

# General Qualifications for Marine Construction and Dredging

# **Background:**

Maritime commerce is at the heart of the Port's mission, and contracting for dredging services is a critical factor in achieving that mission. While the Port has some naturally deep berths, much of its maritime activity depends upon dredging to create operationally safe depths. Dredgingdependent revenues include cruise, cargo, lay berthing, commercial fishing, and private vessel marina operations and account for approximately \$33 million of the Port's total Maritime operating revenues of \$38 million.

Cruise-related visitor spending in particular is a significant economic driver for the city as well as the Port, bringing hundreds of thousands of visitors to San Francisco and approximately \$90 million of economic activity each year. This activity represents spending by the cruise lines and passengers that supports local jobs and fuels the continued revitalization of the waterfront in the wake of the pandemic and its associated economic impacts.

Dredging is also paramount for the sustainability of Hyde Street Harbor/Fishermen's Wharf and the commercial fishing fleet. Dredging adjacent to the inner lagoon was critical for the timely installation of the J-9 float, which opened ahead of the current Dungeness Crab season. Similarly, dredging plays a crucial role in maintaining the sustainability of South Beach Harbor. With nearly 700 berth holders at South Beach Harbor, along with several excursion operators, transitory vessels, water-taxi operators, and recreational maritime users, South Beach Harbor serves as a vital hub for recreational maritime activities.

# Purpose:

In an effort to clarify the requirements to perform over and near-water dredging the Port is publishing—independent of any contract advertisement—common requirements for deep water and shallow water dredging.

## **Common Qualifications:**

### Common Qualifications Requirements for Deep Water Dredging works:

For the purposes of this solicitation, Contractor shall perform dredge to depth from -5' to -40' MLLW.

## **Dredging Licensing and Certification:**

• Possession of a valid Class A Contractor's License issued by the California Contractors State License Board (CSLB).

## **Dredging Project Experience:**

- Demonstrated experience in completing a minimum of three (3) projects of a similar scope and complexity as outlined in the Contract Documents within the past 10 years.
- At least 10 years of experience in public works deep-water dredging, with a minimum of three (3) public works dredging projects executed within the last 10 years.

Hydrographic Surveying Expertise: The contractor's team must include a qualified hydrographic surveyor:

- Certification: Certified Hydrographer with national certification from the American Congress on Surveying and Mapping (ACSM) and The Hydrographic Society of America (THSOA).
- The hydrographic surveyor shall be able to start a survey within 3 calendar days at the request of the Port, and to complete the survey and provide plot in 24 hours, provide quantity calculation in 48 hours.
- Experience: A minimum of three (3) years of professional experience conducting hydrographic surveys on dredge projects to depth from -5' to -40' MLLW..
- Educational and Professional Background:
  - A **bachelor's degree** in surveying, marine science, oceanography, geomatics, hydrography, or a related discipline.
  - Approximately **four (4) years** of work experience and training under a licensed surveyor.
  - Attainment of **professional certification** through ACSM and THSOA by successfully passing the **Hydrographer Certification Exam**.

### **Operational Capability:**

• Submission of documentation (e.g., dredge completion reports submitted to the regulatory permitting agencies and/or disposal site verification logs) verifying the ability to **dredge, transport, and dispose of a minimum of 5,000 cubic yards of sediment** 

daily. This operation may require the use of secondary barges, pilots, and tugboats as necessary.

### **Personnel and Equipment Certification:**

- Possession of all required **licenses and certifications** for tugboat operators responsible for maneuvering dredging barges.
- Compliance with all applicable hazardous waste contractor regulations.
- Certification for trucking operations as required by applicable laws and project specifications.

### Safety Compliance:

• Successful completion of a **Safety Qualification Review**, demonstrating compliance with industry safety standards and regulatory requirements.

### **Experience and Technical Expertise:**

- **Demonstrated Experience:** Firms should have a proven track record of successfully completing dredging projects of similar scope and complexity, particularly within the **San Francisco Bay** or comparable highly regulated dredging environments.
- **Technical Proficiency:** Expertise in various dredging techniques (e.g., mechanical, hydraulic) and familiarity with handling different sediment types, including contaminated sediments, is essential.
- Environmental Sensitivity: Experience in implementing measures to minimize environmental impacts, such as turbidity control and protection of marine habitats, is crucial.

#### **Equipment and Resources:**

- Specialized Equipment: Access to appropriate dredging equipment, such as clamshell dredges, cutterhead suction dredges, and hopper dredges, tailored to the project's specific requirements.
- **Support Infrastructure:** Availability of necessary support vessels, disposal barges, and dewatering facilities to manage dredged materials effectively.

#### **Financial and Safety Requirements:**

• Bonding and Insurance: Ability to secure performance bonds and maintain adequate insurance coverage as mandated by contracting entities.

• Safety Record: A strong safety record and compliance with Occupational Safety and Health Administration (OSHA) standards are imperative. Bidders must be complete the City's online safety form at <a href="https://sfwps.convertcalculator.com/safety-prequal/">https://sfwps.convertcalculator.com/safety-prequal/</a>.

# Local Knowledge and Coordination:

- Understanding of Local Conditions: Familiarity with the San Francisco Bay's regulatory and environmental sensitivities enhances operational effectiveness.
- Stakeholder Engagement: Experience in coordinating with local authorities, U.S. Coast Guard, port officials, environmental groups, and the public to address concerns and ensure project success.

# <u>Common Minimum Qualifications and Team Requirements for Shallow Water Dredging</u> <u>works:</u>

For the purposes of this solicitation, deep water dredging shall mean dredging services that were performed over-water, on a barge, with equipment capable of dredging to a depth of up to -15 feet.

# **Minimum Qualifications and Experience Requirements**

# Licensing and Certification:

• Possession of a valid Class A Contractor's License issued by the California Contractors State License Board (CSLB).

# **Project Experience:**

- Demonstrated experience in completing a minimum of **three (3) projects** of a similar scope and complexity as outlined in the **Contract Documents** within the past **10 years**.
- At least **5 years of experience** in public works shallow-water dredging (under -15 feet), with a minimum of **three (3) dredging projects** executed within the last **10 years**.

# Hydrographic Surveying Expertise:

The contractor must engage a qualified **independent hydrographic surveyor** as a subcontractor, meeting the following criteria:

- Certification: Certified Hydrographer with national certification from the American Congress on Surveying and Mapping (ACSM) and The Hydrographic Society of America (THSOA).
- **Experience:** A minimum of **three (3) years** of professional experience conducting hydrographic surveys on projects of similar scope to the **Contract Documents**.
- Educational and Professional Background:
  - A **bachelor's degree** in surveying, marine science, oceanography, geomatics, hydrography, or a related discipline.
  - Approximately **four (4) years** of work experience and training under a licensed surveyor.

• Attainment of **professional certification** through ACSM and THSOA by successfully passing the **Hydrographer Certification Exam**.

# **Operational Capability:**

• Submission of documentation (e.g., dredge completion reports submitted to the regulatory permitting agencies and/or disposal site verification logs) verifying the ability to **dredge, transport, and dispose of a minimum of 500 cubic yards of sediment daily**. This operation may require the use of **secondary barges, pilots, and tugboats** as necessary.

# Personnel and Equipment Certification:

- Possession of all required **licenses and certifications** for tugboat operators responsible for maneuvering dredging barges.
- Compliance with all applicable hazardous waste contractor regulations.
- Certification for trucking operations as required by applicable laws and project specifications.

# Safety Compliance:

• Successful completion of a **Safety Qualification Review**, demonstrating compliance with industry safety standards and regulatory requirements.

## **Experience and Technical Expertise:**

- **Demonstrated Experience:** Firms should have a proven track record of successfully completing dredging projects of similar scope and complexity, particularly within the **San Francisco Bay** or comparable environments.
- **Technical Proficiency:** Expertise in various dredging techniques (e.g., mechanical, hydraulic) and familiarity with handling different sediment types, including contaminated sediments, is essential.
- Environmental Sensitivity: Experience in implementing measures to minimize environmental impacts, such as turbidity control and protection of marine habitats, is crucial.

# **Equipment and Resources:**

- **Specialized Equipment:** Access to appropriate dredging tailored to the project's specific requirements.
- **Support Infrastructure:** Availability of necessary support vessels, disposal barges, and dewatering facilities to manage dredged materials effectively.

# Financial and Safety Requirements:

- Bonding and Insurance: Ability to secure performance bonds and maintain adequate insurance coverage as mandated by contracting entities.
- Safety Record: A strong safety record and compliance with Occupational Safety and Health Administration (OSHA) standards are imperative.

# Local Knowledge and Coordination:

- Understanding of Local Conditions: Familiarity with the San Francisco Bay's tidal patterns, sediment characteristics, and environmental sensitivities enhances operational effectiveness.
- Stakeholder Engagement: Experience in coordinating with local authorities, port officials, environmental groups, and the public to address concerns and ensure project success.

For detailed guidance on the **permitting process**, firms can refer to the **San Francisco Bay Dredger's Handbook**, which outlines the steps necessary to comply with **environmental and regulatory requirements**. More information is available at <u>bcdc.ca.gov</u>.

By meeting these qualifications and adhering to regulatory frameworks, firms can effectively and responsibly conduct **dredging operations in the San Francisco Bay**.

Common Crafts for Dredging work includes the following but not limited to:

- Pilot
- Dredger various Classes (Operating Engineer)
- Operating Engineers
- Operating Engineer (heavy & highway work)
- Operating Engineer (landscape construction)
- Pile Driver (Carpenter)
- Laborers
- Driver (on/off-hauling to/from construction site)
- Field Surveyor
- Hydrographic Surveyor
- Hazardous Waste Abatement Certifications

Common Insurance and Compliance requirements for dredging work, subject to change based on the particulars of the advertised contract:

- General Liability and Excess Liability per occurrence \$24,000,000
- Automobile Liability \$1,000,000
- Workers Compensation and Employers \$1,000,000
- Pollution Liability \$5,000,000
- Professional Liability \$2,000,000
- Hull and Mach/Prot & Ind/Jones Act \$1,000,000
- Compliance with Davis-Bacon Act, Clean Air Act, Federal Water Pollution Act, Debarment and Suspension