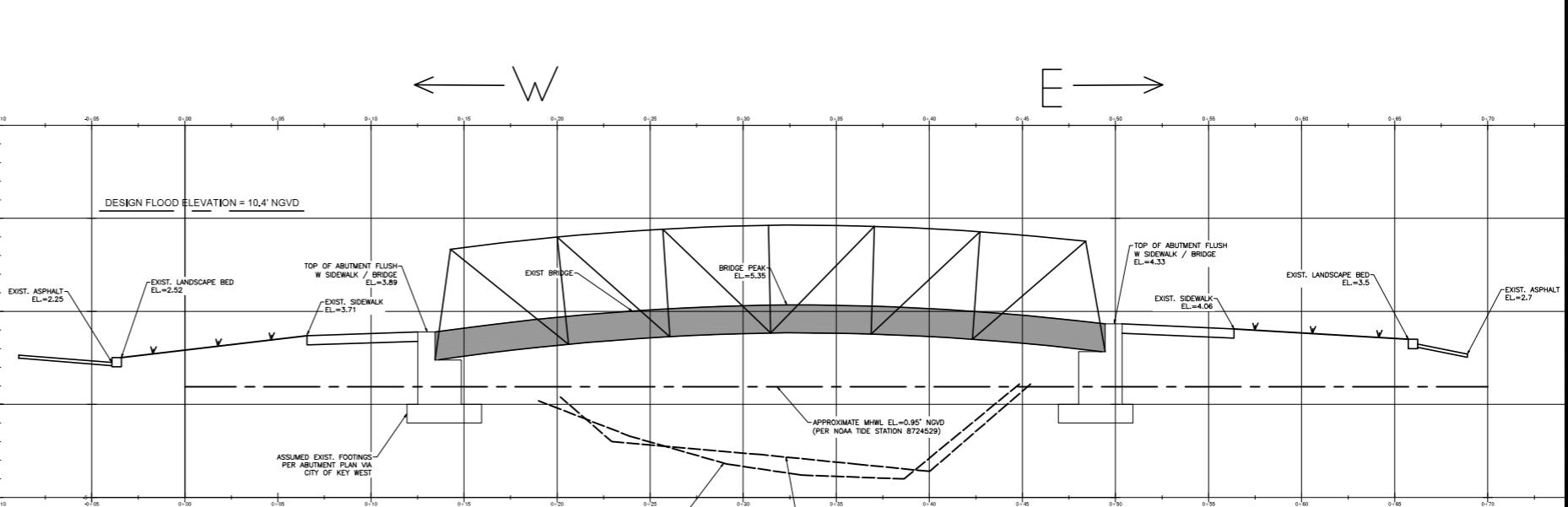
7.1 FABRICATION DRAWINGS Fabrication drawings and calculations shall be prepared and submitted for review after receipt of the order. Submittal drawings shall be unique drawings to this project, prepared to illustrate the specific portion of the bridge being fabricated. All relative design information such as member size, material specification, dimensions, and required critical welds shall be clearly shown on the drawings. Drawings shall have cross referenced details and sheet numbers. All drawings shall be stamped, and signed by a Professional Engineer registered in the state of Florida. A stamped electronic soft copy shall be provided to be reviewed and approved by:

Owner: Gary Volenec, PE, City of Key West, Engineering Department, Interim Engineering Director, gary.volene@cityofkeywest-fl.gov

Engineer: Justin Henika, PE, Perez Engineering and Development, Inc., jhenika@perezeng.com

7.1.1 At minimum the following criteria must be included for approval:

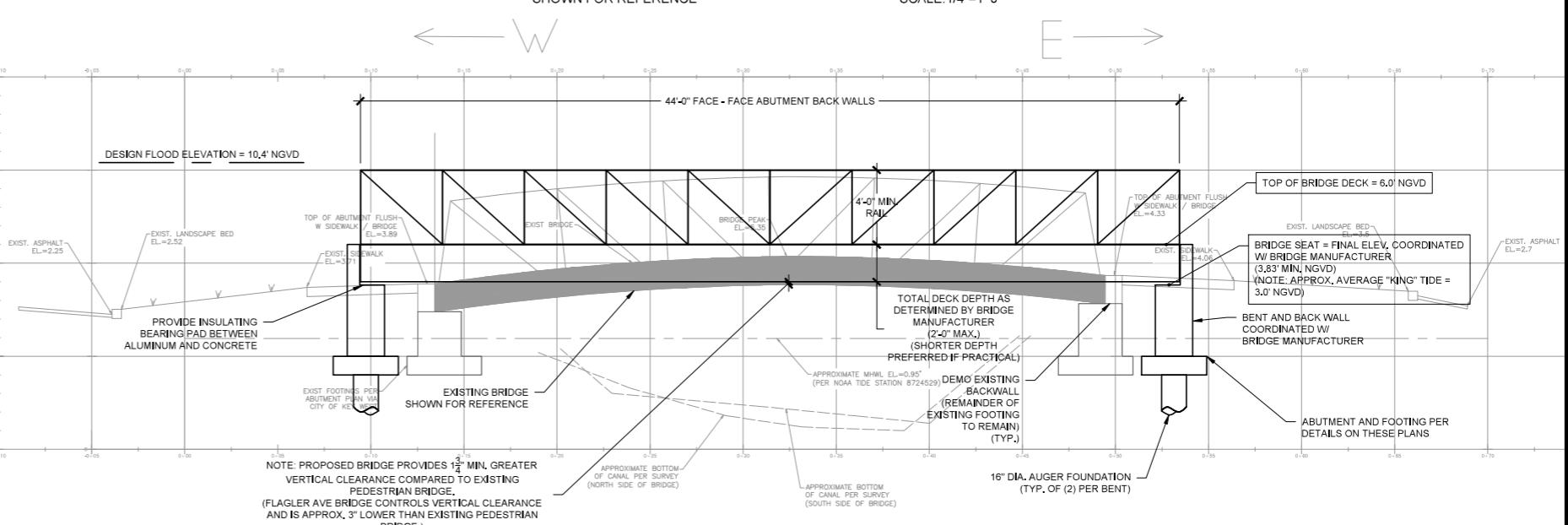
- Design loads
- All relevant bridge dimensions
- Bridge cross sections
- Sufficient detailing
- Member cross sections
- General notes indicating material specifications
- Weld details
- Detail of bolted connection (i.e. decking and bridge bearings)



ELEVATION - EXISTING BRIDGE

SHOWN FOR REFERENCE

SCALE: 1/4"=1'-0"

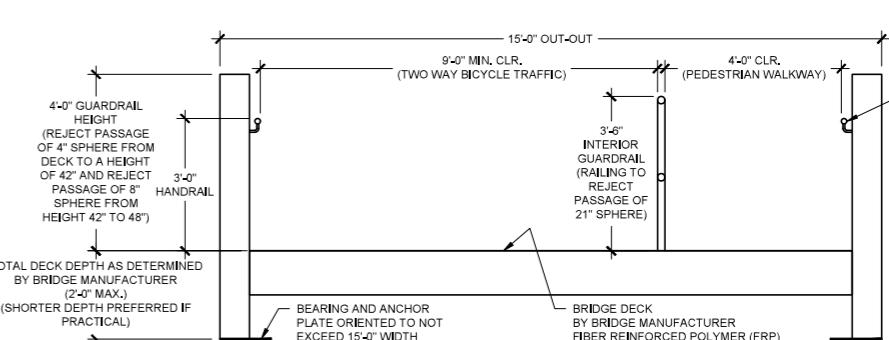


ELEVATION - PROPOSED BRIDGE

SCALE: 1/4"=1'-0"

REQUIREMENTS FOR MANUFACTURED BRIDGE CONT.

- Camber details
- Statement that the bridge design is sufficient to avoid resonance due to frequencies likely encountered under normal use.
- Statement that bridge design includes frame stability and lateral torsional buckling.
- Statement that structural members (including aluminum members and welds) are designed to resist fatigue failure in accordance with the Aluminum Design Manual, 2015.
- Signature and Seal of PE licensed in the state of Florida
- Erection procedures
- Inspection and Maintenance Procedures
- 7.2 CALCULATIONS & RESULTS Structural analysis results and calculations shall be prepared and submitted for review after receipt of the order. A stamped electronic soft copy shall be provided to be reviewed and approved by:
 - Owner: Gary Volenec, PE, City of Key West, Engineering Department, Interim Engineering Director, gary.volene@cityofkeywest-fl.gov
 - Engineer: Justin Henika, PE, Perez Engineering and Development, Inc., jhenika@perezeng.com
- 7.2.1 At minimum the following criteria must be included for approval:
 - Maximum bridge reactions for all service loads, including:
 - Upward/downward and horizontal wind loading
 - Uniform live load
 - Vehicle live load
 - Unbalance live load (if controls live loading)
 - Dead load
 - Detailed description of applied loads and load combinations considered.
 - Expansion and Contraction Requirements
 - Critical load analysis results
 - Member maximum allowables for all load and design conditions
 - Maximum deflections and corresponding load combinations
 - Boundary conditions used for analysis



SECTION - PROPOSED BRIDGE

SCALE: 1/2"=1'-0"

STAPLES AVE PEDESTRIAN BRIDGE
CITY IMPROVEMENTS
KEY WEST, FL 33042
BRIDGE DETAILS

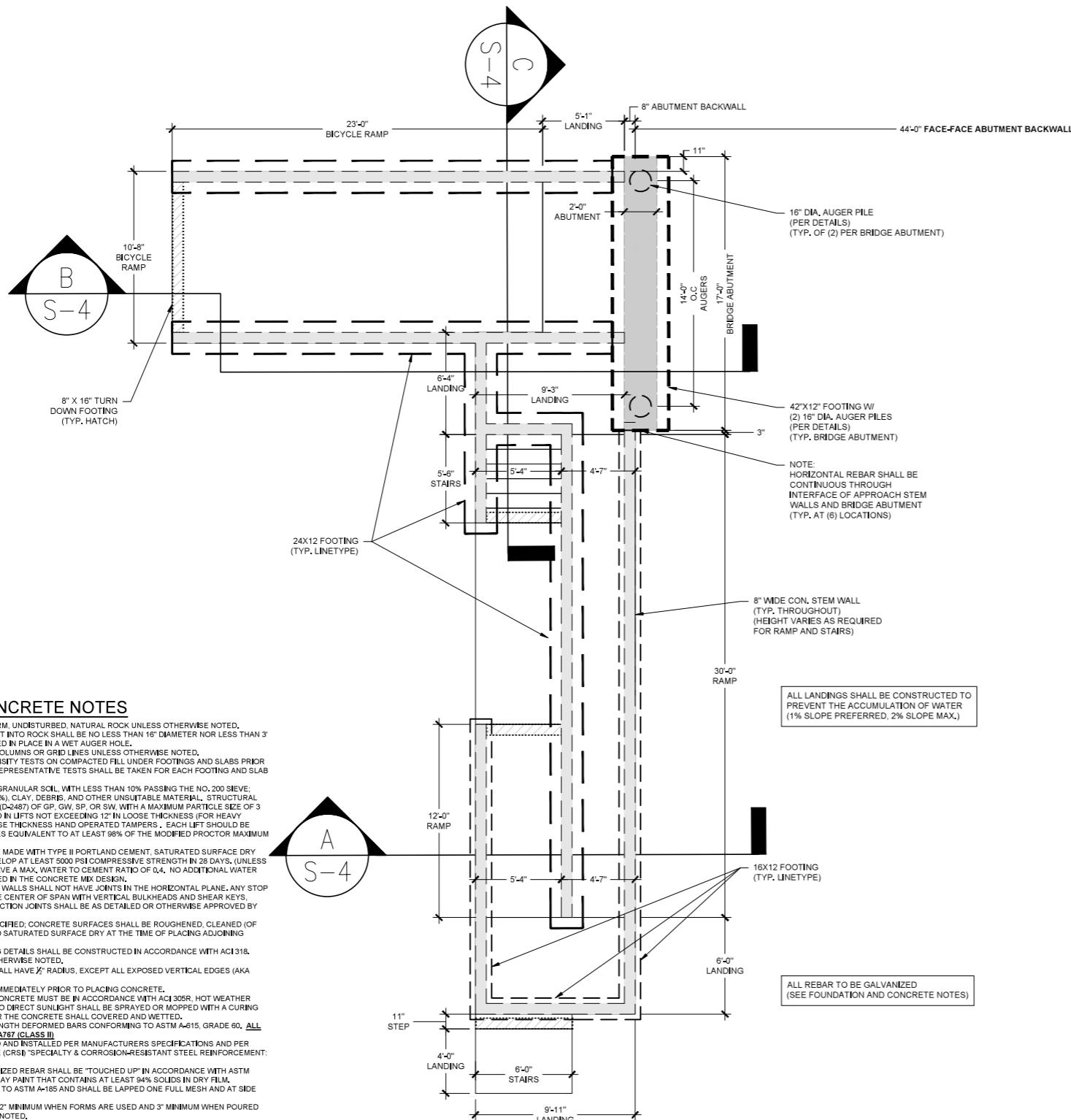
ORIGINAL: JUNE 2023
REVISIONS: 1, 2, 3, 4, 5, 6
CITY OF KEY WEST
1300 WHITE STREET
KEY WEST, FL 33040

JOB NO. 221034
DRAWN AJH
DESIGNED JDH
CHECKED JDH
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Key West Office
1010 East Kennedy Drive, Suite 202
Key West, Florida 33040
tel 305.250.4440

PEREZ ENGINEERING
& DEVELOPMENT, INC.
CERTIFICATE OF AUTHORIZATION No. 8579
Justin D. Henika
Florida I.E. No. 86478
June 2, 2023

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FOUNDATION & CONCRETE NOTES

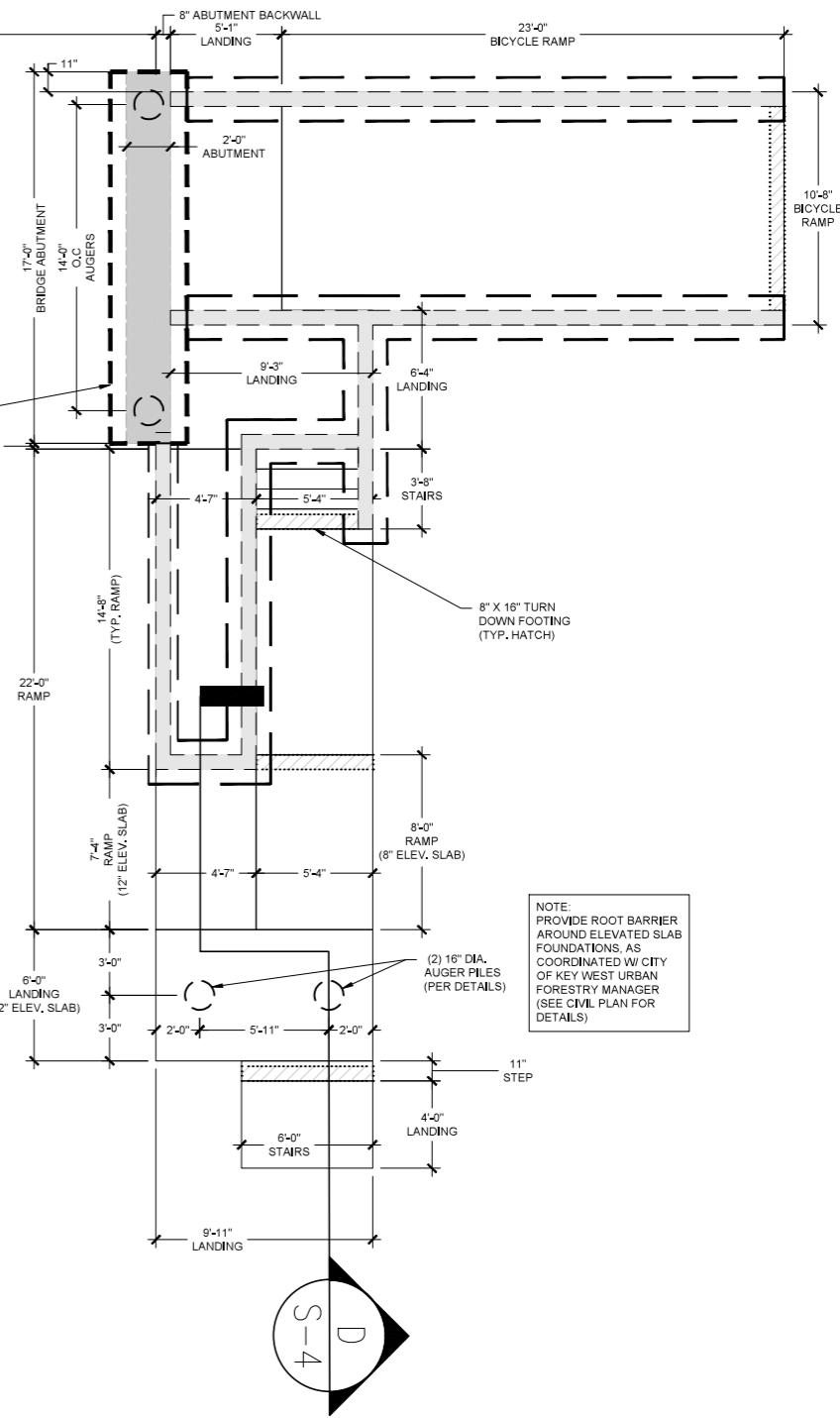
- ALL FOOTINGS ARE TO BE PLACED ON FIRM, UNDISTURBED, NATURAL ROCK UNLESS OTHERWISE NOTED.
- AUGER PILE DIAMETERS AND EMBEDMENT INTO ROCK SHALL BE NO LESS THAN 16" DIAMETER NOR LESS THAN 3' INTO ROCK. CONCRETE SHALL NOT BE MIXED IN PLACE IN A WET AUGER HOLE.
- CENTER ALL FOOTINGS UNDER WALLS, COLUMNS OR GRID LINES UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL FURNISH FIELD DENSITY TESTS ON COMPACTED FILL UNDER FOOTINGS AND SLABS PRIOR TO PLACING CONCRETE, A MINIMUM OF 3 REPRESENTATIVE TESTS SHALL BE TAKEN FOR EACH FOOTING AND SLAB POUR.
- STRUCTURAL FILL SHOULD CONSIST OF GRANULAR SOIL, WITH LESS THAN 10% PASSING THE NO. 200 SIEVE; FREE OF RUBBLE, ORGANICS (LESS THAN 5%), CLAY, DEBRIS, AND OTHER UNSUITABLE MATERIAL. STRUCTURAL FILL SHOULD NOT EXCEED 12" IN MAX. THICKNESS (FOR HEAVY COMPACTION EQUIPMENT) OR 6" MAX. LOOSE THICKNESS HAND OPERATED TAMPER. EACH LIFT SHOULD BE THOROUGHLY COMPACTED UNTIL DENSITIES EQUIVALENT TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY ARE UNIFORMLY OBTAINED.
- ALL CAST-IN-PLACE CONCRETE SHALL BE MADE WITH TYPE II PORTLAND CEMENT, SATURATED SURFACE DRY (SSD) CONCRETE, AND A MAX. WATER TO CEMENT RATIO OF 0.4. NO ADDITIONAL WATER SHALL BE ADDED ON SITE UNLESS SPECIFIED IN THE CONCRETE MIX DESIGN.
- SLABS, TOPPING, FOOTINGS, BEAMS AND WALLS SHALL NOT HAVE JOINTS IN THE HORIZONTAL PLANE, ANY STOP IN CONCRETE WORK MUST BE MADE AT THE CENTER OF SPAN WITH VERTICAL BULKHEADS AND SHEAR KEYS, UNLESS OTHERWISE NOTED. ALL CONSTRUCTION JOINTS SHALL BE AS DETAILED OR OTHERWISE APPROVED BY THE ENGINEER.
- WHERE CONSTRUCTION JOINTS ARE SPECIFIED, CONCRETE SURFACES SHALL BE ROUGHENED, CLEANED OF ALL LOOSE MATERIAL, OIL, DUST, ETC., AND SATURATED SURFACE DRY AT THE TIME OF PLACING ADJOINING CONCRETE.
- ALL CONCRETE WORK AND REINFORCING DETAILS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 318.
- ALL EXPOSED EDGES OF CONCRETE SHALL HAVE $\frac{1}{2}$ " RADIUS, EXCEPT ALL EXPOSED VERTICAL EDGES (AKA CORNERS).
- CONCRETE FORMS SHALL BE WETTED IMMEDIATELY PRIOR TO PLACING CONCRETE.
- MIXING, PLACING AND CURING OF ALL CONCRETE MUST BE IN ACCORDANCE WITH ACI 305R. HOT WEATHER CONCRETING, NEW CONCRETE EXPOSED TO DIRECT SUNLIGHT SHALL BE SPRAYED OR MOVED WITH A CURING COMPOUND AFTER THE FINISH HAS SET, OR THE CONCRETE SHALL COVERED AND WETTED.
- ALL REINFORCING SHALL BE HIGH STRENGTH DEFORMED BARS CONFORMING TO ASTM A-615, GRADE 60. **ALL REINFORCING SHALL BE GALVANIZED AS STATED IN THE MANUFACTURER'S SPECIFICATIONS.**
- GALVANIZED REBAR SHALL BE HANDLED AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND PER CONCRETE REINFORCING STEEL INSTITUTE (CRSI) SPECIALTY & CORROSION-RESISTANT STEEL REINFORCEMENT: PRODUCT GUIDE: SECTION 5
- FIELD BENT, CUT, OR DAMAGED GALVANIZED REBAR SHALL BE "TOUCHED UP" IN ACCORDANCE WITH ASTM A780 USE A CONDUCTIVE RICH SPRAY PAINT THAT CONTAINS AT LEAST 94% SOLIDS IN DRY FILM.
- WIRE-DETERRED FABRIC SHALL CONFORM TO ASTM A-182 AND SHALL BE LAPPED ONE FULL MESH AND AT SIDE AND END SPLICES AND WIRED TOGETHER.
- REINFORCEMENT COVERAGE SHALL BE 2" MINIMUM WHEN FORMS ARE USED AND 3" MINIMUM WHEN POURED AGAINST THE EARTH, UNLESS OTHERWISE NOTED.
- LAP SPLICES SHALL BE A MINIMUM OF 48 BAR DIAMETERS, UNLESS NOTED OTHERWISE, MAKE ALL BARS CONCRETE-FACE TO CONCRETE-FACE.
- PROVIDE ALL ACCESSORIES NECESSARY TO SECURE REINFORCING IN PROPER POSITION AS INDICATED ON THE DRAWINGS AND IN ACCORDANCE WITH ACI 318. ALL ACCESSORIES THAT DO NOT MEET REINFORCEMENT COVERAGE REQUIREMENTS SHALL BE NON-METALLIC.
- ANCHOR BOLTS AND THREADED ROD SHALL BE TYPE 316 STAINLESS STEEL, Fy=30ksi MIN, PROVIDED WITH TYPE 316 NUTS AND WASHERS. (DO NOT ALLOW CONTACT BETWEEN STAINLESS STEEL AND GALVANIZED PARTS).
- ANCHOR BOLTS AND THREADED ROD SHALL BE PROVIDED WITH A COATED SURFACE, CLEAN HOLES AND INSTALL IN STRICT CONFORMANCE WITH MANUFACTURER SPECIFICATIONS.
- CONCRETE REPAIR MORTAR SHALL BE SKATOP-123 PLUS, OR SKACRETE-211SC WHEN A FORM AND POUR REPAIR IS REQUIRED (OR APPROVED EQUALS), PREPARE SURFACES AND APPLY REPAIR MORTAR PER MANUFACTURER SPECIFICATIONS, IF REQUIRED, USE BONDING AGENTS COMPATIBLE WITH REPAIR MORTAR SPECIFICATIONS.
- BEARING GROUT SHALL BE HIGH STRENGTH, BEARING GROUT SHALL BE NON-SHRINK, NON-METALLIC, AND PROVIDE A MIN. OF 95% EFFECTIVE BEARING AREA. BEARING GROUT SHALL EXHIBIT A 10 ksi MIN. (28 DAY) COMPRESSIVE STRENGTH (ASTM C942) AND 2 ksi MIN. (28 DAY) BOND STRENGTH (ASTM C682). INSTALL PER MANUFACTURER'S SPECIFICATIONS.

GEOTECHNICAL AND SOIL PREPARATION NOTES

- FOUNDATION CONTRACTOR SHALL THOROUGHLY REVIEW THE GEOTECHNICAL ENGINEERING REPORT BY NUTTING ENGINEERS DATED 07/15/2022.
- THE CONTRACTOR OF RECORD IS RESPONSIBLE FOR CONTRACTING WITH THE GEOTECHNICAL ENGINEER TO PERFORM CONSTRUCTION COORDINATION, TESTING, AND INSPECTIONS DURING EARTHWORK AND FOUNDATION CONSTRUCTION AS SPECIFIED IN THE GEOTECHNICAL REPORT.
- ALL FOUNDATION CONSTRUCTION AND SOIL/FILL PREPARATION SHALL BE COMPLETED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING REPORT.

FOUNDATION PLAN - BRIDGE AND APPROACH

SCALE: 1/4"=1'-0"



CITY OF KEY WEST

1300 WHITE STREET

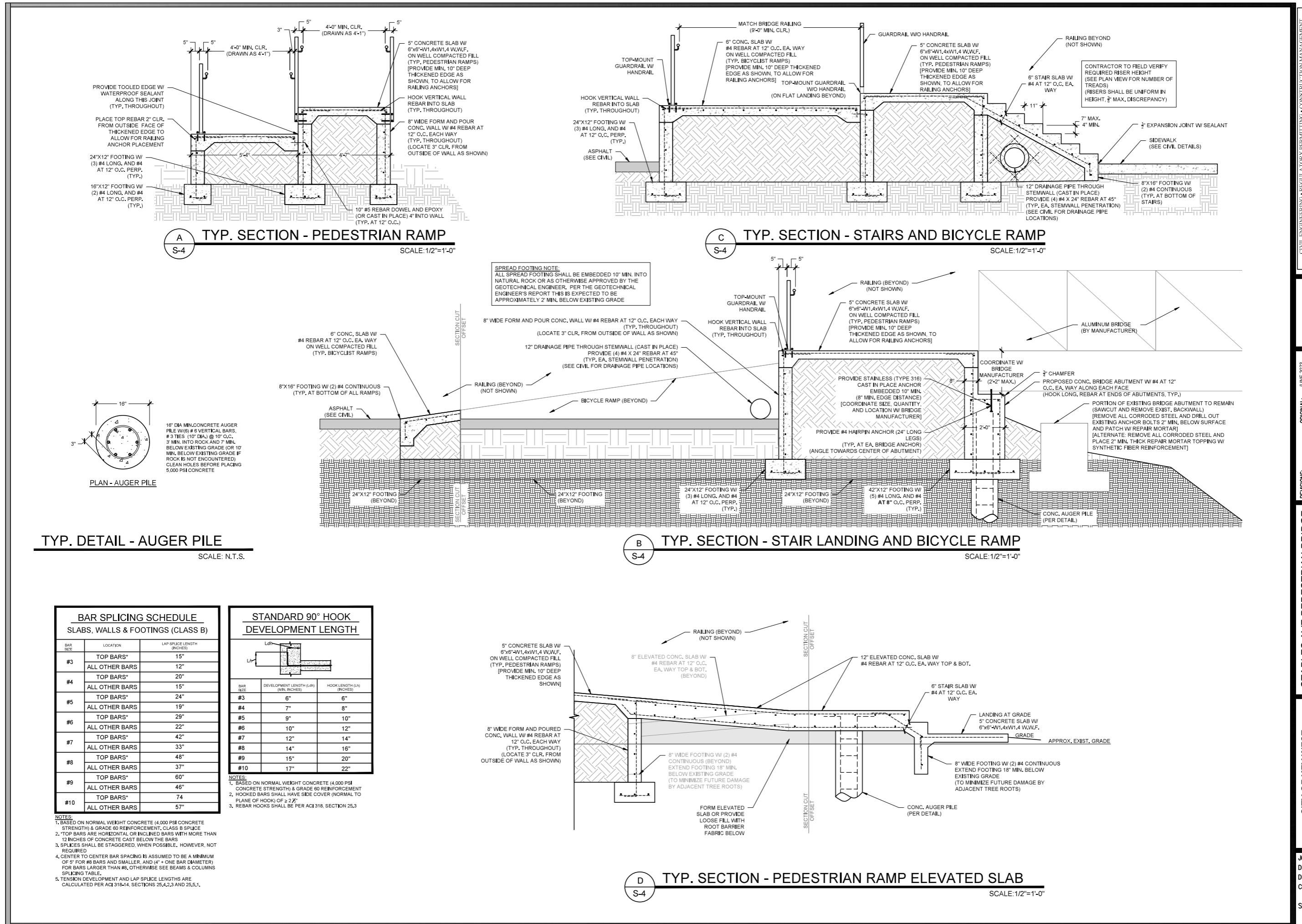
KEY WEST, FL 33040

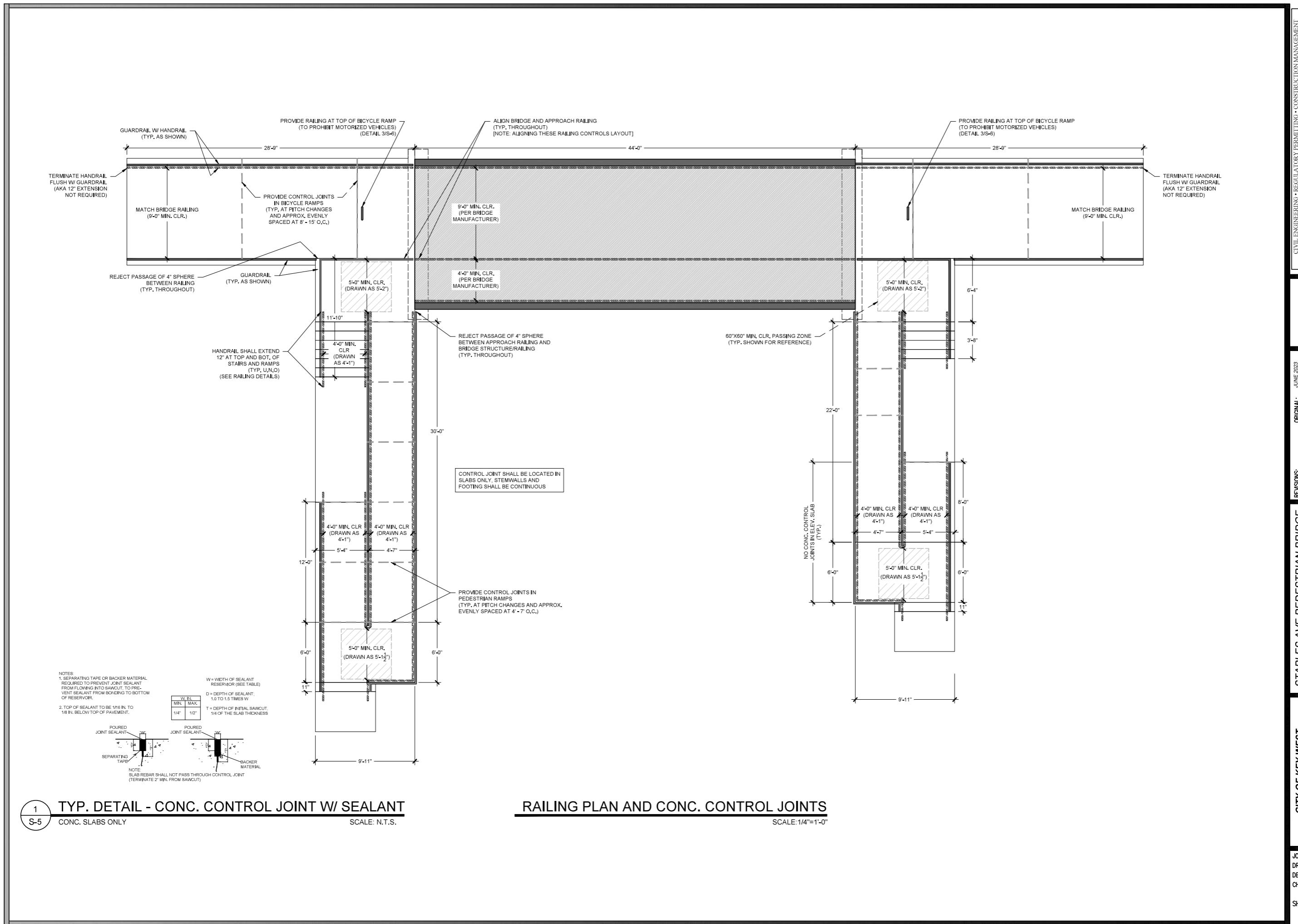
ORIGINAL: JUNE 2023
JUSTIN D. HENKA
Florida I.E. No. 86478
June 2, 2023

PEREZ ENGINEERING & DEVELOPMENT, INC.
CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT
CERTIFICATE OF AUTHORIZATION No. 8579
1010 East Kennedy Drive, Suite 202
Key West, Florida 33040
(305) 295-4440

JOB NO. 221034
DRAWN AJH
DESIGNED JDH
CHECKED JDH

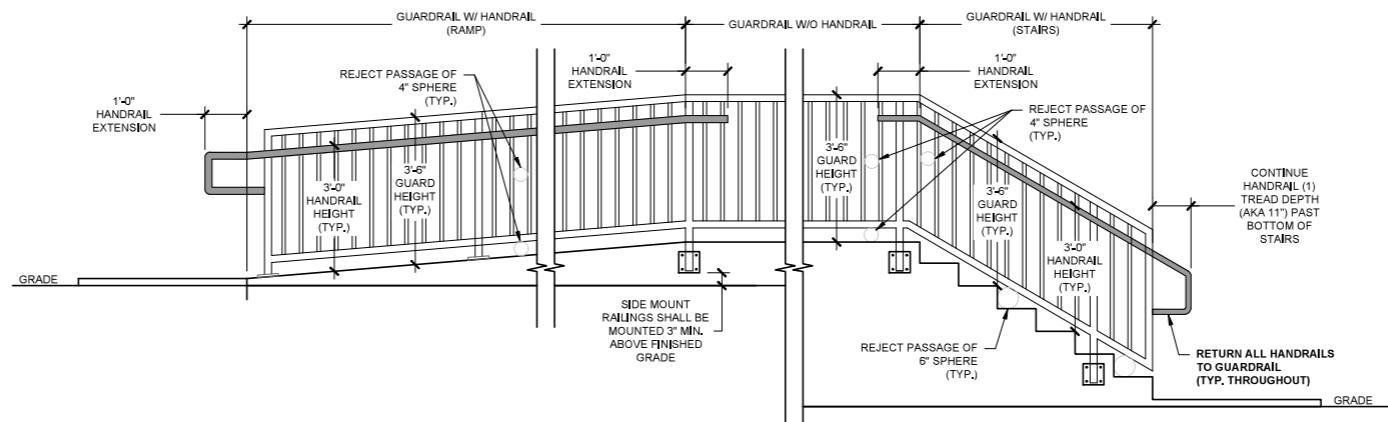
SHEET S-3





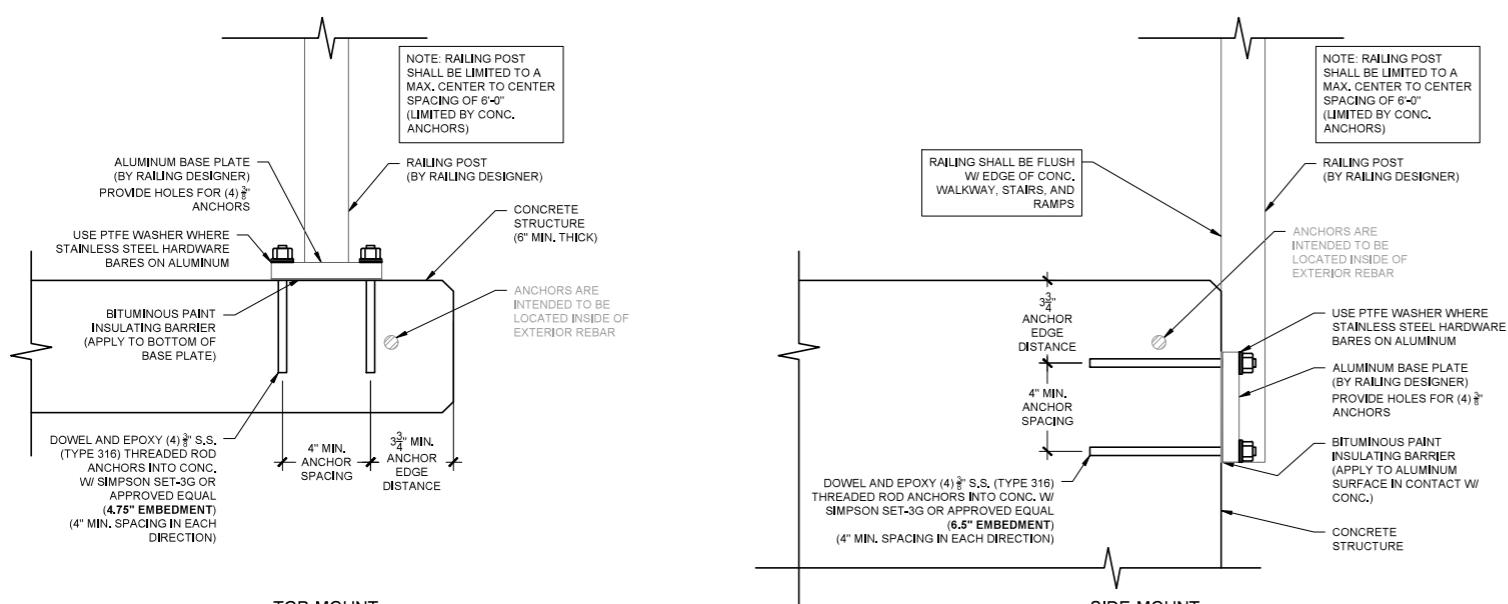
REQUIREMENTS FOR MANUFACTURED ALUMINUM RAIL

- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION AND INSTALLATION.
- RAILING SHALL BE CONSTRUCTED ENTIRELY OF STRUCTURAL ALUMINUM IN ACCORDANCE WITH THE CURRENT ALUMINUM ASSOCIATION - SPECIFICATION FOR ALUMINUM STRUCTURES
- RAILINGS SHALL BE WELDED CONSTRUCTION. LIMITED BOLTED CONNECTIONS MAY BE USED IF COORDINATED WITH AN PRE- APPROVED BY OWNER.
- WELDS SHALL MEET THE REQUIREMENTS OF AMERICAN WELDING SOCIETY - AWS D1.2
- ANCHOR BOLTS AND BOLTED CONNECTIONS FOR ALUMINUM FRAMING SHALL BE TYPE 316 STAINLESS STEEL Fy=30 KSI MIN. Fu=75 KSI MIN. USE PTFE WASHERS WHERE STAINLESS STEEL WASHERS BEAR ON DISSIMILAR METALS (AKA ALUMINUM).
- WHERE ALUMINUM IS IN CONTACT WITH CONCRETE THE ALUMINUM SURFACE SHALL BE COATED WITH BITUMINOUS PAINT (10 MDFT)
- DESIGN AND CONSTRUCTION SHALL BE CORROSION RESISTANT, RATED FOR EXTERIOR USE IN A CORROSIVE SALTWATER ENVIRONMENT.
- ALUMINUM FINISH SHALL MEET AA-M32-C22-A41
- RAILING SHALL MEET ALL APPLICABLE REQUIREMENTS OF THE FLORIDA BUILDING CODE, 7TH EDITION (2020) - BUILDING CODE, INCLUDING:
 - F.B.C., SECTION 1014, HANDRAILS
 - F.B.C., SECTION 1015, GUARDS
- HANDRAILS AND GUARDS SHALL BE DESIGNED TO RESIST A LINEAR LOAD OF 50 P.L.F. AND A (NON-CONCURRENT) CONCENTRATED LOAD OF 200 POUNDS. INTERMEDIATE RAILS SHALL BE DESIGNED TO RESIST A CONCENTRATED LOAD OF 50 LBS. PER F.B.C. SEC. 1607.8.1



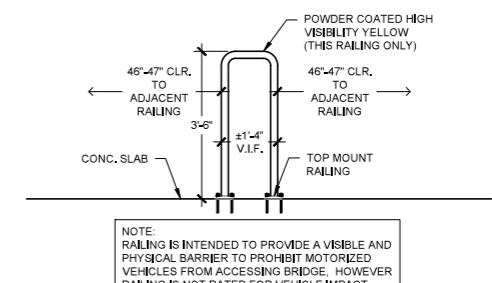
1 TYP. DETAIL - TYP. APPROACH RAILING

SCALE:1/2"=1'-0"



2 TYP. DETAIL - RAILING ANCHORS

SCALE:1/2"=1'-0"



○ TYP. DETAIL - VEHICLE BARRIER

SCALE: 1/2"=1'-4"