



GLOBAL
a **MER** company

WAYSIDE PARK FLOAT INSPECTION
CITY AND BOROUGH OF JUNEAU, HARBOR MAINTENANCE
Juneau, Alaska



Submitted To:



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1. INTRODUCTION

On September 27, 2023, Global Diving & Salvage mobilized a four-man dive team onboard the DSV “Ashley T”, from our dock facility in Auke Bay, Alaska. A shallow air diving system with a digital underwater video recording system and specialized tooling were setup on the Ashley T to complete the scope of work as listed below. All work was completed by request per the current, Harbor Maintenance Term Contract.

SCOPE OF WORK

- Inspection of the underside of the Wayside Park Float, focusing on damage to the exposed flotation billets and glulam structural members.
 - Inspection was made in coordination with PND Engineers, Inc. who observed the video feed from the diver and directed the diver to examine certain areas of the float more closely.
- Provide a list of deficiencies noted, as well as the dive videos with audio in electronic format.

All diving activities were performed in accordance with the following regulations and industry guidance publications. Global personnel and their subcontractors follow the strictest requirement on the work site.

- Occupational Safety and Health Administration (OSHA) Construction Industry Standards, 29 CFR 1926
- Occupational Safety and Health Administration (OSHA) General Industry Standards, 29 CFR 1910
- Occupational Safety and Health Administration (OSHA) Commercial Diving Standards 29 CFR Part 1910, and Subpart T
- Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response, 29 CFR 1926.65 or 29 CFR 1910.120
- United States Coast Guard (USCG), 46 CFR 197, Subpart B
- ADCI (Association of Diving Contractors International), Industry Standards, 6th Edition

Prior to beginning diving operations, an onsite safety meeting was held to familiarize the crew with the scope of work and any hazards that may exist. The crew boat schedule for the day was noted along with potential weather hazards.

2. GENERAL FLOAT CONDITIONS

2.1 Work Location and Operating Conditions

The Wayside Park Float is a marine structure near Twin Lakes in Juneau, Alaska just southeast of Salmon Creek. A 120'x 20' floating dock, bridged to shore by a long walkway. The float grounds at minus tides, which required the dive operations to be conducted at high tide only.



Image 1 - Facility Layout

Weather conditions during the inspection were overcast with light veritable winds, and calm water in the area of the inspection. Due to the recent continuous rain, visibility was affected by a surface layer of fresh and saltwater 'brine' mix

which produces a layer of water that is milky and fuzzy to see through, additionally run off from shore added to the suspended particulars, limiting visibility during the inspection to 1 to 3 feet of water.

2.2 General Float Conditions

The float appears to be in very good overall condition. With the exception of the inshore wailer just to the south of the drive down ramp, the structure of the dock was found true to design. All of the inspected hardware was found to be in satisfactory condition with a locking nut secured. The float does appear to have a bow in it. The middle of the float bows up to 8" higher in the center than at the ends north and south. None of the hardware was found missing or broken.

No discrepancies were found between the plans provided by PND Engineer representative and the diver.



Figure 1 – Typical perimeter hardware, good condition and tight.

2.3 Noted Damage Areas

As previously stated, the float does appear to have a bow in the center. The diver inspection the joint at the intersection just to the south of the drive down ramp float, where it connects with the parent float. Cracks were located up to 8 feet in length in the parent float wailer beam. The cracks coincide with the engineer's belief that the float sat down in the southeast corner and caused stress fractures in the support. All of the hardware in this location appears to be intact and, with the exception of light surface corrosion, true to design. At the time of this survey there appears to be no sign of immediate structural failure.



Image 2 – Inshore connection to bridge cracks located at diver's hand and below.

The dock is secured in position by four dolphin-piling locations. The pile hoops securing the dock appear as designed, however the pads are heavily worn and should be replaced before they fail causing the steel hoops and piling interact directly. The wear pads are below 40% remaining and will start to see failure soon, causing metal-to-metal contact. These should be repaired, and if possible repaired with in kind materials.



Image 3 – Standard piling hoop, corrosion and deflection noted