Vessel Management Plan

Revision: 6

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LOWER DUWAMISH WATERWAY

Upper Reach Remedial Action

Contract KC001065

Prepared By:

Pacific Pile & Marine

700 S. Riverside Dr.

Seattle, WA 98108

Pacific Pile & Marine, LP
700 South Riverside Drive
Seattle, WA 98108

T 206 331-3873
F 206 774-5958
License # PACIFPM922J3

Pacific Pile & Marine, LP
700 South Riverside Drive
Seattle, WA 98108

T 206 331-3873
F 206 774-5958
License # PACIFPM922J3

1. Introduction

This Vessel Management Plan (VMP) outlines the procedures, safety measures, and coordination efforts for managing vessel traffic during construction activities in compliance with Section 35 10 00 (Navigation Safety and Marine Traffic Control). The plan aims to ensure safe and efficient navigation, minimize disruptions to marine traffic, and adhere to all regulatory requirements. The VMP is crucial for coordinating with other waterway users, ensuring environmental protection, and maintaining operational safety throughout the project duration.

2. Equipment

Please refer to Table 5-1 in the umbrella Remedial Action Work Plan (RAWP) for a detailed list of equipment on the project, their particular role, emissions, and other pertinent information.

2.1 Construction Barges

- **Lash 4**: The Lash 4 barge, measuring 160’ long x 50’ wide x 12’ deep, will be used for dredging and capping. It is a load-lined barge equipped with two spuds that can be raised and lowered to securely position the barge. The Lash 4 is also equipped with a 4-point anchoring system that can be utilized in areas where spuds are ineffective or not allowed (AC pilot areas, completed SMAs).
- **WEB**: This barge is 142 feet long, 58 feet wide, and 11 feet deep. It is outfitted with two heavy-duty spuds for anchoring and stability. The spuds, which are 80 feet long, allow the barge to anchor itself in water depths exceeding 60 feet. The WEB does not have a secondary anchoring system.
- **Flexi-Float**: The FlexiFloat barge consists of 16ea 20’ x 10’ x 7’ floats, which are combined to make a single float measuring 80’ x 40’ x 7’It is outfitted with two spuds for anchoring and stability once in its desired location. The FlexiFloat will have the 470 Excavator on the deck for all work activities in SMAs 1, 2, c1, and 14C.
- **Judge Dredge:** For material placement activities in SMA 13, PPM will utilize the Judge Dredge. The Judge Dredge is a 20’x50’ modular barge that is equipped with two 40’ spuds run by hydraulic winches that will be used to anchor the barge. The 270 excavator will be located on the deck of the Judge Dredge for material placement. This barge is a construction barge, so it does not have walls or lining, or scuppers. The barge will have an 8’x 7’x 10’ steel hopper bin located on the deck of the barge to haul the amended sand cover in.
- **PamTay**: For bulkhead wall installation and pipe pile installation PPM will utilize the PamTay. PamTay is a 200’ x 50’ x 12. The barge is outfitted with two heavy duty spuds for anchoring and stability once it is in the desired location. The spuds on the PamTay are 90 feet long allowing it to anchor itself in 60+ feet of water

Pacific Pile & Marine, LP
700 South Riverside Drive
Seattle, WA 98108

T 206 331-3873
F 206 774-5958
License # PACIFPM922J3

2.2 Contaminated Sediment Barge

- **KP-1, KP-2, KP-3, & KP-4**: These four identical barges are each 180 feet long, 50 feet wide, and 12 feet deep. They feature concrete wear decks and 4-foot-high steel fences around the perimeter to capture dredge water for collection and treatment, preventing overflow. Each barge has a capacity of 2,000 US short tons. Due to the barges being identical the displacement chart for the KP-1&2 also apply to the KP-3 and KP-4. Each barge will be made watertight with all scuppers sealed so that any water discharging from the barges must first pass through the passive dewatering process identified in Appendix J and Appendix V of the RAWP.
- **Poseidon P2 Hopper Barge**: For SMAs 1, 2, c1,and 14C the Poseidon P2 Hopper barge will be used to short-haul and store contaminated sediment. The barge is 40’ x 20’ wide and consists of two 40’ Long x 10’ Wide x 8’ 5-3/4” Tall modular barges pinned together. The barge has two hoppers, one on each 40x10 unit. The hopper is set inside of the hull of the barge, it is 26’x 8’ x 8.5’ and capable of holding 50cubic yards. The hopper box has a 1.5’ tall fence extending above the deck of the barge to mitigate the risk for spillage during transport. With both units pinned together the 40’x20’ barge is capable of hauling 100 cubic yards per load. Prior to receiving imported clean material, barges will be decontaminated per Section No. 03 Appendix AD.
- **Porpoise:** The Porpoise will be utilized as a contaminated sediment barge in SMA 1A, 1B, 2A, and 2B in rotation with the P2 Hopper barge. The Porpoise barge dimensions are 140 feet long by 35 feet wide by 8.5 feet deep. The barge is equipped with a concrete wear deck and 4-foot high steel fence around the perimeter, which will be sealed to capture all dredge water for collection and dewatering, thereby avoiding overflow situations. Please refer to the Water Quality Control and Water Management Plan for details regarding dredge water collection, dewatering, and treatment. This barge can hold approximately 530 tons of material, with about 250 tons generated before the material is transloaded on to the KP barge. This will provide the barge with 24 inches of freeboard above the deck, minimizing the risk of spillage during transport to the transload location. Material will be stacked to ensure that it cannot be lost from the barge during transport.

2.3 Imported Clean Material Barge

- **Kumtux**: A 220’ x 64’ x 16’ barge with a usable deck of 210’ x 61’. It is capable of hauling 3,200 tons per load, facilitating efficient backfill operations. This barge is a dedicated imported clean material barge.
- **Eglon**: A 230’ x 60’ x 18’ flat/deck barge with a usable deck space of 220’ x 57’. It boasts a full load capacity of 3,800 short tons and is used for efficient dry cargo transport, operated by Boyer Towing, Inc. Prior to receiving imported clean material, barges will be decontaminated per Section No. 03 Appendix AD.
- **Poseidon P2 Hopper Barge**: For SMAs 1, 2, c1and 14C the Poseidon P2 Hopper barge will be used to short-haul and store aggregate materials for placement. The barge is 40’ x 20’ wide and consists of two 40’ Long x 10’ Wide x 8’ 5-3/4” Tall modular barges pinned together. The barge has two hoppers, one on each 40x10 unit. The hopper is set inside of the hull of the barge, it is 26’x 8’ x 8.5’ and capable of holding 50cubic yards. The hopper box has a 1.5’ tall fence extending above the deck of the barge to mitigate the risk for spillage during transport. With both units pinned together the 40’x20’ barge is capable of hauling 100 cubic yards per load.

Prior to receiving imported clean material, barges will be decontaminated per Section No. 03 Appendix AD.

- **Porpoise Barge:** The Porpoise will be utilized to haul aggregates for material placement in SMA 1A, 1B, 2A, and 2B in rotation with the P2 Hopper barge. The Porpoise barge dimensions are 140 feet long by 35 feet wide by 8.5 feet deep. The barge is equipped with a concrete wear deck and 4-foot high steel fence around the perimeter. This barge can hold approximately 530 tons of material. Material will be stacked to ensure that it cannot be lost from the barge during transport. This barge will be used for both clean material placement and dredging activities. Prior to hauling clean aggregates for material placement the barge will undergo a decontamination process to assure all hazardous materials have been removed prior to loading with clean aggregates. Please refer to Section 2.1 in the Decontamination Plan (Appendix AD).

2.4 Tug Boats

The Towing Safety Management System utilized by Boyer Towing that will be applicable to all tugs used on the project can be found in Attachment A.

- **Halle H**: The HALLE H. features a steel hull, providing durability and strength essential for the demanding conditions of towing services. The HALLE H. is a twin-screw tug rated at 680 horsepower. With a length of 44.7 feet, a breadth of 17 feet, and a depth of 5.8 feet, she is a compact yet powerful vessel. Her gross tonnage is 37, with a net tonnage of 25, making her well-suited for a variety of towing tasks. Boyer Towing has several similar tugboats available (Jennifer H) approximately 3,000 feet from the project site.

- **Gretchen H**: The GRETCHEN H. is a robust towing vessel powered by three Tier III compliant Cummins QSK19 diesel engines, providing a total rated horsepower of 2,250. These engines are coupled with Twin Disc MG5202DC reduction gears at a ratio of 6.1:1, driving three pitch propellers to ensure efficient and powerful propulsion. With a length of 80.6 feet, a breadth of 30 feet, and a depth of 11.1 feet, she is a substantial and capable vessel. Her gross tonnage is 96, with a net tonnage of 65, making her well-suited for the rigorous demands of towing operations. The GRETCHEN H. is registered with the US Coast Guard (1056824) and hails from Ketchikan, Alaska.
- **Jennifer H**: The Jennifer H. features a steel hull, providing the durability and strength essential for demanding towing services. The Jennifer H. measures 64 feet in length, 22 feet in breadth, and 7.4 feet in depth. This robust towing vessel has a gross and net tonnage of 87 and is powered by an 800-horsepower engine with a twin-screw propulsion, she is well-suited for various towing tasks along the coastlines of Puget Sound, Alaska, and the Pacific Coast. Registered under USCG Doc. No. 1022583 and with the call sign WDC3573, the Jennifer H. offers coastwise unrestricted towing services and is based in Ketchikan, AK.

2.5 Support Boats

- **Skiffs**: Two to three small metal work skiffs ranging from 16’ to 21’ in length with outboard motors (50-100 horsepower). These skiffs will be used to transport personnel and supplies, as well as maintain turbidity curtains.

- **Fog Dog Survey Boat**: A 27' Almar Aluminum hulled jet drive boat used for bathymetric surveying. It is equipped with a Norbit iWBMS multibeam head and an Applanix Wavemaster II RTK GPS system. The vessel features dual displays for the operator and survey technician, an inverter, an extra-large battery bank, and an auxiliary generator for ample power capacity. It also has onboard cellular internet access and Wi-Fi connectivity for remote survey operations and troubleshooting.

3. Certifications and Documentation

Certifications for all barges, including load line certificates, stability documentation, displacement charts, and any other relevant certifications, can be found in Attachment B. All equipment certifications will be kept up-to-date and available for inspection upon request.

4. Notifications and Procedures

Continuous coordination with the United States Coast Guard (USCG), other waterway users, and local authorities is essential to ensure safe and efficient operations. This section details the protocols for communication, compliance, and coordination.

4.1 Compliance with Regulations and Rules

- **USCG Regulations**: All activities within the Lower Duwamish Waterway will comply with USCG regulations and the International Regulations for Preventing Collisions at Sea 1972 (COLREGS). This includes adherence to navigation rules, vessel lighting, vessel flagging and communication protocols. Specific day shapes and lighting are described in Section 6.4. Additionally, vessels will utilize coded AIS signals to communicate their encumbered status to USCG vessel traffic control, ensuring optimal safety and coordination in the waterway.
- **Navigation Channel**: All vessel tows through the LDW should occur within the main navigation channel to avoid grounding and equipment damage. Traveling outside the channel, especially at low tides, is strictly prohibited unless approved by the Project Representative. Vessel movements within the SMAs for dredging, material placement, and other work activities will be allowed to occur outside the navigation channel.
- **Safety Supplies and Radio Communications**: All marine equipment must be equipped with the required safety supplies and maintain and monitor radio channels for emergencies (16), bridge to bridge (13), and vessel traffic control channel (14). Tribal fishing coordinators require contact to be done through cell phone communication, below are the various contact for the tribes:
    - Curtis Buchanan- Tribal Fisheries Coordinator Supervisor
        - (253) 545-1605
    - 24HR Port Op Tribal Fisheries Net Movement Hotline
        - (253) 740-1235
    - Lee Foulkes – Tribal Net Coordinator
        - (253) 876-2927

4.2 Right-of-Way Hierarchy

- **Hierarchy Compliance**: Right-of-way hierarchy is defined in the International Regulations for Preventing Collisions at Sea (COLREGs). Due to PPM having barges that are not under command (Rule 27a), restricted in ability to maneuver (Rule 27b) and constricted by draft (Rule 18b), it will have the highest priority on the Duwamish River, yielding to no other vessel. PPM's skiffs and tugboats will yield to boats engaged in fishing (Rule 18c) and sailing vessels (Rule 18a). Kayaks and other human powered vessels have the lowest priority and will yield to both barges and powered-driven vessels (skiffs and tugboats).
- **Communication Channels**: Use channels 16 and 19 for vessel-to-vessel communication to coordinate movements and avoid conflicts.

4.3 Coordinating with LDW Traffic

- **Local Notice to Mariners (LNMs)**: All activities affecting access to the Lower Duwamish Waterway will be identified through LNM. PPM will check LNMs weekly during dredging and backfill activities to stay informed about navigation impacts. A LNMs request will be submitted to the Coast Guard 21 days before starting dredging activities.
- **Tribal Fishing Coordination**: Tribal fishing activities take precedence over construction operations. PPM will coordinate with the tribes and adjust operations to accommodate their activities.
- **Commercial Vessel Movements**: PPM will stop, move, adjust, and/or slow down operations to accommodate commercial vessel movements as required by project-specific agreements and coordination protocols. The tugboat captain and site superintendent will have a dedicated communication device for monitoring Channels 16 and 19. If a commercial vessel indicates it will be traveling through or near the work site or directly hails the captain, then the captain will let the superintendent know of the movement. The superintendent will then assess if repositioning is required, if repositioning is required the superintendent will notify the project manager and project representative prior to moving.
- **Daily Communication**: Daily coordination with the Waste Management Duwamish Reload Facility and each Tribe coordinator will ensure seamless operations. Updates will be provided to the Project Representative as part of the Daily Construction Report.

5. Vessel Routing and Towing Arrangements

5.1 Vessel Routes

- **Imported Clean Materials**: Material Types 4 and 5 will be loaded at CalPortland's Seattle Rock Yard and transported approximately 5.0 miles to the project site (Figure 1). The Eglon will haul approximately 3,500tons in a full load configuration and the Kumtux will haul 3,000tons in a full

load configuration.

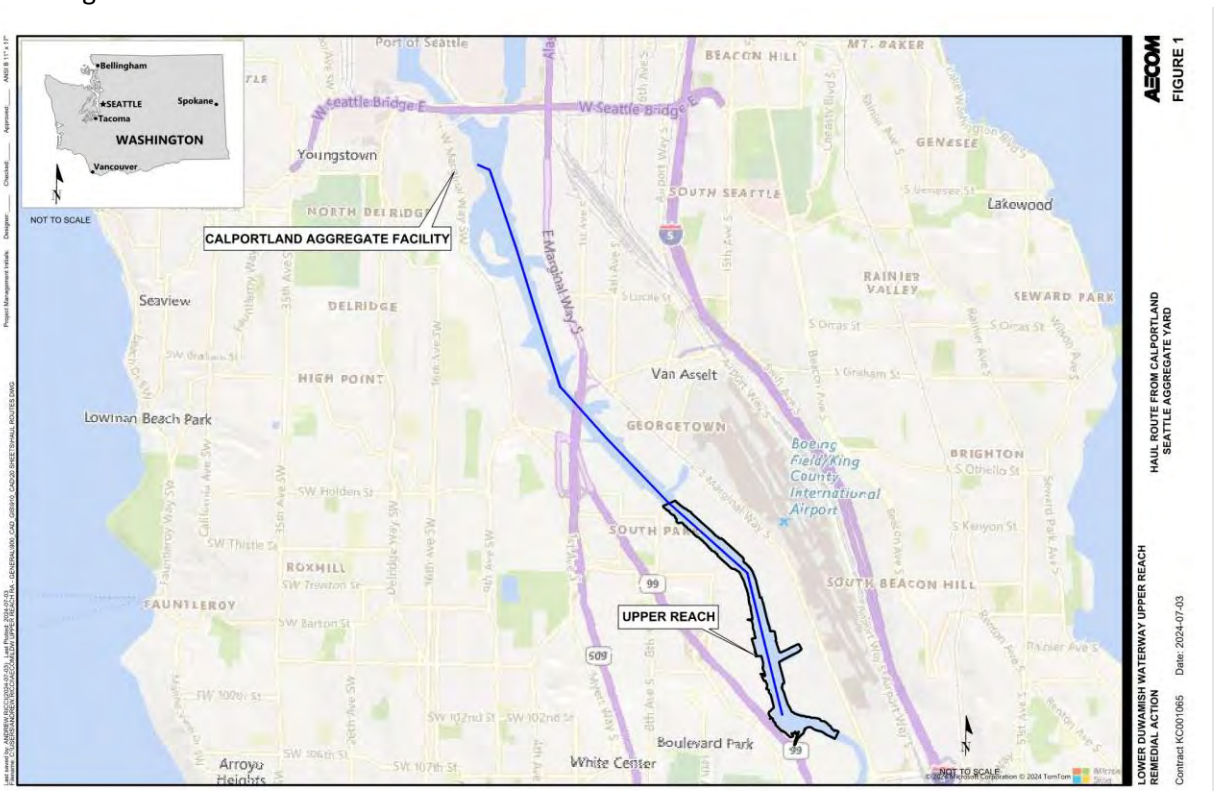

Figure 1- Agg Yard Haul Route

Material Types 1, 1A and 2 will be loaded at CalPortland's DuPont yard and transported approximately 44 nautical miles to the project site (Figure 2). The Eglon will haul approximately 3,500tons in a full load configuration and the Kumtux will haul 3,000tons in a full load

configuration

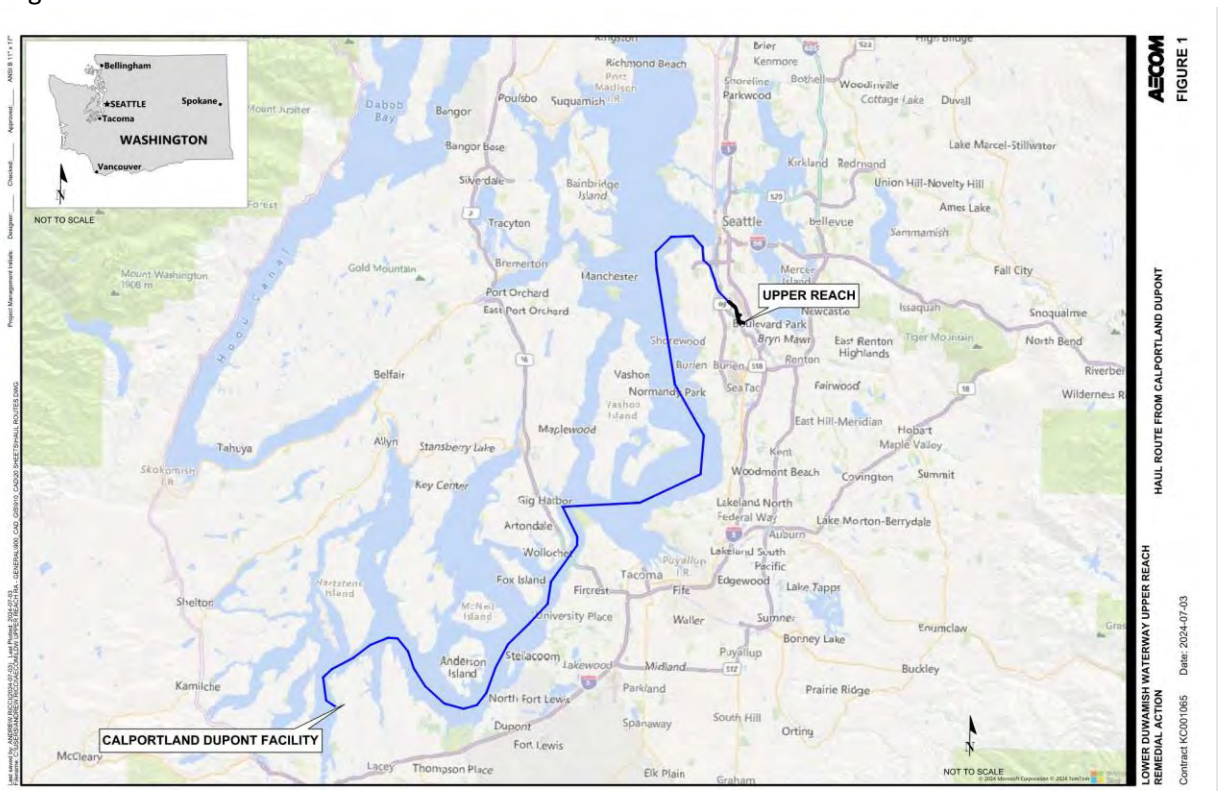

Figure 2- Dupont Haul Route

- **Contaminated Sediment**: Contaminated sediment will be transported to Waste Management's Duwamish Reload Facility (DRF), approximately 2.0 miles from the project site (Figure 3).

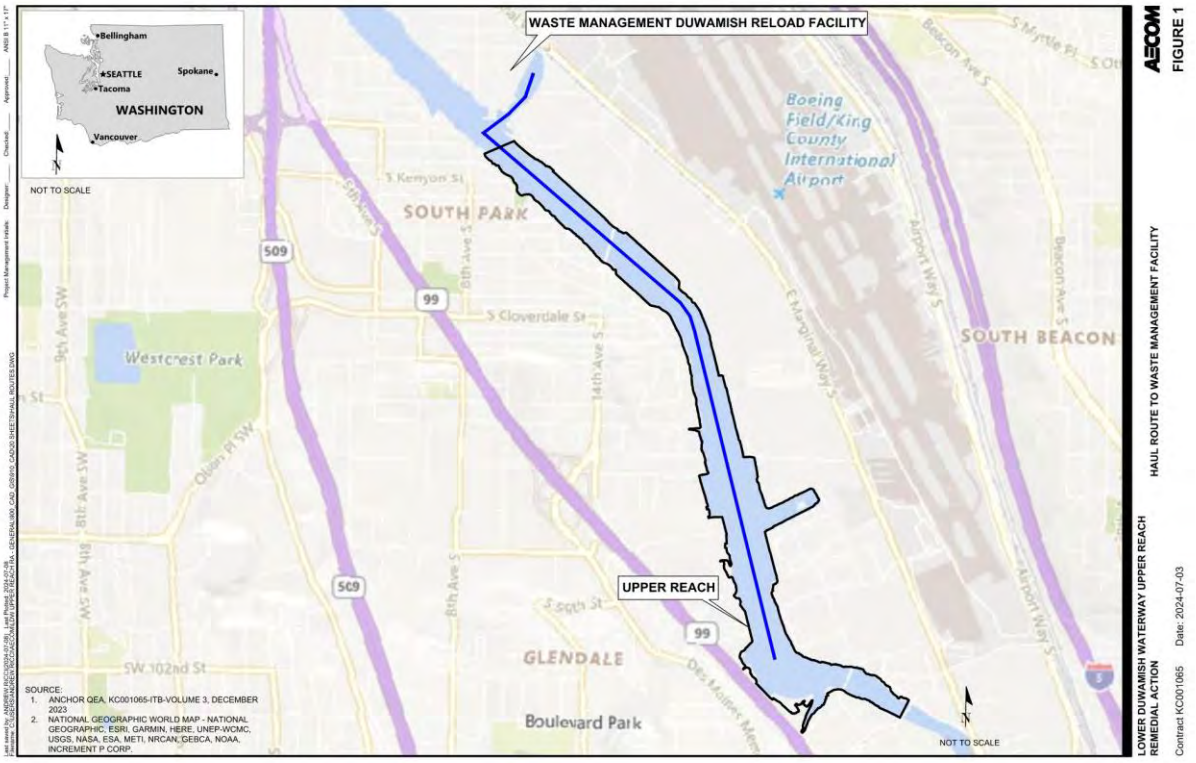

Figure 3- Waste Management DRF Haul Route

- **Towing Arrangements**: Boyer Towing will perform the towing utilizing the tugs Halle H, Jennifer H and Gretchen H to transport the barges. PPM's skiffs will assist in moving vessels on the project site and be used as a rudder for positioning.

5.2 Towing Arrangements

- **Tug Capacity and Power Requirements**: For moving the construction barges the Halle H will be utilized in a push arrangement, requiring 500hp of the Halle's 800hp capacity. The Halle H will also be utilized to move the contaminated sediment barges to the DRF. The Gretchen H will be utilized in the towing of the imported clean material barges from CalPortland's Dupont and Seattle Aggregate Yard. The Gretchen will also tow the contaminated sediment barges to the DRF. The Gretchen H will also use a push arrangement for these tows. The aggregate tows require a tug with a minimum of 1,500hp which the Gretchen is capable of 2,250hp. The Jennifer H will be available to assist in any of these tows as well.

6. Safety and Environmental Measures

6.1 Low Visibility Limitations

The United States Coast Guard (USCG) has established protocols for operating in low visibility conditions to ensure the safety of navigation. Low visibility conditions can be caused by fog,

Pacific Pile & Marine, LP
700 South Riverside Drive
Seattle, WA 98108

T 206 331-3873
F 206 774-5958
License # PACIFPM922J3

heavy rain, snow, or other weather phenomena that reduce visibility on the water. Here are the key protocols and requirements:

Navigation Rules and Signals

- **Sound Signals**: Vessels must use sound signals to communicate their presence and movements. The specific signals are detailed in the International Regulations for Preventing Collisions at Sea (COLREGS) and the Inland Navigation Rules. For example:
    - **Underway, Making Way**: One prolonged blast at intervals of not more than two minutes.
    - **Underway, Not Making Way**: Two prolonged blasts with an interval of about two seconds between them at intervals of not more than two minutes.
    - **Anchored**: Rapid ringing of the bell for about five seconds at intervals of not more than one minute.
    - **Aground**: Three strokes of the bell, followed by the rapid ringing of the bell for about five seconds, followed by three strokes of the bell.

Vessel Speed and Safe Navigation

- **Safe Speed**: Vessels must proceed at the speed restrictions indicated in Section 6.2
- **Lookout**: A proper lookout must be maintained at all times by sight and hearing, as well as by all available means to the prevailing circumstances to make a full appraisal of the situation and the risk of collision.

Radar and Electronic Navigation Aids

- **Radar Use**: Vessels equipped with radar (Gretchen H, Jennifer H, and Halle H) will use it in the open waters of the Puget Sound to obtain early warning of risk of collision and to take required action. Operators must be proficient in radar use and interpretation. Radar will not be utilized on the river due to the restricted shape of the river and congested nature of the waterway.
- **Automatic Identification System (AIS)**: Boyer tugboats will be equipped with AIS and will be operational to assist in identifying nearby vessels and their movements.

Radio Communications

- **VHF Radio**:
    - **Emergency Channel**:
        - **Channel 16 (156.800 MHz)**: This is the international distress, safety, and calling frequency. All vessels must monitor this channel while underway. It is used to call the U.S. Coast Guard or other vessels in an emergency situation.
    - **Bridge-to-Bridge Communication**:
        - **Channel 13 (156.650 MHz)**: This channel is used for bridge-to-bridge communications between vessels. It is primarily used for navigating through narrow passages and during close quarters maneuvering to avoid collisions.
    - **Vessel Traffic Service (VTS) Seattle**:

  - **Channel 14 (156.700 MHz)**: This channel is used by the Vessel Traffic Service (VTS) in Seattle to manage vessel traffic in the area. Mariners must monitor this channel when navigating in VTS zones.
- **Communication Protocols**: Establish and maintain communication with nearby vessels to inform them of your position, course, and intentions. This helps in avoiding collisions and coordinating movements. Continuous monitoring of VHF Channel 16 (156.8 MHz) is required for distress and hailing. Communication with nearby vessels and the USCG should be maintained as necessary.

Additional Precautions

- **Navigation Lights**: Ensure that navigation lights are operational and properly displayed as required by the COLREGS and Inland Navigation Rules.
- **Anchoring**: In extremely low visibility, it will be prudent to anchor in a safe location until conditions improve. Follow proper anchoring procedures and use sound signals as required.

Compliance and Training

- **Crew Training**: Ensure that all crew members are trained and familiar with low visibility protocols and the use of navigation aids.
- **Regulatory Compliance**: Adhere to all relevant regulations and guidelines set forth by the USCG and other maritime authorities.

6.2 Speed Limits

Speed Restrictions: Adhere to speed limits of 3 knots when repositioning vessels and 7 knots throughout the Lower Duwamish Waterway to ensure safe navigation and minimize environmental impact.

6.3 Mooring Locations

Mooring Plans: PPM has identified estimated locations (Attachment D) for overnight or temporary mooring of dredging equipment and haul barges when not in operation. There will be over 100 unique mooring locations, most being decided the day of the required mooring between PPM and PR. These locations are close to active dredging areas to minimize unnecessary movement. These mooring locations will not interfere with the navigation channel. Equipment will be moored using cylinder spuds varying from 24” to 18”, each construction barge using two spuds to anchor in place. The steel spuds are deployed by slowly lowering them from the barge into the waterway bed. This anchoring method provides a stable base, preventing the barge from drifting due to currents, wind, or tidal changes. Regular inspections of the spuds and their deployment mechanisms will be conducted to ensure they remain effective and secure throughout the dredging operations.

The use of spuds is permitted in the waterway bed for required dredging and contingency re-dredging activities within or adjacent to the Sediment Management Areas (SMAs), except in the following locations:

- SMAs where engineered cap material has been placed

- within the Enhanced Natural Recovery (ENR)/Activated Carbon (AC) Pilot Plots, as detailed in Drawing C106 and C107.
- Spudding is prohibited within 30 feet of the South Park Bridge active submarine cable, as detailed in Drawing C103.
- T-117 Cap Area, as detailed in Drawing C105.
- Outfall Z, as detailed in Drawing C105.
- In front of Duwamish Waterway Park, as detailed in Drawing C101.
- In SMA 10, as detailed in Drawing C106

The DREDGEPACK positioning software will be utilized to ensure spud deployment adheres to these requirements. All restricted areas will be created in the software and loaded into the operators screen to verify that spuds are not deployed in those areas. The Lash 4 is equipped with a 4-point mooring system consisting of 1-1/8" steel cable and 10ton anchors. The 4-point system is not anticipated to be used on this project. Dredge barges at anchor must display all-round white lights visible for at least two nautical miles. When engaged in dredging, they must show two vertical red lights on the obstructed side and two vertical green lights on the safe passage side, in accordance with COLREGs and USCG regulations.

6.4 Navigation Safety Measures

- **Aids to Navigation**: PPM will install, maintain, and operate aids to navigation in accordance with the International Rules ratified at the Convention on the International Regulations for Preventing Collisions at Sea, 1972, specifically Rule 24 and 27. PPM will inspect and repair or replace aids as necessary.
    - Day Shapes: During the day construction barge will display the following day shapes:
        - **For the side of the dredger where vessels can safely pass**:
            - **Two Black Diamonds**: In a vertical line to indicate that vessels can pass on this side.
        - **At anchor**:
            - **One Black Ball**: When the vessel is anchored but still engaged in dredging activities, this signals that the vessel is stationary but engaged in work.
    - Lighting: Construction barges must have proper lighting to ensure visibility to other vessels. This includes anchor lights and obstruction lights. Lights must be visible for at least two nautical miles.
        - **Obstruction lights** -Red on obstructed side, Green on safe side for passing.
        - **Anchor lights-** Two all-round white lights—one forward and one aft, both at the highest points of the vessel.
- **Signage**: Provide signage at strategic locations (Turning Basin at RM 4.7 and downstream boundary at RM 3.0) to request non-Project vessels operate at a maximum speed of 7 knots within the Work Site.
- **Radio Communications**: All vessels must have marine VHF radios capable of clear communication over the Project area. Radios should be operational throughout marine operations and monitored during work hours.
- **Recreational Users**: A minimum offset distance of 100 feet between dredging equipment and recreational users will be enforced. The offset will sent to as part of LNM(Local Notice to Mariners) to the USGC, no additional public notices are planned. PPM will utilize a portable

Pacific Pile & Marine, LP
700 South Riverside Drive
Seattle, WA 98108

T 206 331-3873
F 206 774-5958
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megaphone to communicate with users and/or work skiffs to monitor the area to ensure compliance and provide assistance.

7. Emergency Procedures & Communications

7 .1 Emergency Management Systems

Emergency Protocols

1. **Extreme Weather Conditions**
    - **Wind Warnings**: Establish a protocol for monitoring wind conditions using reliable weather forecasting services.
        - **Action Steps**:
            - The National Weather Service Marine Forecast website will be used to monitor wind speeds and issue warnings to crews when winds exceed 40mph.
            - Secure loose equipment and materials to prevent them from becoming hazards.
            - Cease operations and seek shelter if wind speeds reach gale force.
    - **Gale Warnings**:
        - **Action Steps**:
            - Stop all non-essential operations and prepare the barge for heavy weather.
            - Ensure all personnel are aware of the impending gale and take necessary precautions.
            - Evacuate the barge if conditions become life-threatening.
    - **High-Flow Events**:
        - **Action Steps**:
            - The U.S. Geological Survey website/app will be used to monitor water flow rates and issue alerts when flow exceeds 12 ft/second.
            - Implement measures to stabilize the barge and prevent it from drifting.
            - Suspend operations and move to a safe location if necessary.
    - **Extreme Cold Protocols:**
        - **Action Steps:**
            - Implement regular inspections of the deck and all exposed machinery for the presence of ice.
            - Use mechanical means (e.g., ice scrapers, heated surfaces) to remove ice buildup on decks, walkways, and critical equipment. Sand shall be used where possible to address worker safety on decks and other surfaces. If ineffective, 'salt-based ice melt' use is acceptable if applied only in the areas and amounts necessary. Ensure all personnel are equipped with prescribed cold-weather PPE, including insulated gloves and footwear with slip-resistant soles.
            - Reduce or halt non-essential operations if ice accumulation on decks or machinery poses a safety risk.

- Increase monitoring and maintenance of machinery to prevent ice from affecting operational integrity.
- Ensure communication systems are fully operational and that all personnel are informed of the extreme cold conditions and the required precautions.
- Evacuate the barge or cease operations if ice buildup becomes unmanageable or conditions pose life-threatening risks.

2. **Equipment Failures**
    - **Routine Inspections**: Conduct regular inspections and maintenance of all critical equipment per Attachment C.
    - **Failure Response**:
        - **Action Steps**:
            - Immediately stop operations and assess the situation.
            - Notify the designated emergency contact and initiate repairs.
            - Evacuate personnel if the failure poses a significant safety risk.

Emergency Drills

1. **Regular Drills**: Conduct emergency response drills on a quarterly basis.
    - **Types of Drills**:
        - Fire drills
        - Man overboard drills
        - Spill containment drills
        - Severe weather drills
    - **Procedure**:
        - Schedule and announce drills in advance.
        - Simulate realistic scenarios to test preparedness.
        - Debrief after each drill to identify areas for improvement.
2. **Crew Training**: Ensure all crew members are trained in emergency procedures and HAZWOPER 40 and know their roles during an emergency.
    - **Training Topics**:
        - Use of personal protective equipment (PPE)
        - Emergency communication protocols
        - First aid and CPR
        - Evacuation procedures

7.2 Marine Emergency Resources

Response Resources

1. **Rescue Vessels**
    - **Availability**: Work skiffs and survey boat will be ready with each dredge/placement barge for immediate deployment as rescue vessels
        - **Types of Vessels**: Work skiffs, survey boat
        - **Readiness**: Conduct regular maintenance and readiness checks.
    - **Crew Training**: Train crews in search and rescue (SAR) operations and emergency response techniques. HCSS Safety will be utilized to document training and provide records as requested.

Pacific Pile & Marine, LP
700 South Riverside Drive
Seattle, WA 98108

T 206 331-3873
F 206 774-5958
License # PACIFPM922J3

2. **Spill Containment Equipment**
    - **Inventory**: Maintain an inventory of spill containment equipment, including booms, skimmers, and absorbent materials on all construction barges as indicated in the Spill Prevention Control and Countermeasure Plan.
    - **Deployment Procedures**: Develop clear procedures for deploying spill containment equipment.
        - **Action Steps**:
            - Assess the spill and determine the required equipment.
            - Deploy containment booms to prevent the spread of the spill.
            - Use skimmers and absorbents to clean up the spill.
3. **Medical Response Teams**
    - **Availability**: At least two team members of each barge crew will be trained for CPR and First Aid response.
        - **Personnel**: Onboard first aid trained responders
        - **Equipment**: Stock medical supplies and first aid kits.
    - **Coordination with Local Authorities**: Coordination protocols with local hospitals and emergency services for medical evacuations and advanced medical care are detailed in the HASP

8. Monitoring and Security

8.1 Monitoring Procedures

- **Continuous Monitoring**: PPM's deck engineer and Boyer's tug captain will continuously monitor the Work Site for the presence of other waterway users. Adjust operations as necessary to ensure safe navigation and prevent conflicts.
- **Security Measures**: PPM and Boyer towing will lock all access hatches, containers, and equipment to restrict unauthorized access or interference. All loose materials will be secured in a fashion that individuals cannot access or move it by manual means.

9. Construction Submittals

9.1 Daily and Weekly Reports

- **Daily Records**: Maintain a daily record of vessel management coordination, including tracking of Project vessel movements, communications with Project and non-Project vessels, and interactions with tribal entities.
- **Weekly Summaries**: Provide weekly summaries of vessel management activities and planned movements for the following week.
- **Barge Certification Checks**: Include a checkbox in the Daily Construction Report to confirm that barges are properly loaded, seaworthy, and have no observable stability issues.
- **After-Hours Contact**: Marty Locke will be PPM's contact for after-hours personnel available to respond to and mitigate any issues related to vessel security and seaworthiness. Contact information for Marty can be found in the umbrella RAWP document.

- **Marine Condition Surveys**: Conduct regular marine condition surveys to identify and address any repair needs for barges and other marine equipment.

Pacific Pile & Marine, LP
700 South Riverside Drive
Seattle, WA 98108

T 206 331-3873
F 206 774-5958
License # PACIFPM922J3

Attachment A- Towing Safety Management System

BOYER TOWING INC.

SAFETY MANGEMENT SYSTEM

1.0 PURPOSE

The purpose of this manual is to ensure a healthy and safe working environment by implementing and maintaining reasonable and practical operating standards and policies of safety, health and environmental protection in compliance with recognized codes, standards and regulations.

2.0 SCOPE

This manual applies to all Boyer Towing, Inc. employees, in particular marine personnel and Operations and Engineering Department personnel.
Company policies shall take precedence when they are more stringent than other laws and regulations.

3.0 RESPONSIBILITY

The Safety Manager is responsible for maintaining the content and applicability of the sections within this manual.
All Boyer Towing, Inc. employees are responsible for familiarizing themselves and complying with the content of this manual.

4.0 DETAIL

4.1 Aims and Objectives

The instructions set out in this manual are issued to acquaint all employees of Company safety policies, procedures and guidelines. Employees should recognize that the various marine transportation functions performed are inherently dangerous and no such set of instructions can be completely comprehensive, cover every eventuality or ensure a completely safe operation without the support and vigilance of all employees.

Department Managers and vessel Masters should be guided at all times by their primary responsibilities which are for the safety of those entrusted to their care, the safety of the vessel, the safety of life, the safety of the cargo and the protection of the marine environment. All other considerations are secondary to these.

The purpose of these instructions is to provide a framework within which employees can work safely and effectively without inhibiting the use of initiative or discretion when faced with an unusual situation.

4.2 Knowledge of Safety Policy, Procedure and Guidelines

It is the duty of all Department Managers, vessel Masters and Mates to be familiar with the content of this manual. Those instructions relevant to other employees should be brought to their attention by the appropriate supervisor.

4.3 Orientation of New Employees

All newly hired Boyer Towing, Inc. employees shall complete a general company orientation prior to their first work assignment or within a reasonable timeframe. Company orientation training, as detailed in PM-06-01-4.2, includes a review of essential personnel and safety procedures and programs.
All newly hired Boyer Towing, Inc. employees shall also complete functional safety orientation training.

4.4 Periodic Safety Training

After initial orientation/certification, all Boyer Towing, Inc. employees shall complete periodic functional training to review applicable safety procedures and programs as set forth in PM-06-01-4.3.

4.5 Safety Program Responsibilities and Authority

4.5.1 President

The President is responsible for overseeing and supporting all aspects of the Company safety program. The President shall direct appropriate investigations of personnel injuries, shore-based motor vehicle accidents, and vessel accidents/casualties in accordance with Company procedures.

4.5.2 Safety Manager

The Safety Manager is responsible for developing and managing the various processes necessary to support safety management systems on Boyer Towing, Inc. vessels and operate the Company yard facility, in compliance with all safety and environmental regulations at the Federal, State, and local levels. The Safety Manager shall manage various company policies, procedures and safety training programs/manuals to keep current with regulatory agencies. The Safety Manager shall also conduct personnel injury investigations and shall assist in the other investigations as directed by senior management.

4.5.3 Operations and Engineering Management

Operations and Engineering Management are responsible for coordinating vessel and personnel schedules and providing oversight to ensure daily operations at sea and ashore are conducted in compliance with company policies and procedures, and in the safest manner possible. Operations and Engineering Management may assist incident investigations as directed by senior management.

4.5.4 Senior Port Captain

The Senior Port Captain is responsible for overseeing and supporting daily tug/barge operations and marine personnel for all operations. The Senior Port Captain shall conduct accident investigations for incidents on marine vessels and shall assist in the other investigations as directed by senior management.

4.5.5 Vessel Masters

Vessel Masters are responsible for providing appropriate instruction and supervision of crewmembers and oversight to vessel operations to ensure the highest attainable level of safety is achieved. Masters are responsible for taking corrective action for observed safety violations, unsafe equipment, non-conformities and non-compliance with established policies and procedures.

4.5.6 All Employees

All Boyer Towing, Inc. employees are responsible to conduct their work in the safest manner possible while adhering to established safety rules, policies and procedures. All employees should consider themselves safety inspectors at all times and be alert for safety hazards and violations of safety rules and policies. These should be immediately corrected when possible and reported to their immediate supervisor as soon as possible. All injuries, accidents, damage and near-misses must be reported to the immediate supervisor as soon as possible.

5.0 FORMS AND RECORDS

None.

6.0 REFERENCES

Boyer Towing, Inc. *Procedure Manual*

Pacific Pile & Marine, LP
700 South Riverside Drive
Seattle, WA 98108

T 206 331-3873
F 206 774-5958
License # PACIFPM922J3

Attachment B- Vessel Certifications

Certificate No.: 8202583-5892380-007

Deadweight: 0

INTERNATIONAL LOAD LINE CERTIFICATE

Issued under the provisions of
the International Convention on Load Lines, 1966,
as modified by the Protocol of 1988 relating thereto
under the authority of the Government of

United States of America

Commandant, U.S. Coast Guard

by American Bureau of Shipping

Particulars of Ship

Name of Ship		Distinctive Number or Letters
LASH 4		645664
Port of Registry	Length(L) as defined in Article 2(8)	IMO Number[1]
Kodiak, AK	153 Feet 7-3/16 Inches	-

Freeboard Assigned as: New

Type of Ship: Type B - Reduced

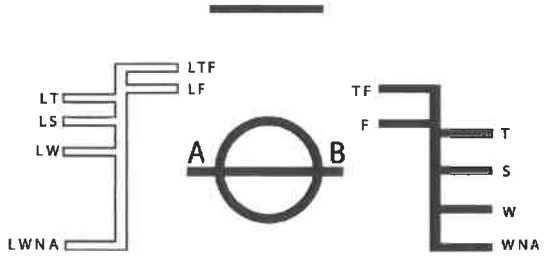
Freeboard from Deck Line:			Load Line	
Tropical	2 Feet 8-1/4 Inches	(T)	2-1/4 Inches	above (S)
Summer	2 Feet 10-1/2 Inches	(S)	Upper edge of line through center of ring	
Winter	3 Feet 3/4 Inches	(W)	2-1/4 Inches	below (S)
Winter North Atlantic	3 Feet 2-3/4 Inches	(WNA)	4-1/4 Inches	below (S)
Timber Tropical	N/A	(LT)	N/A	above (LS)
Timber Summer	N/A	(LS)	N/A	above (S)
Timber Winter	N/A	(LW)	N/A	below (LS)
Timber Winter North Atlantic	N/A	(LWNA)	N/A	below (LS)

Allowance for fresh water for all freeboards other than timber: 2-1/4 Inches

For timber freeboards: N/A

The upper edge of the deck line from which these freeboards are measured is:

Opposite The Top of Upper Steel deck at side.



"This certificate is valid only so long as the operating restrictions in the vessel's stability letter, issued by ABS and dated 1 June 2023, are observed. This certificate is valid for unmanned operations only."

1 In accordance with the IMO Ship Identification Number Scheme, adopted by resolution A.600(15).

THIS IS TO CERTIFY:

1. That the ship has been surveyed in accordance with the requirements of article 14 of the Convention.
2. That the survey showed that the freeboards have been assigned and load lines shown above have been marked in accordance with the Convention.

This certificate is valid until 13 December 2027 [2]
Subject to the annual surveys in accordance with article 14(1)(c) of the Convention.

Completion date of the survey on which this certificate is based: 02 March 2023

Issued at Seattle, Washington USA *(Place of issue of certificate)* on 12 June 2023 *(Date of issue)*

Electronically Signed By
Cheng, Timothy Tin Yuen, Seattle Port
(Surveyor, American Bureau of Shipping)

NOTES:

1. When a ship departs from a port situated on a river or inland waters, deeper loading shall be permitted corresponding to the weight of fuel and all other materials required for consumption between the point of departure and the sea.
2. When a ship is in fresh water of unit density the appropriate load line may be submerged by the amount of fresh water allowance shown above. Where the density is other than unity, an allowance shall be made proportional to the difference between 1.025 and the actual density.
3. It is the owner's responsibility to furnish the master with approved information and instructions for loading and ballasting this vessel to provide guidance as to stability of the vessel under varying conditions of service and to avoid unacceptable stresses in the vessel's structure, as defined in 46 CFR 42.09-1.
4. The Winter North Atlantic Load Line applies only to vessels of 328 ft. in length or less, which enter any part of the North Atlantic Ocean during the winter months as defined by the Load Line Regulations in 46 CFR 42.30-5 and 42.30-35. The periods during which the other seasonal load lines apply in different parts of the world are as stated in the Load Line Regulations in 46 CFR 42.30-5 to 42.30-30, inclusive.
5. This Load Line Certificate will be cancelled by the Commandant, U. S. Coast Guard, if...
   a) The annual surveys have not been carried out within three months either way of each anniversary date of the certificate.
   b) The certificate is not endorsed to show that the ship has been surveyed as indicated in (a).
   c) Material alterations have been made to the hull or superstructures of the vessel such as would necessitate the assignment of an increased freeboard.
   d) The fittings and appliance for the protection of the openings, guardrails, freeing ports, or the means of access to the crew's quarters have not been maintained in as effective a condition as they were when the Certificate was issued.
   e) The structural strength of the ship is lowered to such an extent that the ship is unsafe.
6. When this Certificate has expired or been cancelled, it must be delivered to the Issuing Authority.

ABS

2 Insert the date of expiry as specified by the Administration in accordance with article 19(1) of the Convention. The day and the month of this date correspond to the anniversary date as defined in article 2(9) of the Convention, unless amended in accordance with article 19(8) of the Convention.

ENDORSEMENT FOR ANNUAL SURVEYS

THIS IS TO CERTIFY that, at an annual survey required by article 14(1)(c) of the Convention, the ship was found to comply with the relevant requirements of the Convention.

Annual Survey:
Signed: _____ *(Surveyor, American Bureau of Shipping)*
Place: _____
Date: _____

Annual Survey:
Signed: _____ *(Surveyor, American Bureau of Shipping)*
Place: _____
Date: _____

Annual Survey:
Signed: _____ *(Surveyor, American Bureau of Shipping)*
Place: _____
Date: _____

Annual Survey:
Signed: _____ *(Surveyor, American Bureau of Shipping)*
Place: _____
Date: _____

ANNUAL SURVEY IN ACCORDANCE WITH ARTICLE 19(8)(c)

THIS IS TO CERTIFY that, at a survey in accordance with article 19(8)(c) of the Convention, the ship was found to comply with the relevant requirements of the Convention.

Signed: _____ *(Surveyor, American Bureau of Shipping)*
Place: _____
Date: _____

ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID FOR LESS THAN 5 YEARS WHERE ARTICLE 19(3) APPLIES

The ship complies with the relevant requirements of the Convention, and this certificate shall, in accordance with article 19(3) of the Convention, be accepted as valid until _____

ABS

Signed: _____ *(Surveyor, American Bureau of Shipping)*
Place: _____
Date: _____

ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN COMPLETED AND ARTICLE 19(4) APPLIES

The ship complies with the relevant requirements of the Convention, and this certificate shall, in accordance with article 19(4) of the Convention, be accepted as valid until _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE WHERE ARTICLE 19(5) OR 19(6) APPLIES

This certificate shall, in accordance with article 19(5)/19(6)[3] of the Convention, be accepted as valid until _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE WHERE ARTICLE 19(8) APPLIES

In accordance with article 19(8) of the Convention, the new anniversary date is _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

In accordance with article 19(8) of the Convention, the new anniversary date is _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

ABS

3 Delete as appropriate

DHS, USCG CG-1270 (REV. 06-04)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
WEB	1086804	YD197	1956

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
SEATTLE WA	STEEL	NO

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
899 GRT	899 NRT	142.0	58.0	13.0

PLACE BUILT

CLEVELAND OH

OWNERS

PACIFIC PILE & MARINE LP
COMPRISED OF ONE GENERAL PARTNER

OPERATIONAL ENDORSEMENTS

REGISTRY - LIMITED REGISTRY (NO FOREIGN VOYAGE BY SEA)
COASTWISE

MANAGING OWNER

PACIFIC PILE & MARINE LP
700 SOUTH RIVER DRIVE
SEATTLE WA 98108

National Vessel Documentation Center USCG
I hereby certify this to be a true copy
of the records of this office.

09/28/2023

Director, National Vessel Documentation Center

RESTRICTIONS
NONE

ENTITLEMENTS
NONE

REMARKS
NONE

ISSUE DATE
SEPTEMBER 28, 2023

THIS CERTIFICATE EXPIRES

SEPTEMBER 30, 2024

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

PREVIOUS EDITION OBSOLETE, THIS CERTIFICATE MAY NOT BE ALTERED

DHS, USCG, CG-1270 (REV. 01-23)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
JENNIFER H	1022583	9402	1994

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
KETCHIKAN AK	STEEL	YES

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
87 GRT	87 NRT	64.0	22.0	7.4

PLACE BUILT

EVERETT WA

OWNERS

BOYER TOWING INC

OPERATIONAL ENDORSEMENTS

REGISTRY
COASTWISE

MANAGING OWNER

BOYER TOWING, INC.
5061 SHORELINE DRIVE
PO BOX 8000
KETCHIKAN AK 99901

RESTRICTIONS
NONE

ENTITLEMENTS
NONE

REMARKS
NONE

ISSUE DATE
SEPTEMBER 16, 2023

THIS CERTIFICATE EXPIRES

OCTOBER 31, 2024

Christian G. Waldon

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

This certificate is not valid for operation of the vessel until the vessel is marked with the name, official number, and hailing port as shown on the certificate. The original certificate must be kept aboard the vessel at all times when in operation and must be presented upon the demand of federal, state or local officials for law enforcement purposes. Vessels with only a recreational endorsement may not engage in commercial trade.

Documented vessels may be registered by states for tax and other purposes and may be required to display a state decal. Renewal is the responsibility of the owner. This certificate becomes invalid upon a change in ownership, change in state of incorporation, or a change in any other element shown on the certificate other than change of address. This certificate is invalid for any vessel other than one documented solely for recreation when the vessel is placed under the command of a person who is not a citizen of the U.S. The vessel and its equipment are liable to seizure and forfeiture to the U.S. government and the owner is liable for a civil penalty of not more than $10,000.00 per violation. Each day of a continuing violation is a separate violation.

Any change in address of the managing owner must be reported promptly to the NVDC. You may contact NVDC at nvdc.w.webmaster@uscg.mil.

Note: The certificate on the face of this document is not conclusive evidence of title in any proceeding where ownership is in issue. Complete records are on file at the NVDC. The sale or transfer section below is provided for convenience only.

SALE OR TRANSFER OF VESSEL

100% OF THE VESSEL IDENTIFIED HEREIN IS SOLD (TRANSFERRED) BY THE OWNER(S) NAMED ON THE FACE OF THIS CERTIFICATE TO THE FOLLOWING PERSON(S). ADDRESS MUST BE INCLUDED.

IF SOLD (TRANSFERRED) TO MORE THAN ONE PERSON, THE PURCHASER(S)/TRANSFEREE(S) ARE TENANTS IN COMMON, EACH OWNING AN EQUAL UNDIVIDED INTEREST, UNLESS OTHERWISE INDICATED HEREIN: CHECK ONLY ONE OF THE FOLLOWING BLOCKS TO SHOW ANOTHER FORM OF OWNERSHIP.

☐ JOINT TENANCY WITH RIGHT OF SURVIVORSHIP ☐ TENANCY BY THE ENTIRETIES ☐ COMMUNITY PROPERTY

☐ OTHER

SIGNATURE OF SELLER(S)/TRANSFEROR(S) OR PERSONS SIGNING ON BEHALF OF SELLER(S)/TRANSFEROR(S):

DATE SIGNED:

NAME(S) OF PERSON(S) SIGNING ABOVE, AND LEGAL CAPACITY IN WHICH SIGNED (E.G. OWNER, AGENT, TRUSTEE, EXECUTOR)

ACKNOWLEDGMENT (TO BE COMPLETED BY NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED BY A LAW OR A STATE OR THE UNITED STATES TO TAKE OATHS.)

STATE:

ON _____ THE PERSON(S) NAMED
(DATE)

COUNTY:

ABOVE ACKNOWLEDGED EXECUTION OF THE FOREGOING INSTRUMENT IN THEIR STATED CAPACITY(IES) FOR THE PURPOSES THEREIN CONTAINED.

NOTARY PUBLIC
MY COMMISSION EXPIRES:

PRIVACY ACT STATEMENT

IN ACCORDANCE WITH 5 USC 552(A). THE FOLLOWING INFORMATION IS PROVIDED TO YOU WHEN SUPPLYING PERSONAL INFORMATION TO THE U.S. COAST GUARD:

1. AUTHORITY. SOLICITATION OF THIS INFORMATION IS AUTHORIZED BY 46 USC CHAPTER 313 AND 46 CFR, PART 67.
2. THE PRINCIPAL PURPOSES FOR WHICH THIS INSTRUMENT IS TO BE USED ARE:
   (A) TO PROVIDE A RECORD, AVAILABLE FOR PUBLIC INSPECTION AND COPYING, OF THE SALE OR OTHER CHANGE IN OWNERSHIP OF A VESSEL WHICH IS DOCUMENTED, WILL BE DOCUMENTED, OR HAS BEEN DOCUMENTED PURSUANT TO 46 USC, CHAPTER 121.
   (B) RETENTION FOR EXAMINATION BY GOVERNMENTAL AUTHORITIES AND MEMBERS OF THE GENERAL PUBLIC.
3. THE ROUTINE USE WHICH MAY BE MADE OF THIS INFORMATION INCLUDES DEVELOPMENT OF STATISTICAL DATA CONCERNING DOCUMENTED VESSELS.
4. DISCLOSURE OF THE INFORMATION REQUESTED ON THIS FORM IS VOLUNTARY. HOWEVER, FAILURE TO PROVIDE THE INFORMATION COULD PRECLUDE FILINO OF A BILL OF SALE AND DOCUMENTATION OF THE VESSEL NAMED HEREIN PURSUANT TO 46 USC CHAPTER 121. MOREOVER, BILLS OF SALE WHICH ARE NOT FILED ARE NOT DEEMED TO BE VALID AGAINST ANY PERSON HAVING ACTUAL KNOWLEDGE OF THE SALE. (46 USC 31321 (A)).

AN AGENCY MAY NOT CONDUCT OR SPONSOR, AND A PERSON IS NOT REQUIRED TO RESPOND TO A COLLECTION OF INFORMATION UNLESS IT DISPLAYS A VALID OMB CONTROL NUMBER.

THE COAST GUARD ESTIMATES THAT THE AVERAGE BURDEN FOR THIS FORM IS 20 MINUTES FOR COMPLETING AND 3 MINUTES FOR FILING. YOU MAY SUBMIT ANY COMMENTS CONCERNING THE ACCURACY OF THIS BURDEN ESTIMATE OR ANY SUGGESTIONS FOR REDUCING THE BURDEN TO: U.S. COAST GUARD, NATIONAL VESSEL DOCUMENTATION CENTER, 792 T J JACKSON DRIVE, FALLING WATERS, WEST VIRGINIA 25419 OR OFFICE OF MANAGEMENT AND BUDGET, PAPERWORK REDUCTION PROJECT (1625-0027), WASHINGTON, DC 20503.

United States of America
Department of Homeland Security
United States Coast Guard

Certification Date:	12 Jan 2024
Expiration Date:	12 Jan 2029

Certificate of Inspection

For ships on international voyages this certificate fulfills the requirements of SOLAS 74 as amended, regulation V/14, for a SAFE MANNING DOCUMENT.

Vessel Name	Official Number	IMO Number	Call Sign	Service
JENNIFER H	1022583		WDC3573	Towing Vessel

Hailing Port	Hull Material	Horsepower	Propulsion
KETCHIKAN, AK UNITED STATES	Steel	800	Diesel Reduction

Place Built	Delivery Date	Keel Laid Date	Gross Tons	Net Tons	DWT	Length
EVERETT, WA UNITED STATES	01Jun1994	01Jan1994	R-87 I-	R-87 I-		R-64.0 I-0

Owner
BOYER TOWING, INC.
5061 SHORELINE DRIVE PO BOX 8000
KETCHIKAN, AK 99901
UNITED STATES

Operator
BOYER TOWING, INC.
5061 SHORELINE DRIVE PO BOX 8000
KETCHIKAN, AK 99901
UNITED STATES

This vessel must be manned with the following licensed and unlicensed Personnel. Included in which there must be 1 Certified Lifeboatmen, 0 Certified Tankermen, 0 HSC Type Rating, and 0 GMDSS Operators.

1 Masters	1 Licensed Mates	0 Chief Engineers	0 Oilers
0 Chief Mates	0 First Class Pilots	0 First Assistant Engineers	
0 Second Mates	0 Radio Officers	0 Second Assistant Engineers	
0 Third Mates	0 Able Seamen	0 Third Assistant Engineers	
0 Master First Class Pilot	0 Ordinary Seamen	0 Licensed Engineers	
0 Mate First Class Pilots	2 Deckhands	0 Qualified Member Engineer	

In addition, this vessel may carry 0 Passengers, 0 Other Persons in crew, 0 Persons in addition to crew, and no Others. Total Persons allowed: 4

Route Permitted And Conditions Of Operation:

---Lakes, Bays, and Sounds---

WHEN OPERATING LESS THAN 12 HOURS IN ANY 24 HOUR PERIOD ON A LAKES, BAYS AND SOUNDS VOYAGE, THE LICENSED MATE IS NOT REQUIRED, AND THE NUMBER OF DECKHANDS MAY BE REDUCED TO ONE (1). THE VESSEL MAY CARRY ZERO (0) OTHER PERSONS IN THE CREW, TWO (2) PERSONS IN ADDITION TO THE CREW, AND NO OTHERS. TOTAL PERSONS ALLOWED FOUR (4).

WHILE TRANSFERRING FUEL OIL, A CERTIFIED TANKERMAN OR LICENSED OFFICER SHALL SERVE AS THE DESIGNATED PERSON IN CHARGE.

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

With this Inspection for Certification having been completed at SEATTLE, WA, UNITED STATES, the Officer in Charge, Marine Inspection, SECTOR PUGET SOUND certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

Annual/Periodic/Re-Inspection

Date	Zone	A/P/R	Signature

This Amended certificate issued by:
M. D. TAPPAN Jr., CDR, USCG, By Direction
Officer in Charge, Marine Inspection
SECTOR PUGET SOUND
Inspection Zone

United States of America
Department of Homeland Security
United States Coast Guard

Certification Date:	12 Jan 2024
Expiration Date:	12 Jan 2029

Certificate of Inspection

Vessel Name: JENNIFER H

---Hull Exams---

Exam Type	Next Exam	Last Exam	Prior Exam
DryDock	31Jan2027	24Jan2024	28Jan2022
Internal Structure	31Jan2027	24Jan2024	28Jan2022

---Lifesaving Equipment---

Total Equipment for 4 Persons

Primary Lifesaving Equipment	Quantity	Capacity		Required
Lifeboats (Total)	0	0	Life Preservers (Adult)	4
Lifeboats (Port)	0	0	Life Preservers (Child)	0
Lifeboats (Starboard)	0	0	Ring Buoys (Total)	2
Motor Lifeboats	0	0	With Lights	2
Lifeboats With Radio	0	0	With Line Attached	1
Rescue Boats/Platforms	0	0	Other	0
Inflatable Rafts	1	4	Immersion Suits	4
Life Floats/Buoyant App	0	0	Portable Lifeboat Radios	0
Inflatable Buoyant Apparatus (IBA)	0	0	Equipped With EPIRB?	NO

--- Fire Fighting Equipment ---

Number of Fire Pumps - 1

Hose Information

Location	Quantity	Diameter	Length
FWD STBD BRIDGE DECK	1	1.5	50

Fire Extinguishers - Hand portable and semi-portable

Quantity	Class Type
1	10-B:C
1	160-B
5	40-B:C

---Certificate Amendments---

Amending Unit	Amendment Date	Amendment Remark
Sector Puget Sound	07Feb2024	Amending COI to reflect current DDX ISE dates.

END

BOYER TOWING, INC.

P.O. Box 8000
Ketchikan, Alaska 99901
Phone (206) 763-8696 Fax (206) 767-9517

JENNIFER H.

Radio Call Sign: **WDC 3573**

Official No:	1022583
Dimensions:	65' X 22' X 7'
Main Propulsion:	Twin C18 Caterpillar - 938 h.p. total
Reduction Gears:	Twin Disc 514 - 4.5:1 ratio
Propellers:	44" x 44" - 4 Blade S.S. Type 19
Generators:	Deutz F3-6L 912/w (35kw)
Bollard Pull:	(Calculated) 10.3 Tons

DHS, USCG, CG-1270 (REV. 01-22)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
HALLE H	273081	4154	1957

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
KETCHIKAN AK	STEEL	YES

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
37 GRT	25 NRT	44.7	17.0	5.8

PLACE BUILT

PORTLAND OR

OWNERS

BOYER TOWING INC

OPERATIONAL ENDORSEMENTS

REGISTRY
COASTWISE

MANAGING OWNER

BOYER TOWING INC
5061 SHORELINE DR
PO BOX 8000
KETCHIKAN AK 99901

RESTRICTIONS
NONE

ENTITLEMENTS
NONE

REMARKS
NONE

ISSUE DATE
JUNE 27, 2023

THIS CERTIFICATE EXPIRES

JULY 31, 2024

Christian G. Waldon

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

This certificate is not valid for operation of the vessel until the vessel is marked with the name, official number, and hailing port as shown on the certificate. The original certificate must be kept aboard the vessel at all times when in operation and must be presented upon the demand of federal, state or local officials for law enforcement purposes. Vessels with only a recreational endorsement may not engage in commercial trade.

Documented vessels may be registered by states for tax and other purposes and may be required to display a state decal. Renewal is the responsibility of the owner. This certificate becomes invalid upon a change in ownership, change in state of incorporation, or a change in any other element shown on the certificate other than change of address. This certificate is invalid for any vessel other than one documented solely for recreation when the vessel is placed under the command of a person who is not a citizen of the U.S. The vessel and its equipment are liable to seizure and forfeiture to the U.S. government and the owner is liable for a civil penalty of not more than $10,000.00 per violation. Each day of a continuing violation is a separate violation.

Any change in address of the managing owner must be reported promptly to the NVDC. You may contact us at nvdc.w.webmaster@uscg.mil.

Note: The certificate on the face of this document is not conclusive evidence of title in any proceeding where ownership is in issue. Complete records are on file at the NVDC. The sale or transfer section below is provided for convenience only.

SALE OR TRANSFER OF VESSEL

100% OF THE VESSEL IDENTIFIED HEREIN IS SOLD (TRANSFERRED) BY THE OWNER(S) NAMED ON THE FACE OF THIS CERTIFICATE TO THE FOLLOWING PERSON(S). ADDRESS MUST BE INCLUDED.

_____

_____

IF SOLD (TRANSFERRED) TO MORE THAN ONE PERSON, THE PURCHASER(S)/TRANSFEREE(S) ARE TENANTS IN COMMON, EACH OWNING AN EQUAL UNDIVIDED INTEREST, UNLESS OTHERWISE INDICATED HEREIN: CHECK ONLY ONE OF THE FOLLOWING BLOCKS TO SHOW ANOTHER FORM OF OWNERSHIP.

☐ JOINT TENANCY WITH RIGHT OF SURVIVORSHIP ☐ TENANCY BY THE ENTIRETIES ☐ COMMUNITY PROPERTY

☐ OTHER

SIGNATURE OF SELLER(S)/TRANSFEROR(S) OR PERSONS SIGNING ON BEHALF OF SELLER(S)/TRANSFEROR(S):

DATE SIGNED:

NAME(S) OF PERSON(S) SIGNING ABOVE, AND LEGAL CAPACITY IN WHICH SIGNED (E.G. OWNER, AGENT, TRUSTEE, EXECUTOR)

ACKNOWLEDGMENT (TO BE COMPLETED BY NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED BY A LAW OR A STATE OR THE UNITED STATES TO TAKE OATHS.)

STATE:

ON _____ THE PERSON(S) NAMED
(DATE)

COUNTY:

ABOVE ACKNOWLEDGED EXECUTION OF THE FOREGOING INSTRUMENT IN THEIR STATED CAPACITY(IES) FOR THE PURPOSES THEREIN CONTAINED.

_____
NOTARY PUBLIC
MY COMMISSION EXPIRES:

PRIVACY ACT STATEMENT

IN ACCORDANCE WITH 5 USC 552(A). THE FOLLOWING INFORMATION IS PROVIDED TO YOU WHEN SUPPLYING PERSONAL INFORMATION TO THE U.S. COAST GUARD:

1. AUTHORITY. SOLICITATION OF THIS INFORMATION IS AUTHORIZED BY 46 USC CHAPTER 313 AND 46 CFR, PART 67.
2. THE PRINCIPAL PURPOSES FOR WHICH THIS INSTRUMENT IS TO BE USED ARE:
   (A) TO PROVIDE A RECORD, AVAILABLE FOR PUBLIC INSPECTION AND COPYING, OF THE SALE OR OTHER CHANGE IN OWNERSHIP OF A VESSEL WHICH IS DOCUMENTED, WILL BE DOCUMENTED, OR HAS BEEN DOCUMENTED PURSUANT TO 46 USC, CHAPTER 121.
   (B) RETENTION FOR EXAMINATION BY GOVERNMENTAL AUTHORITIES AND MEMBERS OF THE GENERAL PUBLIC.
3. THE ROUTINE USE WHICH MAY BE MADE OF THIS INFORMATION INCLUDES DEVELOPMENT OF STATISTICAL DATA CONCERNING DOCUMENTED VESSELS.
4. DISCLOSURE OF THE INFORMATION REQUESTED ON THIS FORM IS VOLUNTARY. HOWEVER, FAILURE TO PROVIDE THE INFORMATION COULD PRECLUDE FILING OF A BILL OF SALE AND DOCUMENTATION OF THE VESSEL NAMED HEREIN PURSUANT TO 46 USC CHAPTER 121. MOREOVER, BILLS OF SALE WHICH ARE NOT FILED ARE NOT DEEMED TO BE VALID AGAINST ANY PERSON HAVING ACTUAL KNOWLEDGE OF THE SALE. (46 USC 31321 (A)).

AN AGENCY MAY NOT CONDUCT OR SPONSOR, AND A PERSON IS NOT REQUIRED TO RESPOND TO A COLLECTION OF INFORMATION UNLESS IT DISPLAYS A VALID OMB CONTROL NUMBER.

THE COAST GUARD ESTIMATES THAT THE AVERAGE BURDEN FOR THIS FORM IS 20 MINUTES FOR COMPLETING AND 5 MINUTES FOR FILING. YOU MAY SUBMIT ANY COMMENTS CONCERNING THE ACCURACY OF THIS BURDEN ESTIMATE OR ANY SUGGESTIONS FOR REDUCING THE BURDEN TO: U.S. COAST GUARD, NATIONAL VESSEL DOCUMENTATION CENTER, 792 T J JACKSON DRIVE, FALLING WATERS, WEST VIRGINIA 25419 OR OFFICE OF MANAGEMENT AND BUDGET, PAPERWORK REDUCTION PROJECT (1625-0027), WASHINGTON, DC 20503.

AW 671899922419

United States of America
Department of Homeland Security
United States Coast Guard

Certification Date:	29 Apr 2022
Expiration Date:	29 Apr 2027

Certificate of Inspection

For ships on international voyages this certificate fulfills the requirements of SOLAS 74 as amended, regulation V/14, for a SAFE MANNING DOCUMENT.

Vessel Name	Official Number	IMO Number	Call Sign	Service
HALLE H	273081		WDF5275	Towing Vessel

Hailing Port	Hull Material	Horsepower	Propulsion
KETCHIKAN, AK UNITED STATES	Steel	800	Diesel Reduction

Place Built	Delivery Date	Keel Laid Date	Gross Tons	Net Tons	DWT	Length
PORTLAND, OR UNITED STATES	01Jan1957		R-37 I-	R-25 I-		R-44.7 I-0

Owner
BOYER TOWING INC
5061 SHORELINE DRPO BOX 8000
KETCHIKAN, AK 99901
UNITED STATES

Operator
BOYER TOWING INC
7318 4TH AVE S
SEATTLE, WA 98108
UNITED STATES

This vessel must be manned with the following licensed and unlicensed Personnel. Included in which there must be 0 Certified Lifeboatmen, 0 Certified Tankermen, 0 HSC Type Rating, and 0 GMDSS Operators.

1 Masters	1 Licensed Mates	0 Chief Engineers	0 Oilers
0 Chief Mates	0 First Class Pilots	0 First Assistant Engineers	
0 Second Mates	0 Radio Officers	0 Second Assistant Engineers	
0 Third Mates	0 Able Seamen	0 Third Assistant Engineers	
0 Master First Class Pilot	0 Ordinary Seamen	0 Licensed Engineers	
0 Mate First Class Pilots	2 Deckhands	0 Qualified Member Engineer	

In addition, this vessel may carry 0 Passengers, 0 Other Persons in crew, 0 Persons in addition to crew, and no Others. Total Persons allowed: 4

Route Permitted And Conditions Of Operation:

---Lakes, Bays, and Sounds---

NOT ON AN INTERNATIONAL VOYAGE.

VESSEL IS LIMITED TO 3 NM FROM SHORE.

WHEN OPERATIONS ARE 12 HOURS OR LESS IN ANY 24 HOUR PERIOD, THE LICENSED MATE AND ONE (1) OF THE DECKHANDS ARE NOT REQUIRED.

WHEN APPLYING THE ABOVE MANNING REDUCTION, THE MAXIMUM NUMBER OF PERSONS IN ADDITION TO THE CREW MAY BE INCREASED SO LONG AS THE TOTAL NUMBER OF PERSONS ON BOARD DOES NOT EXCEED FOUR (4).

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

With this Inspection for Certification having been completed at Seattle, WA, UNITED STATES, the Officer in Charge, Marine Inspection, SECTOR PUGET SOUND certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

Annual/Periodic/Re-Inspection

Date	Zone	A/P/R	Signature

This certificate issued by:

P. M. HILBERT, CAPT

Officer in Charge, Marine Inspection

SECTOR PUGET SOUND

Inspection Zone

United States of America
Department of Homeland Security
United States Coast Guard

Certification Date:	29 Apr 2022
Expiration Date:	29 Apr 2027

Certificate of Inspection

Vessel Name: HALLE H

WHEN OPERATING ON A ROUTE NOT SUBJECT TO STCW, ONE (1) CREWMEMBER PRACTICED IN THE HANDLING AND OPERATION OF LIFERAFTS MAY BE PLACED IN CHARGE OF THE LIFERAFTS AS PROVIDED FOR IN 46 CFR 199.100, INCORPORATED THROUGH 46 CFR 15.845(A). ARRANGEMENTS FOR ALTERNATE TRAINING ARE BASED ON COMPANY TRAINING PROVIDED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR LAUNCHING.

---Hull Exams---

Exam Type	Next Exam	Last Exam	Prior Exam
DryDock	30Apr2025		
Internal Structure	30Apr2025		

---Lifesaving Equipment---

Total Equipment for 4 Persons

Primary Lifesaving Equipment	Quantity	Capacity		Required
Lifeboats (Total)	0	0	Life Preservers (Adult)	6
Lifeboats (Port)	0	0	Life Preservers (Child)	0
Lifeboats (Starboard)	0	0	Ring Buoys (Total)	2
Motor Lifeboats	0	0	With Lights	2
Lifeboats With Radio	0	0	With Line Attached	1
Rescue Boats/Platforms	0	0	Other	0
Inflatable Rafts	1	4	Immersion Suits	6
Life Floats/Buoyant App	0	0	Portable Lifeboat Radios	0
Inflatable Buoyant Apparatus (IBA)	0	0	Equipped With EPIRB?	YES

--- Fire Fighting Equipment ---

Number of Fire Pumps - 1

Hose Information

Location	Quantity	Diameter	Length
3rd Deck	1	1.5	50

Fire Extinguishers - Hand portable and semi-portable

Quantity	Class Type
3	10-B:C
1	160-B
1	40-B

END

BOYER TOWING, INC.

P.O. Box 8000
Ketchikan, Alaska 99901
Phone (206) 763-8696 Fax (206) 767-9517

HALLE H.

Radio Call Sign: **WDF 5275**

Cell No. **206-790-6070**

Satellite Phone No. **N/A**

Official No:	273081
IMO No:	4154
Dimensions:	50’ X 18’ X 7’
Class:	N/A
Main Propulsion:	Two 12v-71, 700 h.p @1,800 RPM
Reduction Gears:	Twin Disc MG514 – 4.5:1 Ratio
Propellers:	54’’ x 37’’ S.S
Generators:	Duetz 20kw
Bollard Pull:	7.6 Tons
Tow Wire:	N/A
Under Rider:	N/A

DHS, USCG, CG-1270 (REV. 01-23)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
GRETCHEN H	1056824	8964587	1997

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
KETCHIKAN AK	STEEL	YES

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
205 GT ITC 96 GRT	61 NT ITC 65 NRT	80.6	30.0	11.1

PLACE BUILT

CODEN AL

OWNERS

BOYER TOWING INC

OPERATIONAL ENDORSEMENTS

REGISTRY
COASTWISE

MANAGING OWNER

BOYER TOWING INC
5061 SHORELINE DR
PO BOX 8000
KETCHIKAN AK 99901

RESTRICTIONS
NONE

ENTITLEMENTS
NONE

REMARKS
NONE

ISSUE DATE
FEBRUARY 21, 2024

THIS CERTIFICATE EXPIRES

MARCH 31, 2025

Christopher G. Washburn

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

PREVIOUS EDITION OBSOLETE, THIS CERTIFICATE MAY NOT BE ALTERED

This certificate is not valid for operation of the vessel until the vessel is marked with the name, official number, and hailing port as shown on the certificate. The original certificate must be kept aboard the vessel at all times when in operation and must be presented upon the demand of federal, state or local officials for law enforcement purposes. Vessels with only a recreational endorsement may not engage in commercial trade.

Documented vessels may be registered by states for tax and other purposes and may be required to display a state decal. Renewal is the responsibility of the owner. This certificate becomes invalid upon a change in ownership, change in state of incorporation, or a change in any other element shown on the certificate other than change of address. This certificate is invalid for any vessel other than one documented solely for recreation when the vessel is placed under the command of a person who is not a citizen of the U.S. The vessel and its equipment are liable to seizure and forfeiture to the U.S. government and the owner is liable for a civil penalty of not more than $10,000.00 per violation. Each day of a continuing violation is a separate violation.

Any change in address of the managing owner must be reported promptly to the NVDC. You may contact NVDC at nvdc.w.webmaster@uscg.mil.

Note: The certificate on the face of this document is not conclusive evidence of title in any proceeding where ownership is in issue. Complete records are on file at the NVDC. The sale or transfer section below is provided for convenience only.

SALE OR TRANSFER OF VESSEL

100% OF THE VESSEL IDENTIFIED HEREIN IS SOLD (TRANSFERRED) BY THE OWNER(S) NAMED ON THE FACE OF THIS CERTIFICATE TO THE FOLLOWING PERSON(S). ADDRESS MUST BE INCLUDED.

IF SOLD (TRANSFERRED) TO MORE THAN ONE PERSON, THE PURCHASER(S)/TRANSFEREE(S) ARE TENANTS IN COMMON, EACH OWNING AN EQUAL UNDIVIDED INTEREST, UNLESS OTHERWISE INDICATED HEREIN: CHECK ONLY ONE OF THE FOLLOWING BLOCKS TO SHOW ANOTHER FORM OF OWNERSHIP.

☐ JOINT TENANCY WITH RIGHT OF SURVIVORSHIP ☐ TENANCY BY THE ENTIRETIES ☐ COMMUNITY PROPERTY

☐ OTHER

SIGNATURE OF SELLER(S)/TRANSFEROR(S) OR PERSONS SIGNING ON BEHALF OF SELLER(S)/TRANSFEROR(S):

DATE SIGNED:

NAME(S) OF PERSON(S) SIGNING ABOVE, AND LEGAL CAPACITY IN WHICH SIGNED (E.G. OWNER, AGENT, TRUSTEE, EXECUTOR)

ACKNOWLEDGMENT (TO BE COMPLETED BY NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED BY A LAW OR A STATE OR THE UNITED STATES TO TAKE OATHS.)

STATE:

ON _____ THE PERSON(S) NAMED
(DATE)

COUNTY:

ABOVE ACKNOWLEDGED EXECUTION OF THE FOREGOING INSTRUMENT IN THEIR STATED CAPACITY(IES) FOR THE PURPOSES THEREIN CONTAINED.

NOTARY PUBLIC
MY COMMISSION EXPIRES:

PRIVACY ACT STATEMENT

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   (B) RETENTION FOR EXAMINATION BY GOVERNMENTAL AUTHORITIES AND MEMBERS OF THE GENERAL PUBLIC.
3. THE ROUTINE USE WHICH MAY BE MADE OF THIS INFORMATION INCLUDES DEVELOPMENT OF STATISTICAL DATA CONCERNING DOCUMENTED VESSELS.
4. DISCLOSURE OF THE INFORMATION REQUESTED ON THIS FORM IS VOLUNTARY. HOWEVER, FAILURE TO PROVIDE THE INFORMATION COULD PRECLUDE FILING OF A BILL OF SALE AND DOCUMENTATION OF THE VESSEL NAMED HEREIN PURSUANT TO 46 USC CHAPTER 121. MOREOVER, BILLS OF SALE WHICH ARE NOT FILED ARE NOT DEEMED TO BE VALID AGAINST ANY PERSON HAVING ACTUAL KNOWLEDGE OF THE SALE. (46 USC 31321 (A)).

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THE COAST GUARD ESTIMATES THAT THE AVERAGE BURDEN FOR THIS FORM IS 20 MINUTES FOR COMPLETING AND 3 MINUTES FOR FILING. YOU MAY SUBMIT ANY COMMENTS CONCERNING THE ACCURACY OF THIS BURDEN ESTIMATE OR ANY SUGGESTIONS FOR REDUCING THE BURDEN TO: U.S. COAST GUARD, NATIONAL VESSEL DOCUMENTATION CENTER, 792 T J JACKSON DRIVE, FALLING WATERS, WEST VIRGINIA 25419 OR OFFICE OF MANAGEMENT AND BUDGET, PAPERWORK REDUCTION PROJECT (1625-0027), WASHINGTON, DC 20503.

United States of America
Department of Homeland Security
United States Coast Guard

Certification Date:	10 Jan 2024
Expiration Date:	10 Jan 2029

Certificate of Inspection

For ships on international voyages this certificate fulfills the requirements of SOLAS 74 as amended, regulation V/14, for a SAFE MANNING DOCUMENT.

Vessel Name	Official Number	IMO Number	Call Sign	Service
GRETCHEN H	1056824	8964587	WDC9138	Towing Vessel

Hailing Port	Hull Material	Horsepower	Propulsion
KETCHIKAN, AK UNITED STATES	Steel	2100	Diesel Reduction

Place Built	Delivery Date	Keel Laid Date	Gross Tons	Net Tons	DWT	Length
CODEN, AL UNITED STATES	31Dec1997	01Jan1997	R-96 I-205	R-55 I-61		R-80.6 I-80.6

Owner
BOYER TOWING INC
5061 SHORELINE DR
PO BOX 8000
KETCHIKAN, AK 99901
UNITED STATES

Operator
BOYER TOWING, INC.
5061 SHORELINE DRIVE PO BOX 8000
KETCHIKAN, AK 99901
UNITED STATES

This vessel must be manned with the following licensed and unlicensed Personnel. Included in which there must be 0 Certified Lifeboatmen, 0 Certified Tankermen, 0 HSC Type Rating, and 0 GMDSS Operators.

1 Masters	1 Licensed Mates	0 Chief Engineers	0 Oilers
0 Chief Mates	0 First Class Pilots	0 First Assistant Engineers	
0 Second Mates	0 Radio Officers	0 Second Assistant Engineers	
0 Third Mates	0 Able Seamen	0 Third Assistant Engineers	
0 Master First Class Pilot	0 Ordinary Seamen	0 Licensed Engineers	
0 Mate First Class Pilots	2 Deckhands	0 Qualified Member Engineer	

In addition, this vessel may carry 0 Passengers, 0 Other Persons in crew, 3 Persons in addition to crew, and no Others. Total Persons allowed: 7

Route Permitted And Conditions Of Operation:

---Oceans---

*WHEN OPERATING LESS THAN 12 HOURS IN ANY 24 HOUR PERIOD ON A DOMESTIC VOYAGE, THE LICENSED MATE IS NOT REQUIRED, AND THE NUMBER OF DECKHANDS MAY BE REDUCED TO ONE (1). THE VESSEL MAY CARRY ZERO (0) OTHER PERSONS IN THE CREW, FIVE (5) PERSONS IN ADDITION TO THE CREW, AND NO OTHERS. TOTAL PERSONS ALLOWED SEVEN (7).

WHEN OPERATING ON LAKES, BAYS, SOUNDS, VESSEL MAY BE OPERATED WITH:
ONE (1) MASTER TWO (2*) DECKHANDS
ONE (1*) LICENSED MATE

*WHEN OPERATING LESS THAN 12 HOURS IN ANY 24 HOUR PERIOD ON A LAKES, BAYS AND SOUNDS VOYAGE, THE LICENSED MATE

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

With this Inspection for Certification having been completed at SEATTLE, WA, UNITED STATES, the Officer in Charge, Marine Inspection, SECTOR PUGET SOUND certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

Annual/Periodic/Re-Inspection

Date	Zone	A/P/R	Signature

This certificate issued by: Digitally signed by MOODY KIRA MICHELLE.1026577579 Date: 2024.01.04 08:16:15 -08'00'

K. M. MOODY, CDR, USCG, By Direction

Officer in Charge, Marine Inspection

SECTOR PUGET SOUND

Inspection Zone

United States of America
Department of Homeland Security
United States Coast Guard

Certification Date:	10 Jan 2024
Expiration Date:	10 Jan 2029

Certificate of Inspection

Vessel Name: GRETCHEN H

IS NOT REQUIRED, AND THE NUMBER OF DECKHANDS MAY BE REDUCED TO ONE (1). THE VESSEL MAY CARRY ZERO (0) OTHER PERSONS IN THE CREW, FIVE (5) PERSONS IN ADDITION TO THE CREW, AND NO OTHERS. TOTAL PERSONS ALLOWED SEVEN (7).

WHILE TRANSFERRING FUEL OIL, A CERTIFIED TANKERMAN OR LICENSED OFFICER SHALL SERVE AS THE DESIGNATED PERSON IN CHARGE.

THIS CERTICATE IS VALID ONLY SO LONG AS THE OPERATING RESTRICTIONS IN THE VESSEL'S STABILITY LETTER, ISSUED BY ABS AMERICAS AND DATED AUG 04, 2006, ARE OBSERVED.

---Hull Exams---

Exam Type	Next Exam	Last Exam	Prior Exam
DryDock	31Dec2024	16Nov2022	26Feb2020
Internal Structure	31Dec2024	16Nov2022	19Dec2019

---Stability---

Type	Issued Date	Office
Letter	04Aug2006	ABS AMERICAS IN SEATTLE, WASHINGTON

---Lifesaving Equipment---

Total Equipment for 7 Persons

Primary Lifesaving Equipment	Quantity	Capacity		Required
Lifeboats (Total)	0	0	Life Preservers (Adult)	7
Lifeboats (Port)	0	0	Life Preservers (Child)	0
Lifeboats (Starboard)	0	0	Ring Buoys (Total)	4
Motor Lifeboats	0	0	With Lights	2
Lifeboats With Radio	0	0	With Line Attached	3
Rescue Boats/Platforms	0	0	Other	0
Inflatable Rafts	1	8	Immersion Suits	7
Life Floats/Buoyant App	0	0	Portable Lifeboat Radios	0
Inflatable Buoyant Apparatus (IBA)	0	0	Equipped With EPIRB?	YES

--- Fire Fighting Equipment ---

Number of Fireman Outfits - 2

Number of Fire Pumps - 1

Hose Information

Location	Quantity	Diameter	Length
MAIN DECK AFT PORT	1	1.5	50
MAIN DECK FWD STBD	1	1.5	50

Fire Extinguishers - Hand portable and semi-portable

Quantity	Class Type
7	10-B:C
2	160-B
3	40-B:C

END

Certificate No.: 9736626-4648556-020

Deadweight: 132.0201 LT

INTERNATIONAL LOAD LINE CERTIFICATE

Issued under the provisions of
the International Convention on Load Lines, 1966,
as modified by the Protocol of 1988 relating thereto
under the authority of the Government of

United States of America

Commandant, U.S. Coast Guard

by American Bureau of Shipping

Particulars of Ship

Name of Ship		Distinctive Number or Letters
GRETCHEN H		1056824 WDC9138
Port of Registry	Length(L) as defined in Article 2(8)	IMO Number[1]
Ketchikan, AK	80 Feet 3-13/16 Inches	8964587

Freeboard Assigned as: New

Type of Ship: Type B

Freeboard from Deck Line:			Load Line	
Tropical	1 Feet 8-3/16 Inches	(T)	2-1/4 Inches	above (S)
Summer	1 Feet 10-7/16 Inches	(S)	Upper edge of line through center of ring	
Winter	2 Feet 11/16 Inches	(W)	2-1/4 Inches	below (S)
Winter North Atlantic	2 Feet 2-11/16 Inches	(WNA)	4-1/4 Inches	below (S)
Timber Tropical	N/A	(LT)	N/A	above (LS)
Timber Summer	N/A	(LS)	N/A	above (S)
Timber Winter	N/A	(LW)	N/A	below (LS)
Timber Winter North Atlantic	N/A	(LWNA)	N/A	below (LS)

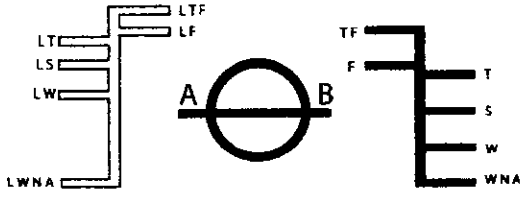
Allowance for fresh water for all freeboards other than timber: 1-3/4 Inches

For timber freeboards: N/A

The upper edge of the deck line from which these freeboards are measured is:

Opposite The Top of Upper Steel deck at side.

This certificate is valid only so long as the operating restrictions in the vessel s stability letter, issued by ABS Americas and dated August 4, 2006, are observed.



1 In accordance with the IMO Ship Identification Number Scheme, adopted by resolution A.600(15).

THIS IS TO CERTIFY:

1. That the ship has been surveyed in accordance with the requirements of article 14 of the Convention.
2. That the survey showed that the freeboards have been assigned and load lines shown above have been marked in accordance with the Convention.

This certificate is valid until 03 January 2025 [2]
Subject to the annual surveys in accordance with article 14(1)(c) of the Convention.

Completion date of the survey on which this certificate is based: 05 March 2020

Issued at Seattle, United States *(Place of issue of certificate)* on 15 February 2021 *(Date of issue)*

Electronically Signed By
Spadafore, Dominic Louis (Dominic Spadafore), Seattle Port
(Surveyor, American Bureau of Shipping)

NOTES:

1. When a ship departs from a port situated on a river or inland waters, deeper loading shall be permitted corresponding to the weight of fuel and all other materials required for consumption between the point of departure and the sea.
2. When a ship is in fresh water of unit density the appropriate load line may be submerged by the amount of fresh water allowance shown above. Where the density is other than unity, an allowance shall be made proportional to the difference between 1.025 and the actual density.
3. It is the owner's responsibility to furnish the master with approved information and instructions for loading and ballasting this vessel to provide guidance as to stability of the vessel under varying conditions of service and to avoid unacceptable stresses in the vessel's structure, as defined in 46 CFR 42.09-1.
4. The Winter North Atlantic Load Line applies only to vessels of 328 ft. in length or less, which enter any part of the North Atlantic Ocean during the winter months as defined by the Load Line Regulations in 46 CFR 42.30-5 and 42.30-35. The periods during which the other seasonal load lines apply in different parts of the world are stated in the Load Line Regulations 46 CFR 42.30-5 to 42.30-30, inclusive.
5. This Load Line Certificate will be cancelled by the Commandant, U. S. Coast Guard, if...
   a) The annual surveys have not been carried out within three months either way of each anniversary date of the certificate.
   b) The certificate is not endorsed to show that the ship has been surveyed as indicated in (a).
   c) Material alterations have been made to the hull or superstructures such as would necessitate the assignment of an increased freeboard.
   d) The fittings and appliance for the protection of the openings, guardrails, freeing ports, or the means of access to the crew's quarters have not been in as effective a condition as they were when the Certificate was issued.
   e) The structural strength of the ship is lowered to such an extent that the ship is unsafe.
6. When this Certificate has expired or been cancelled, it must be delivered to the Assigning Authority.

ABS

2 Insert the date of expiry as specified by the Administration in accordance with article 19(1) of the Convention. The day and the month of this date correspond to the anniversary date as defined in article 2(9) of the Convention, unless amended in accordance with article 19(8) of the Convention.

ENDORSEMENT FOR ANNUAL SURVEYS

THIS IS TO CERTIFY that, at an annual survey required by article 14(1)(c) of the Convention, the ship was found to comply with the relevant requirements of the Convention.

Annual Survey:	Signed:	Electronically Signed By Spadafore, Dominic Louis (Dominic Spadafore), Seattle Port *(Surveyor, American Bureau of Shipping)*
	Place:	Seattle, United States
	Date:	15 February 2021
Annual Survey:	Signed:	Electronically Signed By Polowy, Steven, Seattle Port *(Surveyor, American Bureau of Shipping)*
	Place:	Seattle, United States
	Date:	18 February 2022
Annual Survey:	Signed:	Electronically Signed By Spadafore, Dominic Louis (Dominic Spadafore), Seattle Port *(Surveyor, American Bureau of Shipping)*
	Place:	Seattle, United States
	Date:	10 February 2023
Annual Survey:	Signed:	*(Surveyor, American Bureau of Shipping)*
	Place:	
	Date:	

ANNUAL SURVEY IN ACCORDANCE WITH ARTICLE 19(8)(c)

THIS IS TO CERTIFY that, at a survey in accordance with article 19(8)(c) of the Convention, the ship was found to comply with the relevant requirements of the Convention.

Signed:	*(Surveyor, American Bureau of Shipping)*
Place:	
Date:	

ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID FOR LESS THAN 5 YEARS WHERE ARTICLE 19(3) APPLIES

The ship complies with the relevant requirements of the Convention, and this certificate shall, in accordance with article 19(3) of the Convention, be accepted as valid until _____

ABS

Signed:	*(Surveyor, American Bureau of Shipping)*
Place:	
Date:	

ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN COMPLETED AND ARTICLE 19(4) APPLIES

The ship complies with the relevant requirements of the Convention, and this certificate shall, in accordance with article 19(4) of the Convention, be accepted as valid until _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE WHERE ARTICLE 19(5) OR 19(6) APPLIES

This certificate shall, in accordance with article 19(5)/19(6)[3] of the Convention, be accepted as valid until _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE WHERE ARTICLE 19(8) APPLIES

In accordance with article 19(8) of the Convention, the new anniversary date is _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

In accordance with article 19(8) of the Convention, the new anniversary date is _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

ABS

3 Delete as appropriate

ABS
AMERICAS DIVISION

STABILITY LETTER

August 4, 2006

Master, M. V. "GRETCHEN H", ON 1056824
Rodriguez Boatbuilders Hull 166
84.0' x 30' x 11.5' Uninspected Tug [C]

You are responsible for maintaining this vessel in a satisfactory stability condition at all times and for following the instructions and precautions listed below.

A stability test, witnessed by ABS Americas on behalf of the U.S. Coast Guard was conducted on the GRETCHEN H on 19 May 2006, Seattle, Washington. On the basis of that test, stability calculations have been performed. Results indicate that the stability of the GRETCHEN H, as presently outfitted and equipped, is satisfactory for operation on Exposed Waters, provided that the following restrictions are observed.

OPERATING RESTRICTIONS

1. **ROUTE:** Operation on Exposed Waters is permitted.

2. **FREEBOARD AND DRAFT:** A minimum freeboard of at least 1 foot 10-7/16 inches measured from the main deck at amidships must be maintained. This corresponds to a baseline draft of 9 feet 8-1/2 inches. Trim should be minimized.

3. **DECK CARGO:** Carriage of deck cargo is not permitted.

4. **TANKS:**

   a. No more than one centerline tank or P/S tank pair of the following liquid types may be partially filled at any one time (with the exception of the fuel oil day tank): fuel oil storage, potable water and ballast water.

   b. Any cross-connections between port and starboard tank pairs shall be kept closed at all times when underway.

5. **HULL OPENINGS:** Any openings that could allow water to enter into the hull or deckhouse should be kept closed when rough weather or sea conditions exist or are anticipated.

6. **WEIGHT CHANGES:** This stability letter has been issued based upon the following lightship parameters:

ABS PLAZA, 16855 NORTHCHASE DRIVE, HOUSTON, TX 77060-6008 USA
TEL: 1-281-877-6000 FAX: 1-281-877-6001 EMAIL: abs-amer@eagle.org

AMERICAS DIVISION

GRETCHEN H
O.N. 1056824
Rodriguez Boatbuilders Hull 166
August 04, 2006

Weight:	238.23	Long Tons
VCG:	11.08	Feet Above Baseline
LCG:	1.48	Feet Aft of frame 21

Any alternation resulting in a change in these parameters will invalidate this stability letter. No fixed ballast or other such weights shall be added, removed and/or relocated without prior authorization. No permanent ballast onboard.

7. **BILGES**: The vessel's bilges and voids shall be kept pumped to minimum content at all times consistent with pollution prevention requirements.

8. **FREEING PORTS:** Deck freeing ports shall be maintained operable and completely unobstructed at all times.

9. **LIST**: You should make every effort to determine the cause of any list of the vessel before taking corrective action.

This stability letter shall be posted under glass or other transparent material in the pilothouse of the vessel so that all pages are visible. It supersedes any stability information previously issued to the vessel.

Thomas. M. Gruber
Principal Engineer
ABS Americas

BOYER TOWING, INC.

P.O. Box 8000
Ketchikan, Alaska 99901
Phone (206) 763-8696 Fax (206) 767-9517

GRETCHEN H.

Radio Call Sign: WDC 9138

Cell No. 206-883-7295

Satellite Phone No. 1-877-598-6279

Official No:	1056824
IMO No:	8964587
Dimensions:	85' x 30' x 9'
Class:	ABS Loadline
Main Propulsion:	Triple Screw Cummins QSK 19 Tier 3 2250 h.p. total
Reduction Gears:	Twin Disc 5202 - 6.1:1 ratio
Propellers:	63" x 72"- 5 Blade S.S. In 64" Type 19 Kart Nozzels
Generators:	Two Lugger / John Deere 4045T, 65kw
Bollard Pull:	(Calculated) 32 Ton
Tow Wire:	1-3/4" x 1,800' 6 x 19 IWRC
Under Rider:	1-3/4" x 550' 6 x 19 IWRC

Department of Homeland Security
United States Coast Guard
National Pollution Funds Center
Arlington VA 20598-7100

COFR# 818659

Vessel Operator
BOYER TOWING, INC.

Name of Vessel
EGLON

COFR information is now fully electronic and you are no longer required to carry a COFR certificate onboard your vessel. If you would like a hardcopy for your records, please right-click and print this certificate.

U.S. COAST GUARD

National Pollution Funds Center

Click on the Document Icon to the left of a record to display a COFR Confirmation in html. You may print the COFR Confirmation by right clicking your mouse and selecting "print" from the list.

VESSEL NAME	VESSEL TYPE	HULL TYPE	GROSS TONNAGE	COFR NUMBER	EFFECTIVE DATE	EXPIRATION DATE	COFR APPLICANT	VIN	INSURANCE CANCEL FLAG
AFOGNAK	BARGE AND SCOW		1296	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D294146	
BAINBRIDGE	BARGE AND SCOW		2855	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D1030553	
BARGE 450-7	BARGE AND SCOW		7132	818659 - 19	8/9/2019	8/9/2022	BOYER TOWING, INC.	D633285	
CALLAPOOYA	BARGE AND SCOW		1192	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D522224	
COOL BOB	BARGE AND SCOW		317	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D1022103	
DIOSKOUROI	BARGE AND SCOW		6434	818659 - 19	8/28/2017	8/28/2020	BOYER TOWING, INC.	D651631	
EGLON	BARGE AND SCOW		1719	818659 - 19	2/3/2020	2/3/2023	BOYER TOWING, INC.	D619729	
HUNTER BAY	BARGE AND SCOW		2192	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D655961	
KLAMATH	BARGE AND SCOW		4412	818659 - 19	8/9/2019	8/9/2022	BOYER TOWING, INC.	D956052	
KLINKWAN	BARGE AND SCOW		2768	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D545095	
KOOTZNAHOO	BARGE AND SCOW		312	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D532599	
KP-1	BARGE AND SCOW		905	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D612443	
KP-2	BARGE AND SCOW		907	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D597024	
KP-3	BARGE AND SCOW		905	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D629728	
KP-4	BARGE AND SCOW		905	818659 - 19	8/9/2019	8/9/2022	BOYER TOWING, INC.	D609944	

< Prev Next >

United States of America
Department of Homeland Security
United States Coast Guard

Certification Date:	27 Jan 2021
Expiration Date:	17 Mar 2026

Certificate of Inspection

For ships on international voyages this certificate fulfills the requirements of SOLAS 74 as amended, regulation V/14, for a SAFE MANNING DOCUMENT.

Vessel Name	Official Number	IMO Number	Call Sign	Service
EGLON	619729			Freight Barge

Hailing Port	Hull Material	Horsepower	Propulsion
KETCHIKAN, AK UNITED STATES	Steel		None

Place Built	Delivery Date	Keel Laid Date	Gross Tons	Net Tons	DWT	Length
TACOMA, WA UNITED STATES	01Jan1980		R- I-1524	R- I-457		R-218.4 I-218.4

Owner
BOYER TOWING INC
5061 SHORELINE DRIVE
KETCHIKAN, AK 99901
UNITED STATES

Operator
BOYER ALASKA BARGE LINES, INC.
7318 FOURTH AVE. SO.
SEATTLE, WA 98108
UNITED STATES

This vessel must be manned with the following licensed and unlicensed Personnel. Included in which there must be 0 Certified Lifeboatmen, 0 Certified Tankermen, 0 HSC Type Rating, and 0 GMDSS Operators.

0 Masters	0 Licensed Mates	0 Chief Engineers	0 Oilers
0 Chief Mates	0 First Class Pilots	0 First Assistant Engineers	
0 Second Mates	0 Radio Officers	0 Second Assistant Engineers	
0 Third Mates	0 Able Seamen	0 Third Assistant Engineers	
0 Master First Class Pilot	0 Ordinary Seamen	0 Licensed Engineers	
0 Mate First Class Pilots	0 Deckhands	0 Qualified Member Engineer	

In addition, this vessel may carry 0 Passengers, 0 Other Persons in crew, 0 Persons in addition to crew, and no Others. Total Persons allowed: 0

Route Permitted And Conditions Of Operation:

---Oceans---

THIS CERTIFICATE VALID ONLY AS LONG AS THE OPERATING RESTRICTIONS ON THE VESSELS CURRENT STABILITY LETTER AND LOADLINE CERTIFICATE ARE OBSERVED.

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

With this Inspection for Certification having been completed at SEATTLE, WA, UNITED STATES, the Officer in Charge, Marine Inspection, SECTOR PUGET SOUND certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

Annual/Periodic/Re-Inspection

Date	Zone	A/P/R	Signature

This certificate issued by:

N. S. MENEFEE, CDR, USCG By Direction

Officer in Charge, Marine Inspection

SECTOR PUGET SOUND

Inspection Zone

United States of America
Department of Homeland Security
United States Coast Guard

Certification Date:	27 Jan 2021
Expiration Date:	17 Mar 2026

Certificate of Inspection

Vessel Name: EGLON

---Hull Exams---

Exam Type	Next Exam	Last Exam	Prior Exam
DryDock	30Sep2023	30Oct2018	16Sep2013
Internal Structure	30Sep2023	12Nov2020	30Oct2018

---Stability---

Type	Issued Date	Office
Letter	08Mar2011	Non CG

--- Liquid/Gas/Solid Cargo Authority/Conditions ---

Authorization:

Total Capacity	Units	Highest Grade Type	Part151 Regulated	Part153 Regulated	Part154 Regulated
			No	No	No

Hazardous Bulk Solids Authority

Conditions Of Carriage

---Lifesaving Equipment---

Total Equipment for 0 Persons

Primary Lifesaving Equipment	Quantity	Capacity		Required
Lifeboats (Total)	0	0	Life Preservers (Adult)	0
Lifeboats (Port)	0	0	Life Preservers (Child)	0
Lifeboats (Starboard)	0	0	Ring Buoys (Total)	0
Motor Lifeboats	0	0	With Lights	0
Lifeboats With Radio	0	0	With Line Attached	0
Rescue Boats/Platforms	0	0	Other	0
Inflatable Rafts	0	0	Immersion Suits	0
Life Floats/Buoyant App	0	0	Portable Lifeboat Radios	0
Inflatable Buoyant Apparatus (IBA)	0	0	Equipped With EPIRB?	NO

--- Fire Fighting Equipment ---

Fire Extinguishers - Hand portable and semi-portable

Quantity	Class Type
3	40-B

END

GENERAL NOTES

1. THIS DRAWING PROVIDES GENERAL ARRANGEMENT INFORMATION FOR THE FREIGHT BARGE "EGLON". THE VESSEL GENERAL CHARACTERISTICS ARE AS FOLLOWS:

LENGTH OVERALL	230'-0"
BREADTH (MOLDED)	60'-0"
DEPTH (MOLDED)	15'-9½"
USCG OFFICIAL NUMBER	619729
BUILDER	ZIDELL DISMANTLING, INC.
HULL NUMBER	600-023
ABS ID NUMBER	8006638

REVISIONS

REV	ZONE		DATE	APPVD

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
07-06-22

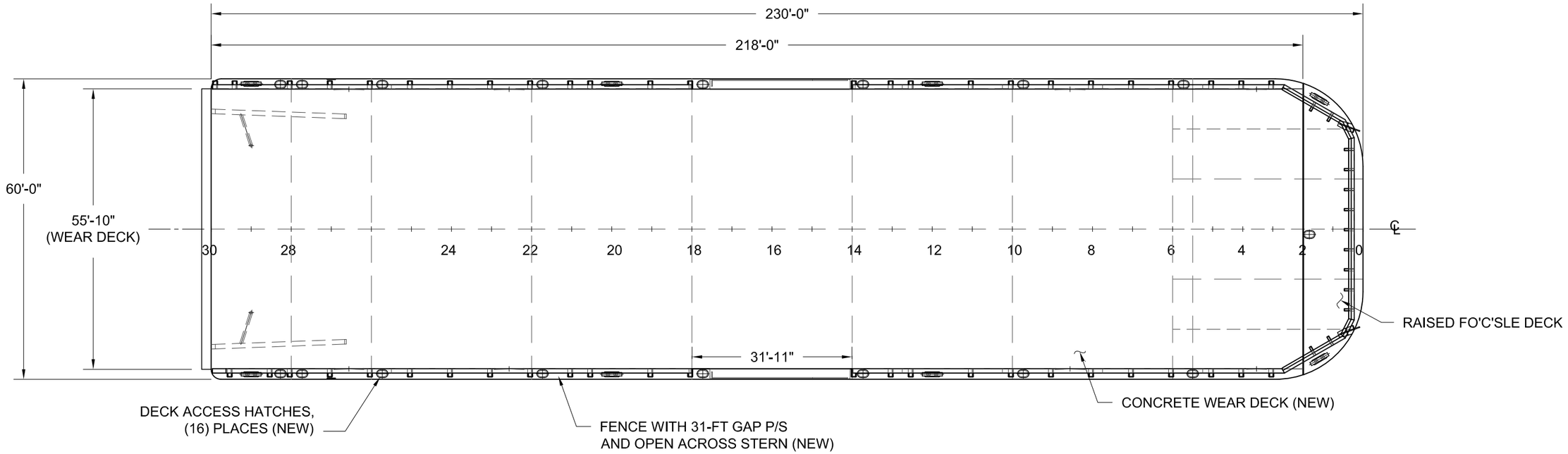
No.	DRAWING No.	TITLE	BY	DATE
5				
4				
3				
2				
1				

REFERENCES

FOR:	PROJECT:	TITLE:
BOYER TOWING, INC.	EGLON	GENERAL ARRANGMENT

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
07-06-2022	jwk	AS NOTED	2022-046-200-01-01	1	4

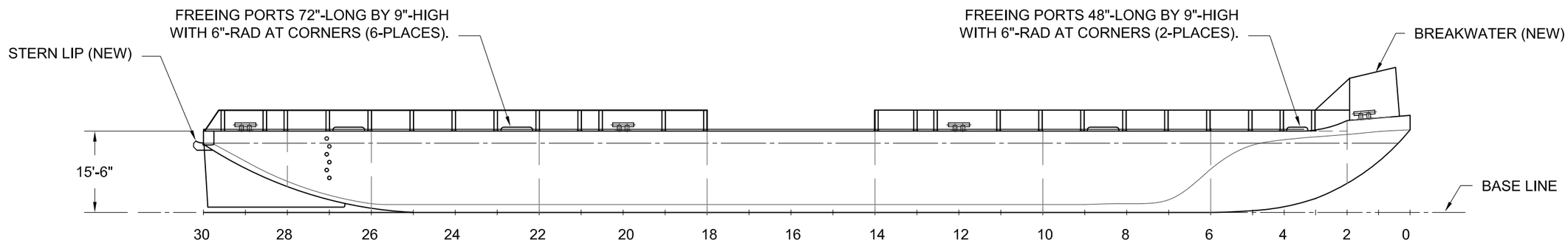
WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



PLAN 2-4E

DECK ARRANGEMENT

SCALE: 3/64" = 1'-0"



ELEV 2-4C

OUTBOARD PROFILE

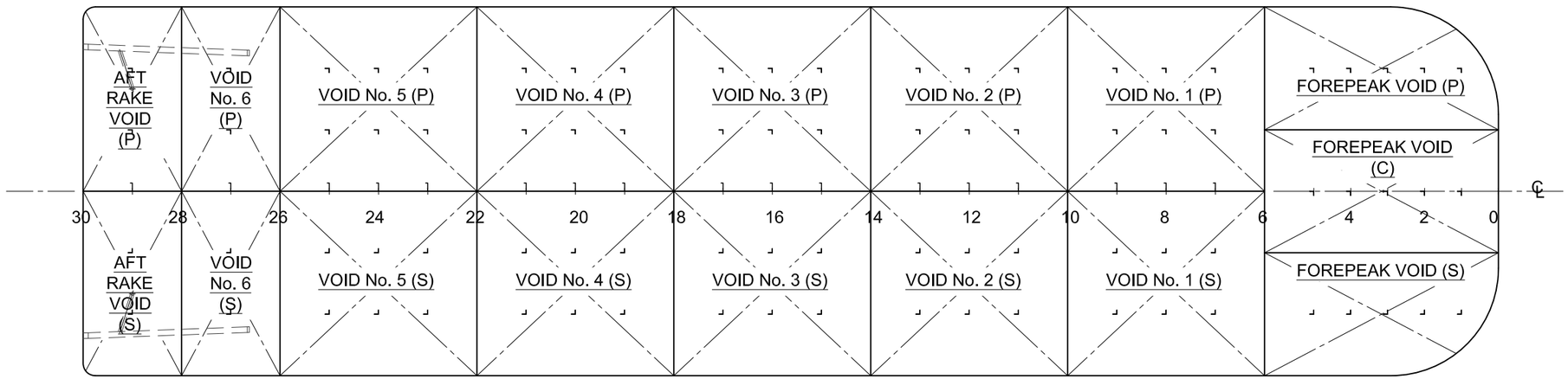
SCALE : 3/64" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
07-06-22

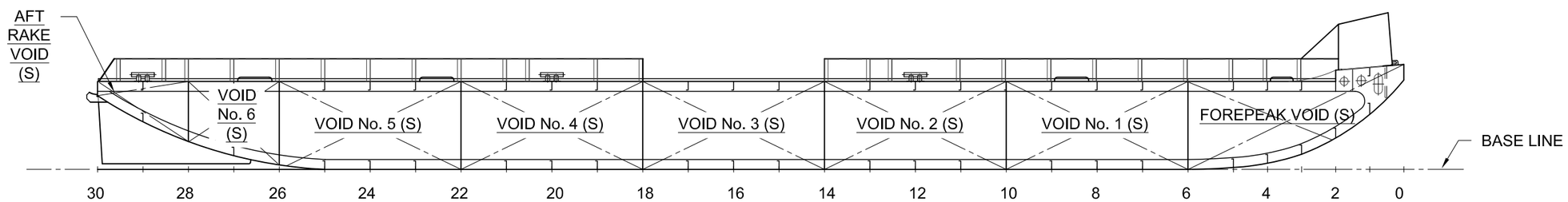
FOR:	PROJECT:	TITLE:
BOYER TOWING, INC.	EGLON	GENERAL ARRANGMENT

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
07-06-2022	jwk	AS NOTED	2022-046-200-01-01	2	4

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



PLAN 3-4E
HOLD ARRANGEMENT
SCALE: 3/64" = 1'-0"



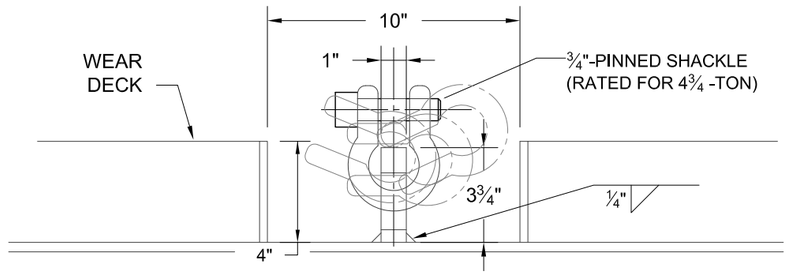
ELEV 3-4C
INBOARD PROFILE (ON C.L. LOOKING TO PORT)
SCALE: 3/64" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
07-06-22

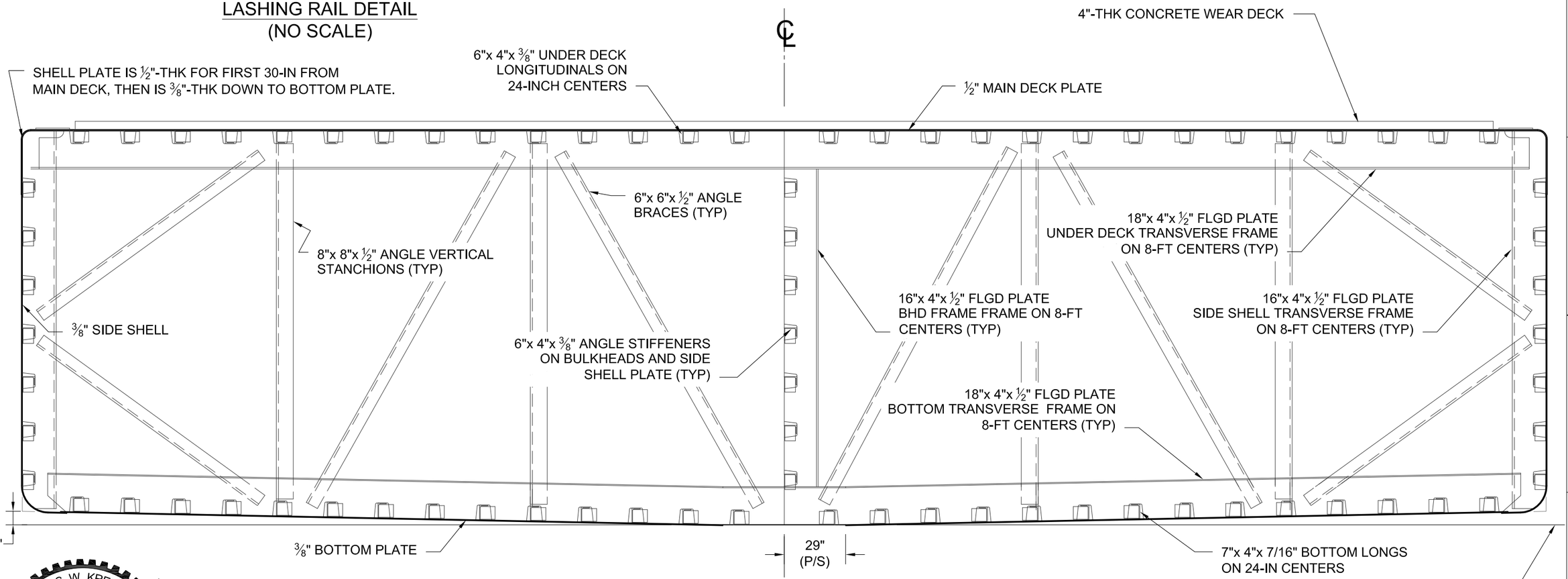
FOR:	PROJECT:	TITLE:
BOYER TOWING, INC.	EGLON	GENERAL ARRANGMENT

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
07-06-2022	jwk	AS NOTED	2022-046-200-01-01	3	4

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



LASHING RAIL DETAIL
(NO SCALE)



SECT 4-4C
TYPICAL MIDSHIP SECTION
SCALE: ¼" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
26117
07-06-22
REGISTERED
PROFESSIONAL ENGINEER

FOR:	PROJECT:	TITLE:
BOYER TOWING, INC.	EGLON	GENERAL ARRANGMENT

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
07-06-2022	jwk	AS NOTED	2022-046-200-01-01	4	4

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com

Certificate No.: 8006638-5998704-021

Deadweight: 3379.7184 LT

INTERNATIONAL LOAD LINE CERTIFICATE

Issued under the provisions of
the International Convention on Load Lines, 1966,
as modified by the Protocol of 1988 relating thereto
under the authority of the Government of

United States of America

Commandant, U.S. Coast Guard

by American Bureau of Shipping

Particulars of Ship

Name of Ship		Distinctive Number or Letters
EGLON		619729
Port of Registry	Length(L) as defined in Article 2(8)	IMO Number[1]
Ketchikan, AK	218 Feet 4-13/16 Inches	--

Freeboard Assigned as: New

Type of Ship: Type B - 25 Reduced

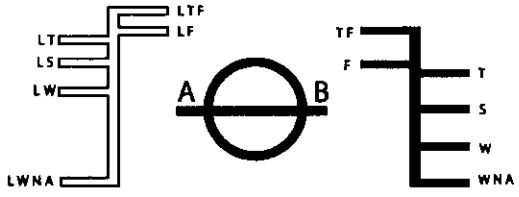
Freeboard from Deck Line:			Load Line	
Tropical	2 Feet 2-11/16 Inches	(T)	3-1/8 Inches	above (S)
Summer	2 Feet 5-13/16 Inches	(S)	Upper edge of line through center of ring	
Winter	2 Feet 8-15/16 Inches	(W)	3-1/8 Inches	below (S)
Winter North Atlantic	2 Feet 10-15/16 Inches	(WNA)	5-1/8 Inches	below (S)
Timber Tropical	N/A	(LT)	N/A	above (LS)
Timber Summer	N/A	(LS)	N/A	above (S)
Timber Winter	N/A	(LW)	N/A	below (LS)
Timber Winter North Atlantic	N/A	(LWNA)	N/A	below (LS)

Allowance for fresh water for all freeboards other than timber: 3-1/8 Inches

For timber freeboards: N/A

The upper edge of the deck line from which these freeboards are measured is:

6 Inches Below The Top of Upper Steel deck at side.



THIS CERTIFICATE IS VALID ONLY SO LONG AS THE OPERATING RESTRICTIONS IN THE VESSEL'S STABILITY LETTER ISSUED BY ABS AMERICAS AND DATED 08 MARCH 2011, ARE OBSERVED. THIS CERTIFICATE IS VALID FOR UNMANNED OPERATION ONLY.

1 In accordance with the IMO Ship Identification Number Scheme, adopted by resolution A.600(15).

THIS IS TO CERTIFY:

1. That the ship has been surveyed in accordance with the requirements of article 14 of the Convention.
2. That the survey showed that the freeboards have been assigned and load lines shown above have been marked in accordance with the Convention.

This certificate is valid until 25 October 2028 [2]

Subject to the annual surveys in accordance with article 14(1)(c) of the Convention.

Completion date of the survey on which this certificate is based: 31 August 2023

Issued at Tacoma, United States (Place of issue of certificate) on 31 August 2023 (Date of issue)

Electronically Signed By
Sell, Graham, Seattle Port
(Surveyor, American Bureau of Shipping)

NOTES:

1. When a ship departs from a port situated on a river or inland waters, deeper loading shall be permitted corresponding to the weight of fuel and all other materials required for consumption between the point of departure and the sea.
2. When a ship is in fresh water of unit density the appropriate load line may be submerged by the amount of fresh water allowance shown above. Where the density is other than unity, an allowance shall be made proportional to the difference between 1.025 and the actual density.
3. It is the owner's responsibility to furnish the master with approved information and instructions for loading and ballasting this vessel to provide guidance as to stability of the vessel under varying conditions of service and to avoid unacceptable stresses in the vessel's structure, as defined in 46 CFR 42.09-1.
4. The Winter North Atlantic Load Line applies only to vessels of 328 ft. in length or less, which enter any part of the North Atlantic Ocean during the winter months as defined by the Load Line Regulations in 46 CFR 42.30-5 and 42.30-35. The periods during which the other seasonal load lines apply in different parts of the world are as stated in the Load Line Regulations in 46 CFR 42.30-5 to 42.30-30, inclusive.
5. This Load Line Certificate will be cancelled by the Commandant, U. S. Coast Guard, if...
   a) The annual surveys have not been carried out within three months either way of each anniversary date of the certificate.
   b) The certificate is not endorsed to show that the ship has been surveyed as indicated in (a).
   c) Material alterations have been made to the hull or superstructures of the vessel such as would necessitate the assignment of an increased freeboard.
   d) The fittings and appliance for the protection of the openings, guardrails, freeing ports, or the means of access to the crew's quarters have not been maintained in as effective a condition as they were when the Certificate was issued.
   e) The structural strength of the ship is lowered to such an extent that the ship is unsafe.
6. When this Certificate has expired or been cancelled, it must be delivered to the Issuing Authority.

ABS

2 Insert the date of expiry as specified by the Administration in accordance with article 19(1) of the Convention. The day and the month of this date correspond to the anniversary date as defined in article 2(9) of the Convention, unless amended in accordance with article 19(8) of the Convention.

ENDORSEMENT FOR ANNUAL SURVEYS

THIS IS TO CERTIFY that, at an annual survey required by article 14(1)(c) of the Convention, the ship was found to comply with the relevant requirements of the Convention.

Annual Survey:
Signed: _____ *(Surveyor, American Bureau of Shipping)*
Place: _____
Date: _____

Annual Survey:
Signed: _____ *(Surveyor, American Bureau of Shipping)*
Place: _____
Date: _____

Annual Survey:
Signed: _____ *(Surveyor, American Bureau of Shipping)*
Place: _____
Date: _____

Annual Survey:
Signed: _____ *(Surveyor, American Bureau of Shipping)*
Place: _____
Date: _____

ANNUAL SURVEY IN ACCORDANCE WITH ARTICLE 19(8)(c)

THIS IS TO CERTIFY that, at a survey in accordance with article 19(8)(c) of the Convention, the ship was found to comply with the relevant requirements of the Convention.

Signed: _____ *(Surveyor, American Bureau of Shipping)*
Place: _____
Date: _____

ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID FOR LESS THAN 5 YEARS WHERE ARTICLE 19(3) APPLIES

The ship complies with the relevant requirements of the Convention, and this certificate shall, in accordance with article 19(3) of the Convention, be accepted as valid until _____

ABS

Signed: _____ *(Surveyor, American Bureau of Shipping)*
Place: _____
Date: _____

ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN COMPLETED AND ARTICLE 19(4) APPLIES

The ship complies with the relevant requirements of the Convention, and this certificate shall, in accordance with article 19(4) of the Convention, be accepted as valid until _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE WHERE ARTICLE 19(5) OR 19(6) APPLIES

This certificate shall, in accordance with article 19(5)/19(6)[3] of the Convention, be accepted as valid until _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE WHERE ARTICLE 19(8) APPLIES

In accordance with article 19(8) of the Convention, the new anniversary date is _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

In accordance with article 19(8) of the Convention, the new anniversary date is _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

ABS

3 Delete as appropriate

BOYER TOWING, INC.

P.O. Box 8000
Ketchikan, Alaska 99901
Phone (206) 763-8696 Fax (206) 767-9517

EGLON

Official No: 619729

Overall Dimensions:

Length:	230 ft.
Beam:	60 ft.
Depth:	16 ft.

Useable Deck:

Length: 219 ft.
Tonnage at Load Line: 3,700 Tons
Beam: 56 ft.

Regulatory:

Built: 1980, Tacoma, WA
Gross Tonnage: 1,719 GRT
Net Tonnage: 1,719 NRT
USCG Certified COI
ABS Load Line

FOUNDED 1862 ABS

Project: 2493050 / CAA
Task: 694328

08 March 2011

Eagle Harbor Engineering, PLLC
5732 Rose Loop NE
Bainbridge Island, WA 98110
Attention: Mr. John D. Van Buskirk

SUBJECT: "EGLON" ABS ID 8006638
Zidell Dismantling Inc., Hull 600-023
230'-0" x 60'-0" x 15'-6"
Unmanned Deck Cargo Barge (U.S. ON 619729)
Stability Review on behalf of the U.S.C.G. – NVIC 3-97

Dear Mr. Van Buskirk,

We have your email of 10 February 2011 and subsequent emails submitting the following:

1. Stability Analysis and Loading Guidance, Report No. 10-012-03, Rev 1 dated March 7, 2011

for our stability review of the subject vessel in association with a molded draft to the summer load line of 12'-6-11/16" (12'-7-1/16" extreme), corresponding to a 1966 Type "B-25%" vessel freeboard of 2'-5-13/16", pursuant to Regulation 10 of the International Convention on Load Lines, 1966.

Having completed our review of submittal item 1, which was prepared based on the previous approved lightship values as per our letter dated 09 February 2011, we wish to advise that provided the subject vessel is loaded in accordance with the operating restrictions in the attached stability letter, the vessel will satisfy the requirements of the following regulations:

a.) 46 CFR 170.170 – Weather Criterion
b.) 46 CFR 174 Subpart B – Special Rules Pertaining to Deck Cargo Barges

Submittal item 1 is stamped "Examined".

Enclosed is the stability letter for the vessel, issued by ABS Americas in accordance with USCG NVIC 3-97. It is the owner's responsibility to ensure that a copy of this letter is maintained with the Load Line Certificate in a suitable location onboard the barge for the guidance of the Master.

The following statement will be placed on the face of the Load Line certificate:

> "This certificate is valid only so long as the operating restrictions in the vessel's stability letter, issued by ABS Americas and dated 08 March 2011, are observed. This certificate is valid for unmanned operation only."

The above submittal will be returned to you electronically, appropriately stamped to indicate our review. One copy of the submittal will be forwarded to the United States Coast Guard upon their request. We have retained one copy of the submittal for our records and files.

An invoice covering the technical service fee for our review will be sent to the owners under a separate cover.

AMERICAS DIVISION
ABS PLAZA 16855 NORTHCHASE DRIVE, HOUSTON, TX 77060 USA
TEL: 1-281-877-6000 FAX: 1-281-877-6001 EMAIL: ABS-amer@eagle.org WEBSITE: www.eagle.org

Electronically published by ABS Houston.
Reference 694328, dated 08-MAR-2011.

Should you have any questions or we can be of any further assistance, please do not hesitate to contact the project engineer Carly Alphonso at (281) 877-6472. Please refer to task number 694328 when responding to this correspondence.

Very truly yours,

Mahmood Billah
Sr. Managing Principal Engineer
Stability & Load Line Group, SED
ABS Americas

FOUNDED 1862 ABS

STABILITY LETTER

08 March 2011

Person in Charge: "EGLON" O.N. 619729
Zidell Dismantling Inc., Hull 600-023
230'-0" x 60'-0" x 15'-6"
Unmanned Deck Cargo Barge

You are responsible for maintaining this barge in a satisfactory stability condition at all times and for following the instructions and precautions listed below. All log entries required by 46 CFR 42.070.20 shall be made prior to getting underway for each voyage.

A deadweight survey, witnessed by the American Bureau of Shipping (ABS) on behalf of the U.S. Coast Guard was conducted on the "EGLON" at Boyer Towing Dock in Seattle, Washington on 21 January 2011. On the basis of that survey, stability calculations have been performed. Results indicate that the stability of the barge "EGLON", as presently outfitted and equipped, is satisfactory for operation on Exposed Waters, provided that the following restrictions are observed.

OPERATING RESTRICTIONS

1. **ROUTE:** Operation on Exposed Waters is permitted for unmanned operations only.

2. **FREEBOARD AND DRAFT:** A maximum mean keel draft of 12'-7-1/16" is permitted. This corresponds to a minimum freeboard of 2'-5-13/16" from 6" below steel upper deck at side measured at amidships, which is located 2'-7-15/16" aft of frame 15. Trim shall not exceed 2 ft forward or 4 feet aft.

3. **WEIGHT CHANGES:** This stability letter has been issued based upon the following light ship characteristics:

Displacement:	873.77	Long Tons
VCG:	11.56	Feet above Baseline
LCG:	6.79	Feet Aft of Frame 15

Any alternations resulting in a change in these parameters will invalidate this stability letter. No fixed ballast or other such weights shall be added, removed and/or relocated without the authorization and supervision of the cognizant OCMI or ABS. This barge is not fitted with permanent ballast.

4. **DECK CARGO:** The cargo must be positively secured against shifting prior to leaving protected waters. Deck cargo should be loaded in accordance with Appendix 8, titled Loading Instructions, bearing the ABS approval stamp dated 08 March 2011. Maximum cargo height of first tier cargo shall not exceed 45 feet above the concrete wear deck.

AMERICAS DIVISION
ABS PLAZA, 16855 NORTHCHASE DRIVE, HOUSTON, TX 77060 USA
TEL: 1-281-877-5800 FAX: 1-281-877-6001 EMAIL: ABS-amer@eagle.org WEBSITE: www.eagle.org

5. **HULL OPENINGS**: Any openings that could allow water to enter into the hull should be kept closed when underway.

6. **TANKS**: All tanks/spaces shall be kept empty at all times.

7. **WATERTIGHT BULKHEADS**: No watertight bulkheads may be removed or altered without the authorization and supervision of the cognizant Officer in Charge, Marine Inspection (OCMI).

8. **BILGES**: The vessel's bilges and voids shall be kept pumped to minimum contents at all times consistent with pollution prevention requirements.

9. **LIST**: You should make every effort to determine the cause of any list of the vessel before taking corrective action.

This stability letter, along with the Load Line Certificate, shall be maintained in a suitable location onboard the barge for the guidance of the Master. It supersedes any stability information previously issued to the barge.

Mahmood Billah
Sr. Managing Principal Engineer
Stability & Load Line Group, SED
ABS Americas

Attachment: Appendix 8 – Loading Instructions (Bearing ABS Houston Approval stamp dated 08 March 2011)

AMERICAS DIVISION
ABS PLAZA, 16855 NORTHCHASE DRIVE, HOUSTON, TX 77060 USA
TEL: 1-281-877-5000 FAX: 1-281-877-5001 Email: ABS-amer@eagle.org www.eagle.org

Appendix 8 – Loading Instructions

"EGLON" O.N. 619729

"EGLON" O.N. 619729

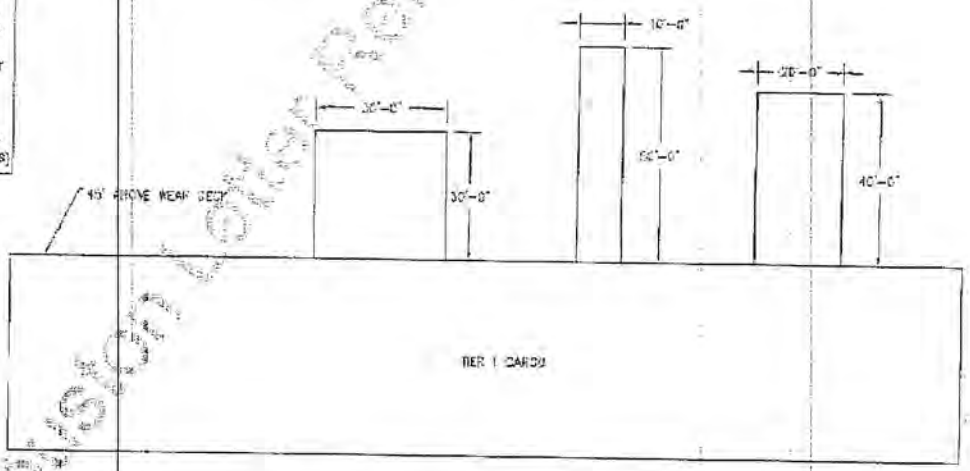
The following guidelines are to be observed when loading the barge to insure safe operation:

1. All compartments on the barge are voids and are to be kept dry at all times. All watertight manholes are to be kept closed.

2. All cargo is to be adequately secured to prevent shifting at sea.

3. For windage profile purposes, the cargo is divided into two tiers. The first tier extends the length of the wear deck and to a height of 45 feet above the wear deck. The second tier is immediately above the first tier. If there is any cargo which falls in the second tier, the maximum cargo height is not to exceed that shown in the attached Chart 1 "Cargo Height". The cargo height is limited by the area of the second tier cargo. The area is to be calculated by summing the length of all items in the second tier and multiplying by the maximum height of the tallest item above the 45 foot level.

   As an example, if there were three items extending above the 45 foot level as follows:
   - 20' long x 85' high (40' above 45' level)
   - 10' long x 95' high (50' above 45' level)
   - 30' long x 75' high (30' above 45' level)



The total length of the Tier 2 cargo is 20'+10'+30' = 60'. The maximum height of the Tier 2 cargo is 50'. The area for the Tier 2 cargo is then 60' x 50' = 3,000 square feet. Enter Chart 1 with the 3,000 square feet on the x-axis, go vertically to the curve and then horizontally to the y-axis and read the maximum allowable cargo height as 123 feet above the wear deck.

"EGLON" O.N. 619729

The actual maximum cargo height from above is 95' above the wear deck so this load would be acceptable.

4. The trim of the barge is not to exceed 2 feet by the bow or 4 feet by the stern. This trim is the difference in drafts at the draft marks.

5. The maximum cargo VCG (vertical center of gravity) is to comply with that shown in either Table 1 or Chart 3. These show the maximum height of the VCG of the cargo above the wear deck for a given draft or deadweight. Deadweight includes the weight of cargo, dunnage, securing gear, etc.

To illustrate the use of Table 1, assume the total cargo weight will be 2,800 LT. Go down the Deadweight LT column of Table 1. The 2,800 figure is between the 2,777 and 2,871 LT. Using the corresponding rows in the table, the draft will be between 11 ft and 11.25 ft. The maximum cargo VCG should be taken at the deeper draft unless the figures are interpolated. At the 11.25 ft draft the maximum cargo VCG is 10.65 ft above the wear deck.

The same example can be done using Charts 2 and 3 without requiring interpolation. Enter Chart 2 "Cargo DWT" on the y-axis at 2,800 LT and then go horizontally to the DWT curve and then vertically down to the x-axis where the draft can be read as approximately 11.05 ft. Enter Chart 3 "Maximum Cargo VCG" on the x-axis at the 11.05 ft draft and go vertically up to the VCG curve and then horizontally over to the y-axis and read the maximum VCG at about 11.6 feet above the wear deck.

CHART 1
Cargo Height
"EGLON" O.N. 619729

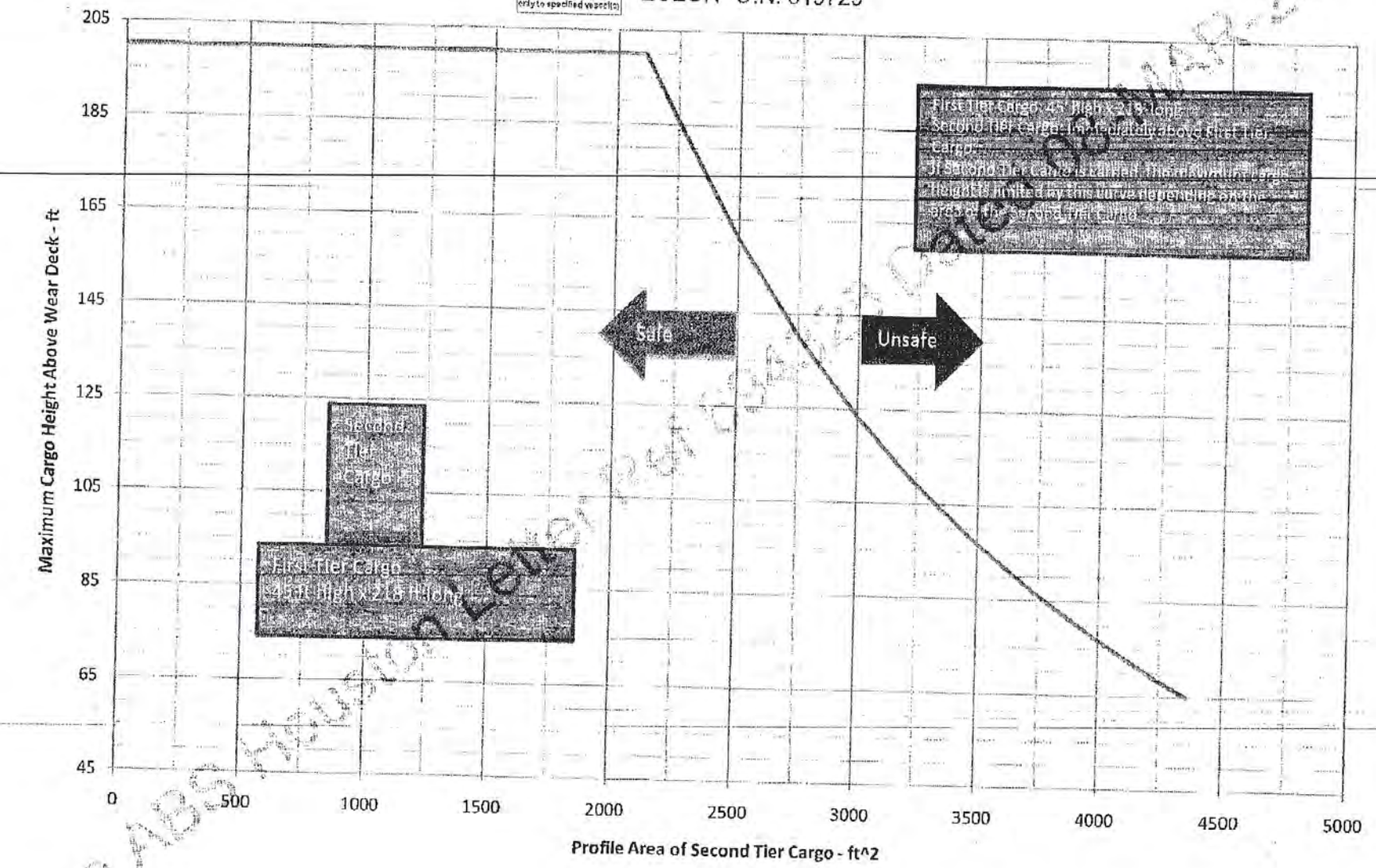


TABLE 1
"EGLON" O.N. 619729

Keel Draft	Displacement	Deadweight		Maximum VCG of Deadweight
Ft	LT	LT	ST	Ft Above Wear Deck
3.5	998	124	139	285.56
3.75	1,080	206	231	204.90
4	1,163	289	324	140.63
4.25	1,246	372	417	107.17
4.5	1,330	456	511	93.80
4.75	1,414	541	605	83.22
5	1,499	625	700	72.90
5.25	1,584	711	796	65.18
5.5	1,670	796	892	59.60
5.75	1,756	882	988	54.82
6	1,843	969	1,085	50.57
6.25	1,929	1,056	1,182	46.90
6.5	2,017	1,143	1,280	43.71
6.75	2,104	1,231	1,378	40.84
7	2,192	1,319	1,477	38.23
7.25	2,281	1,407	1,576	35.84
7.5	2,370	1,496	1,675	33.64
7.75	2,459	1,585	1,775	31.58
8	2,549	1,675	1,876	29.65
8.25	2,639	1,765	1,977	27.83
8.5	2,729	1,855	2,078	26.11
8.75	2,819	1,946	2,179	24.45
9	2,910	2,037	2,281	22.85
9.25	3,002	2,128	2,383	21.33
9.5	3,094	2,220	2,486	19.85
9.75	3,186	2,312	2,589	18.42
10	3,278	2,404	2,693	17.03
10.25	3,371	2,497	2,797	15.68
10.5	3,464	2,590	2,901	14.37
10.75	3,557	2,683	3,005	13.08
11	3,651	2,777	3,110	11.84
11.25	3,745	2,871	3,216	10.65
11.5	3,840	2,966	3,322	9.40
11.75	3,936	3,062	3,430	7.97
12	4,033	3,159	3,538	6.40
12.25	4,129	3,255	3,646	4.83
12.5	4,226	3,352	3,754	3.31
12.59	4,261	3,387	3,793	2.78

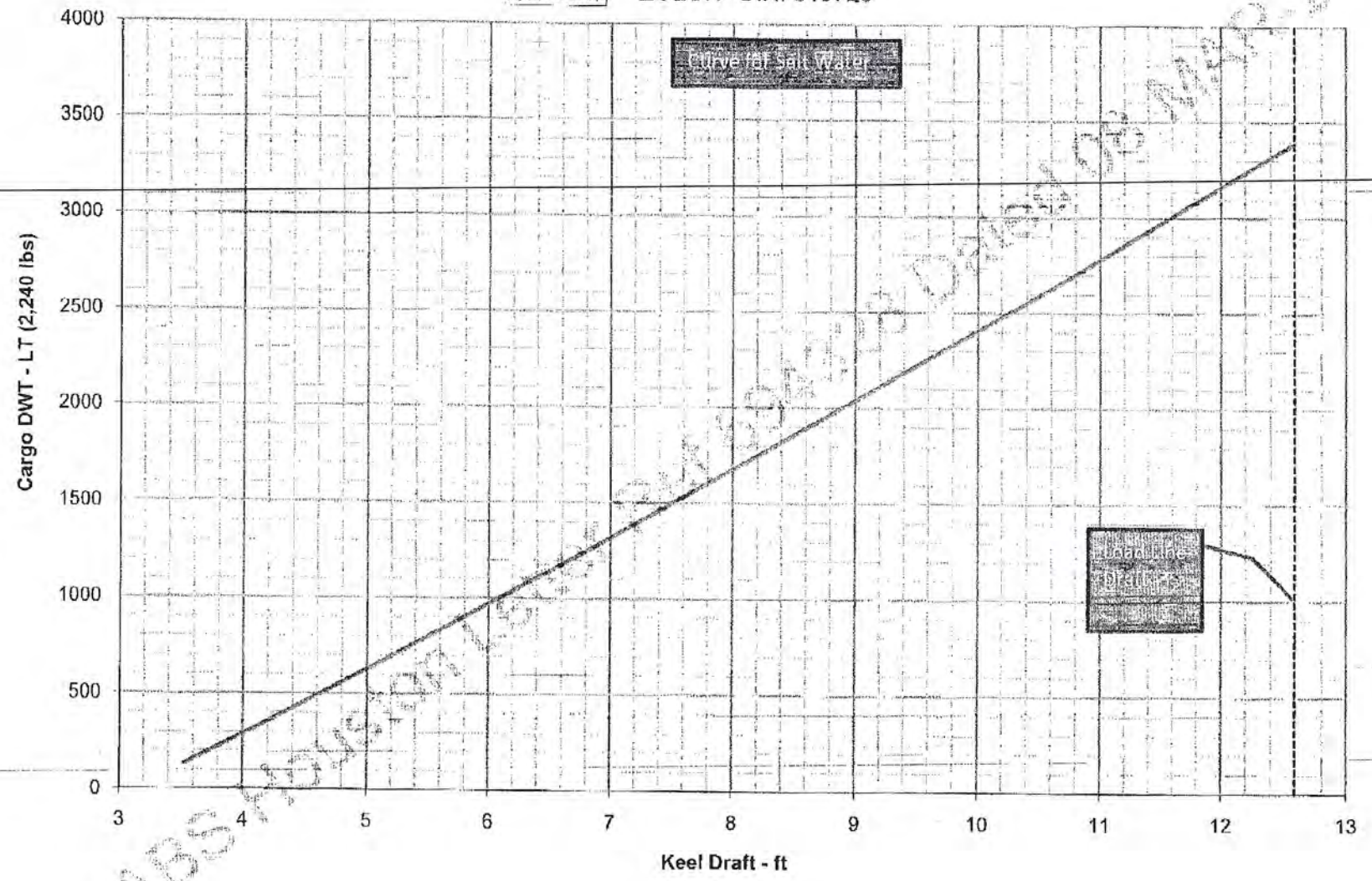
APPROVED by ABS on behalf of the USCG for consistency with applicable USCG Regulations subject to any amendments or comments in ABS letter dated ABS USCG approval applies only to specified vessel(s).

APPROVED by ABS on behalf of the USCG for compliance with applicable USCG Regulations subject to any amendments or comments in ABS letter

ABS

USCG approval applies only to specified vessel(s)

CHART 2
Cargo DWT
"EGLON" O.N. 619729



COPY: DUPLICATE

Certificate Number:
A110119I

International Tonnage Certificate (1969)

Issued under the provisions of the
International Convention on Tonnage Measurement of Ships, 1969,
under the authority of the Government of the

UNITED STATES OF AMERICA

for which the Convention came into force on February 10, 1983, by

AMERICAN BUREAU OF SHIPPING

Name of Ship	Distinctive Number or Letters	Port of Registry	* Date
EGLON	ON 619729	PORTLAND, OR	1980

* Date on which the keel was laid or the ship was at a similar state of construction (Article 2(6)), or date on which ship underwent alterations or modifications of a major character (Article 3(2)(b)), as appropriate.

MAIN DIMENSIONS

Length (Article 2(8))	Breadth (Regulation 2(3))	Molded Depth amidships to Upper Deck (Regulation 2(2))
66.57 m (218.4 ft)	18.29 m (60.0 ft)	4.72 m (15.5 ft)

THE TONNAGES OF THE SHIP ARE:

GROSS TONNAGE 1524

NET TONNAGE 457

The Government of the United States of America certifies that the tonnages of this ship have been determined in accordance with the provisions of the International Convention on Tonnage Measurement of Ships, 1969.

Issued at Houston, TX

Date issued March 9, 2011

The undersigned declares that he is duly authorized by the United States Government to issue this certificate.

M. TREDER
Principal Engineer

Issuing Officer

Rev. 2-98

BOYER TOWING INC.
SINCE 1935

EGLON DECK BARGE

LOAD TABLE

FT.	IN.	CARGO WEIGHT	FT.	IN.	CARGO WEIGHT	FT.	IN.	CARGO WEIGHT
3'	1"		6'	0"	1085	9'	0"	2,282
3'	2"	17	6'	1"	1,118	9'	1"	2,316
3'	3"	48	6'	2"	1,150	9'	2"	2,350
3'	4"	78	6'	3"	1,183	9'	3"	2,384
3'	5"	109	6'	4"	1,215	9'	4"	2,418
3'	6"	139	6'	5"	1,248	9'	5"	2,452
3'	7"	170	6'	6"	1,281	9'	6"	2,487
3'	8"	201	6'	7"	1,313	9'	7"	2,521
3'	9"	232	6'	8"	1,346	9'	8"	2,555
3'	10"	262	6'	9"	1,379	9'	9"	2,590
3'	11"	293	6'	10"	1,412	9'	10"	2,624
4'	0"	324	6'	11"	1,444	9'	11"	2,659
4'	1"	355	7'	0"	1,477	10'	0"	2,693
4'	2"	386	7'	1"	1,510	10'	1"	2,728
4'	3"	418	7'	2"	1,543	10'	2"	2,762
4'	4"	449	7'	3"	1,576	10'	3"	2,797
4'	5"	480	7'	4"	1,610	10'	4"	2,832
4'	6"	511	7'	5"	1,643	10'	5"	2,866
4'	7"	543	7'	6"	1,676	10'	6"	2,901
4'	8"	574	7'	7"	1,709	10'	7"	2,936
4'	9"	606	7'	8"	1,743	10'	8"	2,971
4'	10"	637	7'	9"	1,776	10'	9"	3,006
4'	11"	669	7'	10"	1,809	10'	10"	3,041
5'	0"	701	7'	11"	1,843	10'	11"	3,076
5'	1"	733	8'	0"	1,876	11'	0"	3,111
5'	2"	764	8'	1"	1,910	11'	1"	3,146
5'	3"	796	8'	2"	1,943	11'	2"	3,181
5'	4"	828	8'	3"	1,977	11'	3"	3,216
5'	5"	860	8'	4"	2,011	11'	4"	3,251
5'	6"	892	8'	5"	2,044	11'	5"	3,287
5'	7"	924	8'	6"	2,078	11'	6"	3,323
5'	8"	956	8'	7"	2,112	11'	7"	3,359
5'	9"	989	8'	8"	2,146	11'	8"	3,394
5'	10"	1,021	8'	9"	2,180	11'	9"	3,430
5'	11"	1,053	8'	10"	2,214	11'	10"	3,466
			8'	11"	2,248	11'	11"	3,502

FT.	IN.	CARGO WEIGHT
12'	0"	3428
12'	1"	3,574
12'	2"	3,610
12'	3"	3,646
12'	4"	3,683
12'	5"	3,719
12'	6"	3,755
12'	7"	3,791
12'	8"	3,827
12'	9"	3,863
12'	10"	3,899
12'	11"	3,936
13'	0"	3,972

*Cargo capacities in short tons for salt water

DHS, USCG, CG-1270 (REV. 01-23)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
EGLON	619729	600-023	1980

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
KETCHIKAN AK	STEEL	NO

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
1524 GT ITC	457 NT ITC	218.4	60.0	15.5

PLACE BUILT

TACOMA WA

OWNERS

BOYER TOWING INC

OPERATIONAL ENDORSEMENTS

REGISTRY
COASTWISE

MANAGING OWNER

BOYER TOWING INC
5061 SHORELINE DRIVE
PO BOX 8000
KETCHIKAN AK 99901

RESTRICTIONS
NONE

ENTITLEMENTS
NONE

REMARKS
NONE

ISSUE DATE
FEBRUARY 21, 2024

THIS CERTIFICATE EXPIRES

MARCH 31, 2025

Christopher G. Wadden

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

This certificate is not valid for operation of the vessel until the vessel is marked with the name, official number, and hailing port as shown on the certificate. The original certificate must be kept aboard the vessel at all times when in operation and must be presented upon the demand of federal, state or local officials for law enforcement purposes. Vessels with only a recreational endorsement may not engage in commercial trade.

Documented vessels may be registered by states for tax and other purposes and may be required to display a state decal. Renewal is the responsibility of the owner. This certificate becomes invalid upon a change in ownership, change in state of incorporation, or a change in any other element shown on the certificate other than change of address. This certificate is invalid for any vessel other than one documented solely for recreation when the vessel is placed under the command of a person who is not a citizen of the U.S. The vessel and its equipment are liable to seizure and forfeiture to the U.S. government and the owner is liable for a civil penalty of not more than $10,000.00 per violation. Each day of a continuing violation is a separate violation.

Any change in address of the managing owner must be reported promptly to the NVDC. You may contact NVDC at nvdc.w.webmaster@uscg.mil.

Note: The certificate on the face of this document is not conclusive evidence of title in any proceeding where ownership is in issue. Complete records are on file at the NVDC. The sale or transfer section below is provided for convenience only.

SALE OR TRANSFER OF VESSEL

100% OF THE VESSEL IDENTIFIED HEREIN IS SOLD (TRANSFERRED) BY THE OWNER(S) NAMED ON THE FACE OF THIS CERTIFICATE TO THE FOLLOWING PERSON(S). ADDRESS MUST BE INCLUDED.

_____

_____

IF SOLD (TRANSFERRED) TO MORE THAN ONE PERSON, THE PURCHASER(S)/TRANSFEREE(S) ARE TENANTS IN COMMON, EACH OWNING AN EQUAL UNDIVIDED INTEREST, UNLESS OTHERWISE INDICATED HEREIN: CHECK ONLY ONE OF THE FOLLOWING BLOCKS TO SHOW ANOTHER FORM OF OWNERSHIP.

☐ JOINT TENANCY WITH RIGHT OF SURVIVORSHIP ☐ TENANCY BY THE ENTIRETIES ☐ COMMUNITY PROPERTY

☐ OTHER

SIGNATURE OF SELLER(S)/TRANSFEROR(S) OR PERSONS SIGNING ON BEHALF OF SELLER(S)/TRANSFEROR(S):

DATE SIGNED:

NAME(S) OF PERSON(S) SIGNING ABOVE, AND LEGAL CAPACITY IN WHICH SIGNED (E.G. OWNER, AGENT, TRUSTEE, EXECUTOR)

ACKNOWLEDGMENT (TO BE COMPLETED BY NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED BY A LAW OR A STATE OR THE UNITED STATES TO TAKE OATHS.)

STATE:

ON _____ THE PERSON(S) NAMED
(DATE)

COUNTY:

ABOVE ACKNOWLEDGED EXECUTION OF THE FOREGOING INSTRUMENT IN THEIR STATED CAPACITY(IES) FOR THE PURPOSES THEREIN CONTAINED.

_____
NOTARY PUBLIC
MY COMMISSION EXPIRES:

PRIVACY ACT STATEMENT

IN ACCORDANCE WITH 5 USC 552(A). THE FOLLOWING INFORMATION IS PROVIDED TO YOU WHEN SUPPLYING PERSONAL INFORMATION TO THE U.S. COAST GUARD:

1. AUTHORITY. SOLICITATION OF THIS INFORMATION IS AUTHORIZED BY 46 USC CHAPTER 313 AND 46 CFR, PART 67.
2. THE PRINCIPAL PURPOSES FOR WHICH THIS INSTRUMENT IS TO BE USED ARE:
   (A) TO PROVIDE A RECORD, AVAILABLE FOR PUBLIC INSPECTION AND COPYING, OF THE SALE OR OTHER CHANGE IN OWNERSHIP OF A VESSEL WHICH IS DOCUMENTED, WILL BE DOCUMENTED, OR HAS BEEN DOCUMENTED PURSUANT TO 46 USC, CHAPTER 121.
   (B) RETENTION FOR EXAMINATION BY GOVERNMENTAL AUTHORITIES AND MEMBERS OF THE GENERAL PUBLIC.
3. THE ROUTINE USE WHICH MAY BE MADE OF THIS INFORMATION INCLUDES DEVELOPMENT OF STATISTICAL DATA CONCERNING DOCUMENTED VESSELS.
4. DISCLOSURE OF THE INFORMATION REQUESTED ON THIS FORM IS VOLUNTARY. HOWEVER, FAILURE TO PROVIDE THE INFORMATION COULD PRECLUDE FILING OF A BILL OF SALE AND DOCUMENTATION OF THE VESSEL NAMED HEREIN PURSUANT TO 46 USC CHAPTER 121. MOREOVER, BILLS OF SALE WHICH ARE NOT FILED ARE NOT DEEMED TO BE VALID AGAINST ANY PERSON HAVING ACTUAL KNOWLEDGE OF THE SALE. (46 USC 31321 (A)).

AN AGENCY MAY NOT CONDUCT OR SPONSOR, AND A PERSON IS NOT REQUIRED TO RESPOND TO A COLLECTION OF INFORMATION UNLESS IT DISPLAYS A VALID OMB CONTROL NUMBER.

THE COAST GUARD ESTIMATES THAT THE AVERAGE BURDEN FOR THIS FORM IS 20 MINUTES FOR COMPLETING AND 3 MINUTES FOR FILING. YOU MAY SUBMIT ANY COMMENTS CONCERNING THE ACCURACY OF THIS BURDEN ESTIMATE OR ANY SUGGESTIONS FOR REDUCING THE BURDEN TO: U.S. COAST GUARD, NATIONAL VESSEL DOCUMENTATION CENTER, 792 T J JACKSON DRIVE, FALLING WATERS, WEST VIRGINIA 25419 OR OFFICE OF MANAGEMENT AND BUDGET, PAPERWORK REDUCTION PROJECT (1625-0027), WASHINGTON, DC 20503.

DHS, USCG, CG-1270 (REV. 01-23)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
KUMTUX	636360	432	1981

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
KETCHIKAN AK	STEEL	NO

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
1714 GT ITC 1628 GRT	514 NT ITC 1628 NRT	219.7	64.5	14.2

PLACE BUILT

MARYSVILLE WA

OWNERS

BOYER TOWING INC

OPERATIONAL ENDORSEMENTS

REGISTRY
COASTWISE

MANAGING OWNER

BOYER TOWING INC
5061 SHORELINE DR
PO BOX 8000
KETCHIKAN AK 99901

RESTRICTIONS
NONE

ENTITLEMENTS
NONE

REMARKS
NONE

ISSUE DATE
AUGUST 24, 2023

THIS CERTIFICATE EXPIRES

SEPTEMBER 30, 2024

Christopher G. Washburn

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

PREVIOUS EDITION OBSOLETE, THIS CERTIFICATE MAY NOT BE ALTERED

This certificate is not valid for operation of the vessel until the vessel is marked with the name, official number, and hailing port as shown on the certificate. The original certificate must be kept aboard the vessel at all times when in operation and must be presented upon the demand of federal, state or local officials for law enforcement purposes. Vessels with only a recreational endorsement may not engage in commercial trade.

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☐ OTHER

SIGNATURE OF SELLER(S)/TRANSFEROR(S) OR PERSONS SIGNING ON BEHALF OF SELLER(S)/TRANSFEROR(S):

DATE SIGNED:

NAME(S) OF PERSON(S) SIGNING ABOVE, AND LEGAL CAPACITY IN WHICH SIGNED (E.G. OWNER, AGENT, TRUSTEE, EXECUTOR)

ACKNOWLEDGMENT (TO BE COMPLETED BY NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED BY A LAW OR A STATE OR THE UNITED STATES TO TAKE OATHS.)

STATE:

ON _____ THE PERSON(S) NAMED
(DATE)

COUNTY:

ABOVE ACKNOWLEDGED EXECUTION OF THE FOREGOING INSTRUMENT IN THEIR STATED CAPACITY(IES) FOR THE PURPOSES THEREIN CONTAINED.

_____
NOTARY PUBLIC
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AX 686067422419

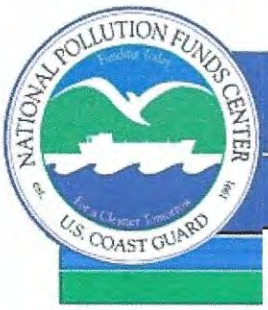
Department of Homeland Security
United States Coast Guard
National Pollution Funds Center
Arlington VA 20598-7100

COFR# 818659

Vessel Operator
BOYER TOWING, INC.

Name of Vessel
KUMTUX

COFR information is now fully electronic and you are no longer required to carry a COFR certificate onboard your vessel. If you would like a hardcopy for your records, please right-click and print this certificate.



U.S. COAST GUARD

National Pollution Funds Center

Click on the Document Icon to the left of a record to display a COFR Confirmation in html. You may print the COFR Confirmation by right clicking your mouse and selecting "print" from the list.

VESSEL NAME	VESSEL TYPE	HULL TYPE	GROSS TONNAGE	COFR NUMBER	EFFECTIVE DATE	EXPIRATION DATE	COFR APPLICANT	VIN	INSURANCE CANCEL FLAG
KUMTUX	BARGE AND SCOW		1628	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D636360	
LITTLE BOYER	BARGE AND SCOW		1946	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D582292	
MADISON BAY	BARGE AND SCOW		2941	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D644434	
MARIE H	TUG AND TOWBOAT		455	818659 - 19	11/19/2019	11/19/2022	BOYER TOWING, INC.	D7716969	
MARTIN RAY	BARGE AND SCOW		5690	818659 - 19	8/9/2019	8/9/2022	BOYER TOWING, INC.	D570177	
MILLER BAY	BARGE AND SCOW		2164	818659 - 19	9/13/2019	9/13/2022	BOYER TOWING, INC.	D1233697	
MISTER ED	BARGE AND SCOW		537	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D566700	
PORPOISE	BARGE AND SCOW		339	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D285683	
SEABECK	BARGE AND SCOW		2377	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D993445	
THLINGIT	BARGE AND SCOW		858	818659 - 19	6/10/2019	6/10/2022	BOYER TOWING, INC.	D503216	

< Prev Next >

Version 3.7 -- This version is designed for Internet Explorer 11.

United States of America
Department of Homeland Security
United States Coast Guard

Certification Date:	15 May 2023
Expiration Date:	15 May 2028

Certificate of Inspection

For ships on international voyages this certificate fulfills the requirements of SOLAS 74 as amended, regulation V/14, for a SAFE MANNING DOCUMENT.

Vessel Name	Official Number	IMO Number	Call Sign	Service
KUMTUX	636360			Freight Barge

Hailing Port	Hull Material	Horsepower	Propulsion
KETCHIKAN, AK UNITED STATES	Steel		None

Place Built	Delivery Date	Keel Laid Date	Gross Tons	Net Tons	DWT	Length
MARYSVILLE WA UNITED STATES	01Jan1981		R-1628 I-1714	R-1628 I-514		R-219.7 I-210.7

Owner
BOYER TOWING INC
5061 SHORELINE DRPO BOX 8000
KETCHIKAN, AK 99901
UNITED STATES

Operator
BOYER TOWING INC
5061 SHORELINE DRIVEPO BOX 8000
KETCHIKAN, AK 99901
UNITED STATES

This vessel must be manned with the following licensed and unlicensed Personnel. Included in which there must be 0 Certified Lifeboatmen, 0 Certified Tankermen, 0 HSC Type Rating, and 0 GMDSS Operators.

0 Masters	0 Licensed Mates	0 Chief Engineers	0 Oilers
0 Chief Mates	0 First Class Pilots	0 First Assistant Engineers	
0 Second Mates	0 Radio Officers	0 Second Assistant Engineers	
0 Third Mates	0 Able Seamen	0 Third Assistant Engineers	
0 Master First Class Pilot	0 Ordinary Seamen	0 Licensed Engineers	
0 Mate First Class Pilots	0 Deckhands	0 Qualified Member Engineer	

In addition, this vessel may carry 0 Passengers, 0 Other Persons in crew, 0 Persons in addition to crew, and no Others. Total Persons allowed: 0

Route Permitted And Conditions Of Operation:

---Oceans---

THIS CERTIFICATE IS VALID ONLY AS LONG AS THE OPERATING RESTRICTIONS ON THE VESSEL'S CURRENT STABILITY LETTER AND LOADLINE CERTIFICATE ARE OBSERVED.

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

With this Inspection for Certification having been completed at Seattle, WA, UNITED STATES, the Officer in Charge, Marine Inspection, SECTOR PUGET SOUND certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

Annual/Periodic/Re-Inspection

Date	Zone	A/P/R	Signature

This certificate issued by:

Digitally signed by MOODY.KIRA.MICHELLE.10266 77579
Date: 2023.09.06 07:36:30 -07'00'

K. M. MOODY, CDR, USCG, By Direction

Officer in Charge, Marine Inspection

SECTOR PUGET SOUND

Inspection Zone

United States of America
Department of Homeland Security
United States Coast Guard

Certification Date:	15 May 2023
Expiration Date:	15 May 2028

Certificate of Inspection

Vessel Name: KUMTUX

---Hull Exams---

Exam Type	Next Exam	Last Exam	Prior Exam
DryDock	31Oct2025	26Oct2020	12Nov2015
Internal Structure	31Oct2025	31Mar2023	26Oct2020

---Stability---

Type	Issued Date	Office
Letter	02Dec1980	USCG

--- Liquid/Gas/Solid Cargo Authority/Conditions ---

Authorization:

Total Capacity	Units	Highest Grade Type	Part151 Regulated	Part153 Regulated	Part154 Regulated
			No	No	No

Hazardous Bulk Solids Authority

Not Authorized

Conditions Of Carriage

---Lifesaving Equipment---

Total Equipment for 0 Persons

Primary Lifesaving Equipment	Quantity	Capacity		Required
Lifeboats (Total)	0	0	Life Preservers (Adult)	0
Lifeboats (Port)	0	0	Life Preservers (Child)	0
Lifeboats (Starboard)	0	0	Ring Buoys (Total)	0
Motor Lifeboats	0	0	With Lights	0
Lifeboats With Radio	0	0	With Line Attached	0
Rescue Boats/Platforms	0	0	Other	0
Inflatable Rafts	0	0	Immersion Suits	0
Life Floats/Buoyant App	0	0	Portable Lifeboat Radios	0
Inflatable Buoyant Apparatus (IBA)	0	0	Equipped With EPIRB?	NO

END

Certificate No.: 8125884-5117034-027

Deadweight: 0

INTERNATIONAL LOAD LINE CERTIFICATE

Issued under the provisions of
the International Convention on Load Lines, 1966,
as modified by the Protocol of 1988 relating thereto
under the authority of the Government of

United States of America

Commandant, U.S. Coast Guard

by American Bureau of Shipping

Particulars of Ship

Name of Ship		Distinctive Number or Letters
KUMTUX		636360
Port of Registry	Length(L) as defined in Article 2(8)	IMO Number[1]
Ketchikan, AK	210 Feet 8-5/8 Inches	--

Freeboard Assigned as: New

Type of Ship: Type B - Reduced

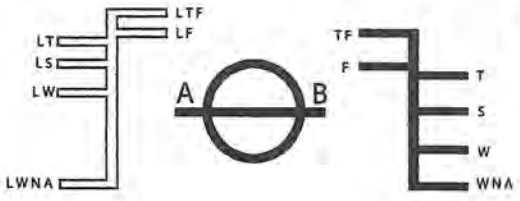
Freeboard from Deck Line:			Load Line	
Tropical	2 Feet 6-7/8 Inches	(T)	2-3/4 Inches	above (S)
Summer	2 Feet 9-5/8 Inches	(S)	Upper edge of line through center of ring	
Winter	3 Feet 3/8 Inches	(W)	2-3/4 Inches	below (S)
Winter North Atlantic	3 Feet 2-3/8 Inches	(WNA)	4-3/4 Inches	below (S)
Timber Tropical	N/A	(LT)	N/A	above (LS)
Timber Summer	N/A	(LS)	N/A	above (S)
Timber Winter	N/A	(LW)	N/A	below (LS)
Timber Winter North Atlantic	N/A	(LWNA)	N/A	below (LS)

Allowance for fresh water for all freeboards other than timber: 2-3/4 Inches

For timber freeboards: N/A

The upper edge of the deck line from which these freeboards are measured is:

Opposite The Top of Upper Steel deck at side.



STABILITY HAS BEEN CHECKED AND FOUND SATISFACTORY PROVIDED RESTRICTIONS IN U.S. COAST GUARD'S ATTACHED STABILITY LETTER DATED 02 DECEMBER 1980 ARE OBSERVED. THIS CERTIFICATE IS VALID FOR UNMANNED OPERATION ONLY.

1 In accordance with the IMO Ship Identification Number Scheme, adopted by resolution A.600(15).

THIS IS TO CERTIFY:

1. That the ship has been surveyed in accordance with the requirements of article 14 of the Convention.
2. That the survey showed that the freeboards have been assigned and load lines shown above have been marked in accordance with the Convention.

This certificate is valid until 31 October 2025 [2]
Subject to the annual surveys in accordance with article 14(1)(c) of the Convention.

Completion date of the survey on which this certificate is based: 07 April 2021

Issued at Seattle, United States *(Place of issue of certificate)* on 21 January 2022 *(Date of issue)*

Electronically Signed By
Barrette, Shannon, Seattle Port
(Surveyor, American Bureau of Shipping)

NOTES:

1. When a ship departs from a port situated on a river or inland waters, deeper loading shall be permitted corresponding to the weight of fuel and all other materials required for consumption between the point of departure and the sea.
2. When a ship is in fresh water of unit density the appropriate load line may be submerged by the amount of fresh water allowance shown above. Where the density is other than unity, an allowance shall be made proportional to the difference between 1.025 and the actual density.
3. It is the owner's responsibility to furnish the master with approved information and instructions for loading and ballasting this vessel to provide guidance as to stability of the vessel under varying conditions of service and to avoid unacceptable stresses in the vessel's structure, as defined in 46 CFR 42.09-1.
4. The Winter North Atlantic Load Line applies only to vessels of 328 ft. in length or less, which enter any part of the North Atlantic Ocean during the winter months as defined by the Load Line Regulations in 46 CFR 42.30-5 and 42.30-35. The periods during which the other seasonal load lines apply in different parts of the world are stated in the Load Line Regulations 46 CFR 42.30-5 to 42.30-30, inclusive.
5. This Load Line Certificate will be cancelled by the Commandant, U. S. Coast Guard, if...
   a) The annual surveys have not been carried out within three months either way of each anniversary date of the certificate.
   b) The certificate is not endorsed to show that the ship has been surveyed as indicated in (a).
   c) Material alterations have been made to the hull or superstructures such as would necessitate the assignment of an increased freeboard.
   d) The fittings and appliance for the protection of the openings, guardrails, freeing ports, or the means of access to the crew's quarters have not been in as effective a condition as they were when the Certificate was issued.
   e) The structural strength of the ship is lowered to such an extent that the ship is unsafe.
6. When this Certificate has expired or been cancelled, it must be delivered to the Assigning Authority.

ABS

2 Insert the date of expiry as specified by the Administration in accordance with article 19(1) of the Convention. The day and the month of this date correspond to the anniversary date as defined in article 2(9) of the Convention, unless amended in accordance with article 19(8) of the Convention.

ENDORSEMENT FOR ANNUAL SURVEYS

THIS IS TO CERTIFY that, at an annual survey required by article 14(1)(c) of the Convention, the ship was found to comply with the relevant requirements of the Convention.

Annual Survey:
Signed: S. BARCHET (Surveyor, American Bureau of Shipping)
Place: SEATTLE, WASHINGTON USA
Date: 21 JANUARY 2022

Annual Survey:
Signed: _____ (Surveyor, American Bureau of Shipping)
Place: _____
Date: _____

Annual Survey:
Signed: _____ (Surveyor, American Bureau of Shipping)
Place: _____
Date: _____

Annual Survey:
Signed: _____ (Surveyor, American Bureau of Shipping)
Place: _____
Date: _____

ANNUAL SURVEY IN ACCORDANCE WITH ARTICLE 19(8)(c)

THIS IS TO CERTIFY that, at a survey in accordance with article 19(8)(c) of the Convention, the ship was found to comply with the relevant requirements of the Convention.

Signed: _____ (Surveyor, American Bureau of Shipping)
Place: _____
Date: _____

ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID FOR LESS THAN 5 YEARS WHERE ARTICLE 19(3) APPLIES

The ship complies with the relevant requirements of the Convention, and this certificate shall, in accordance with article 19(3) of the Convention, be accepted as valid until _____

ABS

Signed: _____ (Surveyor, American Bureau of Shipping)
Place: _____
Date: _____

ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN COMPLETED AND ARTICLE 19(4) APPLIES

The ship complies with the relevant requirements of the Convention, and this certificate shall, in accordance with article 19(4) of the Convention, be accepted as valid until _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE WHERE ARTICLE 19(5) OR 19(6) APPLIES

This certificate shall, in accordance with article 19(5)/19(6)[3] of the Convention, be accepted as valid until _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE WHERE ARTICLE 19(8) APPLIES

In accordance with article 19(8) of the Convention, the new anniversary date is _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

In accordance with article 19(8) of the Convention, the new anniversary date is _____

Signed: _____
(Surveyor, American Bureau of Shipping)

Place: _____

Date: _____

ABS

3 Delete as appropriate

Cert. No. A941576I

INTERNATIONAL TONNAGE CERTIFICATE (1969)

Issued under the provisions of the International Convention on Tonnage Measurement of Ships, 1969, under the authority of the Government of

The United States of America

(full official designation of country)

For which the Convention came into force on 10 February 1983

THE AMERICAN BUREAU OF SHIPPING

Name of Ship	Distinctive Numbers or Letters	Port of Registry	* Date
KUMTUX	636360	JUNEAU, ALASKA	8 OCTOBER 1980

* Date on which the keel was laid or the ship was at a similar stage of construction (Article 2(6)), or date on which the ship underwent alterations or modifications of a major character (Article 3(2) (b)), as appropriate.

MAIN DIMENSIONS

Length (Article 2(5))	Breadth (Regulation 2(3))	Moulded Depth amidships to Upper Deck (Regulation 2(2))
64.22M (210.7 FT)	19.51M (64.0 FT)	4.33M (14.2 FT)

THE TONNAGES OF THE SHIP ARE:

GROSS TONNAGE 1714=
NET TONNAGE 514=

This is to certify that the tonnages of this ship have been determined in accordance with the provisions of the International Convention of Tonnage Measurement of Ships, 1969.

Issued at Houston, Texas U.S.A.
(place of issue of certificate)

8 AUGUST 1994
(date of issue)

If signed, the following paragraph is to be added:
The undersigned declares that he is duly authorized by the said Government to issue this certificate.

(Signature)
Secretary
American Bureau of Shipping

LL–115E

BOYER TOWING, INC.

P.O. Box 8000
Ketchikan, Alaska 99901
Phone (206) 763-8696 Fax (206) 767-9517

KUMTUX

Official No: 636360

Overall Dimensions:

Length: 220ft.
Beam: 64ft.
Depth: 14ft.

Useable Deck:

Length: 210ft.
Cargo Capacity: 3000 Tons
Beam: 61 ft.

Regulatory:

Gross Tonnage: 3,000 GRT
Net Tonnage: 3,000 NRT
USCG Certified
ABS A-1 Barge

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

Commander (mmt)
Twelfth Coast Guard Dist.
630 Sansome Street
San Francisco, CA 94126
Tel: (415) 556-1515
TX: 330459

Kunitux

16710/HALVORSEN BARGE
2 December 1980

Nickum & Spaulding Associates, Inc.
Attn: Mr. Gordon C. Snyder
911 Western Avenue
Seattle, WA 98104

Subj: HALVORSEN BARGE - Hull 432
220' x 64' x 14' Deck Cargo Barge
Oceans
Halvorsen Towing, Inc.
Specification, Structure, Stability

Ref: (a) Nickum & Spaulding transmittal dated 16 October 1980, Ref. #80058
(b) ABS letter to Nickum & Spaulding dated 10 October 1980

Gentlemen:

The specifications for the subject vessel, submitted with reference (a), are returned stamped approved. This approval does not attest to the completeness of the specifications, nor does it signify that they are free from details which are inconsistent with the required plans that will be submitted. Review of these specifications was done on the premise that this vessel will be certificated for an ocean route under the provisions of Title 46, Code of Federal Regulations, Parts 90 through 97. Plan review of the required drawings will be conducted using this subchapter, other applicable CFR subchapters specified therein, and applicable Navigation and Vessel Inspection Circulars.

Enclosures (1) and (2) are approved subject to the construction, installation, workmanship and testing being satisfactory to the cognizant Officer in Charge, Marine Inspection and the following comment:

1. Approval of these drawings is subject to the inclusion of all requirements, amendments and annotations by the American Bureau of Shipping.

Enclosures (3) through (5) are marked examined.

The stability of the subject vessel has been reviewed with respect to loadline assignment. The subject vessel has adequate intact stability for all normal operating conditions in ocean service for a maximum draft of 11 feet - 6 inches (molded), provided the following restrictions are complied with:

1. No bulk liquids may be carried.

2. When operating as a deck cargo barge:

Draft	Allowable VCGC ABV Mn Dk	
Below 10'	22'-0"	(22.0')

Subj: Halvorsen Barge - Hull 432
Specification, Structure, Stability

2 December 1980

10'-0"	21'-6"	(21.5')
10'-6"	17'-2"	(17.17')
11'-0"	12'-4.5"	(12.38')
11'-6" (loadline)	7'-0"	(7.0')

3. For intermediate drafts between tabulated values, the allowable CVCG shall be interpolated, or the value for the deeper draft shall be utilized.

4. The maximum height of deck cargo shall not exceed twice the height of the cargo center of gravity above the main deck.

5. Trim by the bow or stern shall not exceed 2'-2".

The above restrictions (1) through (5) must be placed on or attached to the Load Line Certificate.

By copy of this letter the American Bureau of Shipping will be notified of the acceptability of the subject vessel stability.

Sincerely,

GEORGE J. BUFFLEBEN
Commander, U. S. Coast Guard
Chief, Merchant Marine Technical Branch
By direction of the District Commander

Encls: (1) Dwg. 80058-3, Midship & Typical Sections
(2) Dwg. 80058-4, (2 shts), Scantling Plan
(3) Dwg. 80058-1, Outboard Profile & Deck
(4) Dwg. 80058-2, Lines & Offsets
(5) Dwg. 80058-5, Stability Calculations

cc: OCMI, Seattle w/encls & Specifications
ABS, New York w/o
ABS, Seattle w/o
COMDT (G-MMT-5/12) w/o

BOYER TOWING INC.
SINCE 1935

KUMTUX DECK BARGE

LOAD TABLE

FT.	IN	CARGO WEIGHT	FT.	IN.	CARGO WEIGHT	FT.	IN	CARGO WEIGHT
3'	5.77"	0.0	6'	0"	914.5	8'	7"	1,946.70
3'	6"	6.5	6'	1"	946.4	8'	8"	1,981.30
3'	7"	35.2	6'	2"	978.3	8'	9"	2,016.20
3'	8"	64.0	6'	3"	1,010.4	8'	10"	2,051.10
3'	9"	92.9	6'	4"	1,042.6	8'	11"	2,086.00
3'	10"	122.0	6'	5"	1,074.8	9'	0"	2,121.10
3'	11"	151.1	6'	6"	1,107.2	9'	1"	2,156.30
4'	0"	180.3	6'	7"	1,139.6	9'	2"	2,191.60
4'	1"	209.8	6'	8"	1,172.1	9'	3"	2,227.00
4'	2"	239.2	6'	9"	1,204.8	9'	4"	2,262.60
4'	3"	268.9	6'	10"	1,237.6	9'	5"	2,298.20
4'	4"	298.7	6'	11"	1,270.4	9'	6"	2,333.90
4'	5"	328.5	7'	0"	1,303.3	9'	7"	2,369.70
4'	6"	358.6	7'	1"	1,336.4	9'	8"	2,405.50
4'	7"	388.6	7'	2"	1,369.5	9'	9"	2,441.40
4'	8"	418.7	7'	3"	1,402.8	9'	10"	2,477.40
4'	9"	448.9	7'	4"	1,436.1	9'	11"	2,513.40
4'	10"	479.3	7'	5"	1,469.5	10'	0"	2,549.40
4'	11"	509.7	7'	6"	1,503.1	10'	1"	2,585.50
5'	0"	540.2	7'	7"	1,536.7	10'	2"	2,621.70
5'	1"	570.8	7'	8"	1,570.4	10'	3"	2,657.90
5'	2"	601.6	7'	9"	1,604.3	10'	4"	2,694.20
5'	3"	632.4	7'	10"	1,638.2	10'	5"	2,730.50
5'	4"	663.4	7'	11"	1,672.2	10'	6"	2,766.90
5'	5"	694.4	8'	0"	1,706.4	10'	7"	2,803.30
5'	6"	725.5	8'	1"	1,740.6	10'	8"	2,839.80
5'	7"	756.8	8'	2"	1,774.7	10'	9"	2,876.30
5'	8"	788.1	8'	3"	1,808.9	10'	10"	2,912.90
5'	9"	819.6	8'	4"	1,843.2	10'	11"	2,949.60
5'	10"	851.1	8'	5"	1,877.6	11'	0"	2,986.20
5'	11"	882.8	8'	6"	1,912.1	11'	1"	3,023.00

FT.	IN.	CARGO WEIGHT
11'	2"	3,059.7
11'	3"	3,096.6
11'	4"	3,133.5
11'	5"	3,170.4
11'	6"	3,207.4
11'	7"	3,244.4
11'	8"	3,281.5

*Cargo capacities in short tons for salt water

AMERICAN BUREAU OF SHIPPING

CHARTERED
1862

NUMBER
8125884

CERTIFICATE OF CLASSIFICATION

KUMTUX

Description DECK CARGO BARGE

Dimensions, Length 220 Feet *Breadth* 64 Feet *Depth* 15 Feet

Tonnage, Gross 1714 *Net* 514

Owner BOYER TOWING INC.

Shipbuilder MALTBY TANK & BARGE INC

Engine Builder

Year of Build 01 June 1981 *Hull Number* 432

This is to Certify that the above has been surveyed in accordance with the Rules of this Bureau and entered in the Record with the Class

AMERICAN BUREAU OF SHIPPING ORIGINAL CERTIFICATE

✠A1, Barge

10 November 2016
Issue Date

31 October 2020
Expiration Date

Chief Surveyor

M. C. Adams
Assistant Secretary

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of American Bureau of Shipping and is issued solely for the use of the Bureau, its committees, its clients or other authorized entities. The classification certificate is a representation only that the vessel, structure, item of material, equipment or machinery or any other item covered by this certificate has met one or more of the Rules of American Bureau of Shipping. ***The certificate is governed by the terms and conditions on the reverse side hereof****, and governed by the Rules and standards of American Bureau of Shipping who shall remain the sole judge therof.*

TERMS AND CONDITIONS

1. The issuance and interpretation of the class certificate is subject to the terms and conditions of the "Request for Classification and Agreement" (hereinafter "the Agreement") which are hereby incorporated by reference.

2. REPRESENTATIONS AS TO CLASSIFICATION

Classification is a representation by ABS as to the structural and mechanical fitness for a particular use or service in accordance with its Rules and standards. The Rules of American Bureau of Shipping are not meant as a substitute for the independent judgment of professional designers, naval architects and marine engineers nor as a substitute for the quality control procedures of shipbuilders, engine builders, steel makers suppliers, manufacturers and sellers of marine vessels, materials, machinery or equipment. ABS being a technical society can only act through Surveyors or others who are believed by it to be skilled and competent.

ABS represents solely to the vessel Owner or other client (hereinafter "Client") of ABS that when assigning class it will use due diligence in the development of Rules, Guides and standards and in using normally applied testing standards, procedures and techniques as called for by the Rules, Guides, standards or other criteria of ABS for the purpose of assigning and maintaining class. ABS further represents to the Client of ABS that its certificates and reports evidence compliance only with one or more of the Rules, Guides, standards or other criteria of ABS in accordance with the terms of such certificate or report. Under no circumstances whatsoever are these representations to be deemed to relate to any third party.

3. RESPONSIBILITY AND LIABILITY

It is understood and agreed that the class certificate (hereinafter referred to as "certificate") issued as part of the services rendered under the Agreement is a representation only that the vessel, structure, item of material, equipment or machinery or any other item covered by a certificate has met one or more of the Rules or standards of American Bureau of Shipping and is issued solely for the use of ABS, its committees, clients or other authorized entities. The validity, applicability and interpretation of a certificate issued under the terms of or in contemplation of the Agreement is governed by the Rules and standards of American Bureau of Shipping who shall remain the sole judge thereof. Nothing contained in this certificate or in any report issued in contemplation of this certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied nor to create any interest, right, claim or benefit in any third party. It is understood and agreed that nothing expressed herein is intended or shall be construed to give any person, firm or corporation, other than the parties hereto, any right, remedy or claim hereunder or under any provisions herein contained; all provisions hereof are for the sole and exclusive benefit of the parities hereto.

4. SUSPENSION AND CANCELLATION OF CLASS

The continuance of the Classification of any vessel is conditional upon the Rule requirements for periodical, damage and other surveys being duly carried out. The Committee reserves the right to reconsider, withhold, suspend, or cancel the class of any vessel or any part of the machinery for noncompliance with the Rules, for defects reported by the Surveyors which have not been rectified in accordance with their recommendations, or for nonpayment of fees which are due on account of Classification, Statutory and Cargo Gear Surveys. Suspension or cancellation of class may take effect immediately or after a specified period of time.

5. LIMITATION

ABS makes no representations beyond those contained herein and in the provisions of the request for classification regarding its reports, statements, plan review, surveys, certificates or other services.

6. HOLD HARMLESS

THE PARTY TO WHOM THIS CERTIFICATE IS ISSUED, OR HIS ASSIGNEE OR SUCCESSOR IN INTEREST, AGREES TO RELEASE ABS AND TO INDEMNIFY AND HOLD HARMLESS ABS FROM AND AGAINST ANY AND ALL CLAIMS, DEMANDS, LAWSUITS, OR ACTIONS FOR DAMAGES, INCLUDING LEGAL FEES, TO PERSONS OR OTHER LEGAL ENTITIES AND/OR PROPERTY, TANGIBLE, INTANGIBLE OR OTHERWISE WHICH MAY BE BROUGHT AGAINST ABS INCIDENTAL TO, ARISING OUT OF OR IN CONNECTION WITH THE WORK DONE, SERVICES PERFORMED OR MATERIAL TO BE FURNISHED UNDER THIS CERTIFICATE, EXCEPT FOR THOSE CLAIMS CAUSED SOLELY AND COMPLETELY BY THE NEGLIGENCE OF ABS, ITS AGENTS, EMPLOYEES, OFFICERS, DIRECTORS OR SUBCONTRACTORS.

ANY OTHER INDIVIDUAL OR PARTY WHO CLAIMS A RIGHT HEREUNDER OR WHO CLAIMS TO BE A BENEFICIARY OR ANY PORTION OF THE SERVICES RENDERED IN COMTEMPLATION OF THIS CERTIFICATE SHALL INDEMNIFY AND HOLD ABS HARMLESS FROM AND AGAINST ALL CLAIMS, DEMANDS, LAWSUITS OR ACTIONS FOR DAMAGES, INCLUDING LEGAL FEES, TO PERSONS AND/OR PROPERTY, TANGIBLE, INTANGIBLE OR OTHERWISE WHICH MAY BE BROUGHT AGAINST ABS BY ANY PERSON OR ENTITY AS A RESULT OF THE SERVICES PERFORMED IN COMTEMPLATION OF THIS CERTIFICATE, EXCEPT FOR THOSE CLAIMS CAUSED SOLELY AND COMPLETELY BY THE NEGLIGENCE OF ABS, ITS AGENTS, EMPLOYEES, OFFICERS, DIRECTORS, OR SUBCONTRACTORS.

7. LIMITATION OF LIABILITY

THE COMBINED LIABILITY OF AMERICAN BUREAU OF SHIPPING, ITS COMMITTEES, OFFICERS, EMPLOYEES, AGENTS OR SUB-CONTRACTORS FOR ANY LOSS, CLAIM OR DAMAGE ARISING FROM ITS NEGLIGENT PERFORMANCE OR NONPERFORMANCE OF ANY OF ITS SERVICES OR FROM BREACH OF ANY IMPLIED OR EXPRESS WARRANTY OF WORKMANLIKE PERFORMANCE IN CONNECTION WITH THOSE SERVICES, OR FROM ANY OTHER REASON, TO ANY PERSON, CORPORATION, PARTNERSHIP, BUSINESS ENTITY, SOVEREIGN, COUNTRY OR NATION, WILL BE LIMITED TO THE GREATER OF A) $100,000 OR B) AN AMOUNT EQUAL TO TEN TIMES THE SUM ACTUALLY PAID FOR THE SERVICES ALLEGED TO BE DEFICIENT.

THE LIMITATION OF LIABILITY MAY BE INCREASED UP TO AN AMOUNT TWENTY-FIVE (25) TIMES THAT SUM PAID FOR SERVICES UPON RECEIPT OF CLIENT'S WRITTEN REQUEST AT OR BEFORE THE TIME OF PERFORMANCE OF SERVICES AND UPON PAYMENT BY CLIENT OF AN ADDITIONAL FEE OF $10.00 FOR EVERY $1,000.00 INCREASE IN THE LIMITATION.

8. ARBITRATION

Any and all differences and disputes of whatsoever nature arising out of this certificate shall be put to arbitration before a board of three persons, consisting of one arbitrator to be appointed by ABS, one by Client and one by the two so chosen. The decision of any two of the three on any point or points shall be final. Until such time as the arbitrators finally close the hearings either party shall have the right by written notice served on the arbitrators and on an officer of the other party to specify further disputes or differences under this certificate for hearing and determination. The arbitrators may grant any relief other than punitive damages which they, or a majority of them, deem just and equitable and within the scope of the agreement of the parties, including, but not limited to specific performance. Awards made in pursuance to this clause may include costs including a reasonable allowance for attorney's fees and judgment may be entered upon any award made hereunder in any court having jurisdiction. ABS and Client hereby mutually waive any and all claims to punitive damages in any forum.

Client shall be required to notify ABS within thirty (30) days of the commencement of any arbitration between it and third parties which may concern ABS's work in connection with this certificate and shall afford ABS an opportunity, at ABS's sole option, to participate in the arbitration.

ADDITIONAL INFORMATION

Major Hull Modification

NEW HULL SECTION DESCRIPTION: _____

DATE OF MODIFICATION: _____

ICE CLASS NOTATION

MAXIMUM ICE DRAUGHT FWD: _____ AMIDSHIPS: _____ AFT: _____

MINIMUM ICE DRAUGHT FWD: _____ AMIDSHIPS: _____ AFT: _____

AUTOMATION NOTATION

NUMBER OF UNATTENDED HOURS:

OPERATING RESTRICTIONS

ADDITIONAL NOTATIONS

RECORD COMMENTS

ANNUAL SURVEY ENDORSEMENT

Place SEATTLE, WASHINGTON, USA Date 10 NOVEMBER 2016

(Signature) S BARRETTE Surveyor to the American Bureau of Shipping

Place KETCHIKAN, ALASKA, USA Date 06 FEBRUARY 2018

(Signature) FRANK T. ZUNE, SEATTLE, WA Surveyor to the American Bureau of Shipping

Place Seattle, WA, USA Date 28 January 2019

(Signature) Brendan Ward Surveyor to the American Bureau of Shipping

Place SEATTLE WA USA Date 19 DECEMBER 2019

(Signature) LAUREL JOHNSON Surveyor to the American Bureau of Shipping

INTERMEDIATE SURVEY ENDORSEMENT

Place Seattle, WA, USA Date 28 January 2019

(Signature) Brendan Ward Surveyor to the American Bureau of Shipping

EXTENSION OF CLASS CERTIFICATE
THIS CLASSIFICATION CERTIFICATE IS EXTENDED UNTIL

Date

Place _____ Date _____

(Signature) Surveyor to the American Bureau of Shipping

Please note that the classification of this vessel is automatically suspended and the certificate automatically becomes invalid, if not endorsed annually within three months of the due date of the annual survey, or if the certificate is not endorsed for completion of the intermediate survey within three months of the due date of the third annual survey.

THIS CERTIFICATE IS NOT A CONFIRMATION OF CLASS

BOYER TOWING, INC.

KP - 1&2
DECK BARGE

LOAD TABLE

Average Draft	Cargo Weight	Average Draft	Cargo Weight	Average Draft	Cargo Weight
2'-3"	7.8	5'-3"	737.3	8'-3"	1,503.3
2'-4"	27.2	5'-4"	758.5	8'-4"	1,553.2
2'-5"	46.7	5'-5"	779.7	8'-5"	1,576.2
2'-6"	66.2	5'-6"	801.0	8'-6"	1,599.2
2'-7"	85.7	5'-7"	822.3	8'-7"	1,622.3
2'-8"	105.3	5'-8"	843.6	8'-8"	1,645.5
2'-9"	125.0	5'-9"	865.1	8'-9"	1,668.6
2'-10"	144.7	5'-10"	886.5	8'-10"	1,691.9
2'-11"	164.4	5'-11"	908.0	8'-11"	1,715.1
3'-0"	184.2	6'-0"	929.6	9'-0"	1,738.5
3'-1"	204.1	6'-1"	951.2	9'-1"	1,761.8
3'-2"	224.0	6'-2"	972.9	9'-2"	1,785.3
3'-3"	243.9	6'-3"	994.6	9'-3"	1,808.7
3'-4"	263.9	6'-4"	1,016.3	9'-4"	1,832.2
3'-5"	283.9	6'-5"	1,038.1	9'-5"	1,855.8
3'-6"	304.0	6'-6"	1,060.0	9'-6"	1,879.4
3'-7"	324.2	6'-7"	1,081.9	9'-7"	1,903.1
3'-8"	344.4	6'-8"	1,103.9	9'-8"	1,926.8
3'-9"	364.6	6'-9"	1,125.9	9'-9"	1,950.6
3'-10"	384.9	6'-10"	1,147.9	9'-10"	1,974.4
3'-11"	405.2	6'-11"	1,170.0	9'-11"	1,998.3
4'-0"	425.6	7'-0"	1,192.2	10'-0"	2,022.2
4'-1"	446.1	7'-1"	1,214.4	10'-1"	1,046.1
4'-2"	466.5	7'-2"	1,286.6	10'-2"	2,070.1
4'-3"	487.1	7'-3"	1,258.9	10'-3"	2,094.1
4'-4"	507.7	7'-4"	1,281.3	10'-4"	2,118.1
4'-5"	528.3	7'-5"	1,303.7	10'-5"	2,142.1
4'-6"	549.0	7'-6"	1,326.1	10'-6"	2,166.1
4'-7"	569.7	7'-7"	1,348.6	10'-7"	2,190.1
4'-8"	590.5	7'-8"	1,371.1	10'-8"	2,214.1
4'-9"	611.3	7'-9"	1,393.7	10'-9"	2,238.1
4'-10"	632.2	7'-10"	1,416.4	10'-10"	2,262.1
4'-11"	653.1	7'-11"	1,439.1	10'-11"	2,286.1
5'-0"	674.1	8'-0"	1,461.8	11'-0"	2,310.1
5'-1"	695.1	8'-1"	1,484.6		
5'-2"	716.2	8'-2"	1,507.4		

Weight given in short tons for operation in sea water.

ELLIOTT BAY DESIGN GROUP, LTD.

BOYER TOWING, INC.

P.O. Box 8000
Ketchikan, Alaska 99901
Phone (206) 763-8696 Fax (206) 767-9517

KP-2

Official No: 597024

Overall Dimensions:

Length: 180 ft.
Beam: 50 ft.
Depth: 11.5 ft.

Useable Deck:

Length: 170 ft.
Cargo Capacity: 1,800 Tons
Beam: 45 ft.

Regulatory:

Gross Tonnage: 907 GRT
Net Tonnage: 907 NRT

DHS, USCG, CG-1270 (REV. 01-22)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
KP 3	629728	622	1980

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
KETCHIKAN AK	STEEL	NO

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
1556 GT ITC 905 GRT	788 NT ITC 905 NRT	180.0	50.0	11.5

PLACE BUILT

PORTLAND OR

OWNERS

BOYER TOWING INC

OPERATIONAL ENDORSEMENTS

REGISTRY
COASTWISE

MANAGING OWNER

BOYER TOWING, INC.
5061 SHORELINE DRIVE
PO BOX 8000
KETCHIKAN AK 99901

RESTRICTIONS
NONE

ENTITLEMENTS
NONE

REMARKS
NONE

ISSUE DATE
AUGUST 02, 2023

THIS CERTIFICATE EXPIRES

AUGUST 31, 2024

Christian H. Waldhelm

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

This certificate is not valid for operation of the vessel until the vessel is marked with the name, official number, and hailing port as shown on the certificate. The original certificate must be kept aboard the vessel at all times when in operation and must be presented upon the demand of federal, state or local officials for law enforcement purposes. Vessels with only a recreational endorsement may not engage in commercial trade.

Documented vessels may be registered by states for tax and other purposes and may be required to display a state decal. Renewal is the responsibility of the owner. This certificate becomes invalid upon a change in ownership, change in state of incorporation, or a change in any other element shown on the certificate other than change of address. This certificate is invalid for any vessel other than one documented solely for recreation when the vessel is placed under the command of a person who is not a citizen of the U.S. The vessel and its equipment are liable to seizure and forfeiture to the U.S. government and the owner is liable for a civil penalty of not more than $10,000.00 per violation. Each day of a continuing violation is a separate violation.

Any change in address of the managing owner must be reported promptly to the NVDC. You may contact us at nvdc.w.webmaster@uscg.mil.

Note: The certificate on the face of this document is not conclusive evidence of title in any proceeding where ownership is in issue. Complete records are on file at the NVDC. The sale or transfer section below is provided for convenience only.

SALE OR TRANSFER OF VESSEL

100% OF THE VESSEL IDENTIFIED HEREIN IS SOLD (TRANSFERRED) BY THE OWNER(S) NAMED ON THE FACE OF THIS CERTIFICATE TO THE FOLLOWING PERSON(S). ADDRESS MUST BE INCLUDED.

_____

_____

IF SOLD (TRANSFERRED) TO MORE THAN ONE PERSON, THE PURCHASER(S)/TRANSFEREE(S) ARE TENANTS IN COMMON, EACH OWNING AN EQUAL UNDIVIDED INTEREST, UNLESS OTHERWISE INDICATED HEREIN: CHECK ONLY ONE OF THE FOLLOWING BLOCKS TO SHOW ANOTHER FORM OF OWNERSHIP.

☐ JOINT TENANCY WITH RIGHT OF SURVIVORSHIP ☐ TENANCY BY THE ENTIRETIES ☐ COMMUNITY PROPERTY

☐ OTHER

SIGNATURE OF SELLER(S)/TRANSFEROR(S) OR PERSONS SIGNING ON BEHALF OF SELLER(S)/TRANSFEROR(S):

DATE SIGNED:

NAME(S) OF PERSON(S) SIGNING ABOVE, AND LEGAL CAPACITY IN WHICH SIGNED (E.G. OWNER, AGENT, TRUSTEE, EXECUTOR)

ACKNOWLEDGMENT (TO BE COMPLETED BY NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED BY A LAW OR A STATE OR THE UNITED STATES TO TAKE OATHS.)

STATE:

ON _____ THE PERSON(S) NAMED
(DATE)

COUNTY:

ABOVE ACKNOWLEDGED EXECUTION OF THE FOREGOING INSTRUMENT IN THEIR STATED CAPACITY(IES) FOR THE PURPOSES THEREIN CONTAINED.

NOTARY PUBLIC
MY COMMISSION EXPIRES:

PRIVACY ACT STATEMENT

IN ACCORDANCE WITH 5 USC 552(A). THE FOLLOWING INFORMATION IS PROVIDED TO YOU WHEN SUPPLYING PERSONAL INFORMATION TO THE U.S. COAST GUARD:

1. AUTHORITY. SOLICITATION OF THIS INFORMATION IS AUTHORIZED BY 46 USC CHAPTER 313 AND 46 CFR, PART 67.
2. THE PRINCIPAL PURPOSES FOR WHICH THIS INSTRUMENT IS TO BE USED ARE:
   (A) TO PROVIDE A RECORD, AVAILABLE FOR PUBLIC INSPECTION AND COPYING, OF THE SALE OR OTHER CHANGE IN OWNERSHIP OF A VESSEL WHICH IS DOCUMENTED, WILL BE DOCUMENTED, OR HAS BEEN DOCUMENTED PURSUANT TO 46 USC, CHAPTER 121.
   (B) RETENTION FOR EXAMINATION BY GOVERNMENTAL AUTHORITIES AND MEMBERS OF THE GENERAL PUBLIC.
3. THE ROUTINE USE WHICH MAY BE MADE OF THIS INFORMATION INCLUDES DEVELOPMENT OF STATISTICAL DATA CONCERNING DOCUMENTED VESSELS.
4. DISCLOSURE OF THE INFORMATION REQUESTED ON THIS FORM IS VOLUNTARY. HOWEVER, FAILURE TO PROVIDE THE INFORMATION COULD PRECLUDE FILING OF A BILL OF SALE AND DOCUMENTATION OF THE VESSEL NAMED HEREIN PURSUANT TO 46 USC CHAPTER 121. MOREOVER, BILLS OF SALE WHICH ARE NOT FILED ARE NOT DEEMED TO BE VALID AGAINST ANY PERSON HAVING ACTUAL KNOWLEDGE OF THE SALE. (46 USC 31321 (A)).

AN AGENCY MAY NOT CONDUCT OR SPONSOR, AND A PERSON IS NOT REQUIRED TO RESPOND TO A COLLECTION OF INFORMATION UNLESS IT DISPLAYS A VALID OMB CONTROL NUMBER.

THE COAST GUARD ESTIMATES THAT THE AVERAGE BURDEN FOR THIS FORM IS 20 MINUTES FOR COMPLETING AND 5 MINUTES FOR FILING. YOU MAY SUBMIT ANY COMMENTS CONCERNING THE ACCURACY OF THIS BURDEN ESTIMATE OR ANY SUGGESTIONS FOR REDUCING THE BURDEN TO: U.S. COAST GUARD, NATIONAL VESSEL DOCUMENTATION CENTER, 792 T J JACKSON DRIVE, FALLING WATERS, WEST VIRGINIA 25419 OR OFFICE OF MANAGEMENT AND BUDGET, PAPERWORK REDUCTION PROJECT (1625-0027), WASHINGTON, DC 20503.

AW 670715022419

GENERAL NOTES

1. THIS DRAWING PROVIDES GENERAL ARRANGEMENT INFORMATION FOR THE "KP" BARGES, OWNED BY BOYER TOWING, INC. OF KETCHIKAN, ALASKA. THE BARGES ARE 180'-0" LONG (LOA) WITH A 50'-0" BREADTH AND A DEPTH OF 12'-0". BOYER TOWING OWNS FOUR OF THESE BARGES, AS LISTED BELOW:

KP-1	O.N. 612443
KP-2	O.N. 597024
KP-3	O.N. 629728
KP-4	O.N. 609944

2. THE KP BARGE DECKS HAVE NO SHEER, AND NO CAMBER.

REVISIONS

REV	ZONE		DATE	APPVD

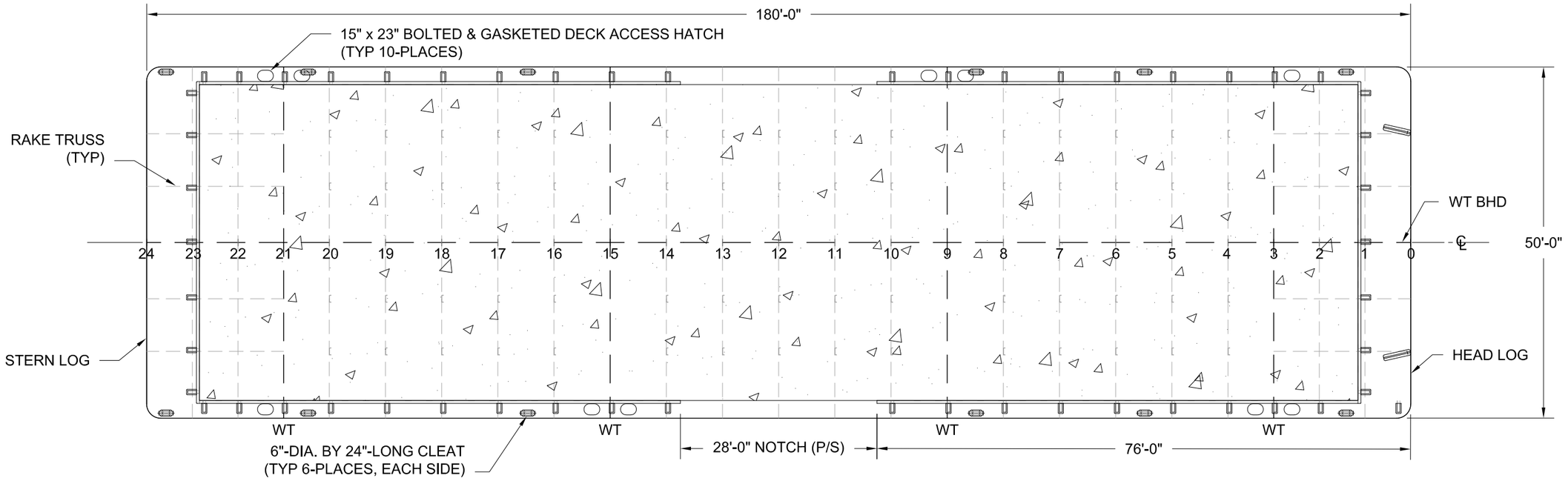
No.	DRAWING No.	TITLE	BY	DATE
2				
1				

REFERENCES

FOR:	PROJECT:	TITLE:
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
10-30-23	jwk	AS NOTED	2021-029-200-01-01	1	5

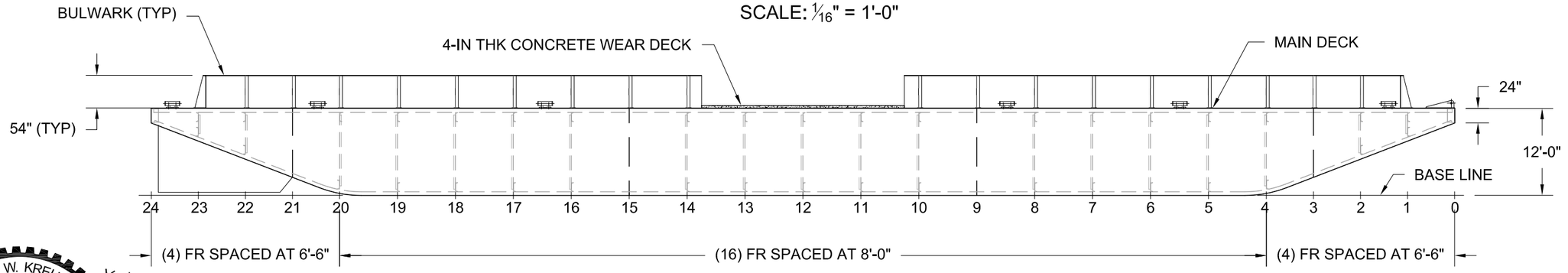
WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



PLAN 2-4E

MAIN DECK ARRANGEMENT

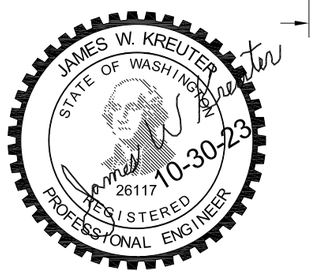
SCALE: 1/16" = 1'-0"



ELEV 2-4C

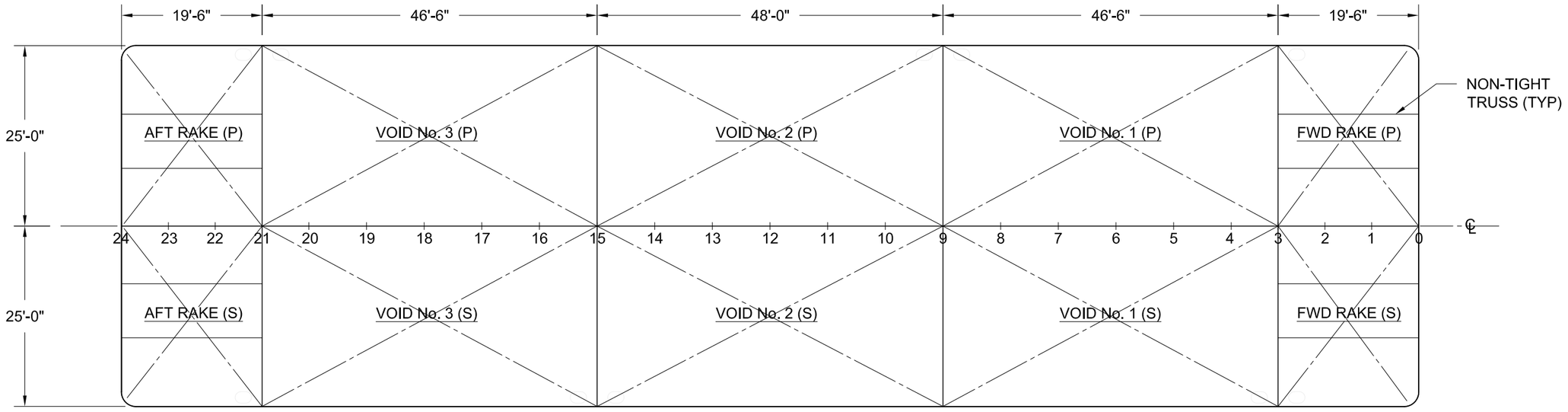
OUTBOARD PROFILE

SCALE: 1/16" = 1'-0"



FOR:	PROJECT:	TITLE:		
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT		
DATE: 10-30-23	BY: jwk	SCALE: AS NOTED	DWG No: 2021-029-200-01-01	SHEET: 2 OF: 5

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com

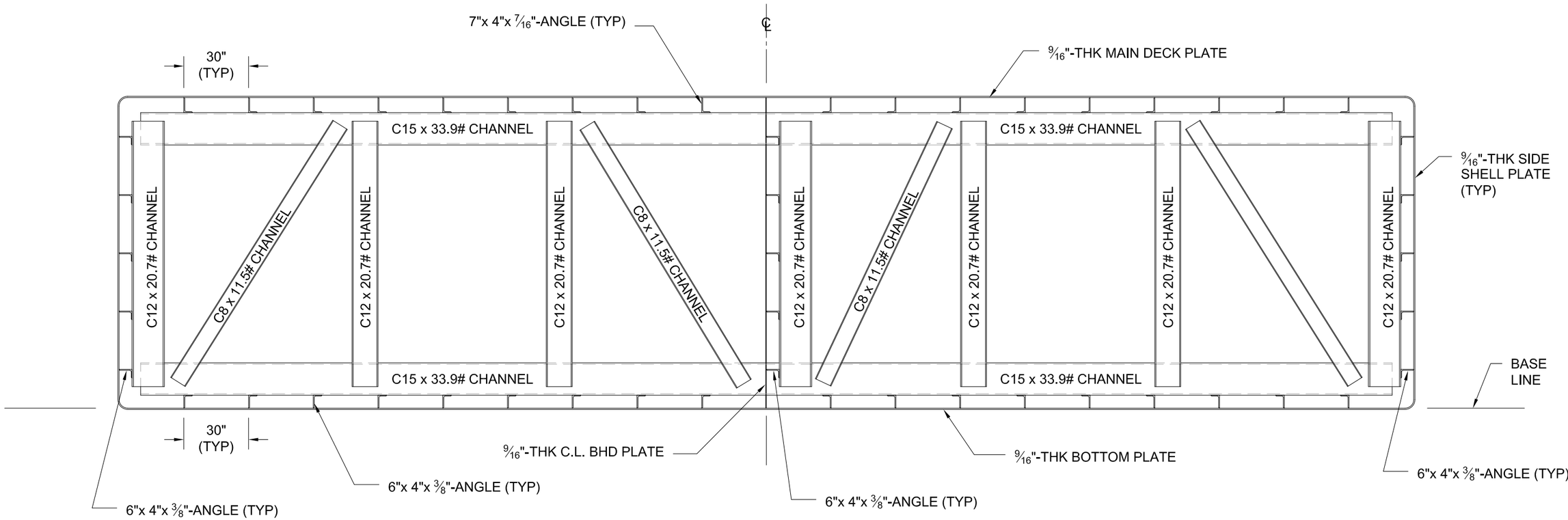


PLAN 3-4D
HOLD ARRANGEMENT
SCALE: 1/16" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
10-30-23

FOR:	PROJECT:	TITLE:			
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT			
DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
10-30-23	jwk	AS NOTED	2021-029-200-01-01	3	5

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



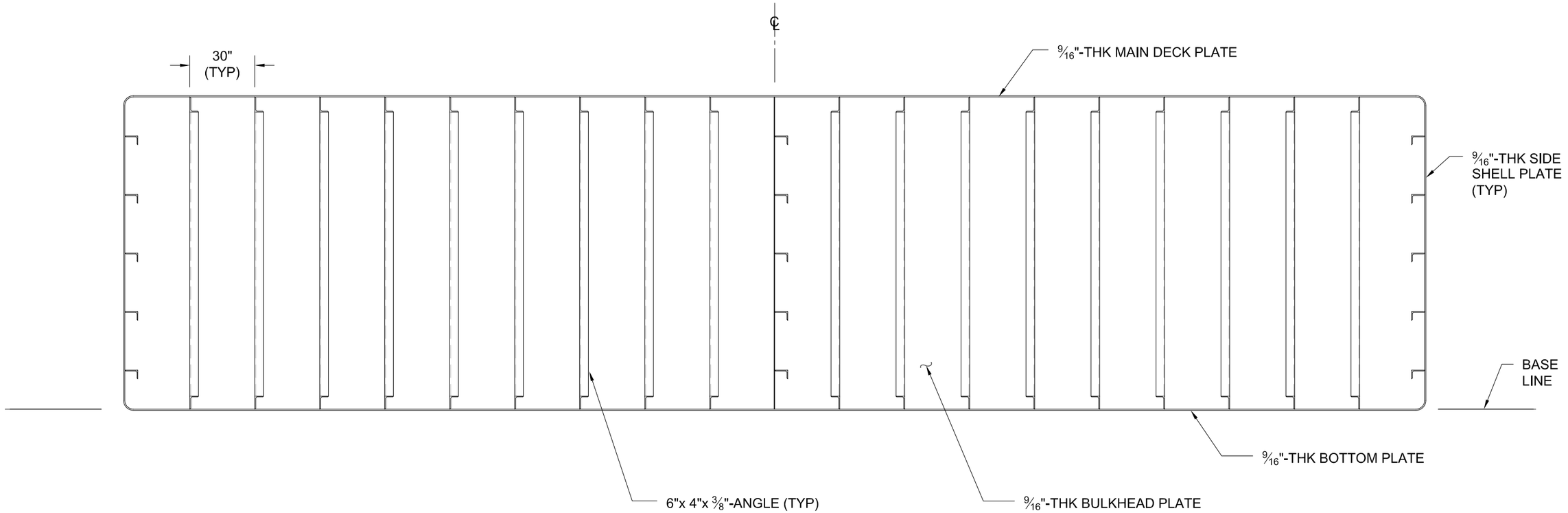
PLAN 4-4D
TYPICAL MIDSHIP SECTION
SCALE: 1/4" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
10-30-23

FOR:	PROJECT:	TITLE:
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
10-30-23	jwk	AS NOTED	2021-029-200-01-01	4	5

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



SECT 5-4D

TYPICAL TRANSVERSE BHD ARRANGEMENT

SCALE: 1⁄16" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
10-30-23

FOR:	PROJECT:	TITLE:		
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT		
DATE: 10-30-23	BY: jwk	SCALE: AS NOTED	DWG No: 2021-029-200-01-01	SHEET: 5 OF: 5

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com

BOYER TOWING, INC.

KP - 1&2
DECK BARGE

LOAD TABLE

Average Draft	Cargo Weight	Average Draft	Cargo Weight	Average Draft	Cargo Weight
2'-3"	7.8	5'-3"	737.3	8'-3"	1,503.3
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3'-3"	243.9	6'-3"	994.6	9'-3"	1,808.7
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3'-9"	364.6	6'-9"	1,125.9	9'-9"	1,950.6
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4'-3"	487.1	7'-3"	1,258.9	10'-3"	2,094.1
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5'-1"	695.1	8'-1"	1,484.6		
5'-2"	716.2	8'-2"	1,507.4		

Weight given in short tons for operation in sea water.

ELLIOTT BAY DESIGN GROUP, LTD.

BOYER TOWING, INC.

P.O. Box 8000
Ketchikan, Alaska 99901
Phone (206) 763-8696 Fax (206) 767-9517

KP-3

Official No: 629728

Overall Dimensions:

Length: 180 ft.
Beam: 50 ft.
Depth: 11.5 ft.

Useable Deck:

Length: 170 ft.
Cargo Capacity: 1,800 Tons
Beam: 45 ft.

Regulatory:

Gross Tonnage: 905 GRT
Net Tonnage: 905 NRT

GENERAL NOTES

1. THIS DRAWING PROVIDES GENERAL ARRANGEMENT INFORMATION FOR THE "KP" BARGES, OWNED BY BOYER TOWING, INC. OF KETCHIKAN, ALASKA. THE BARGES ARE 180'-0" LONG (LOA) WITH A 50'-0" BREADTH AND A DEPTH OF 12'-0". BOYER TOWING OWNS FOUR OF THESE BARGES, AS LISTED BELOW:

KP-1	O.N. 612443
KP-2	O.N. 597024
KP-3	O.N. 629728
KP-4	O.N. 609944

2. THE KP BARGE DECKS HAVE NO SHEER, AND NO CAMBER.

REVISIONS

REV	ZONE		DATE	APPVD

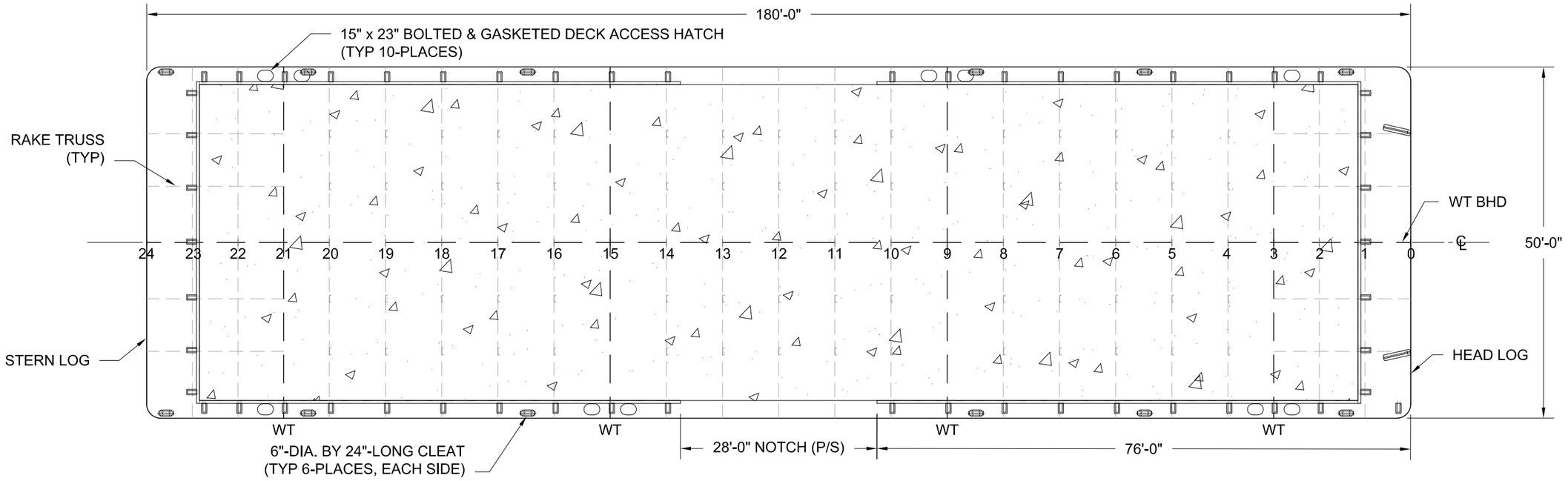
No.	DRAWING No.	TITLE	BY	DATE
2				
1				

REFERENCES

FOR:	PROJECT:	TITLE:
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
10-30-23	jwk	AS NOTED	2021-029-200-01-01	1	5

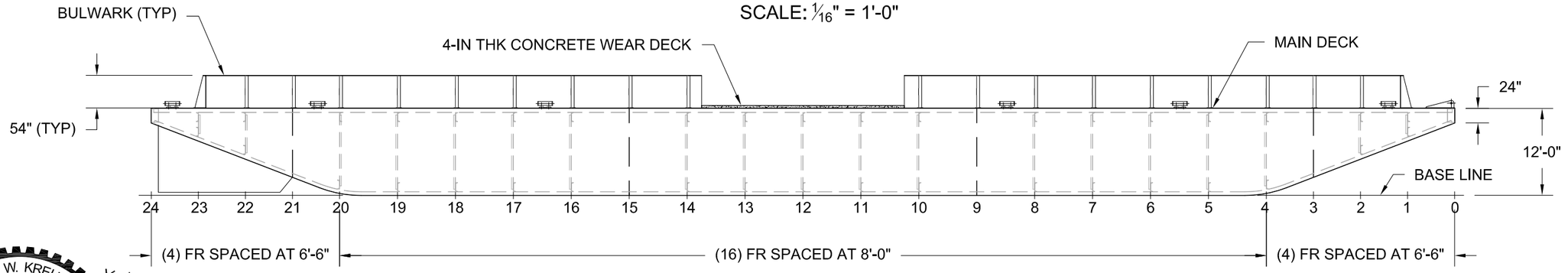
WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



PLAN 2-4E

MAIN DECK ARRANGEMENT

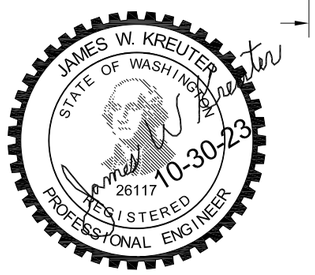
SCALE: 1/16" = 1'-0"



ELEV 2-4C

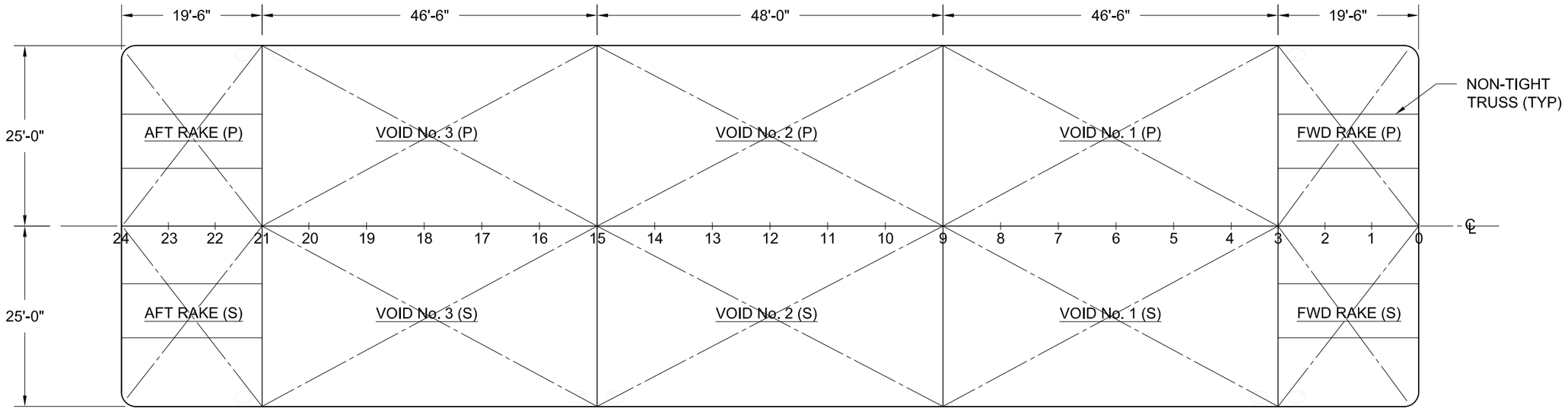
OUTBOARD PROFILE

SCALE: 1/16" = 1'-0"



FOR:	PROJECT:	TITLE:		
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT		
DATE: 10-30-23	BY: jwk	SCALE: AS NOTED	DWG No: 2021-029-200-01-01	SHEET: 2 OF: 5

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com

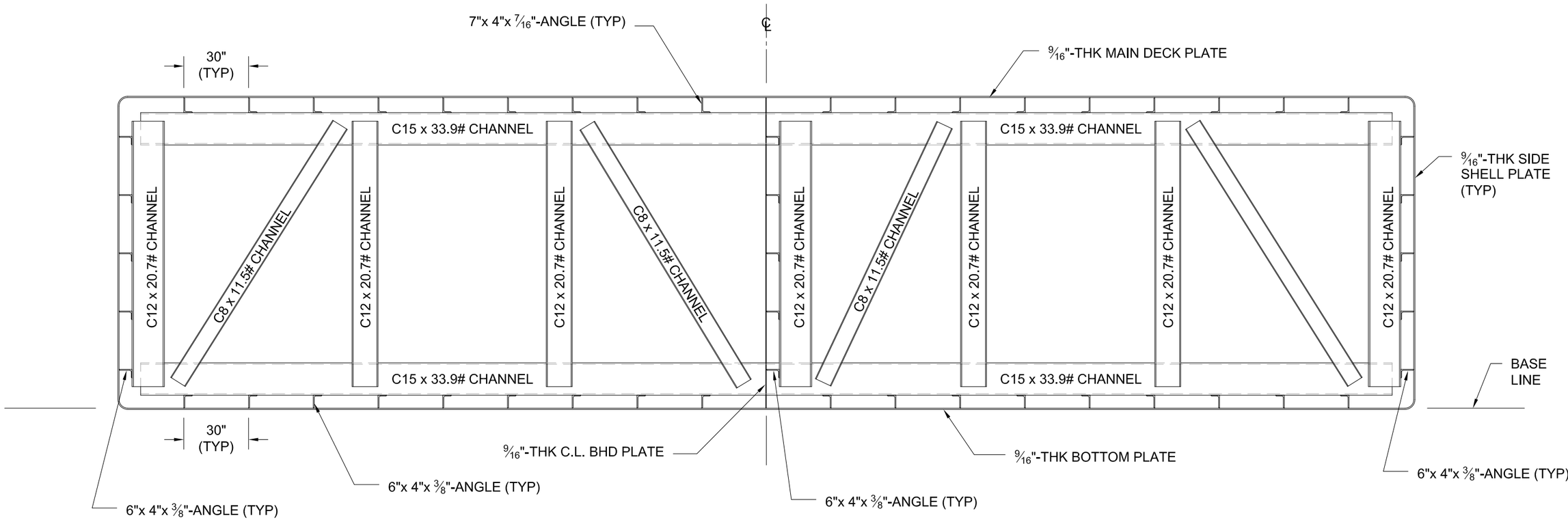


PLAN 3-4D
HOLD ARRANGEMENT
SCALE: 1/16" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
10-30-23

FOR:	PROJECT:	TITLE:			
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT			
DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
10-30-23	jwk	AS NOTED	2021-029-200-01-01	3	5

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



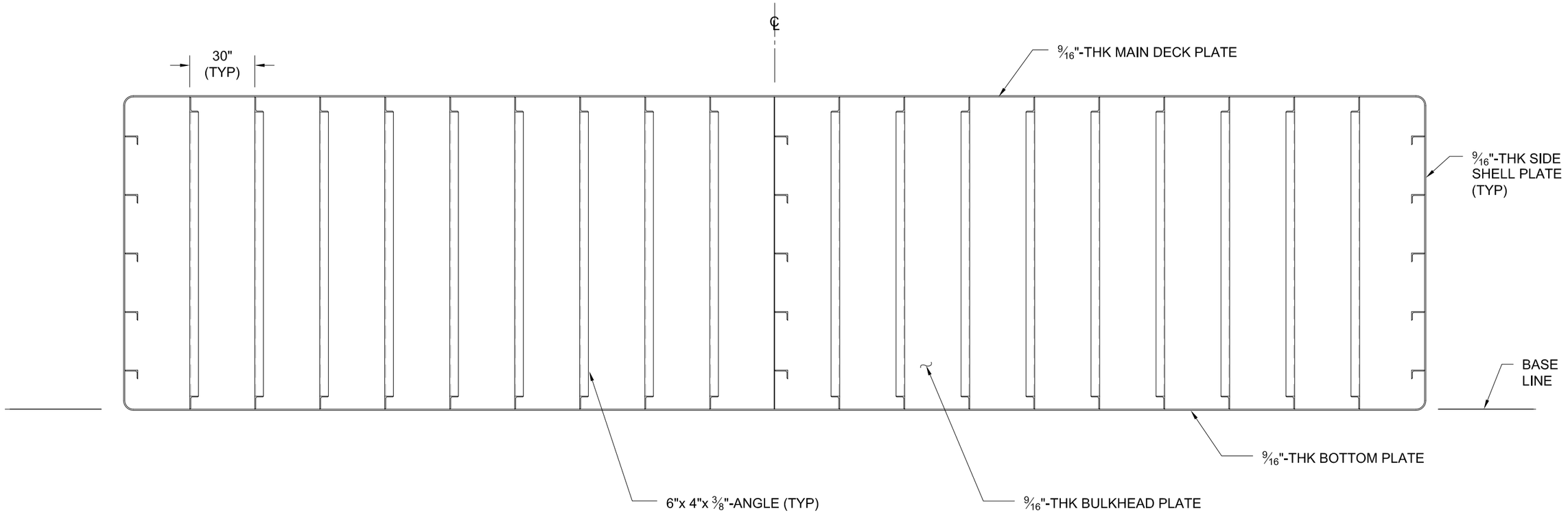
PLAN 4-4D
TYPICAL MIDSHIP SECTION
SCALE: 1/4" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
10-30-23

FOR:	PROJECT:	TITLE:
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
10-30-23	jwk	AS NOTED	2021-029-200-01-01	4	5

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



SECT 5-4D

TYPICAL TRANSVERSE BHD ARRANGEMENT

SCALE: 1⁄16" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
10-30-23

FOR:	PROJECT:	TITLE:		
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT		
DATE: 10-30-23	BY: jwk	SCALE: AS NOTED	DWG No: 2021-029-200-01-01	SHEET: 5 OF: 5

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com

BOYER TOWING, INC.

P.O. Box 8000
Ketchikan, Alaska 99901
Phone (206) 763-8696 Fax (206) 767-9517

KP-4

Official No: 609944

Overall Dimensions:

Length: 180 ft.
Beam: 50 ft.
Depth: 11.5 ft.

Useable Deck:

Length: 170 ft.
Beam: 45 ft.

Regulatory:

Built: 1979, Hood River, OR
Gross Tonnage: 905 GRT Net
Tonnage: 905 NRT

DHS, USCG, CG-1270 (REV. 01-23)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
KP-4	609944	NONE	1979

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
KETCHIKAN AK	STEEL	NO

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
905 GRT	905 NRT	180.0	50.0	11.5

PLACE BUILT

HOOD RIVER OR

OWNERS

BOYER TOWING INC

OPERATIONAL ENDORSEMENTS

REGISTRY
COASTWISE

MANAGING OWNER

BOYER TOWING INC
5061 SHORELINE DR
PO BOX 8000
KETCHIKAN AK 99901

RESTRICTIONS
NONE

ENTITLEMENTS
NONE

REMARKS
None

ISSUE DATE
AUGUST 24, 2023

THIS CERTIFICATE EXPIRES

SEPTEMBER 30, 2024

Christopher G. Wadden

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

This certificate is not valid for operation of the vessel until the vessel is marked with the name, official number, and hailing port as shown on the certificate. The original certificate must be kept aboard the vessel at all times when in operation and must be presented upon the demand of federal, state or local officials for law enforcement purposes. Vessels with only a recreational endorsement may not engage in commercial trade.

Documented vessels may be registered by states for tax and other purposes and may be required to display a state decal. Renewal is the responsibility of the owner. This certificate becomes invalid upon a change in ownership, change in state of incorporation, or a change in any other element shown on the certificate other than change of address. This certificate is invalid for any vessel other than one documented solely for recreation when the vessel is placed under the command of a person who is not a citizen of the U.S. The vessel and its equipment are liable to seizure and forfeiture to the U.S. government and the owner is liable for a civil penalty of not more than $10,000.00 per violation. Each day of a continuing violation is a separate violation.

Any change in address of the managing owner must be reported promptly to the NVDC. You may contact NVDC at nvdc.w.webmaster@uscg.mil.

Note: The certificate on the face of this document is not conclusive evidence of title in any proceeding where ownership is in issue. Complete records are on file at the NVDC. The sale or transfer section below is provided for convenience only.

SALE OR TRANSFER OF VESSEL

100% OF THE VESSEL IDENTIFIED HEREIN IS SOLD (TRANSFERRED) BY THE OWNER(S) NAMED ON THE FACE OF THIS CERTIFICATE TO THE FOLLOWING PERSON(S). ADDRESS MUST BE INCLUDED.

_____

_____

IF SOLD (TRANSFERRED) TO MORE THAN ONE PERSON, THE PURCHASER(S)/TRANSFEREE(S) ARE TENANTS IN COMMON, EACH OWNING AN EQUAL UNDIVIDED INTEREST, UNLESS OTHERWISE INDICATED HEREIN: CHECK ONLY ONE OF THE FOLLOWING BLOCKS TO SHOW ANOTHER FORM OF OWNERSHIP.

☐ JOINT TENANCY WITH RIGHT OF SURVIVORSHIP ☐ TENANCY BY THE ENTIRETIES ☐ COMMUNITY PROPERTY

☐ OTHER

SIGNATURE OF SELLER(S)/TRANSFEROR(S) OR PERSONS SIGNING ON BEHALF OF SELLER(S)/TRANSFEROR(S):

DATE SIGNED:

NAME(S) OF PERSON(S) SIGNING ABOVE, AND LEGAL CAPACITY IN WHICH SIGNED (E.G. OWNER, AGENT, TRUSTEE, EXECUTOR)

ACKNOWLEDGMENT (TO BE COMPLETED BY NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED BY A LAW OR A STATE OR THE UNITED STATES TO TAKE OATHS.)

STATE:

ON _____ THE PERSON(S) NAMED
(DATE)

COUNTY:

ABOVE ACKNOWLEDGED EXECUTION OF THE FOREGOING INSTRUMENT IN THEIR STATED CAPACITY(IES) FOR THE PURPOSES THEREIN CONTAINED.

_____
NOTARY PUBLIC
MY COMMISSION EXPIRES:

PRIVACY ACT STATEMENT

IN ACCORDANCE WITH 5 USC 552(A). THE FOLLOWING INFORMATION IS PROVIDED TO YOU WHEN SUPPLYING PERSONAL INFORMATION TO THE U.S. COAST GUARD:

1. AUTHORITY. SOLICITATION OF THIS INFORMATION IS AUTHORIZED BY 46 USC CHAPTER 313 AND 46 CFR, PART 67.
2. THE PRINCIPAL PURPOSES FOR WHICH THIS INSTRUMENT IS TO BE USED ARE:
   (A) TO PROVIDE A RECORD, AVAILABLE FOR PUBLIC INSPECTION AND COPYING, OF THE SALE OR OTHER CHANGE IN OWNERSHIP OF A VESSEL WHICH IS DOCUMENTED, WILL BE DOCUMENTED, OR HAS BEEN DOCUMENTED PURSUANT TO 46 USC, CHAPTER 121.
   (B) RETENTION FOR EXAMINATION BY GOVERNMENTAL AUTHORITIES AND MEMBERS OF THE GENERAL PUBLIC.
3. THE ROUTINE USE WHICH MAY BE MADE OF THIS INFORMATION INCLUDES DEVELOPMENT OF STATISTICAL DATA CONCERNING DOCUMENTED VESSELS.
4. DISCLOSURE OF THE INFORMATION REQUESTED ON THIS FORM IS VOLUNTARY. HOWEVER, FAILURE TO PROVIDE THE INFORMATION COULD PRECLUDE FILING OF A BILL OF SALE AND DOCUMENTATION OF THE VESSEL NAMED HEREIN PURSUANT TO 46 USC CHAPTER 121. MOREOVER, BILLS OF SALE WHICH ARE NOT FILED ARE NOT DEEMED TO BE VALID AGAINST ANY PERSON HAVING ACTUAL KNOWLEDGE OF THE SALE. (46 USC 31321 (A)).

AN AGENCY MAY NOT CONDUCT OR SPONSOR, AND A PERSON IS NOT REQUIRED TO RESPOND TO A COLLECTION OF INFORMATION UNLESS IT DISPLAYS A VALID OMB CONTROL NUMBER.

THE COAST GUARD ESTIMATES THAT THE AVERAGE BURDEN FOR THIS FORM IS 20 MINUTES FOR COMPLETING AND 3 MINUTES FOR FILING. YOU MAY SUBMIT ANY COMMENTS CONCERNING THE ACCURACY OF THIS BURDEN ESTIMATE OR ANY SUGGESTIONS FOR REDUCING THE BURDEN TO: U.S. COAST GUARD, NATIONAL VESSEL DOCUMENTATION CENTER, 792 T J JACKSON DRIVE, FALLING WATERS, WEST VIRGINIA 25419 OR OFFICE OF MANAGEMENT AND BUDGET, PAPERWORK REDUCTION PROJECT (1625-0027), WASHINGTON, DC 20503.

AX 686067222419

DHS, USCG, CG-1270 (REV. 01-22)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
KP-1	612443	NONE	1979

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
KETCHIKAN AK	STEEL	YES

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
905 GRT	905 NRT	180.0	50.0	11.5

PLACE BUILT

PORTLAND OR

OWNERS

BOYER TOWING, INC.

OPERATIONAL ENDORSEMENTS

REGISTRY
COASTWISE

MANAGING OWNER

BOYER TOWING, INC.
5061 SHORELINE DRIVE
PO BOX 8000
KETCHIKAN AK 99901

RESTRICTIONS
NONE

ENTITLEMENTS
NONE

REMARKS
NONE

ISSUE DATE
JUNE 27, 2023

THIS CERTIFICATE EXPIRES

JULY 31, 2024

Christopher G. Washburn

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

PREVIOUS EDITION OBSOLETE, THIS CERTIFICATE MAY NOT BE ALTERED

This certificate is not valid for operation of the vessel until the vessel is marked with the name, official number, and hailing port as shown on the certificate. The original certificate must be kept aboard the vessel at all times when in operation and must be presented upon the demand of federal, state or local officials for law enforcement purposes. Vessels with only a recreational endorsement may not engage in commercial trade.

Documented vessels may be registered by states for tax and other purposes and may be required to display a state decal. Renewal is the responsibility of the owner. This certificate becomes invalid upon a change in ownership, change in state of incorporation, or a change in any other element shown on the certificate other than change of address. This certificate is invalid for any vessel other than one documented solely for recreation when the vessel is placed under the command of a person who is not a citizen of the U.S. The vessel and its equipment are liable to seizure and forfeiture to the U.S. government and the owner is liable for a civil penalty of not more than $10,000.00 per violation. Each day of a continuing violation is a separate violation.

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_____

_____

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☐ JOINT TENANCY WITH RIGHT OF SURVIVORSHIP ☐ TENANCY BY THE ENTIRETIES ☐ COMMUNITY PROPERTY

☐ OTHER

SIGNATURE OF SELLER(S)/TRANSFEROR(S) OR PERSONS SIGNING ON BEHALF OF SELLER(S)/TRANSFEROR(S):

DATE SIGNED:

NAME(S) OF PERSON(S) SIGNING ABOVE, AND LEGAL CAPACITY IN WHICH SIGNED (E.G. OWNER, AGENT, TRUSTEE, EXECUTOR)

ACKNOWLEDGMENT (TO BE COMPLETED BY NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED BY A LAW OR A STATE OR THE UNITED STATES TO TAKE OATHS.)

STATE:

ON _____ THE PERSON(S) NAMED
(DATE)

COUNTY:

ABOVE ACKNOWLEDGED EXECUTION OF THE FOREGOING INSTRUMENT IN THEIR STATED CAPACITY(IES) FOR THE PURPOSES THEREIN CONTAINED.

_____
NOTARY PUBLIC
MY COMMISSION EXPIRES:

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   (A) TO PROVIDE A RECORD, AVAILABLE FOR PUBLIC INSPECTION AND COPYING, OF THE SALE OR OTHER CHANGE IN OWNERSHIP OF A VESSEL WHICH IS DOCUMENTED, WILL BE DOCUMENTED, OR HAS BEEN DOCUMENTED PURSUANT TO 46 USC, CHAPTER 121.
   (B) RETENTION FOR EXAMINATION BY GOVERNMENTAL AUTHORITIES AND MEMBERS OF THE GENERAL PUBLIC.
3. THE ROUTINE USE WHICH MAY BE MADE OF THIS INFORMATION INCLUDES DEVELOPMENT OF STATISTICAL DATA CONCERNING DOCUMENTED VESSELS.
4. DISCLOSURE OF THE INFORMATION REQUESTED ON THIS FORM IS VOLUNTARY. HOWEVER, FAILURE TO PROVIDE THE INFORMATION COULD PRECLUDE FILING OF A BILL OF SALE AND DOCUMENTATION OF THE VESSEL NAMED HEREIN PURSUANT TO 46 USC CHAPTER 121. MOREOVER, BILLS OF SALE WHICH ARE NOT FILED ARE NOT DEEMED TO BE VALID AGAINST ANY PERSON HAVING ACTUAL KNOWLEDGE OF THE SALE. (46 USC 31321 (A)).

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AW 671899822419

GENERAL NOTES

1. THIS DRAWING PROVIDES GENERAL ARRANGEMENT INFORMATION FOR THE "KP" BARGES, OWNED BY BOYER TOWING, INC. OF KETCHIKAN, ALASKA. THE BARGES ARE 180'-0" LONG (LOA) WITH A 50'-0" BREADTH AND A DEPTH OF 12'-0". BOYER TOWING OWNS FOUR OF THESE BARGES, AS LISTED BELOW:

KP-1	O.N. 612443
KP-2	O.N. 597024
KP-3	O.N. 629728
KP-4	O.N. 609944

2. THE KP BARGE DECKS HAVE NO SHEER, AND NO CAMBER.

REVISIONS

REV	ZONE		DATE	APPVD

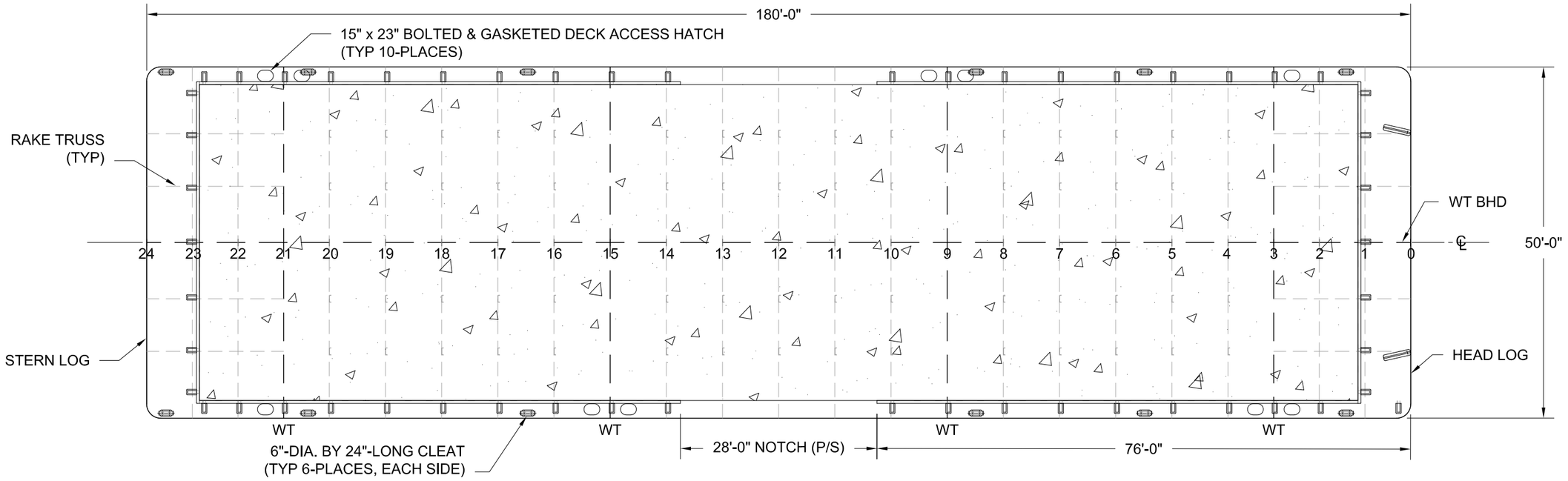
No.	DRAWING No.	TITLE	BY	DATE
2				
1				

REFERENCES

FOR:	PROJECT:	TITLE:
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
10-30-23	jwk	AS NOTED	2021-029-200-01-01	1	5

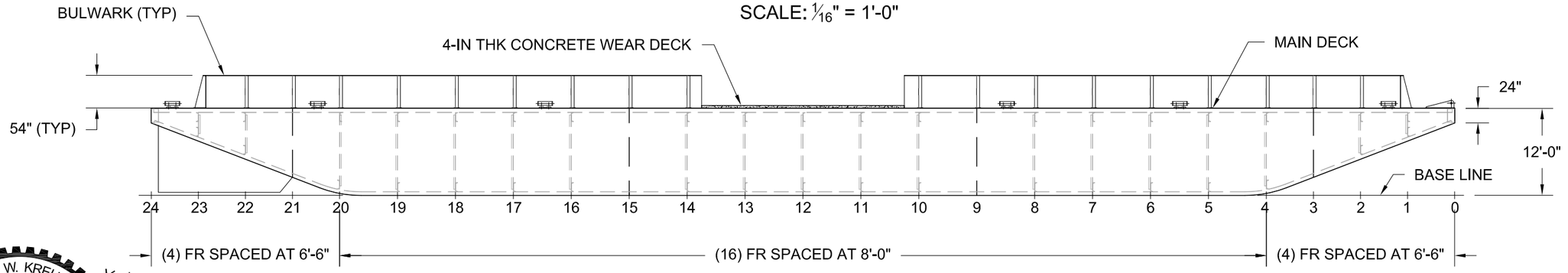
WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



PLAN 2-4E

MAIN DECK ARRANGEMENT

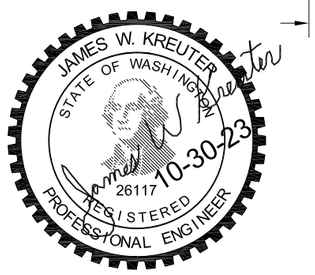
SCALE: 1/16" = 1'-0"



ELEV 2-4C

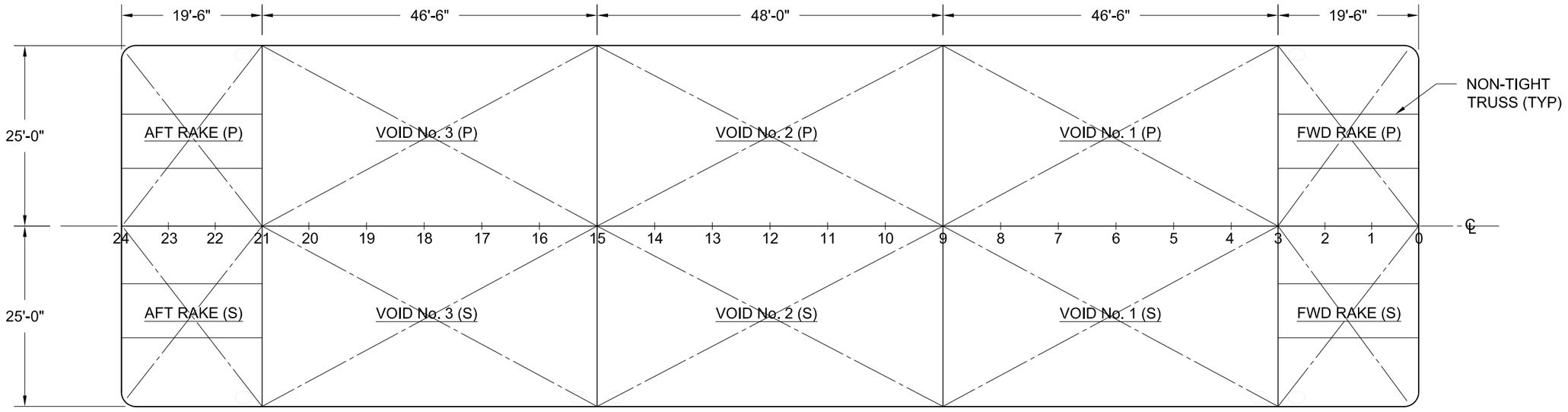
OUTBOARD PROFILE

SCALE: 1/16" = 1'-0"



FOR:	PROJECT:	TITLE:		
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT		
DATE: 10-30-23	BY: jwk	SCALE: AS NOTED	DWG No: 2021-029-200-01-01	SHEET: 2 OF: 5

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com

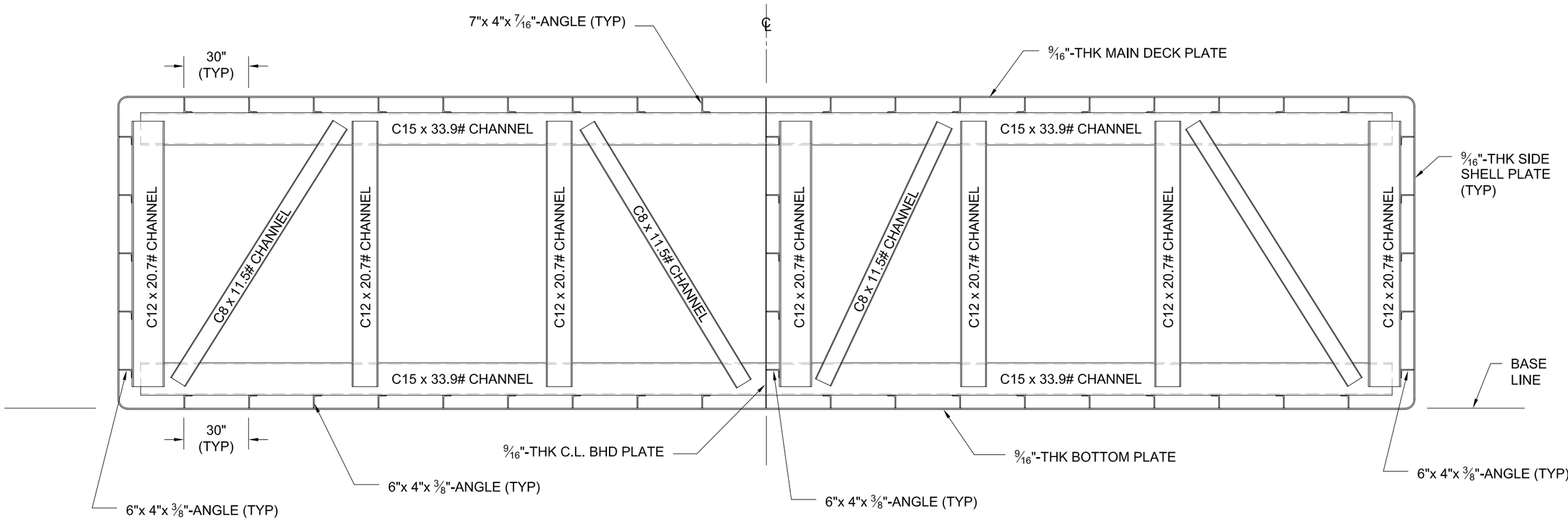


PLAN 3-4D
HOLD ARRANGEMENT
SCALE: 1/16" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
10-30-23

FOR:	PROJECT:	TITLE:			
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT			
DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
10-30-23	jwk	AS NOTED	2021-029-200-01-01	3	5

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



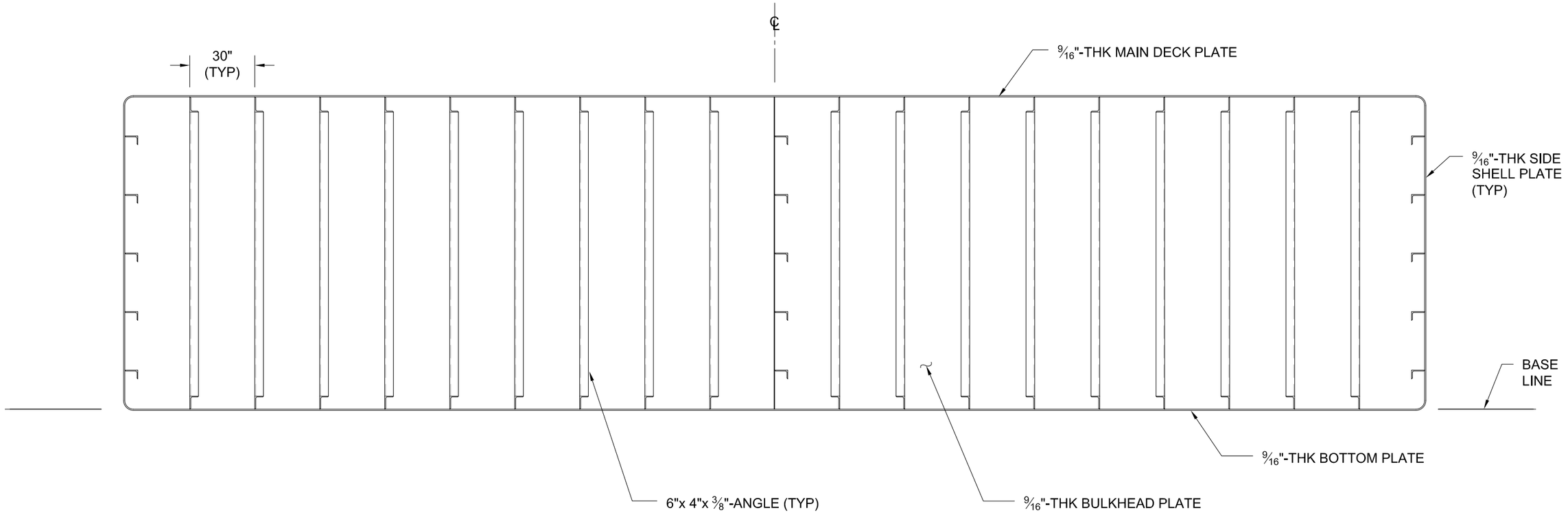
PLAN 4-4D
TYPICAL MIDSHIP SECTION
SCALE: 1/4" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
10-30-23

FOR:	PROJECT:	TITLE:
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
10-30-23	jwk	AS NOTED	2021-029-200-01-01	4	5

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



SECT 5-4D

TYPICAL TRANSVERSE BHD ARRANGEMENT

SCALE: 1⁄16" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
10-30-23

FOR:	PROJECT:	TITLE:		
BOYER TOWING, INC.	KP BARGES	GENERAL ARRANGEMENT		
DATE: 10-30-23	BY: jwk	SCALE: AS NOTED	DWG No: 2021-029-200-01-01	SHEET: 5 OF: 5

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com

BOYER TOWING, INC.

KP - 1&2
DECK BARGE

LOAD TABLE

Average Draft	Cargo Weight	Average Draft	Cargo Weight	Average Draft	Cargo Weight
2'-3"	7.8	5'-3"	737.3	8'-3"	1,503.3
2'-4"	27.2	5'-4"	758.5	8'-4"	1,553.2
2'-5"	46.7	5'-5"	779.7	8'-5"	1,576.2
2'-6"	66.2	5'-6"	801.0	8'-6"	1,599.2
2'-7"	85.7	5'-7"	822.3	8'-7"	1,622.3
2'-8"	105.3	5'-8"	843.6	8'-8"	1,645.5
2'-9"	125.0	5'-9"	865.1	8'-9"	1,668.6
2'-10"	144.7	5'-10"	886.5	8'-10"	1,691.9
2'-11"	164.4	5'-11"	908.0	8'-11"	1,715.1
3'-0"	184.2	6'-0"	929.6	9'-0"	1,738.5
3'-1"	204.1	6'-1"	951.2	9'-1"	1,761.8
3'-2"	224.0	6'-2"	972.9	9'-2"	1,785.3
3'-3"	243.9	6'-3"	994.6	9'-3"	1,808.7
3'-4"	263.9	6'-4"	1,016.3	9'-4"	1,832.2
3'-5"	283.9	6'-5"	1,038.1	9'-5"	1,855.8
3'-6"	304.0	6'-6"	1,060.0	9'-6"	1,879.4
3'-7"	324.2	6'-7"	1,081.9	9'-7"	1,903.1
3'-8"	344.4	6'-8"	1,103.9	9'-8"	1,926.8
3'-9"	364.6	6'-9"	1,125.9	9'-9"	1,950.6
3'-10"	384.9	6'-10"	1,147.9	9'-10"	1,974.4
3'-11"	405.2	6'-11"	1,170.0	9'-11"	1,998.3
4'-0"	425.6	7'-0"	1,192.2	10'-0"	2,022.2
4'-1"	446.1	7'-1"	1,214.4	10'-1"	1,046.1
4'-2"	466.5	7'-2"	1,286.6	10'-2"	2,070.1
4'-3"	487.1	7'-3"	1,258.9	10'-3"	2,094.1
4'-4"	507.7	7'-4"	1,281.3	10'-4"	2,118.1
4'-5"	528.3	7'-5"	1,303.7	10'-5"	2,142.1
4'-6"	549.0	7'-6"	1,326.1	10'-6"	2,166.1
4'-7"	569.7	7'-7"	1,348.6	10'-7"	2,190.1
4'-8"	590.5	7'-8"	1,371.1	10'-8"	2,214.1
4'-9"	611.3	7'-9"	1,393.7	10'-9"	2,238.1
4'-10"	632.2	7'-10"	1,416.4	10'-10"	2,262.1
4'-11"	653.1	7'-11"	1,439.1	10'-11"	2,286.1
5'-0"	674.1	8'-0"	1,461.8	11'-0"	2,310.1
5'-1"	695.1	8'-1"	1,484.6		
5'-2"	716.2	8'-2"	1,507.4		

Weight given in short tons for operation in sea water.

ELLIOTT BAY DESIGN GROUP, LTD.

BOYER TOWING, INC.

P.O. Box 8000
Ketchikan, Alaska 99901
Phone (206) 763-8696 Fax (206) 767-9517

KP-1

Official No: 612443

Overall Dimensions:

Length: 180 ft.
Beam: 50 ft.
Depth: 11.5 ft.

Useable Deck:

Length: 165 ft.
Cargo Capacity: 1,800 Tons
Beam: 45 ft.

Regulatory:

Gross Tonnage: 905 GRT
Net Tonnage: 905 NRT

DHS, USCG, CG-1270 (REV. 01-22)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
KP-2	597024	NONE	1978

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
KETCHIKAN AK	STEEL	NO

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
1556 GT ITC 907 GRT	788 NT ITC 907 NRT	180.0	50.0	12.0

PLACE BUILT

TACOMA WA

OWNERS

BOYER TOWING, INC.

OPERATIONAL ENDORSEMENTS

REGISTRY
COASTWISE

MANAGING OWNER

BOYER TOWING, INC.
5061 SHORELINE DRIVE
PO BOX 8000
KETCHIKAN AK 99901

RESTRICTIONS
NONE

ENTITLEMENTS
NONE

REMARKS
NONE

ISSUE DATE
JUNE 27, 2023

THIS CERTIFICATE EXPIRES

JULY 31, 2024

Christian G. Waddell

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

COPYBAN CAPTURE™ ANTI-FRAUD PROTECTION

PREVIOUS EDITION OBSOLETE, THIS CERTIFICATE MAY NOT BE ALTERED

This certificate is not valid for operation of the vessel until the vessel is marked with the name, official number, and hailing port as shown on the certificate. The original certificate must be kept aboard the vessel at all times when in operation and must be presented upon the demand of federal, state or local officials for law enforcement purposes. Vessels with only a recreational endorsement may not engage in commercial trade.

Documented vessels may be registered by states for tax and other purposes and may be required to display a state decal. Renewal is the responsibility of the owner. This certificate becomes invalid upon a change in ownership, change in state of incorporation, or a change in any other element shown on the certificate other than change of address. This certificate is invalid for any vessel other than one documented solely for recreation when the vessel is placed under the command of a person who is not a citizen of the U.S. The vessel and its equipment are liable to seizure and forfeiture to the U.S. government and the owner is liable for a civil penalty of not more than $10,000.00 per violation. Each day of a continuing violation is a separate violation.

Any change in address of the managing owner must be reported promptly to the NVDC. You may contact us at nvdc.w.webmaster@uscg.mil.

Note: The certificate on the face of this document is not conclusive evidence of title in any proceeding where ownership is in issue. Complete records are on file at the NVDC. The sale or transfer section below is provided for convenience only.

SALE OR TRANSFER OF VESSEL

100% OF THE VESSEL IDENTIFIED HEREIN IS SOLD (TRANSFERRED) BY THE OWNER(S) NAMED ON THE FACE OF THIS CERTIFICATE TO THE FOLLOWING PERSON(S). ADDRESS MUST BE INCLUDED.

_____

_____

IF SOLD (TRANSFERRED) TO MORE THAN ONE PERSON, THE PURCHASER(S)/TRANSFEREE(S) ARE TENANTS IN COMMON, EACH OWNING AN EQUAL UNDIVIDED INTEREST, UNLESS OTHERWISE INDICATED HEREIN: CHECK ONLY ONE OF THE FOLLOWING BLOCKS TO SHOW ANOTHER FORM OF OWNERSHIP.

☐ JOINT TENANCY WITH RIGHT OF SURVIVORSHIP ☐ TENANCY BY THE ENTIRETIES ☐ COMMUNITY PROPERTY

☐ OTHER

SIGNATURE OF SELLER(S)/TRANSFEROR(S) OR PERSONS SIGNING ON BEHALF OF SELLER(S)/TRANSFEROR(S):

DATE SIGNED: _____

NAME(S) OF PERSON(S) SIGNING ABOVE, AND LEGAL CAPACITY IN WHICH SIGNED (E.G. OWNER, AGENT, TRUSTEE, EXECUTOR)

ACKNOWLEDGMENT (TO BE COMPLETED BY NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED BY A LAW OR A STATE OR THE UNITED STATES TO TAKE OATHS.)

STATE:

ON _____ THE PERSON(S) NAMED
(DATE)

COUNTY:

ABOVE ACKNOWLEDGED EXECUTION OF THE FOREGOING INSTRUMENT IN THEIR STATED CAPACITY(IES) FOR THE PURPOSES THEREIN CONTAINED.

_____
NOTARY PUBLIC
MY COMMISSION EXPIRES:

PRIVACY ACT STATEMENT

IN ACCORDANCE WITH 5 USC 552(A). THE FOLLOWING INFORMATION IS PROVIDED TO YOU WHEN SUPPLYING PERSONAL INFORMATION TO THE U.S. COAST GUARD:

1. AUTHORITY. SOLICITATION OF THIS INFORMATION IS AUTHORIZED BY 46 USC CHAPTER 313 AND 46 CFR, PART 67.
2. THE PRINCIPAL PURPOSES FOR WHICH THIS INSTRUMENT IS TO BE USED ARE:
   (A) TO PROVIDE A RECORD, AVAILABLE FOR PUBLIC INSPECTION AND COPYING, OF THE SALE OR OTHER CHANGE IN OWNERSHIP OF A VESSEL WHICH IS DOCUMENTED, WILL BE DOCUMENTED, OR HAS BEEN DOCUMENTED PURSUANT TO 46 USC, CHAPTER 121.
   (B) RETENTION FOR EXAMINATION BY GOVERNMENTAL AUTHORITIES AND MEMBERS OF THE GENERAL PUBLIC.
3. THE ROUTINE USE WHICH MAY BE MADE OF THIS INFORMATION INCLUDES DEVELOPMENT OF STATISTICAL DATA CONCERNING DOCUMENTED VESSELS.
4. DISCLOSURE OF THE INFORMATION REQUESTED ON THIS FORM IS VOLUNTARY. HOWEVER, FAILURE TO PROVIDE THE INFORMATION COULD PRECLUDE FILING OF A BILL OF SALE AND DOCUMENTATION OF THE VESSEL NAMED HEREIN PURSUANT TO 46 USC CHAPTER 121. MOREOVER, BILLS OF SALE WHICH ARE NOT FILED ARE NOT DEEMED TO BE VALID AGAINST ANY PERSON HAVING ACTUAL KNOWLEDGE OF THE SALE. (46 USC 31321 (A)).

AN AGENCY MAY NOT CONDUCT OR SPONSOR, AND A PERSON IS NOT REQUIRED TO RESPOND TO A COLLECTION OF INFORMATION UNLESS IT DISPLAYS A VALID OMB CONTROL NUMBER.

THE COAST GUARD ESTIMATES THAT THE AVERAGE BURDEN FOR THIS FORM IS 20 MINUTES FOR COMPLETING AND 5 MINUTES FOR FILING. YOU MAY SUBMIT ANY COMMENTS CONCERNING THE ACCURACY OF THIS BURDEN ESTIMATE OR ANY SUGGESTIONS FOR REDUCING THE BURDEN TO: U.S. COAST GUARD, NATIONAL VESSEL DOCUMENTATION CENTER, 792 T J JACKSON DRIVE, FALLING WATERS, WEST VIRGINIA 25419 OR OFFICE OF MANAGEMENT AND BUDGET, PAPERWORK REDUCTION PROJECT (1625-0027), WASHINGTON, DC 20503.

AW 671899722419

PREPARED FOR: Pacific Pile & Marine Seattle, WA		**BY:** Alexander P. Lytle NAVAL ARCHITECT
Glosten 1201 WESTERN AVENUE, SUITE 200 SEATTLE, WASHINGTON 98101-2953 T 206.624.7850 GLOSTEN.COM		**CHECKED:** Max B. Ryan, P.E. NAVAL ARCHITECT
		APPROVED: Bradley G. Lamkin, P.E. PRINCIPAL-IN-CHARGE
DOCUMENT NO.: 24129.01-002	**REV:** -	**DATE:** 21 August 2024

This stability guidance report serves as the "Naval Architecture Analysis" for operations of the equipment and barge listed below in partially protected waters. This document shall be kept in the excavator cab with the relevant chart.

Configuration

Vessel	**160'×50'×12' Deck Barge**
160'×50'×12'	*Lash 4*
Equipment	**Hitachi 1200-6**
Main Boom	43'-6", 38,000 lbs*
Stick Boom	31'-5", 13,000 lbs*
Tracks	28" tracks**
Hydraulic Cylinders	3 x 3600 lb*
Counterweight	9,600 lb Counterweight*
Bucket Capacity/Bucket Weight	5 yd bucket, 10,500 lbs***

*See Ref. 9; **See Ref. 5, ***See Ref 8

Barge Stability

Calculations on file at Glosten show that the subject vessel meets stability criteria for lifting as provided in Ref. 1 when adhering to the following restrictions:

1. The excavator is a Hitachi 1200-6, with a Jewell 70' long reach boom and 5 yd^3 bucket, in the above configuration, operating per the excavator reach diagram.
2. The barge geometry and excavator location are as shown on Sheet 4.
3. When the excavator is located as shown on Sheet 4 with the front end faced forward and the bucket on deck, the barge's initial conditions shall be within the following limits for full 360° operation:

Maximum Average Draft*	Minimum Average Freeboard	Heel**	Trim***
4'-6"	7'-6"	±3"	+/- 1'-0"

*Measured at barge ends; **Across the barge beam, measured at amidships; ***Along the barge length, measured at barge ends

4. Barge heel and trim may be controlled with variable ballast tanks in the aft rake of the vessel. The tanks may be empty, slack, or pressed full.
5. Any cross connections between tanks shall be closed. All other voids must remain dry.
6. In addition to the project equipment as shown on Sheet 4, the barge may be loaded down to the limiting draft with other solid deck weights. The height of these miscellaneous weights shall not exceed 8' above the main deck. These weights must be secured to prevent shifting.

7. All unprotected manholes, access openings, etc. through which progressive flooding may take place must be closed while the excavator is in operation.
8. When operating the excavator, spuds must be resting on bottom or removed from the barge.

Excavator Operations

When picking according to the applicable excavator load chart and using the 5 yd^3 bucket (see Sheet 5), the barge trim and heel will remain within the angles given below while operating under the following restrictions:

1. The initial conditions in guidance Item 3, above, are adhered to.
2. The excavator is configured as given in guidance Item 1 and lifting according to the excavator chart for the configuration (see Sheet 5).
3. At no time is barge transiting permitted with a suspended load. The excavator may not operate while the barge is under tow.
4. Calculations have been performed demonstrating that the excavator will have adequate friction force to prevent sliding and/or shifting prior to the stability criteria being met. However, Section 1437(n)(5) of Ref. 2 still requires physical restraint. All manufacturer and client recommendations for lashing of equipment for marine use shall be followed.
5. The guidance provided is for static conditions only. The excavator operator's judgement must be used to allow for dynamic load effects from wind and sea. Sea state wavelengths of more than half the vessel beam shall be avoided.
6. The underdeck structure has been evaluated for capacity in way of the excavator. Calculations on file at Glosten show that the underdeck structure has adequate strength to support the anticipated loads from the excavator (see Ref. 10).
7. In addition to the limitations set forth in this guidance, the excavator operator shall adhere to all available manufacturer's guidance regarding safe operation of the excavator in a marine environment (i.e., wind speed, travel restrictions, etc.).

If operated in the manner described above, the barge may have the following maximum angles/conditions (not necessarily concurrently):

Barge Trim	Barge Heel	Minimum Freeboard	Righting Energy Ach'd	Righting Energy Req'd
1.4°	1.9°	5.8'	101.5 ft-deg	10.0 ft-deg

Assumptions

The following assumptions were used in the analysis to support these guidelines:

1. Lightship weight was estimated using empirical calculations given in Ref. 4. LCG and TCG were assumed to be at the volumetric longitudinal center and on centerline. VCG was calculated at 60% of the vessel depth per Ref. 4.

Lightship	LCG	TCG	VCG
779.5 kip	80.0'	0.00'	7.20'

2. The hull geometry and underdeck structure are based on Ref. 10.
3. The excavator weights and centers were calculated using the manufacturer's reach chart (Sheet 5) and the total machinery weight provided in Ref. 5.
4. The excavator geometry was taken from Ref. 5 and 9.

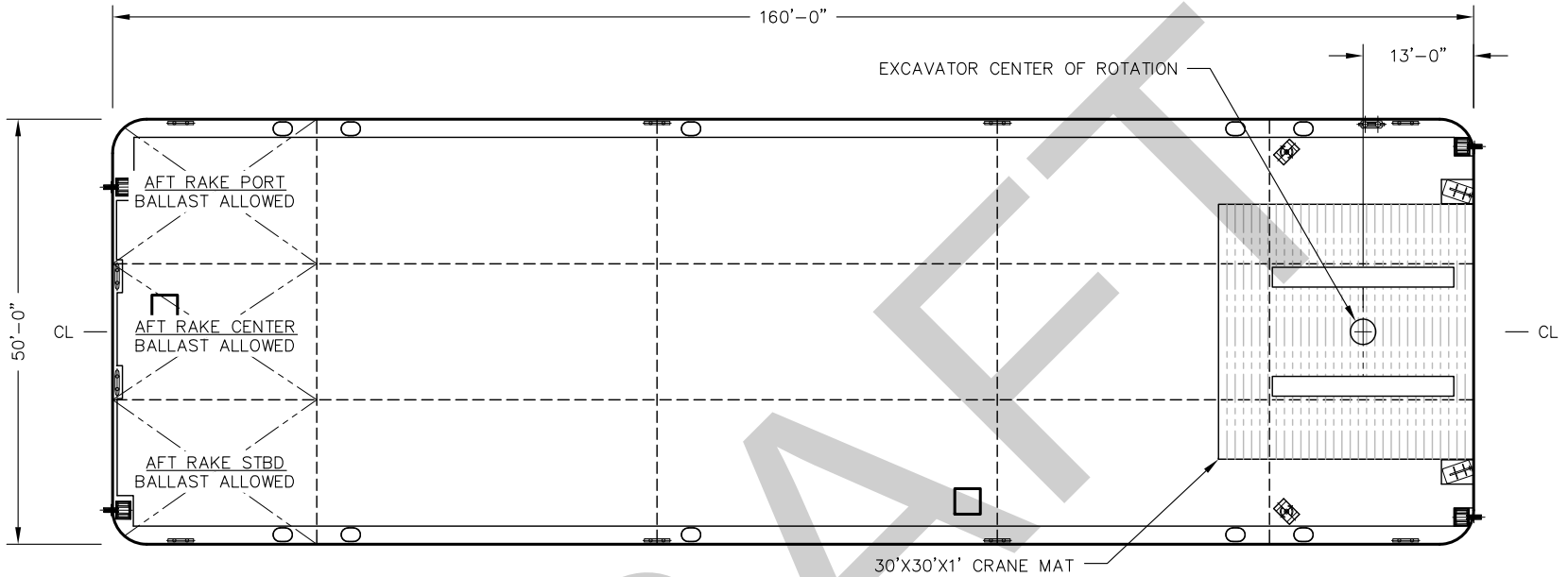
Period of Validity

This stability guidance is valid for four years from the issue date. After this time, the contractor/operator shall review the following items with Glosten prior to reissuing the stability guidance:

- Area of operation and applicable stability criteria.
- Lifting equipment configuration and applicable manufacturer's modes of operations and limits.
- Barge arrangement and structural condition.
- Use of deck cargo.

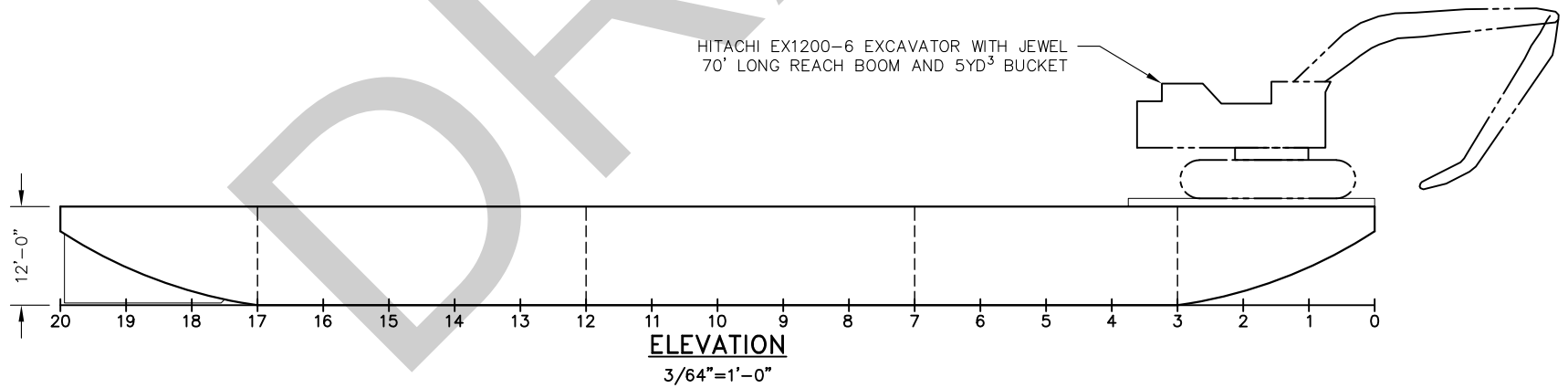
References

1. 46 CFR § 173 Subpart B, *Lifting*, 2023.
2. 29 CFR § 1926 Subpart CC, *Floating Cranes/Derricks and Land Cranes/Derricks on Barges*, 2024.
3. Creative Systems, Inc., *General HydroStatics* (GHS) [software], Version 19.00.
4. United States Coast Guard, *Marine Safety Manual,* Vol. IV, 2004.
5. Hitachi, *EX1200-6 Sales Brochure*, DKE1200BHT, 17-10.
6. Jewell MFG, Inc., *EX 1200 70' MH – Hooked Main Hydraulic Capacity & Stability,* February 13, 2014.
7. Young Corporation, *RS505CLS-SP-Layout,* E-2325, Rev X, January 25, 2016.
8. Clark, J., Pacific Pile & Marine, Email to M., Ryan, Glosten, "WEB & 1200-5 Stability + 1200-6 & Lash," August 16, 2024.
9. EXI1200 1200-6 70' MH Hooked Main, 01116226 Model(1).pdf, September 2, 2017.
10. *Barge "Lash4" Structural Arrgt & Details (As-Built)*, West Sound Maritime, Inc., Dwg No. 2022-058-200-2, November 2, 2022.



PLAN

3/64"=1'-0"



ELEVATION

3/64"=1'-0"

PACIFIC PILE & MARINE

SEATTLE, WASHINGTON

HITACHI 1200-6 WITH JEWELL 70' BOOM AND 5 YD BUCKET

GENERAL ARRANGEMENT

Glosten More than DESIGN.
1201 WESTERN AVENUE, SUITE 200
SEATTLE, WASHINGTON 98101
T +1 206.624.7850 GLOSTEN.COM

Drawn	Checked	Approved	Date
APL	MBR	BGL	2024/08/21

Scale	Drawing Number	Rev
AS NOTED	24129.01 Sheet 4 of 5	–

02-13-2014
35:11:39

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                                30        35        40        45        50        55        60        65        70
**********************************  .....................................|.....|.....................................    60
*       JEWELL MFG, INC.           *  .         .         .         .   |     .|        .         .         .         .
*   EX 1200-6 70' HOOKED MAIN MH   *  .         .         .         .   |     .  |       .         .         .         .
* HYDRAULIC CAPACITY & STABILITY   *  .         .         .         .    |    .    |      .         .         .         .
**********************************  .         .         .         .    |    .      |    .         .         .         .
                                    .....................................|....*........|.....................................    55
                                    .         .         .         .     |   .H=43670  |        .         .         .
REVOL.MACHINE-HITACHI MODEL-1200-6  .         .         .         .     |   .* 33690  . |      .         .         .
UNDERCARRIAGE-HITACHI MODEL-1200-6  .         .         .         .     |   .^21470   .   |    .         .         .
BOOM-JEWELL MODEL-MH-120-70H        .         .         .         .     |   .           .    |   .         .         .
ATTACHMENT-  MODEL-                 .....................................|...*.........*.....|.....................    50
                                    .         .         .         .     |   .H=43760  .H=38990  .         .         .
NOTES:                              .         .         .         .     |   .* 34400  .* 29360  .         .         .
(1.)CAPACITIES BASED UPON 87.5%     .         .         .         .     |   .^22150   .^18620   |         .         .
    HYDRAULIC AND 75% STABILITY     .         .         .         .    |    .         .         . |       .         .
    GOVERNED BY:                    .....................................|....*.........*.........*..|.................    45
    H= HOIST CYL.(2)- 10.5 DIA.     .         .         .         .    |    .H=43680  .H=39100  .H=35020  .         .
    S= STICK CYL.(1)- 10.5 DIA.     .         .         .         .   |     .* 35050  .* 29920  .* 25760  .         .
    *  STABILITY OVER END           .         .         .         .   |     .^22760   .^19150   .^16170   .         .
    ^ STABILITY OVER SIDE           .         .         .         .  |      .         .         .      |  .         .
(2.)HYDRAULIC PRESSURE= 4627 PSI    ..................................|.......*.........*.........*.......|...........    40
(3.)EFFICIENCY= 100%                .         .         .         . |       .H=43530  .H=39090  .H=35210  .         .
(4.)| INDICATES LIMITS OF GRAPPLE   .         .         .         .|       .* 35610  .* 30410  .* 26180  |         .
    ATTACHMENT PIN TRAVEL           .         .         .         |       .^23300   .^19620   .^16580   .|        .
(5.)COUNTERWEIGHT: 13,500#          .         .         .        |.       .         .         .         . |       .
(6.)UNDERCARRIAGE: FACTORY          ..........................|.*.........*.........*.........*.........*.|.......    35
(7.)CYLINDERS: JEWELL               .         .         .      |  .H=48630  .H=43360  .H=39010  .H=35260  .H=31790  .
(8.)CLAM WEIGHT: NOT INCLUDED       .         .         .     |   .* 42750  .* 36100  .* 30830  .* 26550  .* 23000  .
(9.)THE ABOVE CALCULATIONS,         .         .         .   |     .^28400   .^23760   .^20020   .^16940   .^14350   .
    WEIGHTS AND MACHINE MODELS      .         .         .  |      .         .         .         .         .    |    .
    ARE SUBJECT TO CHANGE AT        ....................|.........*.........*.........*.........*.........*.....|....    30
    ANYTIME WITHOUT NOTICE          .         .        |.         .H=48400  .H=43190  .H=38910  .H=35250  .H=31930  .
                                    .         .         .     |   .         .* 43210  .* 36500  .* 31180  .* 26860  .* 23270  .
                                    .         .         .    |    .         .^28840   .^24140   .^20350   .^17230   .^14600   .
10        15        20        25    .         .         .  |     .         .         .         .         .         .      | .
..................................................|.........*.........*.........*.........*.........*.........*.....|..    25
.         .         .         .         .       | .H=63330  .H=54740  .H=48210  .H=43050  .H=38820  .H=35220  .H=31990  .
.         .         .         .         .   |     .* 64280  .* 52350  .* 43570  .* 36820  .* 31460  .* 27090  .* 23470  .
.         .         .         .        .|        .^43130   .^35190   .^29170   .^24440   .^20610   .^17460   .^14800   .
.         .         .         .    |   .         .         .         .         .         .         .         .         |
..........................|.........*.........*.........*.........*.........*.........*.........*.........*.........|    20
.         .         .|        .H=92610  .H=75070  .H=63170  .H=54580  .H=48080  .H=42940  .H=38750  .H=35180  .H=32010  |S=26770
.         .         |        .* 108560 .* 81670  .* 64540  .* 52620  .* 43820  .* 37040  .* 31650  .* 27260  .* 23620  .* 20550
.         .         .|       .^70290   .^54260   .^43370   .^35440   .^29410   .^24650   .^20800   .^17620   .^14950   .^12670
.         .         .|       .         .         .         .         .         .         .         .         .         .|
.....................|.......*.........*.........*.........*.........*.........*.........*.........*.........*.........*    15
.         .         . |      .H=92800  .H=75050  .H=63090  .H=54490  .H=48000  .H=42880  .H=38700  .H=35160  .H=32020  .S=27840
.         .         .  |     .* 108200 .* 81700  .* 64680  .* 52770  .* 43960  .* 37170  .* 31760  .* 27360  .* 23710  .* 20630
.         .         .  |     .^69980   .^54290   .^43490   .^35580   .^29540   .^24770   .^20910   .^17710   .^15030   .^12750
.         .         .  |     .         .         .         .         .         .         .         .         .         .|
.....................|......*.........*.........*.........*.........*.........*.........*.........*.........*.........*    10
.         .         .  |     .H=92870  .H=75050  .H=63070  .H=54470  .H=47970  .H=42860  .H=38690  .H=35150  .H=32020  .S=28130
.         .         .  |     .* 108060 .* 81700  .* 64710  .* 52820  .* 44000  .* 37200  .* 31800  .* 27390  .* 23740  .* 20650
.         .         . |      .^69860   .^54290   .^43520   .^35620   .^29580   .^24810   .^20940   .^17740   .^15060   .^12770
.         .         . |      .         .         .         .         .         .         .         .         .         .|
.....................|.......*.........*.........*.........*.........*.........*.........*.........*.........*.........*    5
.         .         .|       .H=92770  .H=75050  .H=63100  .H=54510  .H=48010  .H=42890  .H=38710  .H=35160  .H=32020  .S=27710
.         .         |        .* 108260 .* 81700  .* 64660  .* 52750  .* 43940  .* 37150  .* 31750  .* 27350  .* 23700  .* 20620
.         .        |.        .^70030   .^54290   .^43480   .^35570   .^29520   .^24750   .^20890   .^17700   .^15020   |^12740
.         .       | .        .         .         .         .         .         .         .         .         .         |
.................|..*.........*.........*.........*.........*.........*.........*.........*.........*.........*.........|    0
.         .    |     .S=39440  .H=92570  .H=75080  .H=63200  .H=54610  .H=48100  .H=42960  .H=38760  .H=35190  .H=32010  |
.         .   |      .* 158190 .* 108620 .* 81650  .* 64510  .* 52580  .* 43780  .* 37000  .* 31620  .* 27240  .* 23600  .
.         . |        .^96960   .^70350   .^54250   .^43330   .^35410   .^29370   .^24620   .^20770   .^17590   .^14930   .
.         |          .         .         .         .         .         .         .         .         .         .      | .
........|.*.........*.........*.........*.........*.........*.........*.........*.........*.........*.........*.....|..    -5
.    |    .S=23960  .S=50670  .H=92460  .H=75190  .H=63360  .H=54780  .H=48240  .H=43070  .H=38840  .H=35220  .H=31980  .
. |        .* 294240 .* 159950 .* 108840 .* 81460  .* 64220  .* 52290  .* 43510  .* 36770  .* 31410  .* 27060  .* 23440  .
.          .^158280  .^98420   .^70550   .^54080   .^43070   .^35130   .^29120   .^24390   .^20570   .^17420   .^14770   .
.          .         .         .         .         .         .         .         .         .         .         .    |    .
*.........*.........*.........*.........*.........*.........*.........*.........*.........*.........*....|.....    -10
.S=20270   .S=33550  .S=60820  .H=92530  .H=75410  .H=63620  .H=55010  .H=48440  .H=43220  .H=38930  .H=35250  .H=31910  .
.* ******  .* 298920 .* 160770 .* 108700 .* 81060  .* 63780  .* 51870  .* 43140  .* 36440  .* 31130  .* 26810  .* 23220  .
.^418080   .^161670  .^99100   .^70420   .^53720   .^42660   .^34740   .^28770   .^24080   .^20300   .^17180   .^14560   .
.          .         .         .         .         .         .         .         .         .         .         . |       .
*.........*.........*.........*.........*.........*.........*.........*.........*.........*.........*.|.......    -15
.S=27120   .S=40640  .S=66980  .H=92850  .H=75780  .H=63960  .H=55300  .H=48670  .H=43390  .H=39030  .H=35250  .H=31750  .
.* ******  .* 300140 .* 160520 .* 108100 .* 80410  .* 63160  .* 51320  .* 42660  .* 36020  .* 30760  .* 26490  |* 22940  .
.^424010   .^162550  .^98890   .^69900   .^53130   .^42100   .^34230   .^28320   .^23680   .^19950   .^16880   .^14290   .
.          .         .         .         .         .         .         .         .         .         .         .      | .
|.........*.........*.........*.........*.........*.........*.........*.........*.........*.........*......|.....    -20
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.* ******  .* 298830 .* 159360 .* 107060 .* 79500  .* 62380  .* 50650  .* 42080  .* 35520  .* 30330  .* 26110  .         .
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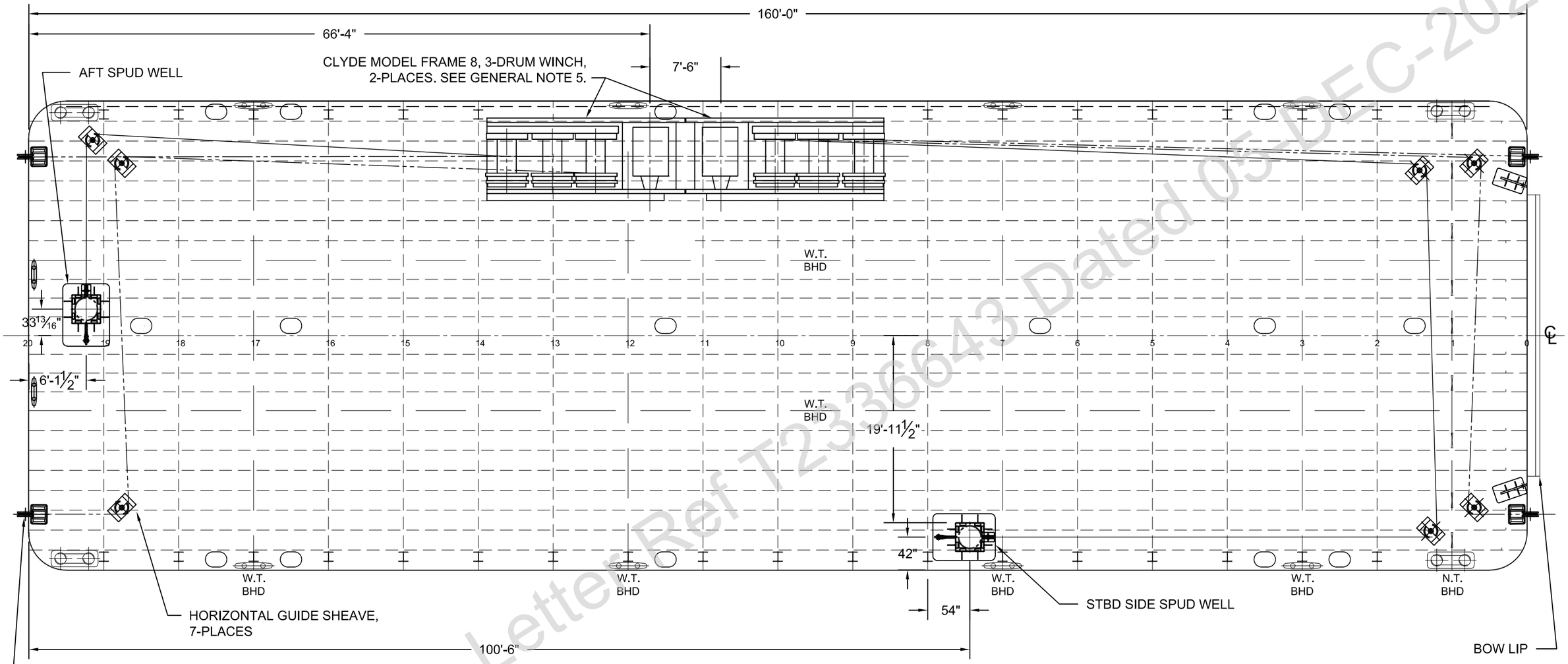


PLAN 3-5B
DECK ARRANGEMENT
SCALE: 3/32" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
11-10-22

FOR:	PROJECT:	TITLE:
PACIFIC PILE & MARINE	BARGE LASH 4	AFT & STBD SPUD WELL INSTALLATION MODS

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
11-10-2022	jck	AS NOTED	2022-058-200-03	3	20

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com

SHIPBOARD

OIL POLLUTION

EMERGENCY PLAN

(SOPEP)

SHIPBOARD OIL POLLUTION EMERGENCY PLAN

In accordance with Regulation 37 of Annex I of MARPOL 73/ 78

SHIP´S IDENTIFICATION

GL-Register-Number	645664
Name of Ship	Lash 4
Distinctive Number or Letters (Call Sign)	
IMO-Number	
Type of Ship	Deck Cargo Barge
Port of Registry	Kodiak, AK
Gross Tonnage	805
Flag	USA

Owner/ Managers: see „Ship Interest Contacts“

TABLE OF CONTENT/ INDEX OF SECTIONS

INTRODUCTION

1. This Shipboard Oil Pollution Emergency Plan (hereafter referred to as the "Plan") is written in accordance with the requirements of regulation 37 of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 relating there to.

2. The purpose of the Plan is to provide guidance to the Master and officers on board the ship with respect to the steps to be taken when an oil pollution incident has occurred or is likely to occur. The appendices contain communication data of all contacts referenced in the Plan, as well as other reference material.

3. The Plan contains all information and operational instructions as required by the "Guidelines for the development of the Shipboard Oil Pollution Emergency Plan" as developed by the Organization (IMO), published under MEPC.54(32) and amended by MEPC.86(44).

4. The Plan has been approved by the Administration or on their behalf and, except as provided below, no alteration or revision shall be made to any part of it without the prior approval by or on behalf of the Administration.

5. Changes to Section 5 and the appendices are not required to be approved. The appendices should be maintained up to date by the owners, operators and managers.

SECTION 1: PREAMBLE

1.1 This Plan is available to assist the ship's personnel in dealing with an unexpected discharge of oil. Its primary purpose is to set in motion the necessary actions to stop or minimize the discharge of oil and to mitigate its effects.

1.2 Effective planning ensures that the necessary actions are taken in a structured, logical and timely manner.

1.3 The primary objectives of this Plan are to

- prevent oil pollution
- stop or minimize oil outflow when a damage to the ship or its requirements occurs
- stop or minimize oil outflow when a operational spill occurs in excess of the quantity or instantaneous rate permitted under the present Convention

1.4 Further, the purpose of the Plan is to provide the Master, officers and certain crew members with a practical guide to the prevention of oil spills and in carrying out the responsibilities associated with regulation 37 of Annex I to MARPOL 73/ 78

- procedures to report an oil pollution incident
- Coastal State contacts (Focal Points) and Port Contact Lists to be contacted in the event of an oil pollution incident
- response actions to reduce or control the discharge of oil following an incident
- co-ordination with national and local Authorities in combating oil pollution

1.5 In summary, the Plan will serve to promote a practised response when the ship's personnel is faced with an oil spill.

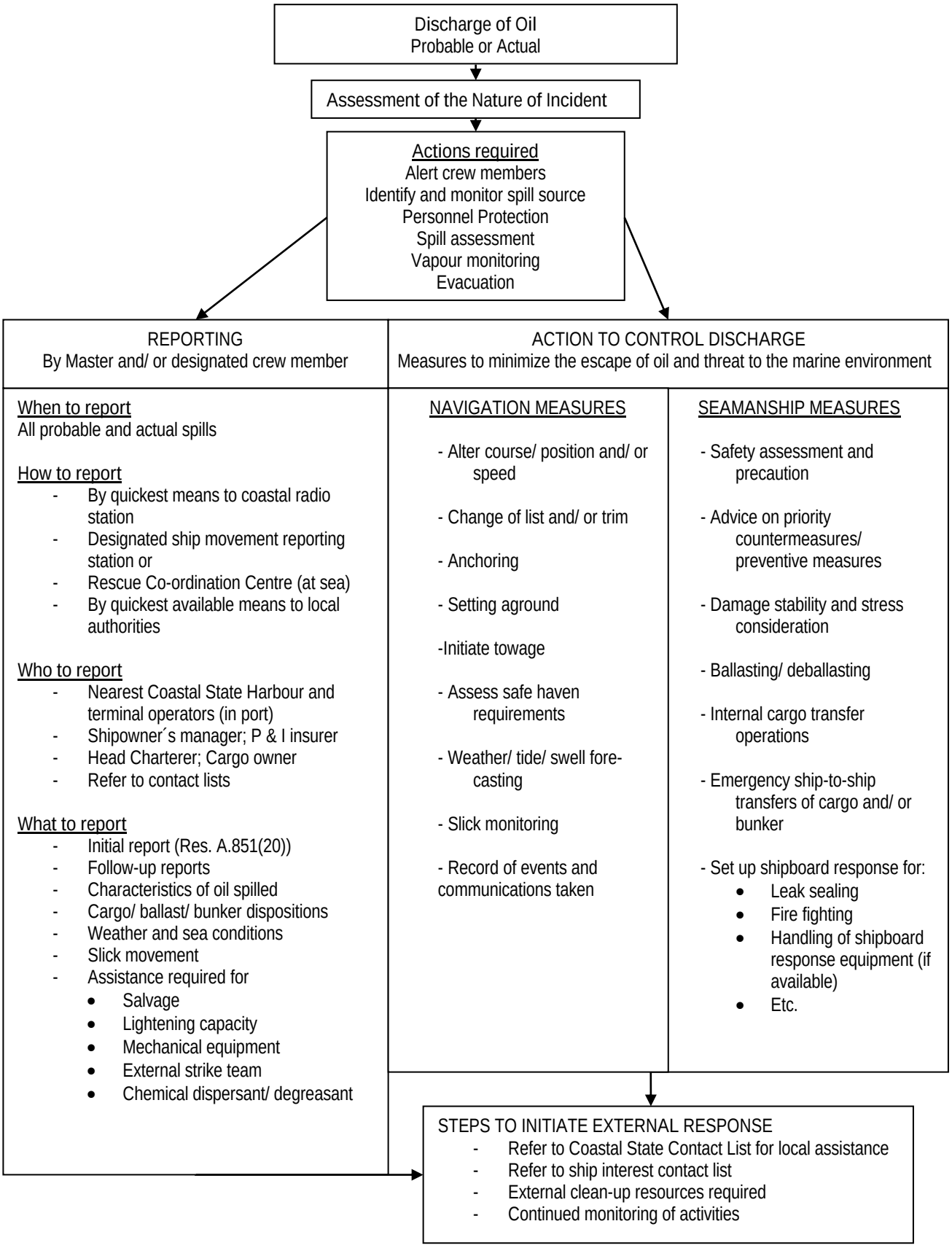
1.6 Although the Plan is designed as a ship-specific tool it must also be considered as an additional instrument and as a link to shore-based plans. With this the Plans allow an efficient co-ordination between the ship and shore-based Authorities/ Organizations in mitigating the effects of an oil pollution incident.

1.7 The Plan includes a summary flowchart to guide the Master through reporting and acting procedures required during an oil pollution incident response.

1.8 The Plan is likely to be a document used on board by the Master and officers of the ship and must therefore be available in the working language used by them.

SHIPBOARD OIL POLLUTION EMERGENCY PLAN – SUMMARY FLOWCHART

This flow diagram is an outline of the course of action that shipboard personnel should follow in responding to an oil pollution emergency based on the guidelines published by the Organization. This diagram is not exhaustive and should not be used as a sole reference in response. Consideration should be given for inclusion of specific reference to the Plan. The steps are designed to assist ship personnel in action to stop or minimize the discharge of oil and mitigate its effects. These steps fall into two main categories – reporting and action



SECTION 2: REPORTING REQUIREMENTS

2.1 General

The reporting requirement of this section complies with those of regulation 37 of MARPOL 73/ 78, Annex I.

When the ship is involved in an incident which results in the discharge or probable discharge of oil, the Master is obliged under the terms of MARPOL 73/ 78 to report details of the incident, without delay, to the nearest Coastal State by means of the fastest telecommunication channels available.

The intent of these requirements are to ensure that Coastal States are informed, without delay, of any incident giving rise to oil pollution, or threat of oil pollution, of the marine environment, as well as of assistance and salvage measures, so that appropriate action may be taken.

Without interfering with ship owners' liability, some coastal states consider that it is their responsibility to define techniques and means to be taken against an oil pollution incident and approve such operations which might cause further pollution, i.e. lightening. States are in general entitled to do so under the International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969.

2.2 Reporting Procedures

For easy reference the reporting requirements in the context of this Plan are divided in the following information blocks:

2.2.1 When to report

Taking the summary flowchart as a basic guide into consideration reports are necessary in the following cases:

2.2.1.1 Actual Discharge

The Master is obliged to report to the nearest Coastal State whenever there is a discharge of oil resulting

- from damage to the ship
- from damage to the ship's equipment
- for the purpose of securing the safety of a ship or saving life at sea
- during the operation of the Ship in excess of the quantity or instantaneous rate permitted under the present Convention

2.2.1.2 Probable Discharge

The Master is obliged to report even when no actual discharge of oil has occurred but there is a probability that one could.

However, as it is not practicable to lay down precise definitions of all types of situations involving probable discharge of oil which would warrant an obligation to report the Master is obliged to judge by himself whether there is such a probability and whether a report should be made.

Therefore, it is recommended that, at least, the following events

- damage, failure or breakdown which affects the safety of the ship (e.g. collision, grounding, fire, explosion, structural failure, flooding, cargo, cargo shifting etc.)

or

- failure or breakdown of machinery or equipment which results in impairment of the safety of navigation (e.g. failure or breakdown of steering gear, propulsion, electrical generating system, essential shipborne navigation aids etc.)

are carefully considered by the Master – taking into account the nature of the damage failure or break- down of the ship, machinery or equipment as well as the ship's location, proximity to land, weather, state of the sea and traffic density – as cases in which a probable discharge of oil is most likely.

If in doubt, the Master should always make a report in cases aforementioned.

In all cases the Authorities should be kept informed by the Master as how the situation progress and be advised when all threat of pollution has passed.

2.2.2 Information Required

As required in article 8 and Protocol I of MARPOL 73/ 78 Convention the Master or other persons having charge of the ship should report the particulars of any pollution incident. In this context the International Maritime Organization (IMO), in 1997, adopted Resolution A. 851 (20) "General Principles for Ship Reporting Systems and Ship Reporting Requirements, including Guidelines for Reporting Incidents involving Dangerous Goods, Harmful Substances and/ or Marine Pollutants".

The intent of the Resolution aforementioned is to enable Coastal States and other interested parties to be informed, without delay, of any incident giving rise to oil pollution, or threat of oil pollution, of the marine environment, as well as of assistance and salvage measures, so that appropriate action may be taken.

Nothing in this chapter relieves the Master in using sound judgement to make sure that any incident or probable discharge of oil is reported as quickly as possible in the prevailing situation.

When transmitting initial reports to the authorities of the nearest Coastal State the Master or other persons dealing with such a transmission should take note of Resolution A. 851 (20).

Especially, the format of the initial report as well as supplementary of follow-up reports should be conform to the guidance contained in Res. A. 851 (20). All reporting whether initial or follow-up, should follow IMO's reporting format as outlined below and should contain the following information:

LABEL	FUNCTION	EXPLANATION
A	Ship	Name, call sign and nationality
B	Date and time (UTC) of event	A 6-digit group giving day of month (first two digits), hours & minutes (last four digits)
C	Position	A 4-digit group giving latitude in degrees and minutes suffixed with N or S, and a 5-digit group giving longitude in degrees and minutes suffixed with E or W
D	Position	True bearing (first 3 digits) and distance (state distance) in nautical miles from clearly identified landmark (state landmark)
E	True course	A 3-digit group
F	Speed at time of incident	In knots and tenths of knots as a 3-digit group
L	Route information	Details of intended track
M	Radio communications	Full details of radio stations (names) and frequencies being guarded
N	Time (UTC) of next report	A 6-digit group as under BB above
P	Cargo on board: can be included in „RR„ as relevant	Type(s) and quantity(/ies) of cargo/ bunker on board and brief details of any dangerous cargoes as well as harmful substances and gases that could endanger persons or the environment
Q	Defects or damage or deficiencies or other limitations	Brief details of conditions of the ship as relevant; ability to transfer cargo/ ballast/ bunker fuel
R	Description of pollution or possible overboard discharge	Brief details of pollution; this should include the type(s) of fuel oil, an estimate of the quantity discharged, whether the discharge is continuing, the cause of the discharge and, if possible, an estimate of the movement and area of slick
S	Weather conditions	Brief details of weather and sea conditions prevailing including wind force and direction and relevant swell details
T	Ship's representative and/ or owner	Name, address, telex and telephone number of the ship's owner and representative (charterer, manager or operator of the ship or their agents)
U	Ship's size and type	Details of length, breadth and type of ship as well as draught
X	Miscellaneous and additional information	Any other information including relevant details such as brief details of incident, need for outside assistance, action being taken to limit further discharge; details of any personnel injuries sustained, details of P & I Club and local correspondent.

A sample format for initial notification and a detailed example of an initial report is shown within the appendices.

All follow-up reports by the Master should include information relevant to the Coastal State Authorities to keep them informed as the incident develops.

Follow-up reports should include information on any significant changes in the ship's condition, the rate of release and spread of oil, weather and sea conditions and clean-up activities underway.

In this context details of bunker disposition, condition of any empty tanks and nature of any ballast carried are information needed by those involved in order to assess the threat posed by an actual or probable discharge of oil from the damaged ship.

2.2.3 Who to Contact

The Master is responsible for reporting any incident involving an actual or probable discharge of oil.

Taking into consideration the summary flowchart in Section 1 the Master of the ship involved in any kind of an actual or probable discharge, cases of which are defined under SECTION 2 (sub-paragraph 2.2.1.1 and 2.2.1.2) of this Plan should report details on the incident immediately (see Report Format in App. 1)

Nothing in this chapter relieves the Master from using sound judgement to make sure that any incident is reported as quickly as possible in the prevailing situation.

2.2.3.1 Coastal State Contacts

For the ship at sea

In order to expedite response and minimize damage from an oil pollution incident at sea, it is essential that appropriate Coastal States are notified without delay.

In this context the use of the list of agencies or officials of Administrations responsible for receiving and processing reports (so called "Focal Points") as developed by the Organization (IMO) in conformity with article 8 of the Convention is recommended.

Such a list is shown under App. 2.

An updated list of existing "Focal Points" is available from the Internet pages of IMO under address:

http://www.imo.org/ >> National Contacts >>> MEPC.6/Circ. xx

In the absence of such a list or listed focal point for a single country/ Coastal State, the Master should contact by the quickest available means

- the nearest coastal radio station or
- the designated ship movement reporting station or
- the nearest Rescue Co-Ordination Centre (RCC).

2.2.3.2 Port Contacts

For the ship in port,

Notification of local agencies, combating teams or clean-up companies will speed up response. If an oil spill occurs during the ship's stay in port, whether operational or as a result of an incident, the Master should inform the appropriate local agencies (e.g. National Response Centre, Terminal/ Port Authorities etc.) without undue delay.
If the ship is engaged in a regular service between ports/ terminals the Master or any other person aboard delegated by the Master should provide a list with the relevant Port Contact addresses for each port served regularly of Authorities/ persons and/ or terminals dealing with an oil spill. This list must be regularly updated.

The "Port Contact List" is shown in the App. 3.

If a change in the ship's range of trade or a change in the addresses of persons/ Authorities of the ports/ terminals served regularly takes place the Master or any other person aboard delegated by the Master is required to issue a new list.

Where ship's service makes it not feasible to prepare such a list the Master should seek guidance concerning such local Port Contacts and local reporting procedures upon arrival in port.

Addresses obtained in this way should be documented aboard in the form that the Master considers most effective and should be attached to the Plan.

2.2.3.3 Ship Interest Contacts

For Ship Interest Contacts it is necessary to have information at the Master's disposal in case of an oil spill for informing the home office of the ship's owner or operator, the local agent of the company, the appropriate P & I Club and correspondents, clean-up contractors etc.

This information should be provided in the form of a so-called "Ship Interest Contact List".

The "Ship Interest Contact List" is shown in the App. 4.

To avoid duplication of reports and to co-ordinate the Plan and the company's shoreside plan(s) responsible for informing the various Ship Interested Contacts is

☐ Master

☐ Owner

☒ Operator

Please follow then delete these
Remark for Plan writers:

Mark with a cross as appropriate

SECTION 3: STEPS TO CONTROL DISCHARGE

Ship personnel will most probably be in the best position to take quick action to mitigate or control the discharge of oil from their ship.

Therefore, this Plan provides the Master with clear guidance on how to accomplish this mitigation for a variety of situations.

It is the Master's responsibility to initiate a response in the event of a discharge of oil or substantial threat of discharge of oil – actual or probable – into the waters.

In no case action should be taken that in any way could jeopardize the safety of personnel either onboard or ashore.

The following enumeration specifies different kinds of possible operational oil spills with regard to reactions to be taken.

Please follow then delete these
Remark for Plan writers:

This section might be shortened considerably. All Sub-headings (e.g. Hull leakage, tank overflow etc) have to be dealt with by tailored and significant procedures (e.g. for sub-section 3.2.6 – transfer of bunker/ lightening). Only a few company–specific instructions could be sufficient for a dry cargo ship.
For oil tankers procedures in regard for loading/ discharging of cargo have to be added to the contents as necessary.

3.1 Operational Spills

3.1.1 Operational Spill Prevention

Crew members shall maintain a close watch for the escape of oil during bunker operations.

Prior to bunker transfer the competent crew members should mobilize the oil spill equipment, as far as available on board, and place it close to the planned operation, e.g. along the railing on the side at which bunker operation takes place.

Before bunker handling commences, all deck scuppers and open drains must be effectively plugged. Accumulations of water should be drained periodically and scupper plugs replaced immediately after the water has run off. Any free floating oil or oil droplets should be removed prior to draining.

Bunker tanks which have been topped up should be checked frequently during the remaining bunker operations to avoid an overflow.

Unless there are permanent means for retention of any slight leakage at ship/ shore connections for bunker transfer, it is essential that a drip tray is in place to catch any leaking oil.

The removed bunker oil and the used clean-up material should be retained on board in proper containment units until it can be discharged to a reception facility.

3.1.2 Pipeline Leakage

If a leakage occurs from a pipeline, valve, hose or metal arm, operations through that connection should be stopped immediately until the cause has been ascertained and the defect remedied.

Defective pipe sections should be isolated. Affected sections should be drained down to an available empty or slack tank.

If a leakage occurs from a hydraulic pipeline, operations should be stopped immediately.

Initiate clean-up procedures.

The removed bunker oil and the used clean-up material should be retained on board in proper containment units until it can be discharged to a reception facility.

Inform in line with Section 2 all parties interested about Pipeline Leakage and the actions taken so far.

3.1.3 Tank Overflow

If there is a tank overflow all bunker operations should be stopped immediately and should not be restarted until the fault has been rectified and all hazards from the released oil have been eliminated.

If there is any possibility of the released oil or oil vapours entering an engine room intake, appropriate preventive steps must be taken quickly.

Promptly shift bunker oil from the tank overflowed to an available empty or slack tank or prepare pump(s) or transfer the excess ashore.

Initiate clean-up procedures.

The removed bunker oil and the used clean-up material should be retained on board in proper containment units until it can be discharged to a reception facility.

Inform in line with Section 2 all parties interested about Tank Overflow and actions taken so far.

3.1.4 Hull Leakage

Identify leaking tank; consider diver if necessary and possible.

Reduce level in tank in question well below sea level.

If it is not possible to identify the leaking tank, reduce level in all tanks in vicinity. In this case give careful consideration to hull stress and stability.

If there is a spillage due to suspected hull leakage reduce the head of bunker and promptly transfer the bunker oil to an available empty or slack tank or, if berthed, discharge ashore in suitable barges/ tanks.

Inform in line with SECTION 2 all parties interested about Hull Leakage and the actions taken so far.

3.1.5 Spills caused by Equipment in Machinery Spaces

If operational oil spills are caused by a failure of equipment in machinery spaces any further operations of this equipment should be stopped immediately or measures are to be taken to avoid an oil spill.

Such equipment may be:

- Oily-water separating equipment or oil filtering equipment to de-oil bilge water from the engine room bilges
- Valves in pipes connecting ballast/ bilge systems
- Cooling pipes in oil cooler systems
- Gearing of bow thrusters
- Stern tubes

The removed bunker oil and the used clean-up material should be retained on board in proper containment units until it can be discharged to a reception facility.

3.2 Spills Resulting From Casualties

In the event of a casualty the Master's first priority is to ensure the safety of the ship's personnel, and to initiate actions which may prevent escalation of the incident and marine pollution.

3.2.1 Ship grounded / stranded

The Master's priority should be to ensure that he as soon as possible receives detailed information about the damage that the ship has been sustained, in order to determine remedial action to be taken for ensuring the safety of the ship and its crew.

Furthermore, the Master should also consider

- Danger to the ship's complement if the ship should slide off grounding site
- Danger of ship being shattered by heavy seas or swell
- Health hazards to the ship's crew and surrounding population due to release of oil or other hazardous substances in dangerous concentrations
- That fires may start due to released flammable substances and uncontrolled ignition sources
- Should the damage which the ship has sustained be of such an extent that the stability cannot be computed on board, the Master should seek assistance according to subparagraph 3.6

Also, the ship's Master shall take into account the following considerations:

- Is the vessel constantly being struck in the seaway?
- Is the vessel exposed to torsion?
- Is there a large difference in the tidal rangers at the grounding site?
- Are there strong tidal currents in the grounding area?
- May the vessel drift further up on the shore, due to high tides, wind and waves?

3.2.1.1 Prevention of Fire and Explosion

If the ship is aground and therefore cannot manoeuvre, all possible sources of ignition should be eliminated and action should be taken to prevent flammable vapours from entering the machinery spaces or the accommodation.

3.2.1.2 Extension of Hull Damage / Containment System Failure

First, a visual inspection should be carried out.

Check for visible oil along hull or in wake of the ship during day time. At night a stick with white cloth (or sheet of sorbent) around it may be lowered into the water alongside the ship to check for oil leakages.
All ballast/ bunker tanks to be sounded (ullage),

All other compartments which may have contact with the sea should be sounded to ensure that they are intact.

Soundings of ballast tanks/ bunkers tanks are to be compared with last soundings to check for possible leaks.

Sounding to be taken around the ship establish the ship's position on the grounding area.

When the ship is aground, due regards should be given to the indiscriminate opening of ullage plugs, sighting ports etc. as loss of buoyancy could be the result of such actions.

Any list of the ship shall be noted and included in the report for assistance.

3.2.1.3 Procedures to Reduce or Stop Outflow of Oil

The Master should assess the possibility of damage to the environment and whatever action can be taken to reduce further damage from an oil release, such as:

- Transfer of bunkers internally, provided shipboard piping system is in an operational condition
- If the damage is fairly limited and restricted, i.e. to one or two tanks, consideration should be given to transfer of bunkers internally from the damaged tank(s) to intact tanks, taking into account the impact on the ship's overall stress and stability
- Isolate damaged/ penetrated bunker tank(s) hermetically to ensure that hydrostatic pressure in tanks remains intact during tidal changes
- Evaluate possibility of pumping water into a damaged tank in order to form a water bottom stopping the outflow of oil
- Evaluate the necessity of transferring bunkers to barges or other ships and request such assistance accordingly
- Evaluate the possibility of additional release of oil.

In case of large differences between the tide levels, the Master should try to isolate the damaged tank(s) to reduce additional loss of oil.

3.2.1.4 Refloating by own Means

The Master should also evaluate the question of refloating the vessel by own means. Before such an attempt is made, it must be determined:

- whether the ship is damaged in such a way that it may sink, break up or capsize after getting off
- whether the ship after getting off may have manoeuvring problems upon leaving the dangerous area by own means
- whether machinery, rudder or propeller are damaged due to grounding or may be damaged by trying to get off ground by own means
- whether the ship may be trimmed or lightened sufficiently to avoid damage to other tanks in order to reduce additional pollution from oil/ bunker spillage
- weather evaluation: whether there is time/ reason to await improvements in weather or tide.

3.2.1.5 Securing the Ship

If the risk of further damage to the ship is greater in an attempt to refloat the ship by own means, than in remaining aground until professional assistance has been obtained, the ship's Master should try to secure the ship as much as possible by:

- Trying to prevent the ship from moving from its present position
- By dropping anchors (adequate water depth and anchor ground provided)
- By taking ballast into empty tanks, if possible
- Trying to reduce longitudinal strain on hull by transferring ballast or bunkers internally
- Reducing fire risk by removing all sources of ignition.

Inform in line with Section 2 all parties interested about the Grounding and the actions taken so far.

3.2.2 Fire/ Explosion

Should an explosion and a fire occur on board, sound the GENERAL ALARM immediately.
Further actions should be initiated in accordance with the ship's Muster List.
In case of fire and explosion the following priorities exist:

- Rescuing lives
- Limiting the damage/ danger to the ship and cargo
- Preventing environmental pollution

Steps to control the discharge of oil will depend largely on the damage to ship and cargo.
Special information thereto is contained in subparagraphs 3.2.4, 3.2.5 and 3.2.6.
Inform in line with Section 2 all parties interested about the Fire/ Explosion and the actions taken so far.

3.2.3 Collision (with fixed or moving object)

Should the ship be involved in a collision with another ship, the Master should as soon as possible identify the extent of damage to his own vessel.

When a collision occurs, the GENERAL ALARM should be sounded immediately for the personnel to muster at their designated Muster Stations.

The following check list should assist the Master in assessing the situation:

- Are any tanks penetrated above or below the waterline?
- If ships are dead in the water and interlocked, what is most prudent, to stay interlocked or separate?
- Is there any oil spill at present – small or large? Will a separation of the interlocked ships create a larger oil spill than if the ships stay interlocked?
- If there is an oil spill, will the separation of the ships cause sparks that can ignite the spilled oil or other flammable substances leaked out from the ships?
- Are the ships creating a greater danger to other traffic in the area if they are interlocked than if separated?
- Is there a danger to either ship of sinking after being separated?
- If the ships are separated, how is the manoeuvrability of the own ship?

If separation of the ships takes place, alter course to bring the own ship windward of any oil slick, if possible.

Shut down all none essential air intakes.

Isolate damaged/ penetrated tank(s) by hermetically closing the tank(s), if possible.

When it is possible to manoeuvre, the Master, in conjunction with the appropriate shore authorities, should consider moving his ship to a more suitable location in order to facilitate emergency repair work or lightening operations, or to reduce the threat posed to any sensitive shoreline areas.

Inform in line with Section 2 all parties interested about the collision and the actions taken so far.

3.2.4 Hull Failure

Should the ship lose one or more shellplatings, develop major cracks, or suffer severe damage to the hull, the Master should immediately sound the GENERAL ALARM to call the crew members to their Muster Stations, and inform them of the situation, and prepare lifeboats for launching if necessary.

The Master should then assess the situation, and confer with his senior officers.
The Master should obtain the latest weather forecast, and asses its impact on the present situation.

Furthermore, the following questions should be considered and should be asked:

- Is the ship in any immediate danger of sinking or capsizing?

If YES:

- Send distress message
- Immediately abandon the ship

If NO, initiate damage control measures as found necessary by considering the following points:

- Can the vessel manoeuvre on its own?
- Has the ship lost buoyancy?
- If the ship has a list due to loss of ballast, cargo/ bunker or buoyancy, is it necessary and possible to rearrange the bunker or ballast by internal transfer operation in order to bring the ship to an even keel?
- Is it necessary to dump cargo in order to maintain stability without changing the stress situation?
- Can this operation wait till another ship/ barge can receive that cargo?
- Is there any abnormal change in the ship's stability and stress situation?
- Can the change in the ship's stability and stress situation be monitored and calculated on board? If not, the Master should seek assistance according to subparagraph 3.6.
- Does the ship need assistance or escort to nearest port of refuge or repair port?
- Might it be prudent to salve part of the crew members in case the situation should worsen, or is it necessary to abandon the ship totally?

Inform in line with Section 2 all parties interested about the Hull Failure and the actions taken so far.

3.2.5 Excessive List

Should the ship for some reasons suddenly start to list excessively during discharging/ loading operations, or bunkering, all ongoing operations should be stopped immediately until the cause has been determined.

The Officer on Duty should inform the Master and/ or Chief Officer without delay.

The Master should try to determine the reason for the excessive list, and take steps to rectify the situation and to stabilize the ship's condition:

- Check reason(s) for list
- Soundings/ ullage to be taken in all tanks
- Bunker/ ballast pumps to be made ready
- Consider measures to minimize list in transferring liquid from one compartment to another
- Ensure water tightness of empty spaces
- Close all openings
- Secure vent pipes to avoid ingress of water
- If bunkering: Change to corrective tanks for rectifying the situation
- If ballasting/ deballasting: Change to corrective tanks to rectify the situation
- If there is reason to believe that the list may cause an oil spill, notify as per Section2
- If the ship's crew is in jeopardy, prepare lifeboats for launching, and notify as per Section 2

If the situation is brought under control, inform all parties interested.

3.2.6 Ship submerged/foundered/wrecked

If the ship is wrecked to the extent that it or parts of it are submerged take all measures to evacuate all persons on board. Avoid contact with any spilled oil. Alert other ships and/or the nearest coastal state for assistance in rescuing lives and the ship as far as possible.

3.2.7 Hazardous Vapour release

In case of any vapour release out of the containment system precautions have to taken to protect the persons onboard against contamination. The ship should be brought with the accommodation upwind of the spill area as far as possible. The crew should be evacuated from any area of risk. All possible sources of ignition should be eliminated and non-essential air intakes shut down to prevent intake of vapour into accommodation and engine spaces.
If unavoidable work has to be carried out within risk areas, the involved persons have to wear protective closing and breathing apparatus.

3.3 Priority Actions

Top priority shall in all cases of casualty be put on the safety of the persons onboard and to take actions to prevent escalation of the incident.
Immediate consideration should be given to protective measures against fire, explosions and personnel exposure to toxic vapour.
Detailed information about the damage sustained to the ship and its containment system has to be obtained. On the basis of the information the Master can decide next actions for the protection of lives, the ship, the cargo and the environment.
The Master should take into account the following when he is determining whether salvage assistance

will be needed or not:

- Nearest land or hazard to navigation
- Vessel's set and drift
- Estimated time of casualty repair
- Determination of nearest capable assistance and its response time.

In case of necessary movement of cargo within the ship careful consideration is to be given to hull strength and stability.
Plans/tables about the location and specification of the current cargo as well as bunkers and ballast have to be readily available.

3.4 Mitigating Activities

If safety of both the ship and the personnel has been addressed the Master shall care for following issues:

- Assessment of the situation and monitoring of all activities as documented evidence
- Care for further protection of the personnel, use of protection gear, assessment of further risk for health and safety
- Containment of the spilled material by absorption and safe disposal within leak proof containers of all used material onboard until proper delivery ashore, with due consideration to possible fire risk.
- Decontamination of personnel after finishing the cleanup process

3.5 Transfer of Bunker/ Lightening

If the ship has sustained extensive structural damage, it may be necessary to transfer all or part of the cargo/ bunker to another ship; however, this section refers to bunker transfer procedures only.
In Ship-to-Ship-transfer operations involving a specialized service ship, the Master of that ship will normally be in overall charge.
In the case of non-specialized ships the Master or other person in overall charge of the operation should be mutually agreed and clearly established by the Masters concerned prior to the start of operations.
The actual bunker transfer should be carried out in accordance with the requirements of the receiving ship.
In all cases each Master remains responsible for the safety of his own ship, its crew, cargo/ bunker and equipment and should not permit their safety to be jeopardized by the action of the other Master, his owner, regulatory officials or others.

The Ship-to-Ship-transfer operations should be coordinated with the appropriate responsible local Authority.

When selecting the area of operation the Master(s) should consider the following points

- The need to notify and obtain the agreement of any responsible authority
- The destinations of the ships concerned
- The shelter provided, particularly from sea and swell
- The sea area and depth of water, which should be sufficient for manoeuvring during mooring, unmooring and transfer operations and allow a safe anchorage if operations have to be undertaken at anchor
- The traffic density
- The weather conditions and the weather forecasts

Further, before commencing Ship-to-Ship transfer operations each ship should carry out, as far as possible, appropriate preparations like

- Pre-mooring preparations of the ships
- Positioning of fenders if such equipment is available on board
- Mooring equipment arrangements
- Checking the communication channels between the two ships

In additions to the general principles of Ship-to-Ship operations as aforementioned the Master should take note of supplemented instructions issued by the company.

Those supplemented information is located in:

☐ The Master's Office/ Cabin

☐ Chief Officers Office/ Cabin

☐ Navigation Bridge

☒ Cargo Office

Please follow then delete this
Remark for Plan writers:

Mark as appropriate

3.6 Damage Stability and Hull Stress Calculation

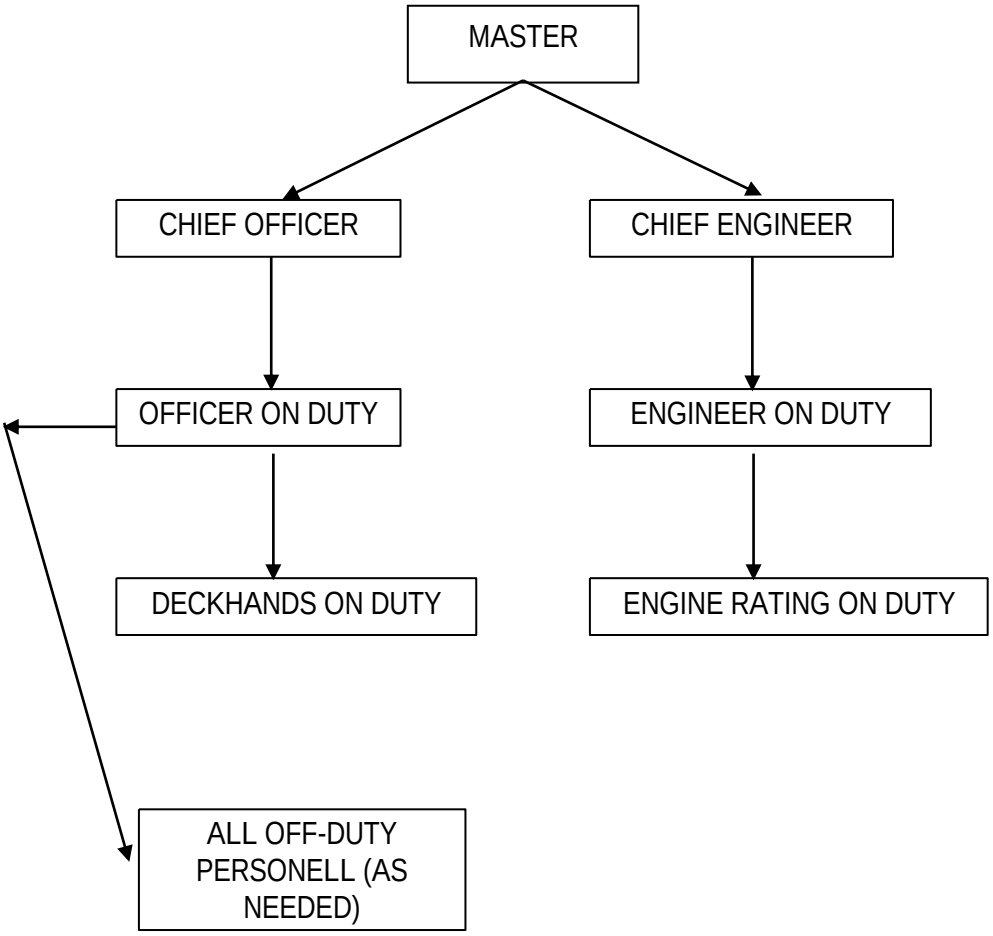
Please follow then delete this
Remark for Plan writers:

Under this heading it should be stated:

- *Availability of shipboard facilities (e.g. damage control plans, computer systems)*
- *Location where data about cargo, bunker and ballast distribution is available*
- *Shore based contacts for advice (e.g. technical department of operators)*

Subscription to a shore based computation-service would be on a voluntary basis. Germanischer Lloyd offers the EMERGENCY RESPONSE SERVICE (ERS) for all types of vessels – this 24-hour service contributes to the increasing demands for operational safety, especially in connection with safety management/ quality systems. (For further information, please call GL-Head Office, extension number –269.)

3.7 General Responsibilities of the Master and designated Officers/ Crew Members



Please follow then delete this
Remark for Plan writers:

The actual team composition should be listed in this section
(e.g. in accordance with the muster list)
Duties/ Responsibilities have to be fully in line with company procedures.

3.7.1 General Responsibilities

The following crew members are in charge in the event of an oil spill – actual or probable – to bring the accident under control, limit outflows, organize onboard clean-up procedures and determine the additional manpower needed. Arrangements shall be made that in case of sudden unavailability of superior ranks other available ranks are prepared to take over.

Ranking	Duties
Master	Overall in charge of operation on board dealing with an oil spill; responsible for all steps to be taken especially for the two main categories – reporting and action. Keeps log off all events and progress of actions.
Chief Officer	In charge of deck operation; Should keep the Master informed and updated on the situation and the results from action taken to stop or minimize an oil outflow.
Chief Engineer	In charge of bunker operation; Should keep the Master informed and updated on the situation and the results from action taken to limit oil outflow.
Deck Duty Officer	Tank overflow (bunkering): Alert and inform Chief Officer/ Chief Engineer on situation; Mobilize off duty crew as necessary
Duty Engineer	Assist Chief Engineer; Prepare for fire fighting; Ensure sufficient power and water to deck; Organize on board clean-up equipment
Duty Rating(s)	If an oil leakage is detected alert immediately by all possible means; Inform Officers(s) on Duty immediately; Position sorbent material/ clean-up material to prevent any escaped oil from reaching the railing; Commence clean-up by using, as far as available on board, the clean up equipment

Please follow then delete this
Remark for Plan writers:

The list of duties of the team members has to be tailored to the actual crew onboard and according to the diagram on the previous page

SECTION 4: NATIONAL AND LOCAL CO-ORDINATION

Quick efficient co-ordination between the ship and Coastal States or other parties involved becomes vital in mitigating the effects of an oil pollution incident.

As the identities and roles of various national and local Authorities involved vary widely from state to state and even from port to port, the Master should take note of these particularities, as far as possible. In this context the Master should call upon the owner's representatives in the state/ port of question to receive the relevant information.

Prior to undertaking mitigation actions – especially in cases of an actual discharge of oil due to casualties in the territorial waters of a Coastal State – the Master should contact the Coastal State for authorization of his action.

The Master should co-ordinate all his activities with the Coastal State.

The Master should call the Coastal State for allowance to use chemical agents for response to oil pollution on the sea. Without authorization of the Authorities of the appropriate Coastal State no chemical agents should be used.

Where no responsibility for discharge response by a Coastal State is noticed the Master should take all the necessary steps as deemed appropriate to minimize the escape of oil.

With respect of the accident happened the Master should take measures as stated in Section 2 and Section 3 of this Plan.

Appendices:

Initial Notification	(app. 1)
Coastal State Contacts (Focal Points)	(app. 2)
Port contacts	(app. 3)
Ship interest contacts	(app. 4)
Ship's Plans and Drawings	(app. 5)

- Layout of General Arrangement Plan
- Layout of Ballast and Bunker Tanks
- Drawings of fuel oil pipelines

SECTION 5 NON-MANDATORY INFORMATION (VOLUNTARY PART)

In addition to the mandatory provisions required by Reg. 37, Annex I, MARPOL 73/ 78 which are mentioned in Sections 1 to 4 of this Plan, local requirements, insurance company or owner/ operator policies etc. may dictate the provisions of additional guidance.

Such additional information material, including diagrams and/ or drawings, reference material etc., may be of help for the Master when responding to an oil pollution incident or an emergency situation as well as may be required by local Authorities in ports visited by the individual ship.

Please follow then delete this
Remark for Plan writers:

Therefore, for example the following additional information material may be attached to the individual Plan at the owners/ operators discretion and documented in the form that the Master/ company/ operator considers most effective.

- *Diagrams and additiona**l ship's plans (e.g. midship section plan, lines plan/ tables of** offsets, tank tables, load line assignment, light ship characteristics, etc.)*
- *Availability of response equipment (onboard spill equipment) and its location*
- *Guidance for the keeping of appropriate records of the pollution incident (e.g. for liability, compensation and reimbursement issues)*
- *Reference material (e.g. industry guidelines issued by various industry organization like ICS, OCIMF, SIGTTO, INTERTANKO, etc)*
- *Procedures for Plan testing*
- *Record-keeping procedures*
- *Procedures for Plan review.*

⇒ *All this information may be appended to the Plan if appropriate for the individual ship.*

APPENDICES

List of contacts
and
Additional Information Material

APPENDIX 1 INITIAL NOTIFICATION

The following format provides an example as to how Initial Notification information shall be presented:

A	MV „X„, Call Sign D..., German Flag
B	01 12 36
C	2528N 05740E
E	179
F	186
L	Bound Singapore from Muscat
M	Bahrain Radio 500 KHz, VHF 16, INMARSAT No. 888 888
N	As required
P	650 TEU/ NO IMDG CARGO/ BUNKERS 580 IFO/ 75 MDO
Q	Collision with cargo ship ..., HFO-Service tank starboard breached, no fire and all essential shipboard systems operational
R	Quantity of fuel oil lost from breached tank about 10 tons; tank now empty Slick moving SE away from land and out of Gulf of Oman
S	Weather fine, wind NNW, 3 Bft, sea state slight to moderate, no swell
T	Owner Blue Horizon Co., Vorsetzen 12, 20459 Hamburg, Tel. +40 123 45, Telex 876 54 Fax +40 876 543
U	Length 169 m, breadth 25 m, tonnage 23.000 tdw, type container ship
X	No personnel injuries sustained; no clean-up operations possible from ship; Shipsafe P and I Club advised; local correspondent is Miller on Tel. Dubai 54 444. Proceeding to Dubai for survey/ repairs.

MASTER

SHIPBOARD OIL POLLUTION EMERGENCY PLAN

SAMPLE FORMAT FOR INITIAL NOTIFICATION

A (SHIPS NAME; CALL SIGN; FLAG)

B(DATE AND TIME OF EVENT; UTC)

D	D	H	H	M	M

C (POSITION; LAT; LONG)

				N	S
d	d	m	m		

					E	W
d	d	d	m	m		

OR

D (BEARING; DISTANCE FROM LANDMARK)

d	d	d	N miles

E (COURSE)

d	d	d

kn	kn	1/ 10

L (INTENDED TRACK)

M (RADIO STATION(S) GUARDED)

N (DATE AND TIME OF NEXT REPORT; UTC)

D	D	H	H	M	M

P (TYPE AND QUANTITY OF CARGO/ BUNKERS ON BOARD)

Q (BRIEF DETAILS OF DEFECTS/ DEFICIENCIES/ DAMAGE)

R (BRIEF DETAILS OF POLLUTION; INCLUDING ESTIMATE OF QUANTITY LOST)

S (CONTACT DETAILS OF WEATHER AND SEA CONDITIONS)

Wind: Direction | Speed

Direction (m)

(Beaufort) SWELL | \└ Height
T (CONTACT DETAILS OF SHIP´S OWNER/ OPERATOR/ AGENT)
U (SHIP SIZE AND TYPE)
X (ADDITIONAL INFORMATION)

Footnote: The alphabetical reference letters in the above format are from „General principles for ship reporting systems and ship reporting requirements, including guidelines for reporting incidents involving dangerous goods, harmful substances and/ or marine pollutants“ adopted by the International Maritime Organization by resolution A. 851 (20). The letters do not follow the complete alphabetical sequence as certain letters are used to designate information required for other standard reporting formats, e.g., those used to transmit route information.

APPENDIX 2 COASTAL STATE CONTACTS (FOCAL POINTS)

Please follow then delete this
Note to Plan writers:

The current edition of the „List of the National Operational Contact Points„ issued by IMO has to be added in this Appendix. The present version can be downloaded and printed from the Internet under following address:

http://www.imo.org >>> National Contacts >>> MEPC.6/Circ. Xx

APPENDIX 3 SHIP INTEREST CONTACTS

The following table provides an example as to how ship interest contact information could be presented:

(a) Owner/ operator contacts

Name of institution/ person to be contacted	Address	Means of contact	Remarks
Pacific Pile & Marine	700 S Riverside Seattle, WA	206-331-3873	
Barge Superintendent	...	907-538-9854	...
...	...	...	...

(b) Other ship interest contacts

Name of institution/ person to be contacted	Address	Means of contact	Remarks
	...	...	...
Local agent	...	...	...
P & I Club and correspondents	...	...	...
...	...	...	...
...	...	...	...

APPENDIX 5 SHIP´S PLANS AND DRAWINGS

1. General Arrangement Plan
2. Tank Plan
3. Fuel Oil Piping Diagram

Dutch

STRUCTURAL DETAILS

Bottom - 3/8" steel plate
Bottom at longitudinal bulkheads - 3/4" steel plate
Transverse bottom frames - 18" x 4" x 7/16" flanged plate
Side frames - 12" x 30# channel
Diagonal supports - 5" x 5" x 1/2" angle
Bottom longitudinals - 7" x 4" x 3/8" angle
Deck longitudinals - 7" x 4" x 3/8" angle
Longitudinal deck web frames - 7/16" x 24" plate
Longitudinal face bar - 12" x 3/4" plate
Deck 1 - 5/8" steel plate
Sheer strake - 5/8" steel plate
First below sheer strake - 3/8" steel plate
Vertical stanchions - 8" x 8" x 1/2" angle

MACHINERY & ELECTRICAL SYSTEMS

Running lights on stanchions
Safety tow wire
4 Fairleads mounted near barge corners
4 Drum BU 100 Skagit anchor winch with G.M.C. diesel
2 external, removable spud tubes
2 30" Dia. steel pipe spuds
Anchors available as required

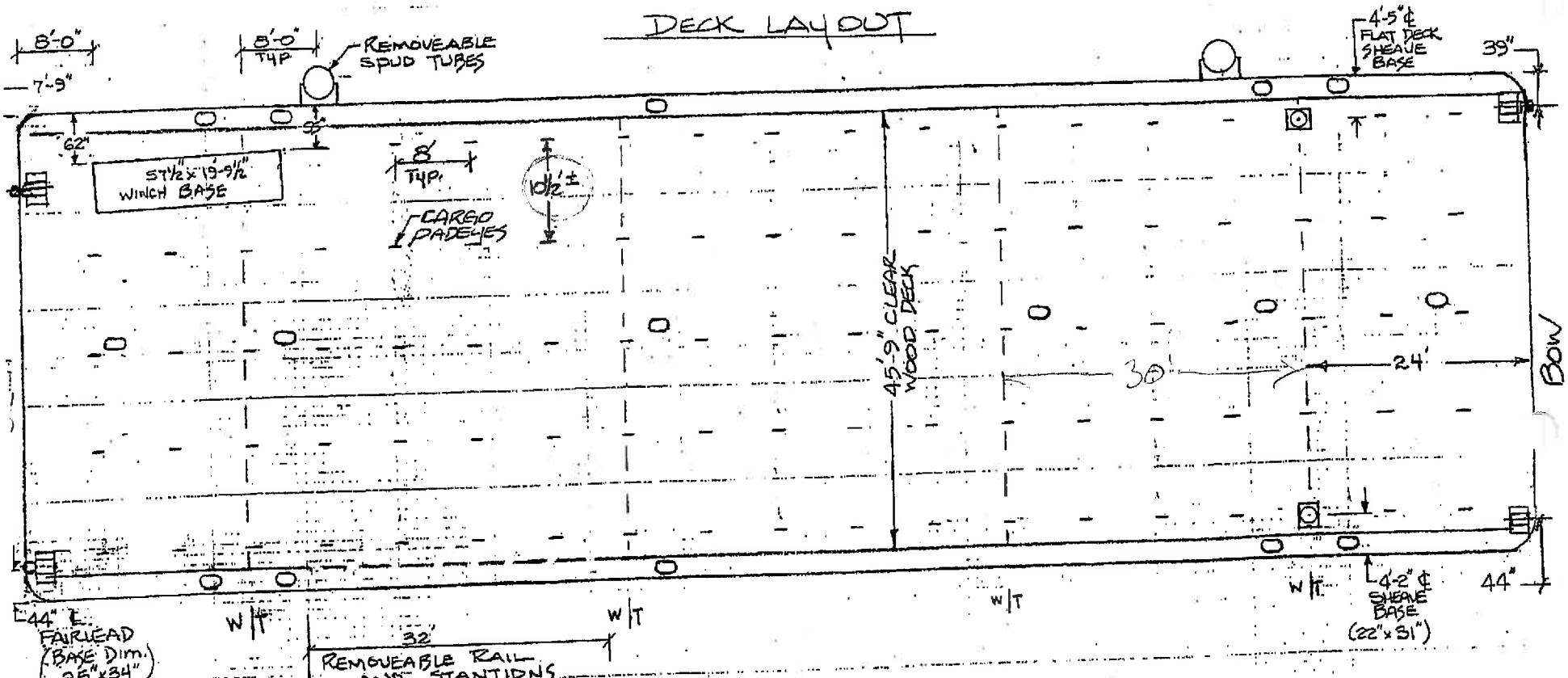
Vol 8 Tab A

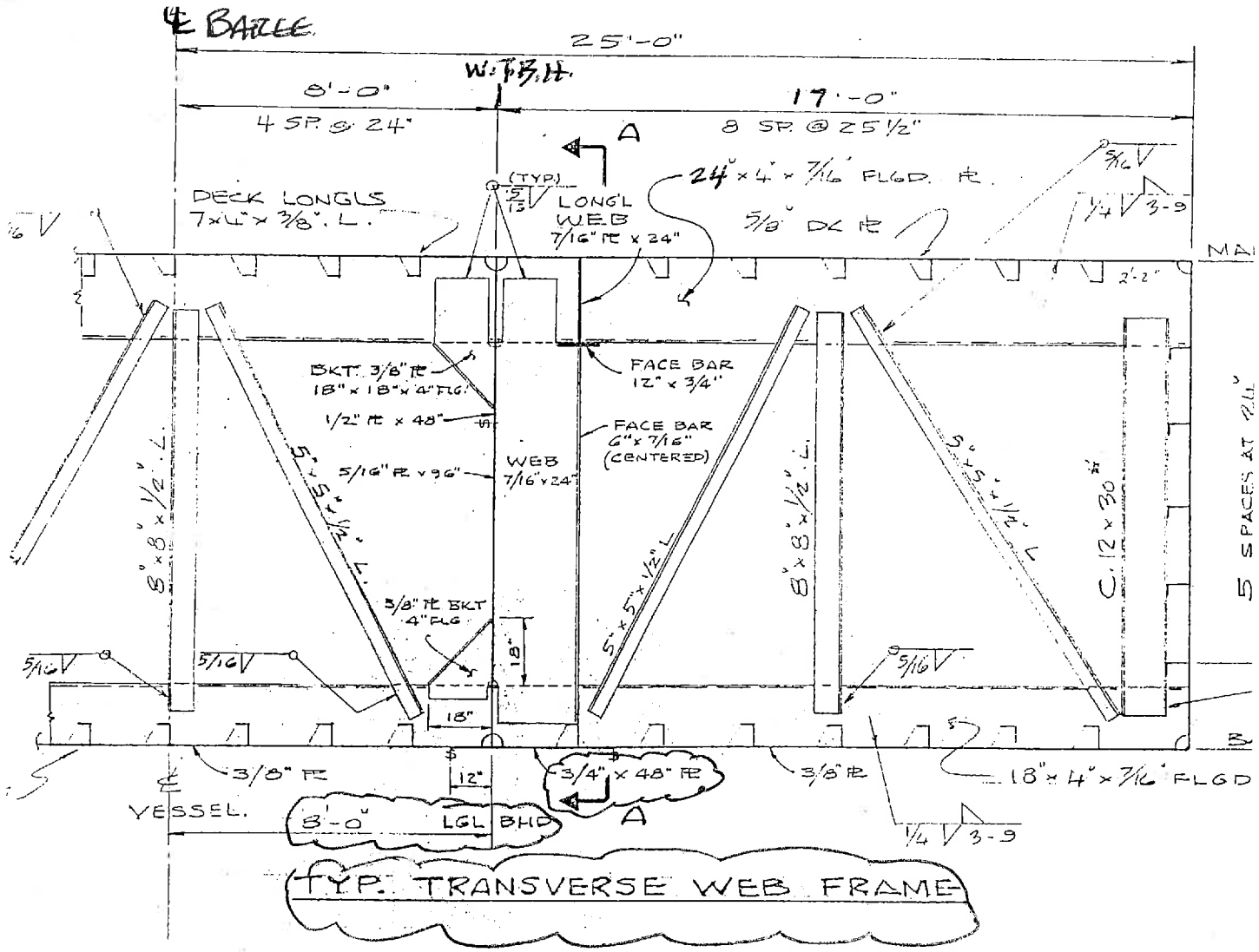
16.67

LASH 4 BARGE
50' x 160' x 12'
1" = 10'

BOW RAMPS
8'x26' EACH

DECK LAYOUT



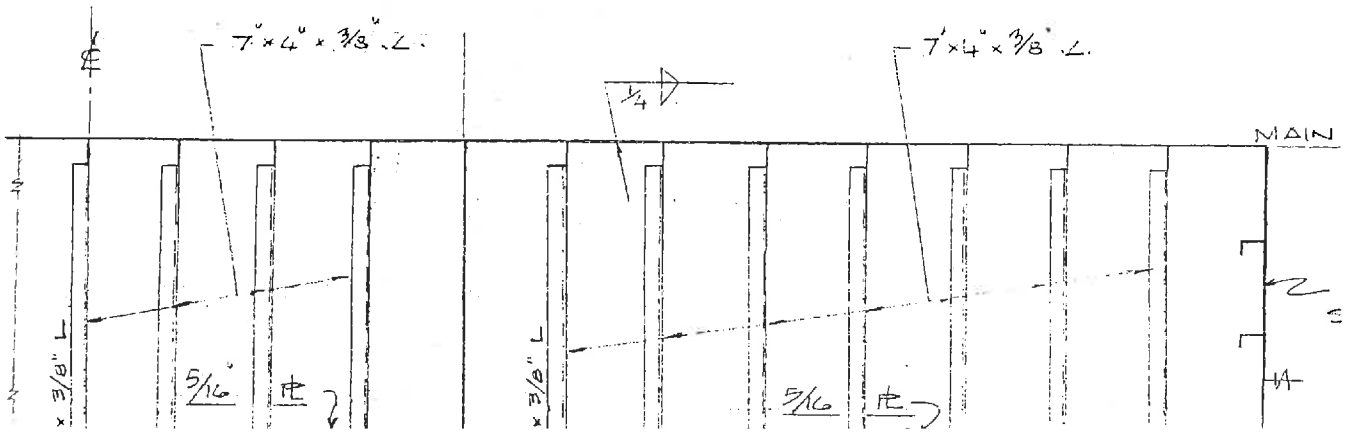


LASH ℄

½ SECTION

TRANS. FR.

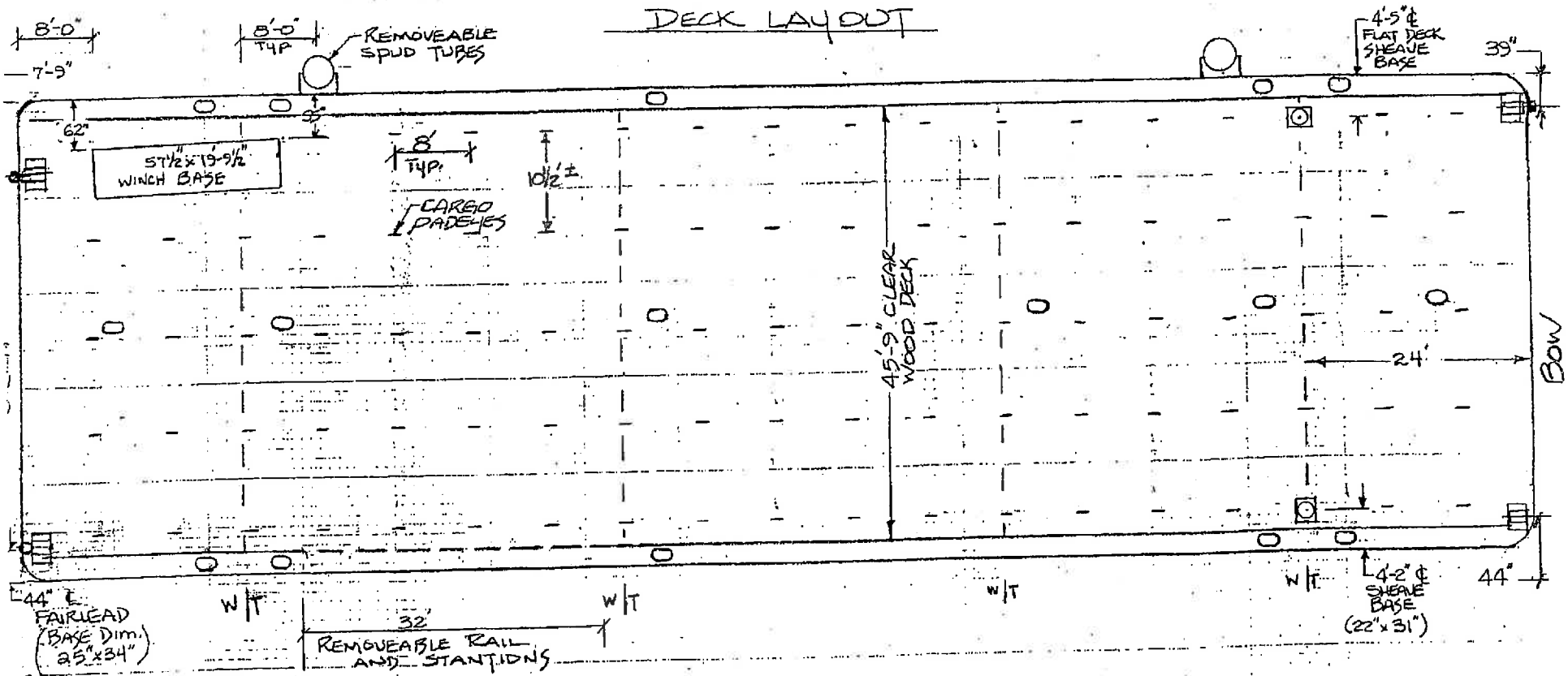
WATERTIGHT BULKHDS @ 8 OFF ℄



LASH 4 BARGE
50' x 160' x 12'
1" = 10'

BOW RAMPS
8' x 26' EACH

DECK LAYOUT



GENERAL NOTES

1. THIS DRAWING PROVIDES GENERAL ARRANGEMENT INFORMATION FOR THE BARGE "LASH 4". THE VESSEL GENERAL CHARACTERISTICS ARE AS FOLLOWS:

LENGTH OVERALL	161'-4"
BREADTH MOLDED	50'-0"
DEPTH MOLDED	12'-0"
GROSS TONNAGE	805
USCG DOC. No	645664
YEAR BUILT	1981
BUILDER	MALTBY TANK (EVERETT, WA)
HULL NUMBER	458
VESSEL SERVICE	FREIGHT BARGE

2. THE BARGE HAS BEEN ISSUED A LOAD LINE CERTIFICATE BY THE AMERICAN BUREAU OF SHIPPING (ABS).

3. THE BARGE HAS TRANSVERSE FRAMES ON 8'-0" CENTERS. THE BARGE HAS HALF FRAMES (TRANSVERSE) LOCATED AT 4'-0" FROM EACH MAIN FRAME ON THE BOTTOM SHELL IN WAY OF THE FORWARD AND AFT RAKE. THERE ARE NO HALF FRAMES UNDER THE DECK AND THERE ARE NO HALF FRAMES IN THE VESSEL MID-BODY. STRUCTURAL DETAILS ARE PROVIDED ON REFERENCE No. 1.

4. THE BARGE IS PRESENTLY CONFIGURED WITH A MOORING SYSTEM AND TWO EXTERNAL SPUDS. BOTH THE MOORING SYSTEM AND SPUD HOISTING SYSTEM ARE POWERED BY A SINGLE, 4-DRUM WINCH. THE MOORING SYSTEM IS COMPRISED OF FOUR ANCHORS (SIZE UNKNOWN) WITH SWIVEL HEAD FAIRLEADS LOCATED AT THE FOUR CORNERS OF THE BARGE. THE TWO SPUDS ARE 30"-DIAMETER PIPES WITH ¾"-THICK WALL BY 90-FT LONG. THE TWO SPUDS ARE LOCATED IN 36"-DIAMETER EXTERNAL SPUD WELLS MOUNTED TO THE PORT SIDE OF THE BARGE AT FRAMES 3 AND 17.

JAMES W. KREUTER
STATE OF WASHINGTON
26117
12-09-11
REGISTERED
PROFESSIONAL ENGINEER

REVISIONS

REV	ZONE	DESCRIPTION	DATE	APPVD

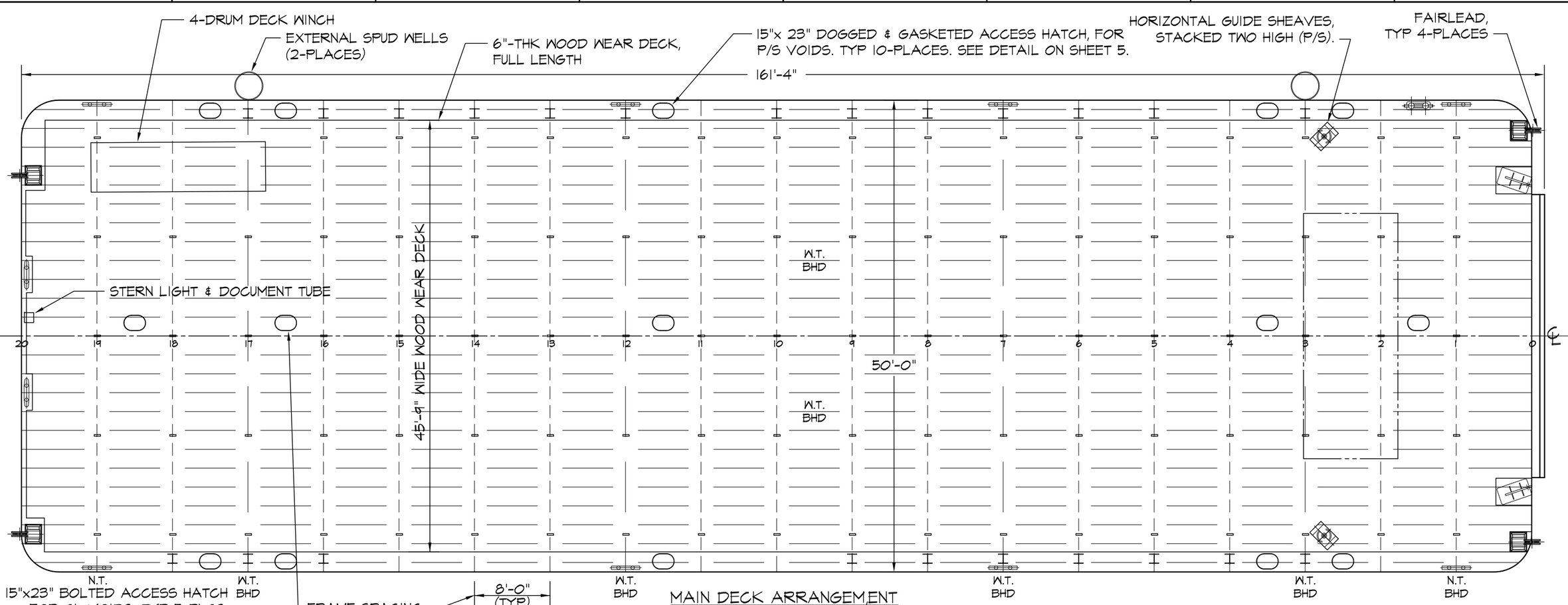
NO.	DRAWING NO.	TITLE	BY	DATE
1	2011-26-02	STRUCURAL DETAILS (AS-BUILT)	VANGUARD MARINE, PLLC	12-09-11

REFERENCES

VESSEL OWNER:	VESSEL:	TITLE:
PACIFIC PILE & MARINE	BARGE "LASH 4"	GENERAL ARRANGEMENT

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
12-09-11	jwk	AS NOTED	2011-26-01	1	5

VANGUARD MARINE, PLLC
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 jimkreuter@vanguardmarinepllc.com



MAIN DECK ARRANGEMENT

SCALE: 3/32" = 1'-0"

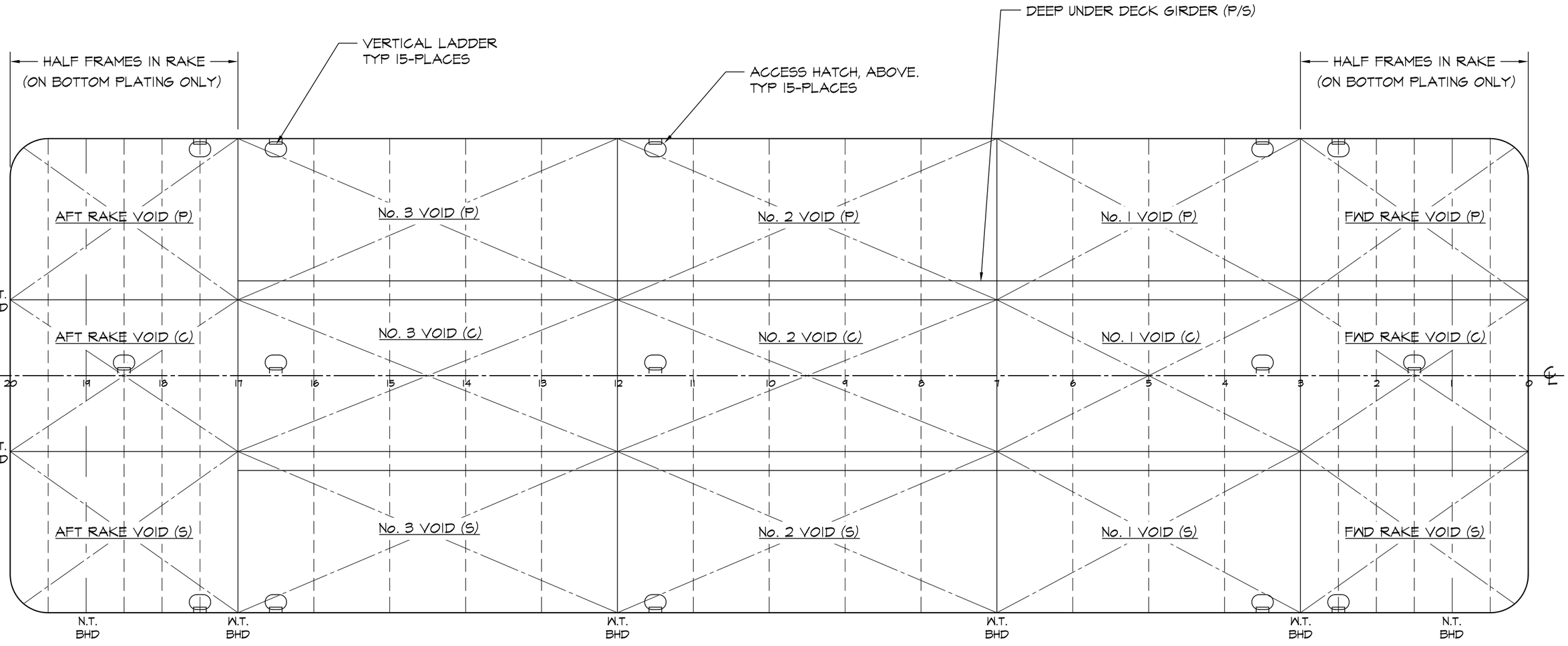
OUTBOARD PROFILE

SCALE: 3/32" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
12-09-11
26117
REGISTERED PROFESSIONAL ENGINEER

VESSEL OWNER:	VESSEL:	TITLE:		
PACIFIC PILE & MARINE	BARGE "LASH 4"	GENERAL ARRANGEMENT		
DATE:	BY:	SCALE:	DWG No:	SHEET: OF:
12-09-11	jwk	AS NOTED	2011-26-01	2 5

VANGUARD MARINE, PLLC
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 jimkreuter@vanguardmarinepllc.com



HOLD ARRANGEMENT

SCALE: 3/32" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
12-09-11
26117
REGISTERED
PROFESSIONAL ENGINEER

VESSEL OWNER:	VESSEL:	TITLE:		
PACIFIC PILE & MARINE	BARGE "LASH 4"	GENERAL ARRANGEMENT		
DATE:	BY:	SCALE:	DWG No:	SHEET: / OF:
12-09-11	jwk	AS NOTED	2011-26-01	3 / 5

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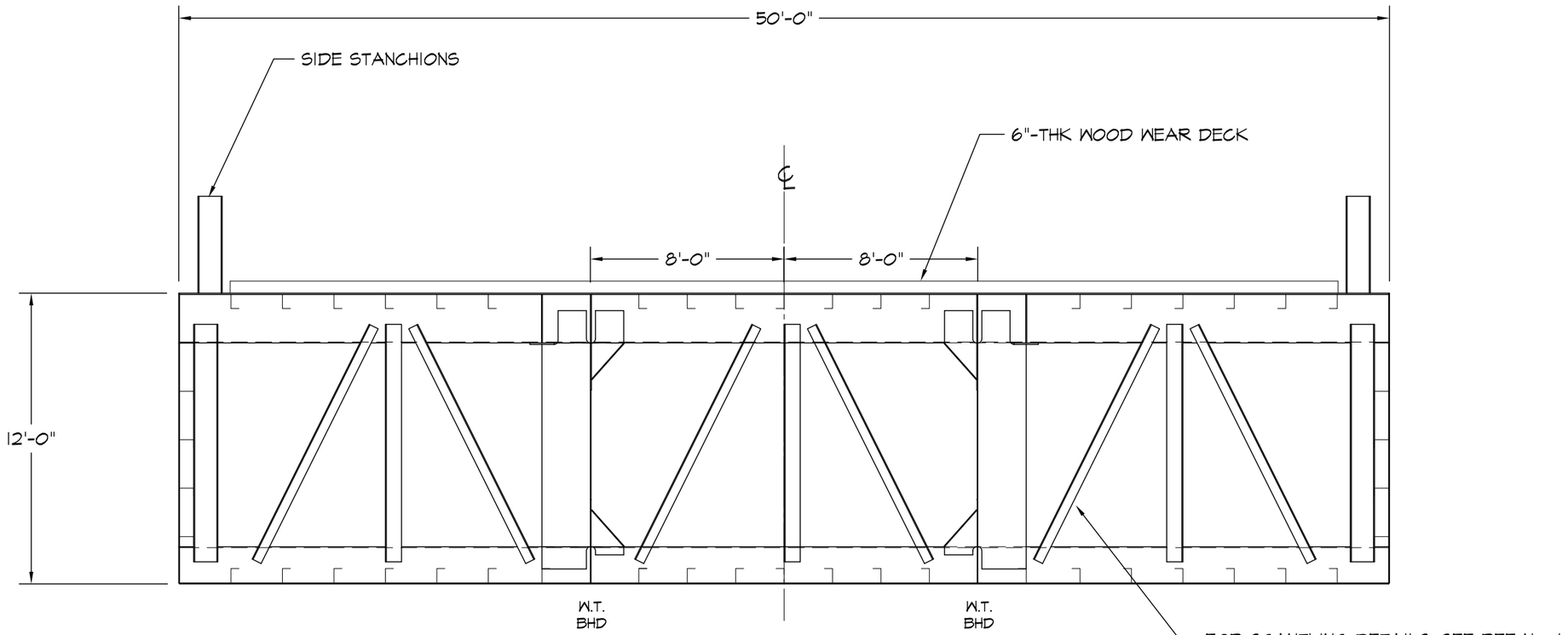
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 jimkreuter@vanguardmarinepllc.com



TYPICAL MIDSHIP SECTION

SCALE: 3/16" = 1'-0"

JAMES W. KREUTER
STATE OF WASHINGTON
12-09-11
26117
REGISTERED
PROFESSIONAL ENGINEER

VESSEL OWNER:	VESSEL:	TITLE:		
PACIFIC PILE & MARINE	BARGE "LASH 4"	GENERAL ARRANGEMENT		
DATE:	BY:	SCALE:	DWG No:	SHEET: OF:
12-09-11	jwk	AS NOTED	2011-26-01	4 5

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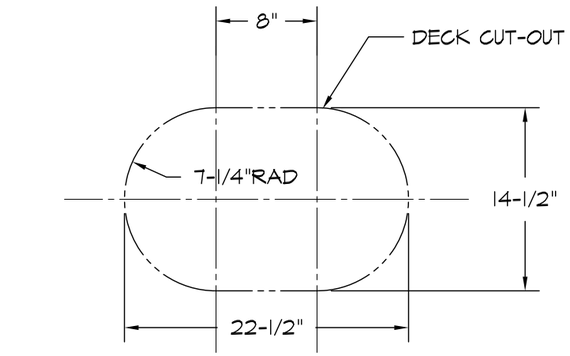
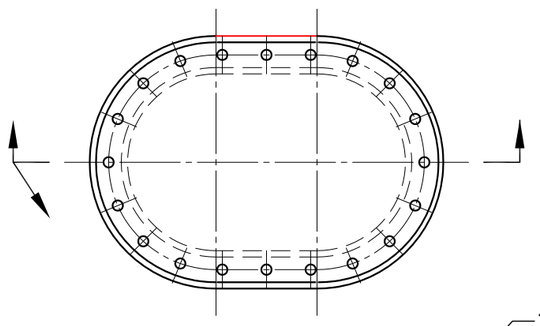
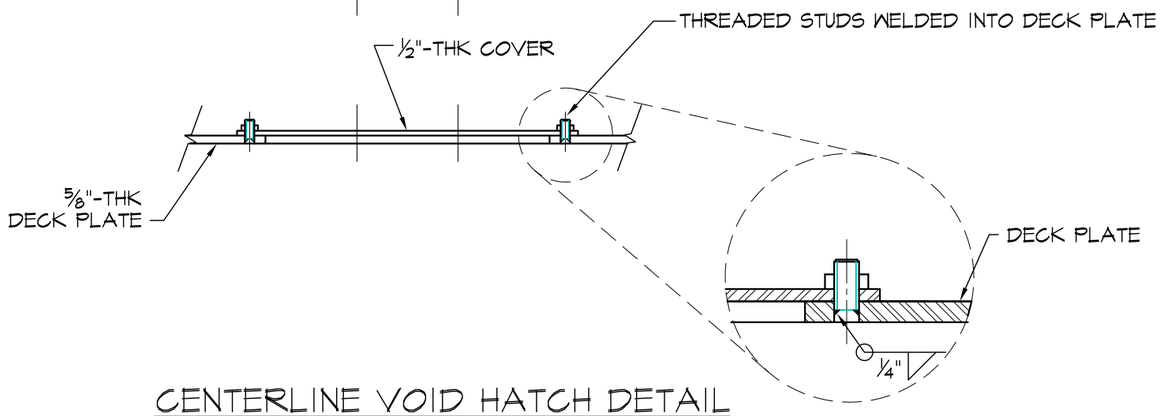
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 jimkreuter@vanguardmarinepllc.com



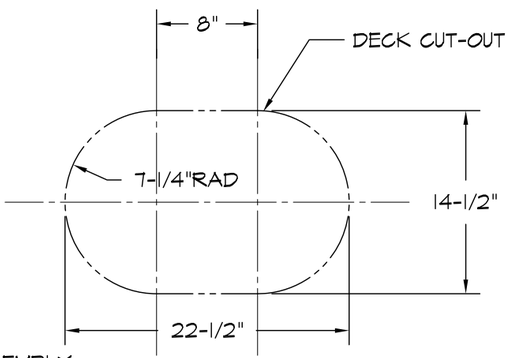


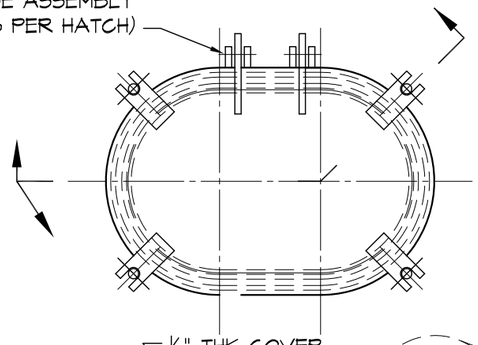


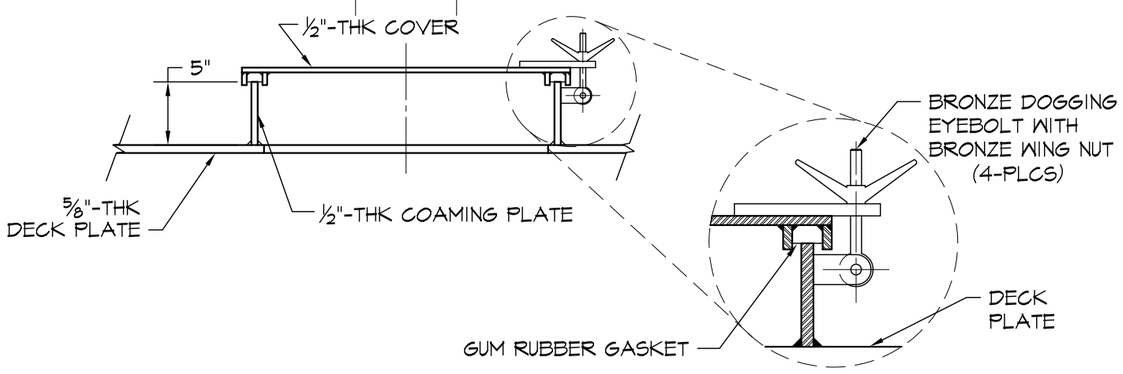
CENTERLINE VOID HATCH DETAIL

(TYP 5-PLACES)

SCALE: 1" = 1'-0"







PORT/STBD VOID HATCH DETAIL

(TYP 10-PLACES)

SCALE: 1" = 1'-0"

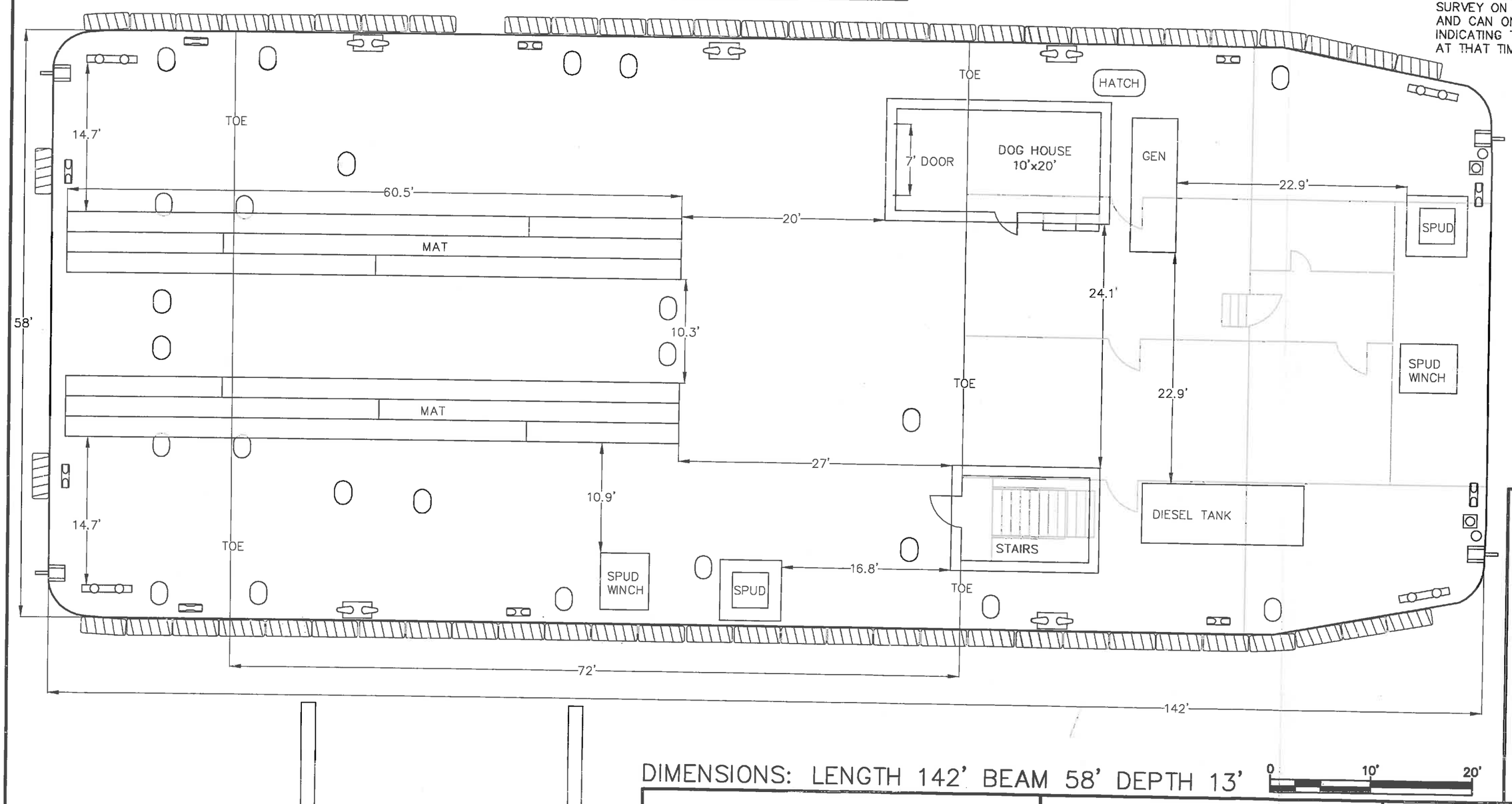
VESSEL OWNER:	VESSEL:	TITLE:		
PACIFIC PILE & MARINE	BARGE "LASH 4"	GENERAL ARRANGEMENT		
DATE: 12-09-11	BY: jwk	SCALE: AS NOTED	DWG No: 2011-26-01	SHEET: 5 OF: 5

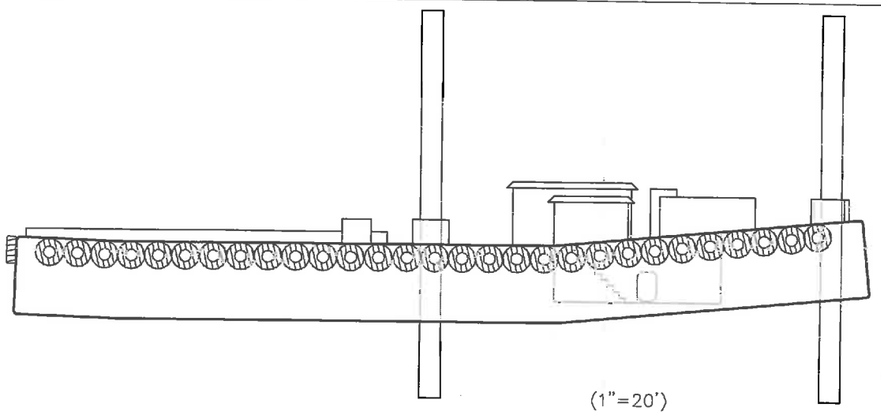
VANGUARD MARINE, PLLC
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 jimkreuter@vanguardmarinepllc.com

BARGE MAP OF THE "WEB"

NOTES:

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY ON OCTOBER 29TH, 2012 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THAT TIME.





DIMENSIONS: LENGTH 142' BEAM 58' DEPTH 13'

0 10' 20'

LEGEND

- BIT
- BUTTON
- CHALK
- CLEAT
- FAIRLEAD
- HATCH
- TIRE
- OBJECT LINE
- HIDDEN LINE

BARGE MAP
FOR
PACIFIC PILE & MARINE
582 S. RIVERSIDE DR.
SEATTLE, WA 98108

SINE
SURVEYING & MAPPING
KIRKLAND, WA
TYSON@SINESURVEYING.COM

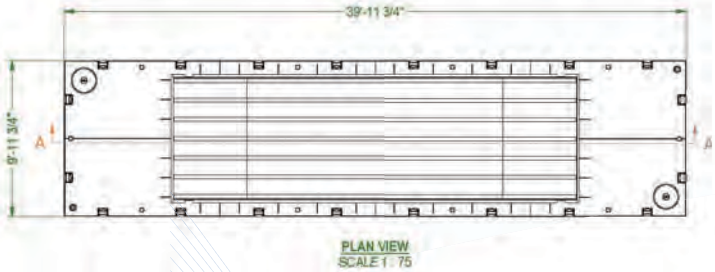
JOB NO. 12003	DATE 11/23/12
SCALE 1"=10'	DRAWN BY TLD
SHEET 1 OF 1	CHECKED BY FK

POSEIDON® BARGE P2-7' SECTIONAL HOPPER

The Poseidon Hopper Barge is made to the same dimensions as the Poseidon P2-40' x 10' x 7' barge section. The P2-7' Hopper has male and female connections to allow for the sections to attach to one another or to another Poseidon P2-40' x 10' x 7' Standard Barge.

HEAVY DUTY CONSTRUCTION INCLUDES:

- 40' Long x 10' Wide x 8' 5-3/4" Tall Hopper Barge
- 3/8" Wall and Floor Thickness
- Physical Shipping Weight 40,900 lbs
- 50 Yard Hopper Box
- Four Point lifting points
- 1.6' Draft Empty Fresh Water
- Two (2) —18" Deck Hatches Each
- 4" Diameter drain plug



Draft Levels Material Capacity:

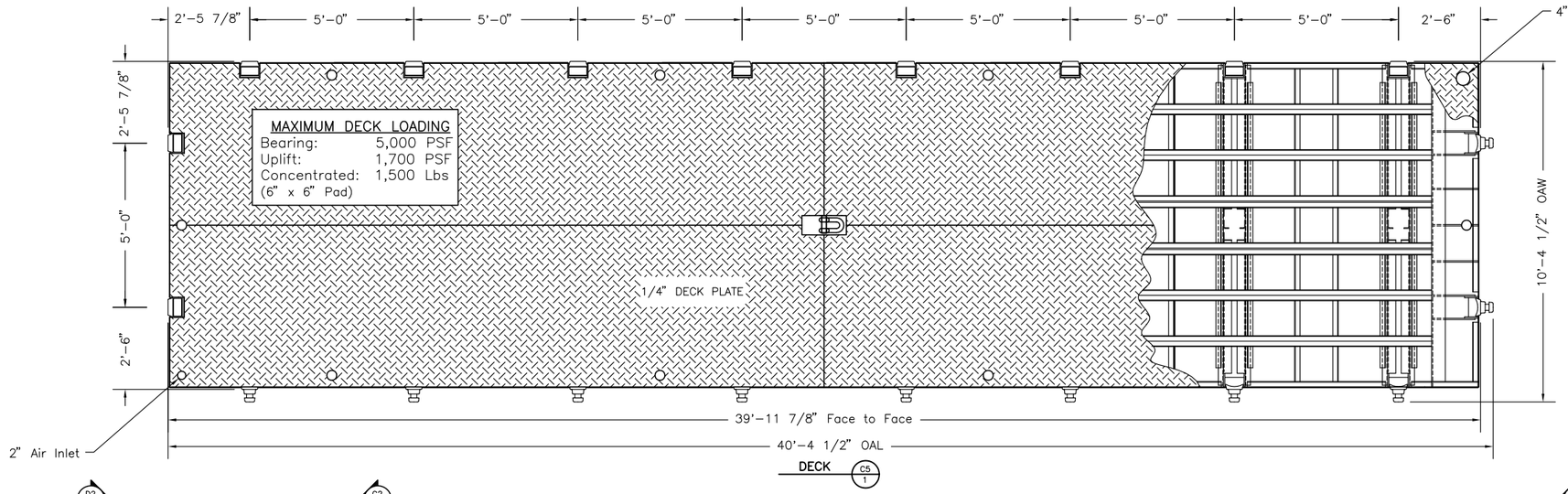
- 2' draft: 4.5 tons of material
- 4' draft: 29.5 tons of material
- 5'10" max allowable draft holds 52. tons of material

Material weight varies depending on the make up of the dredge material.

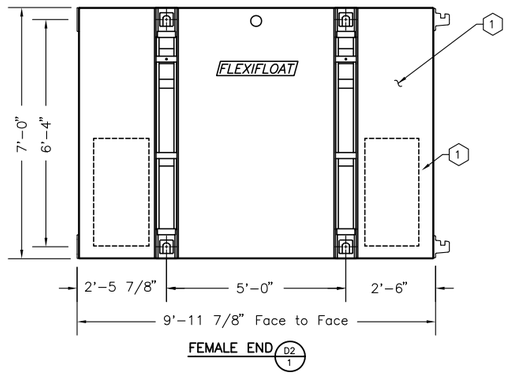
POSEIDON® Barge, Ltd

CERTIFIED ISO 9001:2015 COMPANY

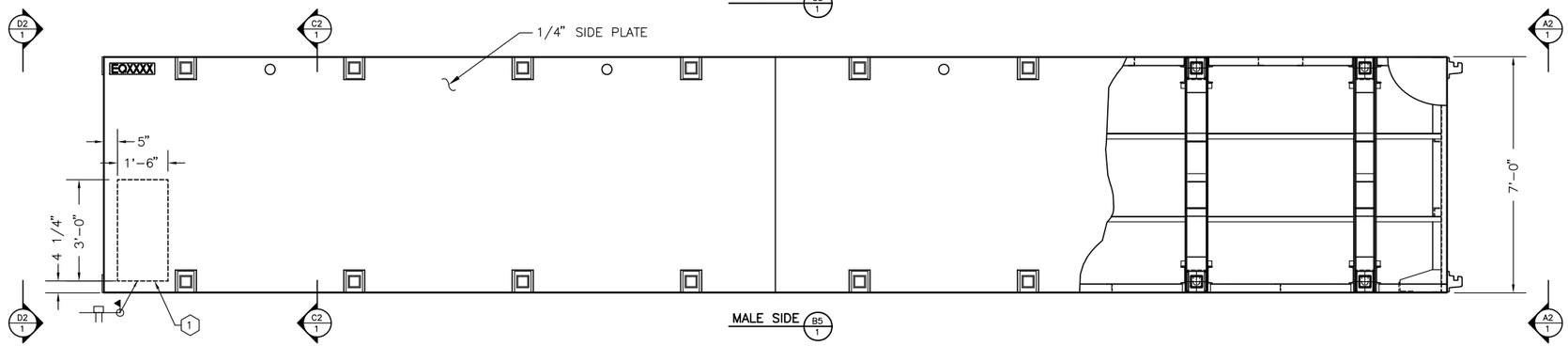
POSEIDON® BARGE, LTD
725 East Parr Road, Berne, IN 46711
PH: 866-99-BARGE; FAX: 260-589-2088
WEBSITE: www.poseidonbarge.com
STOCK LOCATIONS: Berne, IN • Plain, WI • Leland, NC
Cocoa, FL • Coeymans, NY • St. Louis, MO • New Orleans, LA



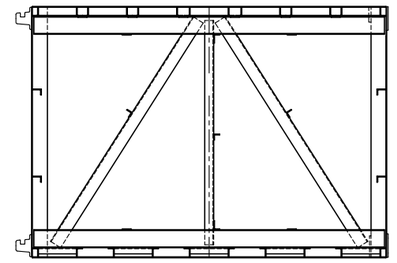
DECK C5/1



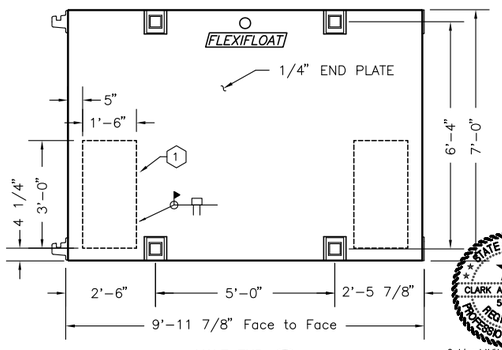
FEMALE END D2/1



MALE SIDE B5/1



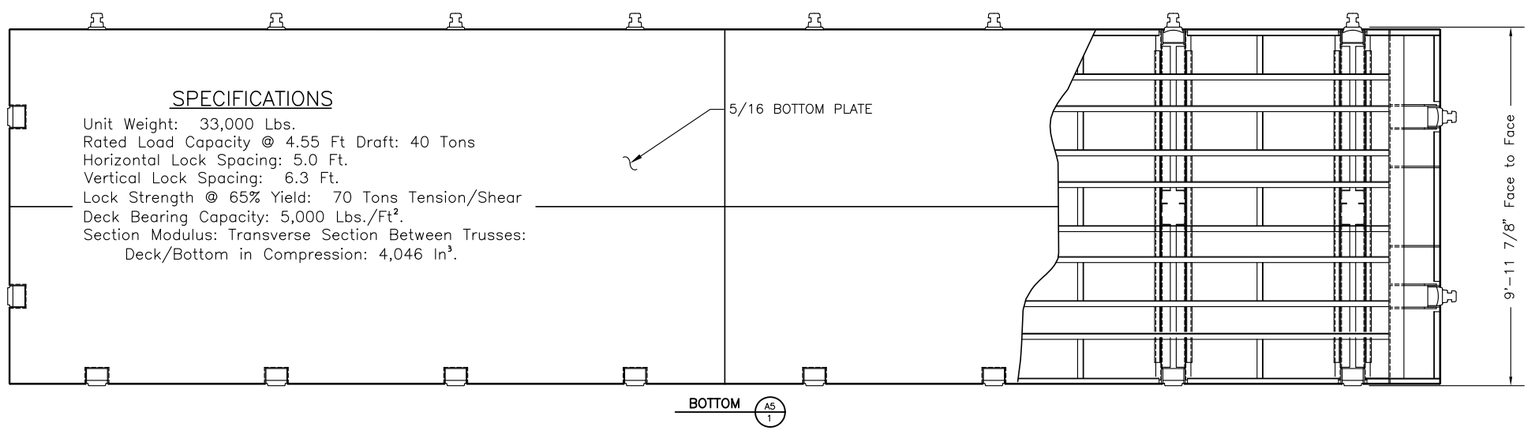
SECTION C2/1



MALE END A2/1

SPECIFICATIONS

Unit Weight: 33,000 Lbs.
Rated Load Capacity @ 4.55 Ft Draft: 40 Tons
Horizontal Lock Spacing: 5.0 Ft.
Vertical Lock Spacing: 6.3 Ft.
Lock Strength @ 65% Yield: 70 Tons Tension/Shear
Deck Bearing Capacity: 5,000 Lbs./Ft^2.
Section Modulus: Transverse Section Between Trusses:
Deck/Bottom in Compression: 4,046 In^3.



BOTTOM A5/1

OAW – Overall Width
OAL – Overall Length
REDUCTION – DO NOT SCALE

GENERAL NOTES

1. TO ENTER FLOAT FOR INSPECTION OR REPAIR REMOVE FEMALE SIDE CORNER PLATES OR CUT OUT END/SIDE PANELS AS SHOWN. AFTER COMPLETION OF INSPECTION/REPAIR REPLACE PANEL, SEAL WELD, AND TEST FOR LEAKS AS DESCRIBED IN NOTE 2.
2. TEST FOR LEAKS BY APPLYING INTERNAL AIR PRESSURE OF 3 PSI MAXIMUM. BRUSH ALL EXTERNAL WELD SEAMS WITH WATER AND SOAP SOLUTION. LEAKS WILL BE DETECTED BY FORMATION OF SOAP BUBBLES.

Rev E: Added Warning Statement
Rev D: Added Maximum Deck Loading Table
Rev C: Updated DWG Number was 740000W – Rotated View to Male Side Down
Rev B: Updated Weight to 33,000 Lbs from 35,600 Lbs

ZBORDER 2009

WARNING: The use of Flexifloat equipment requires competent personnel and the application of engineering principles. The improper use, operation, modification, maintenance or repair of Flexifloat equipment can be dangerous and result in property damage, injury or death. Contact Robishaw Engineering, Inc. (REI) or other qualified professional for assistance prior to use. REI offers its engineering services free of charge to all Flexifloat users. Equipment used on or with Flexifloat barges must have the manufacturer's approval for use in marine applications.

UNSPECIFIED TOLERANCES
DECIMAL:
X.X ± .1
X.XX ± .03
X.XXX ± .030
ANGULAR: ± .50'
FRACTIONAL: ± 1/16"
METRIC: ± .001

NEXT ASSY Varies

NO.	DATE	BY
E	5/24/16	KIG
D	10/1/15	CAM
C	11/6/14	CAM
B	3/31/14	KIG
A	2/19/09	CAM

REVISIONS

Robishaw Engineering, Inc.
HOUSTON, TEXAS

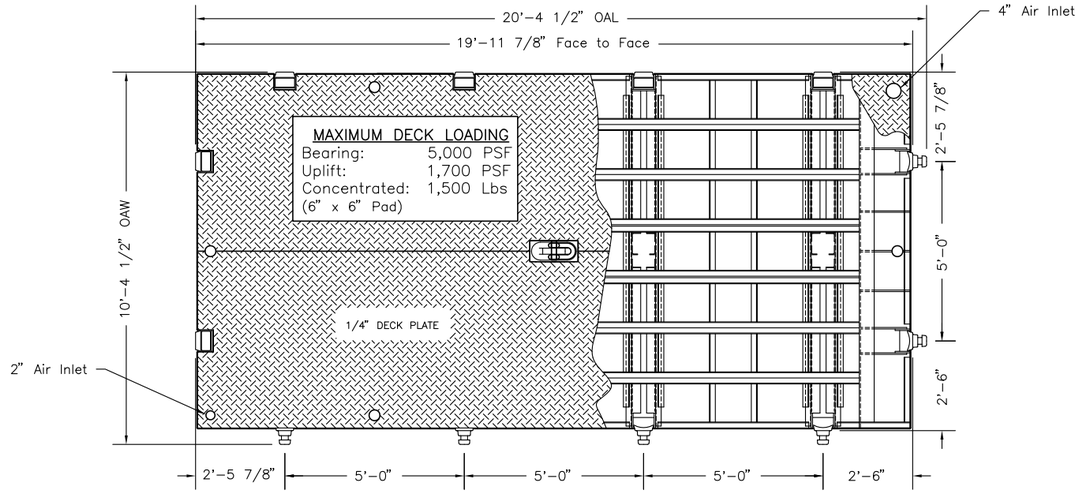
QUADRAFLOAT GENERAL ARRANGEMENT FLEXIFLOAT SERIES S–70

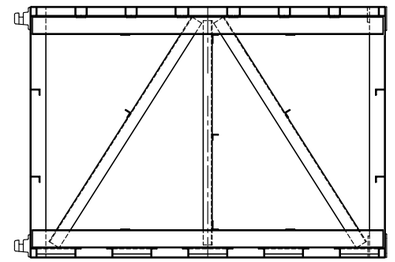
DRAWN BY	CHECKED	DWG NO.	REV
NAME CAM	NAME RLM	740000–GA	E
DATE 5/9/96	DATE 7/21/86	SCALE 1/2"=1'-0"	SHEET 1 OF 1

TB SCALE: 24
DIMSCALE: 24
Print Size 24 x 36 all others Not to Scale
Replaced Title Block 10/2014

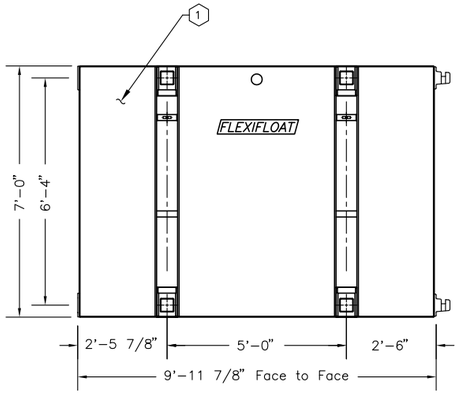
RE149654d5-423d-4a6c-b811-071b03f9f293

K:\7\740000-GA.dwg, 6/11/16 2:54:16 PM



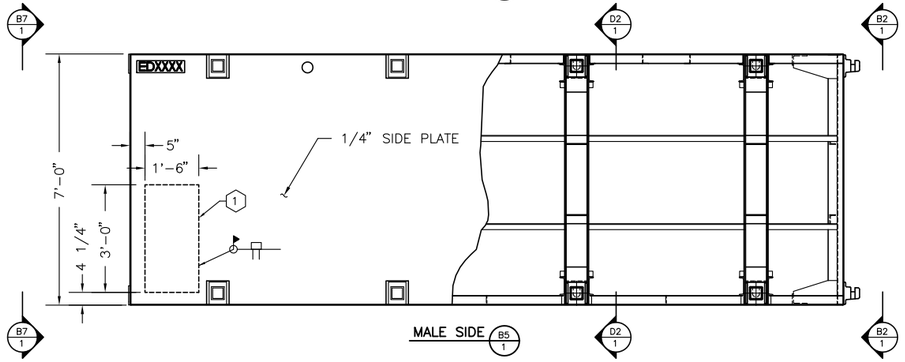


SECTION D2/1

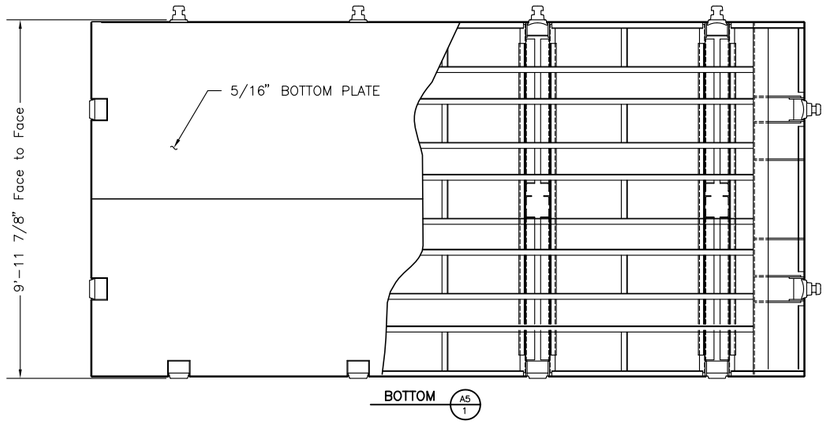


FEMALE END B7/1

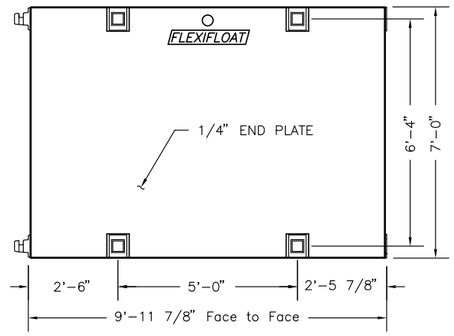
DECK C5/1



MALE SIDE B5/1



BOTTOM A5/1



MALE END B2/1

SPECIFICATIONS

Unit Weight: 18,000 Lbs.
Rated Load Capacity @ 4.55 Ft Draft: 19 Tons
Horizontal Lock Spacing: 5.0 Ft.
Vertical Lock Spacing: 6.3 Ft.
Lock Strength @ 65% Yield: 70 Tons Tension/Shear
Deck Bearing Capacity: 5,000 Lbs./Ft^2.
Section Modulus: Transverse Section Between Trusses:
Deck/Bottom in Compression: 4,046 In^3.

GENERAL NOTES

1. TO ENTER FLOAT FOR INSPECTION OR REPAIR REMOVE FEMALE CORNER PLATES OR CUT OUT PANEL AS SHOWN. AFTER COMPLETION OF INSPECTION/REPAIR REPLACE PANEL, SEAL WELD, AND TEST FOR LEAKS AS DESCRIBED IN NOTE 2.
2. TEST FOR LEAKS BY APPLYING INTERNAL AIR PRESSURE OF 3 PSI MAXIMUM. BRUSH ALL EXTERNAL WELD SEAMS WITH WATER AND SOAP SOLUTION. LEAKS WILL BE DETECTED BY FORMATION OF SOAP BUBBLES.

Rev E: Added Warning Statement
Rev D: Added Maximum Deck Loading Table
Rev C: Updated Drawing Number Was 720000W
Rev B: Updated Weight to 18,000 Lbs from 18,900 Lbs
Updated Rated Load Capacity to 19 Tons from 20 Tons

ZBORDER 2009

OAW – Overall Width
OAL – Overall Length
REDUCTION – DO NOT SCALE

STATE OF TEXAS
CLARK A MCMURTRY
58064
REGISTERED
PROFESSIONAL ENGINEER

Seal is not Valid Unless Digitally Signed
Clark A McMurtry
5/24/16

ROBISHAW ENGINEERING, INC.
Texas Registered Engineering Firm
F-1560

WARNING: The use of Flexifloat equipment requires competent personnel and the application of engineering principles. The improper use, operation, modification, maintenance or repair of Flexifloat equipment can be dangerous and result in property damage, injury or death. Contact Robishaw Engineering, Inc. (REI) or other qualified professional for assistance prior to use. REI offers its engineering services free of charge to all Flexifloat users. Equipment used on or with Flexifloat barges must have the manufacturer's approval for use in marine applications.

UNSPECIFIED TOLERANCES
DECIMAL:
X.X ± .1
X.XX ± .03
X.XXX ± .030
ANGULAR: ± .50'
FRACTIONAL: ± 1/16"
METRIC: ± .001

NEXT ASSY Varies

NO.	DATE	BY
E	5/24/16	KIG
D	10/1/15	CAM
C	11/7/14	CAM
B	3/31/14	KIG
A	2/19/09	CAM

REVISIONS

Robishaw Engineering, Inc.
HOUSTON, TEXAS

DUOFLOAT
GENERAL ARRANGEMENT
FLEXIFLOAT SERIES S-70

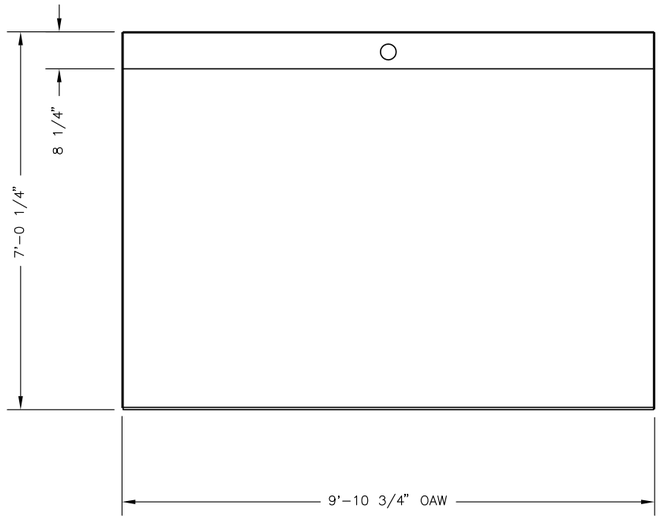
DRAWN BY	CHECKED	DWG NO.	REV
NAME CAM	NAME	720000-GA	E
DATE 11/8/96	DATE	SCALE 1/2" = 1'-0"	SHEET 1 OF 1

TB SCALE: 24.0
DIMSCALE: 24.0

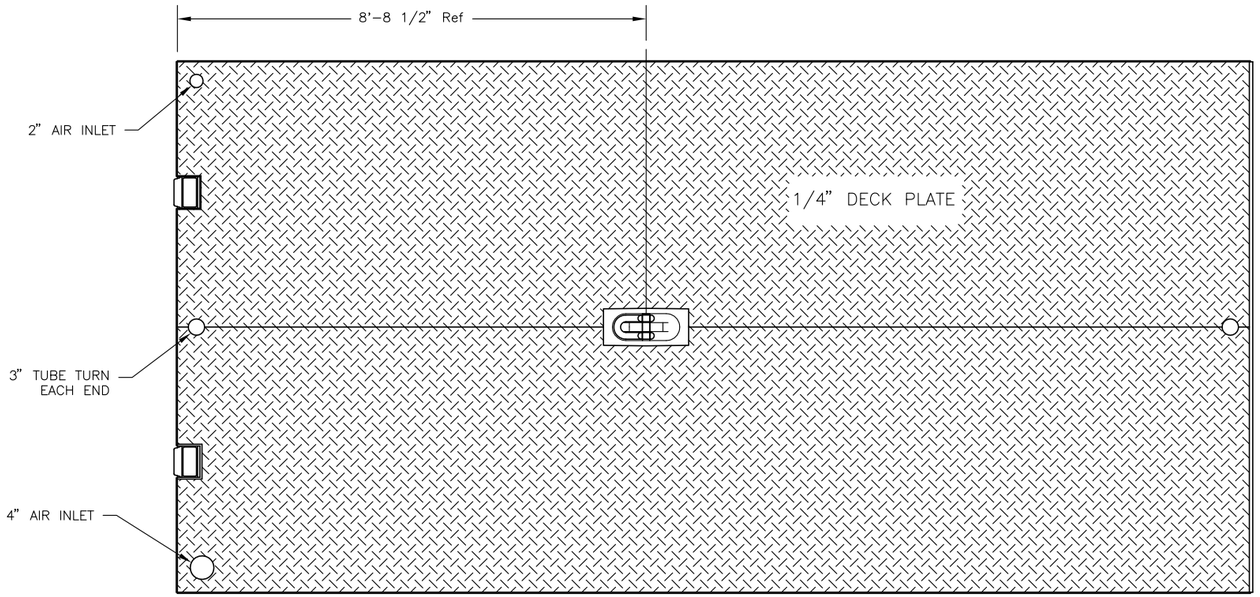
Print Size 24 x 36 all others Not to Scale
Replaced Title Block by CAM 9/2011

RE149650d4a5-423d-4a6c-b811-071b03f9f293

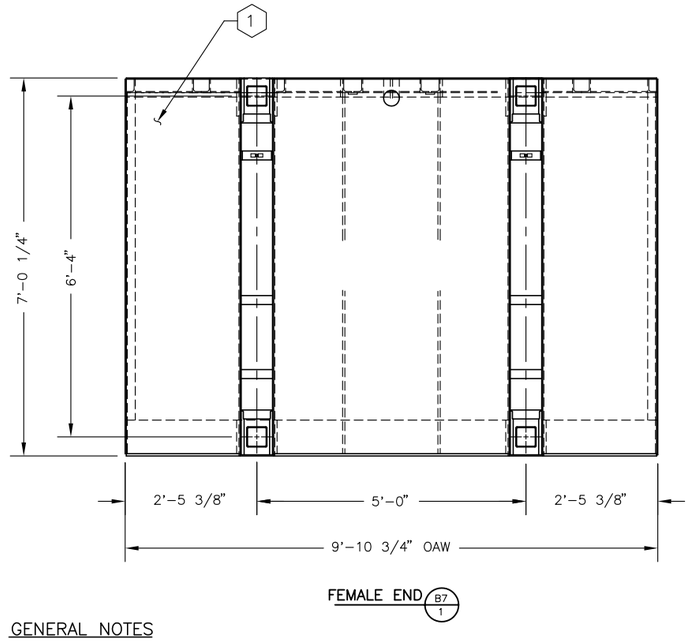
K:\T\720000-GA.dwg, 5/26/16 8:34:37 AM



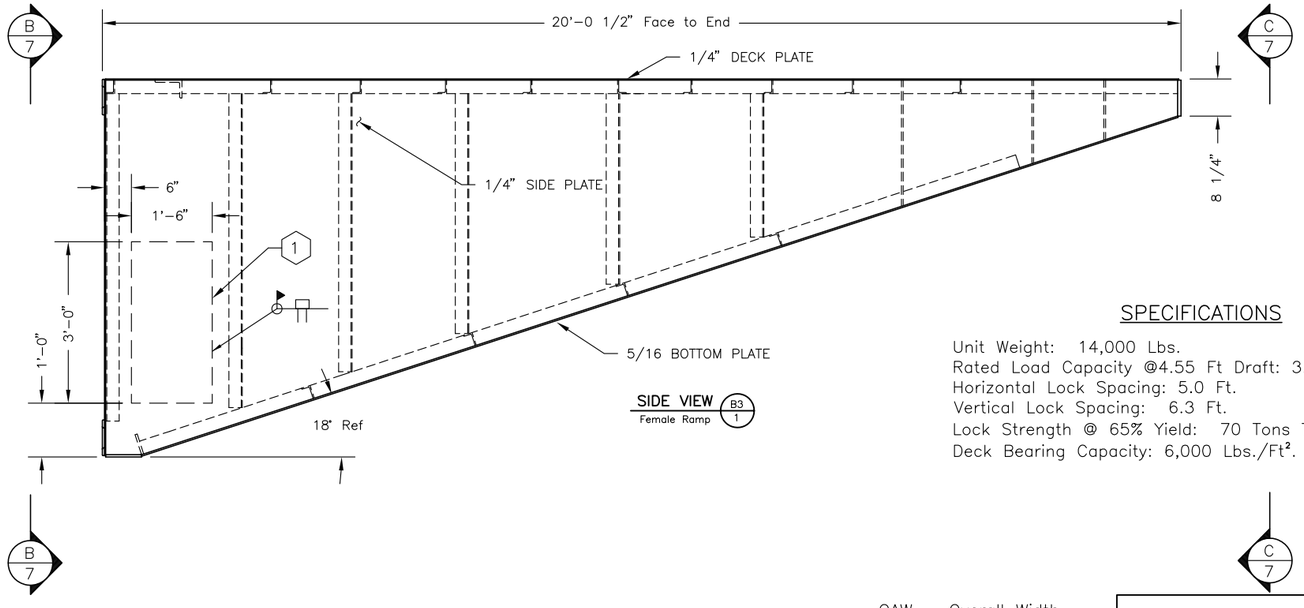
NOSE END (C7 / 1)



DECK VIEW (C3 / 1) Female Ramp



FEMALE END (B7 / 1)



SIDE VIEW (B3 / 1) Female Ramp

C 7

SPECIFICATIONS

Unit Weight: 14,000 Lbs.
Rated Load Capacity @4.55 Ft Draft: 3.5 Tons
Horizontal Lock Spacing: 5.0 Ft.
Vertical Lock Spacing: 6.3 Ft.
Lock Strength @ 65% Yield: 70 Tons Tension/Shear
Deck Bearing Capacity: 6,000 Lbs./Ft^2.

GENERAL NOTES

1. TO ENTER FLOAT FOR INSPECTION OR REPAIR REMOVE FEMALE CORNER PLATES OR CUT OUT PANEL AS SHOWN. AFTER COMPLETION OF INSPECTION/REPAIR REPLACE PANEL, SEAL WELD, AND TEST FOR LEAKS AS DESCRIBED IN NOTE 2.
2. TEST FOR LEAKS BY APPLYING INTERNAL AIR PRESSURE OF 3 PSI MAXIMUM. BRUSH ALL EXTERNAL WELD SEAMS WITH WATER AND SOAP SOLUTION. LEAKS WILL BE DETECTED BY FORMATION OF SOAP BUBBLES.

Rev D: Added Warning Statement, Updated Unit Weight
Rev C: Updated Drawing Number was 740400W
Rev B: Updated Rated Load Capacity to 3.5 Tons from 2.2 Tons

OAW – Overall Width
OAL – Overall Length
REDUCTION – DO NOT SCALE

UNSPECIFIED TOLERANCES
DECIMAL:
X.X ± .1
X.XX ± .03
X.XXX ± .030
ANGULAR: ± .50'
FRACTIONAL: ± 1/16"
METRIC: ± .001
NEXT ASSY Varies

NO.	DATE	BY
D	5/26/16	CAM
C	1/15/16	KIG
B	3/31/14	KIG
A	4/9/10	RLM

REVISIONS

Robishaw Engineering, Inc.
HOUSTON, TEXAS

FEMALE RAMP
GENERAL ARRANGEMENT
FLEXIFLOAT SERIES S–70

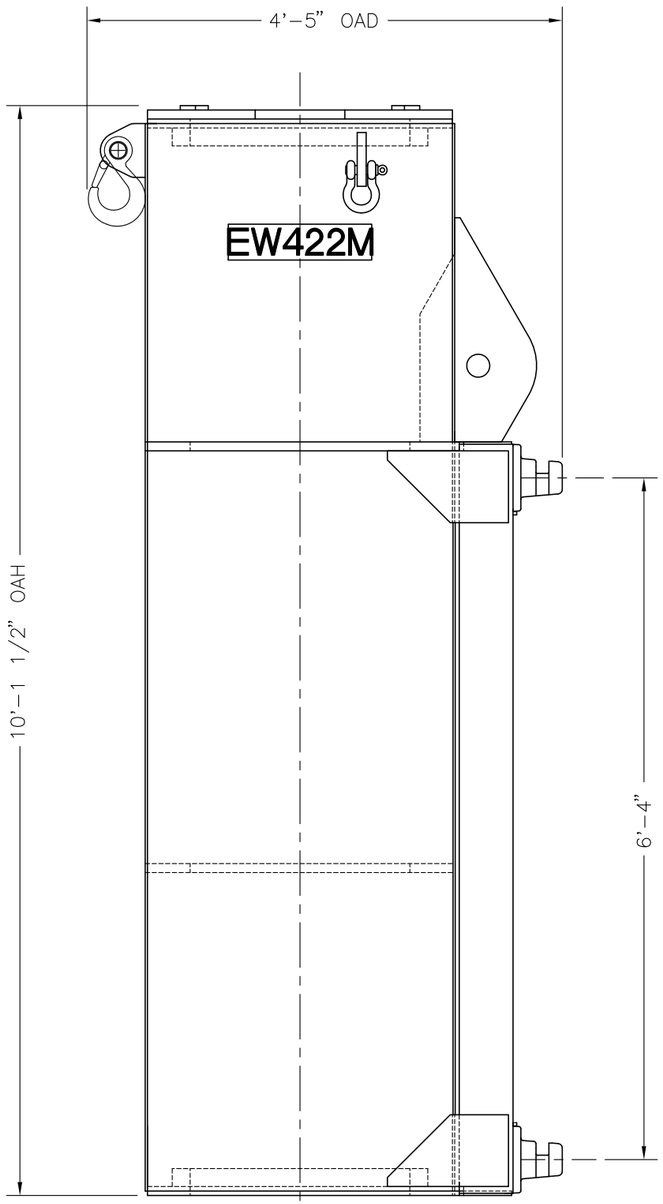
DRAWN BY	CHECKED	DWG NO.	REV
NAME CAM	NAME RLM	740400–GA	D
DATE 7/21/03	DATE 4/9/10	SCALE 3/4"=1'-0"	SHEET 1 OF 1

TB SCALE:16
DIMSCALE:16
Print Size 24 x 36 all others Not to Scale
Replaced Title Bock 4/9/2010 by RLM

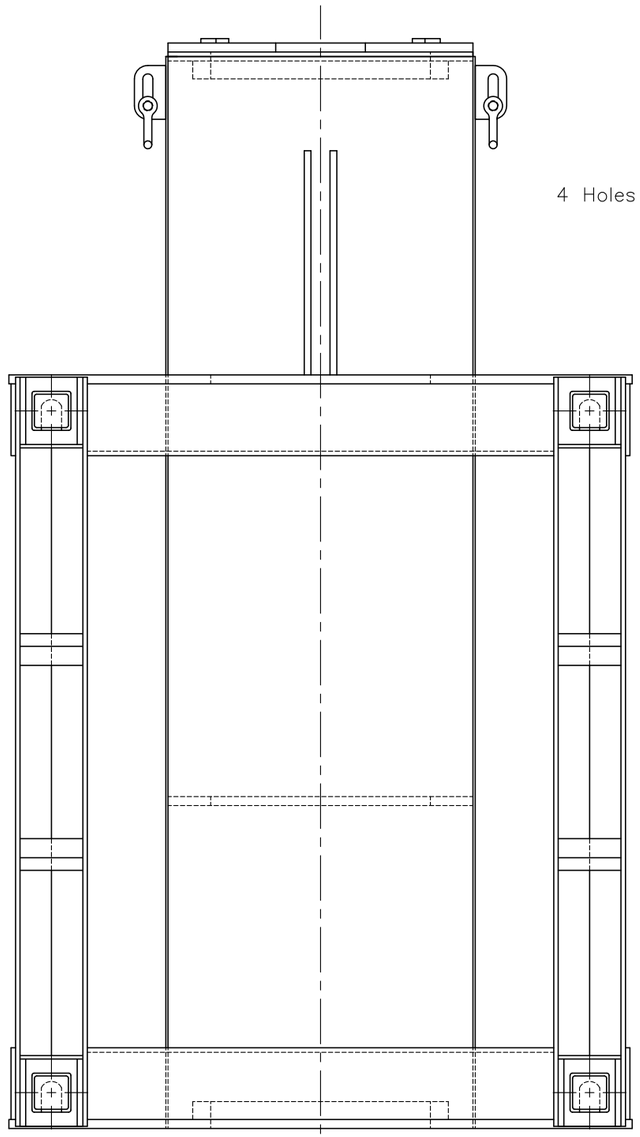
ZBORDER 2009

RE149655d4d5-423d-4a6c-b811-071b03f9f293

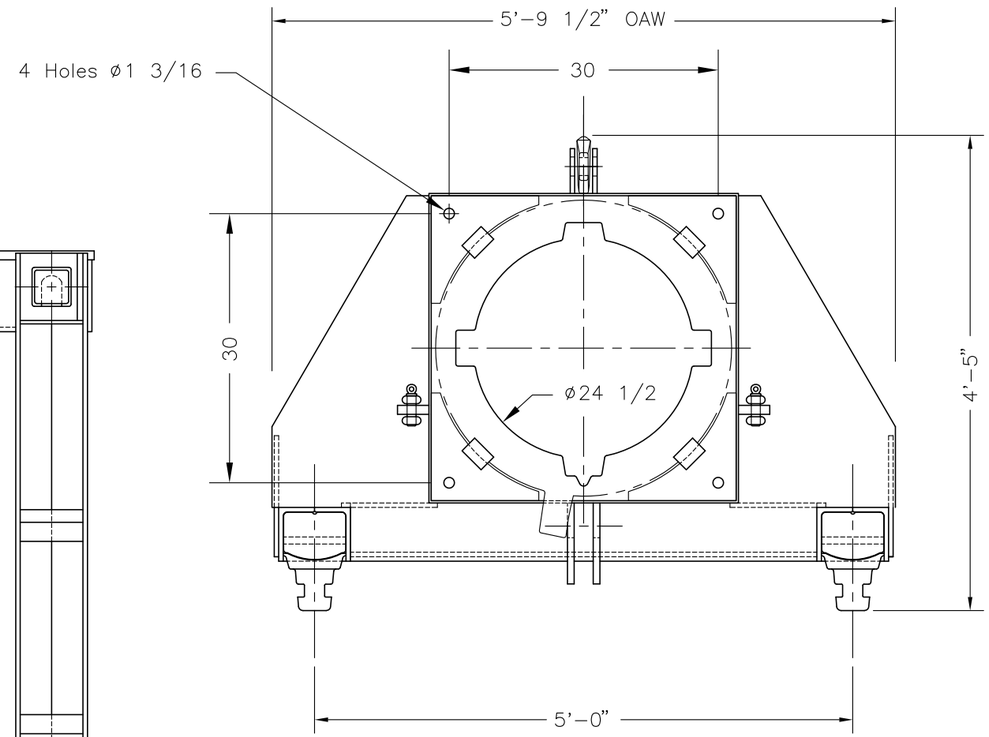
K:\7\740400-GA.dwg, 6/1/16 3:31:19 PM



SIDE VIEW A7/1



FRONT VIEW A5/1



TOP VIEW B2/1

Male Shown – Female Similar

Weight: 4,200 Lbs
Cubage: 259 Cubic Feet

Rev D: Added Warning Statement
Rev C: Updated Drawing Number was 770901GA
Rev B: Updated Overall Depth to 4’–5” from 4’ 4–1/2”, Weight to 4,200 Lbs from 4,000, Cubage to 259 Cu Ft from 250 Cu Ft
Rev A: Added dimensions for Winch Mount, Shipping Weight & Cubage
Updated Title Block to current Standards

UNSPECIFIED TOLERANCES
DECIMAL:
X.X ± .1
X.XX ± .03
X.XXX ± .030
ANGULAR: ± .50’
FRACTIONAL: ± 1/16”
METRIC: ± .001

NEXT ASSY 770901

NO.	DATE	BY
D	5/24/16	KIG
C	1/19/16	KIG
B	6/18/14	KIG
A	4/30/09	CAM

REVISIONS

Robishaw Engineering, Inc.
HOUSTON, TEXAS

24” DIA SPUDWELL
GENERAL ARRANGEMENT
FLEXIFLOAT SERIES S–70

DRAWN BY	CHECKED	DWG NO.	REV
NAME CAM	NAME	770901–GA	D
DATE 8/5/99	DATE	SCALE 1/8	SHEET 1 OF 1

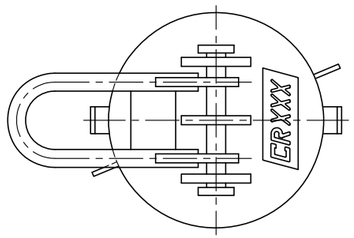
Print Size 24 x 36 all others Not to Scale

ZBORDER 2003

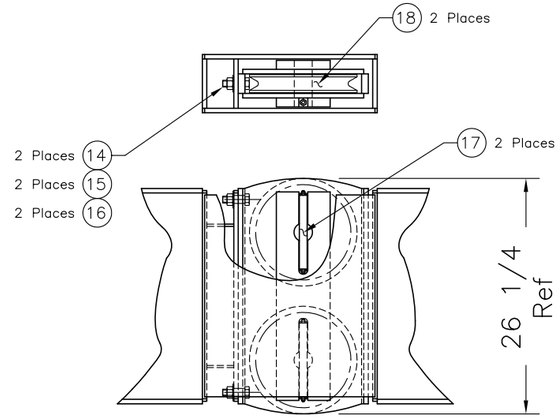
REI4965d4a5-423d-4a6c-b811-071b03f9293

K:\7\770901-GA.dwg, 5/24/16 2:38:30 PM

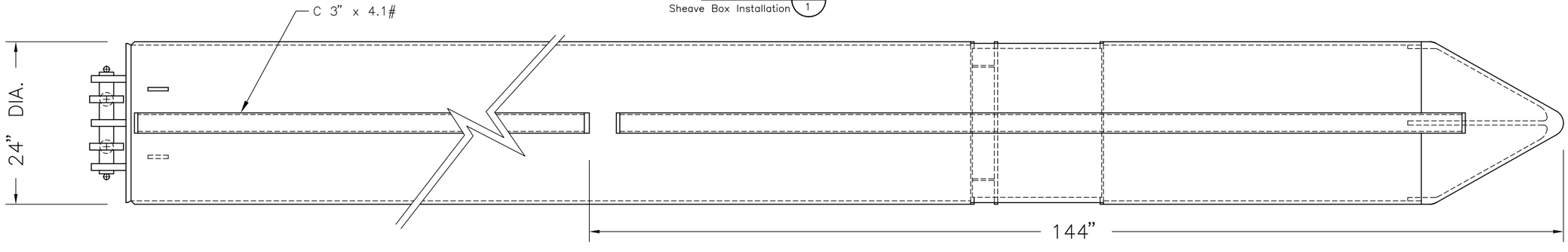
Qty	INVENTORY CODE	DESCRIPTION	MATERIAL	SPECIFICATION	NET WT	ZONE	ITEM
2	9121613	Bolt 1 x 2-1/2	Bolt Hex Head SAE GR 5 1-8 UNC x 2-1/2 Galv	COML	–	D5 1	14
2	9121603	Nut 1	Nut Hex SAE Gr 5 1-8 UNC Galv	COML	–	D5 1	15
2	9121602	Lock Washer 1	Lock Washer ASA Med 1 Nom Galv	COML	–	D5 1	16
2	U80109	Sheave Pin Assembly 2.50ø x 4.25 Long			14	D4 1	17
2	9214003	Sheave #12-10	Sheave Bronze Bushed 2.50 ID w/ 5/8-1 1/8 WL	Gunnebo Johnson #452527028 or EQ	56	D4 1	18

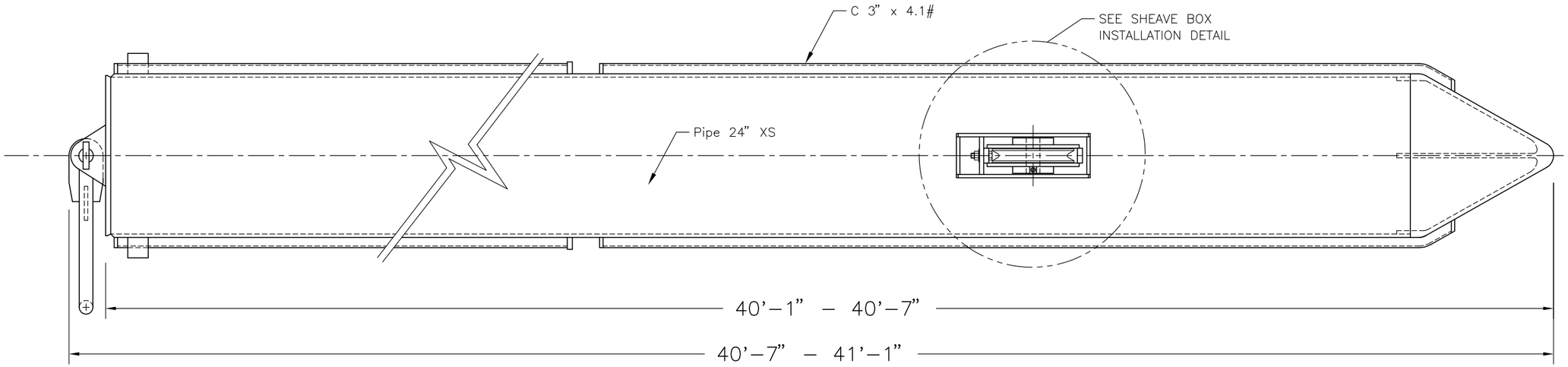


VIEW D7/1



DETAIL Sheave Box Installation D5/1





Estimated Weight 6,200 Lbs
Estimated Cubage 260 Cubic Feet

Rev C: Added Warning Statement
Rev B: Updated Drawing Number was U70912GA

CR208 – CRXXX | 8/2002 | A
Serial Numbers | Date | Rev
Release for Production

UNSPECIFIED TOLERANCES
DECIMAL:
X.X ± .1
X.XX ± .03
X.XXX ± .030
ANGULAR: ± .50'
FRACTIONAL: ± 1/4"
METRIC: ± .001

NEXT ASSY VARIES

Ref Drawings
U7091230
U70912
U7091260

NO.	DATE	BY
C	5/24/16	KIG
B	1/19/16	KIG
A	8/2002	CAM

REVISIONS

Robishaw Engineering, Inc.
HOUSTON, TEXAS

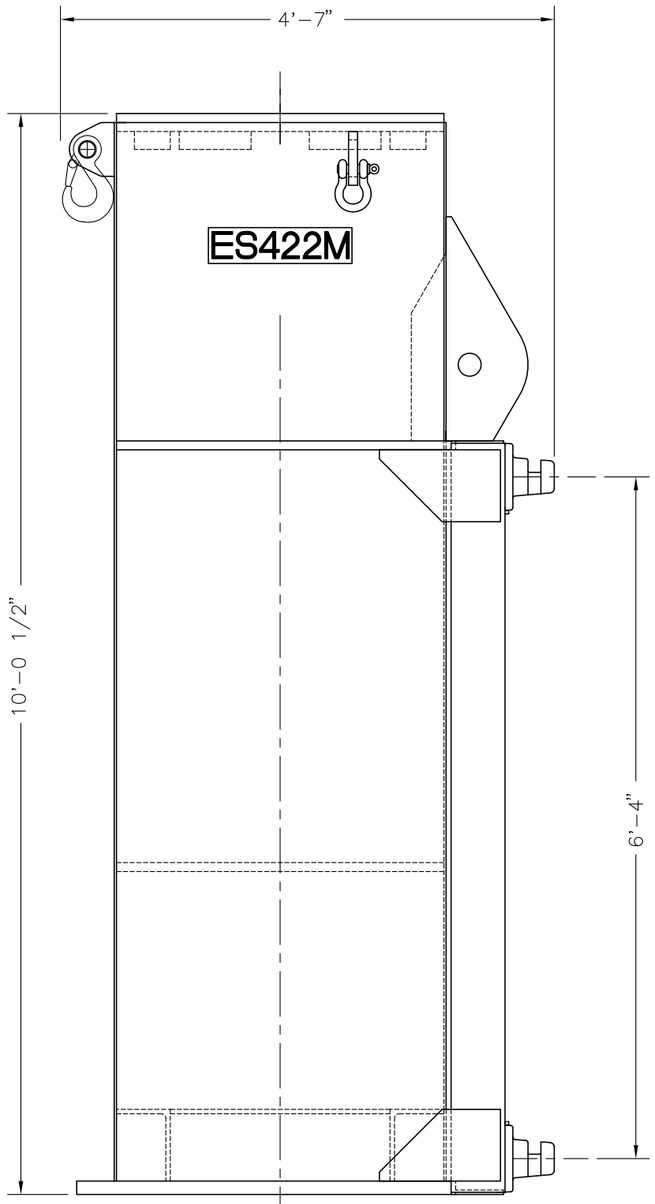
24" DIA x 40 FT HOLDING SPUD
GENERAL ARRANGEMENT
FLEXIFLOAT SERIES S-70

DRAWN BY	CHECKED	DWG NO.	REV
NAME RLM	NAME	U70912-GA	C
DATE 2/24/98	DATE	SCALE 1/8	SHEET 1 of 1

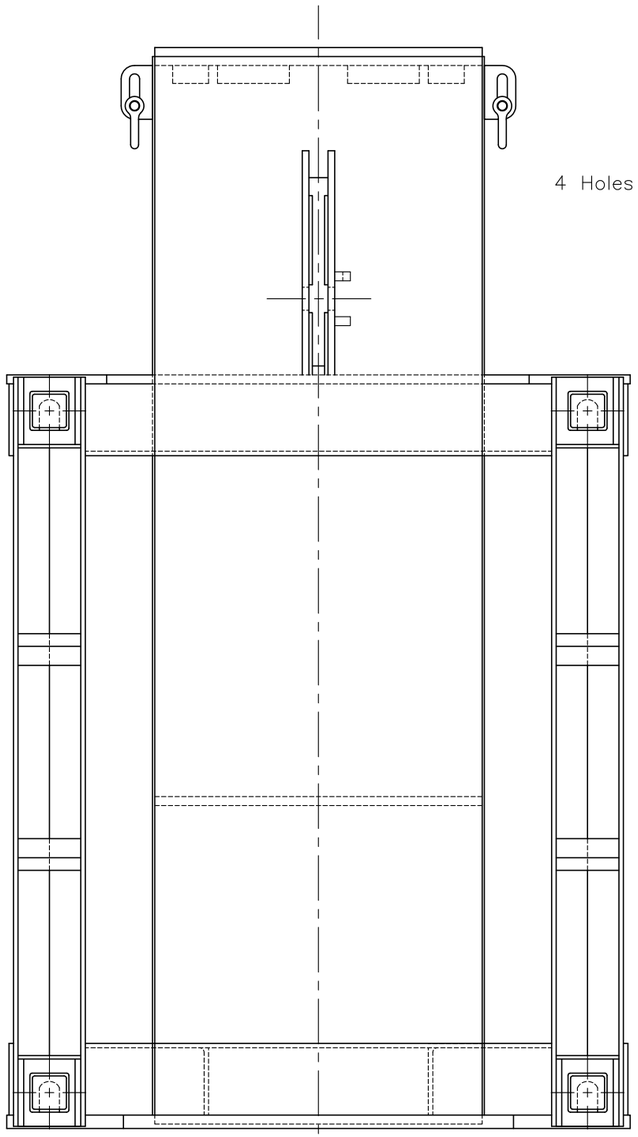
ZBORDER

RE14965d4a5-423d-4a6c-b811-071b03f9f293

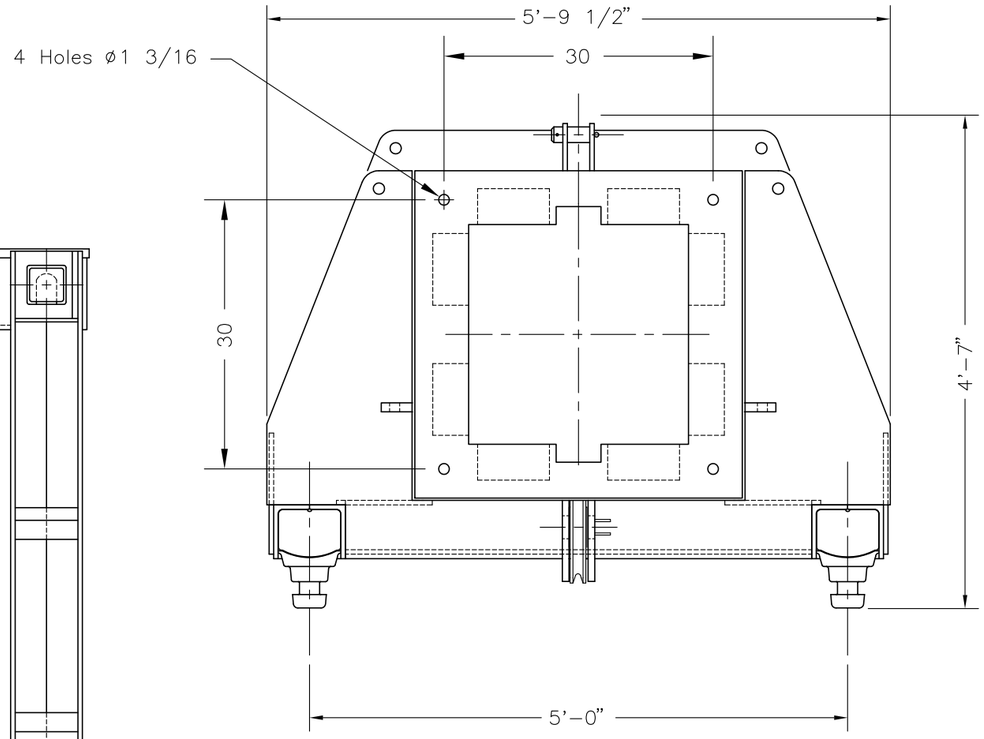
K:\UU70912-GA.dwg, 5/24/16 4:01:31 PM



SIDE VIEW A7/1



FRONT VIEW A5/1



TOP VIEW B2/1

Male Shown – Female Similar

Estimated Weight 5,100 Lbs
Estimated Cubage 270 Cubic Feet

Rev D: Added Warning Statement
Rev C: Updated Drawing Number was 770905GA
Rev B: Added dimensions for Winch Mount, Shipping Weight & Cubage
Updated Title Block to current Standards
Rev A: Added SN details and Sheave and Pin Details

ZBORDER 2003

ES540M – ESXXXX	4/2009	B
ES422M – ES539F	11/2003	A
Serial Numbers	Date	Rev

Release for Production

UNSPECIFIED TOLERANCES
DECIMAL:
X.X ± .1
X.XX ± .03
X.XXX ± .030
ANGULAR: ± .50'
FRACTIONAL: ± 1/16"
METRIC: ± .001

NEXT ASSY 770905

Ref Drawings
770905
77090103
U8012802

NO.	DATE	BY
D	5/24/16	KIG
C	1/19/16	KIG
B	4/30/2009	CAM
A	11/4/2003	CAM

REVISIONS

Robishaw Engineering, Inc.
HOUSTON, TEXAS

24” SQUARE SPUDWELL GENERAL ARRANGEMENT FLEXIFLOAT SERIES S–70

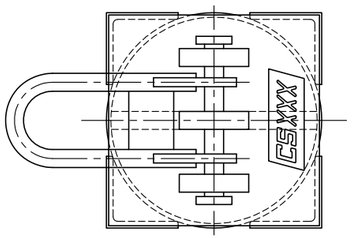
DRAWN BY	CHECKED	DWG NO.	REV
NAME CAM	NAME	770905–GA	D
DATE 8/4/99	DATE	SCALE 1/8	SHEET 1 OF 1

Print Size 24 x 36 all others Not to Scale

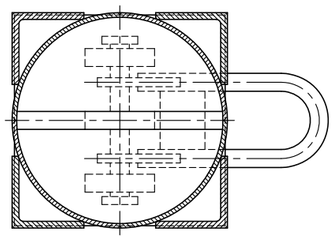
RE14965d4a5-423d-4a6c-b811-071b03f9293

K:\7\770905-GA.dwg, 5/24/16 4:08:43 PM

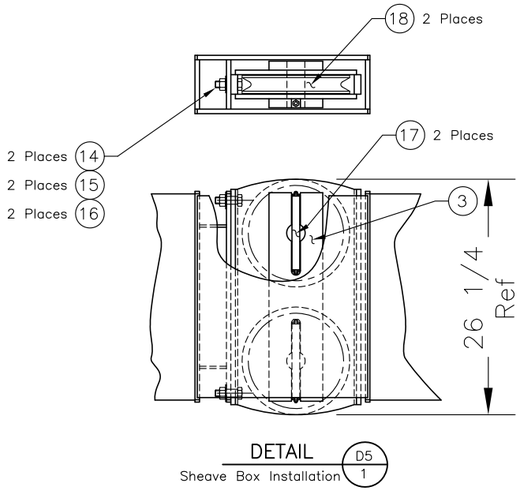
Qty	INVENTORY CODE	DESCRIPTION	MATERIAL	SPECIFICATION	NET WT	ZONE	ITEM
2	9121613	Bolt 1 x 2-1/2	Bolt Hex Head SAE GR 5 1-8 UNC x 2-1/2 Galv	COML	–	D5 1	14
2	9121603	Nut 1	Nut Hex SAE Gr 5 1-8 UNC Galv	COML	–	D5 1	15
2	9121602	Lock Washer 1	Lock Washer ASA Med 1 Nom Galv	COML	–	D5 1	16
2	U80109	Sheave Pin Assembly 2.50ø x 4.25 Long			14	D4 1	17
2	921400316	Sheave #12-10 1" Groove	Sheave Bronze Bushed 2.50 ID w/ 1" WL	Gunnebo Johnson #452527032 or EQ	56	D4 1	18
					12,120	Total	



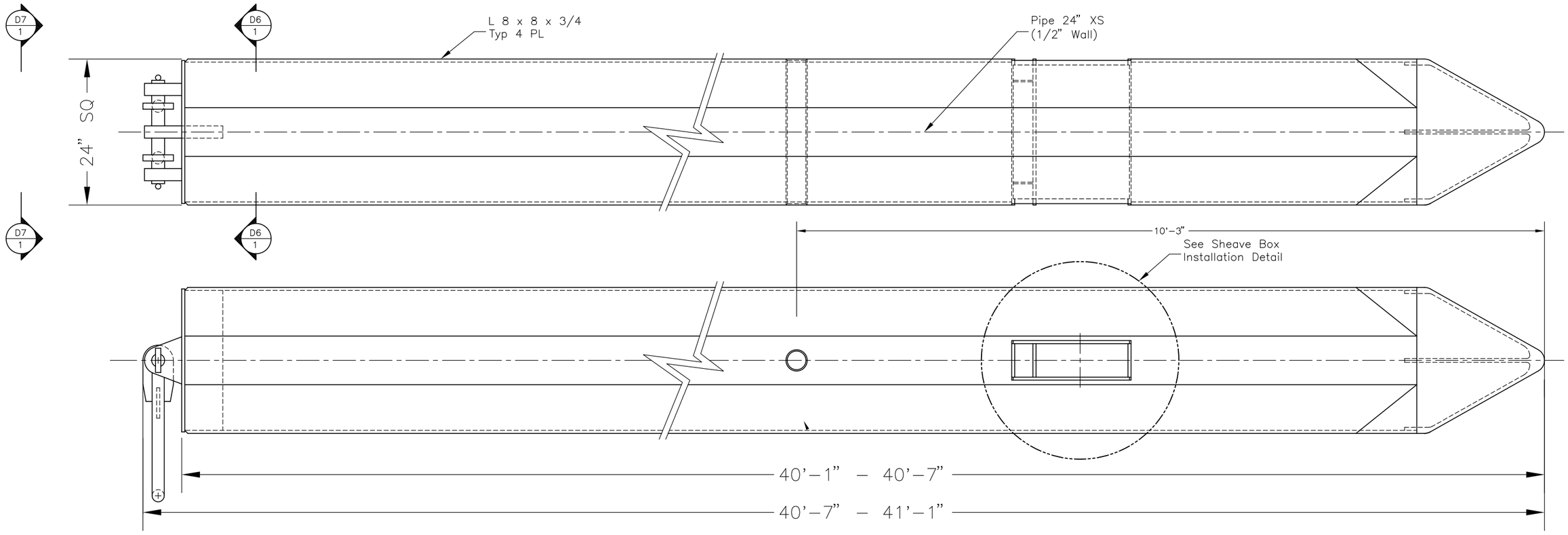
VIEW D7/1



SECTION D6/1



DETAIL Sheave Box Installation D5/1



Estimated Weight 12,300 Lbs
Estimated Cubage 190 Cubic Feet

Rev F: Added Warning Statement
Rev E: Updated Drawing Number was U70916WD
Rev D: Change Sheave from 7/8" Groove to 1" Groove
Rev C: Deleted 2" Holding Pin Detail
Rev B: 40'-1"to 40'-7" was 41'-8 3/8"
Rev A: Added Optional 2"Holding Pin and 3" Pipe Guide

Serial Numbers	Date	Rev
CS214 – CSXXX	9/2002	B A BL
Release for Production		

Ref Drawings: U7091602, U7091202, U70916, U70913

UNSPECIFIED TOLERANCES
DECIMAL:
X.X ± .1
X.XX ± .03
X.XXX ± .030
ANGULAR: ± .50'
FRACTIONAL: ± 1/16"
METRIC: ± .001

NEXT ASSY VARIES

NO.	DATE	BY
F	5/24/16	KIG
E	1/19/16	KIG
D	9/8/2008	CAM
C	10/10/06	CAM
B	09/20/02	CAM

REVISIONS

Robishaw Engineering, Inc.
HOUSTON, TEXAS

24"x 40' SQUARE HOLDING SPUD
GENERAL ARRANGEMENT
FLEXIFLOAT SERIES S-70

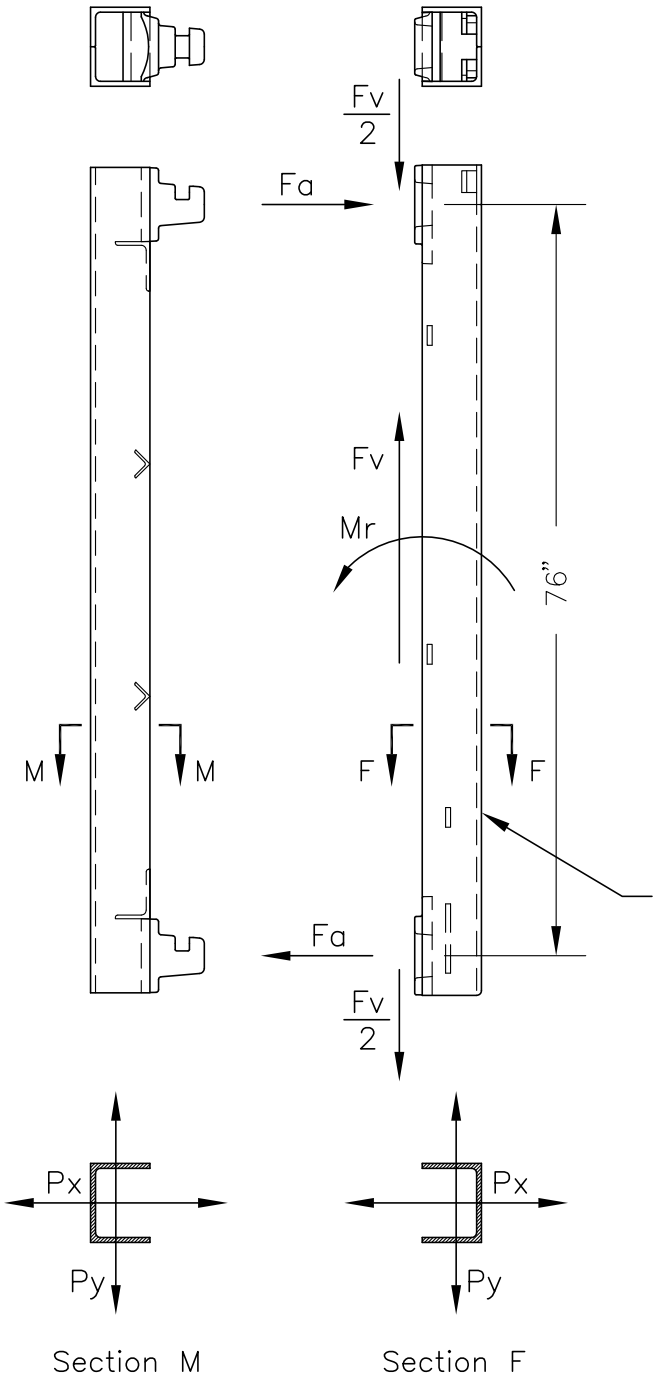
DRAWN BY	CHECKED	DWG NO.	REV
NAME CAM	NAME RLM	U70916-GA	F
DATE 1/16/2003	DATE 06/08/98	SCALE 1/8	SHEET 1 of 1

ZBORDER

RE14965d4d5-423d-4a6c-b811-071b03f9f293

K:\U\U70916-GA.dwg, 5/24/16 4:05:24 PM

Rated Loads and Resisting Moment for the Series S–70 Connector System



Axial Load at <u>each</u> connector:
Fa = 140,000 Pounds
(Tension/Compression)

Shear Load at <u>each</u> upper and lower connector pair:
Fv = 140,000 Pounds
$\frac{Fv}{2}$ = 70,000 Pounds

Resisting Moment between <u>each</u> upper and lower connector:
Mr = 10,640,000 Inch–Pounds

Maximum Concentrated Load
(Reference Section M/F)
Load at 1/3 Point (Top/Bottom)
Px = 17,000 Pounds
Py= 36,000 Pounds

Load at Midpoint
Px = 15,000 Pounds
Py= 32,000 Pounds

STATE OF TEXAS
CLARK A MCMURTRY
58064
REGISTERED PROFESSIONAL ENGINEER

Seal is not Valid Unless Digitally Signed

Clark A McMurtry
10/1/15

ROBISHAW ENGINEERING, INC.
Texas Registered Engineering Firm
F–1560

Rev A: Added Maximum Concentrated Loads

Robishaw Engineering, Inc.
HOUSTON, TEXAS

UNSPECIFIED TOLERANCES

DECIMAL:	
X.X	± .1
X.XX	± .03
X.XXX	± .030
ANGULAR:	± .50'
FRACTIONAL:	± 1/16"
METRIC:	± .001

NEXT ASSY

NO.	DATE	BY
A	10/1/15	CAM

REVISIONS

DESIGN LOADS
CONNECTOR SYSTEM
FLEXIFLOAT SERIES S–70

DRAWN BY	CHECKED	DWG NO.	REV
NAME CAM	NAME MDM	7404LOAD	A
DATE 6/2/99	DATE 9/2/99	SCALE N/A	SHEET 1 OF 1

ABORDER 2009 Print Size 8–1/2 x 11 all others Not to Scale

Replaced Title Block 10/2015

TB SCALE: 20 DIMSCALE: 20

K:\7\7704LOAD.dwg, 5/26/16 8:42:21 AM

Details for registered vessel PAMTAY (O.N. 846893)

Vessel

Official Number	846893
Vessel Name	PAMTAY
Former Vessel Name	-
IMO Number	-
Hull Number	-
Year Built	1943
Year Rebuilt	-
Port of Registry	VANCOUVER
Registry Date	2023-08-02
Certificate Expires	2026-08-31
Number of Encumbrances	0

General Statistics

Vessel Type	BARGE
Gross Tonnage	756.43
Net Tonnage	226.93
Construction Type	WELDED
Construction Material	STEEL
Vessel Length (m)	56.08
Vessel Breadth (m)	15.24
Vessel Depth (m)	3.51

Engine

Engine Description	NONE
Number of Engines	0
Propulsion Type	NON-PROPELLED
Speed (knots)	0.0
Propulsion Method	NONE
Propulsion Power	0
Unit of Power	NONE

Builder

Date Modified: 2018-08-02

Name	THE FEDERAL SHIPBUILDING AND DRYDOCKING COMPANY
Address	
City	SOUTH KEARNY
Country	UNITED STATES
Province	
Postal Code	-

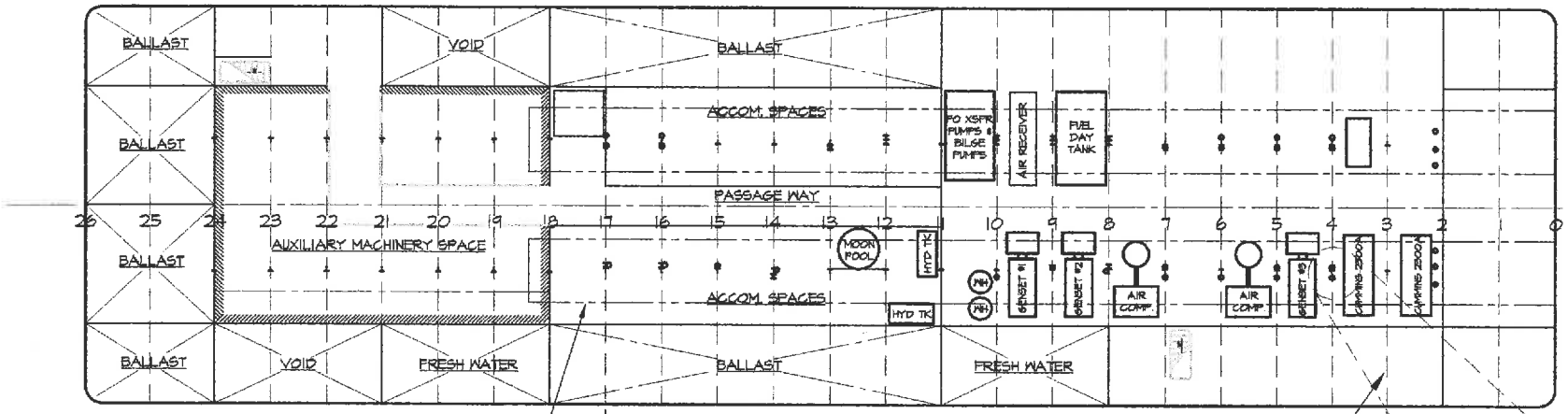
Owners

Sequence #1. Number of Shares: 64

Name	PPM CIVIL CONSTRUCTORS, ULC
Address	604-495 DUNSMUIR STREET
City	NANAIMO
Country	CANADA
Province	BRITISH COLUMBIA
Postal Code	V9R 6B9

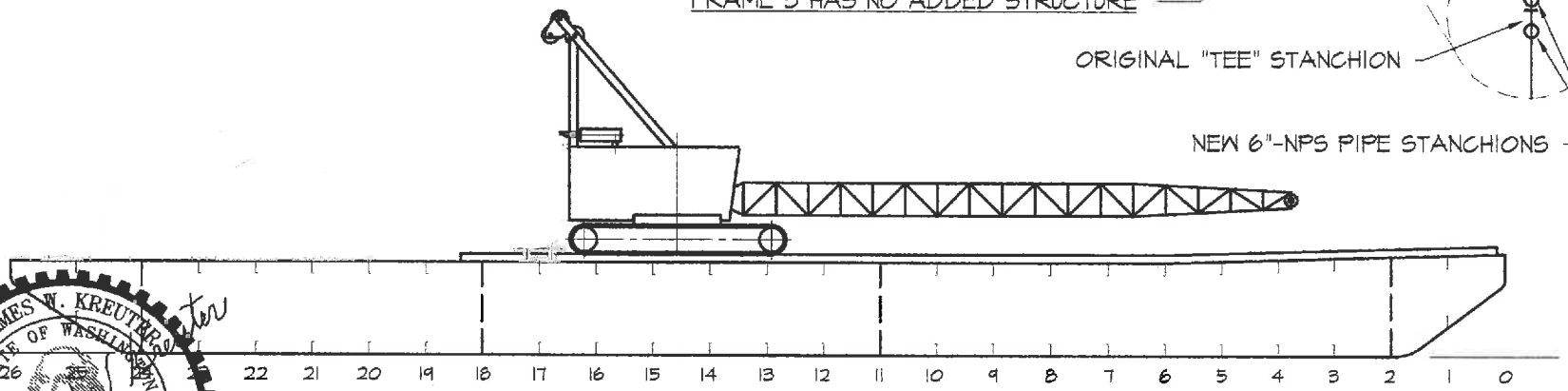
Authorized Representative

Name	PPM CIVIL CONSTRUCTORS, ULC
Address	604-495 DUNSMUIR STREET
City	NANAIMO
Country	CANADA
Province	BRITISH COLUMBIA
Postal Code	V9R 6B9



PLAN VIEW HOLD

FRAME 3 HAS NO ADDED STRUCTURE



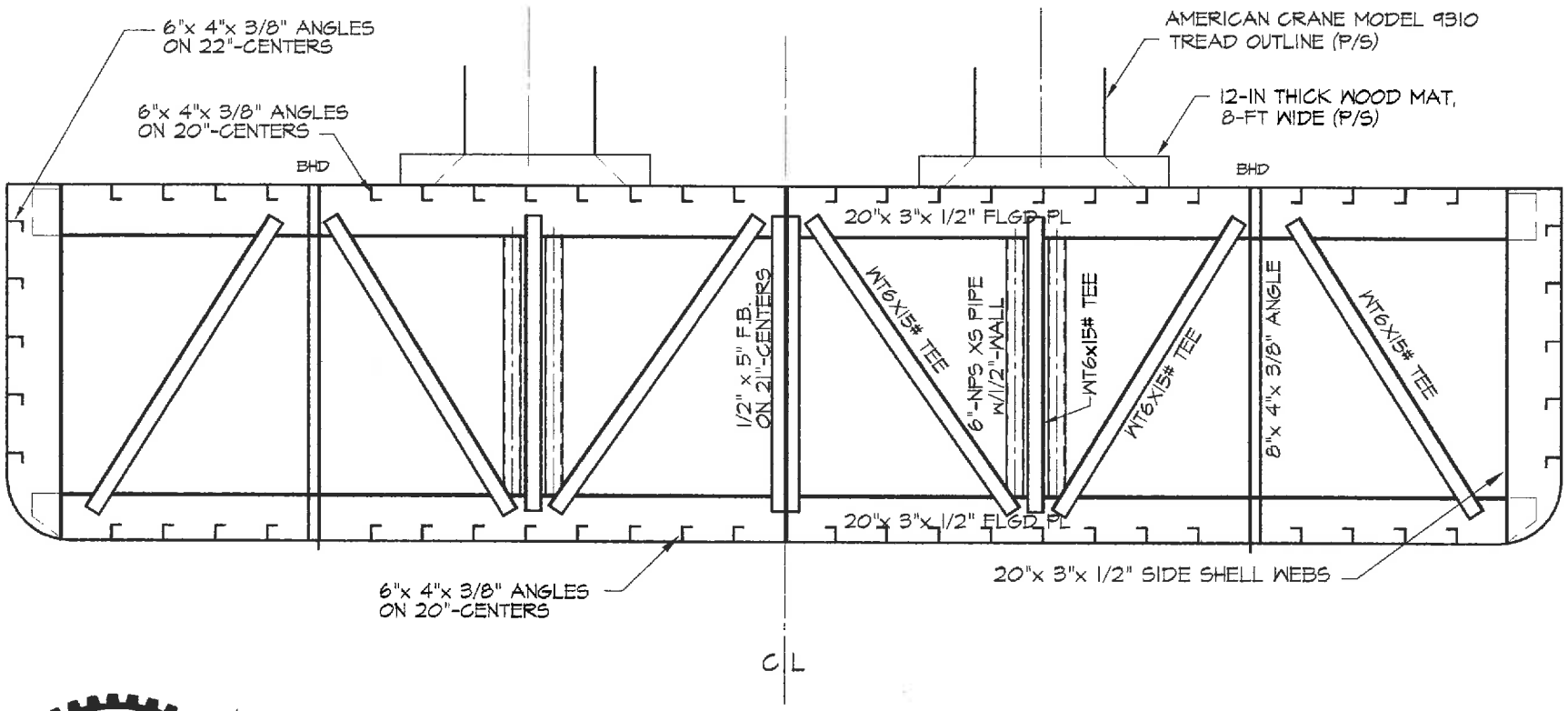
OUTBOARD PROFILE

EXPIRES 1/18/09

VESSEL OWNER:	VESSEL:	TITLE:
ACC HURLEN, INC.	FREIGHT BARGE SUSITNA	BARGE ARRANGEMENT DWG

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
1-17-07	jwk	3/64" = 1'-0"	2006-28-02A	1	2

JAMES W. KREUTER, P.E.
3340 CRYSTAL SPRINGS DRIVE N.E. BAINBRIDGE ISLAND, WA 98110 (206)780-5504 FAX: (206)780-6765



TYPICAL FRAME
(LOC. ON 7'-0" CENTERS)

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER

EXPIRES 1/18/09

VESSEL OWNER:	VESSEL:	TITLE:
ACC HURLEN, INC.	FREIGHT BARGE SUSITNA	BARGE ARRANGEMENT DWG

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
1-17-07	jwk	3/8" = 1'-0"	2006-28-02A	2	2

JAMES W. KREUTER, P.E.
3340 CRYSTAL SPRINGS DRIVE N.E. BAINBRIDGE ISLAND, WA 98110 (206)780-5504 FAX: (206)780-6765

BOYER TOWING, INC.

P.O. Box 8000
Ketchikan, Alaska 99901
Phone (206) 763-8696 Fax (206) 767-9517

PORPOISE

Official No: 285683

Overall Dimensions:

Length: 140 ft.
Beam: 35 ft.
Depth: 8.6 ft.

Useable Deck:

Length: 130 ft.
Cargo Capacity: 500 Tons
Beam: 32 ft.

Regulatory:

Gross Tonnage: 339 GRT
Net Tonnage: 339 NRT

DEADWEIGHT TABLE - SALTWATER (SHORT TONS)

Avg. Draft	Cargo Wt.	
3'-4 3/8"	0.0	(Lightship)
3'-6"	17.3	
3'-9"	51.8	
4'-0"	86.4	
4'-3"	123.6	
4'-6"	160.8	
4'-9"	198.0	
5'-0"	235.2	
5'-3"	272.7	
5'-6"	310.2	
5'-9"	347.7	
6'-0"	385.1	
6'-3"	423.1	
6'-6"	461.0	
6'-9"	498.9	
7'-0"	536.8	

NOTE:
1. Draft or freeboard shown is for average values.

DEADWEIGHT TABLE - FRESHWATER (SHORT TONS)

Avg. Draft	Cargo Wt.	
3'-5 1/2"	0.0	(Lightship)
3'-6"	16.9	
3'-9"	50.4	
4'-0"	83.9	
4'-3"	120.1	
4'-6"	156.3	
4'-9"	192.5	
5'-0"	228.6	
5'-3"	265.1	
5'-6"	301.5	
5'-9"	337.9	
6'-0"	374.3	
6'-3"	411.2	
6'-6"	448.1	
6'-9"	484.9	
7'-0"	521.8	

NOTE:
1. Draft or freeboard shown is for average values.

DHS, USCG, CG-1270 (REV. 01-23)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
PORPOISE	285683	NONE	UNKNOWN

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
KETCHIKAN AK	STEEL	NO

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
~~353 GRT~~	339 NRT	137.0	34.2	8.6

PLACE BUILT

UNKNOWN

OWNERS

BOYER TOWING INC

OPERATIONAL ENDORSEMENTS

REGISTRY
COASTWISE

MANAGING OWNER

BOYER TOWING INC
5061 SHORELINE DRIVE
PO BOX 8000
KETCHIKAN AK 99901

RESTRICTIONS
NONE

ENTITLEMENTS
NONE

REMARKS
NONE

ISSUE DATE
MAY 23, 2024

THIS CERTIFICATE EXPIRES

JUNE 30, 2025

Christopher G. Washburn

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

PREVIOUS EDITION OBSOLETE, THIS CERTIFICATE MAY NOT BE ALTERED

This certificate is not valid for operation of the vessel until the vessel is marked with the name, official number, and hailing port as shown on the certificate. The original certificate must be kept aboard the vessel at all times when in operation and must be presented upon the demand of federal, state or local officials for law enforcement purposes. Vessels with only a recreational endorsement may not engage in commercial trade.

Documented vessels may be registered by states for tax and other purposes and may be required to display a state decal. Renewal is the responsibility of the owner. This certificate becomes invalid upon a change in ownership, change in state of incorporation, or a change in any other element shown on the certificate other than change of address. This certificate is invalid for any vessel other than one documented solely for recreation when the vessel is placed under the command of a person who is not a citizen of the U.S. The vessel and its equipment are liable to seizure and forfeiture to the U.S. government and the owner is liable for a civil penalty of not more than $10,000.00 per violation. Each day of a continuing violation is a separate violation.

Any change in address of the managing owner must be reported promptly to the NVDC. You may contact NVDC at nvdc.w.webmaster@uscg.mil.

Note: The certificate on the face of this document is not conclusive evidence of title in any proceeding where ownership is in issue. Complete records are on file at the NVDC. The sale or transfer section below is provided for convenience only.

SALE OR TRANSFER OF VESSEL

100% OF THE VESSEL IDENTIFIED HEREIN IS SOLD (TRANSFERRED) BY THE OWNER(S) NAMED ON THE FACE OF THIS CERTIFICATE TO THE FOLLOWING PERSON(S). ADDRESS MUST BE INCLUDED.

IF SOLD (TRANSFERRED) TO MORE THAN ONE PERSON, THE PURCHASER(S)/TRANSFEREE(S) ARE TENANTS IN COMMON, EACH OWNING AN EQUAL UNDIVIDED INTEREST, UNLESS OTHERWISE INDICATED HEREIN: CHECK ONLY ONE OF THE FOLLOWING BLOCKS TO SHOW ANOTHER FORM OF OWNERSHIP.

☐ JOINT TENANCY WITH RIGHT OF SURVIVORSHIP ☐ TENANCY BY THE ENTIRETIES ☐ COMMUNITY PROPERTY

☐ OTHER

SIGNATURE OF SELLER(S)/TRANSFEROR(S) OR PERSONS SIGNING ON BEHALF OF SELLER(S)/TRANSFEROR(S):

DATE SIGNED:

NAME(S) OF PERSON(S) SIGNING ABOVE, AND LEGAL CAPACITY IN WHICH SIGNED (E.G. OWNER, AGENT, TRUSTEE, EXECUTOR)

ACKNOWLEDGMENT (TO BE COMPLETED BY NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED BY A LAW OR A STATE OR THE UNITED STATES TO TAKE OATHS.)

STATE:

ON _____ THE PERSON(S) NAMED
(DATE)

COUNTY:

ABOVE ACKNOWLEDGED EXECUTION OF THE FOREGOING INSTRUMENT IN THEIR STATED CAPACITY(IES) FOR THE PURPOSES THEREIN CONTAINED.

NOTARY PUBLIC
MY COMMISSION EXPIRES:

PRIVACY ACT STATEMENT

IN ACCORDANCE WITH 5 USC 552(A). THE FOLLOWING INFORMATION IS PROVIDED TO YOU WHEN SUPPLYING PERSONAL INFORMATION TO THE U.S. COAST GUARD:

1. AUTHORITY. SOLICITATION OF THIS INFORMATION IS AUTHORIZED BY 46 USC CHAPTER 313 AND 46 CFR, PART 67.
2. THE PRINCIPAL PURPOSES FOR WHICH THIS INSTRUMENT IS TO BE USED ARE:
   (A) TO PROVIDE A RECORD, AVAILABLE FOR PUBLIC INSPECTION AND COPYING, OF THE SALE OR OTHER CHANGE IN OWNERSHIP OF A VESSEL WHICH IS DOCUMENTED, WILL BE DOCUMENTED, OR HAS BEEN DOCUMENTED PURSUANT TO 46 USC, CHAPTER 121.
   (B) RETENTION FOR EXAMINATION BY GOVERNMENTAL AUTHORITIES AND MEMBERS OF THE GENERAL PUBLIC.
3. THE ROUTINE USE WHICH MAY BE MADE OF THIS INFORMATION INCLUDES DEVELOPMENT OF STATISTICAL DATA CONCERNING DOCUMENTED VESSELS.
4. DISCLOSURE OF THE INFORMATION REQUESTED ON THIS FORM IS VOLUNTARY. HOWEVER, FAILURE TO PROVIDE THE INFORMATION COULD PRECLUDE FILING OF A BILL OF SALE AND DOCUMENTATION OF THE VESSEL NAMED HEREIN PURSUANT TO 46 USC CHAPTER 121. MOREOVER, BILLS OF SALE WHICH ARE NOT FILED ARE NOT DEEMED TO BE VALID AGAINST ANY PERSON HAVING ACTUAL KNOWLEDGE OF THE SALE. (46 USC 31321 (A)).

AN AGENCY MAY NOT CONDUCT OR SPONSOR, AND A PERSON IS NOT REQUIRED TO RESPOND TO A COLLECTION OF INFORMATION UNLESS IT DISPLAYS A VALID OMB CONTROL NUMBER.

THE COAST GUARD ESTIMATES THAT THE AVERAGE BURDEN FOR THIS FORM IS 20 MINUTES FOR COMPLETING AND 3 MINUTES FOR FILING. YOU MAY SUBMIT ANY COMMENTS CONCERNING THE ACCURACY OF THIS BURDEN ESTIMATE OR ANY SUGGESTIONS FOR REDUCING THE BURDEN TO: U.S. COAST GUARD, NATIONAL VESSEL DOCUMENTATION CENTER, 792 T J JACKSON DRIVE, FALLING WATERS, WEST VIRGINIA 25419 OR OFFICE OF MANAGEMENT AND BUDGET, PAPERWORK REDUCTION PROJECT (1625-0027), WASHINGTON, DC 20503.

AX 696650922419

80'x40'x5' Flexifloat Raft w/ Hitachi ZX470-6 Excavator Stability Guidance

PREPARED FOR: Pacific Pile & Marine Seattle, Washington	BY: Mark J. Welsh NAVAL ARCHITECT	 Digitally Signed 24-Oct-2024
Glosten 1201 WESTERN AVENUE, SUITE 200 SEATTLE, WASHINGTON 98101-2953 T 206.624.7850 GLOSTEN.COM	CHECKED: Max B. Ryan, PE NAVAL ARCHITECT	
	APPROVED: Bradley G. Lamkin, PE PRINCIPAL-IN-CHARGE	
DOCUMENT NO.: 24159.01-001 / REV.: -	DATE: 24 October 2024	

Raft Stability

Calculations on file at Glosten show that the 80'×40'×5' Flexifloat Raft meets the lifting stability criteria of Reference 1, with the raft configured as follows:

1. The excavator is a Hitachi Z470LC-6 excavator weighing 112.3 kip with the following configuration:
    a. 20'-7" mass boom.
    b. 21' Jewell stick.
    c. 36" triple semi-grouser shoes.
    d. 2 cu. yd Young RS200 clamshell bucket.
    e. Maximum pick load of 59 kips.
2. The raft geometry and excavator location are as shown on Sheet 4. The excavator's tracks shall be fully extended.
3. Prior to operation, the excavator shall be in its initial working position as shown on Sheet 4 with the boom on centerline.
4. In this initial position, the raft's initial conditions shall be within the following limits:

Minimum Average Freeboard (measured at raft ends)	Maximum Heel (measured across working end)	Maximum Trim (measured at raft ends)
2'-9"	Level	1'-0" Fwd or 1'-0" Aft

5. All voids shall remain dry.
6. In addition to the excavator and crane mats, the raft may be loaded down to the limiting draft with other solid deck weights. The height of these miscellaneous weights shall not exceed 8' above the main deck. These weights shall be secured against movement.
7. Initial raft heel and trim may be controlled by miscellaneous weights on deck.
8. The excavator shall operate with 12" crane mats oriented as shown on Sheet 4. The excavator may walk forward on the raft as noted on Sheet 4 for spud access/removal only.
9. Spuds shall be down or removed during equipment operations.
10. All unprotected manholes, access openings, etc., through which progressive flooding may take place must be closed while the excavator is in operation.

Excavator Operations

When operating according to the rated load chart and range of operation above, the maximum raft heel or trim angle will not exceed 3.0° when operating under the following restrictions.

1. The initial conditions described in Raft Stability Item 4, above, are adhered to.
2. The raft meets the stability requirements of Reference 1 when the total load lifted is less than or equal to 59 kips.
3. The excavator may not travel with a load. At no time is raft transiting permitted with a load.
4. There is no inclination chart for this excavator. It is assumed that the excavator can operate in raft heel and trim angles up to 3.0°.
5. Calculations have been performed demonstrating that the excavator will have adequate friction force to prevent sliding and/or shifting prior to the stability criteria being met. However, Section 1437(n)(5) of Ref. 2 still requires physical restraint. All manufacturer recommendations and PPM policies for lashing of equipment for marine use shall be followed.
6. The raft deck structure has been analyzed using the machine self-weight and the max pick load (noted in item 4 above). The excavator shall operate with the crane mat configuration shown on Sheet 4. The maximum nominal deck pressure from is less than the allowable deck pressure provided in Reference 4.
7. The guidance provided is for static conditions only. The operator's judgement must be used to allow for dynamic effects from wind and sea. Sea state wavelengths of more than half the raft beam shall be avoided.
8. In addition to the limitations set forth in this guidance, the operator shall adhere to all available manufacturer's guidance, including any guidance regarding safe operation of the excavator in a marine environment and wind restrictions.
9. If operated in the manner described above, the raft may have the following maximum angles/conditions (not necessarily concurrently):

Raft Heel	Raft Trim	Achieved Righting Energy	Reqd. Righting Energy
2.7°	2.2°	25.1 ft-deg	10.0 ft-deg

Assumptions

- The raft operates in salt water with calm conditions and in partially protected waters.
- The raft lightship was derived from Reference 4. The longitudinal transverse and vertial centers were derived from Reference 3.

  Lightship: 220.8 kip
  LCG: 40 ft aft of FP
  TCG: 0.0 ft off centerline
  VCG: 3.0 ft above baseline

- The excavator weight is provided in Reference 5. The center of gravity is conservatively assumed to be at its center of rotation and at the top of the cab in the initial condition.
- A lift capacity chart does not exist for the extended Jewell stick configuration. However, given that the counterweight and base machine weights have not changed, the load and front-end tipping moment limits can be assumed the same as stock. The new boom and stick weigh more than stock and therefore the max pick of 59kips from the load chart is conservative. Hydraulic capacity may limit operations prior to stability limits.
- When operating forward or aft, the combined excavator and load LCG is assumed to be aligned with the track ends.

- When operating port or starboard, the combined excavator and load is conservatively assumed to be at the tracks outer edge.

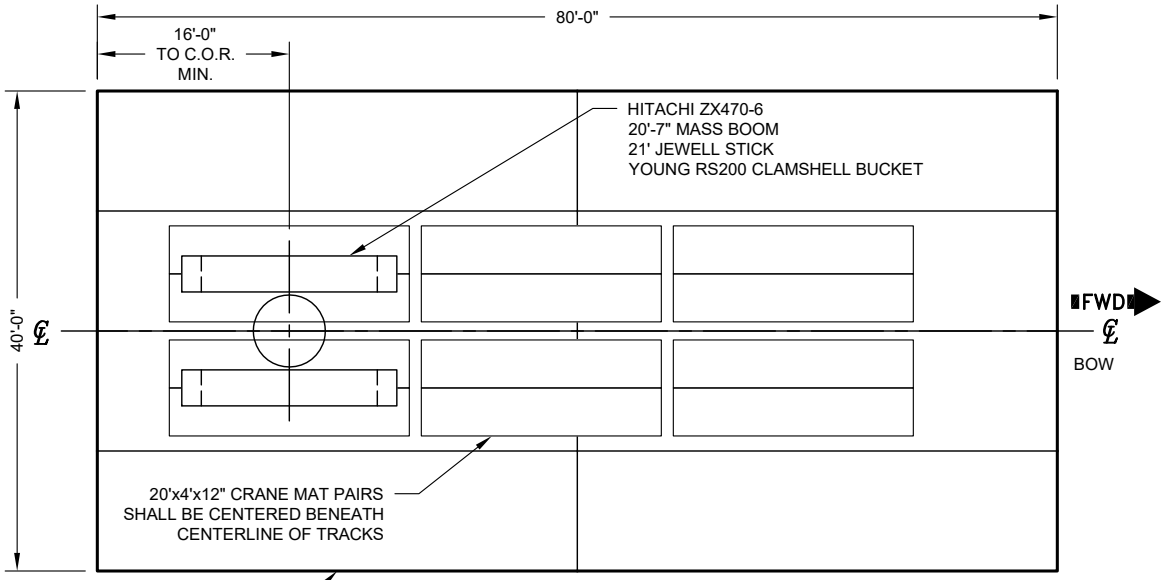
Period of Validity

The stability guidance is valid for four years from the issue date. After this time, the contractor/operator shall review the following items with Glosten prior to reissuing the stability guidance.

- Area of operation and applicable stability criteria.
- Excavator configuration and applicable manufacturer's modes of operations and limits.
- Raft arrangement and structural condition.
- Use of deck cargo.

References

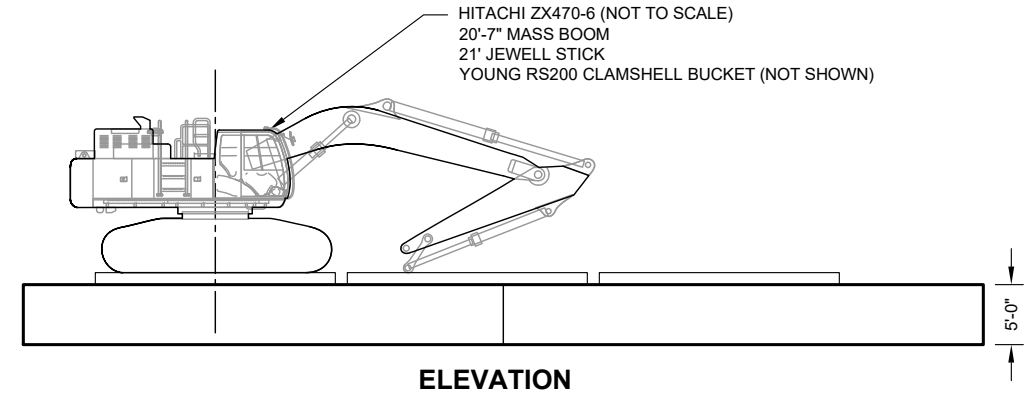
1. 46 CFR§173 Subpart B, Lifting, 2023.
2. 29 CFR§1926 Subpart CC, Floating Cranes/Derricks and Land Cranes/Derricks on Barges, 2023.
3. Marine Safety Manual, Vol. IV, United States Coast Guard, 2024.
4. *Robishaw Engineering, Inc.,* Working Drawing, Flexifloat S-50 Quadrafloat 540000W, Rev A, 19 February 2009.
5. Hitachi Ltd., *Production-Class Excavators ZX470-6*, June 2016.



PLAN

ARRANGEMENT

1/16"=1'-0"



ELEVATION

ARRANGEMENT

1/16"=1'-0"

PACIFIC PILE & MARINE

SEATTLE, WASHINGTON

80'X40'X5' FLEXIFLOAT RAFT W/ HITACHI ZX470-6 EXCAVATOR

STABILITY GUIDANCE

RAFT ARRANGEMENT

Glosten More than DESIGN.
1201 WESTERN AVENUE, SUITE 200
SEATTLE, WASHINGTON 98101
T +1 206.624.7850 GLOSTEN.COM

Drawn	Checked	Approved	Size	Issue Date
MJW	MBR	BGL	A	2024/10/24

Scale	Drawing Number	Sheet	of	Revision
AS NOTED	24159.01-001	4	4	-

DHS, USCG, CG-1270 (REV. 01-23)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
KP-5	630338	1303	1980

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
KETCHIKAN AK	STEEL	NO

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
938 GT ITC 1053 GRT	281 NT ITC 1053 NRT	172.7	54.0	12.5

PLACE BUILT

BRAITHWAITE LA

OWNERS

BOYER TOWING INC

OPERATIONAL ENDORSEMENTS

REGISTRY
COASTWISE

MANAGING OWNER

BOYER TOWING INC
5061 SHORELINE DR
PO BOX 8000
KETCHIKAN AK 99901

RESTRICTIONS
NONE

ENTITLEMENTS
NONE

REMARKS
NONE

ISSUE DATE
APRIL 19, 2024

THIS CERTIFICATE EXPIRES

MAY 31, 2025

Christian G. Waldon

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

Barge KP-5 (180'-0" x 54'-0" x 12'-6")

DEADWEIGHT TABLE (SHORT TONS)

SALTWATER

	Avg. Draft	Cargo Wt.
(Lightship)	**2'-8 7/8"**	0.0
	3'-0"	**71.1**
	3'-3"	139.0
	3'-6"	207.3
	3'-9"	276.1
	4'-0"	**345.4**
	4'-3"	415.1
	4'-6"	485.3
	4'-9"	555.9
	5'-0"	**627.0**
	5'-3"	698.6
	5'-6"	770.6
	5'-9"	843.1
	6'-0"	**916.1**
	6'-3"	989.5
	6'-6"	1,063.4
	6'-9"	1,137.7

Avg. Draft	Cargo Wt.	
7'-0"	**1,212.5**	
7'-3"	1,287.8	
7'-6"	1,363.5	
7'-9"	1,439.7	
8'-0"	**1,516.4**	
8'-3"	1,593.5	
8'-6"	1,671.0	
8'-9"	1,748.8	
9'-0"	**1,826.6**	
9'-3"	1,904.4	
9'-5 1/2"	**1,969.3**	(Loadline)
9'-6"	1,982.2	
9'-9"	2,060.0	
10'-0"	**2,137.8**	
10'-3"	2,215.6	
10'-6"	2,293.4	

NOTES:

1. Drafts shown are average values.
2. Table shown applies to even keel conditions (no trim).
3. Lightship weight is assumed to be 707.13-ST, based on freeboard measurements taken on 10-25-22.

DHS, USCG, CG-1270 (REV. 01-23)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
COLE DAVID	1211321	YR92	1945

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
SEATTLE WA	STEEL	NO

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
289 GRT	289 NRT	110.0	34.0	9.2

PLACE BUILT

SAN FRANCISCO CA

OWNERS

SPECTRAL CRANE AND MARINE LLC

OPERATIONAL ENDORSEMENTS

COASTWISE
REGISTRY - LIMITED REGISTRY (NO FOREIGN VOYAGE BY SEA)

MANAGING OWNER

SPECTRAL CRANE AND MARINE LLC
1061 SE BAY STREET
(PORT ORCHARD WA)
PO BOX 2386
ISSAQUAH WA 98027

RESTRICTIONS

NO RECREATION - BARGE, 79 FEET OR MORE IN LENGTH, MEASURED UNDER SIMPLIFIED SYSTEM

ENTITLEMENTS

NONE

REMARKS

NONE

ISSUE DATE

JUNE 25, 2024

THIS CERTIFICATE EXPIRES

JULY 31, 2025

Christine H. Waddell

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

GENERAL NOTES

1. THIS DRAWING PROVIDES GENERAL ARRANGEMENT INFORMATION FOR THE FREIGHT BARGE "COLE DAVID". THE VESSEL PARTICULARS ARE SHOWN BELOW:

   LENGTH OVERALL.....110'-0"
   BREADTH MOLDED.....34'-0"
   DEPTH MOLDED.....11'-3"

2. THE MAIN DECK HAS 3-INCHES OF CAMBER.

3. THE BARGE HAS BEEN OUTFITTED WITH A FORWARD AND AFT SPUD WELL. BOTH SPUD WELLS ARE ON THE STARBOARD SIDE OF THE BARGE. THE SPUD WELLS HAVE AN OUTER DIAMETER OF 24-INCHES AND AN INNER DIAMETER OF 21½". THE SPUDS HAVE AND OUTER DIAMETER OF 16-INCHES AND A 15-INCH INNER DIAMETER. THE SPUDS ARE 60-FT LONG AND WEIGH APPROXIMATELY 6,000-LBf.

REVISIONS

REV	ZONE	DESCRIPTION	DATE	APPVD

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
6-09-23

PRELIMINARY

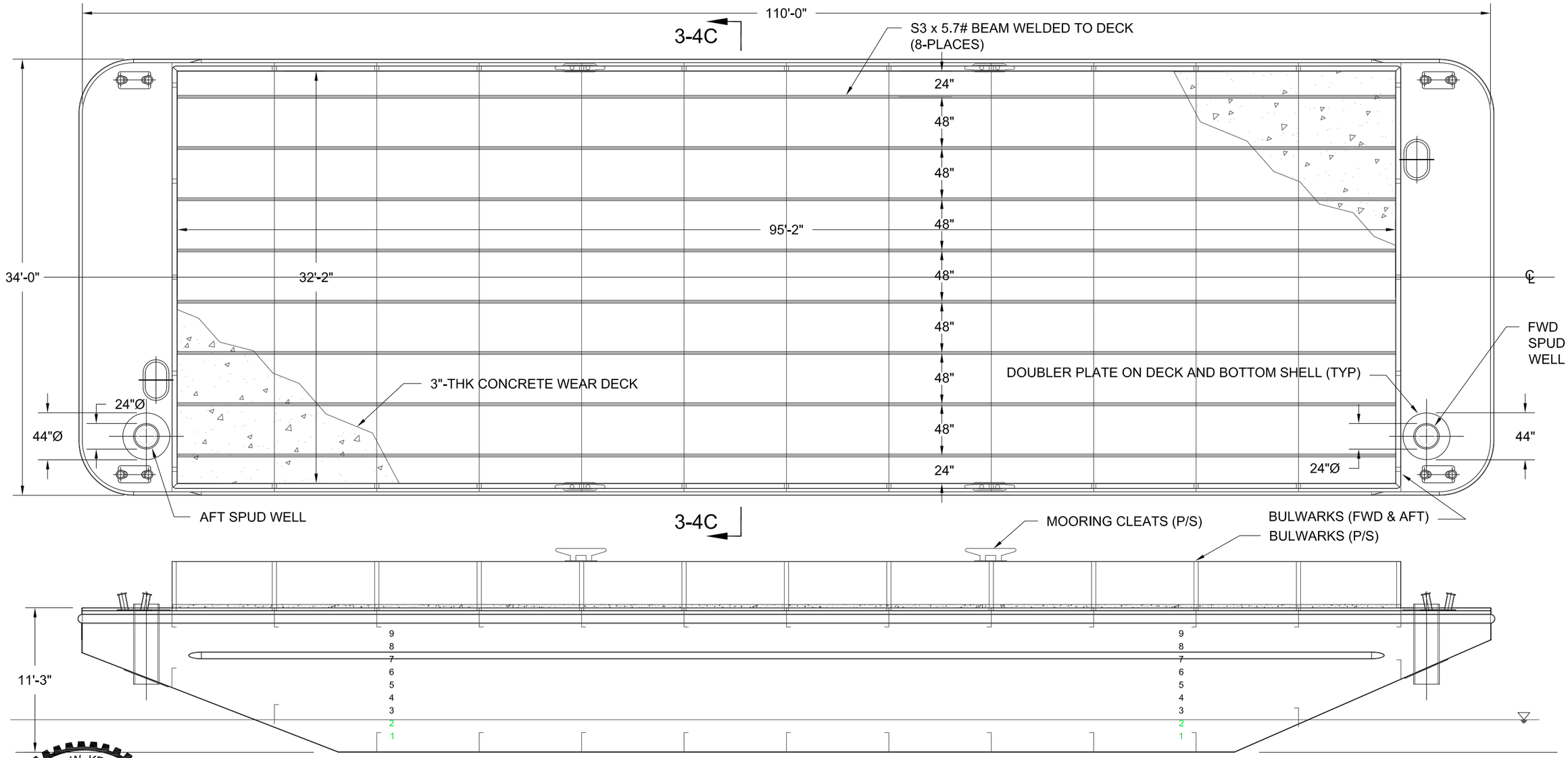
No.	DRAWING No.	TITLE	BY	DATE
3				
2				
1				

REFERENCES

FOR:	PROJECT:	TITLE:
SPECTRAL CRANE & MARINE	COLE DAVID	GENERAL ARRANGEMENT

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
06-09-2023	jwk	AS NOTED	2023-009-200-01	1	3

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



JAMES W. KREUTER
STATE OF WASHINGTON
26117
6-09-23
REGISTERED
PROFESSIONAL ENGINEER

PLAN 2-4B

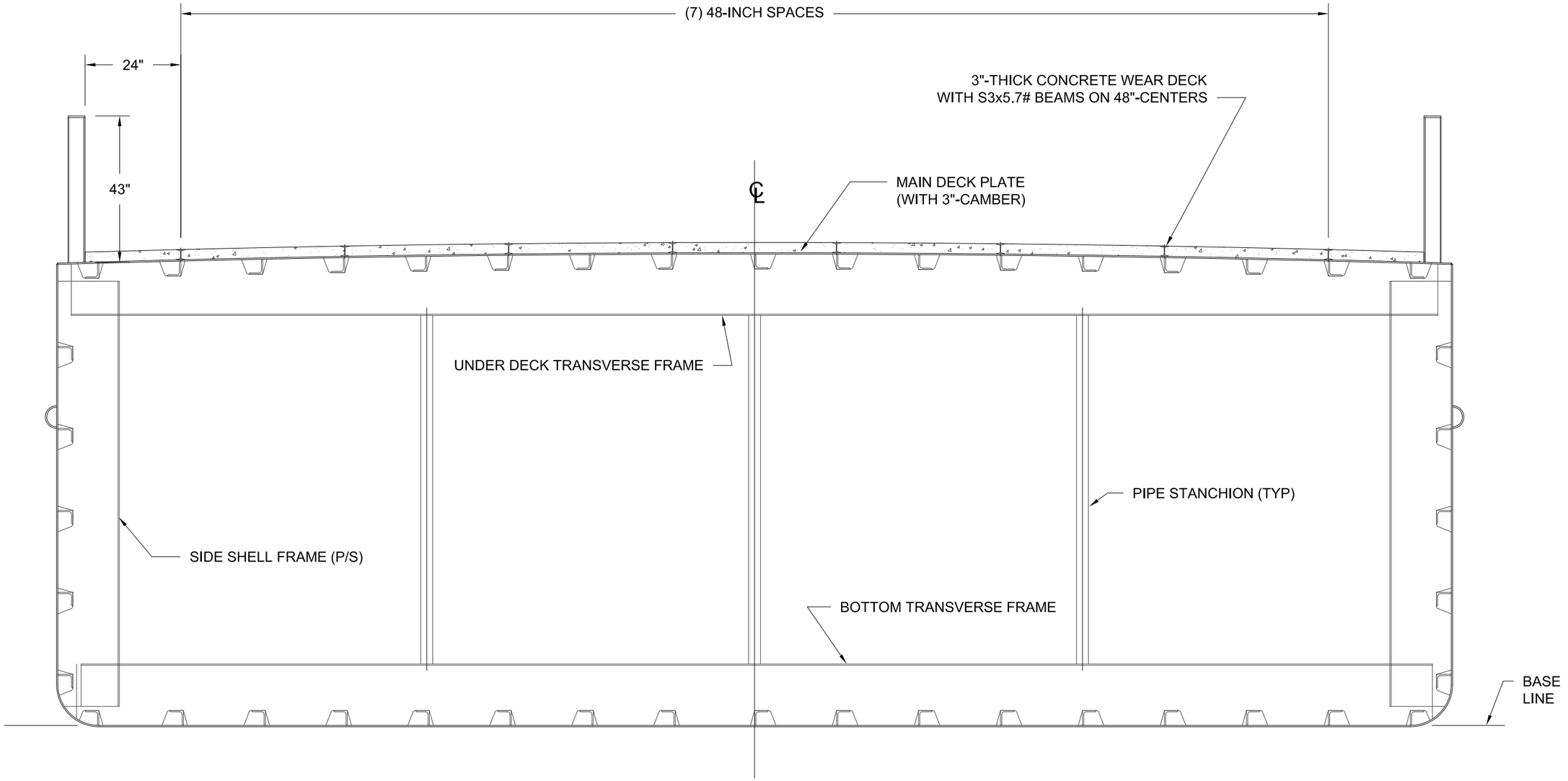
COLE DAVID DECK ARRGT & OUTBD PROFILE

SCALE: 1/8" = 1'-0"

PRELIMINARY

FOR:	PROJECT:	TITLE:			
SPECTRAL CRANE & MARINE	COLE DAVID	GENERAL ARRANGEMENT			
DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
06-09-2023	jwk	AS NOTED	2023-009-200-01	2	3

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com



PLAN 3-4C

COLE DAVID MIDSHIP SECTION (LOOKING AFT)

SCALE: $\frac{3}{64}$" = 1'-0"

PRELIMINARY

JAMES W. KREUTER
STATE OF WASHINGTON
26117
REGISTERED
PROFESSIONAL ENGINEER
6-09-23

FOR:	PROJECT:	TITLE:
SPECTRAL CRANE & MARINE	COLE DAVID	GENERAL ARRANGEMENT

DATE:	BY:	SCALE:	DWG No:	SHEET:	OF:
06-09-2023	jwk	AS NOTED	2023-009-200-01	3	3

WEST SOUND MARITIME, INC.
P.O. BOX 505 QUILCENE, WASHINGTON 98376 PHONE (206)595-9203 info@westsoundmaritime.com

DEADWEIGHT TABLE - SALTWATER (SHORT TONS)

Avg. Draft	Cargo Wt.	
3'-4 3/8"	0.0	(Lightship)
3'-6"	17.3	
3'-9"	51.8	
4'-0"	86.4	
4'-3"	123.6	
4'-6"	160.8	
4'-9"	198.0	
5'-0"	235.2	
5'-3"	272.7	
5'-6"	310.2	
5'-9"	347.7	
6'-0"	385.1	
6'-3"	423.1	
6'-6"	461.0	
6'-9"	498.9	
7'-0"	536.8	

NOTE:
1. Draft or freeboard shown is for average values.

DEADWEIGHT TABLE - FRESHWATER (SHORT TONS)

Avg. Draft	Cargo Wt.	
3'-5 1/2"	0.0	(Lightship)
3'-6"	16.9	
3'-9"	50.4	
4'-0"	83.9	
4'-3"	120.1	
4'-6"	156.3	
4'-9"	192.5	
5'-0"	228.6	
5'-3"	265.1	
5'-6"	301.5	
5'-9"	337.9	
6'-0"	374.3	
6'-3"	411.2	
6'-6"	448.1	
6'-9"	484.9	
7'-0"	521.8	

NOTE:
1. Draft or freeboard shown is for average values.

Pacific Pile & Marine, LP
700 South Riverside Drive
Seattle, WA 98108

T 206 331-3873
F 206 774-5958
License # PACIFPM922J3

Attachment C- Maintenance Schedule

Vessel(s)	Mandatory Dry Docking	Mandatory Inspections	Optional Dry Docking	Regular Inspections	Preventive Maintenace	Emergency Repairs
KP Barges	N/A	N/A	Every 6 years (1 is anticipated during project)	checking the hull for structural integrity, ensuring that mooring equipment is in good condition, and inspecting internal bulkheads and voids for cleanliness and wear.	Regular cleaning to prevent buildup of marine growth and debris is essential. Maintenance of mooring lines, hatches, and fittings, as well as checking and lubricating moving parts like winches and hinges. Application of anti-fouling paint where applicable	Use of divers for hull repairs
Kumtux	Every 5 years	Conducted every year to verify the condition of the hull, equipment, and machinery, ensuring they meet ABS standards and remain in satisfactory condition.	N/A	checking the hull for structural integrity, ensuring that mooring equipment is in good condition, and inspecting internal bulkheads and voids for cleanliness and wear.	Regular cleaning to prevent buildup of marine growth and debris is essential. Maintenance of mooring lines, hatches, and fittings, as well as checking and lubricating moving parts like winches and hinges. Application of anti-fouling paint where applicable	Use of divers for hull repairs
Lash 4	Every 5 years	Conducted every year to verify the condition of the hull, equipment, and machinery, ensuring they meet ABS standards and remain in satisfactory condition.	N/A	checking the hull for structural integrity, ensuring that mooring equipment is in good condition, and inspecting internal bulkheads and voids for cleanliness and wear.	Regular cleaning to prevent buildup of marine growth and debris is essential. Maintenance of mooring lines, hatches, and fittings, as well as checking and lubricating moving parts like winches and hinges. Application of anti-fouling paint where applicable	Use of divers for hull repairs. PPM mechanics for anchoring systems
WEB	N/A	N/A	Every 6 years	checking the hull for structural integrity, ensuring that mooring equipment is in good condition, and inspecting internal bulkheads and voids for cleanliness and wear. inspection of hull for corrosion, damage, and leaks, ensuring the integrity of the deck and structural component	Regular cleaning to prevent buildup of marine growth and debris is essential. Maintenance of mooring lines, hatches, and fittings, as well as checking and lubricating moving parts like winches and hinges. Application of anti-fouling paint where applicable	Use of divers for hull repairs. PPM mechanics for anchoring systems
PamTay	N/A	N/A	Every 6 years	checking the hull for structural integrity, ensuring that mooring equipment is in good condition, and inspecting internal bulkheads and voids for cleanliness and wear. inspection of hull for corrosion, damage, and leaks, ensuring the integrity of the deck and structural component	Regular cleaning to prevent buildup of marine growth and debris is essential. Maintenance of mooring lines, hatches, and fittings, as well as checking and lubricating moving parts like winches and hinges. Application of anti-fouling paint where applicable	Use of divers for hull repairs. PPM mechanics for anchoring systems

P2 Hopper Barges	N/A	N/A	N/A	checking the hull for structural integrity, ensuring that mooring equipment is in good condition, and inspecting internal bulkheads and voids for cleanliness and wear. inspection of hull for corrosion, damage, and leaks, ensuring the integrity of the deck and structural component	Regular cleaning to prevent buildup of marine growth and debris is essential. Maintenance of mooring lines, hatches, and fittings. Application of anti-fouling paint where applicable	Use of divers for hull repairs
FlexiFloat	N/A	N/A	N/A	checking the hull for structural integrity, ensuring that mooring equipment is in good condition, and inspecting internal bulkheads and voids for cleanliness and wear. inspection of hull for corrosion, damage, and leaks, ensuring the integrity of the deck and structural component	Regular cleaning to prevent buildup of marine growth and debris is essential. Maintenance of mooring lines, hatches, and fittings, as well as checking and lubricating moving parts like winches and hinges. Application of anti-fouling paint where applicable	Use of divers for hull repairs. PPM mechanics for anchoring systems
Judge Dredge	N/A	N/A	N/A	checking the hull for structural integrity, ensuring that mooring equipment is in good condition, and inspecting internal bulkheads and voids for cleanliness and wear. inspection of hull for corrosion, damage, and leaks, ensuring the integrity of the deck and structural component	Regular cleaning to prevent buildup of marine growth and debris is essential. Maintenance of mooring lines, hatches, and fittings, as well as checking and lubricating moving parts like winches and hinges. Application of anti-fouling paint where applicable	Use of divers for hull repairs. PPM mechanics for anchoring systems
Halle H	Tugboats must undergo drydocking and ISE twice within a five-year period, with no more than three years between examinations. One of these examinations must be conducted while the vessel is out of the water. The drydocking inspection includes examination of the hull, propulsion systems, steering apparatus, and other underwater components. The ISE focuses on internal structural integrity.	• Hull and Structural Integrity: Examination for corrosion, damage, and overall structural condition. • Machinery and Electrical Systems: Checks on engines, generators, electrical wiring, and battery conditions. • Safety Equipment: Inspection of life rafts, life jackets, fire extinguishers, and other emergency equipment. • Operational Readiness: Verification of navigational aids, communication systems, and alarms. • Documentation Review: Ensuring all necessary logs, certificates, and documentation are up-to-date and properly maintained.	N/A	routine checks of safety equipment, hull integrity, electrical systems, and navigational aids	cleaning and painting the hull, inspecting and maintaining deck machinery, and verifying the operation of all onboard systems	Use of divers for hull repairs. Boyer mechanics for anchoring systems

Gretchen H	Tugboats must undergo drydocking and ISE twice within a five-year period, with no more than three years between examinations. One of these examinations must be conducted while the vessel is out of the water. The drydocking inspection includes examination of the hull, propulsion systems, steering apparatus, and other underwater components. The ISE focuses on internal structural integrity.	• Hull and Structural Integrity: Examination for corrosion, damage, and overall structural condition. • Machinery and Electrical Systems: Checks on engines, generators, electrical wiring, and battery conditions. • Safety Equipment: Inspection of life rafts, life jackets, fire extinguishers, and other emergency equipment. • Operational Readiness: Verification of navigational aids, communication systems, and alarms. • Documentation Review: Ensuring all necessary logs, certificates, and documentation are up-to-date and properly maintained.	N/A	routine checks of safety equipment, hull integrity, electrical systems, and navigational aids	cleaning and painting the hull, inspecting and maintaining deck machinery, and verifying the operation of all onboard systems	Use of divers for hull repairs. Boyer mechanics for anchoring systems
Fog Dog	N/A	N/A	N/A	routine checks of safety equipment, hull integrity, electrical systems, and navigational aids	propulsion systems, and servicing	Removal of boat from water at PPM Yard for hull repairs. PPM mechanics for propulsion issues
Work Skiffs	N/A	N/A	N/A	routine checks of electrical systems, navigation lights, and bilge pumps	propulsion systems, and servicing the outboard motor, including oil changes and spark plug replacements.	Removal of boat from water at PPM Yard for hull repairs. PPM mechanics for propulsion issues

Pacific Pile & Marine, LP
700 South Riverside Drive
Seattle, WA 98108

T 206 331-3873
F 206 774-5958
License # PACIFPM922J3

Attachment D- Mooring Locations

MATCH LINE SEE DRAWING V106

MATCH LINE SEE DRAWING V108

ENR/AC PILOT PLOT (NO SPUDDING)

ENR/AC PILOT PLOT (NO SPUDDING)

PAMTAY BARGE WITH AMERICAN 9310 CRANE (170' BOOM)

CONTRACTOR SHALL PROTECT-IN-PLACE LOG WEIR

BOEING THOMPSON SITE

BOEING SOUTH PARK

CENTERPOINT PROPERTIES

SEA KING INDUSTRIAL PARK

DUWAMISH WATERWAY

RM 3.9

799 SP2 802 804 806 CP 45 RC 808 809 810

2102 2101 2074 2075 2077

232+00 233+00 234+00 235+00 236+00 237+00 238+00 239+00

50'-0" 184'-0" 90'-0"

-10 0 -10 -10

8 9 9 7 7

ASPHALT EDGE OF ASPHALT GUARDRAIL 7' CHAIN LINK FENCE W/BARBED WIRE TOP OF BANK WOOD VAULT IN POOR CONDITION 6' CHAIN LINK FENCE 8' ELEC SECURITY FENCE CONC ASPHALT 6"Ø METAL BOLLARD CP 13 SET SCRB ON TOP OF CONC STORM VAULT GATE BLDG #12A-E-1 OUTFALL #2075 TOP CENTER 30"VERT. DI=3.94 OUTFALL #2077 18"DI W/BACKFILL BAFFLE IE=9.68 CP 18 SW PROPERTY CORNER BOEING THOMPSON CENTER STORM VAULT (RAISED 3.75'H) 6' CHAIN LINK FENCE (APPROXIMATED) SHEET PILE WALL EDGE OF CONC 6' CHAIN LINK FENCE EDGE OF CONCRETE/TOE OF SLOPE CONC RUBBLE TOP OF SLOPE BH "GT-24" CONC UTILITY TRENCH BH "A5-3" BH "A5-7" OUTFALL #2073 18"DI W/BACKFILL BAFFLE IE=9.18 SDMH 821 RIM EL=15.28 IE(W)18"CONC=9.3 BTM EL=6.6 SDMH 822 RIM EL=15.20 IE(S)8"PVC=9.2 BTM EL=6.6 SDMH 823 RIM EL=15.20 IE(E)18"CONC=9.4 SDMH 824 RIM EL=15.18 IE(NW)12"PVC=10.9 C/L CHAN=9.8 CB 818 RIM EL=15.13 IE(S)12"PVC=11.8 IE(W)12"PVC=11.9 BTM EL=10.8 CP 14 TN PKW ON CONC RAMP IE(18"CONC)=9.30 CB 819 RIM EL=15.03 IE(E)12"PVC=10.9 BTM EL=10.6 SDMH 820 RIM EL=15.41 IE(E)18"CONC=9.3 (W/BACKFLOW BAFFLE) IE(W)18"CONC=9.3 WATER VAULT WATER MH ELEC CABINET W/ COVER CB 791 RIM EL=15.42 IE(N)8"PVC=12.8 IE(E)4"PVC=13.6 STORM VAULT 3'Ø LIDS (UNABLE TO OPEN) SDMH 825(S) RIM EL=17.13

LEGEND:

- USACE CHANNEL CENTERLINE AND STATIONING (250+00)
- FEDERAL NAVIGATION CHANNEL
- RM 3.0 — RIVER MILE LABEL
- KING COUNTY PARCEL
- LDW UPPER REACH APPROXIMATE BOUNDARY
- EXISTING GRADE MERGED DATA SET CONTOURS (2' & 10' INTERVALS)
- OUTFALL LOCATION (ACTIVE) - LOCATION APPROXIMATE
- OUTFALL LOCATION (PRESUMED ABANDONED, INACTIVE, OR REMOVED) - LOCATION APPROXIMATE
- DOLPHIN
- VERTICAL DELINEATION CORE LOCATION
- SEDIMENT MANAGEMENT AREA BOUNDARY
- 14 — SEDIMENT MANAGEMENT AREA NUMBER
- ENR/AC PILOT PLOTS
- HABITAT AREA (CONTRACTOR TO PROTECT)

NOTES:

1. HORIZONTAL DATUM: WASHINGTON STATE PLANE NORTH ZONE, NAD83 (2011), U.S. SURVEY FEET
2. VERTICAL DATUM: MLLW
3. AERIAL SOURCE: KING COUNTY 2021
4. THESE DRAWINGS DISPLAY THE LOCATION OF VERTICAL DELINEATION CORES ONLY. THE FULL DESIGN DATASET IS AVAILABLE AS A REFERENCE DOCUMENT, SEE SPECIFICATION SECTION 01 13 00.
5. OUTFALLS ARE SHOWN ON DRAWINGS AS ACTIVE OR PRESUMED ABANDONED, INACTIVE, OR REMOVED. THE CONTRACTOR SHALL TAKE CARE TO AVOID CONTACT WITH OR IMPACT TO ACTIVE OUTFALLS WHILE WORKING IN THEIR VICINITY.
6. ITALICIZED TEXT REPRESENT SURVEYOR'S FIELD NOTES. CONTRACTOR TO VERIFY ANY NOTES RELEVANT TO THE CONTRACTOR'S WORK.

0 40 80
SCALE IN FEET

COLOR IMAGE
THIS DRAWING IS COMPOSED USING COLOR IMAGES OR PHOTOGRAPHS AND MUST BE PLOTTED, PRINTED, AND REPRODUCED IN COLOR TO BE VIEWED ACCURATELY.

NO	REVISION DESCRIPTION	BY	APVD	DATE

Lower Duwamish Waterway Group
City of Seattle / King County / The Boeing Company
ANCHOR QEA

FINAL ISSUE DRAWING
INFORMATION ONLY
BID DOCUMENTS
DECEMBER 2023

JOHN P. LAPLANTE STATE OF WASHINGTON 38792 REGISTERED PROFESSIONAL ENGINEER
12-14-23

DESIGNED/DRAWN: BIGSBY/GRIGA	CHECKED: K. GROSS
PROJECT ENGINEER: J. LAPLANTE	SCALE: AS NOTED
DESIGN APPROVAL: J. ABDALKHANI	PROJECT FILE NO: E00559E18
PROJECT ACCEPTANCE: G. STEINER	CONTRACT NO: KC001065

King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH REMEDIAL ACTION

EXISTING CONDITIONS (RM 3.85 TO 3.99)

DATE: DECEMBER 2023
DRAWING NO: **V107**
SHT NO 13 / TOTAL 91 | REV NO: **0**

BORDER FILE EDITION: xKCWTD-Dsize-TB-Border_AGByLayer
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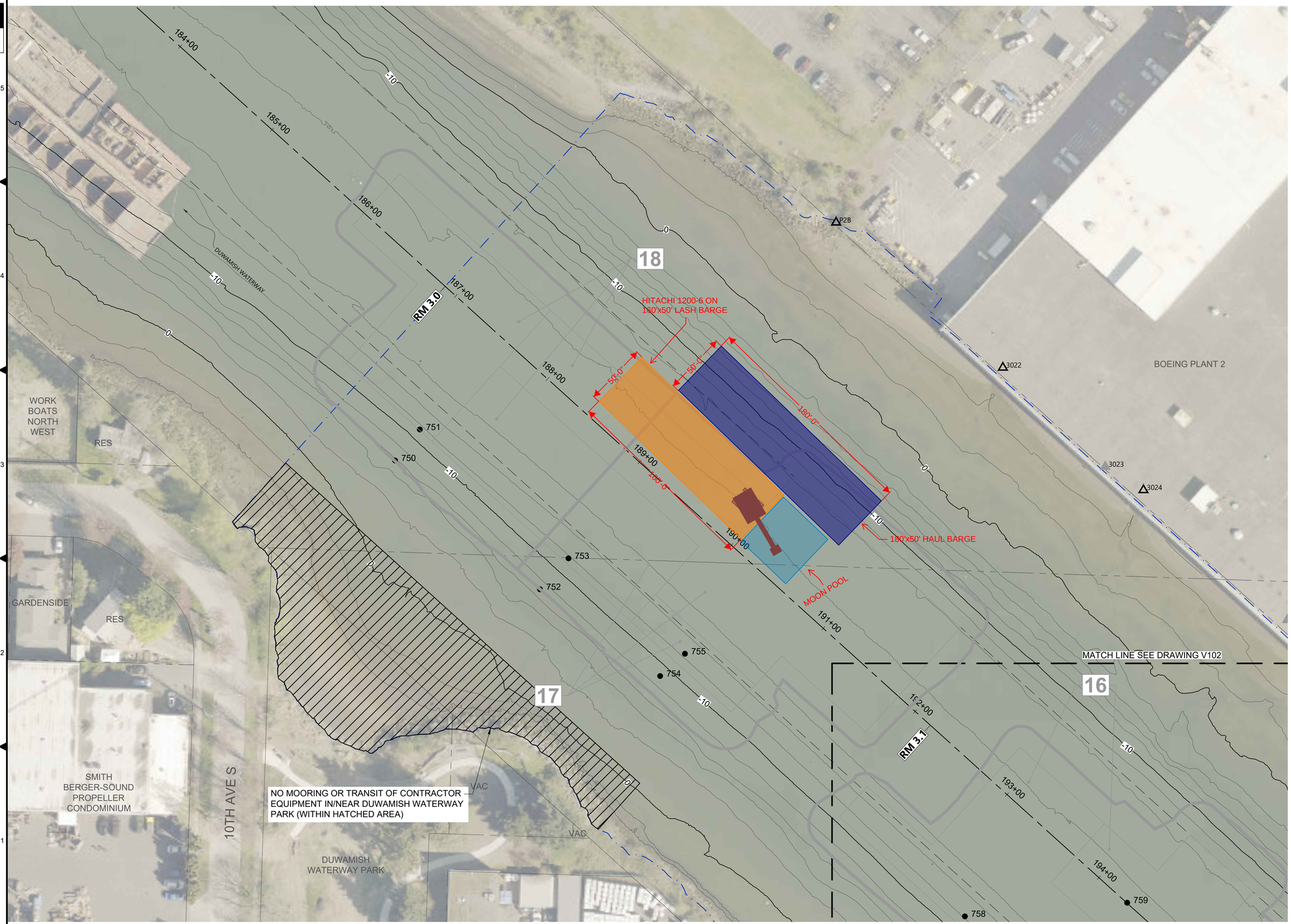
PLOTTED: Jan 12, 2024-10:16:49am By jbigsby



LEGEND:

- USACE CHANNEL CENTERLINE AND STATIONING (250+00)
- FEDERAL NAVIGATION CHANNEL
- RM 3.0 — RIVER MILE LABEL
- KING COUNTY PARCEL
- LDW UPPER REACH APPROXIMATE BOUNDARY
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- OUTFALL LOCATION (ACTIVE) - LOCATION APPROXIMATE
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- VERTICAL DELINEATION CORE LOCATION
- SEDIMENT MANAGEMENT AREA BOUNDARY
- 14 — SEDIMENT MANAGEMENT AREA NUMBER

NOTES:

1. HORIZONTAL DATUM: WASHINGTON STATE PLANE NORTH ZONE, NAD83 (2011), U.S. SURVEY FEET
2. VERTICAL DATUM: MLLW
3. AERIAL SOURCE: KING COUNTY 2021
4. THESE DRAWINGS DISPLAY THE LOCATION OF VERTICAL DELINEATION CORES ONLY. THE FULL DESIGN DATASET IS AVAILABLE AS A REFERENCE DOCUMENT, SEE SPECIFICATION SECTION 01 13 00.
5. OUTFALLS ARE SHOWN ON DRAWINGS AS ACTIVE OR PRESUMED ABANDONED, INACTIVE, OR REMOVED. THE CONTRACTOR SHALL TAKE CARE TO AVOID CONTACT WITH OR IMPACT TO ACTIVE OUTFALLS WHILE WORKING IN THEIR VICINITY.
6. ITALICIZED TEXT REPRESENT SURVEYOR'S FIELD NOTES. CONTRACTOR TO VERIFY ANY NOTES RELEVANT TO THE CONTRACTOR'S WORK.

0 40 80
SCALE IN FEET

COLOR IMAGE
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NO	REVISION DESCRIPTION	BY	APVD	DATE

Lower Duwamish Waterway Group
City of Seattle / King County / The Boeing Company
ANCHOR QEA

FINAL ISSUE DRAWING
INFORMATION ONLY
BID DOCUMENTS
DECEMBER 2023

JOHN P. LAPLANTE — STATE OF WASHINGTON — 38792 — REGISTERED PROFESSIONAL ENGINEER — 12-14-23

DESIGNED/DRAWN: BIGSBY/GRIGA	CHECKED: K. GROSS
PROJECT ENGINEER: J. LAPLANTE	SCALE: AS NOTED
DESIGN APPROVAL: J. ABDALKHANI	PROJECT FILE NO: E00559E18
PROJECT ACCEPTANCE: G. STEINER	CONTRACT NO: KC001065

King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH REMEDIAL ACTION

EXISTING CONDITIONS (RM 2.93 TO 3.15)

DATE: DECEMBER 2023
DRAWING NO: **V101**
SHT NO 7 / TOTAL 91 | REV NO: 0

BORDER FILE EDITION: xKCWTD-Dsize-TB-Border_AGByLayer
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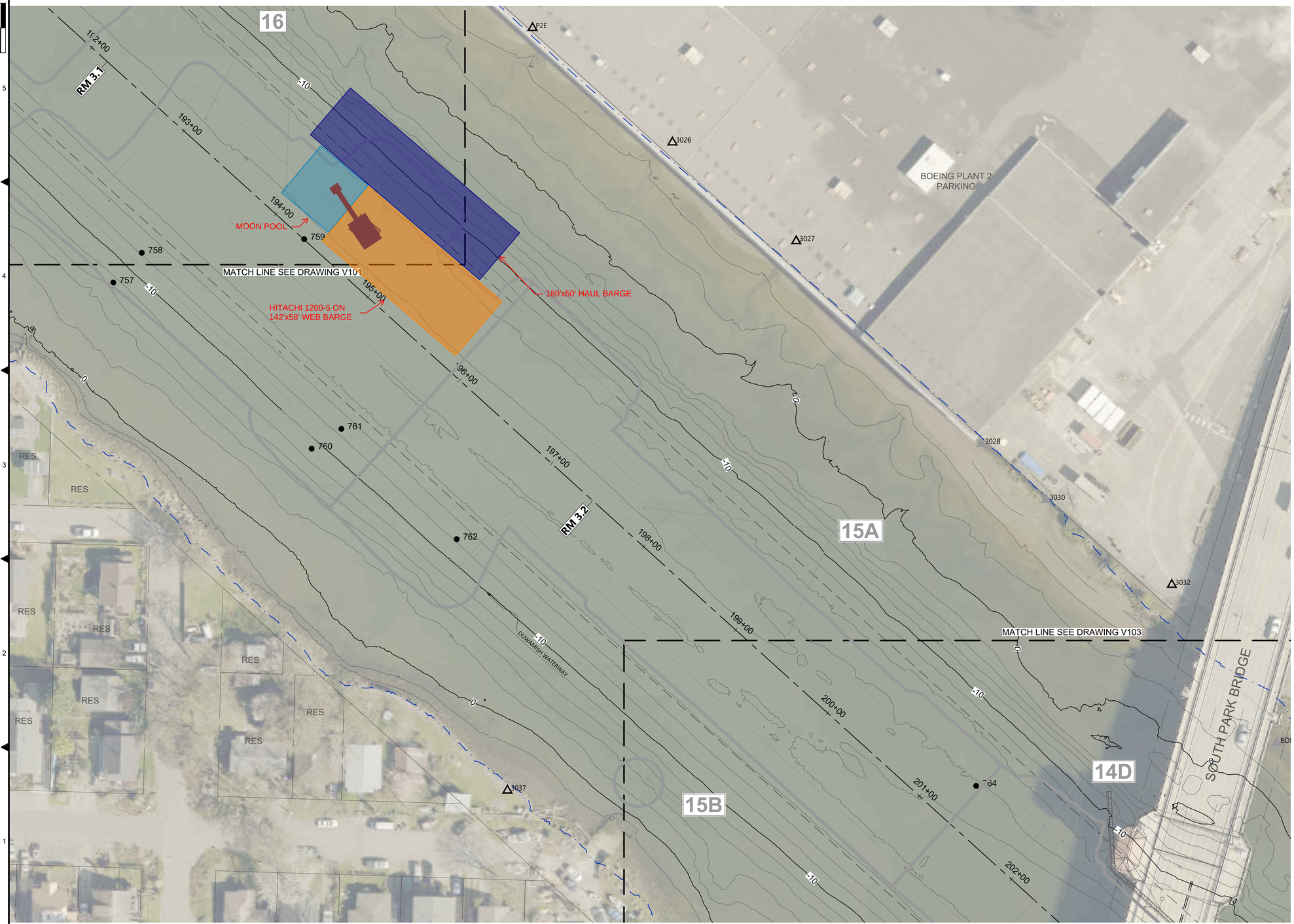
PLOTTED: Jan 12, 2024-10:12:06am By jbigsby



LEGEND:

- USACE CHANNEL CENTERLINE AND STATIONING (250+00)
- FEDERAL NAVIGATION CHANNEL
- RM 3.0 — RIVER MILE LABEL
- KING COUNTY PARCEL
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- OUTFALL LOCATION (ACTIVE) - LOCATION APPROXIMATE
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- 14 — SEDIMENT MANAGEMENT AREA NUMBER

NOTES:

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2. VERTICAL DATUM: MLLW
3. AERIAL SOURCE: KING COUNTY 2021
4. THESE DRAWINGS DISPLAY THE LOCATION OF VERTICAL DELINEATION CORES ONLY. THE FULL DESIGN DATASET IS AVAILABLE AS A REFERENCE DOCUMENT, SEE SPECIFICATION SECTION 01 13 00.
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6. ITALICIZED TEXT REPRESENT SURVEYOR'S FIELD NOTES. CONTRACTOR TO VERIFY ANY NOTES RELEVANT TO THE CONTRACTOR'S WORK.

0 40 80
SCALE IN FEET

COLOR IMAGE
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NO	REVISION DESCRIPTION	BY	APVD	DATE

Lower Duwamish Waterway Group
City of Seattle / King County / The Boeing Company
ANCHOR QEA

FINAL ISSUE DRAWING
INFORMATION ONLY
BID DOCUMENTS
DECEMBER 2023

JOHN P. LAPLANTE — STATE OF WASHINGTON — 38792 — REGISTERED PROFESSIONAL ENGINEER
12-14-23

DESIGNED/DRAWN: BIGSBY/GRIGA	CHECKED: K. GROSS
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King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH REMEDIAL ACTION

EXISTING CONDITIONS (RM 3.09 TO 3.29)

DATE: DECEMBER 2023
DRAWING NO: **V102**
SHT NO 8 / TOTAL 91 | REV NO: **0**

BORDER FILE EDITION: xKCWTD-Dsize-TB-Border_AGByLayer
\\gaiaicad\Projects\0067-King County\LDW Upper Reach Engineering Services\Construction Plans\0067-LDWUR-PL-Existing Conditions.dwg | Layout: V102
PLOTTED: Jan 12, 2024-10:12:52am By jbigsby

REFERENCE 1"
0

16
15A
15B
14D
RM 3.1
RM 3.2
MATCH LINE SEE DRAWING V101
MATCH LINE SEE DRAWING V103
1+200
193+00
194+00
195+00
196+00
197+00
198+00
199+00
200+00
201+00
202+00
-10
-0
759
758
757
761
760
762
64
P2E
3026
3027
3028
3030
3032
3037
BOEING PLANT 2 PARKING
RES
DUWAMISH WATERWAY
MOON POOL
HITACHI 1200-5 ON 142'x58' WEB BARGE
180'x50' HAUL BARGE
SOUTH PARK BRIDGE

LEGEND:

- USACE CHANNEL CENTERLINE AND STATIONING (250+00)
- FEDERAL NAVIGATION CHANNEL
- RM 3.0 — RIVER MILE LABEL
- KING COUNTY PARCEL
- LDW UPPER REACH APPROXIMATE BOUNDARY
- EXISTING GRADE MERGED DATA SET CONTOURS (2' & 10' INTERVALS)
- OUTFALL LOCATION (ACTIVE) - LOCATION APPROXIMATE
- OUTFALL LOCATION (PRESUMED ABANDONED, INACTIVE, OR REMOVED) - LOCATION APPROXIMATE
- VERTICAL DELINEATION CORE LOCATION
- SEDIMENT MANAGEMENT AREA BOUNDARY
- 14 — SEDIMENT MANAGEMENT AREA NUMBER

NOTES:

1. HORIZONTAL DATUM: WASHINGTON STATE PLANE NORTH ZONE, NAD83 (2011), U.S. SURVEY FEET
2. VERTICAL DATUM: MLLW
3. AERIAL SOURCE: KING COUNTY 2021
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6. ITALICIZED TEXT REPRESENT SURVEYOR'S FIELD NOTES. CONTRACTOR TO VERIFY ANY NOTES RELEVANT TO THE CONTRACTOR'S WORK.

N

0 40 80
SCALE IN FEET

COLOR IMAGE
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NO	REVISION DESCRIPTION	BY	APVD	DATE

Lower Duwamish Waterway Group
City of Seattle / King County / The Boeing Company
ANCHOR QEA

FINAL ISSUE DRAWING
INFORMATION ONLY
BID DOCUMENTS
DECEMBER 2023

JOHN P. LAPLANTE STATE OF WASHINGTON 38792 REGISTERED PROFESSIONAL ENGINEER
12-14-23

DESIGNED/DRAWN: BIGSBY/GRIGA	CHECKED: K. GROSS
PROJECT ENGINEER: J. LAPLANTE	SCALE: AS NOTED
DESIGN APPROVAL: J. ABDALKHANI	PROJECT FILE NO: E00559E18
PROJECT ACCEPTANCE: G. STEINER	CONTRACT NO: KC001065

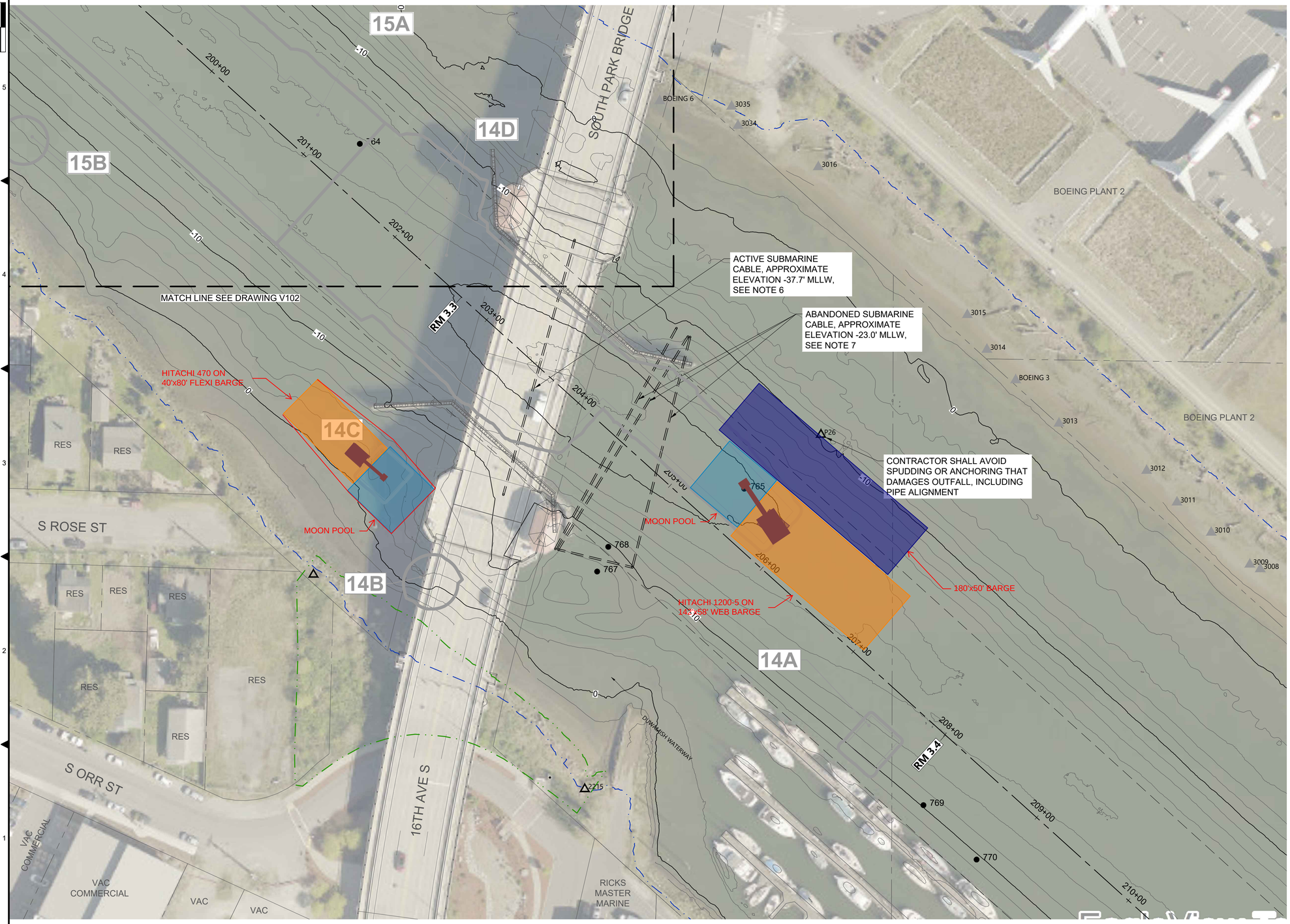
King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH REMEDIAL ACTION

EXISTING CONDITIONS (RM 3.09 TO 3.29)

DATE: DECEMBER 2023
DRAWING NO: V102
SHT NO 8 / TOTAL 91
REV NO: 0

BORDER FILE EDITION: xKCWTD-Dsize-TB-Border_AGByLayer
\\gala\cad\Projects\0067-King County\LDW Upper Reach Engineering Services\Construction Plans\0067-LDWUR-PL-Existing Conditions.dwg | Layout: V102
PLOTTED: Jan 12, 2024-10:12:52am By jbigsby



LEGEND:

- USACE CHANNEL CENTERLINE AND STATIONING (250+00)
- FEDERAL NAVIGATION CHANNEL
- RM 3.0 — RIVER MILE LABEL
- KING COUNTY PARCEL
- LDW UPPER REACH APPROXIMATE BOUNDARY
- EXISTING GRADE MERGED DATA SET CONTOURS (2' & 10' INTERVALS)
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- OUTFALL LOCATION (PRESUMED ABANDONED, INACTIVE, OR REMOVED) - LOCATION APPROXIMATE
- VERTICAL DELINEATION CORE LOCATION
- SEDIMENT MANAGEMENT AREA BOUNDARY
- 14 — SEDIMENT MANAGEMENT AREA NUMBER
- SUBMARINE CABLE
- HABITAT AREA (CONTRACTOR TO PROTECT)

NOTES:

1. HORIZONTAL DATUM: WASHINGTON STATE PLANE NORTH ZONE, NAD83 (2011), U.S. SURVEY FEET
2. VERTICAL DATUM: MLLW
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6. ITALICIZED TEXT REPRESENT SURVEYOR'S FIELD NOTES. CONTRACTOR TO VERIFY ANY NOTES RELEVANT TO THE CONTRACTOR'S WORK.
7. THE CONTRACTOR SHALL TAKE EXTREME CARE WHILE WORKING NEAR THE ACTIVE SUBMARINE CABLE. SEE SPECIFICATION SECTION 35 20 23 FOR RESTRICTIONS ON SPUDDING IN THIS AREA.
8. THE ABANDONED SUBMARINE CABLE SHALL BE REMOVED IF ENCOUNTERED.

0 40 80
SCALE IN FEET

COLOR IMAGE
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Lower Duwamish Waterway Group
City of Seattle / King County / The Boeing Company
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DECEMBER 2023

JOHN P. LAPLANTE STATE OF WASHINGTON 38792 REGISTERED PROFESSIONAL ENGINEER 12-14-23

DESIGNED/DRAWN: BIGSBY/GRIGA	CHECKED: K. GROSS
PROJECT ENGINEER: J. LAPLANTE	SCALE: AS NOTED
DESIGN APPROVAL: J. ABDALKHANI	PROJECT FILE NO: E00559E18
PROJECT ACCEPTANCE: G. STEINER	CONTRACT NO: KC001065

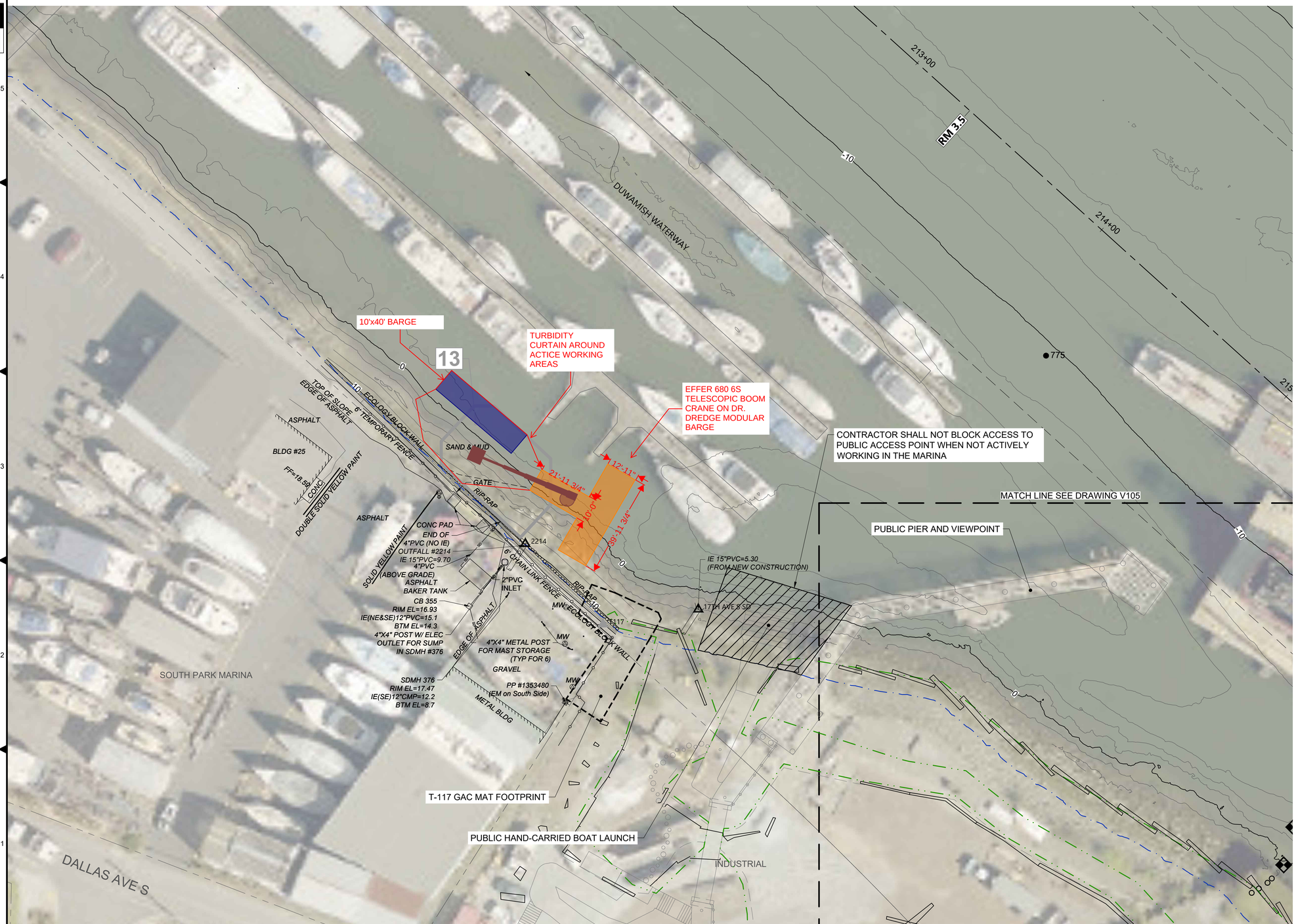
King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH REMEDIAL ACTION

EXISTING CONDITIONS (RM 3.23 TO 3.44)

DATE: DECEMBER 2023
DRAWING NO: **V103**
SHT NO 9 / TOTAL 91 | REV NO: **0**

BORDER FILE EDITION: xKCWTD-Dsize-TB-Border_AQByLayer
\\galacad\Projects\0067-King County\LDW Upper Reach Engineering Services\Construction Plans\0067-LDWUR-PL-Existing Conditions.dwg | Layout: V103
PLOTTED: Jan 12, 2024-10:13:37am By jbigsby



LEGEND:

- USACE CHANNEL CENTERLINE AND STATIONING (250+00)
- FEDERAL NAVIGATION CHANNEL
- RM 3.0 — RIVER MILE LABEL
- KING COUNTY PARCEL
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- OUTFALL LOCATION (PRESUMED ABANDONED, INACTIVE, OR REMOVED) - LOCATION APPROXIMATE
- VERTICAL DELINEATION CORE LOCATION
- SEDIMENT MANAGEMENT AREA BOUNDARY
- 14 — SEDIMENT MANAGEMENT AREA NUMBER
- HABITAT AREA (CONTRACTOR TO PROTECT)

NOTES:

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N

0 20 40
SCALE IN FEET

COLOR IMAGE
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NO	REVISION DESCRIPTION	BY	APVD	DATE

Lower Duwamish Waterway Group
City of Seattle / King County / The Boeing Company
ANCHOR QEA

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BID DOCUMENTS
DECEMBER 2023

JOHN P. LAPLANTE — STATE OF WASHINGTON — 38792 — REGISTERED PROFESSIONAL ENGINEER — 12-14-23

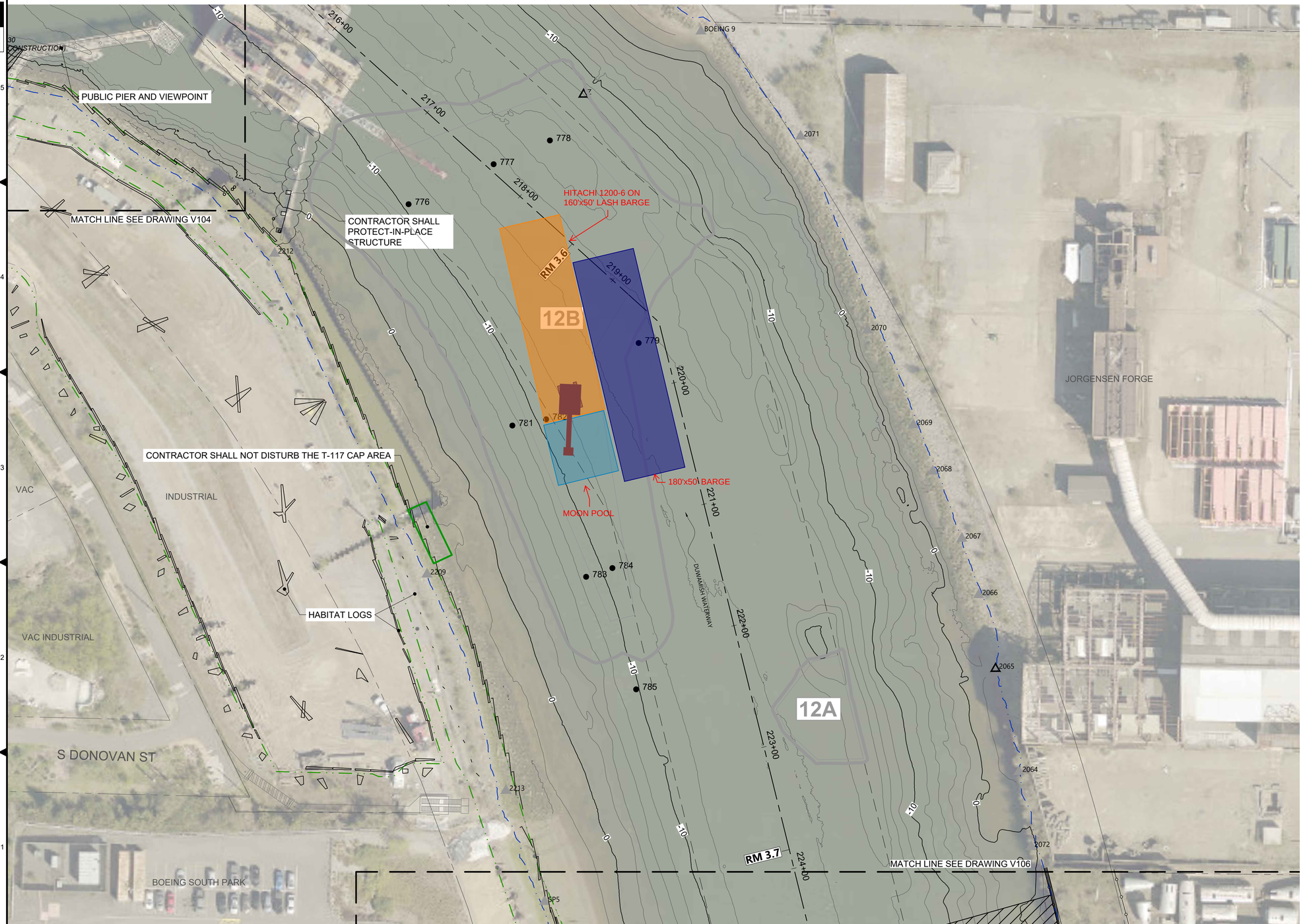
DESIGNED/DRAWN: BIGSBY/GRIGA	CHECKED: K. GROSS
PROJECT ENGINEER: J. LAPLANTE	SCALE: AS NOTED
DESIGN APPROVAL: J. ABDALKHANI	PROJECT FILE NO: E00559E18
PROJECT ACCEPTANCE: G. STEINER	CONTRACT NO: KC001065

King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH REMEDIAL ACTION

EXISTING CONDITIONS (RM 3.49 TO 3.56)

DATE: DECEMBER 2023
DRAWING NO: **V104**
SHT NO 10 / TOTAL 91 | REV NO: **0**



REFERENCE 1" 0 5

(CONSTRUCTION)

LEGEND:

- USACE CHANNEL CENTERLINE AND STATIONING (250+00)
- FEDERAL NAVIGATION CHANNEL
- RM 3.0 — RIVER MILE LABEL
- KING COUNTY PARCEL
- LDW UPPER REACH APPROXIMATE BOUNDARY
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- OUTFALL LOCATION (ACTIVE) - LOCATION APPROXIMATE
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- DOLPHIN
- VERTICAL DELINEATION CORE LOCATION
- SEDIMENT MANAGEMENT AREA BOUNDARY
- 14 — SEDIMENT MANAGEMENT AREA NUMBER
- T-117 CAP AREA
- HABITAT AREA (CONTRACTOR TO PROTECT)

NOTES:

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0 40 80
SCALE IN FEET

COLOR IMAGE
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Lower Duwamish Waterway Group
City of Seattle / King County / The Boeing Company
ANCHOR QEA

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INFORMATION ONLY
BID DOCUMENTS
DECEMBER 2023

JOHN P. LAPLANTE STATE OF WASHINGTON 38792 REGISTERED PROFESSIONAL ENGINEER 12-04-23

DESIGNED/DRAWN: BIGSBY/GRIGA	CHECKED: K. GROSS
PROJECT ENGINEER: J. LAPLANTE	SCALE: AS NOTED
DESIGN APPROVAL: J. ABDALKHANI	PROJECT FILE NO: E00559E18
PROJECT ACCEPTANCE: G. STEINER	CONTRACT NO: KC001065

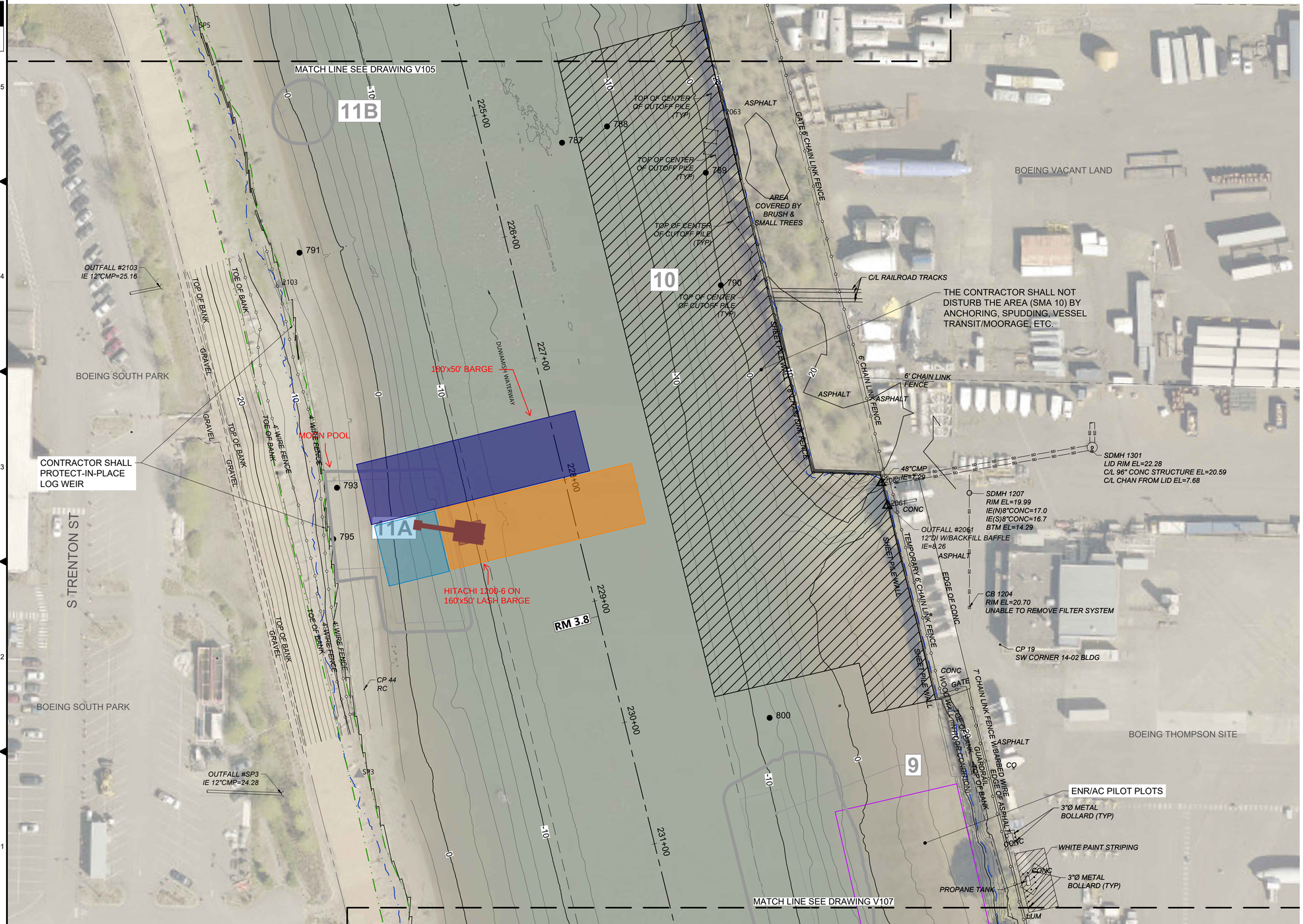
King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH REMEDIAL ACTION

EXISTING CONDITIONS (RM 3.54 TO 3.71)

DATE: DECEMBER 2023
DRAWING NO: **V105**
SHT NO 11 / TOTAL 91 REV NO: **0**

BORDER FILE EDITION: xKCWTD-Dsize-TB-Border_AQByLayer
\\gala\cad\Projects\0067-King County\LDW Upper Reach Engineering Services\Construction Plans\0067-LDWUR-PL-Existing Conditions.dwg | Layout: V105
PLOTTED: Jan 12, 2024-10:15:10am By: jbigsby



LEGEND:

- USACE CHANNEL CENTERLINE AND STATIONING (250+00)
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- RM 3.0 — RIVER MILE LABEL
- KING COUNTY PARCEL
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- DOLPHIN
- VERTICAL DELINEATION CORE LOCATION
- SEDIMENT MANAGEMENT AREA BOUNDARY
- 14 — SEDIMENT MANAGEMENT AREA NUMBER
- ENR/AC PILOT PLOTS
- HABITAT AREA (CONTRACTOR TO PROTECT)

NOTES:

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0 40 80
SCALE IN FEET

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Lower Duwamish Waterway Group
City of Seattle / King County / The Boeing Company
ANCHOR QEA

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INFORMATION ONLY
BID DOCUMENTS
DECEMBER 2023

JOHN P. LAPLANTE STATE OF WASHINGTON 38792 REGISTERED PROFESSIONAL ENGINEER 12-14-23

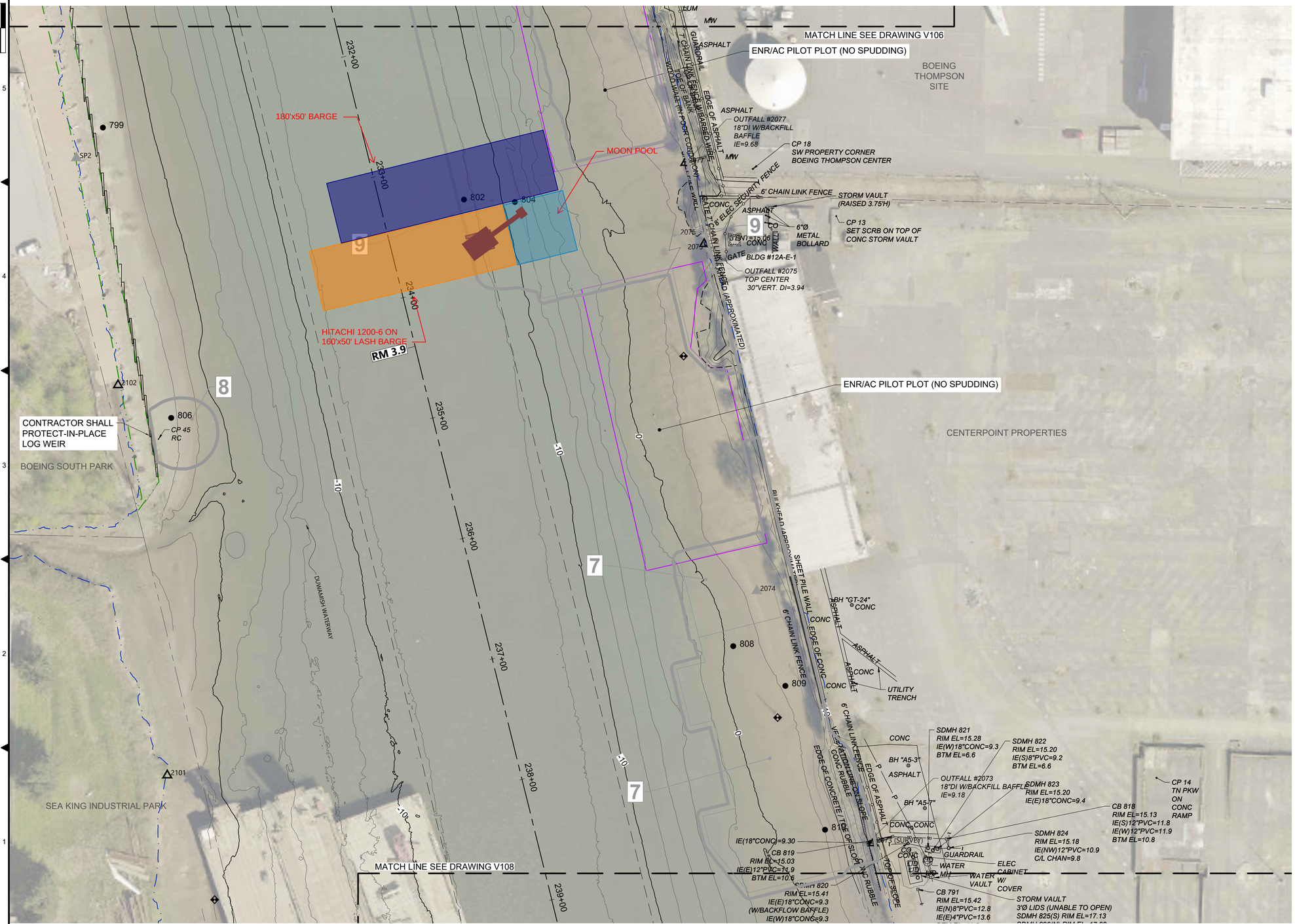
DESIGNED/DRAWN: BIGSBY/GRIGA	CHECKED: K. GROSS
PROJECT ENGINEER: J. LAPLANTE	SCALE: AS NOTED
DESIGN APPROVAL: J. ABDALKHANI	PROJECT FILE NO: E00559E18
PROJECT ACCEPTANCE: G. STEINER	CONTRACT NO: KC001065

King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH REMEDIAL ACTION

EXISTING CONDITIONS (RM 3.73 TO 3.84)

DATE: DECEMBER 2023
DRAWING NO: V106
SHT NO 12 / TOTAL 91
REV NO: 0



LEGEND:

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- FEDERAL NAVIGATION CHANNEL
- RM 3.0 — RIVER MILE LABEL
- KING COUNTY PARCEL
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- DOLPHIN
- VERTICAL DELINEATION CORE LOCATION
- SEDIMENT MANAGEMENT AREA BOUNDARY
- 14 — SEDIMENT MANAGEMENT AREA NUMBER
- ENR/AC PILOT PLOTS
- HABITAT AREA (CONTRACTOR TO PROTECT)

NOTES:

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0 40 80
SCALE IN FEET

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Lower Duwamish Waterway Group
City of Seattle / King County / The Boeing Company
ANCHOR QEA

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INFORMATION ONLY
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DECEMBER 2023

JOHN P. LAPLANTE STATE OF WASHINGTON 38792 REGISTERED PROFESSIONAL ENGINEER
12-14-23

DESIGNED/DRAWN: BIGSBY/GRIGA	CHECKED: K. GROSS
PROJECT ENGINEER: J. LAPLANTE	SCALE: AS NOTED
DESIGN APPROVAL: J. ABDALKHANI	PROJECT FILE NO: E00559E18
PROJECT ACCEPTANCE: G. STEINER	CONTRACT NO: KC001065

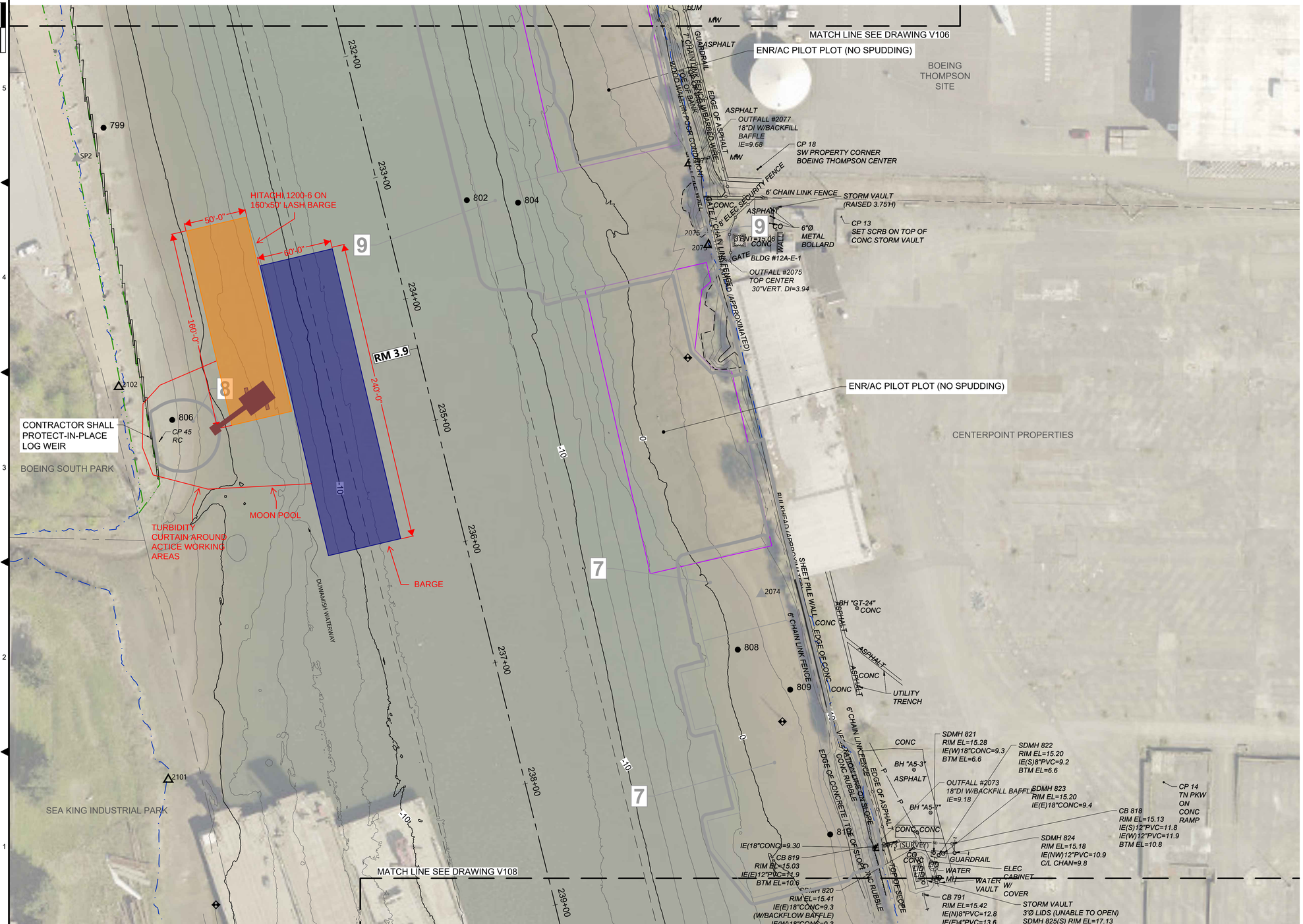
King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH REMEDIAL ACTION

EXISTING CONDITIONS (RM 3.85 TO 3.99)

DATE: DECEMBER 2023
DRAWING NO: **V107**
SHT NO 13 / TOTAL 91 | REV NO: **0**

BORDER FILE EDITION: xKCWTD-Dsize-TB-Border_AGByLayer
\\gala\cad\Projects\0067-King County\LDW Upper Reach Engineering Services\Construction Plans\0067-LDWUR-PL-Existing Conditions.dwg | Layout: V107
PLOTTED: Jan 12, 2024-10:16:49am By jbigsby



LEGEND:

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- HABITAT AREA (CONTRACTOR TO PROTECT)

NOTES:

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SCALE IN FEET

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Lower Duwamish Waterway Group
City of Seattle / King County / The Boeing Company
ANCHOR QEA

FINAL ISSUE DRAWING
INFORMATION ONLY
BID DOCUMENTS
DECEMBER 2023

JOHN P. LAPLANTE STATE OF WASHINGTON 38792 REGISTERED PROFESSIONAL ENGINEER
12-14-23

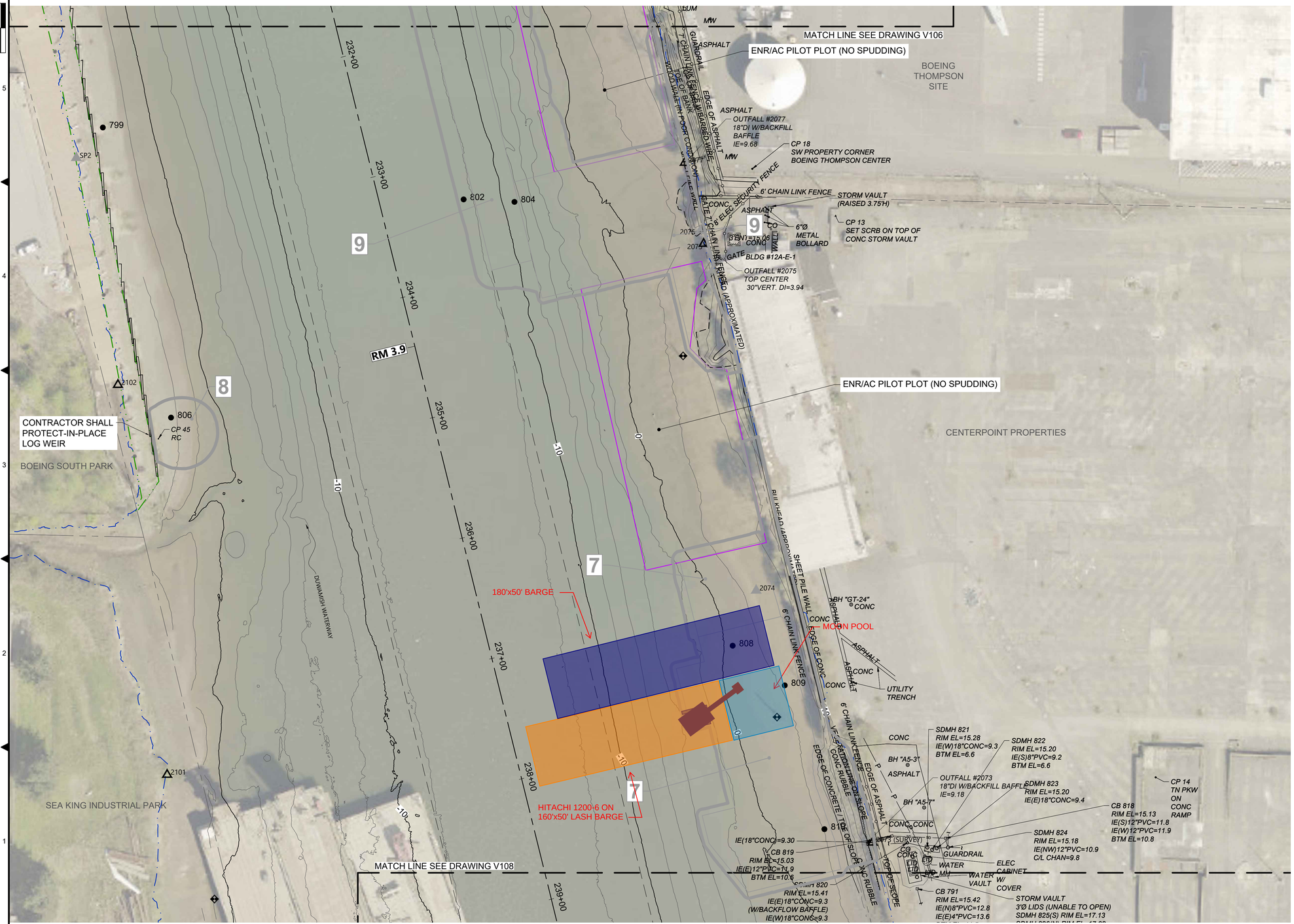
DESIGNED/DRAWN: BIGSBY/GRIGA	CHECKED: K. GROSS
PROJECT ENGINEER: J. LAPLANTE	SCALE: AS NOTED
DESIGN APPROVAL: J. ABDALKHANI	PROJECT FILE NO: E00559E18
PROJECT ACCEPTANCE: G. STEINER	CONTRACT NO: KC001065

King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH
REMEDIAL ACTION

EXISTING CONDITIONS (RM 3.85 TO 3.99)

DATE: DECEMBER 2023
DRAWING NO: V107
SHT NO 13 / TOTAL 91
REV NO: 0



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FINAL ISSUE DRAWING
INFORMATION ONLY
BID DOCUMENTS
DECEMBER 2023

JOHN P. LAPLANTE — STATE OF WASHINGTON — 38792 — REGISTERED PROFESSIONAL ENGINEER
12-14-23

DESIGNED/DRAWN: BIGSBY/GRIGA	CHECKED: K. GROSS
PROJECT ENGINEER: J. LAPLANTE	SCALE: AS NOTED
DESIGN APPROVAL: J. ABDALKHANI	PROJECT FILE NO: E00559E18
PROJECT ACCEPTANCE: G. STEINER	CONTRACT NO: KC001065

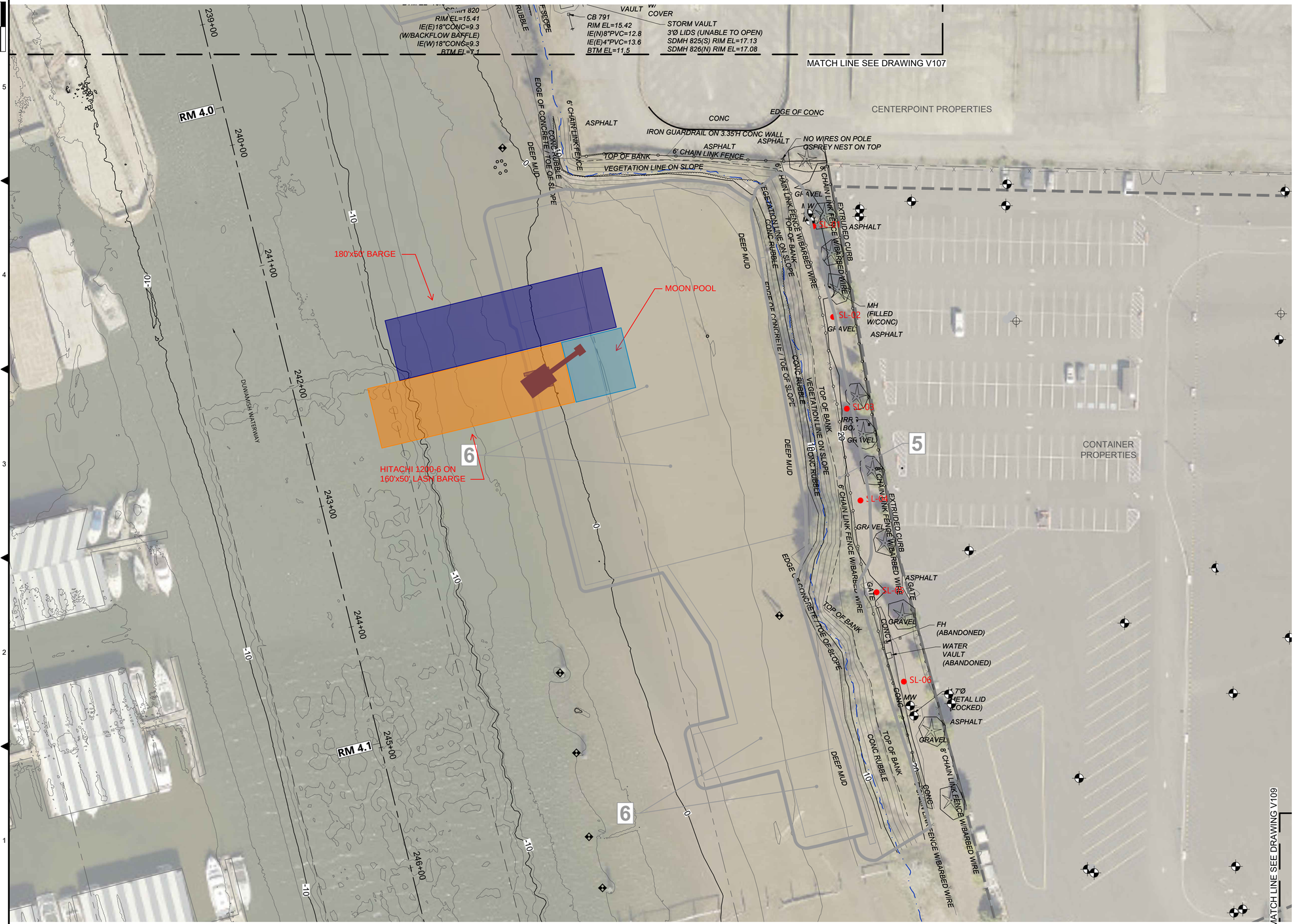
King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH REMEDIAL ACTION

EXISTING CONDITIONS (RM 3.85 TO 3.99)

DATE: DECEMBER 2023
DRAWING NO: V107
SHT NO 13 / TOTAL 91
REV NO: 0

BORDER FILE EDITION: xKCWTD-Dsize-TB-Border_AGByLayer
\\gaiacad\Projects\0067-King County\LDW Upper Reach Engineering Services\Construction Plans\0067-LDWUR-PL-Existing Conditions.dwg | Layout: V107
PLOTTED: Jan 12, 2024-10:16:49am By jbigsby



LEGEND:

- USACE CHANNEL CENTERLINE AND STATIONING (250+00)
- FEDERAL NAVIGATION CHANNEL
- RM 3.0 — RIVER MILE LABEL
- KING COUNTY PARCEL
- LDW UPPER REACH APPROXIMATE BOUNDARY
- EXISTING GRADE MERGED DATA SET CONTOURS (2' & 10' INTERVALS)
- OUTFALL LOCATION (ACTIVE) - LOCATION APPROXIMATE
- OUTFALL LOCATION (PRESUMED ABANDONED, INACTIVE, OR REMOVED) - LOCATION APPROXIMATE
- DOLPHIN
- PILE
- VERTICAL DELINEATION CORE LOCATION
- SEDIMENT MANAGEMENT AREA BOUNDARY
- 14 — SEDIMENT MANAGEMENT AREA NUMBER
- MONITORING WELL
- UPLAND SOIL SAMPLE LOCATIONS
- TREE

NOTES:

1. HORIZONTAL DATUM: WASHINGTON STATE PLANE NORTH ZONE, NAD83 (2011), U.S. SURVEY FEET
2. VERTICAL DATUM: MLLW
3. AERIAL SOURCE: KING COUNTY 2021
4. THESE DRAWINGS DISPLAY THE LOCATION OF VERTICAL DELINEATION CORES ONLY. THE FULL DESIGN DATASET IS AVAILABLE AS A REFERENCE DOCUMENT, SEE SPECIFICATION SECTION 01 13 00.
5. OUTFALLS ARE SHOWN ON DRAWINGS AS ACTIVE OR PRESUMED ABANDONED, INACTIVE, OR REMOVED. THE CONTRACTOR SHALL TAKE CARE TO AVOID CONTACT WITH OR IMPACT TO ACTIVE OUTFALLS WHILE WORKING IN THEIR VICINITY.
6. ITALICIZED TEXT REPRESENT SURVEYOR'S FIELD NOTES. CONTRACTOR TO VERIFY ANY NOTES RELEVANT TO THE CONTRACTOR'S WORK.

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0 40 80

SCALE IN FEET

COLOR IMAGE

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NO	REVISION DESCRIPTION	BY	APVD	DATE

Lower Duwamish Waterway Group
City of Seattle / King County / The Boeing Company

ANCHOR QEA

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JOHN P. LAPLANTE STATE OF WASHINGTON 38792 REGISTERED PROFESSIONAL ENGINEER 12-14-23

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King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH REMEDIAL ACTION

EXISTING CONDITIONS (RM 3.98 TO 4.13)

DATE: DECEMBER 2023
DRAWING NO: **V108**
SHT NO 14 / TOTAL 91 | REV NO: **0**

BORDER FILE EDITION: xKCWTD-Dsize-TB-Border_AGByLayer
\\galaxcad\Projects\0067-King County\LDW Upper Reach Engineering Services\Construction Plans\0067-LDWUR-PL-Existing Conditions.dwg | Layout: V108
PLOTTED: Jan 12, 2024-10:17:35am By jbigsby

REFERENCE 1"
0

MATCH LINE SEE DRAWING V108

CONTAINER PROPERTIES

FORMER RHONE-POULENC

2079
2078
2081

180'x50' BARGE
180'-0"
50'-0"
SLIP 6
HITACHI 1200-6 ON 160'x50'
LASH BARGE
160'-0"
50'-0"

MOON POOL
4

CONCRETE DOCK
CONCRETE DOCK

4"Ø METAL BOLLARDS (TYP)
AIR COMP
GATE
9" DTREE W/10'DL
CONC WALL
ASPHALT
LUM EHMH
WCR
SOLID WHITE PAINT (TYP)
LSCAPE
CONC SIDEWALK
CONC C&G
BH "GT-36"
ASPHALT

BOEING DEVELOPMENTAL CENTER

LEGEND:

- KING COUNTY PARCEL
- LDW UPPER REACH APPROXIMATE BOUNDARY
- EXISTING GRADE MERGED DATA SET CONTOURS (2' & 10' INTERVALS)
- OUTFALL LOCATION (ACTIVE) - LOCATION APPROXIMATE
- OUTFALL LOCATION (PRESUMED ABANDONED, INACTIVE, OR REMOVED) - LOCATION APPROXIMATE
- VERTICAL DELINEATION CORE LOCATION
- SEDIMENT MANAGEMENT AREA BOUNDARY
- 14 SEDIMENT MANAGEMENT AREA NUMBER

NOTES:

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King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH
REMEDIAL ACTION

EXISTING CONDITIONS (RM 4.14 TO 4.23)

DATE: DECEMBER 2023
DRAWING NO: **V109**
SHT NO 15 / TOTAL 91
REV NO: 0

LEGEND:

- USACE CHANNEL CENTERLINE AND STATIONING (250+00)
- FEDERAL NAVIGATION CHANNEL
- RM 3.0 — RIVER MILE LABEL
- KING COUNTY PARCEL
- LDW UPPER REACH APPROXIMATE BOUNDARY
- EXISTING GRADE MERGED DATA SET CONTOURS (2' & 10' INTERVALS)
- OUTFALL LOCATION (ACTIVE) - LOCATION APPROXIMATE
- OUTFALL LOCATION (PRESUMED ABANDONED, INACTIVE, OR REMOVED) - LOCATION APPROXIMATE
- PILE
- VERTICAL DELINEATION CORE LOCATION
- SEDIMENT MANAGEMENT AREA BOUNDARY
- 14 — SEDIMENT MANAGEMENT AREA NUMBER

NOTES:

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12-14-23

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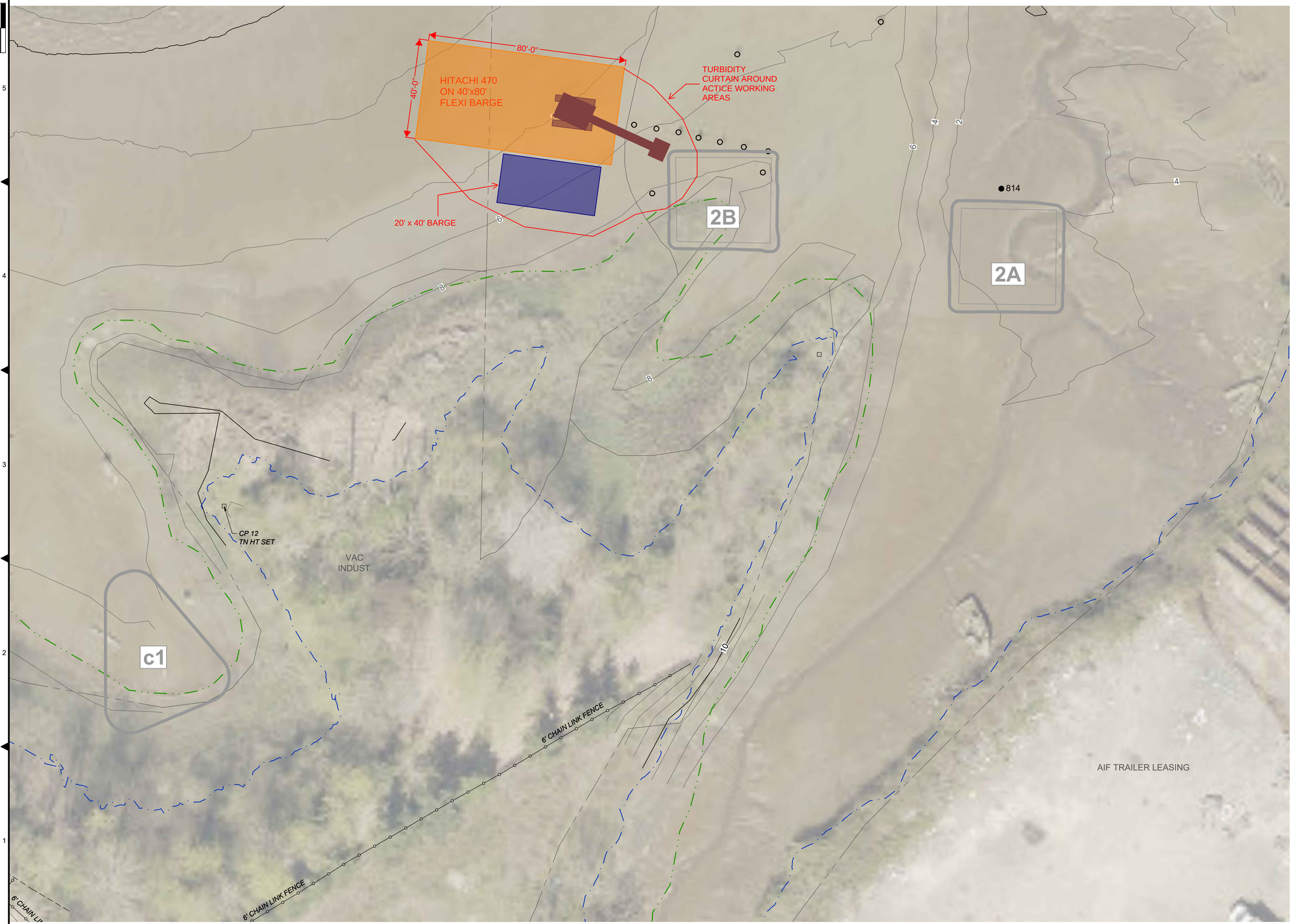
King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH
REMEDIAL ACTION

EXISTING CONDITIONS (RM 4.57 TO 4.66)

DATE: DECEMBER 2023
DRAWING NO: **V110**
SHT NO 16 / TOTAL 91
REV NO: **0**



LEGEND:

- KING COUNTY PARCEL
- LDW UPPER REACH APPROXIMATE BOUNDARY
- EXISTING GRADE MERGED DATA SET CONTOURS (2' & 10' INTERVALS)
- OUTFALL LOCATION (ACTIVE) - LOCATION APPROXIMATE
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- PILE
- VERTICAL DELINEATION CORE LOCATION
- SEDIMENT MANAGEMENT AREA BOUNDARY
- 14 SEDIMENT MANAGEMENT AREA NUMBER
- ESTIMATED LIMITS OF HABITAT AREA (CONTRACTOR TO PROTECT)

NOTES:

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King County

DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH REMEDIAL ACTION

EXISTING CONDITIONS (RM 4.64 TO 4.76)

DATE: DECEMBER 2023
DRAWING NO: **V111**
SHT NO 17 / TOTAL 91
REV NO: **0**

LEGEND:

- KING COUNTY PARCEL
- LDW UPPER REACH APPROXIMATE BOUNDARY
- EXISTING GRADE MERGED DATA SET CONTOURS (2' & 10' INTERVALS)
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DEPARTMENT OF NATURAL RESOURCES & PARKS
WASTEWATER TREATMENT DIVISION
LOWER DUWAMISH WATERWAY UPPER REACH REMEDIAL ACTION

EXISTING CONDITIONS (RM 4.84 TO 4.95)

DATE: DECEMBER 2023
DRAWING NO: **V112**
SHT NO 18 / TOTAL 91
REV NO: 0