BROWNSVILLE NAVIGATION DISTRICT

BULK CARGO DOCK IMPROVEMENTS

CONTRACTOR

SCOPE OF WORK

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1.0 OVERVIEW

1.1 This Scope of Work sets forth the minimum requirements for improvements of the existing Bulk Cargo Dock at Brownsville Navigation District’s Port of Brownsville (OWNER) located on the Brownsville shipping channel in Brownsville, Texas. The existing dock is a 400 ft. long steel H-pile structure with concrete decking. Currently, operations are not allowed along rows 1 to 5 of the dock due to the poor condition of the existing H-piles and steel framing supporting the concrete deck above in this area. Operations along the remaining portion of the dock should remain limited to light traffic; less than 50psf from rows 6 to 41 and A to E.

1.2 In summary, the CONTRACTOR's Scope is to remove the existing timber fender system including all members marked on the Demolition Drawings including, but not limited to, L8x6, C12, and W10 members supporting the timber fenders and attached mooring cleats. CONTRACTOR shall remove and replace in kind or with approved equivalent all structural members labeled as such on the Demolition Drawings along rows 1 to 5 and rows A to E. CONTRACTOR shall perform concrete demolition work on existing concrete deck as depicted on Demolition Contract Drawings to allow placement of new piles. CONTRACTOR shall not cut into or through existing steel framing located beneath concrete deck while making cut-outs in existing concrete deck. CONTRACTOR is responsible for the disposal of all demolished material as specified in the demolition specification. CONTRACTOR shall perform concrete repair work to the existing concrete supporting the four (4) existing mooring bits and any other locations depicted on the Contract Drawings as needing concrete structural repair. CONTRACTOR shall install new steel piles and concrete pads for ship loader equipment foundations. CONTRACTOR shall install monopile fender system in accordance with the Contract Drawings and applicable fender manufacturer instructions. CONTRACTOR shall install four (4) timber pile-supported landside mooring bollards/foundations specified on Contract Drawings. CONTRACTOR shall install two (2) overboard ladders following removal of existing ladders.

2.0 DEFINITIONS

2.1 Owner: Port of Brownsville

2.2 Owner’s Representative: EDG Inc.

2.3 Contractor: TBD

2.4 Contract Drawings:

A. 6966-CS-001
B. 6966-GN-001
C. 6966-GN-002
D. 6966-GN-003
E. 6966-GN-004
F. 6966-SP-001
2.5 Referenced Specifications:
A. 6966003-40900-00001-B Structural Steel
B. 6966003-40900-00002-B Cast-In-Place Concrete
C. 6966003-40900-00003-B Coatings
D. 6966003-40900-00004-B Demolition
E. 6966003-40900-00005-B Fender System
F. 6966003-40900-00006-B Timber Piles

2.6 The CONTRACTOR shall execute the work in accordance with all federal and local laws and applicable industry standard codes governing this scope.

3.0 GENERAL WORK DESCRIPTION

3.1 CONTRACTOR shall provide ALL necessary equipment, materials, labor, and consumables required to complete the Work as described in this Scope of Work document and depicted in the Contract Drawings and Specifications.

3.2 Owner will furnish areas within the facility for CONTRACTOR’s materials/equipment yard and office trailer. All fencing and improvements shall be by CONTRACTOR, if desired by CONTRACTOR.

3.3 CONTRACTOR shall plan, schedule, and perform contract work based on meeting key deliverable dates outlined in this document. CONTRACTOR will coordinate the work schedule with Owner’s Project Representative Construction Manager.
3.4 The CONTRACTOR shall sequence work as to avoid work interference among the different trades and to expedite the overall duration of the project.

3.5 CONTRACTOR’s operations must not interfere with ongoing port and facility operations.

3.6 All extra work must be approved by OWNER before work commences.

3.7 All Sub-CONTRACTORs must be approved by OWNER prior to performing any work.

3.8 CONTRACTOR to confirm all information required to accurately define and perform the Work.

3.9 CONTRACTOR shall be responsible for gathering all information required to accurately define and perform the Work.

3.10 CONTRACTOR is responsible for providing his own transportation assistance and support (Mobilization / Demobilization), if required.

3.11 CONTRACTOR shall complete a daily tool box safety meeting. This meeting shall include the review of all permits, any changes to the JSEA, scope of work to be performed for that day and all potential hazards associated with the scope of work being executed. All subcontract employees must participate in this meeting.

3.12 CONTRACTOR shall plan, schedule, and perform Work based on work periods consisting of a minimum of 10 hour days.

3.13 CONTRACTOR shall develop a work plan itemizing and describing the plan for executing the requested work scope. A detailed schedule of activities is to be developed and updated as work progresses.

4.0 SUMMARY OF TASKS

4.1 CONTRACTOR is to remove existing timber fender system including all members marked on the Demolition Contract Drawings including but not limited to L8x6, C12, and W10 members supporting the timber fenders and attached mooring cleats. Disposal by CONTRACTOR.

4.2 CONTRACTOR shall remove and replace in kind or with approved equivalent all members and braces labeled as such on the Demolition Contract Drawings.

4.3 CONTRACTOR shall perform concrete demolition work on existing concrete deck as depicted on the Contract drawings. CONTRACTOR shall not cut into or through existing steel framing located beneath concrete deck while making cut-outs in the existing concrete deck.

4.4 CONTRACTOR shall provide and install all misc. steel, per the Contract Drawings and Specifications, including, but not limited to, plates, bolted
connections, anchors, embedded steel, re-steel, bollards, fender system accessories, and landside mooring bollard accessories. The CONTRACTOR shall provide detailed shop drawings and mill certificates for all supplied/fabricated items for approval prior to fabrication. CONTRACTOR shall supply all testing and inspection services, including, but not limited to pile driving testing (PDA), concrete, steel, welds, and coating, with written plan and list of sub-contractors for Owner’s Representative and Owners review and approval prior to initiation of respective work.

4.5 CONTRACTOR is responsible for the disposal of all demolished material as specified in the Demolition Specification and Contract Drawings.

4.6 CONTRACTOR shall perform concrete repair work to the existing concrete supporting the four (4) existing mooring bitts located on the edge of the needing concrete structural repair or those damaged during demolition activities. See Cast-In-Place Concrete and Demolition specifications for reference.

4.7 CONTRACTOR shall install new steel piles for new ship loader foundation as indicated and to the elevations called out on the Contract Drawings. CONTRACTOR to install all additional miscellaneous steel to be encapsulated in the concrete cap and concrete pad, including, but not limited, to rebar cage, pile interior cap plate, rebar hooks, and post installed dowels.

4.8 CONTRACTOR shall place all rebar and concrete for new pad per project plans.

4.9 CONTRACTOR shall place all rebar and concrete per project plans, per the project drawing elevations.

4.10 CONTRACTOR shall install monopile fender system in accordance to Contract Drawings and applicable manufacturer instructions. Monopiles shall be cut-off to elevations specified on the Contract Drawings. All fender system components and accessories shall be provided and installed by the CONTRACTOR per manufacturer’s instructions.

4.11 CONTRACTOR shall provide and install timber piles for the landside mooring bollard foundations per the Timber Pile Specification and Contract Drawings.

4.12 CONTRACTOR shall place and form all rebar and concrete for the landside mooring bollard timber pile-supported concrete caps per project plans and specifications.

4.13 CONTRACTOR shall provide and install the landside mooring bollards and all accessories including, but not limited to base plates and anchor bolts.

4.14 CONTRACTOR shall demolish and dispose existing overboard ladders specified on the Demolition Contract Drawings.

4.15 CONTRACTOR shall install new overboard ladders as specified on the Structural Contract Drawings.
4.16 CONTRACTOR shall touch-up coatings and clean site before demobilization.

5.0 OPERATING PARAMETERS

5.1 Existing Conditions:

A. Dock Operations are not allowed along the entire length of the dock due to the poor condition of the existing steel framing supporting the concrete deck above. Existing dock loading is limited to 50psf in the current condition, between rows 6 to 41 and A to E.

5.2 CONTRACTOR shall indicate any parameters that may limit the dock and/or CONTRACTOR operations that could require demobilization and/or start/stop of construction activities per the proposed schedule, including severe weather conditions.

6.0 EXECUTION PLAN & SCHEDULE

6.1 CONTRACTOR shall submit a written execution plan and schedule describing the following:

A. Pre-Mobilization & Preparation Efforts.

B. Detailed schedule, with dates for all phases and tasks of the project shall be submitted with bid documents.

C. General Arrangement Drawings of Site Construction Sequence and Layout & Equipment/Personnel lists.

D. Required Certification & Re-Certifications.

E. List of Sub-CONTRACTORs/Work Schedule.

F. Pile Driving Plan- Including hammer sizing, testing (PDA) plan for both Timber Piles and Steel Piles, and restrike plan.

G. Weld Inspection procedures shall be included in bid documents for approval by Owner’s Representative.

H. Mobilization Scheduling/ Re-mobilization Scheduling.

I. Demobilization Schedule.
6.2 Execution Milestones

Phase I
Completion of all demolition and dock repair work.

Phase II
Installation of new ship loader foundation and new fender system.

Phase III
Installation of four (4) new landside mooring bollards and respective foundations.

7.0 PERMITS

7.1 Corps of Engineers permit number: SWG-2018-00229. Corps Real State Division review is ongoing at this time.

8.0 SAFETY

8.1 CONTRACTOR is responsible for reviewing and understanding both West Plains LLC and the Port of Brownsville safety practices and Safety Procedure Manuals that apply to the project and specific work tasks.

8.2 CONTRACTOR shall observe all applicable governmental regulations.

8.3 Although it is not anticipated that utility pipelines or power or other cables are in existence in the area of the proposed work, CONTRACTOR shall be responsible to notify OWNER of any such utility lines or cables that may be discovered or found PRIOR TO REMOVAL of same. OWNER shall determine the need for any such found utilities or cables to remain. Should CONTRACTOR remove any such found utilities or cables without prior authorization from OWNER, CONTRACTOR shall, at his sole cost and expense, be responsible to restore such found utilities or cables back to same as existing condition or better, as required by the OWNER.

END OF SECTION