

Applicant Information

Project Address: 8149 W Mercer Way, Mercer Island, Washington 98040

Parcel Number: 335850-0365

Applicant: Seaborn Pile Driving Company, 1080 W Ewing St Building B, Seattle, WA 98119 206-236-1700

Property Owner: Anil Thomas

Legal Description: HILLMANS C D SEA SHORE LAKE FRONT PCL B MERCER ISLAND LLR# SUB 14-007 REC #20140917900003 SD LLR DAF- PCLS A & B MI LLR# SUB 12-004 REC #20130404900003 SD LLR DAF - TRS 480 & 481 SD PLAT TGW LOT B MI SP# SP 87-04-03 (J3) REC # 8804119002 BEING TRS 478 & 479 TGW POR TRS 579 & 580 TGW SH LDS ADJ LESS CO RD TGW UNPLATTED STRIP ADJ TRS 480 & 481

Description of Work: We propose to repair (14) piles of the east dock, set back 6" and repair 107 lft of existing bulkhead, replace 4 lft of existing rock bulkhead with stairs, raise the existing east dock 1', and repair the existing east dock with (415 sqft) grated decking material.

Job specific comments

Purpose

The proposed dock is to provide for safe boat moorage and safe water recreational activities for a single-family residence.

Habitat Enhancement

The proposed planting plan has been designed to mitigate the existing and proposed pier.

Water Quality

In order to prevent debris from entering the lake during the demolition stage of the project, a containment boom will surround the crane barge and work area.

Permits

Mercer Island Exemption Permit:

We are applying for the permit to be reviewed under the:

“Development Standards for Replacement, Repair and Maintenance of Overwater Structures, Including Moorage Facilities” per MIMC 19.13.050(F)(2).

Mitigation

Shoreline Plantings: The shoreline plantings have been designed to provide the spread of tree and shrub nutrients into the adjacent waters of Lake Washington.

Fully grated deck: The proposed dock will have a fully grated deck to provide light penetration below the dock where there is no light penetration with the existing structure.

Piles: The proposed pier has been designed to maximize the distance between pile bents and minimize the number of piles.

Contractor: Seaborn Pile Driving Company License #: SEABOPD942CG

Address: 1080 W Ewing St. Bldg B. Seattle WA 98119

Office: 206.236.1700

Contact: Zion Napier

Email: permits@seabornpiledriving.com

Construction Narrative

Mobilization

Mobilize crew, crane barge, supply, and material barge to the site.

Pile Repair Standard Pile Sleeve Method

1. Set out a Sediment Containment Curtain around the work area waterward of the bulkhead to contain any silt and debris that may be generated during construction.
2. Cut the pile below the waterline until you reach good wood.
3. Attach the epoxy-coated steel sleeve to the existing stub with epoxy-coated steel thru bolts and nuts.
4. Confirm the pilings are straight and solid.
5. Cut the pilings to elevation.
6. Attach the new pile repair to the existing pile cap.
7. Clean the work area and remove the sediment curtain.

Dock construction (Track Dock)

1. Set out a Sediment Containment Curtain around the work area waterward of the bulkhead to contain any silt and debris that may be generated during construction.
2. Install new piles where applicable.
3. Install new steel I-beam pile caps and attach them to the piles by welding.
4. Install metal brackets on the edge of the cap by welding them to the I-beam to support glulam beams.
5. Install dock section made of Glulam Beams and angle iron framing with 2x4 PT nailers to support the grated decking.
6. Install the conduit for future use under the decking along the dock. Wiring and any connection to be completed by others.
7. Install the grated decking with screws making sure the screws are aligned and flush with the surface.
8. Install any boat or PWC lifts.
9. Clean the work area and remove the sediment curtain.

Rock Bulkhead Repair

1. Set out a Sediment Containment Curtain around the work area waterward of the bulkhead to contain any silt and debris that may be generated during construction.
2. Remove soil and material from behind the bulkhead.
3. Remove bulkhead rocks as necessary and set aside reusable rocks.
4. Dig a keyway into the substrate and reset the first row of rocks. Be sure to extend no further than the existing rock.
5. Install filter fabric into the excavated area and backfill with 2" – 4" cleaned crushed rock, and then envelope with the filter fabric.
6. Reinstall the remaining rows of rocks to complete the bulkhead, then envelope with the filter fabric.
7. Finish with 10" – 12" of topsoil and blend into the existing elevation.
8. Clean the work area and remove the silt fence/boom.

Structural Notes

General

- All materials, workmanship, design, and construction shall conform to the submitted drawings and the International Building Code.
- The contractor will be responsible for all safety precautions and methods and processes to perform the designated work.

Design Criteria

- The existing design and construction meet the live load specification of a minimum of 40 PSF.

Materials

All materials used in the construction of the dock will be for use on the water and of the highest quality available on the market. All materials will conform to the International Building Code.

For example:

- Steel piles/ Sleeves – ASTM A53 GrB with Devran 261QC low temperate cure epoxy (16 mils) finish coated full length.
- Structural Lumber – All lumber will be graded and marked in conformance with WCLIB standard grading rules.
- Fasteners – All fasteners, bolts, nuts, and nails will be epoxy-coated.

- Decking – The decking will consist of fiberglass grating which is pet and children-friendly and will provide years of safe and comfortable use.

Preservatives

- All wood preservatives to be state approved and will be applied and fully cured prior to installation over the water.
- All hardware and fasteners to be epoxy-coated.

Best Management Practices

1. Above the Water Line Work

1. Seaborn Pile Driving Company will employ one crane barge, one supply, and one debris barge to complete the scope of work. A tug will tow the barges on and off the job site.
2. Seaborn Pile Driving Company personnel working in, near, or over the water will at all times wear either USCG approved life vests or work vests as well as hard hats and safety glasses.

2. Material Handling

1. While at the job site, a floating containment boom will completely surround the work area.
2. All removed piles and the existing dock structure will be placed on the debris barge where they will be contained and kept out of the lake.

3. Hazardous Materials

- No hazardous materials will be mixed or stored in or near the water. No cleaning of materials will be performed in or near the water.

4. Polluting Materials in Water

- Seaborn Pile Driving Company will take extra precautions to ensure materials don't fall into or pollute the water. Any material that enters the water will be removed immediately. Any hazardous material such as oily rags will not be handled near or over the water.
- A spill kit will be employed on the barges at the job site.
- If any pollutants enter the water, Seaborn Pile Driving Company will contact the appropriate agencies and report the spill immediately.

5. Materials Disposal

- Seaborn Pile Driving Company will dispose of the rotten wood and pile sections in an approved legal disposal site in accordance with all applicable laws and permit requirements.