



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Administration  
DIVISION OF PURCHASES  
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Providence, RI 02908-5855

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October 24, 2013

**ADDENDUM NUMBER ONE**  
**RFQ # 7513366**

**TITLE: Construction Services for the South Bulkhead Project-Port of Galilee**

**Closing Date and Time: 11/27/2013 at 10:00 AM (Note Change)**

**Per the issuance of this ADDENDUM #1 (36 pages and pdf files on disc) the following change(s) are noted:**

**Please be advised the Bid Closing Date and Time has been extended:**  
**From: 10/30/13 at 10:00 AM**  
**To: 11/27/13 at 10:00 AM**

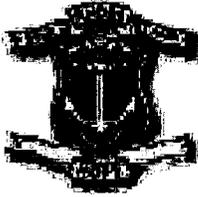
**Specification Change /Addition / Clarification**

This addendum post sign in sheet from non-mandatory pre bid conference held 10/2/13 at 8:30am.

This addendum answers/clarifies questions from the pre bid and submitted on line.

Questions concerning this solicitation may be e-mailed to the Division of Purchases at [bidinfo@purchasing.ri.gov](mailto:bidinfo@purchasing.ri.gov) no later than November 8, 2013 at 5PM (est). Please reference the RFQ number on all correspondence. Questions should be submitted in a Microsoft word attachment. Answers to questions received, if any, will be posted on the internet as an addendum to this solicitation ([www.purchasing.ri.gov](http://www.purchasing.ri.gov)). It is the responsibility of all interested parties to download this information.

Please note the instructions on bids submitted on Public Works Projects in excess of \$500,000 (attached to original bid package and also to this addendum).



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**NOTICE TO VENDORS**

Effective **January 1, 2013** all *public works project* related bids or proposals exceeding **Five Hundred Thousand (\$500,000) dollars** are required to include a “public copy.” All agency contract solicitations and invitations for bids, etc. shall state that any bid or proposal that exceeds Five Hundred Thousand (\$500,000) dollars must include a copy to be available for public inspection upon the opening of the bids. Any bid or proposal in excess of Five Hundred Thousand (\$500,000) dollars which does not include a copy for public inspection shall be deemed to be non-responsive. For further information, please see R. I. Gen. Laws §37-2-18(j)..

Dated: December 11, 2012



State of Rhode Island Department of Administration  
Division of Purchases

REVISED  
December 7, 2012

NOTICE TO CONTRACTORS  
AND VENDORS BIDDING  
ON PUBLIC WORKS PROJECTS

Effective **January 1, 2013** all Public Works related project proposals exceeding Five Hundred Thousand (\$500,000) dollars are required to include a "public copy." All agency contract solicitations, requests for proposals, invitations for bids, etc. shall state that any bid or proposal that exceeds Five Hundred Thousand (\$500,000) dollars must include a copy to be available for public inspection upon the opening of the bids. Any bid or proposal in excess of Five Hundred Thousand (\$500,000) dollars which does not include a copy for public inspection shall be deemed to be non-responsive. Additionally, proposals submitted for a Master Price Agreement, when the total amount potentially may exceed Five Hundred Thousand (\$500,000) and the solicitation expressly requires any or all vendors to submit a public copy, must include a copy to be available for public inspection.

For further information, please see R.I. Gen. Laws Section 37-2-18(j) and State Procurement Regulations at [www.purchasing.ri.gov](http://www.purchasing.ri.gov). This requirement applies to all public works projects (vertical and horizontal) exceeding Five Hundred Thousand (\$500,000) dollars and any combination of base bid plus all alternates.

In accordance to the State Procurement Regulations that became effective January 2, 2012 the following conditions are required:

1. All bid proposals shall be opened publicly and read aloud.
2. Each bid, together with the name of the bidder, shall be recorded and an abstract made available "immediately" for public inspection.

3. Copy of the redacted bid proposal shall be available for public inspection by the close of the business the day the subject bid(s) and/or contract(s) is opened by the Division of Purchases.
4. The burden to identify and withhold from the public copy that is released at the bid opening any trade secrets, commercial or financial information, or other information the bidder deems not subject to public disclosure pursuant to Chapter 38-2, the Access to Public Records Act, shall rest solely and exclusively with the bidder submitting the bid proposal.
5. At the time that a proposal is submitted, a bidder must submit a redacted copy of the bid proposal in a PDF (Portable Document File) file format on a read only CD-R Media Disk (hereinafter referred to as a "CD"). Vendors are required to provide all documents submitted in response to the bid solicitation on the CD.
  - a. The acceptable media is a CD-R. Media that is read/writable (CD RW) will not be accepted.
  - b. Only readable, not writeable media is acceptable.
  - c. Vendor is responsible for supplying their own CD-R media.
  - d. Vendor is responsible for the integrity of the CD.
6. Failure of the bidder to submit a public copy on a readable CD, as required by RIGL 37-2-18 as amended, shall result in the disqualification of said bid.
7. CD must be enclosed in a protective cover and the protective cover clearly labeled with the following:
  - a. Marked "Public Copy"
  - b. Title of Solicitation as it appears on the RIVIP cover letter.
  - c. Name of Company and Vendor ID as it appears on the RIVIP cover letter.
  - d. Bid Response Number as it appears on the RIVIP cover letter.
  - e. Date of Bid as it appears on the RIVIP cover letter.
8. Bid response on CD-R to be in a PDF (Portable Document Format).
  - a. One PDF file will be on the CD-R. File to meet the following requirements:
    - i. Only one file will contain all documents in response to the bid. If you have more than one document for the response, the documents must be concatenated or merged into one PDF document. Failure to submit only one PDF file may result in disqualification of bid.
    - ii. File should be named in the following manner:
      1. BidNumber\_DateofBid\_VendorName\_VendorID.pdf. Where:
        1. Bid Number is the bid number for which the response is for as it appears on the RIVIP cover sheet.
        2. Dateofbid is date of bid using the format (mm-dd-yyyy).
        3. VendorName is the name of the vendor as one word – no spaces or punctuation.
        4. Vendor ID as it appears on the RIVIP vendor cover sheet.

**Note: you must use underscores in separating the fields. Do not use underscores anywhere else in the filename other than to separate the fields.**

**Example: 1234567\_06-01-2011\_Vendor1\_9876.pdf**

9. Purchasing staff will officially conclude the bid opening and all loaded proposals will be posted to the Purchasing web site. All proposals will be available immediately after bid opening [www.purchasing.ri.gov](http://www.purchasing.ri.gov).

For technical assistance, contact the Division of Purchases office at 574-8100.



**SECTION 16531 - EXTERIOR SOLAR POWERED LIGHTING****PART 1 – GENERAL****1.1 SUMMARY**

- A. Section Includes:
  - 1. Exterior Solar Powered Outdoor Lighting.

**1.2 SUBMITTALS**

- A. Product Data: Catalog cut sheets with performance specifications demonstrating compliance with specified requirements.
- B. IES electronic files of lamp output or Photometric Plots on a surface from a defined lamp height
- C. Calculation of Effective Projected Area (EPA) of the solar lighting system, with associated AASHTO reference for design wind speed for the area and EPA rating of the pole.
- D. Shop Drawings: Anchor-bolt templates keyed to specific poles and certified by manufacturer.

**1.3 QUALITY ASSURANCE**

- A. Manufacturer: Minimum 10 years experience in manufacture of solar powered lighting systems
- B. Manufacturer's Quality System: Registered to ISO 9001:2001 Quality Standards, including in-house engineering for product design activities.
- C. Photo Voltaic panels shall be IEEE1262 listed and UL1703 listed
- D. Battery shall be rated "non-spillable" by ICAO/IATA/DOT
- E. Perform full-function testing on 100% of all lighting systems at the factory.
- F. Manufactured by an ISO 9001-2000 listed manufacturer

**1.4 PROJECT CONDITIONS**

- A. Do not install equipment until following conditions can be maintained in spaces to receive equipment:
  - 1. Ambient temperature: 0° to 50° C
  - 2. Relative humidity: 0 to 100%
  - 3. All electrical components rated from -10° to 100°C
  - 4. Pole, base, footing and all coupling components exceed maximum specified EPA ratings required for local wind loading conditions.
  - 5. Photo Voltaic Panel rated to withstand hailstone impact described in ASTM E1038-93 and surface Cut Susceptibility tests (UL 1703-24)
  - 6.

**1.5 WARRANTY**

- A. Provide manufacturer's warranty covering 10 years from date of purchase.
- B. Solar Voltaic Panel warranty covers 25 years.

**PART 2 – PRODUCTS****2.1 MANUFACTURERS**

- A. Products: Subject to compliance with requirements, provide product indicated on Drawings or

## ADDENDUM NO. 1

approved equal.

B. Substitutions:

1. Proposed substitutes must be accompanied by a review of the specification noting compliance on a line-by-line basis.
2. Provide complete point-by-point photometric analysis of the site for the proposed substitution.
3. Contractor accepts responsibility and associated costs for all required modifications

## 2.2 SOLAR POWERED LUMINAIRES

A. Solar Powered Light System consists of (7) components and assemblies: Photovoltaic (PV) Modules, Solar Light Controllers, Light Fittings, LED lamps, Batteries, Battery Enclosures, Mounting and Support Hardware.

B. Photovoltaic (PV) Module

1. Construction:
  - a. Crystalline silicon solar cells
  - b. Framed in an all-aluminum structure
  - c. Sealed behind UV stabilized tempered glass
  - d. Covered by a 25 year power warranty
  - e. Meet or exceed IEEE1262 and listed UL1703 standard
  - f. RoHS compliant
  - g. Harnessing and cabling is 12 AWG THHN stranded wire with over molded insulated rated for exterior usage
2. Performance: PV power rating generates adequate power to fully recharge system batteries within two (2) days at the installation location's expected minimum insolation as defined by NREL.

C. Light Fixture Assembly

1. Construction:
  - a. Shoebox style
  - b. UV stabilized powder coated bronze
  - c. Glass lens finish
  - d. Sealed and rain-proof
  - e. Dark Sky Certified
  - f. Tilt from 0 to 15 degrees above horizontal for better light dispersion
  - g. Designed and factory-installed LED light source only no screw in LED lamps or compact fluorescent permitted.
2. Performance:
  - a. LED source designed for a minimum of 100,000 hour performance with over 70% initial lumen maintenance
  - b. LED junction temperature does not exceed 120° C in worst-case site temperature conditions
  - c. High brightness LEDs only (>80 lumens/Watt) per LED. 5 mm type LEDs are not acceptable
  - d. Bright white LEDs with a color temperature greater than 5000 K (> 5000 K)

D. System Electronics – consist of battery charge controller and LED driver

1. Construction:
  - a. Enclosed within the light system with touch-proof covers to prevent damage
  - b. Conformal coated to prevent corrosion and failure due to water
  - c. Charge controller and LED driver are designed without electrolytic capacitors. All other capacitor devices are de-rated by at least 20° C below the capacitor's maximum temperature rating under fully-loaded conditions and ambient

## ADDENDUM NO. 1

- d. temperature of 30° C
  - d. Minimum 10 year operational life when operating at minimum or maximum rated system environmental specifications (10° C to 50° C at 0 – 100% relative humidity, non condensing)
  - e. Designed and tested to withstand electrostatic discharges up to 15,000 V without impairment per IEC 801-2.
  - f. Withstand up to a 6,000 Volt surge without impairment of performance as defined by ANSI C62.41 Category A.
  - g. Manufactured in a facility that employ ESD reduction practices in compliance with ANSI/ESD S20.20.
2. Performance:
- a. Operates in the following mode Dusk to Dawn-No Dimming permitted
  - b. Perform Power Management to increase a system's run-time even with inclement weather conditions
  - c. Charge Controller operates with temperature compensated limits ensuring battery charging algorithm protects battery(ies) from over and under voltage stress
    - 1) Charge controller adapts maximum (charged) voltage based on temperature (14V maximum at 21° C)
    - 2) Charge controller prevents discharge below temperature compensated battery Low Voltage Disconnect (LVD) limit (11.5V at 21° C)
  - d. Operate the light for five (5) nights without adequate insolation during the day to charge the batteries
  - e. Charge controller never discharges more than 20% depth of discharge per night
  - f. Charge Controller differentiates between actual sunlight and solar panel illumination from the system's own LED light
- E. Batteries
1. Construction:
- a. Sealed valve regulated Gel cell type
  - b. Maintenance free
  - c. Air shippable
  - d. 100% recyclable
2. Performance:
- a. Capable of over 2000 cycles
  - b. Deep cycle technology
  - c. Maintains over 80% of charge after 2 months if left disconnected
- F. Battery enclosure
1. Construction:
- a. All aluminum vented enclosure
  - b. Aluminum doors with keyed notches for securing the door during service NEMA 3RX rated
  - c. All battery wire terminals and harnessing connect via quick-connect type with keyed connections to prevent miswires
2. Performance:
- a. Access provided for battery service via four (4) bolts
  - b. Wire harness is 12AWG THHN wire and finished to prevent accidental shorts
  - c. Terminal covers, ring washers, terminals, etc. are non-corrosive non-rusting
  - d. Warranted for a minimum of two (2) years 100%, and an additional pro-rated warranty to cover five (5) years.
- G. Mounting and Support Hardware
1. Construction:
- a. All aluminum bracing and support struts

## ADDENDUM NO. 1

- b. Aluminum or stainless steel hardware for rust-proof and corrosion resistant mounting equipment
  - c. All field serviceable cabling is quick connect plug-in type and designed to prevent miswires.
2. Performance:
- a. PV, Battery, and Fixture mounting hardware rated for 120 mph wind conditions
  - b. PV support structure adjustable to set angles of 5, 15, 30, 45, 60 degrees for ideal solar harvesting
  - c. PV support structure does not allow complete horizontal mounting to avoid soil, dust, dirt and debris collection that impedes solar harvesting

**PART 3 – EXECUTION****3.1 PROJECT CONDITIONS**

- A. Do not install equipment until following conditions can be maintained in spaces to receive equipment:
  - 1. Ambient temperature: 0° to 50° C
  - 2. Relative humidity: 0 to 100%
  - 3. All electrical components rated from -10° to 100°C

**3.2 STORAGE AND HANDLING**

- A. Battery(ies) approved for shipping via ground, air, or sea
- B. Battery(ies) retains 80% charge or higher from 2 months of shipment

**3.3 INSTALLATION**

- A. Install equipment in accordance with manufacturer's installation instructions.
- B. Provide complete installation of system in accordance with Contract Document

**3.4 MAINTENANCE**

- A. Make ordering of new equipment for expansions, replacements, and spare parts available to end user twenty-four hours a day, seven days a week.
- B. Make replacements available for minimum of ten years from date of manufacture.
- C. Provide factory direct technical support hotline 24 hours per day, 7 days per week.
- D. Provide on-site service support within 3 days anywhere in continental United States.

END OF SECTION 16531

**SECTION 00310  
BID PROPOSAL**

TO THE CHIEF PURCHASING OFFICER OF THE STATE OF RHODE ISLAND, acting in the name and on behalf of the Department of Environmental Management, Division of Planning and Development.

The undersigned proposes to furnish all labor and materials required for **South Bulkhead Replacement and Site Improvements, Port of Galilee, Narragansett, Rhode Island** in accordance with the accompanying Contract Documents, plans and specifications prepared by the Department of Environmental Management, Division of Planning and Development for the Bid Price specified below, subject to additions and deductions according to the terms of the contract documents.

**A. ADDENDA**

This bid includes Addenda numbered: \_\_\_\_\_ and dated: \_\_\_\_\_

This bid includes Addenda numbered: \_\_\_\_\_ and dated: \_\_\_\_\_

**B. BASE BID**

Total proposed Base Bid Price and including the Owner controlled contingency is:

\_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_ )  
(Price in Words) (Numbers)

ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT BID (in dollars and cents)
1. General Contract Requirements, Mobilization, Demobilization	LS	NA	NA	_____
2. Site Prep, Demolition, Sediment & Erosion Control	LS	NA	NA	_____
3. Site Work, Excavation, Backfilling, Concrete Fill Between sheeting	LS	NA	NA	_____
4. Furnish and Install FRP Sheeting	LS	NA	NA	_____
5. Furnish and Install Steel Sheeting	LS	NA	NA	_____
6. Install Earth Anchor Tiebacks & Steel Wales for Sheet Pile Bulkhead	LS	NA	NA	_____
7. Construct Cast in Place Concrete Facing Below Handrigans Seafood, Offshore Leasing and Champlins Piers, Including H-Piles, and H-Pile Wales And related Earth Tiebacks and all Incidental Work	LS	NA	NA	_____

8. Furnish and Install Timber Fender Piles Timber Wales and Chocks, Ladders	LS	NA	NA	_____
9. Furnish and Install Precast Concrete Cap & Reinforced Concrete Backfill Under Cap	LS	NA	NA	_____
10. Bituminous & Conc Surface Paving	LS	NA	NA	_____
11. Electrical Improvements	LS	NA	NA	_____
12. Water Distribution System	LS	NA	NA	_____
13. Pier J&K Improvements-Bracing, Batter Pile Connections, Decking, Fender piles, Dolphins, Ladders & All Incidentals	LS	NA	NA	_____
14. Remove and replace three 3-pile Corner clusters and 44 timber fender piles at Piers B, C and D, and install one 7-pile dolphin at Pier D	LS	NA	NA	_____
15. Obstruction removal for sheet pile installation	Hour	40		_____
16. Additional 3,000 psi concrete fill for Voids located behind existing sheet pile bulkhead	CY	20		_____
17. Additional 34-Kip design capacity Earth tiebacks to replace tiebacks Abandoned due to obstructions	Each	5		_____
18. Additional 38-Kip design capacity Earth tiebacks to replace tiebacks Abandoned due to obstructions	Each	5		_____
19. Additional 44-or 45-kip design Capacity earth tiebacks abandoned Due to obstructions	Each	5		_____
20. Additional 51-kip design capacity Earth tiebacks to replace tiebacks Abandoned due to obstructions	Each	5		_____

**Total of Base Bid Breakdown** \$ \_\_\_\_\_

NOTE: The sum of the price of all 19 Base Bid Items should equal the Total Proposed Base Bid Price. In case of a conflict the Total Proposed Base Bid Price shall govern.

**C. ALTERNATIVES:**

There are no Alternatives to be included.

D. GENERAL CONTRACTOR AND SUBCONTRACTOR BASE BID PRICE BREAKDOWN  
 The PROPOSED BASE BID PRICE IS SUBDIVIDED AS FOLLOWS:

**Base Bid:**

ITEM 1: The work of the General Contractor, being all work performed by the General Contractor's own work force:

\_\_\_\_\_ DOLLARS \$ \_\_\_\_\_  
 (Price in words) (Numbers)

ITEM 2: The work of the General Contractor, being all work performed by a subcontractor not part of the General Contractor's own work force covered by ITEM 1 above:

SUB-TRADE	NAME OF SUBCONTRACTOR	AMOUNT
_____	_____	\$ _____
_____	_____	\$ _____
_____	_____	\$ _____

TOTAL OF ITEM NO. 2: \_\_\_\_\_ \$ \_\_\_\_\_  
 (Price in Words) (Price in Numbers)

ITEM 2: The work of the General Contractor, being all work performed by a subcontractor not part of the General Contractor's own work force covered by ITEM 1 above:

SUB-TRADE	NAME OF SUBCONTRACTOR	AMOUNT
_____	_____	\$ _____
_____	_____	\$ _____
_____	_____	\$ _____

TOTAL OF ITEM NO. 2: \_\_\_\_\_ \$ \_\_\_\_\_  
 (Price in Words) (Price in Numbers)

E. QUALIFICATIONS OF SUBCONTRACTORS

The undersigned agrees that each of the above-named will be used for the work indicated at the amounts stated, unless a substitution is made with prior written approval of the Owner.

The undersigned further agrees to pay the premiums for the performance and payment bonds furnished by the subcontractors as required herein and that all of the cost of all such premiums is included in the amount set forth in item 1 of this bid.

F. LEGAL ORGANIZATION

The undersigned is a (an) \_\_\_\_\_ (Individual- Partnership-Corporation-Joint Venture). Attach copies of articles of incorporation or

partnership agreement, and Rhode Island Secretary of State's Certificate of Good Standing.

**G. QUALIFICATIONS TO PERFORM WORK**

The undersigned offers the following information as evidence of its organizational qualifications to perform the work as bid upon according to all requirements of the plans and the specifications.

1. The undersigned has been in business as a General Contractor under present business name for \_\_\_ years.
2. List at least two and no more than five recent projects on which the undersigned served as the General Contractor for work of similar character as required for the above named project, along with the date of the project, the name of the Architect/Engineer, and the contract price

	<b>PROJECT NAME</b>	<b>DATE</b>	<b>ARCHITECT/ENGINEER</b>	<b>CONTRACT PRICE</b>
1.	_____	_____	_____	\$ _____
2.	_____	_____	_____	\$ _____
3.	_____	_____	_____	\$ _____
4.	_____	_____	_____	\$ _____
5.	_____	_____	_____	\$ _____

3. List all construction contracts between the undersigned and the State of Rhode Island in the past five (5) years:

	<b>PROJECT NAME</b>	<b>DATE</b>	<b>STATE AGENCY</b>	<b>STATE CONTACT PERSON</b>	<b>CONTRACT PRICE</b>
1.					\$
2.					\$
3.					\$
4.					\$
5.					\$
6.					\$
7.					\$
8.					\$
9.					\$
10.					\$

H. VIOLATION OF RI/DEM LAWS AND REGULATIONS

The undersigned is / is not (Please circle one) currently cited as being in violation of any law or regulation administered by the Department of Environmental Management.

If Yes please explain. \_\_\_\_\_

I. REQUIREMENT FOR LICENSE NUMBER

In compliance with the requirements of Rhode Island General Law, Section 5-65-23, my Rhode Island license number for work to be performed by this firm as prime contractor is:

LICENSE NUMBER: \_\_\_\_\_

The undersigned acknowledges by signature below that the undersigned has read and understands the Information to Bidders, the terms of which are hereby incorporated into this Proposal.

DATE: \_\_\_\_\_

BIDDER: \_\_\_\_\_

BY: \_\_\_\_\_  
Signature Title

BUSINESS ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TELEPHONE NUMBER: (\_\_\_\_\_) \_\_\_\_\_

FEIN NO.: \_\_\_\_\_

\*\*\*\*\*END OF PROPOSAL\*\*\*\*\*

**September 26, 2013**  
**Galilee Reconstruction of South Bulkhead Questions**

**Please refer to Plan Sheet 2 of 26.**  
**The Notes are not complete for the Water Service.**

Response: The plan notes will be corrected by addendum. The full notes will read as:

1. New 2-inch water service to be installed through the right of way at the Bait Shack, with meter pit and shut off valve, to service three pairs of frost proof yard hydrants. See the revised plans by GZA showing the meter location, details, and connection to the water main.
2. Contractor is responsible for obtaining all necessary Local and State permits.
3. Installation shall be in accordance with Town of Narragansett Requirements.
4. Water service shall be 2-inch HDPE, and shall be installed at minimum frost depth of 3'-4' or as required by permit. See revised specifications.
5. Yard hydrants shall be installed in pairs (6 total), and shall be Clayton Mark frost proof hydrants with riser or manufacturer to match standard yard hydrants in the port, installed per manufacturer's specifications. Contractor shall provide as part of the base bid price an additional ten hydrants and risers for RIDEM to stock as future replacements.
6. Hydrants shall be installed in a 3-foot by 3-foot box out in the proposed concrete surface finish. The box out shall be finished with a 4-inch thick concrete surface with premolded expansion joint filler around the edges.
7. Provide 3-Inch diameter concrete filled steel pipe bollards on each corner of hydrant box out.

**September 26, 2013**  
**Galilee Reconstruction of South**  
**Bulkhead Questions — Part 2**

**1) Please refer to Plan Sheet 9 of 26. The notes in the upper left-hand corner appear to be incomplete.**

Response: The note has been truncated, a revised sheet will be issued by addendum.

**2) On Sheet 9 of 26, please provide the units of measurement for the Tieback Schedule.**

Response: Design capacity is in kips, bonded and unbounded lengths are in feet.

**3) Sheet references generally do not correspond to the correct Sheets — see references on Sheet 16 of 26 and Notes on Sheet 22 of 26.**

Response: Sheet references will be checked and corrected, and revised plans will be issued by addendum as necessary.

- 4) Sheet 5 of 26 calls for some timber piles to remain on Pier "J" and Pier "K." Sheet 22 of 26 calls for all timber piles to be removed and replaced. Please clarify.**

Response: ALL of the fender piles on Pier "J" and Pier "K" need to be replaced with greenheart piles. See the revised plan sheets.

**September 27, 2013  
Galilee Reconstruction of South  
Bulkhead Questions**

- 1) Section 01500, 1.8.D (should be "E"?) requires the maintenance of temporary access to Wooden Piers that are to be demolished and replaced. Please clarify the intent of requiring access to a pier that is not there.**

Response: Only the ends of the piers are to be demolished to allow the installation of the bulkhead, and the demolished portion of the pier is to be replaced in kind. Access to the un-demolished portion of the pier shall be maintained during construction. See the revised Specification Section 01015 issued with the addendum.

- 2) Section 02400, 2.1.A.2 calls for the inspection and reuse of existing timber piles. It appears from the Plans that, typically, new timber piles are required. Please clarify.**

Response: All existing piles shall be replaced with new piles. No existing piles are to be reused

**September 27, 2013  
Galilee Reconstruction of South  
Bulkhead Questions — Part 2**

- 1) Please refer to the Detailed Bulkhead Plans (3 Sheets, 9,10, & 11) and the Sections Sheets (2 Sheets, 12 & 13). The Minimum Sheet Pile Tip Elevations shown are not consistent between the Plans and Sections. Please review.**

Response: The tip elevations shown on Detailed Bulkhead Plans (3 Sheets, 9,10, & 11) are correct for this design. The tip elevations shown on the sections will be corrected and issued by addendum to be consistent for this design. Refer to Specifications Section 00100-7 regarding substitutions. No substitutions will be considered AFTER the contract award. The contractor may submit a proposed substitution of anchoring the FRP sheets including either the use of a composite

section utilizing the existing steel bulkhead or other substitution ONLY during the bid phase as long as the proposed substitution is received at least 10 days before the bid award. If the engineer approves a proposed substitution prior to the receipt of bids, such approval shall be set forth in an Addendum. Substituting steel sheets on the seawater side of the bulkhead for FRP sheets where FRP sheets are specified will not be allowed.

- 2) Section 01500 calls for a fully furnished office for the exclusive use of the owner's Representative. At the completion of the work, does the Contractor retain ownership of all equipment.**

Response: Yes. The contractor will retain ownership of all equipment.

**September 27, 2013  
Galilee Reconstruction of South Bulkhead  
Questions — Part 3**

***Please refer to the Typical Precast Concrete Cap Detail on Sheet 18 of 26. Is the 3/8" weld connecting the Precast Cap to the Sheeting to be performed in the field.***

Response: The weld connects the clip angle to the plate embedded in the cap, and is intended to be a field weld.

**October 02, 2013  
Galilee Reconstruction of South Bulkhead  
Questions from Pre-bid and Site Walk-thru**

- 1) Is a Building Permit required**

Response: Yes, the Contractor will need to obtain a State Building Permit from the RIBCC

- 2) Please outline any temporary staging area(s) that can be provided by the Owner**

Response: The RIDEM will do the best we can to provide areas in either one or a combination of the following: an approximately 100' by 50' area in the parking lot behind the Galilee office (October 15-May 15 only), Pier # 3 (October 15-May 15 only), Pier # 4 Jerusalem (October 15-May 15 only), Parking lot G (October 15-May 15 only), the bulkhead section near the great Island Bridge (year round), and other potential areas in Narragansett. The location and size of the areas may change depending on factors such as the season and access requirements. We will do our best to work with the contractor to find suitable areas, but have limited ability to provide areas in the summer months from May 15-October 15.

**3) Please identify a location for the Engineer's Office**

Response: It can be located in the small parking lot directly behind the RIDEM Coastal Resources Office Building. It will be the responsibility of the contractor to hook up to an appropriate power line and provide temporary power to the office.

**4) Please provide the duration of occupancy for the Engineer's office**

Response: 12 months

**5) Piers E & H are identified for cutback – should they be included on Sheet 19**

Response: Yes, Piers E & H should be included in the piers requiring cut backs

**6) Please confirm that for areas marked "remove and replace," suitable existing materials can be reused**

Response: No; the contractor should remove and replace with new materials.

**7) Please provide the finish requirements for structural steel (wales, bearing plates, etc)**

Response: All structural steel shall be coated with coal tar epoxy.

**8) Please clarify the language in the Note on Sheet 16: "bearing plates at the face of each sheet at 3'-0" o/c"**

Response: The note shall be revised to read "at 5'-0" o/c". The wale seats are to be provided at the outside face of each pair of sheets.

**9) Can the Engineer's Estimate for the cost of the work be provided**

Response: NO. The engineer's estimate is for the work shown on the plan. Refer to Specifications Section 00100-7 regarding substitutions. NO substitutions will be considered AFTER the contract award. The contractor may submit a proposed substitution of anchoring the FRP sheets including either the use of a composite section utilizing the existing steel bulkhead or other substitution ONLY during the bid phase as long as the proposed substitution is received at least 10 days before the bid award. If the engineer approves a proposed substitution prior to the receipt of bids, such approval shall be set forth in an Addendum. Substituting steel sheets on the seawater side of the bulkhead for FRP sheets where FRP sheets are specified will not be allowed.

**10) With reference to Specification Section 02900, please provide sufficient engineering properties to establish "approved equals" to the UC-95 FRP sheet pile specified**

Response: The properties will be provided by Addendum and only FRP sheets will be allowed. Steel sheets, coated steel sheets, or some other material will not be allowed.

**11) Please review the requirement to extract every third pair of FRP Sheeting for inspection**

Response: See Revised Specification Section 02900.

**12) Please clarify the requirement to drive the extracted FRP Sheets to 20' below mudline**

Response: This will be revised to the minimum tip elevation.

**13) With reference to Sheet 20, what are the vertical limits of the Sheeting Closure Detail**

Response: The closure angle is 10 feet long.

**14) Please confirm that others (Owner and/or commercial entities) will bear responsibility for any relocations of existing utilities/facilities (water lines, fuel lines, electrical, AC units, piping, etc.)**

Response: NO; it is the contractor's responsibility to relocate any existing utilities and/or facilities in the work area and to provide any temporary utilities and/or facilities in the work area for uninterrupted service. The ongoing operation of existing tenants and owners within the work area cannot be disrupted; their utilities and facilities will remain operational throughout the construction period. See revised Specification Section 01015 issued with this addenda.

**15) With reference to Sheet 21, what is the thickness of the Steel Plate Lagging**

Response: Steel plate lagging shall be 1/2" thick

**October 03, 2013**

**Galilee Reconstruction of South Bulkhead**

**Questions**

**1) Where is the diameter of the Bulkhead Fender Pile specified**

Response: Fender piles shall have a minimum butt diameter of 14 inches, all fender piles to be greenheart and to be stainless steel strapped.

- 2) General Layout calls for 35' long Piles – Bulkhead Section (Sheet 16) calls for Piles to be over 36' long. Please clarify.**

Response: Bulkhead fender piles shall be at least 36.5 feet long. The plans will be revised to reflect this.

**October 03, 2013**

**Galilee Reconstruction of South Bulkhead**

**Question – Part 2**

**Sheet 6 calls for the removal and resetting of existing rip rap near Sta. 9+00. This rip rap has the voids concrete filled. Do you want concrete fill with the replaced rip rap.**

Response: The riprap does not need to be grouted or concrete filled.

**October 07, 2013**

**Galilee Reconstruction of South Bulkhead**

**Questions**

- 1) With reference to the Pier J & K Pier Improvements, please confirm that there are four Dolphins to be replaced, and that the replacement steel pipe pile Dolphins will be 7-Pile (Sheet 22 shows 6-pile)**

Response: There are four dolphins, and shall be 7-pile cluster per sheet 23

- 2) Please confirm the thickness of the angles used to connect the P/C Cap to the Sheet Pile – both 5/8" and 3/4" are called out**

Response: The angles shall be 3/4"

**October 07, 2013**

**Galilee Reconstruction of South Bulkhead**

**Question – Part 2**

**Demo Plans and Sheet 22 call for Pier J & K Chocks to be removed and replaced. Sheet 23 calls for "10" x 12" Oak Chock Existing to Remain." Please clarify.**

Response: The existing chocks will need to be replaced.

**Re: Bid No. 7513366, Construction Services for the South Bulkhead Project, Port of Galilee**

***We submit the following questions:***

- 1. The drawings and bid items show precast concrete items, but there is no specification section for precast concrete. The only section for concrete is Section 03300, Cast-in-Place Concrete. Will specifications be issued for precast concrete items?***

Response: No additional specifications for the precast item will be issued. See also Concrete Notes on Sheet 2

- 2. Please clarify the distance of precast cap to be installed on top of sheeting. It appears that the drawings show no precast cap for a distance of 24 LF at Handrigan Seafood, 30 LF at Offshore Leasing, and 32 LF at Champlins, for a total of 86 LF +/- of sheeting that will not have a precast cap. Is this correct?***

Response: This is correct.

- 3. Are there any Buy American requirements related to the U.S. Dept. of Commerce Economic Development Administration contracting provisions listed in Section 00810?***

Response: According to the EDA Standard Terms and Conditions for Construction Projects, "American-Made Equipment and Products. Recipients are hereby notified that they are encouraged, to the greatest extent practicable, to purchase American-made equipment and products with funding provided under this Award."

- 4. In Section 00610, the date to be completed on the bid bond form is pre-printed with the year 2011. Will a new bid bond form be issued showing the year 2013, or should the surety company cross out the year 2011 on the existing bid bond form?***

Response: Use the existing bid bond form and correct the date on the existing form.

***Re: Bid No. 7513366, Construction Services for the South Bulkhead Project, Port of Galilee***

***We submit the following questions:***

- 1. The typical precast concrete cap detail on Sheet 18 states that 8"x8"x3/4" steel angle with 2 7/8"x3" slots is to be installed on each sheet. Is this angle to be installed on each single sheet or each double sheet?***

Response: Angles are to be installed on each double sheet (5' o.c.)

- 2. On Sheet 22 (Timber Piers J and K), Note 3 does not say that chocks are to be replaced, but Pier J and K notes say that chocks are to be replaced. Which is correct?***

Response: The existing chocks need to be replaced.

3. *Steel sheets at the Coast Guard property are to be coated top 20 ft. Are they to be coated on one side or both sides?*

Response: Both sides of the sheets are to be coated

4. *We do not see any information on coating of the HP piles. Are the HP piles to be coated, and if so, to what length?*

Response: The top 20 feet shall be coated with coal tar epoxy

5. *On Sheet 17, the upper wale connection details shows that 3/4" galvanized machine bolts are to be installed every 24" with plate washers for chock installation. Are plate washers to be used in counter sunk holes?*

Response: This shall be revised to be dock washers, and shall be countersunk

6. *During concrete and asphalt removal, does a solid temporary surface have to be provided so that tenants can roll carts to and from the piers? We know that access to the piers must be provided.*

Response: See revised Specification Section 01015 included with this addendum. The contractor will perform the work in seven separate and distinct sections. The contractor will be able to work within the limits of work in each section either one section or a time or in multiple sections as long as they do not directly abut each other. Work areas will need to be protected from the general public during construction. Access to the lease tenants and/or owners of the property must be maintained at all times as specified in Section 01015. The contractor will be required to continuously work in a section, once work is started in that section until all work in that section is completed and that section will be re-opened to full use by the tenants and the public. A temporary surface will not be required other than what will be necessary to provide access for the tenants to operate as defined in 01015.

7. *The specifications say that all piers must be accessible at all times for fishing boats and tour boats. We intend to use barges to perform most of the work, especially drilling the anchors. We would need many weeks of barge space 24 hours a day to perform this work. Are some fishing boats and tour boats going to be moved to other berths to allow barge access to perform the work? Would enough space be available to have three barges approximately 175 ft. long x 50 ft. wide performing the work simultaneously?*

Response: Barges must be anchored independently from the existing piers; existing piers do not have the structural capacity to support lateral loads from barges. Barges must be located within the section that work is being performed and not in adjacent sections unless as approved in advance by the DEM Port Manager and DEM Planning and Development. It may be possible, but difficult given the constraints in Section 01015 to have three barges 175'x50' working at the same time. Smaller barges will most likely be necessary given the site and operational constraints.

8. *We recently installed the UC-95 composite sheets and had a very difficult time due to small unknown obstructions that ripped holes in the sheets, making the sheets unusable. Sheet Pile Bulkhead Note 13 on Sheet 2 states that if the above conditions exist on this project, the sheets must be replaced at no cost to the owner. How can the contractor know if obstructions exist and to what extent? Also, can the engineer add a driving shoe to the design, to be installed before driving to help work through difficult driving conditions?*

Response: The contractor may add a driving shoe at their discretion.

**PART 1 – GENERAL:**

**1.1 DESCRIPTION OF WORK INCLUDED**

- A. Provide all labor, materials, equipment and supervision necessary to complete the sheet pile wall as specified in this section.
- B. Scope of work includes but is not limited to, furnishing and installing the following:
  - 1. Interconnected sheet pile wall;
  - 2. Wale system;
  - 3. Anchor rods;
- C. Related work specified elsewhere;
  - 1. Section 02200 - Earthwork
  - 2. Section 02220 – Permanent Ground Anchors
  - 2. Section 05500 - Miscellaneous Metals & Hardware
  - 3. Section 03300 - Cast-in-Place Concrete
  - 4. Section 09960 – High Performance Coatings

**1.2 QUALITY ASSURANCE**

- A. Except as noted, work shall conform to the latest editions and revisions of the following codes and standards:
  - 1. American Society for Testing and Materials (ASTM): specifications and standards herein referred to.
  - 2. American Welding Society (AWS): specifications and standards herein referred to.
  - 3. American Institute of Steel Construction (AISC): specifications and standards herein referred to.

**1.3 SUBMITTALS**

- A. Submit for approval by the Engineer, proposals for the following items:
  - 1. Driving plan and schedule for installation of the sheet pile wall.
  - 2. Method of installation of piles, including size and type of pile hammer.
  - 3. Templates and false work to be used for support and layout of piles during driving.
  - 4. Manufacturers' specifications for interlock size and configuration.

5. Fabricator's method of applying protective coating and contractor's method of transporting and storing coated sheet piling.
- B. Certificates:
1. Certify that materials are new and meet or exceed specification requirements by submitting notarized copy of chemical and physical test results.
  2. Submit copy of notarized test reports indicating that the material has met the manufacturers' specified minimum interlock strength of the interlocked joint.
- C. Shop Drawings:
1. Submit shop drawings for all fabricated items including: special sheet pile fabrication, connection details, wales, etc.

**1.04 PRODUCT DELIVERY, STORAGE AND HANDLING**

- A. Materials shall be stored and handled in accordance with the manufacturers' recommendations.
- B. Store and handle materials carefully to prevent physical damage. Sheet piles with damaged coatings may be rejected by the Engineer.
- C. Materials shall be stored in areas as designated by the Owner.

**1.05 LAWS AND REGULATIONS**

- A. All work under this Contract shall be accomplished in accordance with regulations of local, county, state and federal agencies and national or utility company standards as they apply.

**1.06 SUBSURFACE DATA**

- A. Subsurface investigations have been made and the results included in the bid package. The data shown is for general information of Bidders. Bidders are expected to examine the site and the compiled record of investigations, and then decide for themselves the character of materials to be encountered. No warranty, either expressed or implied, is made as to the accuracy of the subsurface information presented. Arrangements for inspection of the soil samples can be made at the office of the Engineer.
- B. Variations in existing ground conditions differing from those indicated on the boring logs shall not, under any conditions, constitute grounds for changes in Contract Price or completion dates of this Contract.
- C. Upon notification to the Owner, the Bidders will be allowed the right to make any subsurface explorations they deem necessary to satisfy themselves of the existing ground conditions.

**1.07 QUALITY CONTROL**

- A. The Quality Control provisions of Section 01400 apply to this section. Acceptance shall be obtained before delivery of materials or equipment to the project site.
- B. Given the complex nature of FRP products and the difficulty in manufacturing them to their design specifications, quality control is one of the most critical performance components. To meet this level of manufacturing precision and quality assurance, ISO certification in Design, Manufacture, Fabrication and Testing is required of all acceptable manufacturing facilities.

**PART 2 - PRODUCTS**

**2.1 MATERIALS**

- A. Fiberglass Reinforced Polymer (FRP) sheets shall be Ultra Composite 95 (UC-95) as manufactured by Crane Materials International, or accepted equal.
- B. FRP sheets shall be wholly and completely manufactured in an ISO certified production facility.
- D. All FRP sheet piling shall conform dimensionally to ASTM D3917-96, Dimensional Tolerance of Thermosetting Glass-Reinforced Plastic Pultruded Shapes.
- E. All FRP sheet piling shall conform to ASTM D4385-02, Classifying Visual Defects in Thermosetting Reinforced Plastic Pultruded Products, Level I for all criteria except for the following, which shall conform to Level II:
  - Die Parting Line
  - Exposed Underlayer
  - Fiber Prominence
  - Grooving
  - Inclusion
  - Internal Shrinkage Cracks
  - Saw Burn
  - Stop Mark
- F. The section modulus of the FRP sheet piling shall be no less than 58.5 in<sup>3</sup> per linear foot of wall.
- G. The FRP sheet piling must have a minimum thickness of 0.54 inches.
- H. The FRP sheet piling must have a minimum section depth of 17 inches.
- I. The FRP sheet piling shall have a minimum tensile yield stress of 15,000 psi, and a minimum modulus of elasticity of 4,000,000 psi.

- J. Steel Sheet Piling at the U.S. Coast Guard property shall be Arbed Grade 50 steel sheeting of the minimum section and tip elevation specified on the plans, or an equivalent Grade 50 steel sheeting by another manufacturer with a section modulus equal to or greater than the specified sections.. The top 20 feet of steel sheet piling shall be coated with coal tar epoxy in accordance with Section 09960.

**PART 3 - EXECUTION**

**3.1 ERECTION OF SHEET PILE WALL**

- A. The wall shall be located as shown on the drawings.
- B. Driving equipment and method shall be approved by the Engineer. No jetting will be permitted, except as may be needed to remove obstructions. Jetting must be approved by the Owner.
- C. Piles shall be driven in stages to avoid distortion and creep. The "sheet-lead" shall not exceed 6 feet on the first pass and shall decrease with depth of penetration. Successive driving stages shall be performed in opposite directions.
- D. All sheets shall be marked at a given distance from the bottom, which will show above the waterline or midline after driving, so that the bottom elevation of each sheet and its relation with adjacent sheets can be recorded.
- E. Do not drive sheeting within 50 feet of concrete less than 72 hours old.
- F. Cut off portions of piles shall be removed and disposed of off-site by the contractor.
- G. Drive piles to the minimum elevations as shown on the drawings or refusal at the acceptance of the Engineer.
- H. Piles shall be driven plumb and true to line. Maximum deviation from the intended wall line shall be 6" per 100 feet but shall not exceed 6" over the entire length.
- I. Cut off the tops of piles at the elevation shown on the drawing.
- L. Piles which are damaged, mislocated, or driven out of vertical alignment shall be withdrawn and replaced by new piles or cut off and abandoned as directed by the Engineer.
- M. Piles should be driven within accepted falsework or accepted templates.
- N. Where FRP sheeting is used, the Contractor, at the Engineer's discretion for up to 30 sheet pairs, shall install sheet piles to 20 feet below the mudline or to the minimum tip, whichever is less, and then extract to 1 foot above tide level to allow on-site owner's representative to observe the sheet condition. The sheets selected to be extracted by the engineer will be based upon observed driving conditions. After sheet condition is viewed, and is considered undamaged, the contractor shall install the sheet pair to the design tip elevation. If sheets show signs of damage, the contractor shall mitigate the cause and replace damaged sheets at no additional cost to the owner. Mitigation shall include excavation of any obstructions, driving steel mandrel sections to relocate or breakthrough obstructions, and/or manufacturer

recommendations to allow sheet installation through obstructions or difficult driving conditions.

**PART 4 - MEASUREMENT AND PAYMENT**

Payment for the scope of work specified herein, including all labor, materials, equipment and incidentals to satisfactorily complete the requirements of this Section shall be on a lump sum basis as stipulated on the Bid Form.

**\*\*\*\*END OF SECTION 02900\*\*\*\***

**PART 1 - GENERAL:**

**1.1 DESCRIPTION:**

- A. Work included: this section applies to situations in which the contractor or their representatives including, but not limited to, suppliers, subcontractors, employees, and field engineers, enter upon the Owner's property.
- B. Contractor shall maintain public and business access to all existing piers at all times during the completion of the work. This will include providing temporary aluminum gangway(s) to piers and wooden boardwalks with lighting and safety fencing through construction zones.
- C. Related work:
  - 1. Section 01010 – Summary of Work
  - 2. Section 00700 – General Conditions
  - 3. Section 00800 – Supplementary Conditions
  - 4. Section 01500 – Temporary Facilities and Controls

**1.2 QUALITY ASSURANCE:**

- A. Promptly upon award of the contract, notify all pertinent personnel regarding requirements of this section.
- B. Require that all personnel who will enter upon the Owner's property certify their awareness of and familiarity with the requirements of this section.

**1.3 SUBMITTALS:**

- A. Maintain an accurate record of the names and identification of all persons entering upon the Owner's property in connection with the Work of this Contract, including times of entering and times of leaving, and submit a copy of the record to the Owner daily.
- B. Submit specifications of temporary aluminum gangway(s) or design calculations stamped by a R.I. Professional Engineer of timber gangways to be utilized to maintain public access to existing piers during the completion of the work.

**1.4 TRANSPORTATION FACILITIES:**

- A. Truck, equipment and contractor's vehicle access:
  - 1. Provide adequate protection for curbs and sidewalks and parking areas over which trucks and equipment pass to reach the job site.
  - 2. Do not permit contractor's vehicles to park in any area of the Owner's property except where the Owner has designated as the "Contractor's Parking Area".

**1.5 PUBLIC ACCESS TO PIERS AND FACILITIES:**

- A. The existing piers are utilized by commercial fishermen; commercial ferries and charter boats on an around-the-clock basis. Safe access to the piers by the boat owners, business owners and employees, operators, clients and general public must be provided at all times during the completion of the work, including but not limited to driving of sheet

piling and excavation and trenching for installation of tiebacks and deadmen, water and electric lines.

- B. The completion of the work shall be sequenced so as to minimize impacts to access to the operating businesses in the construction area. In particular, excavations shall be opened, work completed, and backfilled in a progressive manner to minimize impacts on the use of the site during construction. The contractor shall work in seven distinct sections; several sections can be under construction at the same time as long as the sections under construction at one time are not adjacent to each other. Work in the following seven sections:

1. **Ferry Wharf Fish Market: STATION 0+00 to STATION 1+40:** Work in this section will only be allowed from October 15th to May 15<sup>th</sup>. The contractor must maintain all existing utilities in the construction zone in fully operating condition including seawater lines, drains, electric lines, water lines. The contractor must provide full access to business owners and employees from the piers to their buildings for successful continued business operation during construction. Work in this section includes all required construction work on Pier K. All construction work and equipment including barges must be located within the limits of the section while work is being completed in that section.
2. **The Bait Company and Handrigan North: STATION 1+40 to STATION 2+70:** Work in this section will only be allowed from October 15th to May 15<sup>th</sup>. The contractor must maintain all existing utilities in the construction zone in fully operating condition including seawater lines, hydraulic lines, ice chute, drains, electric lines, water lines. The contractor must provide full access to business owners and employees from the piers to their buildings for successful continued business operation during construction. Handrigan Seafood must have full access for berthing boats for unloading on the south, west, and north sides of their covered pier at all times. Work in this section includes all required construction work on Pier J. All construction work and equipment including barges must be located within the limits of the section while work is being completed in that section.
3. **Handrigan South: STATION 2+70 to STATION 3+55:** Work in this section will only be allowed from October 15th to May 15<sup>th</sup>. The contractor must maintain all existing utilities in the construction zone in fully operating condition including seawater lines, hydraulic lines, ice chute, drains, electric lines, water lines. The contractor must provide full access to business owners and employees from the piers to their buildings and loading docks for successful continued business operation during construction. Handrigan Seafood must have full access for berthing boats for unloading on the south, west, and north sides of their covered pier at all times. Handrigan Seafood must have full access at all times from the covered pier and the uncovered portion of the pier to their loading dock. All construction work and equipment including barges must be located within the limits of the section while work is being completed in that section if possible; work in this section may require locating construction barges in directly adjacent sections.
4. **US Coast Guard: STATION 3+55 to STATION 4+55:** Work in this section will only be allowed from October 15th to May 15<sup>th</sup>. The contractor must maintain all existing utilities in the construction zone in fully operating condition including seawater lines, hydraulic lines, drains, electric lines, water lines. The contractor must provide full access to Coast Guard employees from the piers to their building for successful continued operation during construction. All construction work and equipment including barges must be located within the limits of the section while work is being completed in that section.
5. **Narragansett Bay Lobster: STATION 4+55 to STATION 6+70:** Work in this section WILL be allowed during all months of the year including the summer months. The contractor must maintain all existing utilities in the construction zone in fully operating condition including seawater lines, lobster tanks, hydraulic lines, ice chutes, drains,

electric lines, water lines. The contractor must provide full access to business owners and employees from the piers to their buildings and loading docks for successful continued business operation during construction. All construction work and equipment including barges must be located within the limits of the section while work is being completed in that section.

6. **Timber Piers C and D: STATION 6+70 to STATION 8+00:** Work in this section WILL be allowed during all months of the year including the summer months. The contractor must maintain all existing utilities in the construction zone in fully operating condition including seawater lines, drains, electric lines, water lines. The contractor must provide full access to business owners and employees from the piers to their loading docks for successful continued business operation during construction. All construction work and equipment including barges must be located within the limits of the section while work is being completed in that section.
  7. **Champlin's: STATION 8+00 to STATION 9+26:** Work in this section will only be allowed from October 15th to May 15<sup>th</sup>. The contractor must maintain all existing utilities in the construction zone in fully operating condition including seawater lines, electric lines, water lines. The contractor must provide full access to business owners and employees from the piers to their buildings for successful continued business operation during construction. Champlin's must have full access for berthing boats on a nearby pier during construction. Champlin's must have full access at all times from the covered pier to the back of their building. All construction work and equipment including barges must be located within the limits of the section while work is being completed in that section. All work in the vicinity of the covered pier MUST be done within the first four months of the overall construction project.
- C. Temporary aluminum or timber gangways shall be used to bridge across the temporary demolition of pier ends during installation of sheet piling. Driving of sheet piling shall be sequenced such that the access may be gained from the either side of the piers during driving. The Contractor shall submit specifications of pre-manufactured aluminum gangways or design calculations for wooden gangways in accordance with 1.3.B.
- D. The Contractor shall provide compacted gravel pathways lined with safety fencing through active construction zones for use by the public. These walkways shall be protected from construction activities that may endanger the public. Timber boardwalks or gangways shall be used as required across uneven ground or to bridge excavations. All walkways and gangways through constructions areas shall be lighted with a string of incandescent lights from dusk to dawn.
- E. The contractor must coordinate all of the work and access to the site with Dan Costa, the Port Property manager and the RIDEM Owner's Representative. The contractor must give Dan Costa at least 72 hours' notice in advance if any boats must be moved to accommodate construction operations.
- F. No storage of equipment or materials will be allowed on the construction site. The RIDEM will do the best we can to provide areas in either one or a combination of the following: an approximately 100' by 50' area in the parking lot behind the Galilee office (October 15-May 15 only), Pier # 3 (October 15-May 15 only), Pier # 4 Jerusalem (October 15-May 15 only), Parking lot G (October 15-May 15 only), the bulkhead section near the great Island Bridge (year round), and other potential areas in Narragansett. The location and size of the areas may change depending on factors such as the season and access requirements. We will do our best to work with the contractor to find suitable areas, but have limited ability to provide areas in the summer months from May 15-October 15. Contractor to install a temporary fence around all stockpile and storage areas.

\*\*\*\*END OF SECTION\*\*\*\*

Galilee South Bulkhead Replacement  
 Addendum No. 1  
 Plan and Specifications Revisions  
 October 21, 2013

**Specifications**

Section 00310 – Bid Proposal – The following additional Bid Items have been added:

13 Remove and replace three 3-pile corner clusters and 74 timber fender piles at Piers B, C and D, and install one 7-pile dolphin at Pier D.	LS	NA	NA
14 Obstruction Removal For Sheet Pile Installation	Hour	40	
15 Additional 3,000 psi concrete fill for voids Located behind existing sheet pile bulkhead	CY	20	
16 Additional 34-kip design capacity Earth Tiebacks to replace tiebacks abandoned due to obstructions	Each	5	
17 Additional 38-kip design capacity Earth Tiebacks to replace tiebacks abandoned due to obstructions	Each	5	
18 Additional 44- or 45-kip design capacity Earth Tiebacks to replace tiebacks abandoned due to obstructions	Each	5	
19 Additional 51-kip design capacity Earth Tiebacks to replace tiebacks abandoned due to obstructions	Each	5	

Section 02900 Sheet Piling

Paragraphs 2.1.F through 2.1.I shall be revised to read as follows:

- F. The section modulus of the FRP sheet piling shall be no less than 58.5 in<sup>3</sup> per linear foot of wall.
- G. The FRP sheet piling must have a minimum thickness of 0.54 inches.
- H. The FRP sheet piling must have a minimum section depth of 17 inches.
- I. The FRP sheet piling shall have a minimum tensile yield stress of 15,000 psi, and a minimum modulus of elasticity of 4,000,000 psi.

- J. Steel Sheet Piling at the U.S. Coast Guard property shall be Arbed Grade 50 steel sheeting of the minimum section and tip elevation specified on the plans, or an equivalent Grade 50 steel sheeting by another manufacturer with a section modulus equal to or greater than the specified sections.. The top 20 feet of steel sheet piling shall be coated with coal tar epoxy in accordance with Section 09960.

Paragraph 3.1.N shall be revised to read as follows:

- N. Where FRP sheeting is used, the Contractor, at the Engineer's discretion for up to 30 sheet pairs, shall install sheet piles to 20 feet below the mudline or to the minimum tip, whichever is less, and then extract to 1 foot above tide level to allow on-site owner's representative to observe the sheet condition. The sheets selected to be extracted by the engineer will be based upon observed driving conditions. After sheet condition is viewed, and is considered undamaged, the contractor shall install the sheet pair to the design tip elevation. If sheets show signs of damage, the contractor shall mitigate the cause and replace damaged sheets at no additional cost to the owner. Mitigation shall include excavation of any obstructions, driving steel mandrel sections to relocate or breakthrough obstructions, and/or manufacturer recommendations to allow sheet installation through obstructions or difficult driving conditions.

### Plans

The plans have been revised as follows:

- Sheet 2: Sheet Pile Bulkhead Note 13, and the Water Service Notes have been revised.
- Sheet 5: Greenheart fender piles to remain have been indicated, length of proposed fender piles has been corrected, and additional water service notes have been added. Proposed light pole and fixture adjacent to USCG has been revised to a solar powered light. Existing wood deck at Handrigan Seafood has been revised to be replaced with concrete apron.
- Sheet 6: Removal and replacement of timber fender piles and corner clusters has been added to Piers B, C, and D, and the installation of a 7-pile dolphin has been added at Pier D. Proposed light pole and fixture adjacent to Galilee Fuel has been revised to a solar powered light.
- Sheet 9: Units have been added to the Earth Tieback Schedule. Additional notes have been added to the proposed water service. The note for the side pier at Handrigan Seafood has been corrected. Excavation limits have been shown at two light poles for electrical installation.
- Sheet 10: Note has been added to USCG sheeting for transition to FRP sheeting detail. Proposed light pole and fixture adjacent to Galilee Fuel has been

revised to a solar powered light. Proposed light pole and fixture adjacent to USCG has been revised to a solar powered light.

- Sheet 11: Excavation limits have been revised to include installation of underground electric to existing pole. The locations of timber fender piles adjacent to Piers B, C, D and E have been revised.
- Sheet 12: Sheet pile tip elevations have been corrected.
- Sheet 13: Sheet pile tip elevations have been corrected.
- Sheet 16: Corrections made to Wale Seat and Typical Earth Anchor Notes. Typical New Bulkhead Section has been revised to show underground electric and water.
- Sheet 17: Sheeting end closure detail modified to include transition from FRP to steel sheet piling. Miscellaneous note corrections (dock washers instead of plate washers, truncated notes fixed).
- Sheet 18: Water service Backflow Valve and Meter Pit Detail added, Bollard Detail added.
- Sheet 19: Title revised to include Piers E & H.
- Sheet 22: Existing greenheart fender piles to remain indicated. Note regarding removal and replacement of fender pile chocks revised. Sheet number callouts in Notes corrected.
- Sheet 23: Existing fender pile chocks called out to be replaced with new SYP chocks.
- Sheet 24: Proposed light pole and fixture adjacent to Galilee Fuel has been revised to a solar powered light. Underground electric service to this pole has been deleted.
- Sheet 25: Proposed light pole and fixture adjacent to USCG has been revised to a solar powered light. Underground electric service to this pole has been deleted.

Galilee South Bulkhead Replacement  
Addendum No. 1  
Plan and Specifications Revisions  
October 21, 2013

#### SOLAR POWERED LIGHTING

Two of the proposed light fixtures are revised to be installed as solar powered light fixtures with battery back up, as indicated on the plans. The solar powered fixtures shall be per Specification Section 16531 – Exterior Solar Powered Lighting, included with this Addendum. The proposed solar powered lighting fixtures shall consist of Back-To-Back TP Series Solar Lighting Systems as manufactured by Sol Inc. of Palm City Florida or approved equal. The fixtures shall include two 2Q Shoebox Luminaires at 15 watts each installed on bullhorn arms. The pole for the fixture shall be as specified for the standard light fixtures, or approved equal. The top edge of the solar panel shall be provided with a row of 2-inch galvanized spikes to deter birds from perching on the panel.