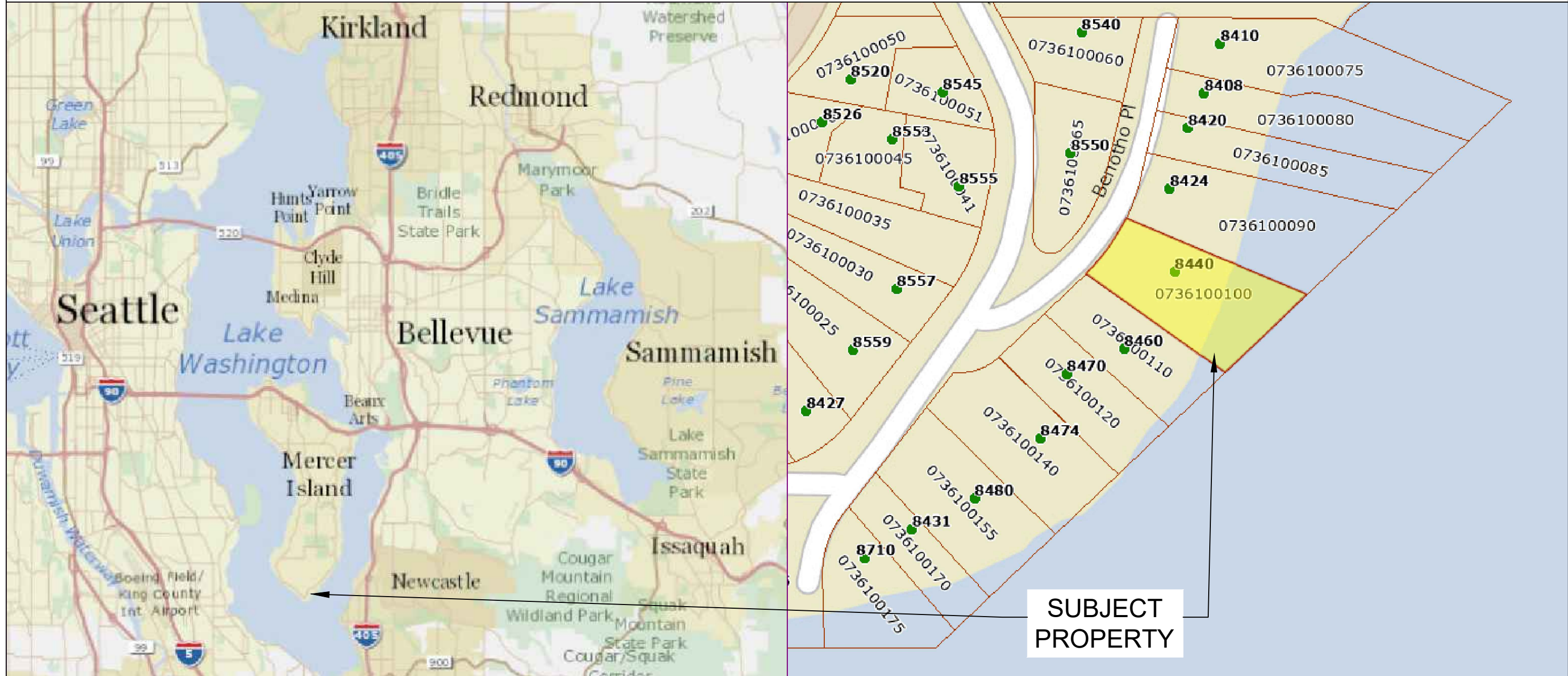


# SITE PLAN



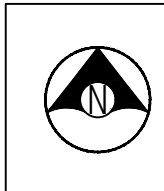
Pin: 0736100100

Legal Description: BENOTHO BEACH UNREC TGW SH LDS ADJ LESS C/M RGTS

Plat Block:  
Plat Lot: 19-20

Parcel  
LAT: 47.52555  
LONG: -122.2243

Bulkhead  
LAT: 47.525504  
LONG: -122.224164



Seaborn Pile Driving  
1080 W Ewing St  
Seattle, WA 98119

Office: 206-236-1700 ext. 3  
www.seabornpiledriving.com

Scope of Work: We propose to replace the existing wooden bulkhead with a granite rock bulkhead.

<p>County: King County Location: Lake Washington</p>	
<p>Applicant: Chen Residence 8440 Benotho Place Mercer Island, WA 98040</p>	<p>Created: 11-01-22 Last Updated: 1/9/2023 11:31 AM Zion</p>
<p>Datum: CORPS OF ENGINEERS 1919 NW Quarter Of Section 31, Township 24, Range 05</p>	<p>Adjacent Owners: ASPIRI GARY+MITZI 8460 BENOTHO, PL 98040 GOODRICK ELIZABETH S+RAYMON 8424 BENOTHO, PL 98004</p>
<p><b>SHEET A1.0</b></p>	
<p>NWS-2023-XXX PAGE 1 OF 10</p>	

# GENERAL NOTES:

## MATERIALS SPEC LIST:

### Boat Lifts:

- \* SL8012ARW - 146" x 167"

### SEWER:

- \* All sewer is field verified by probing the lake bed manually during the allowed work windows for the area.

## CODE REFERENCES: Mercer Island

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

**“Bulkheads and Shoreline Stabilization Structures” per MIMC 19.13050(B)(1).**

1. An existing shoreline stabilization structure may be replaced with a similar structure if there is a demonstrated need to protect principal uses or structures from erosion caused by currents or waves, and the following conditions shall apply:

i. The replacement structure should be designed, located, sized, and constructed to assure no net loss of ecological functions.

#### **NNL Report attached.**

ii. Replacement walls or bulkheads shall not encroach waterward of the ordinary high water mark or existing structure unless the primary structure was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure. Soft shoreline stabilization measures that provide restoration of shoreline ecological functions may be permitted waterward of the ordinary high water mark.

#### **Replacement bulkhead will not encroach further waterward of OHWM than existing bulkhead.**

iii. For purposes of this section standards on shoreline stabilization measures, "replacement" means the construction of a new structure to perform a shoreline stabilization function of an existing structure which can no longer adequately serve its purpose. Additions to or increases in size of existing shoreline stabilization measures shall be considered new structures.

#### **Replacement bulkhead will have no addition or increase in size over existing bulkhead.**

iv. Construction and maintenance of normal protective bulkhead common to single-family dwellings requires only a shoreline exemption permit, unless a report is required by the code official to ensure compliance with the above conditions; however, if the construction of the bulkhead is undertaken wholly or in part on lands covered by water, such construction shall comply with SEPA mitigation.

#### **Replacement bulkhead will not be constructed in lands covered by water.**

Last permit issued for property: 1304-164 4/14/2013

Bulkhead established/constructed: 4/25/1980

Boat lift permitted: 08/14/1990



Seaborn Pile Driving  
1080 W Ewing St  
Seattle, WA 98119

Office: 206-236-1700 ext. 3  
www.seabornpiledriving.com

Scope of Work: We propose to replace the existing wooden bulkhead with a granite rock bulkhead.

County: King County  
Location: Lake Washington

Applicant: Chen Residence  
8440 Benotho Place  
Mercer Island, WA 98040

Datum: CORPS OF ENGINEERS 1919  
NW Quarter Of Section 31, Township 24, Range 05

Adjacent Owners:  
ASPIRI GARY+MITZI  
8460 BENOTHO, PL 98040  
GOODRICK ELIZABETH S+RAYMON  
8424 BENOTHO PL, 98004

Last Updated: 1/9/2023 11:31 AM Zion

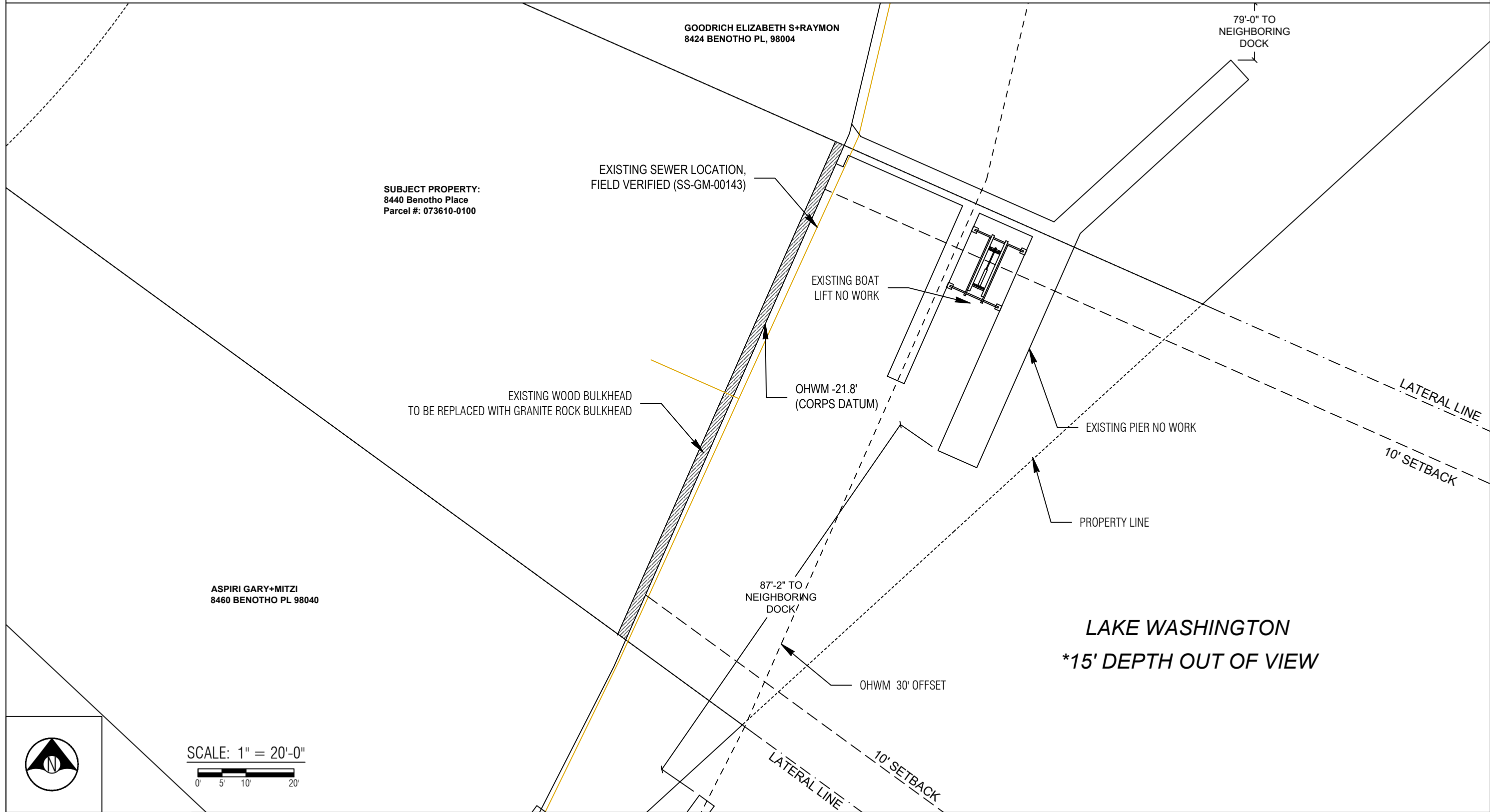
Created: 11-01-22

**SHEET  
A2.0**

NWS-2023-XXX  
PAGE 2 OF 10

# EXISTING CONDITIONS

**\*\*CLEAN UP LAKE AROUND PROJECT\*\***



SCALE: 1" = 20'-0"  
 0' 5' 10' 20'



Seaborn Pile Driving  
 1080 W Ewing St  
 Seattle, WA 98119

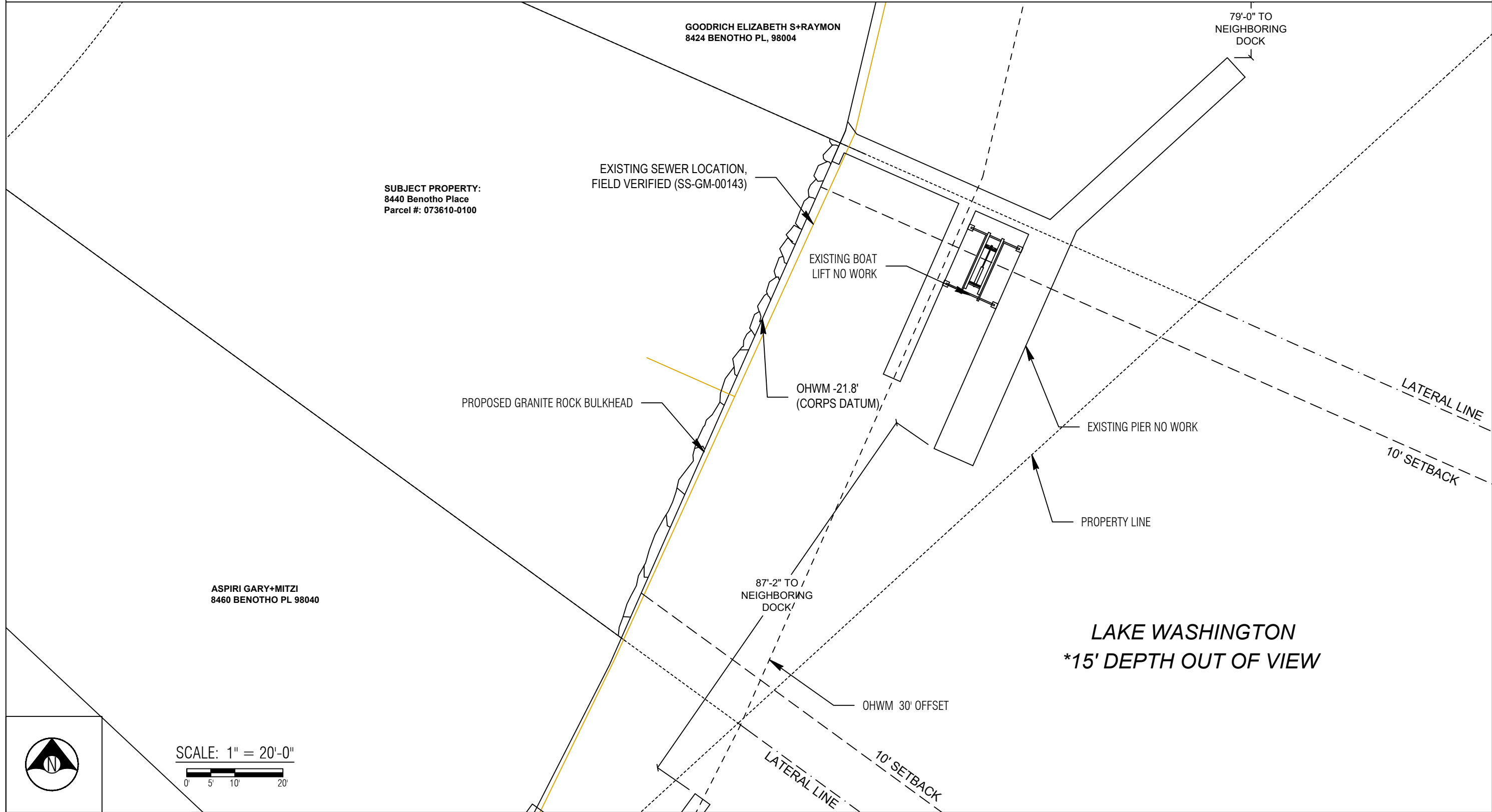
Office: 206-236-1700 ext. 3  
[www.seabornpiledriving.com](http://www.seabornpiledriving.com)

Scope of Work: We propose to replace the existing wooden bulkhead with a granite rock bulkhead.

Applicant: Chen Residence 8440 Benotho Place Mercer Island, WA 98040	County: King County Location: Lake Washington
Datum: CORPS OF ENGINEERS 1919 NW Quarter Of Section 31, Township 24, Range 05	Last Updated: 1/9/2023 11:31 AM Zion
Adjacent Owners: ASPIRI GARY+MITZI 8460 BENOTHO PL 98040	Created: 11-01-22
GOODRICK ELIZABETH S+RAYMON 8424 BENOTHO PL, 98004	SHEET <b>A3.0</b>
NWS-2023-XXX PAGE 3 OF 10	

# PROPOSED CONDITIONS

**\*\*CLEAN UP LAKE AROUND PROJECT\*\***



SCALE: 1" = 20'-0"  
0' 5' 10' 20'



Seaborn Pile Driving  
1080 W Ewing St  
Seattle, WA 98119

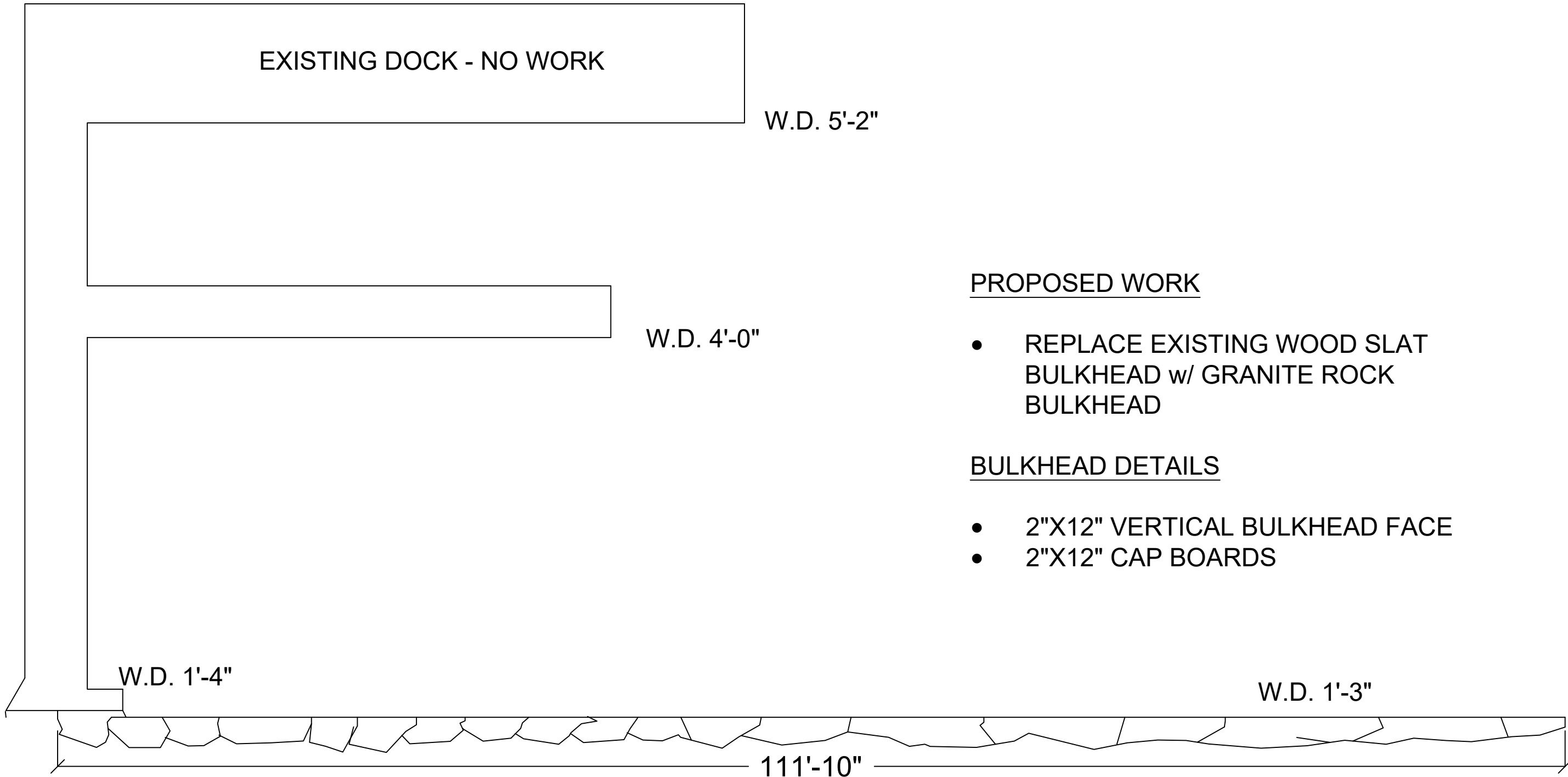
Office: 206-236-1700 ext. 3  
www.seabornpiledriving.com

Scope of Work: We propose to replace the existing wooden bulkhead with a granite rock bulkhead.

Datum: CORPS OF ENGINEERS 1919 NW Quarter Of Section 31, Township 24, Range 05	Applicant: Chen Residence 8440 Benotho Place Mercer Island, WA 98040	County: King County Location: Lake Washington
	Adjacent Owners: ASPIRI GARY+MITZI 8460 BENOTHO PL, 98040	Created: 11-01-22 Last Updated: 1/9/2023 11:31 AM Zion

**SHEET  
A4.0**

# BULKHEAD DETAILS - EXISTING/PROPOSED



## PROPOSED WORK

- REPLACE EXISTING WOOD SLAT BULKHEAD w/ GRANITE ROCK BULKHEAD

## BULKHEAD DETAILS

- 2"X12" VERTICAL BULKHEAD FACE
- 2"X12" CAP BOARDS

PLAN VIEW



Seaborn Pile Driving  
1080 W Ewing St  
Seattle, WA 98119

Office: 206-236-1700 ext. 3  
www.seabornpiledriving.com

Scope of Work: We propose to replace the existing wooden bulkhead with a granite rock bulkhead.

County: King County  
Location: Lake Washington

Applicant: Chen Residence  
8440 Benotho Place  
Mercer Island, WA 98040

Datum: CORPS OF ENGINEERS 1919  
NW Quarter Of Section 31, Township 24, Range 05

Adjacent Owners:  
ASPIRI GARY+MITZI  
8460 BENOTHO, PL 98040

**SHEET  
A5.0**

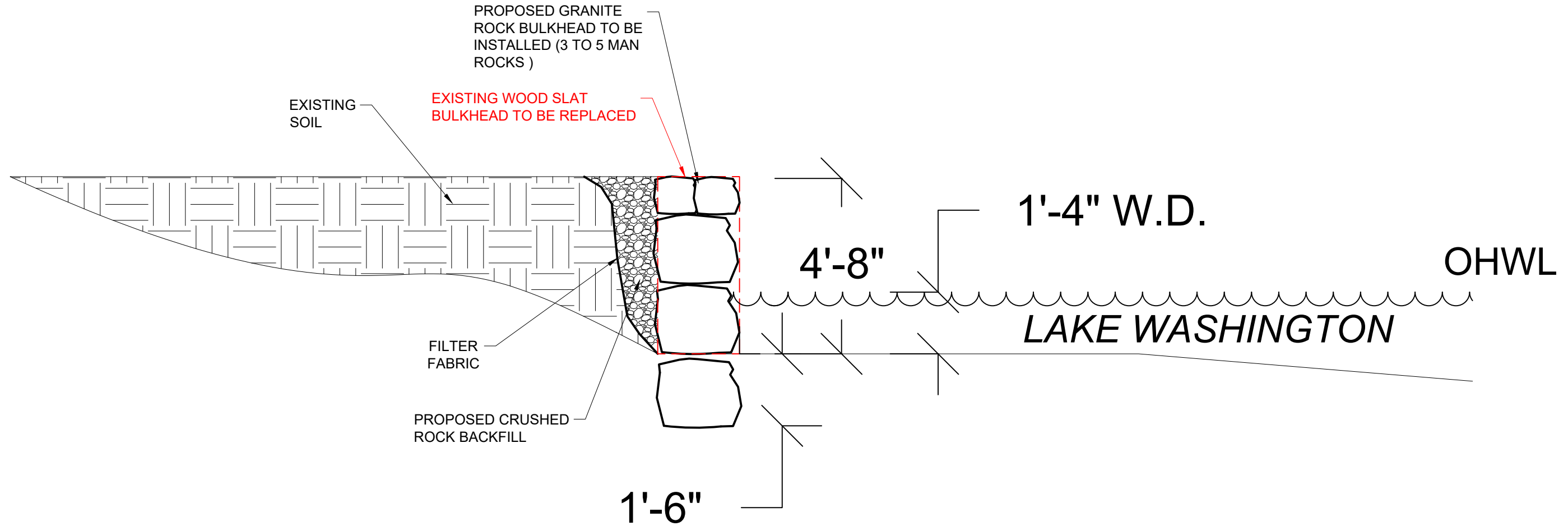
NWS-2023-XXX  
PAGE 5 OF 10

Last Updated: 1/9/2023 11:31 AM Zion

Created: 11-01-22

GOODRICK ELIZABETH S+RAYMON  
8424 BENOTHO PL, 98004

# BULKHEAD DETAILS EXISTING/PROPOSED



SECTION VIEW: A'-A'



Seaborn Pile Driving  
1080 W Ewing St  
Seattle, WA 98119

Office: 206-236-1700 ext. 3  
www.seabornpiledriving.com

Scope of Work: We propose to replace the existing wooden bulkhead with a granite rock bulkhead.

County: King County  
Location: Lake Washington

Applicant: Chen Residence  
8440 Benotho Place  
Mercer Island, WA 98040

Datum: CORPS OF ENGINEERS 1919  
NW Quarter Of Section 31, Township 24, Range 05

Adjacent Owners:  
ASPIRI GARY+MITZI  
8460 BENOTHO, PL 98040  
GOODRICK ELIZABETH S+RAYMON  
8424 BENOTHO PL, 98004

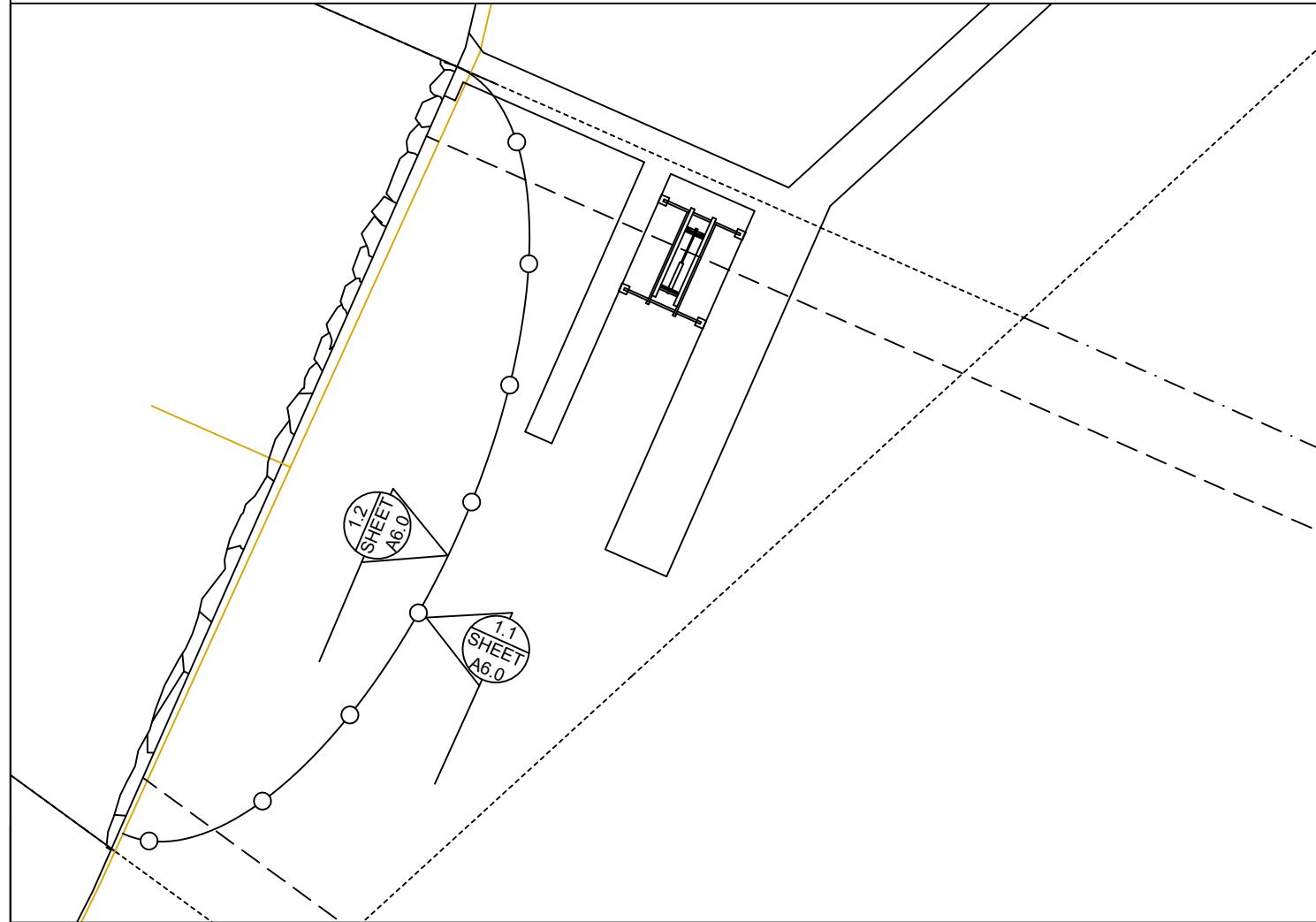
Last Updated: 1/9/2023 11:31 AM Zion

Created: 11-01-22

**SHEET  
A6.0**

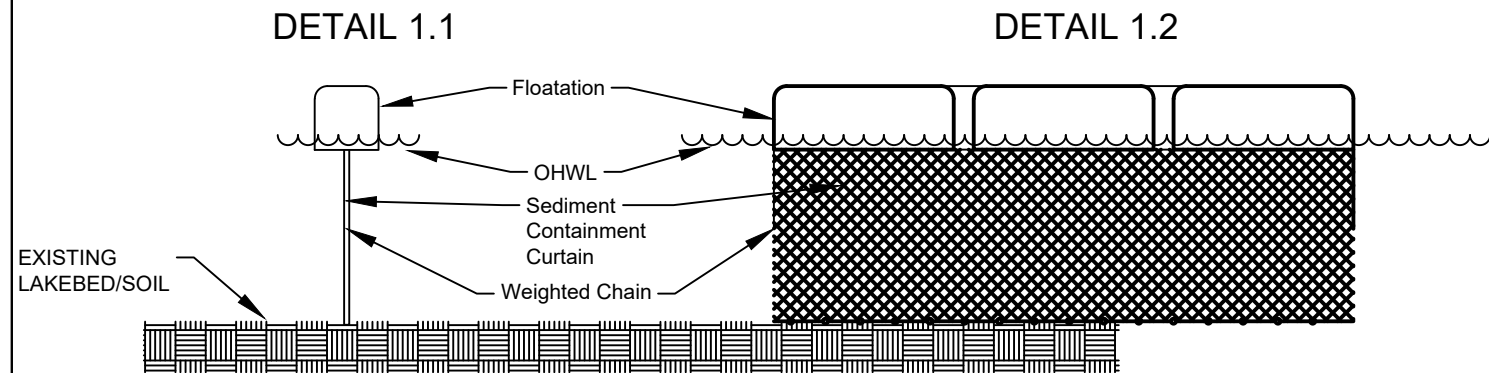
NWS-2023-XXX  
PAGE 6 OF 10

# BMP INFORMATION



## BMP NOTES:

- A. Constant vigilance shall be kept for the presence of protected fish species during all aspects of the proposed action, particularly during in-water activities such as vessel movement, deployment of anchors & spuds, pile driving, dredging, and placement of gravels and other fill.
1. The project manager shall designate an appropriate number of competent observers to survey the project site and adjacent areas for protected species, including the presence of fish as conditions allow.
  2. Visual surveys shall be made prior to the start of work each day, and prior to resumption of work following any break of more than an hour. Periodic additional visual surveys throughout the work day are strongly recommended.
  3. All in-water work shall be done during the in-water work window for the waterbody. Where there is a difference between the USCOE and WDFW work windows, the overlap of the two shall apply.
  4. All pile driving and extraction shall be postponed or halted when obvious aggregations or schooling of fish are observed within 50 yards of that work, and shall only begin/resume after the animals have voluntarily departed the area.
  5. When piloting vessels, vessel operators shall operate at speeds and power settings to avoid grounding vessels, and minimize substrate scour and mobilization of bottom sediments.
- B. No contamination of the marine environment shall result from project-related activities.
1. Appropriate materials to contain and clean potential spills shall be stored and readily available at the work site and/or aboard project-related vessels.
  2. The project manager and heavy equipment operators shall perform daily pre-work equipment inspections for cleanliness and leaks. All heavy equipment operations shall be postponed or halted should a leak be detected, and shall not proceed until the leak is repaired and the equipment is cleaned.
  3. To the greatest extent practicable, utilize biodegradable oils for equipment that would be operated in or near water.
  4. Fueling of land-based vehicles and equipment shall take place at least 50 feet away from the water, preferably over an impervious surface. Fueling of vessels shall be done at approved fueling facilities.
  5. Turbidity and siltation from project-related work shall be minimized and contained through the appropriate use of erosion control practices, effective silt containment devices, and the curtailment of work during adverse weather and tidal/flow conditions.
  6. All wastes shall be collected and contained for proper disposal at approved upland disposal sites appropriate for the material(s).
  7. When removing piles and other similarly treated wood, containment booms must fully enclose the work area. Wood debris, oils, and any other materials released into lake waters must be collected, removed, and properly disposed of at approved disposal sites.
  8. All in- and over-water wood cutting would be limited to the minimum required to remove the subject wood component, and all cutting work should be enclosed within floating containment booms.
  9. When removing piles, no actions shall be taken that would cause adhering sediments to return to lake waters.
  10. Above-water containment shall be installed around removed piles to prevent sediment laden waters from returning to lake waters.
  11. Construction staging (including stocking of materials, etc.) will occur on the supply barge.
  12. All Exposed wood to be used on the project will be treated with a cheminite treatment.



DETAIL 1.1 & 1.2

Scope of Work: We propose to replace the existing wooden bulkhead with a granite rock bulkhead.



Seaborn Pile Driving  
1080 W Ewing St  
Seattle, WA 98119

Office: 206-236-1700 ext. 3  
www.seabornpiledriving.com

County: King County  
Location: Lake Washington

Applicant: Chen Residence  
8440 Benotho Place  
Mercer Island, WA 98040

Datum: CORPS OF ENGINEERS 1919  
NW Quarter Of Section 31, Township 24, Range 05

Adjacent Owners:  
ASPIRI GARY+MITZI  
8460 BENOETHO, PL 98040

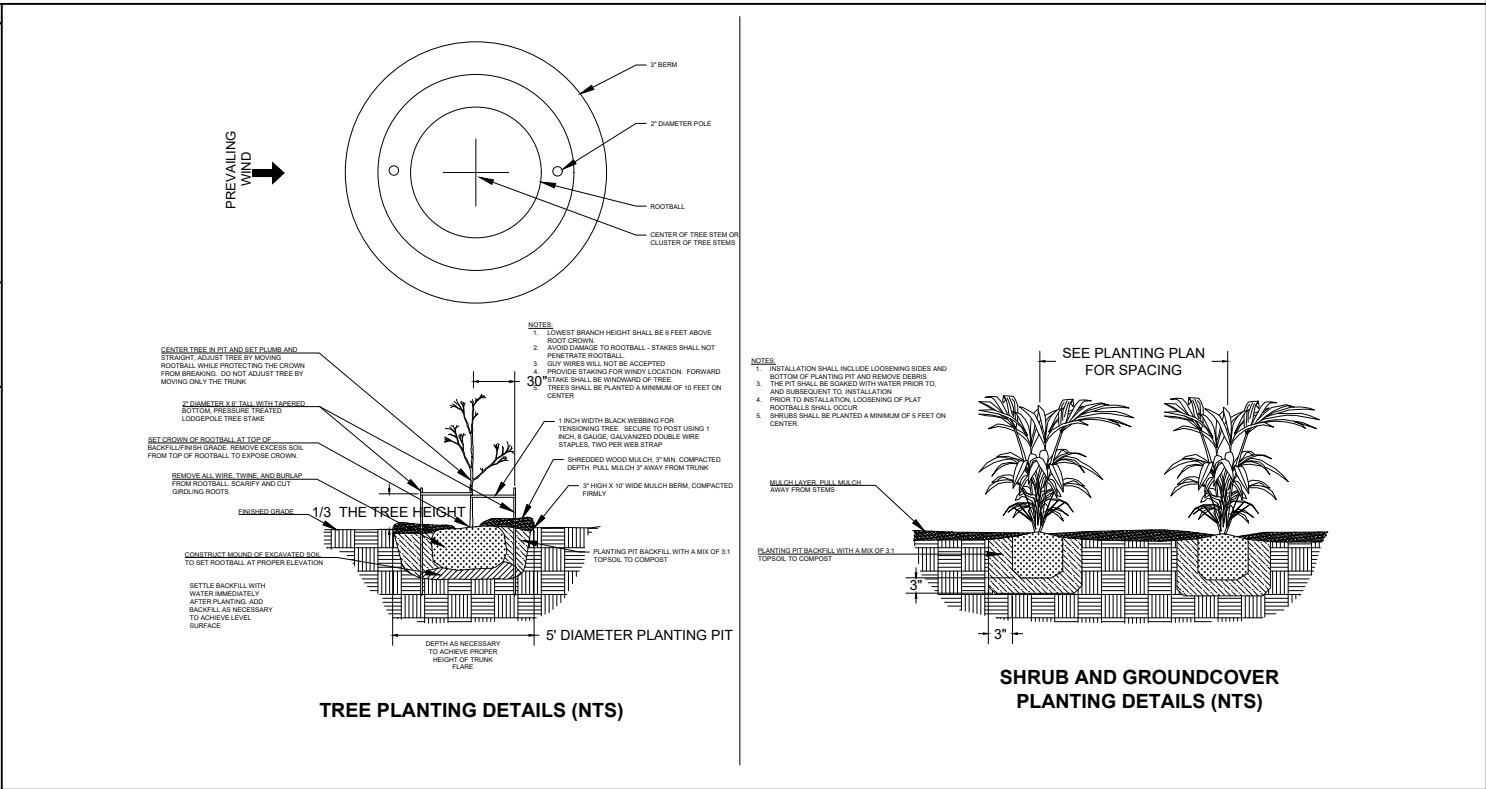
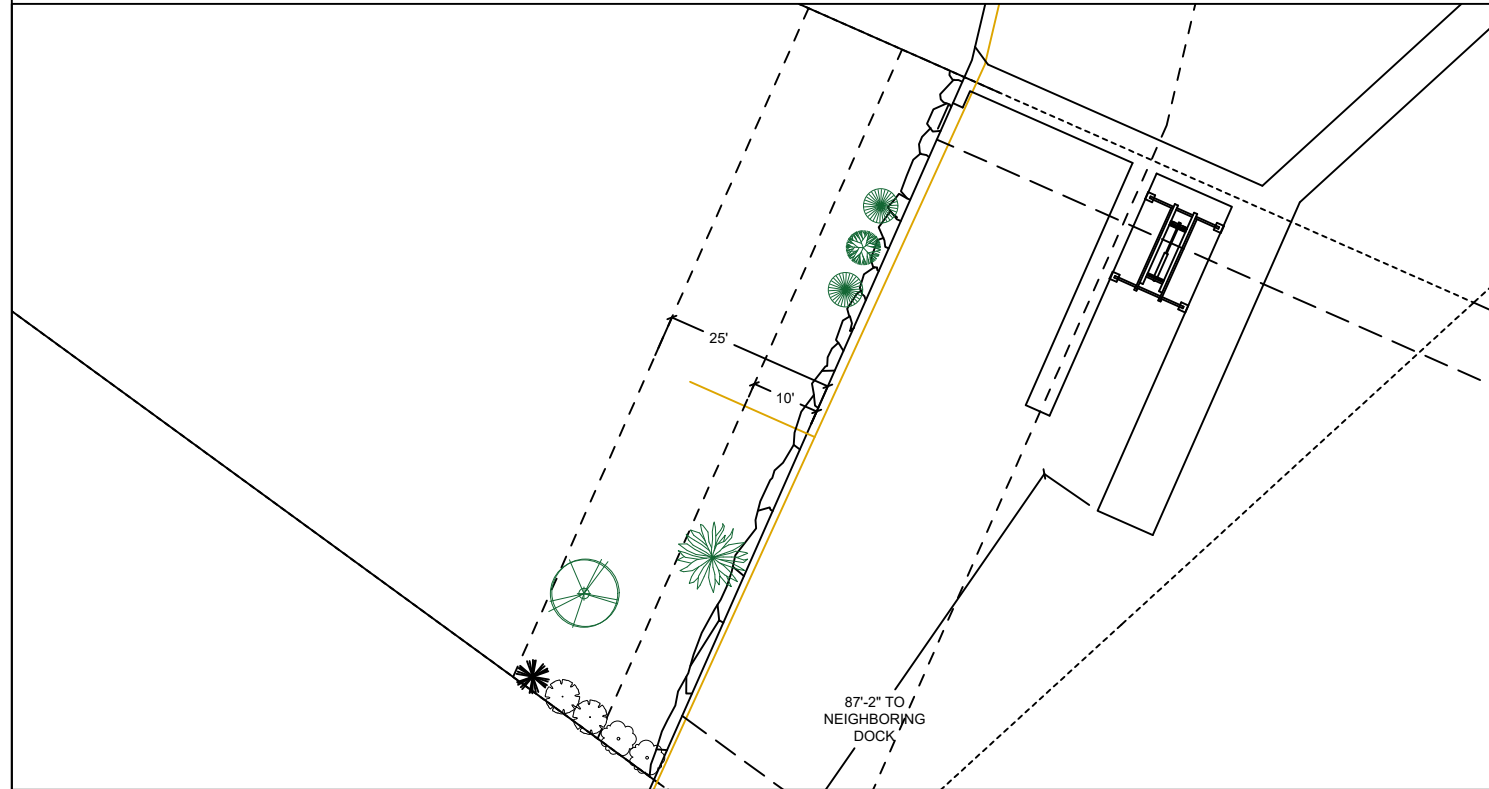
GOODRICK ELIZABETH S+RAYMON  
8424 BENOETHO PL, 98004

Created: 11-01-22

Last Updated: 1/9/2023 11:31 AM Zion

**SHEET**  
**A7.0**

# MITIGATION PLAN



- Notes:**
1. Shrubs are show, and shall be planted, at least five feet on center. Trees are show, and shall be planted, at least ten feet to center.
  2. The property owner will implement and abide by the shoreline planting plan. The plants shall be installed before or concurrent with the work authorized by this permit. A report, as-built drawing and photographs demonstrating the plants have been installed or a report on the status of project construction will be submitted to the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch, within 12 months from the date of permit issuance. This reporting requirement may be met by completing and submitting a U.S. Army Corps of Engineers approved Report for Mitigation Work Completion form.
  3. The property owner will maintain and monitor the survival of installed shoreline plantings for five years after the U.S. Army Corps of Engineers accepts the as-built report. Installed plants shall achieve 100% survival during monitoring Years 1 and 2. Installed plants shall achieve at least 80% survival during monitoring Years 3, 4 and 5. Percent survival is based on the total number of plants installed in accordance with the approved riparian planting plan. Individual plants that die will be replaced with native riparian species in order to meet the survival performance standards.
  4. The property owner will provide annual monitoring reports for five years (Monitoring Years 1-5). Each annual monitoring report will include written and photographic documentation on plant mortality and replanting efforts and will document whether the performance standards are being met. Photos will be taken from established points and used repeatedly for each monitoring year. In addition to photos at designated points, photo documentation will include a panoramic view of the entire planting area. Submitted photos will be formatted on standard 8 1/2 x 11" paper, dated with the date the photo was taken, and clearly labeled with the direction from which the photo was taken. The photo location points will be identified on an appropriate drawing. Annual shoreline planting monitoring reports will be submitted to the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch, by November 31 of each monitoring year. This reporting requirement may be met by completing and submitting a U.S. Army Corps of Engineers approved Mitigation Planting Monitoring Report form.

PROPOSED PLANTING SPECIES/QUANTITIES				
SYMBOL	LATIN NAME	COMMON NAME	QTY	SIZE
	Thuja picatta	Western Redcedar	1	3 ft
	Pinus contorta v contorta	Shore pine	1	3 ft
	Rosa nutkana	Nootka Rose	1	1 Gallon
	Philadelphus lewisii	Mock Orange	2	1 Gallon

**PLANTS:** Shrubs to be installed 5ft on center and trees to be installed 10ft on center.

County: King County  
 Location: Lake Washington

Applicant: Chen Residence  
 8440 Benotho Place  
 Mercer Island, WA 98040

Datum: CORPS OF ENGINEERS 1919  
 NW Quarter Of Section 31, Township 24, Range 05

Adjacent Owners:  
 ASPERI GARY+MITZI  
 8460 BENOETHO, PL 98040

GOODRICK ELIZABETH S+RAYMON  
 8424 BENOETHO PL 98004

Created: 11-01-22  
 Last Updated: 1/9/2023 11:31 AM Zion



Seaborn Pile Driving  
 1080 W Ewing St  
 Seattle, WA 98119

Office: 206-236-1700 ext. 3  
[www.seabornpiledriving.com](http://www.seabornpiledriving.com)

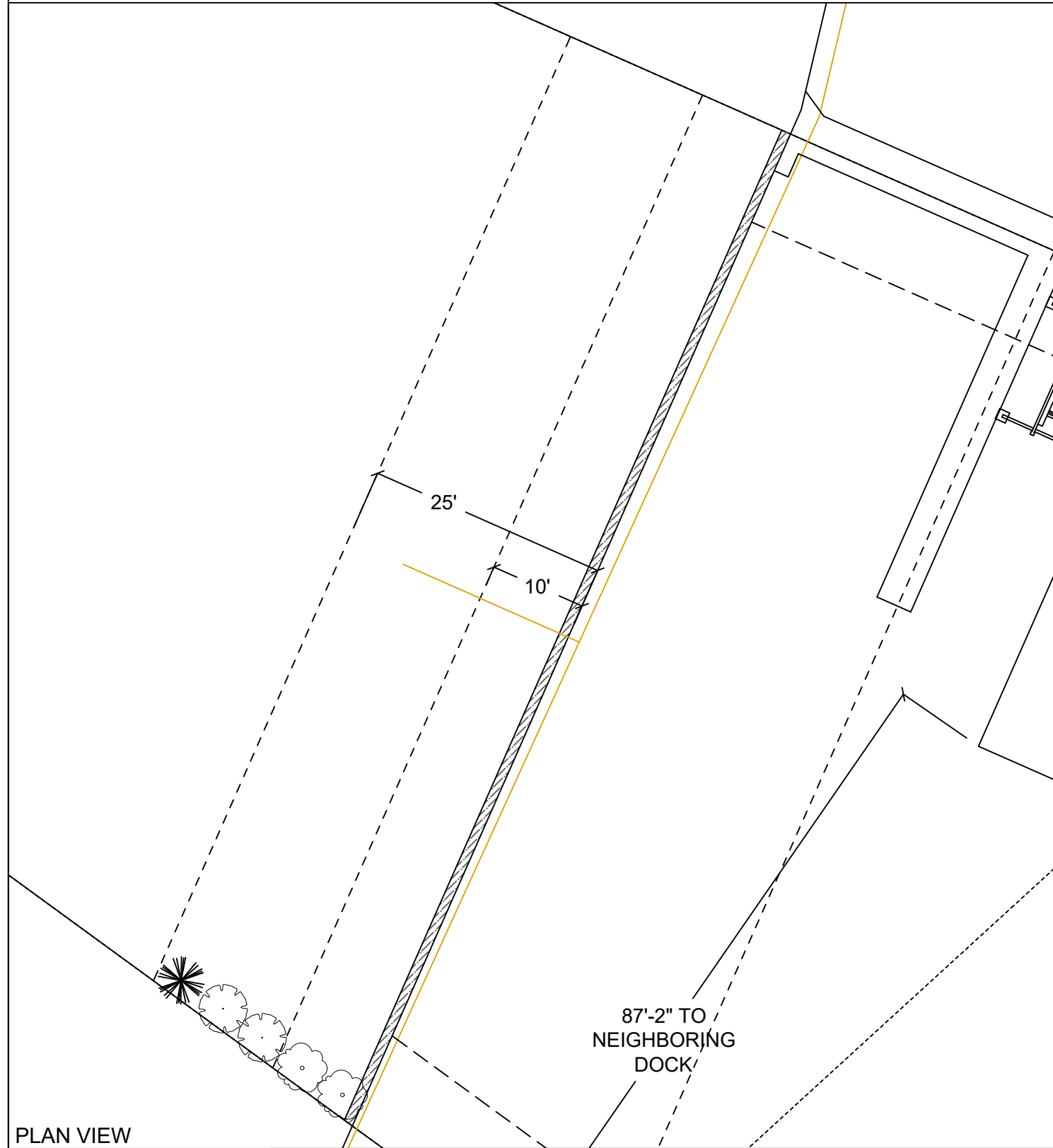
Scope of Work: We propose to replace the existing wooden bulkhead with a granite rock bulkhead.

**SHEET  
 A8.0**

NWS-2023-XXX  
 PAGE 8 OF 10



# EXISTING PLANT PLAN



PLAN VIEW

## EXISTING PLANTING SPECIES/QUANTITIES

SYMBOL	SCIENTIFIC NAME	COMMON NAME	QTY	SIZE
	Cortaderia Selloana	Pampas Grass	2	5'x5'x5'
	Prunus Laurocerasus	Cherry Laurel	2	5'x5'x5'
	Prunus Cerasifera	Cherry Plum	1	5'x5'x5'

EXISTING PLANTS TABLE

Scope of Work: We propose to replace the existing wooden bulkhead with a granite rock bulkhead.



Seaborn Pile Driving  
1080 W Ewing St  
Seattle, WA 98119

Office: 206-236-1700 ext. 3  
www.seabornpiledriving.com

County: King County  
Location: Lake Washington

Applicant: Chen Residence  
8440 Benotho Place  
Mercer Island, WA 98040

Datum: CORPS OF ENGINEERS 1919  
NW Quarter Of Section 31, Township 24, Range 05  
Adjacent Owners:  
ASPIRI GARY+MITZI  
8460 BENOETHO, PL 98040  
GOODRICK ELIZABETH S+RAYMON  
8424 BENOETHO PL, 98004

**SHEET**  
**A9.0**

# HARDSCAPE CALCULATION DRAWING

**Allowed Impervious Quantities**

SETBACK (total sqft)	ALLOWED	PERMIT 0502-114	CURRENTLY USED	REMOVING	PROPOSED
0' - 25' SETBACK (2,749,0959 sqft)	10% (274,90959 sqft)	8.1845% (225 sqft)	8.1845% (225 sqft)	0.5456% (15 sqft)	7.6389% (210 sqft)
25' - 50' SETBACK (2617,9714 sqft)	30% (788,39142 sqft)	0% (0 sqft)	0% (0 sqft)	0% (0 sqft)	0% (0 sqft)

**LEGEND**

DESCRIPTION	AREA	HATCH
EXISTING BULKHEAD 25FT SETBACK	225 sqft	

**Allowed Impervious Quantities**

SETBACK (total sqft)	ALLOWED	PERMIT 0502-114	CURRENTLY USED	REMOVING	PROPOSED
0' - 25' SETBACK (2,749,0959 sqft)	10% (274,90959 sqft)	8.1845% (225 sqft)	8.1845% (225 sqft)	0.5456% (15 sqft)	7.6389% (210 sqft)
25' - 50' SETBACK (2617,9714 sqft)	30% (788,39142 sqft)	0% (0 sqft)	0% (0 sqft)	0% (0 sqft)	0% (0 sqft)

**LEGEND**

DESCRIPTION	AREA	HATCH
PROPOSED BULKHEAD 25FT SETBACK	210 sqft	

EXISTING

PROPOSED

Scope of Work: We propose to replace the existing wooden bulkhead with a granite rock bulkhead.



Seaborn Pile Driving  
1080 W Ewing St  
Seattle, WA 98119

Office: 206-236-1700 ext. 3  
www.seabornpiledriving.com

Datum: CORPS OF ENGINEERS 1919  
NW Quarter Of Section 31, Township 24, Range 05

Adjacent Owners:  
ASPIRI GARY+MITZI  
8460 BENOETHO, PL 98004

GOODRICK ELIZABETH S+RAYMON  
8424 BENOETHO PL, 98004

Applicant: Chen Residence  
8440 Benotho Place  
Mercer Island, WA 98040

County: King County  
Location: Lake Washington

Created: 11-01-22

Last Updated: 1/9/2023 11:31 AM Zion

**SHEET  
A10.0**