



DEVELOPMENT SERVICES DEPARTMENT
 ENVIRONMENTAL COORDINATOR
 450 110th Ave NE
 BELLEVUE, WA 98009-9012

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: Becky Henderson – Marine Restoration & Construction LLC.

LOCATION OF PROPOSAL: 1839 Killarney Way

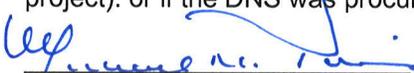
DESCRIPTION OF PROPOSAL: Shoreline Substantial Development Permit to replace an ground based boatlift. The proposal also includes the installation of a freestanding dual jet ski lift; pier repair; and partial soft shoreline rehabilitation.

FILE NUMBERS: 14-139149-WG **PLANNER:** David Wong

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.

- There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's office by 5:00 p.m. on _____.
- This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on **2/19/2015**
- This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on _____. This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5:00 p.m. on _____.

This DNS may be withdrawn at any time if the proposal is modified so as to have significant adverse environmental impacts; if there is significant new information indicating a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project); or if the DNS was procured by misrepresentation or lack of material disclosure.


 Environmental Coordinator

2/5/2015
 Date

OTHERS TO RECEIVE THIS DOCUMENT:

- State Department of Fish and Wildlife / Stewart.Reinbold@dfw.gov; Christa.Heller@dfw.wa.gov;
- State Department of Ecology, Shoreline Planner N.W. Region / Jobu461@ecy.wa.gov; sepaunit@ecy.wa.gov
- Army Corps of Engineers Susan.M.Powell@nws02.usace.army.mil
- Attorney General ecyolyef@atg.wa.gov
- Muckleshoot Indian Tribe Karen.Walter@muckleshoot.nsn.us; Fisheries.fileroom@muckleshoot.nsn.us



**City of Bellevue
Development Services Department
Land Use Staff Report**

Proposal Name: Wall Dock

Proposal Address: 1839 Killarney Way

Proposal Description: Shoreline Substantial Development Permit to replace an ground based boatlift. The proposal also includes the installation of a freestanding dual jet ski lift; pier repair; and partial soft shoreline rehabilitation.

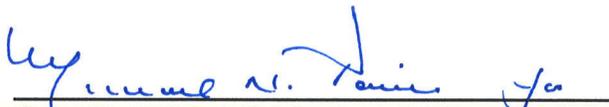
File Number: 14-139149-WG

Applicant: Daniel Wall

Decisions Included: Shoreline Substantial Development Permit (Process II. LUC 20.30R)

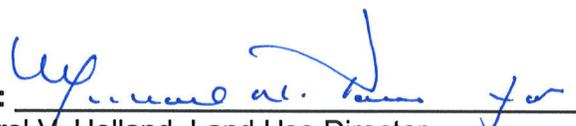
Planner: David Wong, Planner

**State Environmental Policy Act
Threshold Determination:** **Determination of Non-Significance**



Carol V. Helland, Environmental Coordinator
Development Services Department

Director's Decision: **Approval with Conditions**
Michael Brennan, Director
Development Services Department

By: 

Carol V. Helland, Land Use Director

Date of Application: August 19, 2014
Notice of Application: September 18, 2014
Decision Publication Date: February 5, 2015
SEPA Appeal Deadline: February 19, 2015 (14 days from publication date)
Shoreline Substantial Development Permit: February 26, 2015 (21 days from publication date)

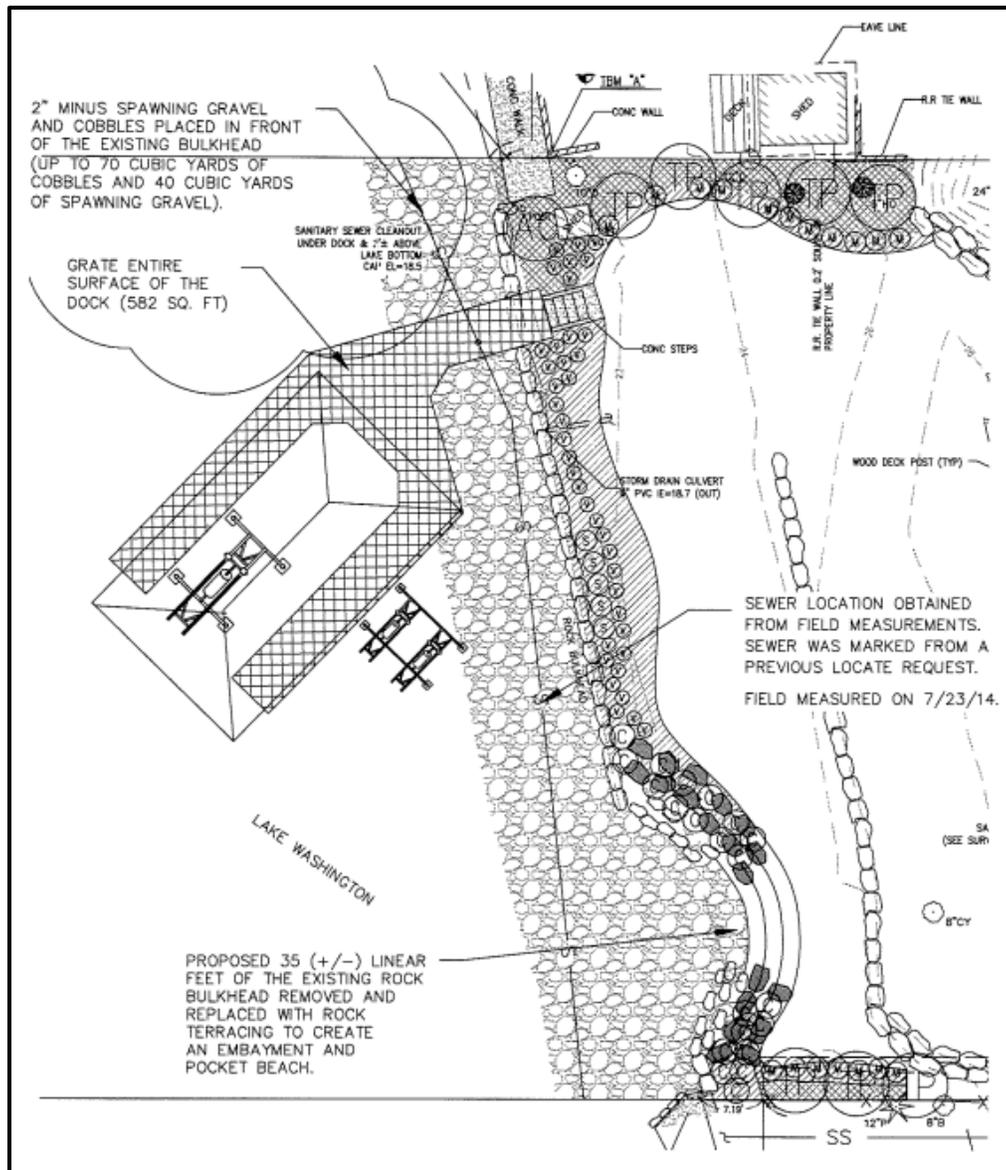
For information on how to appeal a project proposal, visit the Permit Center at City Hall or call 425-452-6800. Appeal of any Process II Administrative decision must be made by 5 p.m. on the date noted for appeal of the decision. Appeal of the SEPA Threshold Determination must be made to the City of Bellevue City Clerk's Office. Appeal of the Shoreline Substantial Development Permit must be made to the Washington State Shoreline Hearings Board (contact the project planner for more information on how to file an appeal with the Shoreline Hearings Board).

CONTENTS

I. Proposal Description	1
II. Site Description, Zoning, Land Use and Critical Areas	2
III. Consistency with Land Use Code Requirements:.....	4
IV. Public Notice and Comment.....	6
V. Summary of Technical Reviews	6
VI. State Environmental Policy Act (SEPA).....	7
VII. Decision Criteria.....	8
VIII. Conclusion and Decision.....	9
IX. Conditions of Approval	9

I. Proposal Description

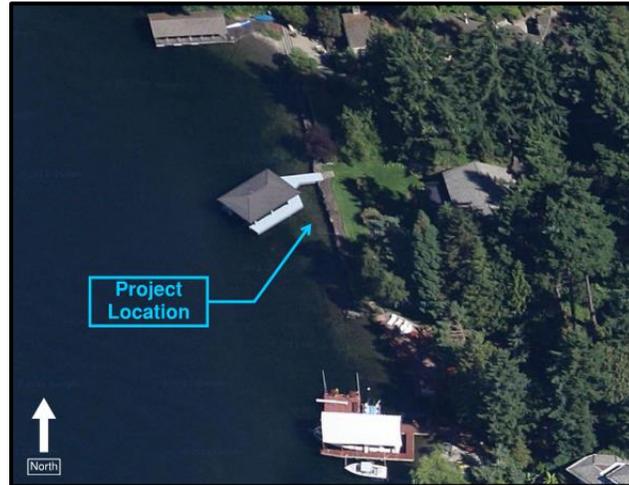
The applicant requests approval to replace a ground-based boatlift and install a new dual jet ski lift. The proposal also includes pier repair with thru-flow grating to comply with City of Bellevue Shoreline Master Program (SMP) requirements; 40 cubic yards of 2-inch minus spawning gravel; and soft shore conversion of approximately 35 feet of an existing bulkhead. In addition to the previously approved bulkhead modifications and mitigation planting (13-114599-LO), this proposal includes approximately 100 square feet of native planting along the existing bulkhead.



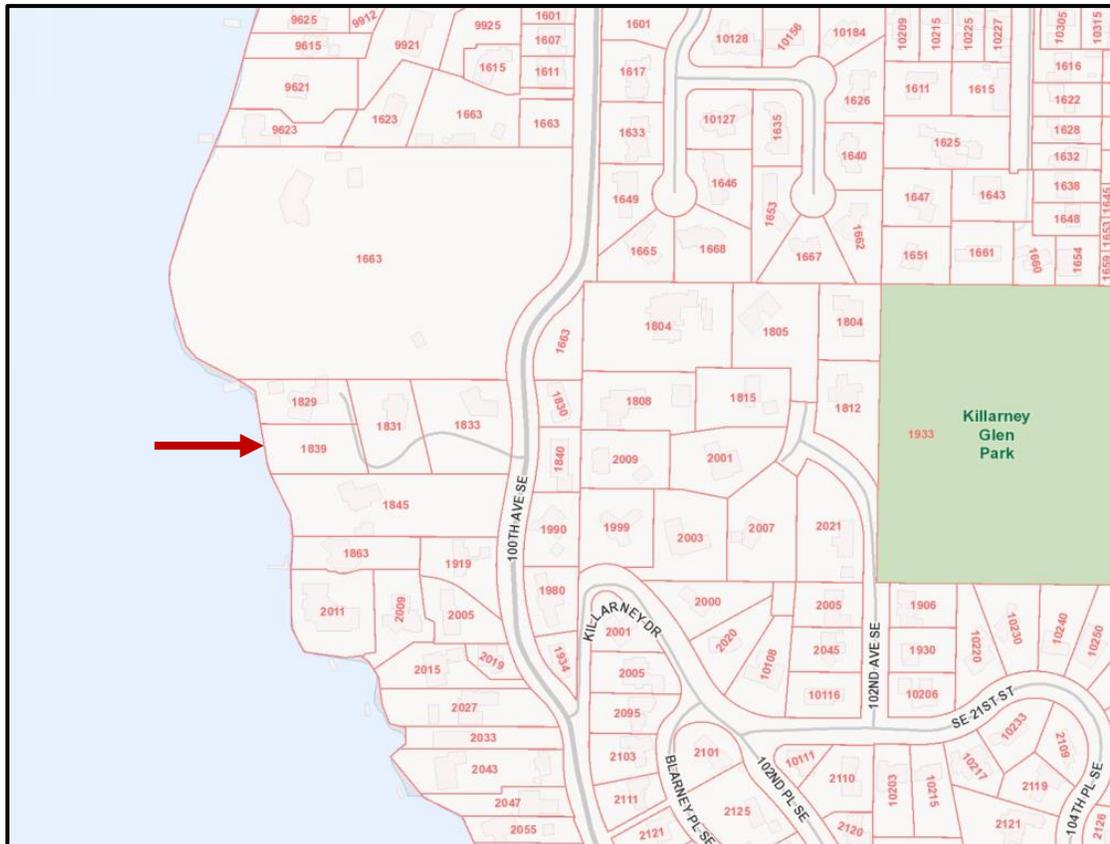
The proposed project is subject to the Shoreline Substantial Development Permit and SEPA requirements because the proposed work is within a shoreline of statewide significance. The provisions of the Shoreline and Critical Areas Overlay Districts apply.

II. Site Description, Zoning, Land Use and Critical Areas

A. Site Description and Land Use Context



The subject site is located in Southwest Bellevue subarea. Properties in the vicinity are generally developed with single family residences. The exceptions to single family residential development are the Bellevue City Parks of Chism Beach and Chesterfield as well as the privately held Sisters of Saint Joseph of Peace property. The neighborhood is characterized by mature trees and well maintained higher end properties.



B. Zoning

The property is zoned R-1.8 and is located within the Shoreline Overlay District per LUC 20.25E. Properties in the vicinity are also within the R-1.8 zoning district which is a single family low density residential zone that permits up to 1.8 dwelling units per acre.

C. Critical Area Functions

i. Shorelines

Shorelines provide a variety of functions including shade, temperature control, water purification, woody debris recruitment, channel, bank and beach erosion, sediment delivery, and terrestrial-based food supply (Gregory et al. 1991; Naiman et al. 1993; Spence et al. 1996). Shorelines provide a wide variety of functions related to aquatic and riparian habitat, flood control and water quality, economic resources, and recreation, among others. Each function is a product of physical, chemical, and biological processes at work within the overall landscape. In lakes, these processes take place within an integrated system (ecosystem) of coupled aquatic and riparian habitats (Schindler and Scheuerell 2002). Hence, it is important to have an ecosystem approach which incorporates an understanding of shoreline functions and values.

ii. Habitat Associated with Species of Local Importance

The increase in human settlement density and associated intensification of land use known as urbanization has a profound and lasting effect on the natural environment and wildlife habitat (McKinney 2002, Blair 2004, Marzluff 2005, Munns 2006), is a major cause of native species local extinctions (Czech et al 2000), and is likely to become the primary cause of extinctions in the coming century (Marzluff et al. 2001a). Cities are typically located along rivers, on coastlines, or near large bodies of water. The associated floodplains and riparian systems make up a relatively small percentage of land cover in the western United States, yet they provide habitat for rich wildlife communities (Knopf et al. 1988), which in turn provide a source for urban habitat patches or reserves. Consequently, urban areas can support rich wildlife communities. In fact, species richness peaks for some groups, including songbirds, at an intermediate level of development (Blair 1999, Marzluff 2005). Protected wild areas alone cannot be depended on to conserve wildlife species. Impacts from catastrophic events, environmental changes, and evolutionary processes (genetic drift, inbreeding, colonization) can be magnified when a taxonomic group or unit is confined to a specific area, and no one area or group of areas is likely to support the biological processes necessary to maintain biodiversity over a range of geographic scales (Shaughnessy and O'Neil 2001). As well, typological approaches to taxonomy or the use of indicators present the risk that evolutionary potential will be lost when depending on reserves for preservation (Rojas 2007). Urban habitat is a vital link in the process of wildlife conservation in the U.S.

Properties within the Shoreline and Critical Area Overlays are part of the city's shoreline master program and are classified as environmentally sensitive. The master

program recognizes the site as a shoreline residential environment subject to the provisions of the City's Shoreline Master Program as discussed below.

III. Consistency with Land Use Code Requirements:

A. Zoning District Dimensional Requirements:

The site is located in the R-1.8 zoning district. No structures above the ordinary high water mark are proposed – therefore the dimensional standards for the district do not apply.

B. Shoreline Master Program Requirements LUC 20.25E:

i. General Regulations Applicable to All Land Use Districts and Activities LUC 20.25E.080.B

a. Where applicable, all federal and state water quality and effluent standards shall be met.

The project will be constructed and operated consistent with applicable federal state and local regulations regarding water quality and effluent standards.

b. If a property extends into the Shoreline Overlay District, the Shoreline Master Program Policies and these use regulations shall apply only to that portion of the property lying within the Shoreline Overlay District.

The entire project is within Lake Washington and therefore, is entirely within the Shoreline Overlay District.

c. All development within the Shoreline Overlay District shall be accompanied by a plan indicating methods of preserving shoreline vegetation and for control of erosion during and following construction in accordance with Part 20.25H LUC, City of Bellevue Clearing and Grading regulations, Chapter 23.76 BCC, and the Comprehensive Plan.

As part of the building permit approval, the applicant will be required to prepare a Construction Stormwater Pollution Prevention Plan and a Temporary Erosion Sediment Control Plan to mitigate potential erosion during construction.

d. Special care shall be exercised to preserve vegetation in wetland, shoreline and stream corridor bank areas in order to prevent soil erosion. Removal of vegetation from or disturbance of shoreline critical areas and shoreline critical area buffers, and from other critical area and critical area buffers shall be prohibited, except in conformance with Part 20.25H LUC and the specific performance standards of this section.

No vegetation removal is proposed.

- e. **Maximum height limitation for any proposed structure within the Shoreline Overlay District shall be 35 feet, except in land use districts with more restrictive height limitations. The method of measuring the maximum height is described in WAC 173-14-030(6). Variances to this height limitation may be granted pursuant to Part 20.30H LUC.**

The proposed boat lift replacement and pier repair will not affect height 35-feet in height. The new personal watercraft will also not exceed the height maximum of 35 feet.

- f. **The Bellevue Shoreline Master Program, in conjunction with existing Bellevue land use ordinances and Comprehensive Plan policies, shall guide all land use decisions in the Shoreline Overlay District.**

The proposal is consistent with the Comprehensive Plan Policies that make up the city's Shoreline Master Program.

- g. **Any development within the Shoreline Overlay District shall comply with all applicable Bellevue ordinances, including but not limited to the Bellevue Land Use Code, Sign Code, and clearing and grading regulations.**

The proposal will be required to obtain a building permit. Approval and permit issuance will be verification of compliance with applicable regulations.

- h. **The dead storage of watercraft seaward of the ordinary high water mark of the shoreline is prohibited.**

No dead storage of watercraft is proposed.

- i. **Where applicable, state and federal standards for the use of herbicides, pesticides and/or fertilizers shall be met, unless superseded by City of Bellevue ordinances. Use of such substances in the shoreline critical area and shoreline critical area buffer shall comply with the City's "Environmental Best Management Practices."**

No herbicides, pesticides and/or fertilizers are proposed for use.

- j. **Adequate storm drainage and sewer facilities must be operational prior to construction of new development within the Shoreline Overlay District. Storm drainage facilities shall be separated from sewage disposal systems.**

No new development requiring storm or sewer drainage facilities is proposed.

ii. The project site is in the Shoreline Overlay District and is subject to the regulations regarding boat lifts and piers (Land Use Code (LUC) Section 20.25E.080.N).

a. Boat Lifts

- 1. The fill must be clean.**
- 2. The fill must contain rock or pre-cast concrete blocks.**
- 3. The fill must only be used to anchor the watercraft lift.**
- 4. The minimum amount of fill must be utilized to anchor the watercraft lift.**

No fill is proposed for the installation of the replacement boat lift or the dual jet ski lift. The proposed development conforms to the applicable Land Use Code regulations.

b. Piers - Repair

Proposals to repair legally established moorage facilities that do not meet the requirements of LUC 20.25E.080.N.1 require partial compliance with the requirements of LUC 20.25E.080.N.2.a.ii.

The proposed pier repair will replace more than 50 percent of the decking and the above water substructure within 30 feet waterward of the ordinary high water mark, and will require partial compliance under subsection N.2.a.ii. To meet these requirements, the proposal includes thru-flow grating of the entire deck surface of the pier.

IV. Public Notice and Comment

Date of Application:	August 19, 2014
Notice of Application:	September 18, 2014
Minimum Comment Period:	October 20, 2014

The Notice of Application for this project was published in the City of Bellevue weekly permit bulletin September 18, 2014. It was mailed to property owners within 500 feet of the project site. As of the writing this staff, report staff have received no comments in regards to this project.

V. Summary of Technical Reviews

Clearing and Grading:

The Clearing and Grading Division of the Development Services Department has reviewed the proposed development for compliance with Clearing and Grading codes and standards. The Clearing and Grading staff found no issues with the proposed development.

Utilities Department:

The public sewer main shall be shown on all construction plans. The plans shall note that the sewer main is “as located by COB waste water crew” and the date that the location was done.

Construction is not permitted within 5’ of the sewer main on the site. All equipment, barges, and anchors must be kept away from the sewer main during construction. **See Conditions of Approval in Section IX of this report**

VI. State Environmental Policy Act (SEPA)

The environmental review indicates no probability of significant adverse environmental impacts occurring as a result of the proposal. The Environmental Checklist submitted with the application adequately discloses expected environmental impacts associated with the project and is provided as an addendum to this staff report (Attachment A). The City codes and requirements, including the Clear and Grade Code, Utility Code, Land Use Code, Noise Ordinance, Building Code and other construction codes are expected to mitigate potential environmental impacts. Therefore, issuance of a Determination of Non-Significance (DNS) is the appropriate threshold determination under the State Environmental Policy Act (SEPA) requirements.

A. Earth and Water

Erosion and sediment control best management practices include the installation of a silt barrier around the work area to prevent migration of suspended sediment to the surrounding water column. The applicant will also be required perform turbidity monitoring during construction to ensure suspended sediment is contained to the work area. The applicant is also required to adhere to the City Environmental Best Management Practices related to the use of pesticides, insecticides, and fertilizers to avoid impacts to water resources. **See Conditions of Approval in Section IX of this report**

B. Animals

Adult and juvenile chinook salmon and steelhead trout (listed as Threatened under the Federal Endangered Species Act) migrate through Lake Washington. Lake Washington also contains coho salmon (Species of Concern under the Federal Endangered Species Act). Lake Washington potentially contains bull trout, a salmonid listed as Threatened under the Federal Endangered Species Act. These fish species and their habitat will be protected during the project construction through timing of the work to occur in the water. All work will occur within the construction window established by state and federal agencies to minimize or avoid impacts to fish and wildlife. **See Conditions of Approval in Section IX of this report**

C. Plants

No plants are proposed for removal as part of the current proposal. The applicant is

proposing approximately 100 square feet of native shoreline plantings.

D. Noise

The site is adjacent to single-family residences whose residents are most sensitive to disturbance from noise during evening, late night and weekend hours when they are likely to be at home. Construction noise will be limited by the City's Noise Ordinance (Chapter 9.18 BCC) which regulates construction hours and noise levels. **See Conditions of Approval in Section IX of this report**

VII. Decision Criteria

A. Shoreline Substantial Development Permit Decision Criteria 20.30R

The Director of Planning and Community Development may approve or approve with modifications if:

- 1. The applicant has carried the burden of proof and produced evidence sufficient to support the conclusion that the application merits approval or approval with modifications; and**

Finding: The applicant has carried the burden of proof and provided evidence sufficient to approve the project.

- 2. The applicant has demonstrated that the proposal complies with the applicable decision criteria of the Bellevue City Code; and**

Finding: As identified in Section III of this report the applicant has submitted project plans that demonstrate the proposal's compliance with the applicable City of Bellevue Codes and Standards.

- 3. The applicant has demonstrated that the proposal is consistent with the policies and procedures of the Shoreline Management Act and the provisions of Chapter 173-14 WAC and the Master Program.**

Finding: The applicant's proposal is consistent with the following policies and has demonstrated compliance with the applicable procedures through this application. The subject proposal is compatible with existing and project land uses.

Specifically the proposal is consistent with the following:

RCW 90.58.020 Legislative findings-State policy enunciated-Use preference.

WAC 173-26-176 General policy goals of the act and guidelines for shorelines of the state.

City of Bellevue Comprehensive Plan POLICY SH-16. Discourage structures using materials which have significant adverse physical or chemical effects on water quality, vegetation, fish, and wildlife in or near the water.

The boat lift, jet ski lift, and pier are associated with a single family residential use and are for water dependent recreational activities. As proposed pier the will be repaired with materials suitable for construction in water and will not have an adverse effect on water quality, vegetation, fish, and wildlife in or near the water. With the native planting, spawning gravel, and flow through grating water quality, native vegetation, and habitat will be improved.

VIII. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, SEPA, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the replacement of the existing boat lift; the installation of a dual jet ski lift; repair of the existing pier; and the associated mitigation. Revision to of this approval shall be in accordance with LUC 20.30R.190.

Note- Expiration of Approval: In accordance with LUC 20.30R.175, a Shoreline Substantial Development Permit automatically expires and is void if the applicant fails to file for a building permit and fails to make substantial progress towards completion of the project within two years of the effective date of the Shoreline Substantial Development Permit unless the applicant has received an extension for the Shoreline Substantial Development Permit pursuant to LUC 20.30R.180.

IX. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

<u>Applicable Ordinances</u>	<u>Contact Person</u>
Clearing and Grading Code- BCC 23.76	Janney Gwo, 425-452-6190
Utilities Code	Mark Frazier 425-452-2022
Land Use Code- BCC 20.25H	David Wong, 425-452-4282
Noise Control- BCC 9.18	David Wong, 425-452-4282

The following conditions are imposed under the Bellevue City Code or SEPA authority referenced:

1. Building Permit Required

Approval of this Shoreline Substantial Development Permit does not constitute an approval of a development permit. Application for a building permit or other required permits must be submitted and approved. Plans submitted as part of either permit application shall be consistent with the activity permitted under this approval. Future work on the property may be subject to further shoreline permit requirements.

Authority: Land Use Code 20.30R.155
Reviewer: David Wong, Development Services Department

2. State Permits Required

Prior to the issuance of the required building permit, the applicant shall produce evidence of receipt of required state permits for the proposed pier.

Authority: Land Use Code 20.30R.155
Reviewer: David Wong, Land Use

3. Lake Washington Allowed In-Water Work Windows

To protect habitat associated with migrating anadromous fish within Lake Washington, the pier replacement approved by this permit shall only be allowed to occur between the following dates:

- July 16 – April 30

Any deviation from this approved schedule must be approved in writing from the Washington Department of Fish and Wildlife.

Authority: Land Use Code 20.25H.160
Reviewer: David Wong, Land Use

4. Noise Control

Noise related to construction is exempt from the provisions of BCC 9.18 between the hours of 7 am to 6 pm Monday through Friday and 9 am to 6 pm on Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Noise emanating from construction is prohibited on Sundays or legal holidays unless expanded hours of operation are specifically authorized in advance. Requests for construction hour extension must be done in advance with submittal of a construction noise expanded exempt hours permit.

Authority: Bellevue City Code 9.18
Reviewer: David Wong, Land Use

5. Sewer Main Location

The public sewer main shall be shown on all demolition and construction plans. The plans shall note that the sewer main is “as located by COB waste water crew” and the date that the location was done.

Authority: Sanitary Sewer Engineering Standards
Reviewer: Mark Frazier, Utilities Department

6. Construction Setback from Sewer

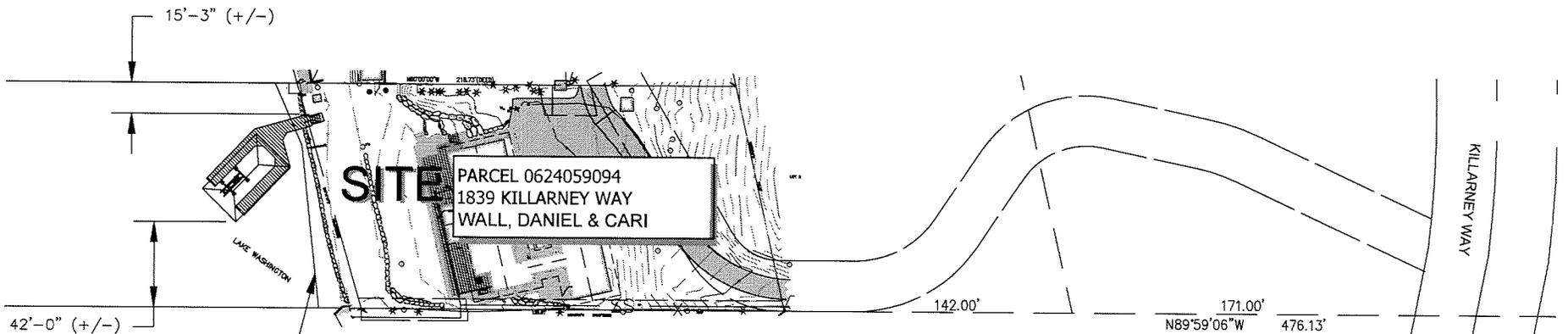
Construction is not permitted within 5' of the sewer main on the site. All equipment, barges, and anchors must be kept away from the sewer main during construction.

Authority: Sanitary Sewer Engineering Standards
Reviewer: Mark Frazier, Utilities Department

7. Land Use Inspection

To ensure planting plan has been installed in accordance with approved plans (see Attachment B) the applicant must call for and obtain an inspection from a Land Use Planner from the City of Bellevue, following installation of vegetation. This inspection is listed as a #600 land use inspection on the approved building permit.

Authority: Land Use Code 20.25E.080.B
Reviewer: David Wong, Land Use Division



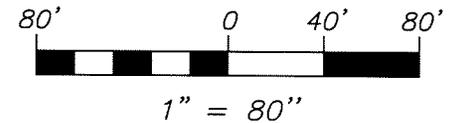
SEWER LOCATION OBTAINED FROM FIELD MEASUREMENTS. SEWER WAS MARKED FROM A PREVIOUS LOCATE REQUEST. FIELD LOCATED ON 7/23/14

EXISTING SITE PLAN

SCALE: 1" = 80'



GRAPHIC SCALE



NOTE:
 Property information for this site was obtained from a survey and a quarter section. Marine Restoration & Construction LLC has added information from other sources including field measurements and aerial photos. We are not surveyors and can not guarantee great level of accuracy.



MARINE RESTORATION & CONSTRUCTION LLC

MAIL: P.O. BOX 884, Kirkland, WA 98083 - 0884

PHONE: (425) 576-8661

E-MAIL: INFO@MARINELLC.COM

FAX: (425) 576-8669

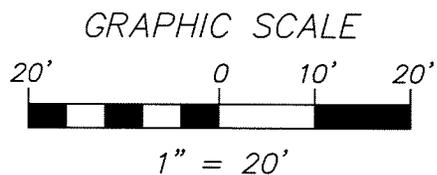
THIS DRAWING IS PROPERTY OF MARINE RESTORATION & CONSTRUCTION LLC AND MAY NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT

N90

SEWER LOCATION OBTAINED FROM FIELD MEASUREMENTS. SEWER WAS MARKED FROM A PREVIOUS LOCATE REQUEST. FIELD LOCATED ON 7/24/14.

EXISTING BOATLIFT IN 10'-9" (+/-) WATER DEPTH ON THE LANDWARD SIDE

EXISTING 38' X 23'-3" ROOF TO REMAIN UNCHANGED



NOTE:

Property information for this site was obtained from a survey and a quarter section. Marine Restoration & Construction LLC has added information from other sources including field measurements and aerial photos. We are not surveyors and can not guarantee great level of accuracy.

EXISTING PLAN VIEW

SCALE: 1" = 20'

PLOT DATE: 5 September 2014



MARINE RESTORATION & CONSTRUCTION LLC

MAIL: P.O. BOX 884, Kirkland, WA 98083 - 0884

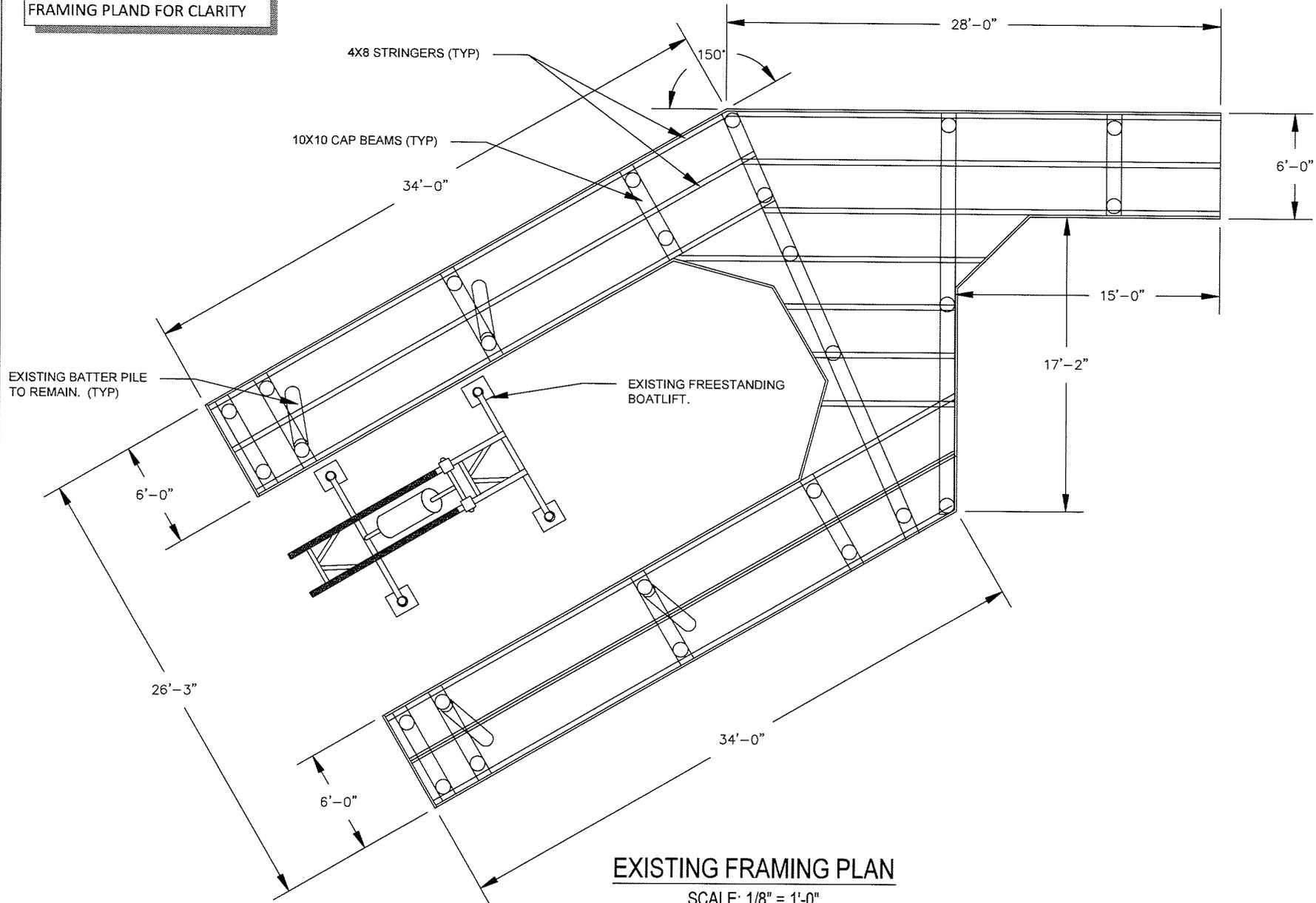
PHONE: (425) 576-8661

FAX: (425) 576-8669

E-MAIL: INFO@MARINELLC.COM

THIS DRAWING IS PROPERTY OF MARINE RESTORATION & CONSTRUCTION LLC AND MAY NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT

NOTE:
ROOF OMITTED FROM
FRAMING PLAND FOR CLARITY



EXISTING FRAMING PLAN

SCALE: 1/8" = 1'-0"

PLOT DATE: 5 September 2014



MARINE RESTORATION & CONSTRUCTION LLC

MAIL: P.O. BOX 884, Kirkland, WA 98083 - 0884

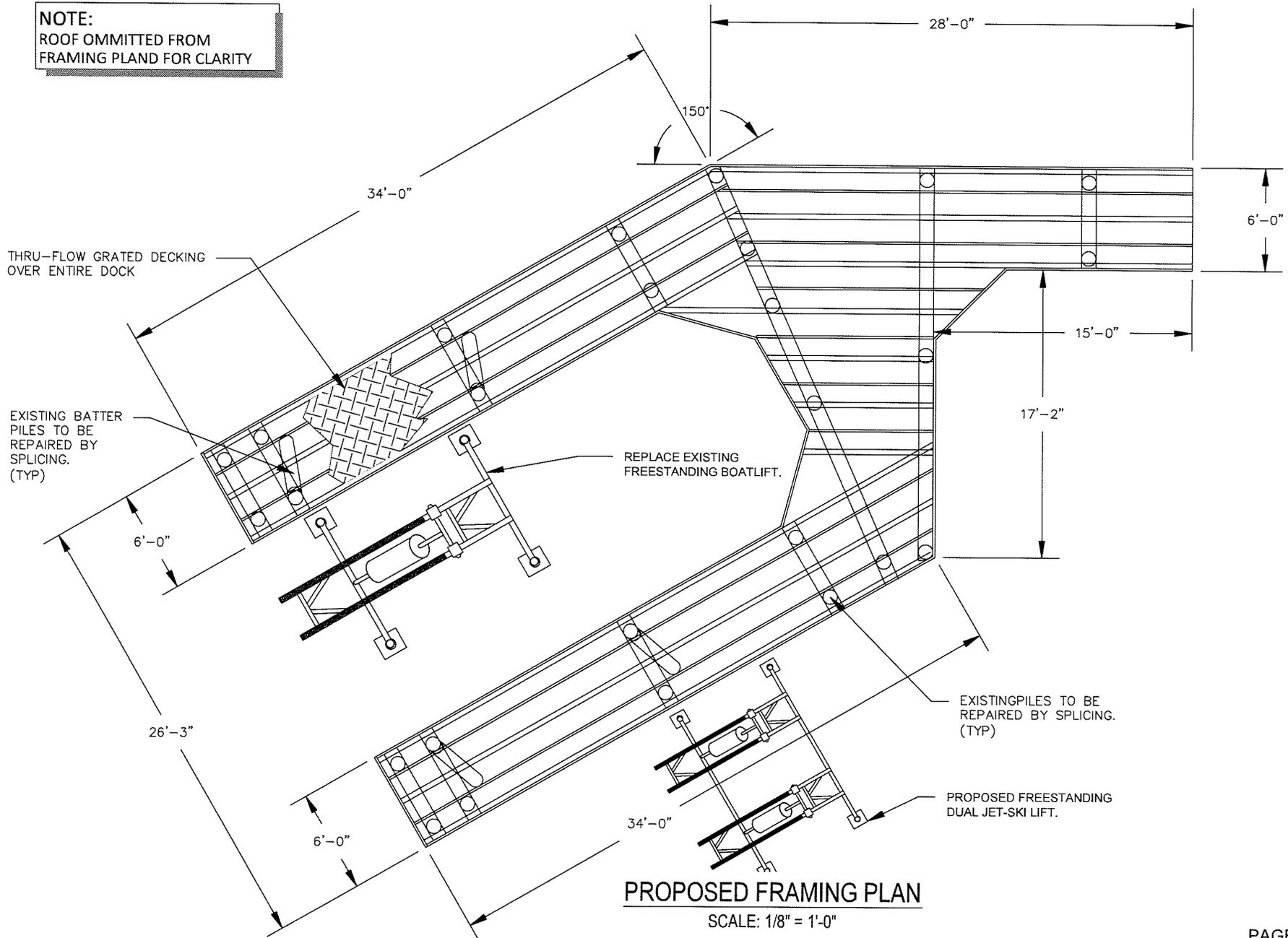
PHONE: (425) 576-8661

FAX: (425) 576-8669

E-MAIL: INFO@MARINELLC.COM

THIS DRAWING IS PROPERTY OF MARINE RESTORATION & CONSTRUCTION LLC AND MAY NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT

NOTE:
ROOF OMITTED FROM
FRAMING PLAN FOR CLARITY



PROPOSED FRAMING PLAN

SCALE: 1/8" = 1'-0"



MARINE RESTORATION & CONSTRUCTION LLC

MAIL: P.O. BOX 884, Kirkland, WA 98083 - 0884

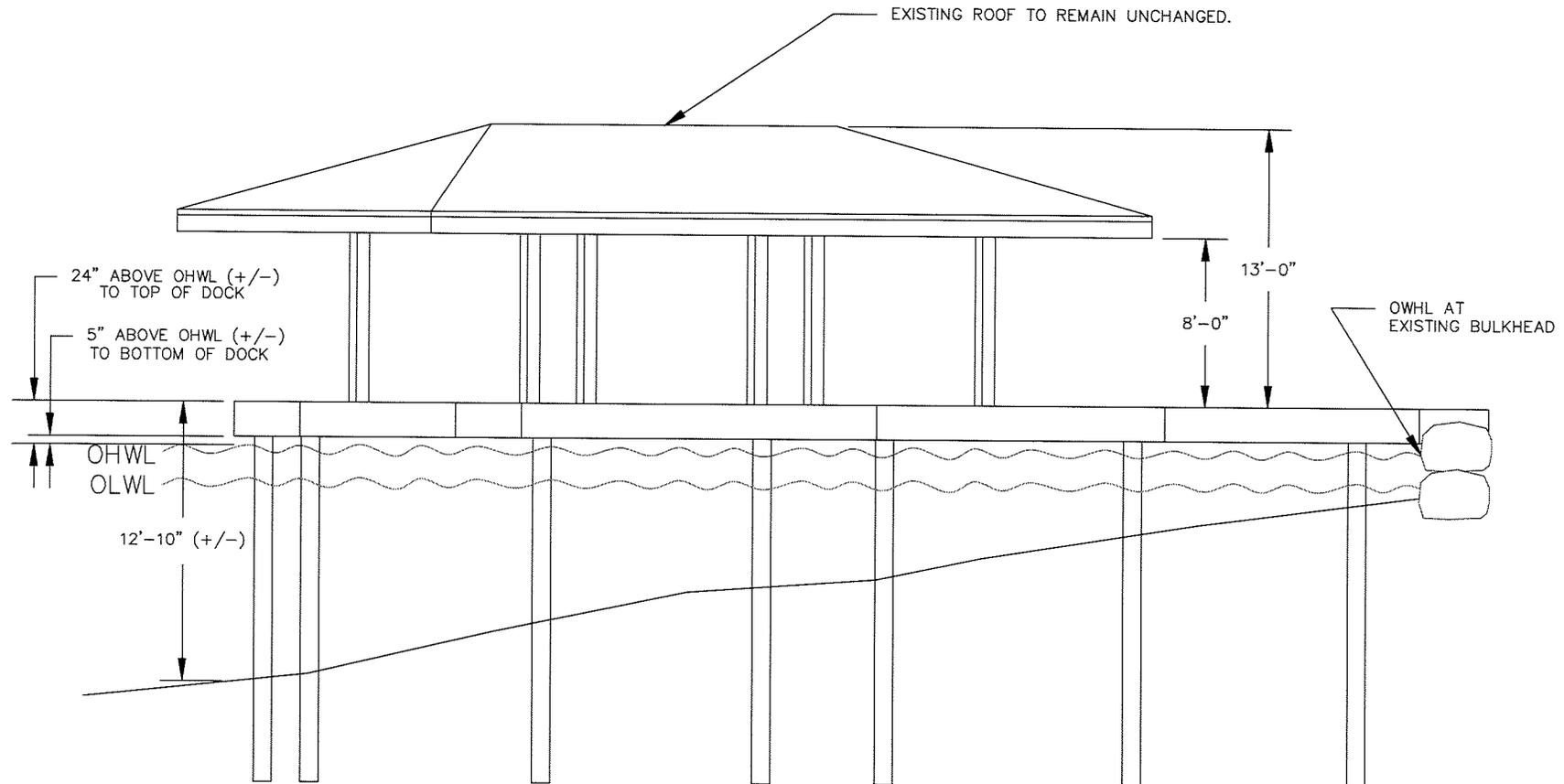
PHONE: (425) 576-8661

E-MAIL: INFO@MARINELLC.COM

FAX: (425) 576-8669

THIS DRAWING IS PROPERTY OF MARINE RESTORATION & CONSTRUCTION LLC AND MAY NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT

NOTE:
LIFTS OMITTED FROM
ELEVATION FOR CLARITY



EXISTING ELEVATION PLAN

SCALE: 1/8" = 1'-0"



MARINE RESTORATION & CONSTRUCTION LLC

MAIL: P.O. BOX 884, Kirkland, WA 98083 - 0884

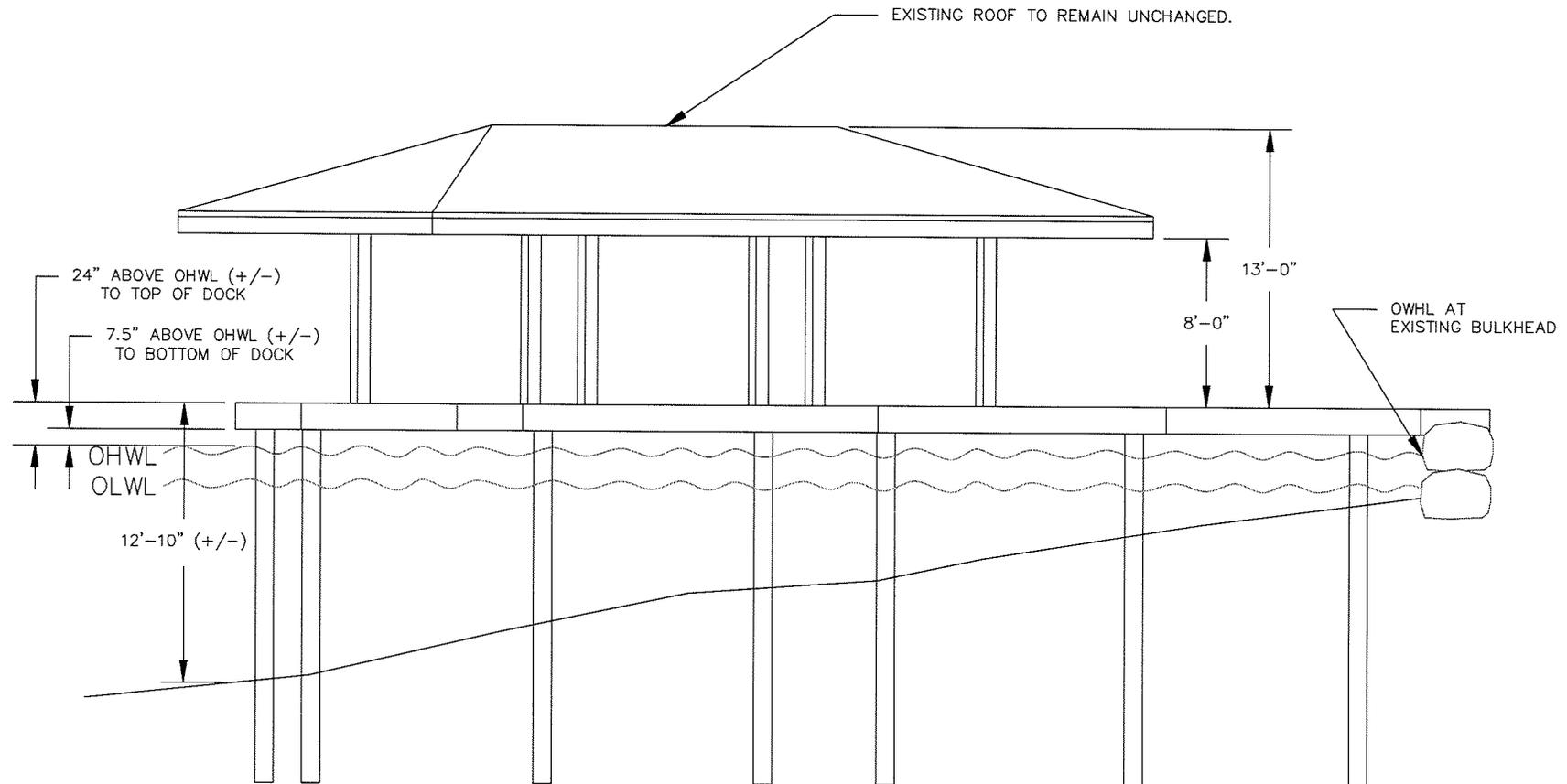
PHONE: (425) 576-8661

FAX: (425) 576-8669

E-MAIL: INFO@MARINELLC.COM

THIS DRAWING IS PROPERTY OF MARINE RESTORATION & CONSTRUCTION LLC AND MAY NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT

NOTE:
LIFTS OMITTED FROM
ELEVATION FOR CLARITY



PROPOSED ELEVATION PLAN

SCALE: 1/8" = 1'-0"



MARINE RESTORATION & CONSTRUCTION LLC

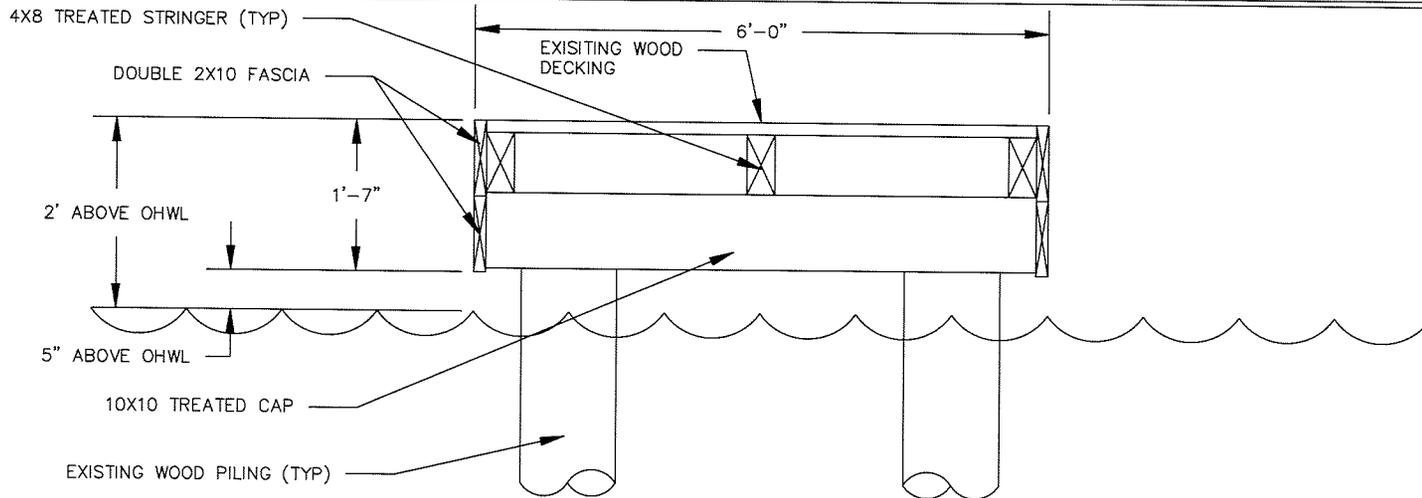
MAIL: P.O. BOX 884, Kirkland, WA 98083 - 0884

PHONE: (425) 576-8661

FAX: (425) 576-8669

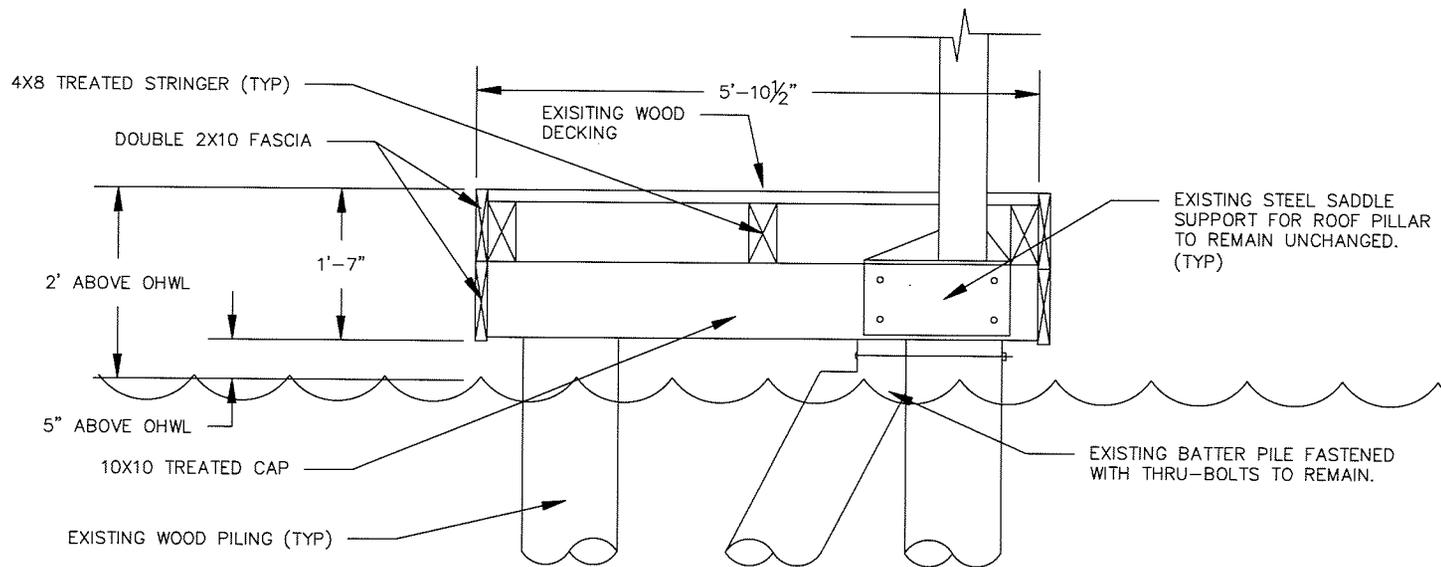
E-MAIL: INFO@MARINELLC.COM

THIS DRAWING IS PROPERTY OF MARINE RESTORATION & CONSTRUCTION LLC AND MAY NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT



EXISTING DOCK SECTION

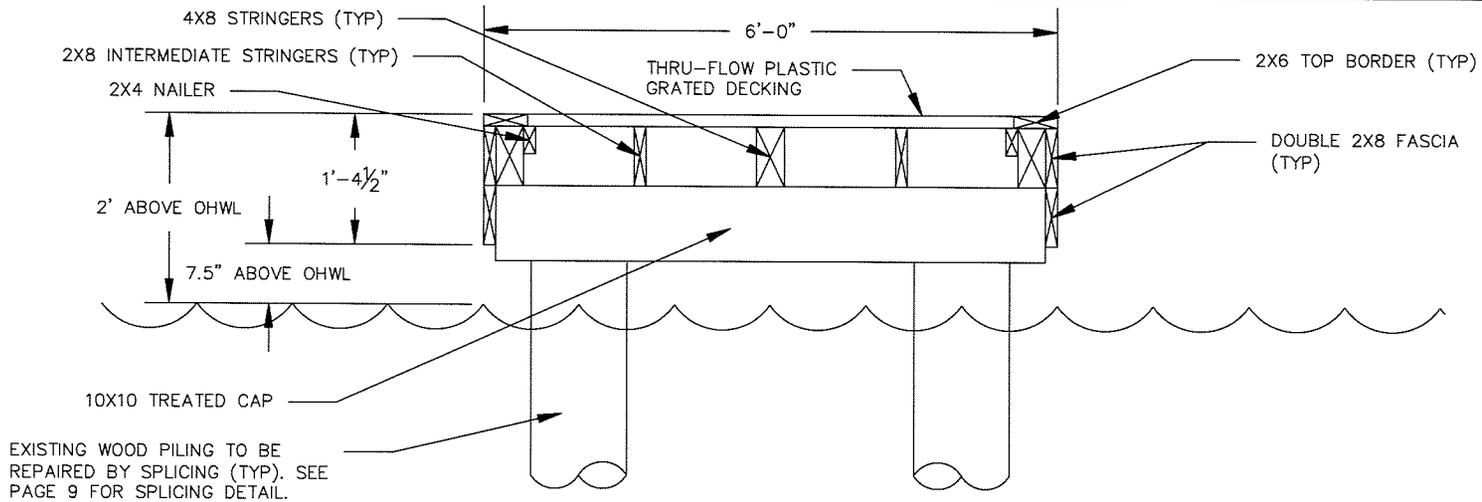
SCALE: 1/2" = 1'-0"



EXISTING DOCK SECTION

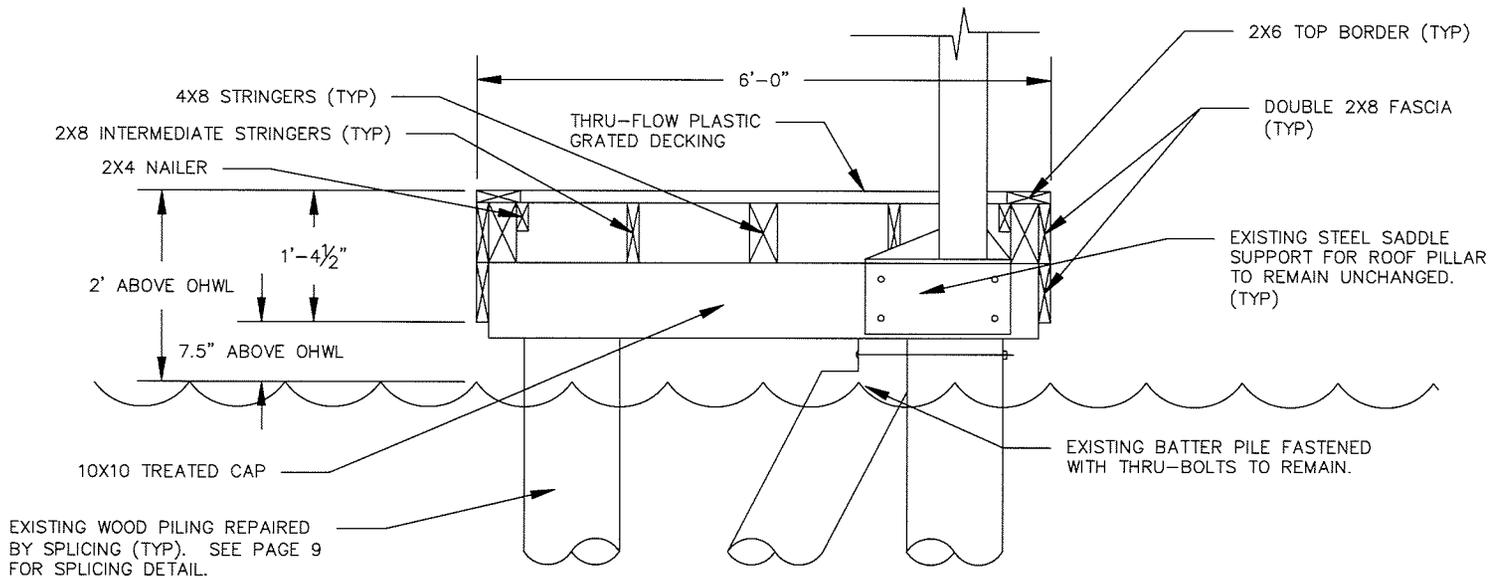
SCALE: 1/2" = 1'-0"





PROPOSED DOCK SECTION

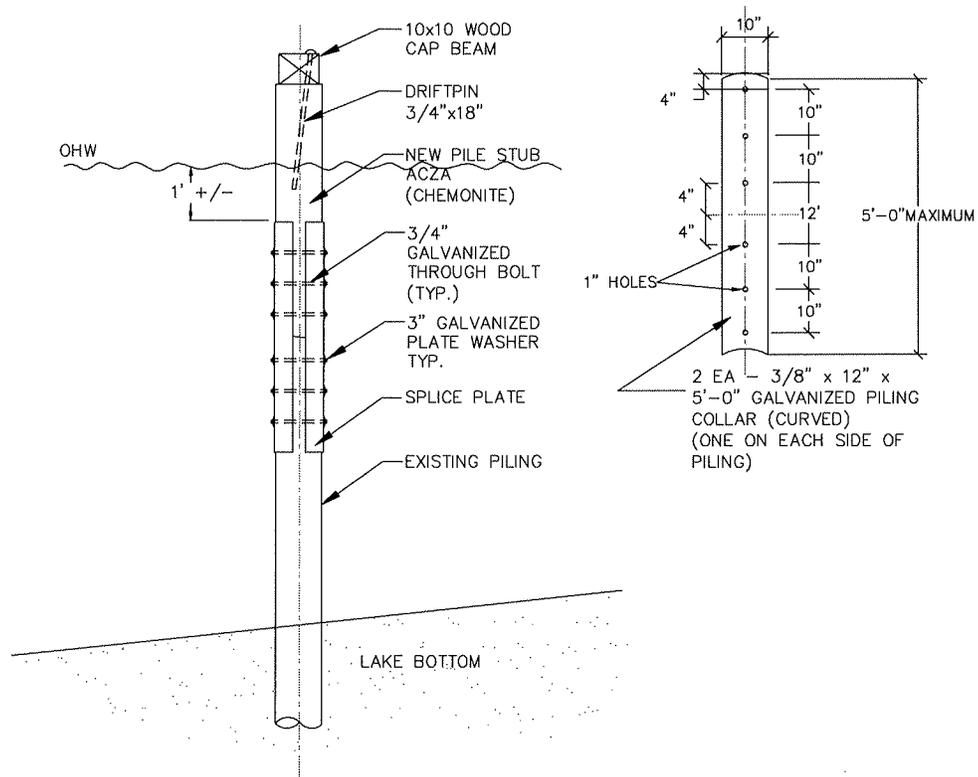
SCALE: 1/2" = 1'-0"



PROPOSED DOCK SECTION

SCALE: 1/2" = 1'-0"



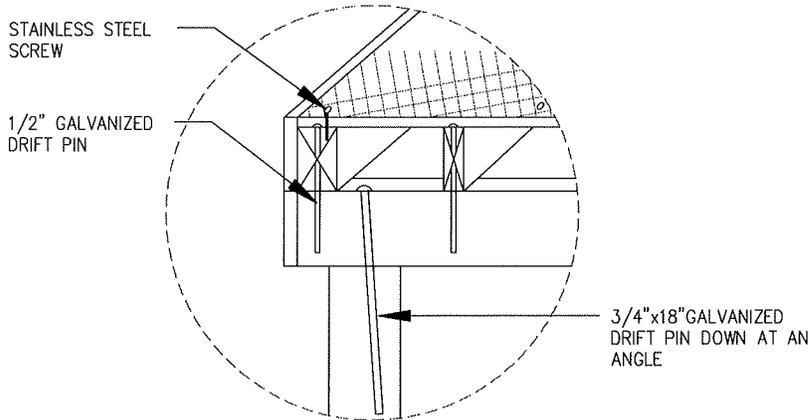


STANDARD PILING SPLICING METHOD:

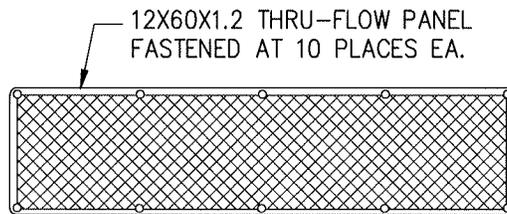
LOCATE POINT ON PILING BELOW ANY DETERIORATION OR ROT. CUT OFF PILING USING PNEUMATIC AIR SAW. CUT NEW PILING LENGTH (STUB) TO FIT IN. PLACE STUB IN PLACE WITH A SPLICE PLATE AND THRU BOLT USING GALVANIZED THRU BOLTS. SPLICE TO BE DONE APPROX 1' BELOW O.H.W. DRILLING TO BE DONE WITH A PNEUMATIC DRILL. LAKE BOTTOM TO REMAIN UNDISTURBED IN ALL CASES.

PILING SPLICE PLATES TO BE MADE OF 3/8" X 10" X 5" GALVANIZED STEEL PIPE AND THROUGH BOLTED WITH 3/4" GALVANIZED STEEL THROUGH BOLTS, NUTS, AND PLATE WASHERS.





CONNECTION DETAIL
N.T.S.



60" THRU-FLOW GRATED PANEL
N.T.S.



2" MINUS SPAWNING GRAVEL
 PLACED IN ON TOP OF A LAYER
 OF 3" COBBLES PLACED IN FRONT OF
 ENTIRE BULKHEAD.

2-3 MAN ROCKS

3-4 MAN ROCKS

PROPOSED 35 LINEAR FEET (+/-)
 OF THE EXISTING ROCK
 BULKHEAD REMOVED AND
 REPLACED WITH ROCK
 TERRACING (16' +/-) TO
 CREATE AN EMBAYMENT
 AND POCKET BEACH.

SEWER LOCATION OBTAINED
 FROM FIELD MEASUREMENTS.
 SEWER WAS MARKED FROM A
 PREVIOUS LOCATE REQUEST.
 FIELD LOCATED ON 7/23/14

PROPOSED ROCK STEPS



MARINE RESTORATION & CONSTRUCTION LLC

MAIL: P.O. BOX 884, Kirkland, WA 98083 - 0884

PHONE: (425) 576-8661

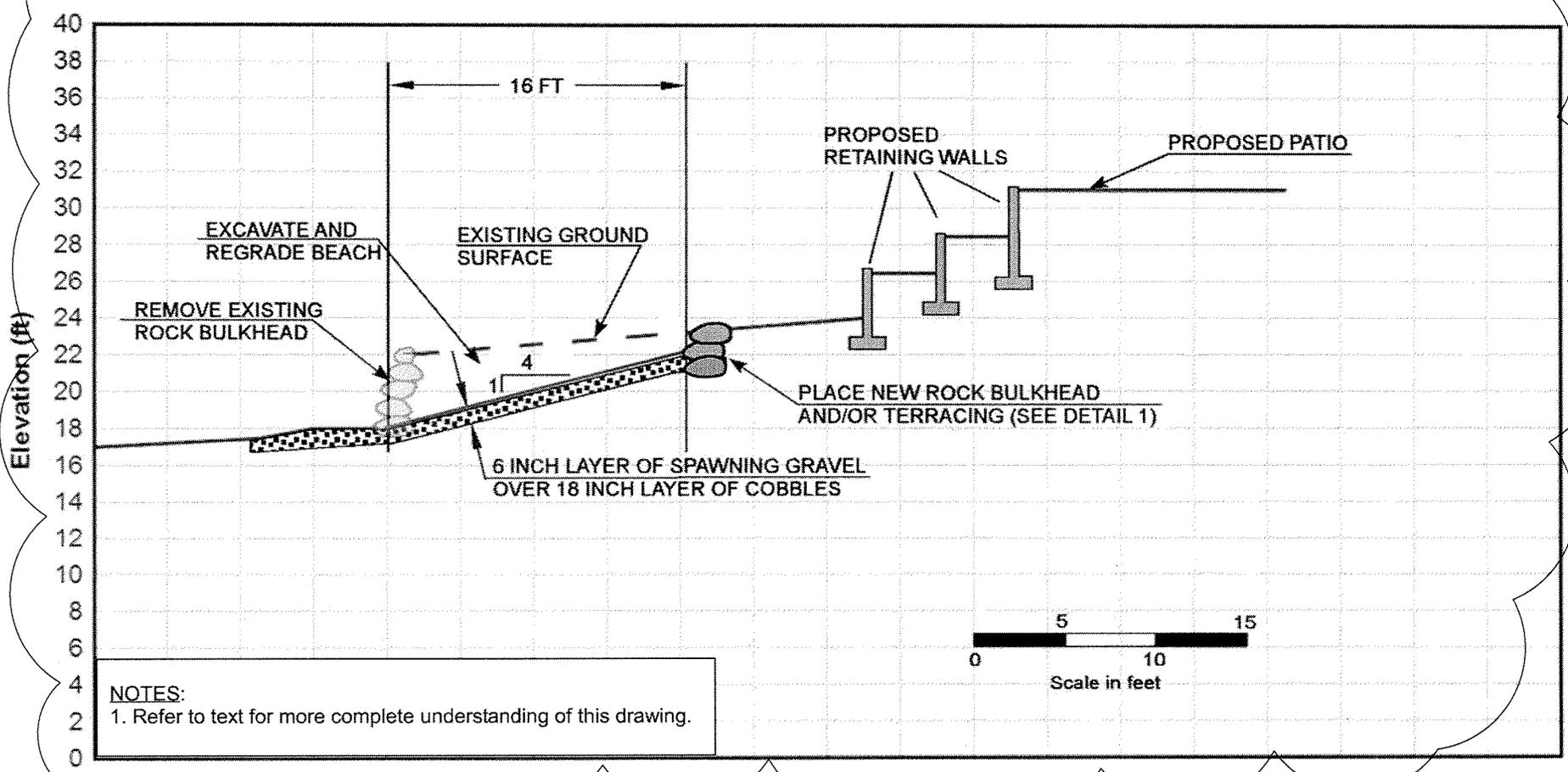
FAX: (425) 576-8669

E-MAIL: INFO@MARINELLC.COM

THIS DRAWING IS PROPERTY OF MARINE RESTORATION & CONSTRUCTION LLC AND MAY NOT BE
 COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT

**A
WEST**

**A'
EAST**



NOTES:
 1. Refer to text for more complete understanding of this drawing.

NOTE:
 PERRONE CONSULTING, INC DESIGNED THE COVE. MARINE RESTORATION & CONSTRUCTION LLC CANNOT BE HELD RESPONSIBLE FOR COVE DESIGN ASPECTS.

COVE DESIGNED BY:  **PERRONE CONSULTING, INC., P.S.**
 Project No. 13102

PROPOSED COVE SECTION
ELEVATION
 SCALE: NTS



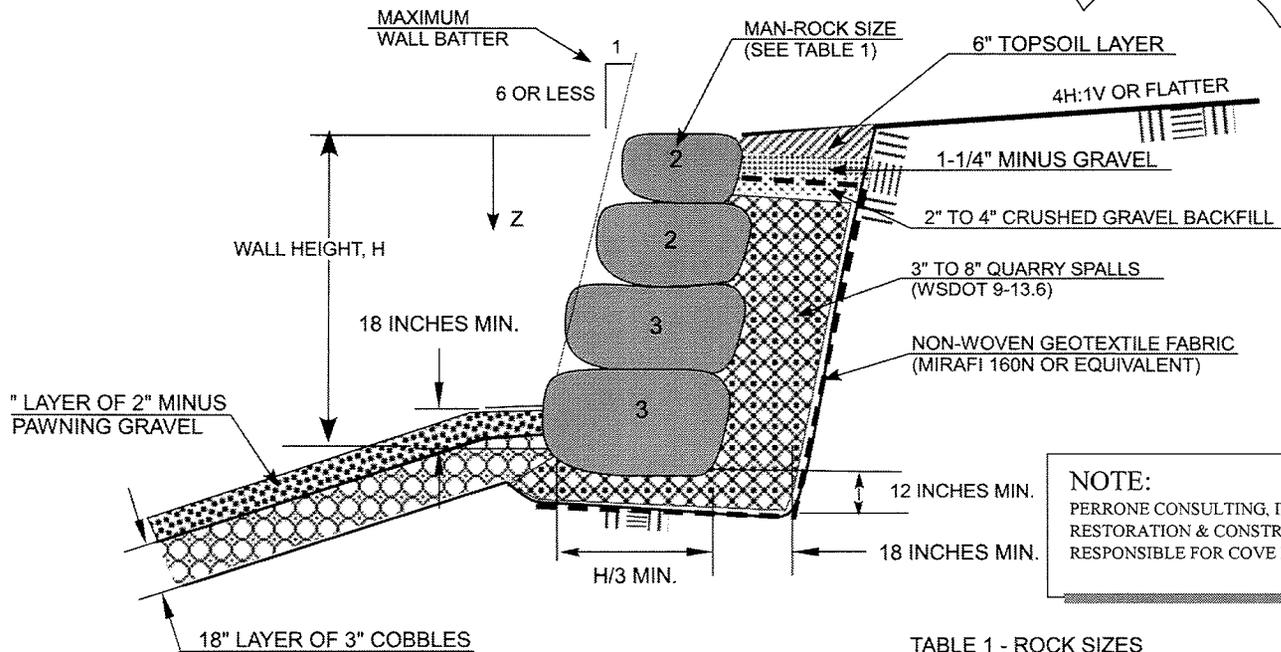
MARINE RESTORATION & CONSTRUCTION LLC

MAIL: P.O. BOX 884, Kirkland, WA 98083 - 0884

PHONE: (425) 576-8661
 FAX: (425) 576-8669

E-MAIL: INFO@MARINELLC.COM

THIS DRAWING IS PROPERTY OF MARINE RESTORATION & CONSTRUCTION LLC AND MAY NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT



NOTE:
 PERRONE CONSULTING, INC DESIGNED THE COVE. MARINE RESTORATION & CONSTRUCTION LLC CANNOT BE HELD RESPONSIBLE FOR COVE DESIGN ASPECTS.

- NOTES:**
1. Drawing is schematic only. Not drawn to scale.
 2. Refer to text for more complete understanding of this drawing.
 3. Temporary excavations should be shaped to maintain a stable slope.

TABLE 1 - ROCK SIZES

H (ft)	Z (ft)	Minimum Man-Rock Size
< 3	0 to 3	2
3 to 6	0 to <3 3 to 6	2 3

DETAIL 1 - ROCK BULKHEAD AND TERRACING

COVE DESIGNED BY:  **PERRONE CONSULTING, INC., P.S.**
 Project No. 13102



MARINE RESTORATION & CONSTRUCTION LLC

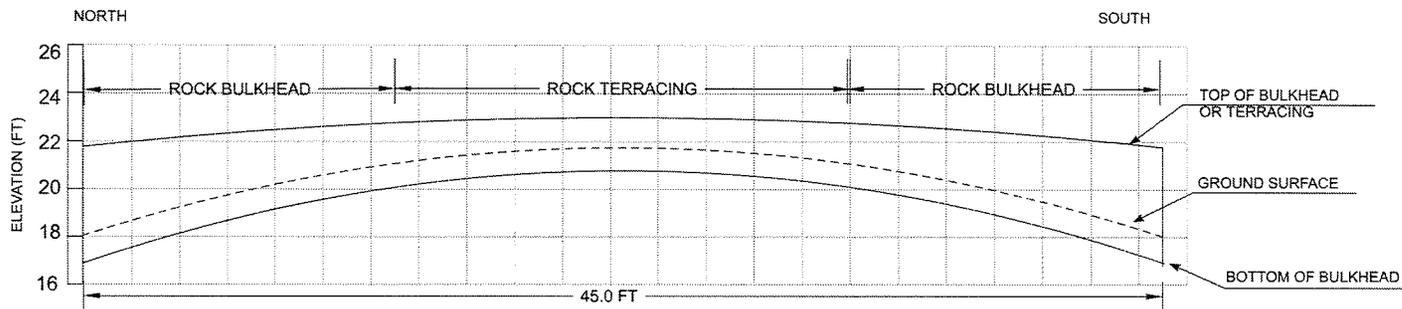
MAIL: P.O. BOX 884, Kirkland, WA 98083 - 0884

PHONE: (425) 576-8661

FAX: (425) 576-8669

E-MAIL: INFO@MARINELLC.COM

THIS DRAWING IS PROPERTY OF MARINE RESTORATION & CONSTRUCTION LLC AND MAY NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN CONSENT



ROCK BULKHEAD & TERRACING PROFILE

COVE DESIGNED BY:  **PERRONE CONSULTING, INC., P.S.**
Project No. 13102

NOTE:
PERRONE CONSULTING, INC DESIGNED THE COVE. MARINE RESTORATION & CONSTRUCTION LLC CANNOT BE HELD RESPONSIBLE FOR COVE DESIGN ASPECTS.



PROPOSED MITIGATION PLAN

SCALE: 1" = 20'

2" MINUS SPAWNING GRAVEL AND COBBLES PLACED IN FRONT OF THE EXISTING BULKHEAD (UP TO 70 CUBIC YARDS OF COBBLES AND 40 CUBIC YARDS OF SPAWNING GRAVEL).

GRATE ENTIRE SURFACE OF THE DOCK (582 SQ. FT)

SANITARY SEWER CLEANOUT UNDER DOCK & 1/2' ABOVE LAKE BOTTOM - 3" DIA' EL=18.5

CONC STEPS

STORM DRAIN CULVERT 8" PVC IE=18.7 (OUT)

SEWER LOCATION OBTAINED FROM FIELD MEASUREMENTS. SEWER WAS MARKED FROM A PREVIOUS LOCATE REQUEST. FIELD MEASURED ON 7/23/14.

PROPOSED 35 (+/-) LINEAR FEET OF THE EXISTING ROCK BULKHEAD REMOVED AND REPLACED WITH ROCK TERRACING TO CREATE AN EMBAYMENT AND POCKET BEACH.

PLANTING SCHEDULE:

TYPE:	SPACING:	QTY:	SIZE:	SYMBOL:
THUJA PLICATA WESTERN RED CEDAR	10' O.C.	7	5 GAL.	TP
ACER CIRCINATUM VINE MAPLE	6' O.C.	1	5 GAL.	AC
CORNUS SERICEA RED OSIER DOGWOOD	3' O.C.	21	1 GAL.	C
CAULThERIA SHALLON SALAL	2' O.C.	93	1 GAL.	[Grid Pattern]
MAHONIA AQUIFOLIUM TALL OREGON GRAPE	4' O.C.	25	2 GAL.	M
RIBES SANGUINEUM RED CURRENT	3' O.C.	5	2-5 GAL.	S
VACCINIUM OVATIM EVERGREEN HUCKLEBERRY	2' O.C.	39	2 GAL.	V
ARCTOSTAPHYLOS UVA-URSI KINNIKINICK	3' O.C.	41	1 GAL.	[Diagonal Lines]

OTHER MITIGATION:

COVE CONSTRUCTION: AN APPROXIMATELY 35 FOOT LONG SECTION OF THE EXISTING ROCK BULKHEAD WILL BE REMOVED AND REPLACED WITH ROCK TERRACING TO CREATE AN EMBAYMENT AND POCKET BEACH.

SPAWNING GRAVEL: UP TO 40 CUBIC YARDS OF 2" MINUS SPAWNING GRAVEL IS PROPOSED.

DOCK GRATING: THE WOOD DECKING (582 SQ. FT.) OF THE EXISTING PIER IS TO BE REPLACED WITH THRU-FLOW PLASTIC GRATED DECKING.

NOTE:
COVE AND PLANTING PLAN BY:

Altmann Oliver Associates, LLC
PO Box 578
Carnation, WA 98014

