



**CITY OF TACOMA**  
**Public Work Engineering Division**

**ADDENDUM NO.3**

**DATE:** 3/15/2022

**REVISIONS TO:**

**Request for Bids Specification No. PW22-0059F**  
**15<sup>th</sup> Street Transient Moorage Dock Replacement**

**NOTICE TO ALL BIDDERS:**

This addendum is issued to clarify, revise, add to or delete from, the original specification documents for the above project. This addendum, as integrated with the original specification documents, shall form the specification documents. The noted revisions shall take precedence over previously issued specification documents and shall become part of this contract.

**REVISIONS TO THE SPECIAL PROVISIONS:**

- Replace Section 6-22 with Section 6-22, labeled Addendum No. 3 as attached.

**QUESTIONS AND ANSWERS:**

- See attached Q&A Sheet.

NOTE: Acknowledge receipt of this addendum by initialing the corresponding space as indicated on the signature page. Vendors who have already submitted their bid/proposal may contact the Purchasing Division at 253-502-8468 and request return of their bid/proposal for acknowledgment and re-submittal. Or, a letter acknowledging receipt of this addendum may be submitted in an envelope marked Request for Bids Specification No. PW22-0059F Addendum No. 3. The City reserves the right to reject any and all bids, including, in certain circumstances, for failure to appropriately acknowledge this addendum.

cc: Darius Thompson, Public Works Engineering

## **6-22 DOCK FLOATS**

(xxxx)

The following section is added

### **6-22.1 General**

#### **6-22.1(1) Description of Work**

The work under this item includes all labor, materials, tools and equipment necessary to design, fabricate, pre-assemble, furnish and deliver float structures. Layout and dimensions of these floating dock structures are shown on the Drawings. Floats shall consist of a grated deck, concrete deck, a frame, connection hardware, accessories such as cleats, and removable pile restraint guide collars. The floating dock system shall accommodate exiting guide piles per the Drawings and field conditions.

The Manufacturer is responsible for final design based on design criteria, ADA requirements, regulatory permit conditions and these specification requirements. The provisions of the Contract, including the General conditions and information contained in the Drawings, apply to this work as if specified in this section.

#### **6-22.1(2) References**

The publications listed below form a part of this Specification to the extent referenced. References shall be the latest edition available as of the date of the invitation to bid unless otherwise specified.

1. International Building Code, (IBC)
2. American Institute of Steel Construction (AISC)
3. American Welding Society (AWS) D1.1 Structural Welding Code – Steel
4. American Welding Society (AWS) D1.4 Structural Welding Code – Reinforcing Steel
5. American Society of Testing and Materials (ASTM)
6. National Design Specification (NDS) for Wood Construction
7. American Institute of Timber Construction (AITC)
8. American Society of Mechanical Engineers (ASME)
9. American Wood-Preservers' Association (AWPA)
10. UFC 4-152-07 "Small Craft Berthing Facilities," July 2009.
11. American Society of Civil Engineers, "Planning and Design Guidelines for Small Craft Harbors," ASCE Manuals and Reports on Engineering Practice No. 50, 2012.
12. PIANC, "Review of Selected Standards for Floating Dock Designs," Supplement to Bulletin No. 93, Jan. 1997.
13. Tobaïsson & Kollmeyer, "Marinas and Small Craft Harbors," 1991.
14. US Army Corps of Engineers. "Small Craft Harbors: Design, Construction and Operation," Special Report No. 2, December 1974.
15. Aluminum Design Manual
16. NFPA 303, "Fire Protection Standard for Marinas and Boatyards"
17. ADA Standards for Accessible Design (ADA), Department of Justice

#### **6-22.1(3) Float System Performance Requirements**

Provide float units, and connections capable of withstanding design loading criteria indicated below:

1. Float system shall be a string of floats connected to existing steel guide piles shown in the Drawings. Float units shall be capable of supporting all design load combinations throughout entire tidal range.
2. Freeboard:
  - a. Dead load freeboard: 15 to 20-inches of freeboard at every float.
  - b. The freeboard under all dead loads shall not be more than ½-inch below or more than one-inch above the specified freeboard after one year of operation. Dead loads shall consist of the float system, cleats, pile restraint guides, transition plates, and all other attached appurtenances.
  - c. Under all dead loads, the structural frame and connection hardware shall be greater than or equal to 6-inches above the water surface.
3. Wind Load:
  - a. Basic wind speed (3-second gust) = 110 mph
  - b. Wind exposure – Exposure C
4. Uniform Live Load:
  - a. 40 psf uniform live load
  - b. Minimum freeboard under DL+LL to be 15-inches minimum.
5. Concentrated Live Load:
  - a. 400 lbs, distributed over 144-square inches, placed anywhere on floats.
  - b. Minimum freeboard under DL + point LL 15-inches minimum.
  - c. Cross slope shall not exceed 2%.
6. Wave Load:
  - Head Seas:
    - Fetch = 4.7 Nautical Miles
    - Sustained Wind Speed = 23 Knots
    - HW = 2.0 Feet
    - TP = 2.6 Seconds
    - Wavelength = 35 Feet
  - Beam Seas:
    - Fetch = 2.2 Nautical Miles
    - Sustained Wind Speed = 30 Knots
    - HW = 1.7 Feet
    - TP = 1.9 Seconds
    - Wavelength = 19 Feet

1           Quartering Seas:

2                 Fetch = 5.4 Nautical Miles

3                 Sustained Wind Speed = 28 Knots

4                 HW = 2.7 Feet

5                 TP = 2.4 Seconds

6                 Wavelength = 43 Feet

- 7
- 8           7. Float to Guide Pile Connection: All float to guide pile connections shall be designed for
- 9                 a horizontal load based on the tributary wave loading to the guide pile.

10

11          8. Tides:

12                 Highest Astronomical Tide (HAT): +13.75 ft

13                 Mean Higher-High Water (MHHW): +11.78 ft

14                 Lowest Astronomical Tide: -4.36 ft

15                 Mean Lower-Low Water (MLLW): +0.0 ft

16

17          Float connections shall be designed to distribute loads based on the relative flexibility of the

18          piling and dock assembly. Connections shall be noiseless and non-wearing. Selection

19          preference will be given to the use of non-metallic flexible connection materials which will

20          permit dampened vertical and torsional articulation without imposing concentrated or shock

21          loads on the adjoining float units. Connection designs shall consider joint rotation effects so

22          that contact, abrasion or subsequent damage between unprotected float elements does not

23          occur due to wave and live load effects. Connections should be easily removable for

24          installation and removal each year, but also be tamper resistant to deter vandalism.

25

26          Pile restraint guides and their connections shall be designed based on the requirements of

27          section 6-22.1(3). Connections should be tamper resistant to deter vandalism.

28

29          Decking: Deck surface shall be grating and concrete panels, nonslip and allow minimum

30          60% sunlight penetration. See requirements in the regulatory permits.

31

32          The float manufacturer shall provide one life preserver and one fire extinguisher with the

33          float system. These items shall be located and mounted to the floats in such manner that they

34          do not intrude upon the functionality of the floating dock to be used for launching boats or for

35          pedestrian use.

36

37          **6-22.1(4) Float System Quality Assurance**

38

39          The float manufacturer shall have a minimum of 5 years experience in the design,

40          manufacturing, and installation of the type of floats provided and shall have regularly engaged

41          in the production of floating structures of the type required for this project. The float

42          manufacturing facility shall provide proper environment, adequate work space, equipment, level

43          construction surfaces, physical conditions and protection from direct sunlight, wind, moisture,

44          and freezing necessary for construction of high quality floats.

45

46          All plans and calculations shall be signed and stamped with the seal of an Engineer

47          registered in the State of Washington. The Engineer of Record for the float system shall have a

48          minimum of 5 years experience in the design of float structures.

49

50          The float system shall be designed by the manufacturer in accordance with the latest IBC

51          and shall consist of modular float units as required to provide the configuration shown on the

1 drawings. Complete all Engineering for the float system in accordance with plans and specified  
2 loads.

3  
4 Fabrications and connections shall be designed by the float manufacturer. Fabrications and  
5 associated connections to the floats shall be designed to develop the full capacity of the  
6 pertinent structural member connected. Steel transition plates shall meet the change in level  
7 requirements of ADA section 303.

8  
9 Existing pile locations are shown in Drawings. Contractor shall field measure and determine  
10 exact locations of piles to determine attachment locations of pile restraint guides.

11  
12 Pile restraint guides and method of attachment to the floats shall be designed by the  
13 manufacturer. Pile guides and connections to the float shall be designed to transmit all  
14 anticipated loads from the float to the piles without failure to the float. This load shall not be  
15 less than the loading requirements of Section 6-22.1(3). All directions of load shall be  
16 considered.

17  
18 Float Tests and Inspection:

- 19  
20 1. Quality control during the fabrication process shall be given utmost priority. A quality  
21 control plan shall be prepared prior to construction of any floats. A quality control  
22 supervisor shall be assigned to the project for the duration of the fabrication process.  
23 The supervisor will be responsible for insuring that all products are constructed per the  
24 plans and specifications. A checklist of contract conformance items shall be prepared  
25 and submitted to the Owner for each float produced. No floats may be produced in the  
26 absence of the quality control supervisor.  
27  
28 2. The Contractor shall provide testing and field or plant inspection service to the  
29 satisfaction of the Engineer. The Contractor shall hire an independent testing  
30 laboratory, as approved by the Owner, to provide on-site quality control services  
31 throughout the fabrication period. Sampling and testing shall be performed on-site or as  
32 otherwise approved by the Owner.  
33  
34 3. At a minimum, the following sampling and testing procedures shall be performed:  
35  
36 a. All fillet welds shall be visually inspected.  
37  
38 b. All complete penetration welds shall be tested ultrasonically or by use of a  
39 comparable approved method.  
40

41 The plant facility shall be made available to the Engineer for observation of the products.  
42 The Engineer may perform structural observation at any point during the manufacturing of the  
43 float modules. The fabricator shall provide sufficient notice and access for the Engineer to  
44 perform these observations.

45  
46 Welder Qualifications: All welders are required to be currently certified by AWS for  
47 structural welding. Contractor shall submit proof of certification in accordance with AWS. All  
48 welding shall be in accordance with the American Welding Society Structural Code – Steel,  
49 ANSI/AWS D1.1, current edition, or Aluminum ANSI/AWS D1.2, current edition. No welding  
50 shall be performed through paint, galvanized or other coatings.  
51

1 Metal Fabricator Qualifications: The metal fabricator shall have not less than five (5) years  
2 continuous experience in the fabrication of the metal used.

3  
4 Timber treatment shall be applied by an organization regularly involved in the pressurized  
5 treatment of wood products. No field treatment will be permitted except for accidental cuts,  
6 nicks, abrasions, or punctures. Field cuts or trims shall not be allowed. All timber designated  
7 pressure-treated on the drawings or by these specifications shall conform to AWPAs Standard  
8 (C-1 or C-2). In addition, wood treated with waterborne salts shall bear the AWPAs quality mark  
9 designation of C2.

10  
11 All floats shall be identified with the date of manufacture, float type and intended layout  
12 location designation per the approved shop drawings. Markings shall be located on one side  
13 and on one end for ease of field identification.

14  
15 For floats, the float manufacturer's quality control efforts shall include verification of material  
16 and treatment certificates against materials supplied before issuing them to the Engineer. This  
17 may involve inspection of materials prior to treatment to determine species. Contractor shall  
18 also provide documentation of verification of piece counts, sectional dimension and other  
19 random tolerance checks such as camber, sweep, crook, straightness, etc. The Contractor's  
20 quality control efforts shall also include provision of survey control to determine theoretical  
21 versus actual positions and elevations. The Engineer shall undertake quality assurance  
22 observation, as he deems necessary.

23  
24 Provide a two-year warranty on materials and workmanship of the float system.

## 25 26 **6-22.2 Products**

### 27 28 **6-22.2(1) Float System Fabrication Requirements**

29  
30 All structural bolts, including cleat bolts, shall be through-bolted, unless noted otherwise on  
31 the plans, and shall be capable of developing their full allowable strength without causing  
32 damage to the float. Provide plate washers on all nut-bearing surfaces.

33  
34 Walking surfaces of the floats shall align with adjoining float units so that the articulating  
35 joints are free of tripping hazards and meeting current ADA standards throughout the defined  
36 tidal ranges.

37  
38 Fire Protection and Life Safety Equipment as identified within the contract drawings are  
39 intended to be field installed to the deck of the floats via drilled-in-place bolts or other suitable  
40 means as determined by the float manufacturer. The float manufacturer shall consider means  
41 of connection in the float design to allow for ease of field installation.

### 42 43 **6-22.2(2) Float Requirements**

44  
45 Floats shall be fabricated in modules corresponding to the nominal length, widths, and  
46 geometric cross sections indicated on the plans. All forces and loads imposed on the float  
47 system shall be borne by the float structure.

48  
49 The floats and associated connections shall be designed by the manufacturer. The  
50 accompanying plans indicate minimum requirements for the floats. The drawings are intended

1 to indicate basic configuration and appearance criteria. Structural design of the float elements  
2 and its support connections is the responsibility of the manufacturer.

3  
4 Pile locations shall be as shown on the drawings. Contractor shall field measure and  
5 determine exact final locations of piles to determine attachment locations of pile restraint  
6 guides.

7  
8 Vendor may deviate from the plans to the extent required to facilitate structural connections  
9 and placement of pile restraint guides, to insure the functionality of the desired product. Minor  
10 deviations for value engineering purposes may also be considered if it is in the best interest of  
11 the Owner.

### 12 **6-22.2(3) Submittals**

13  
14 The float manufacturer shall furnish the following submittals for approval prior to fabrication:

- 15  
16  
17 1. The float manufacturer shall submit qualifications demonstrating a minimum of 5 years  
18 experience in the design, manufacturing and installation of the type of floats proposed.  
19 At a minimum, the manufacturer shall provide 5 project examples demonstrating this  
20 experience. The manufacturer shall also furnish resumes for their float design engineer  
21 and shop foreman or quality control specialist who will oversee the production of the  
22 floats. Both the engineer and shop foreman shall have experience demonstrating a  
23 minimum of 5 years in the design and manufacture of floating structures of the type  
24 proposed for this project.
- 25  
26 2. The Manufacturer shall furnish engineered shop drawings and structural calculations,  
27 both stamped and signed by the Engineer of Record, with sufficient detail to satisfy  
28 requirements for permit. The Owner has applied for all regulatory permits required for  
29 the proposed work.
- 30  
31 3. The float manufacturer shall provide calculations of the designed system demonstrating  
32 the required freeboard at time of construction and also calculations showing anticipated  
33 settlement due to foam absorption and other associated items.
- 34  
35 4. The float manufacturer shall submit electronic drawings for review by the Owner.  
36 Appropriate changes will be made as required by the markups and resubmitted to the  
37 Owner for final review and approval.
- 38  
39 5. Shop drawings shall be submitted for all features of the float system including (but not  
40 limited to): Pile locations, float units, connection details and metal fabrications such as  
41 pile restraint guides, cleats, transition plates and associated hardware prior to  
42 fabrication.
- 43  
44 6. Shop drawings shall contain sufficient detail and information to allow complete  
45 fabrication of the floats, pile restraint guides, transition plates and associated hardware.  
46 The float manufacturer shall furnish catalog cuts of any proprietary items to the  
47 engineer for approval.
- 48  
49 7. Completed float products shall be weighed in order to verify flotation calculations.

- 1 8. The float manufacturer shall submit a quality control plan and testing results for review  
2 by the Owner.  
3

4 **6-22.2(4) Materials**

5  
6 Aluminum:

- 7  
8 1. All aluminum and aluminum fabrication, including but not limited to pontoons and  
9 framing shall be heavy duty marine grade 5086 aluminum alloy.  
10

11 Timber Components:

- 12  
13 1. All timber components shall be Douglas Fir No. 1 or better, in accordance with WCLIB  
14 inspection rules and Section 06 05 00 of these Specifications. All timber components  
15 shall not have splits, warps or waness. Surfacing shall be S4S, chamfered or milled as  
16 noted on the plans.  
17  
18 2. In addition to complying with all applicable codes and regulations, all materials of this  
19 section shall comply with the pertinent provisions of the following:  
20  
21 a. "West Coast Lumber Inspection Bureau, Rule Book 16" for Douglas Fir.  
22  
23 b. "Construction and Industrial Softwood Plywood" Product Standard PS 1-83 of  
24 U.S. Department of Commerce.  
25  
26 c. "Specification for the Design, Fabrication, and Erection of Structural Steel for  
27 Building" of the AISC, for rough hardware.  
28  
29 d. Timber shall be pressure treated ACZA (ammoniacal copper zinc arsenate) to  
30 not less than 0.6 pounds per cubic foot net dry salt retention per AWP A U1  
31 standard for ACZA  
32  
33 e. All timber shall be cut to length, drilled, dapped, and chamfered prior to pressure  
34 treatment.  
35  
36 f. All accidental field cuts, nicks, abrasions, or punctures shall be thoroughly  
37 saturated in the field, in accordance with AWP A-M4, with one of the following  
38 preservative products:  
39  
40 i. Copper Naphthenate  
41  
42 ii. Solubilized Copper-8-Quinolinolate  
43  
44 3. Lumber shall be fabricated to provide uniform gaps and butt joint connections. Lumber  
45 splices shall not exceed ½ inch between adjoining ends. All decking, spacers, plywood,  
46 or any other member which is subject to foot traffic, shall be flush with the walking  
47 surface.  
48  
49 4. All exposed timber corners shall be chamfered by ½-inch.  
50

51 Plastic Lumber:



1. Plastic lumber shall be a purified high-density polyethylene (HDPE) material made from 100% recycled plastic, in accordance with ASTM D-6662. The material shall be of uniform color, color stabilized, and shall be resistant to ultra-violet deterioration, mechanical abrasion, chemical attack, detergents, and animals. The plastic lumber material shall be procured in 8-foot lengths, minimum. The material shall also be suitable for long-term exterior exposure. Color shall match the furnished float material or as approved by the owner.

#### Structural and Misc. Steel:

1. All structural steel and structural steel fabrication, including but not limited to, pile guides, plates, and shapes shall be in accordance with ASTM A-36 or ASTM A-572. Pipe sections shall be in accordance with ASTM A-53, Type E or S, Grade B. Cold formed hollow structural sections shall be in accordance with ASTM A-500, Grade B. All steel fabrications and components shall be hot-dipped galvanized in accordance with ASTM A-123. Touch up galvanizing shall be in accordance with ASTM A-780, hot-stick repair using zinc-based alloys.

Fasteners for timber members: Bolts shall conform to ASTM A-307 or A-36 as applicable, with ASTM A-563 hex nuts and flat washers. Malleable iron washers are required in all cases (except economy head bolts) where the bolt heads or nuts would otherwise bear directly on wood. Locking nuts shall be heavy hex head and self-locking type. Wood screws shall conform to ASME B18.6.1. Lag bolts shall conform to ASME B18.2.1. All bolts, lag bolts, wood screws, nuts, washers, etc. shall be hot-dipped galvanized in accordance with ASTM A-153. Touch up galvanizing shall be in accordance with ASTM A-780, hot-stick repair using zinc-based alloys.

2. Bolts for float connections and metal fabrications shall be ASTM A-325 and shall be hot dip galvanized after fabrication in accordance with ASTM A-153.
3. All bolts and lag bolts shall be a minimum of 5/8" diameter. Where dissimilar metals come into contact, provide durable plastic (HDPE or UHMW) isolating bushings or washers.
4. All steel shall have 3/8" minimum thickness unless noted otherwise.
5. All holes shall be drilled or punched 1/16-inch larger than the connecting bolt diameter. Do not flame cut holes.
6. Design, fabrication and erection shall be in accordance with the "AISC Code of Standard Practice for Steel Buildings and Bridges, Current Edition".
7. All welding shall conform to the AWS codes for arc and gas welding in building construction. Welding shall be performed in accordance with a welding procedure specification (WPS) as required in AWS D1.1 and approved by the structural engineer. The WPS variables shall be within the parameters established by the filler-metal manufacturer. Welds shall be made using E70XX electrodes and shall be 3/16-inch minimum. Welding shall be by AWS certified welders.

- 1 8. Vessel mooring cleats shall Sea Dog galvanized iron hex head closed base dock cleats,  
2 or approved equal, with a minimum capacity each of 10 tons. The castings shall  
3 conform to the requirements of the Standard Specifications for Ductile Iron Castings,  
4 ASTM Designation A-27, Grade 60-30, with the exception that the elongation  
5 requirements shall be waived. Cleat bolts shall be recessed and mounted flush with the  
6 top surface of the cleat. Not less than two, 5/8-inch diameter hex head bolts shall be  
7 used to secure each cleat. Cleats shall be hot-dipped galvanized in accordance with  
8 ASTM A-123.

9  
10 Concrete Deck:

- 11  
12 1. Concrete deck panels shall be designed and constructed with 5,000psi 28 day strength  
13 concrete for the loads and conditions appropriate for the project location.  
14

15 Rubber Components:

- 16  
17 1. Rubber components shall be butyl rubber (ASTM D-2000-75E Type BA) or neoprene  
18 (ASTM D-2000-75E Type BC) with Shore A durometer hardness of 45 to 55.  
19

20 Fiberglass Grating:

- 21  
22 1. Pultruded Fiberglass Grating with minimum 60% open area by Grating Pacific, r  
23 approved equal. Grating shall be manufactured with polyester resin that is UV resistant,  
24 corrosion resistant in seawater, and has a flame spread rating of 25 or less. Grating  
25 shall be supplied with grit skid resistant walking surface. All cut or sanded surfaces shall  
26 be sealed with resin prior to installation. To meet ADA requirements maximum clear  
27 space between bearing bars at the walking surface shall be 1/2", and bearing bars shall  
28 span perpendicular to the normal flow of traffic. Grating shall be fastened to supporting  
29 structure with stainless steel or aluminum clip assemblies. Live Load deflection shall be  
30 limited to the lesser of 1/4" or clear span divided by 200.  
31

32 Other Materials:

- 33  
34 1. All other materials not specifically described but required for a complete and proper  
35 installation of the work shall be as selected by the float manufacturer subject to the  
36 approval of the Engineer.  
37

38 **6-22.3 Execution**

39  
40 **6-22.3(1) Float Handling and Delivery Requirements**

41  
42 Floats shall be properly designed for loading, shipment, and delivery.  
43

44 **6-22.3(2) Installation Support Requirements**

45  
46 The float manufacturer shall provide a representative knowledgeable with the  
47 installation of floats, on site for a minimum of three site visits as follows: (Note: half-day  
48 shall be defined as an 4-hour work day, Monday through Friday, at the project site, and  
49 shall not include travel time.)  
50

1. One, half-day duration site visit prior to installation, to discuss float installation procedures and requirements with the installation contractor and Port representative(s).
2. One, half-day duration site visit during installation to verify required installation procedures are being followed.
3. One, half-day duration site visit during installation punch-list review to assist in identification of any potential deficiencies, defects, etc.

The Engineer will schedule the dates of each site visit at mutually agreed upon times after the installation contractor's schedule is known.

#### **6-22.4 Measurement**

Measurement for "Floats" shall be in a lump sum quantity.

#### **6-22.5 Payment**

1. "Floats," lump sum.

*The second paragraph is revised to read as follows:*

Where no item for structural metal is included in the Proposal, full pay for furnishing and placing metal parts shall be included in the unit Contract lump sum price for "Timber and Lumber (treated)."

**END OF SECTION**

## QUESTIONS AND ANSWERS

1. There is a note for a 60-working day for substantial completion. Currently a lot of materials that will be used in the float system have lead times of 60 working days, and that does not account for design, fabrication, and delivery. We believe delivery of the float system would realistically late fall or early winter of 2022. Can the completion date for the float system be adjusted?

**Answer: Page 40 and 41 in the specification book talks about suspension of work to procure materials and environmental permits.**

2. There is a decent amount of up-front design and engineering necessary with this set of specifications, can the bid date be extended by two weeks?

**Answer: The City will extend the opening date by one week the new opening date will be March 22, 2022.**

3. The wave requirements section 6-22.1(5) states design wave loads shall be as shown on the contract drawing. We are not finding the design wave loads in the contract drawings.

**Answer:**



HEAD SEAS:

- FETCH = 4.7 NAUTICAL MILES
- SUSTAINED WIND SPEED = 23 KNOTS
- HW = 2.0 FEET
- TO = 2.6 SECONDS
- WAVELENGTH = 35 FEET

BEAM SEAS:

- FETCH = 2.2 NAUTICAL MILES
- SUSTAINED WIND SPEED = 30 KNOTS
- HW = 1.7 FEET
- TO = 1.9 SECONDS
- WAVELENGTH = 19 FEET

QUARTERING SEAS:

- FETCH = 5.4 NAUTICAL MILES
- SUSTAINED WIND SPEED = 28 KNOTS
- HW = 2.7 FEET
- TO = 2.4 SECONDS
- WAVELENGTH = 43 FEET

4. Can you provide the contact information for the company who supplied the existing steel railing on the waterfront that will be typical for this project?

**Answer: The fabrication of this steel rail can be manufactured by any company. There isn't one company that the City of Tacoma contracts with.**

5. I have a question on the bid package for the above referenced project, on the bid document there is not a line for sales tax? Is this job considered a roadway per the DOR therefore sales tax is collected on the bid amount, or is this a use tax job?

**Answer: This project is located within the City of Tacoma rights of way therefore a line item for sales tax isn't applicable.**

6. The specifications on page 59 state a length of the aluminum gangway being 80', yet there is no mention of the clear width.

**Answer: Clear width of the aluminum gangway shall be 3'8" between handrails.**

7. In the "Findings" section under the (They mean the shoreline permit not the Army Corp of Engineering please see attached permit ) Army Corp of Engineers Permit on page 227/258, the section states the following; "The existing gangway is 6 x 61 feet for a total of 366 sf. The new gangway will be 6 x 88 feet for a total of 528 sf. This is an increase of 162 sf. The entire gangway will be grated." This states a clear width, but contradicts the 80' length that was previously mentioned. This also does not specify whether this is clear inside the handrails, guardrails, or if this is out to out width.

**Answer: The aluminum gangway shall be 80' long in accordance with the specifications.**

8. In the plans on page S3, the gangway drawing is called out as being steel with a 6' gangway landing platform, but there are no called out widths of the gangway. Can you clarify the width and the structural metal being aluminum, please?

**Answer: Clear width of the aluminum gangway shall be 3'8" between handrails.**

9. Under drawing S8 detail A and note 2, stringers for the platform are called out as 8x. Please clarify the size required for this member.

**Answer: Contractor shall provide (7) PT 4x8x10' timbers. For structural support of the platform to be replaced in kind. The framing shall be ripped to match adjacent pavement with decking.**

10. Please confirm the quantity of bollards needed for the project. Drawings S11 on the Steel Railing Elevation detail as well as detail A. But there is no way of defining how many are needed as they do not show on either the plan views or the full section cross views.

**Answer: Provide and install one bollard at each of the waterward end of the dock, and one at each side of the gangway. Total of (4) bollards to be provided and installed. Connect railing into the two existing bollards at the upland end of the dock.**

11. Are there any existing utilities on the dock? Specification section 1-07.23(1) states contractor top adjust, relocate, replace or construct of utility work. That said there is not mention of any existing or new utilities on the plans.

**Answer: See S4 for callout about existing utilities. No utilities are to be constructed.**

12. The specifications call out concrete floats, however the plans make no mention of concrete floats, and instead call out structural timber. Are the floats to be made of steel, timber, or concrete? Or would you like everything to be consistent and have the floats to be made out of aluminum instead?

**Answer: The answer will be included in the revised specification section in Addendum No. 3 labeled "6-22 Dock Floats", Addendum No. 3.**

13. This call for a Design/Build project But instead of leaving the float manufactures to meet a 30/50 yr expectancy and 1 or 5 year warranty, they are specifying 6 inch minimum wall/slabs sizes at the same time saying the floats “shall have a draft of 4 feet, and freeboard of 2 feet” These parameters don’t actually work. Can the engineering of the float design be left up to the manufacturer?

**Answer: The answer will be included in the revised specification section in Addendum No. 3 labeled “6-22 Dock Floats”, Addendum No. 3.**

14. 24 inches of freeboard seems excessive for this type of float, normally marina floats are 18” freeboard. The added 6” will require for the floats to be deeper and heavier. If there are concerns of water depth on the site, which may be the case, then having a deeper float will not help? Would 18” freeboard be acceptable?

**Answer: The answer will be included in the revised specification section in Addendum No. 3 labeled “6-22 Dock Floats”, Addendum No. 3.**

15. The requirement for coated rebar galvanized or epoxy is just an added expense for the client. 98% of all the jobs we have built in our 38 years in business have used “Black Bar” (uncoated). We as the manufacturer and the one’s who need to warranty the project feel that the uncoated bar, adheres to the concrete better giving it more strength and making the better product. We have proper clearances & coverages of concrete on the bar, and in our experience we have never had an issue with our specification of “uncoated” bar. We request to use uncoated bar, please confirm if this is acceptable.

**Answer: The answer will be included in the revised specification section in Addendum No. 3 labeled “6-22 Dock Floats”, Addendum No. 3.**

16. Concrete Design; We come across this issue often when the engineer dictate the concrete specification. But in reality we are the manufacturer, and we are the ones warranting the product so we do not want to be forced to use a concrete specification that we are not familiar with or have experience with. We have been using a 5,000 PSI mix with C1 exposure class, 5-8% air for 38 years in business with much success. Our request would be that the engineers allow us to use our own concrete mix.

**Answer: The answer will be included in the revised specification section in Addendum No. 3 labeled “6-22 Dock Floats”, Addendum No. 3.**

17. The float system specifications require a 6” thick wall, which is much larger than typical construction, even for large breakwaters. Is there a reason for specifying such a large wall on a design build project?

**Answer: The answer will be included in the revised specification section in Addendum No. 3 labeled “6-22 Dock Floats”, Addendum No. 3.**

18. We intend to bid the 15th Street Transient Moorage Dock Replacement and I have received the email below from our insurance company. Can you confirm if we do need to purchase an additional \$3M excess policy for this project?

**Answer: Please see the insurance requirements in the specification book.**

19. Per drawings S3 and the pertinent specification sanctions can you please confirm the special inspections contracting and cost is as follows or please advise if differently:

Prefab construction by the manufacturer, **correct**

Adhesive anchors installation by the owner, **correct**

Steel Structures Fabrication by the fabricator, **if AISC qualified, otherwise by the owner. Field erection, and field welding by the owner**

Field welds by the contractor, **No the owner**

Timber nailing and bolting by owner, **correct**

Pile driving by owner, **correct**

**Answer embedded after the comma and bold.**

20. Detail 1 in drawing S11 calls for Hilti expansion bolts for the bollard fasteners, that said related to previous question #2, the bollards location in the plan view and cross section view are not shown. That said, everything seems to indicate they are located over the timbe deck. Please confirmed this are the correct fasteners required for the bollards under this application.

**Answer: In place of Hilti bolts callout out, use 1/2"x6" lag screws.**