

Waterfront Construction, Inc

Project Description & Construction Sequence

Evers, Eckhard – Pier Repair

A. Project Location

The project is located at a single family residence with a personal use pier. The project lot size is 13,497 s/f. The project site is located at 4456 Ferncroft Rd, Mercer Island, WA 98040. The property is situation in the SE Quarter of Section 18, Township 24, Range 05 at 47.5655 Lat. and -122.2083 Long. Tax lot #0046100453

B. Project Description

The existing pier is unofficially (not recorded) multi-use and partially crosses the lot line to the north. The aim of this project is to repair the pier and simultaneously convert it back to a single use pier, removing all parts of the structure crossing the lot line: One finger pier, one deck/platform area, two boat lifts, one moorage canopy cover and one mooring pile.

The remaining portion of the existing wood pier will be repaired, using 6x12" glue-lams & molded plastic decking with more than 40% light passthrough. "L" shaped pier will be added to the south of existing structure. Drive twenty-two (22) epoxy coated steel internal piles per plan set using a vibratory hammer to the point of refusal. All hardware will be stainless steel, grating will be made by SunWalk, and the new wood material will be treated with Chemonite (ACZA). Accessories to be replaced. Remove two wood mooring piles to the south of pier, install two new steel mooring piles waterward of existing mooring piles (south of boat slip). The first 30' of the walkway will be reduced to 4' wide.

The existing pier footprint will be reduced from 1386 s/f to 1334 s/f and elevated to 18" above the OHWM. No treated wood will be used in the water, steel will be epoxy-coated.

We are also applying retroactively to permit the install of a double personal watercraft lift, which was installed without permission between 2009 and 2012. The double personal watercraft lift is located on the south side of the main pier walkway. Please see attached plan set for details.

C. Construction Technique & Sequencing

1. Pre-Fabrication

All construction materials will be loaded onto the crane barge in the contractor's Seattle yard and transported to the site for installation.

2. Site Preparation

This site requires no preparation prior to construction.

3. Onsite Construction

- Remove storage shed and canopy cover, temporarily store on barge.
- Remove existing deck structure and load into 20 debris containers on barge for disposal upland;
- Existing forty-seven (47) timber piles will be either pulled or cut at the mudline if extraction is not possible;
- Demolish and remove existing concrete groin wall and steps, load into 20 debris containers on barge for disposal upland;
- Drive two (2) 4" epoxy coated steel piles to the point of refusal;
- Drive twenty (20) 8" epoxy coated steel piles to the point of refusal;
- Install cap beams;
- Using a barge crane, hoist pier sections into place and bolt to cap beams;
- Reinstall storage shed and boat canopy cover;
- Reinstall all accessories per plan set;
- Collect construction debris and place on barge for upland disposal;
- Mobilize to WCI Seattle yard;
- Dispose of demolition debris at an approved upland site.

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4. Equipment used

All construction equipment and materials used in this project will be stationed on the construction barge.

5. Materials used

Piles will be epoxy coated steel. Cap beams will be galvanized steel. Pier decking is treated wood frame with molded plastic grating.

6. Work Corridor

The construction barge will operate offshore to avoid bottom and shoreline disturbances that could occur with ground-based equipment. All staging will take place on the barge.

7. Staging Area

The barge will hold all construction materials during the project and all construction debris will be held in a 20 c/y steel debris container that is secured on the barge for upland disposal later.

8. Running of Equipment During Construction

Equipment will be running off and on during the construction phase, only when required, and only during allowed work hours.

9. Clean-Up

All construction debris will be removed and loaded into a 20 c/y steel debris container secured on the construction barge during construction. Debris is then transported by barge to the contractor's Seattle yard, off-loaded, and shipped to an approved upland disposal site. A temporary silt fence will be installed prior to construction to contain any potential debris in the water during construction.

10. Project Timing

All proposed construction will take place during daylight hours in approved work windows unless work needs to be coordinated with evening hours to facilitate construction in the approved work window.

11. Duration of Construction

On-site construction will take between four and six weeks.