

Alpha Marine Installations

* Office 360 978 5157 *
Alphamarineinstallations.com

Aquatic Habitat Dive Survey for Mooring Buoy Installation

Customer: Paul Gifford
Location: Burton
Vashon WA. 98070
Quarter Master Harbor

Date: October 30, 2023
Time: 1551
Tide Station: Burton, Quartermaster
Actual Water Depth: 26.2'

PROJECT DESCRIPTION:

Proposed recreational mooring for Paul Gifford installed in Quarter Master Harbor, East Vashon Island. Mooring will consist of a helical embedment anchor, 35' one inch nylon rope with midline float, 6 inch chain thru pass thru buoy topped with retrieval pear ring. MLLW 16'

INTRODUCTION:

The aquatic habitat survey was subcontracted to and performed by Jake Dow, Northwest Mooring Services on October 30, 2023 at 5:51 PM, weather clear with 3-5 mph wind. 0-5' Visibility.

METHODS:

The dive survey area is located in Quarter Master Harbor, Vashon Island, Washington. Site location is 395 feet off high water mark at 47.4002 latitude / -122.4404 longitude as the proposed mooring location center point. A 40 foot radius was surveyed by diver around the proposed anchor site with no debris or obstructions observed.

SUBSTRATE:

Within the survey area substrate consisted of sand, mud and clay. Substrate will be suitable site for an embedment anchor.

VEGETATION:

There was no vegetation of any kind observed within the project area surveyed. The proposed location at 47.4002 Latitude/ -122.4404 Longitude.

CONCLUSION:

The proposed mooring as designed with a helical screw anchor with a 1 ¾ inch foot print and midline float to avoid drag circles and damage to aquatic vegetation will have a minimal environmental impact on this project.

WAC 220-660-380 (8) Buoy design:

(a) In water bodies where buoy systems might damage submerged aquatic vegetation, locate and design the buoy system to minimize damage.

(i) Whenever feasible, use an embedded anchor.

(A) A seagrass/macroalgae habitat survey is not required if an embedment-style mooring anchor is installed. The department will require the diver/installer to locate the anchor so the mooring buoy system will not damage seagrass and kelp beds, and in herring spawning beds other macroalgae used as spawning substrate.

