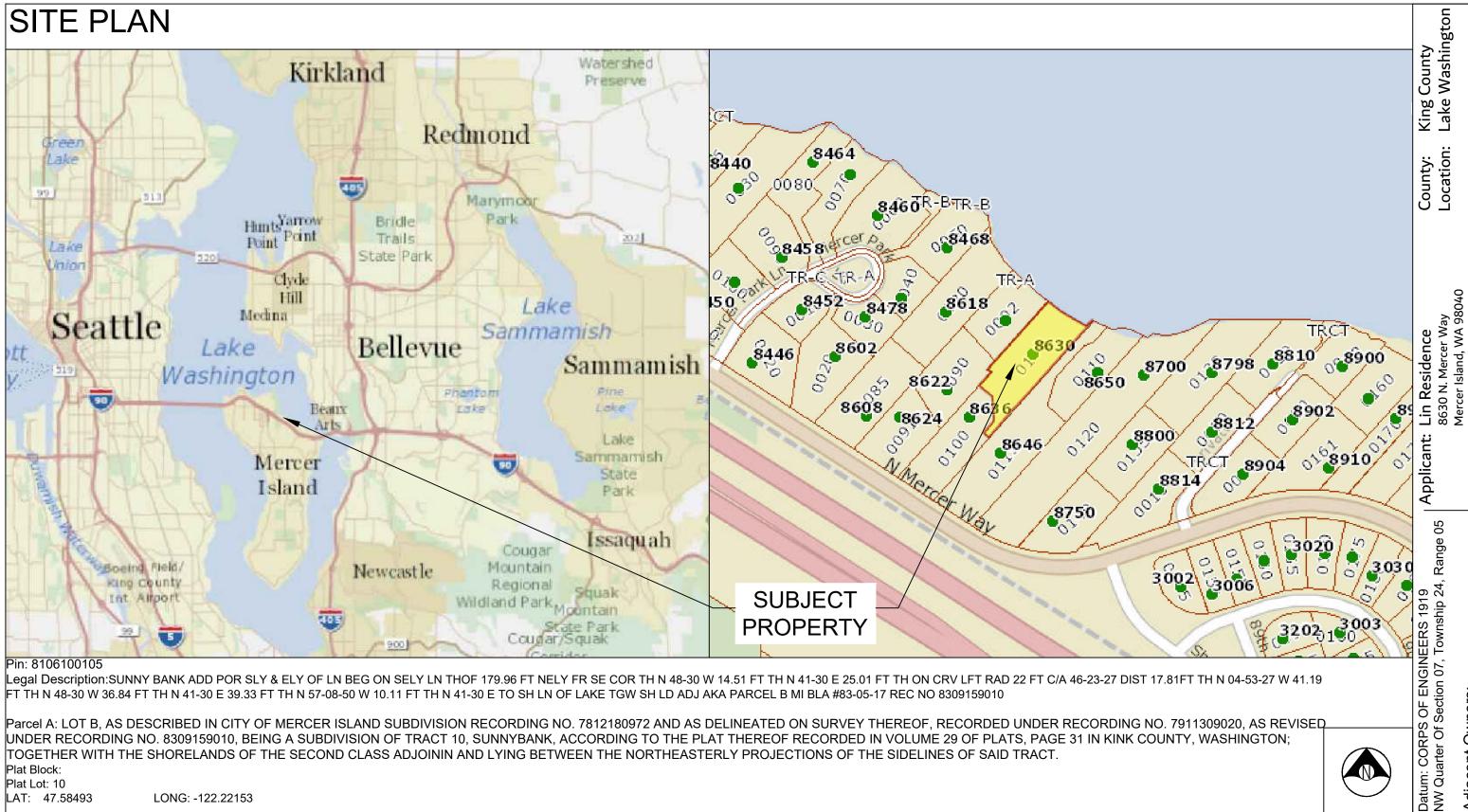
SITE PLAN



Legal Description:SUNNY BANK ADD POR SLY & ELY OF LN BEG ON SELY LN THOF 179.96 FT NELY FR SE COR TH N 48-30 W 14.51 FT TH N 41-30 E 25.01 FT TH ON CRV LFT RAD 22 FT C/A 46-23-27 DIST 17.81FT TH N 04-53-27 W 41.19 FT TH N 48-30 W 36.84 FT TH N 41-30 E 39.33 FT TH N 57-08-50 W 10.11 FT TH N 41-30 E TO SH LN OF LAKE TGW SH LD ADJ AKA PARCEL B MI BLA #83-05-17 REC NO 8309159010

Parcel A: LOT B, AS DESCRIBED IN CITY OF MERCER ISLAND SUBDIVISION RECORDING NO. 7812180972 AND AS DELINEATED ON SURVEY THEREOF, RECORDED UNDER RECORDING NO. 7911309020, AS REVISED UNDER RECORDING NO. 8309159010, BEING A SUBDIVISION OF TRACT 10, SUNNYBANK, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 29 OF PLATS, PAGE 31 IN KINK COUNTY, WASHINGTON; TOGETHER WITH THE SHORELANDS OF THE SECOND CLASS ADJOININ AND LYING BETWEEN THE NORTHEASTERLY PROJECTIONS OF THE SIDELINES OF SAID TRACT.

Plat Block: Plat Lot: 10

LAT: 47.58493 LONG: -122.22153



ESTD 1947

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 install (18) new 8" steel piles, permit (1) existing PWC lift, a walkway & extension with grated decking material. We will also install a platform lift, a boat lift and a dual jetski lift.

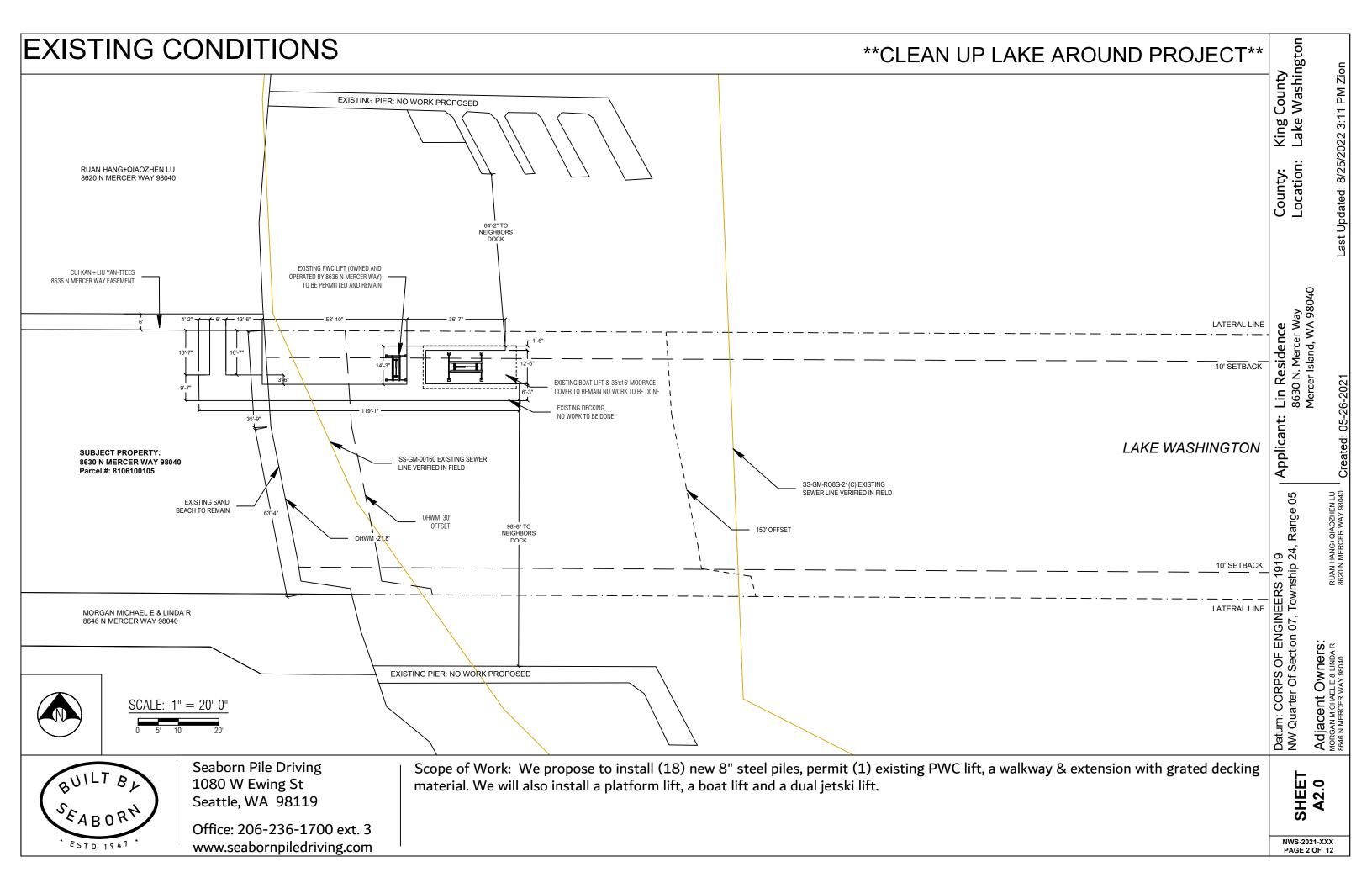
SHEET A1.0

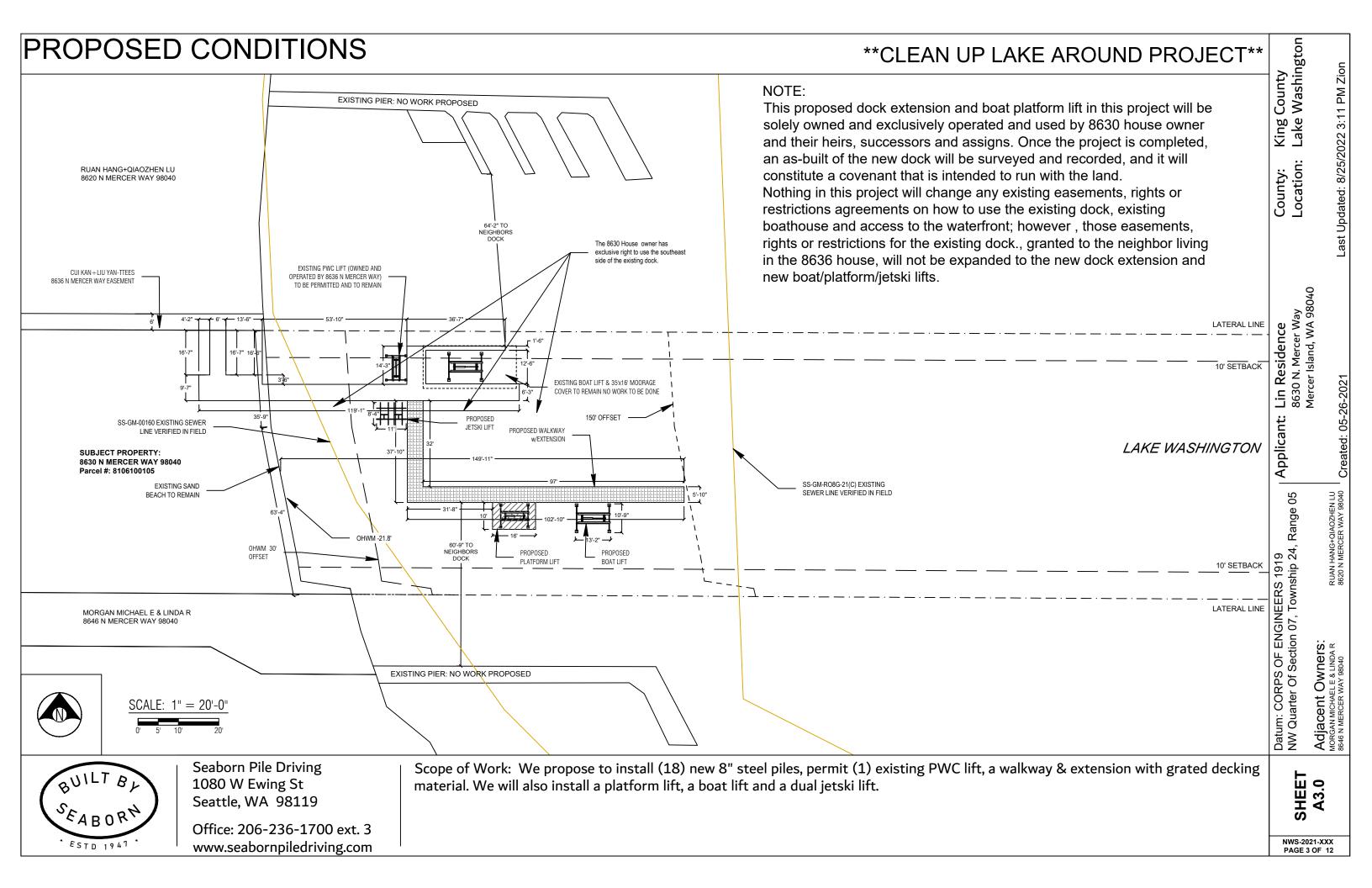
Adjacent (MORGAN MICHAE 8646 N MERCER W

ast Updated: 8/25/2022 3:11 PM Zion

RUAN HANG+QIAOZHEN LU 8620 N MERCER WAY 98040

NWS-2021-XXX



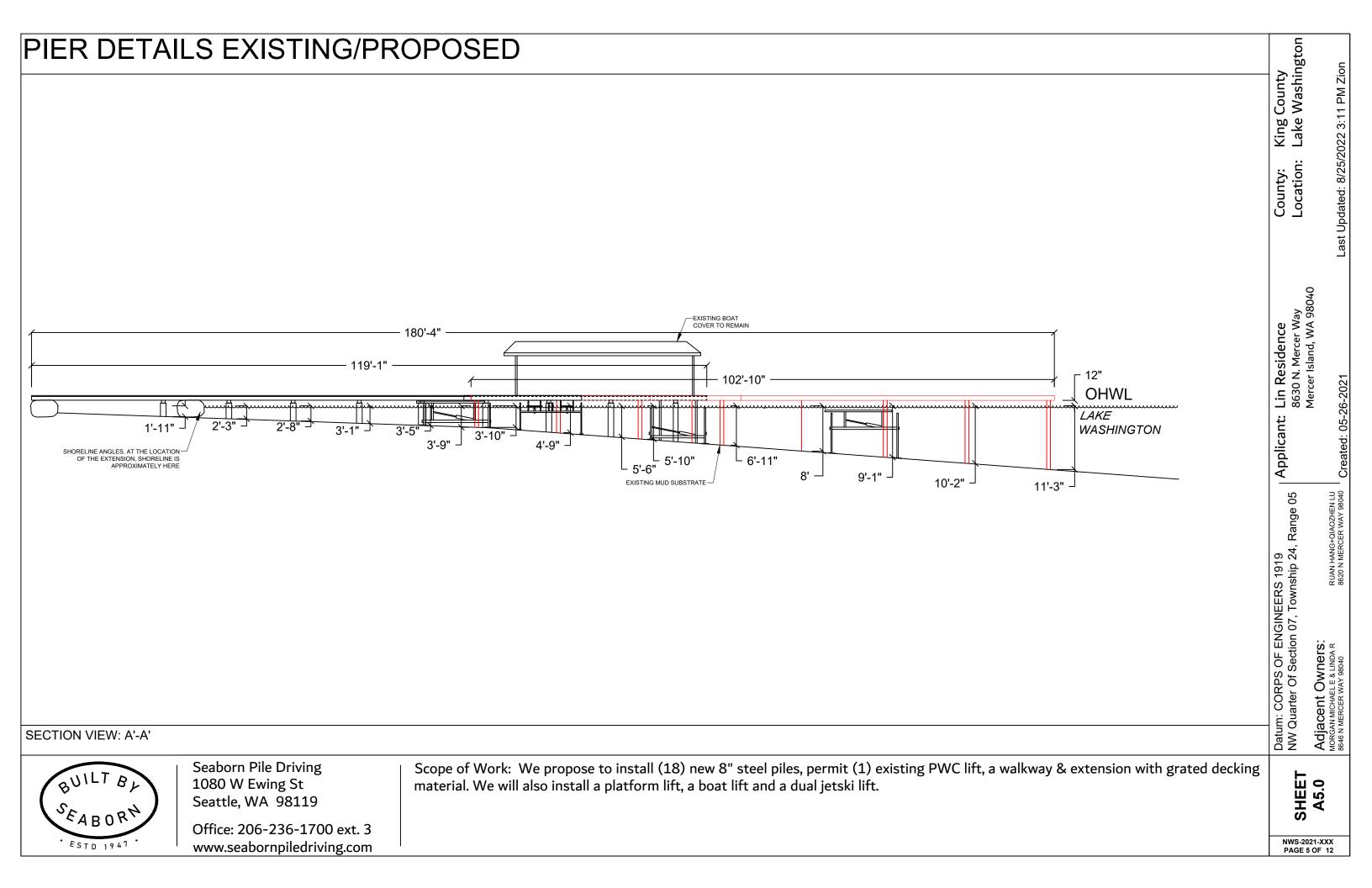


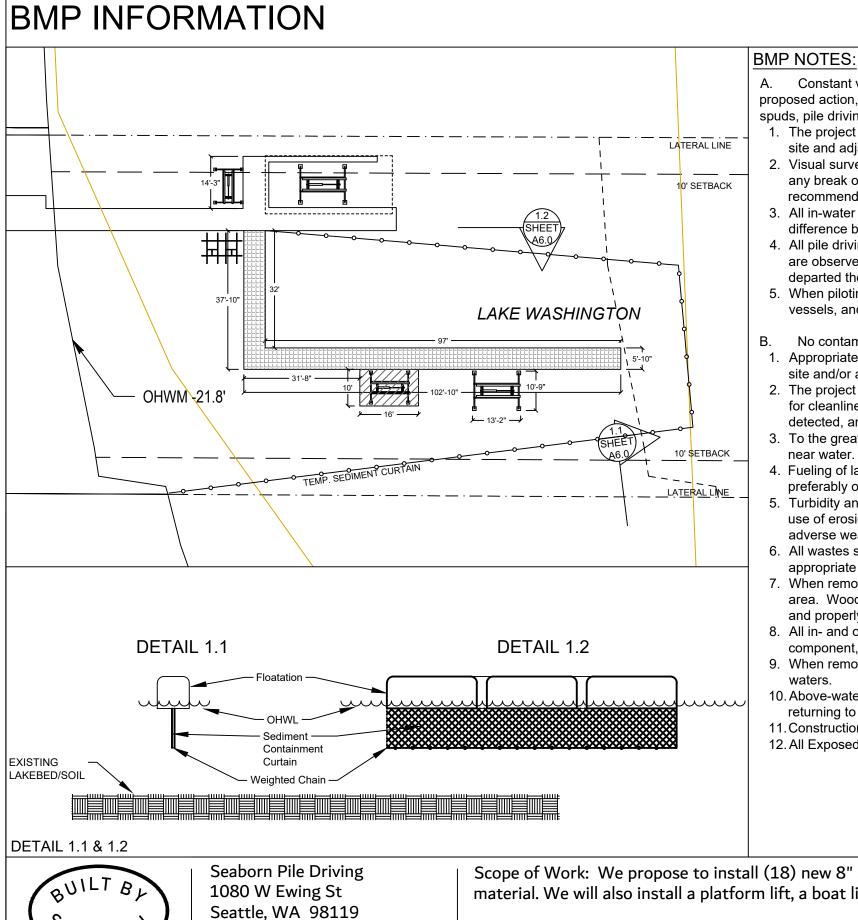
King County Lake Washington PIER DETAILS - EXISTING/PROPOSED Last Updated: 8/25/2022 3:11 PM Zion EXISTING PWC LIFT (OWNED AND OPERATED BY 8636 N MERCER WAY) TO BE PERMITTED AND TO REMAIN – 13'-6" 53'-10" 1'-6" EXISTING 16'-7" 16'-7" Applicant: Lin Residence 8630 N. Mercer Way Mercer Island, WA 98040 EXISTING BOAT LIFT & 35'x16' MOORAGE COVER TO REMAIN NO WORK TO BE DONE 9'-7' 6'-3" 3'-11" **PROPOSED** JETSKI LIFT 16'<u>5</u>6"_{10"} **LEGEND** PROPOSED WALKWAY (23) EXISTING PILES - NO WORK TO BE DONE 37'-10" w/EXTENSION (18) PROPOSED 8" STEEL PILES - TO BE ADDED Datum: CORPS OF ENGINEERS 1919 NW Quarter Of Section 07, Township 24, Range 05 15'-6" Area: 1,054 sqft (total) Area: 716 sqft (over water) Proposed Extension: 786 sqft (new grated decking) Proposed Platform lift: 160 sqft (new grated decking) 10'-9" 10' New Area: 2,000 sqft (total) New Area: 1,662 sqft (over water) **Grated Decking Material is 43% Light Permeable** PROPOSED BOAT LIFT PROPOSED PLATFORM LIFT Adjacent (**PLAN VIEW** Scope of Work: We propose to install (18) new 8" steel piles, permit (1) existing PWC lift, a walkway & extension with grated decking Seaborn Pile Driving SHEET A4.0 1080 W Ewing St material. We will also install a platform lift, a boat lift and a dual jetski lift. Seattle, WA 98119 Office: 206-236-1700 ext. 3

ESTD 1947

www.seabornpiledriving.com

NWS-2021-XXX





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.
- 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
- 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
- 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.

Office: 206-236-1700 ext. 3 www.seabornpiledriving.com Scope of Work: We propose to install (18) new 8" steel piles, permit (1) existing PWC lift, a walkway & extension with grated decking material. We will also install a platform lift, a boat lift and a dual jetski lift.

SHEET A6.0

NWS-2021-XXX

Lin Residence 8630 N. Mercer Way Mercer Island, WA 98040 Applicant:

Datum: CORPS OF ENGINEERS 1919 NW Quarter Of Section 07, Township 24, Range 05

County Washington

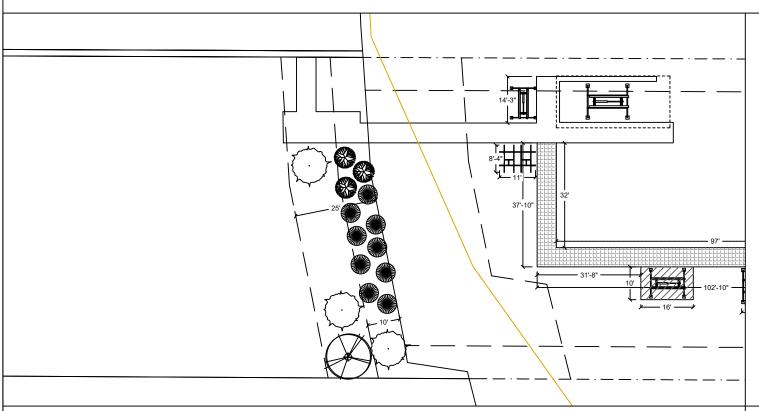
King Lake

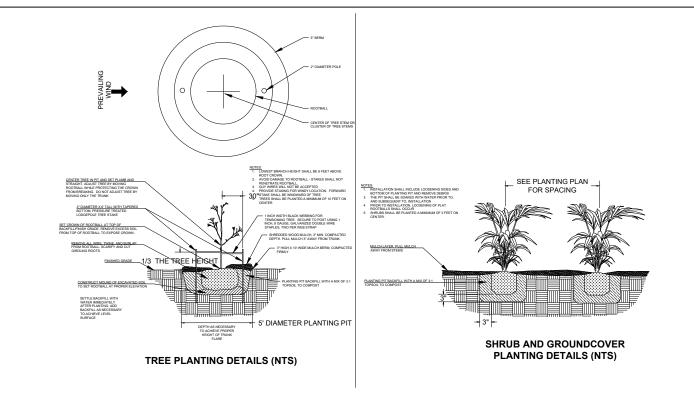
ast Updated: 8/25/2022 3:11 PM Zion

RUAN HANG+QIAOZHEN LU 8620 N MERCER WAY 98040

Adjacent (MORGAN MICHAE MERCER W

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
	Rosa nutkana	Nootka Rose	3	1 Gallon
	Salix sitchensis	Sitka Willow	9	1 Gallon
\bigcirc	Salix lasiandra	Pacific Willow	3	3 ft

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



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 install (18) new 8" steel piles, permit (1) existing PWC lift, a walkway & extension with grated decking material. We will also install a platform lift, a boat lift and a dual jetski lift.

SHEET A7.0

Adjacent Owners:
MORGAN MICHAEL E & LINDA R
8646 N MERCER WAY 98040

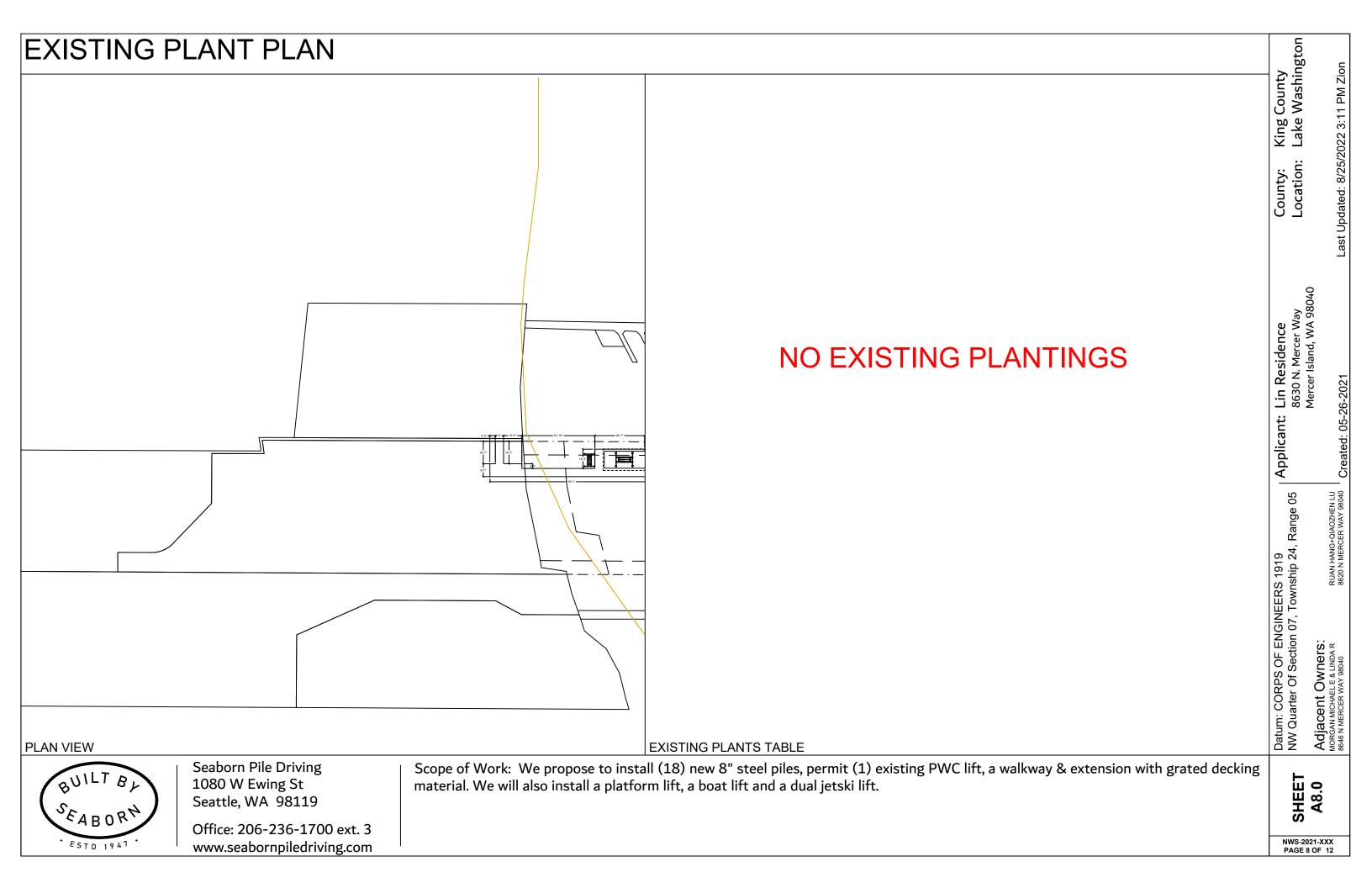
King County Lake Washington

Lin Residence 8630 N. Mercer Way Mercer Island, WA 98040

Applicant:

Datum: CORPS OF ENGINEERS 1919 NW Quarter Of Section 07, Township 24, Range 05 3:11

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GENERAL NOTES:

MATERIALS SPEC LIST:

Boat Lifts:

- * SL10014ARW 158" x 129"
- SL8012ARW 120" x 192"
- SL2008AR2D2 100" x 132" (dual jet ski)
- * New canopy covers will be constructed with translucent material

Thruflow Decking Material: FRPP - Fiberglass reinforced polypropylene Light permeable percentage:

- * Surface 43%
- * 18" Dock Height 61%

PILES:

* All new piles are epoxy coated Steel piles *size varies, see plan set

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:

"Alternative Development Standards" per MIMC 19.13050(F)(3).

The code official shall approve moorage facilities not in compliance with the development standards in subsection (F)(1) or (F)(2) of this section subject to both U.S. Army Corps of Engineers and Washington Department of Fish and Wildlife approval to an alternate project design. The following requirements and all other applicable provisions in this chapter shall be met:

i. The dock must be no larger than authorized through state and federal approval; Ch. 19.13 Shoreline Master Program | Mercer Island City Code Page 30 of 34 The Mercer Island City Code is current through Ordinance 20C-13, passed June 16, 2020.

The dock will be no larger than authorized through state and federal approval.

ii. The maximum width must comply with the width of moorage facilities standards specified in standards specified in subsection D of this section (Table D);

The maximum width will comply with the moorage facilities standards.

iii. The minimum water depth must be no shallower than authorized through state and federal approval;

The minimum water depths will be no shallower than authorized through state and federal approval.

iv. The applicant must demonstrate to the code official's satisfaction that the proposed project will not create a net loss in ecological function of the shorelands; and

NNL Report attached.

Datum: CORPS OF ENGINEERS 1919 NW Quarter Of Section 07, Township 24, Range 05 v. The applicant must provide the city with documentation of approval of the moorage facilities by both the U.S. Army Corps of Engineers and the Washington Department of Fish and Wildlife.

Plan set is under review by CORPS and WDFW.

Mitigation Disturbance of bank vegetation shall be limited to the minimum amount necessary to accomplish the project. Disturbed bank vegetation shall be replaced with native, locally adapted herbaceous and/or woody vegetation. Herbaceous plantings shall occur within 48 hours of the completion of construction. Woody vegetation components shall be planted in the fall or early winter, whichever occurs first. The applicant shall take appropriate measures to ensure revegetation success;

Last permit issued for property: 1910-099 BLDG Permit Dock established/constructed: 1959 Sewer Easement



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 install (18) new 8" steel piles, permit (1) existing PWC lift, a walkway & extension with grated decking material. We will also install a platform lift, a boat lift and a dual jetski lift.

SHEET A9.0

Adjacent (MORGAN MICHAE MERCER W

County Washington

King (Lake

Lin Residence 8630 N. Mercer Way Mercer Island, WA 98040

Applicant:

RUAN HANG+QIAOZHEN LU 8620 N MERCER WAY 98040

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NWS-2021-XXX

GENERAL

- 1. ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS.
- 2. CONTRACTOR SHALL VERIFY ALL LEVELS, DIMENSIONS, AND EXISTING CONDITIONS IN THE FIELD BEFORE PROCEEDING. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR FIELD CHANGES PRIOR TO INSTALLATION OR FABRICATION. IN CASE OF DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE DRAWINGS, THE CONTRACTOR SHALL OBTAIN DIRECTION FROM THE ENGINEER BEFORE PROCEEDING. DIMENSIONS NOTED AS PLUS OR MINUS (±) OR REF INDICATE UNVERIFIED DIMENSIONS AND ARE APPROXIMATE. NOTIFY ENGINEER IMMEDIATELY OF CONFLICTS OR EXCESSIVE VARIATIONS FROM INDICATED DIMENSIONS, NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS - DO NOT SCALE DRAWINGS. DIMENSIONS OF EXISTING CONDITIONS ARE BASED ON RECORD DRAWINGS AND ARE TO BE FIELD-VERIFIED BY THE CONTRACTOR.
- CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND BRACING OF ALL STRUCTURAL MEMBERS AND EXISTING MEMBERS, AS REQUIRED, AND IN A MANNER SUITABLE TO WORK SEQUENCE. TEMPORARY SHORING AND BRACING SHALL NOT BE REMOVED UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE DRAWINGS AND MATERIALS HAVE ACHIEVED DESIGN STRENGTH.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS. TECHNIQUES. SEQUENCES AND PROCEDURES REQUIRED TO PERFORM THE WORK.
- 5. ALL MATERIALS SHALL BE NEW, UNO.
- 6. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE DRAWINGS, NOTES. AND MANUFACTURER RECOMMENDATIONS. IF THERE ARE ANY CONFLICTS BETWEEN THESE DOCUMENTS. THE ENGINEER SHALL BE CONTACTED FOR DIRECTION.
- THE CONTRACTOR SHALL CAREFULLY DECONSTRUCT EXISTING ELEMENTS AS NECESSARY TO ACCESS THE WORK AREAS. SUCH DECONSTRUCTION MAY INCLUDE, INTERIOR AND EXTERIOR FINISHES. ALL DECONSTRUCTION ELEMENTS SHALL BE RECONSTRUCTED TO MATCH THE ORIGINAL APPEARANCE AND MEET THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE.
- 8. ALL BOAT COVERS AND LIFTS SHALL BE FREESTANDING AND SHALL NOT BE ATTACHED TO THE DOCK, UNLESS NOTED OTHERWISE.

CODES AND STANDARDS

- ALL METHODS AND MATERIALS SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE, 2018 EDITION.
- 2. AMERICAN SOCIETY OF CIVIL ENGINEERS STANDARD 7-16 (ASCE) MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
- WOOD WORK SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION (NDS) 2018
- AMERICAN SOCIETY FOR TESTING AND MATERIALS, CURRENT EDITION

DESIGN CRITERIA

WIND DESIGN: WIND LOAD IS BASED ON ASCE CHAPTER 29 WITH THE FOLLOWING

 $EXPOSURE\ CATEGORY = D$ RISK CATEGORY = IIWIND IMPORTANCE FACTOR, $I_w = 1.0$ $V_{3S} = 98MPH$

LENGTH = 50 FT

VESSEL: FREEBOARD = 15 FT

WAVE LOADS: P = 328 LBS

LIVE LOADS: LIVE LOAD = 40 PSFSNOW LOAD = 25 PSF

SEISMIC LOADS: DOCK PILING R = 2.0

SEISMIC IMPORTANCE - 1.0 SD1 = 0.613q

STRUCTURAL STEEL

- 1. ALL MISCELLANEOUS STEEL SHAPES AND PLATES, EXCEPT AS NOTED BELOW. SHALL CONFORM TO ASTM 36.
- 2. ALL WF SHAPES SHALL CONFORM TO ASTM A992, Fy = 50 KSI
- 3. ALL PILES SHALL CONFORM TO ASTM A252 GRADE 3, Fy = 45 KSI
- 4. ALL BOLTS SHALL BE ASTM A307, UNO.
- 5. ALL NUTS SHALL BE ASTM A563, UNO.
- 6. ALL WASHERS SHALL BE ASTM F436, UNO.
- 7. ALL THREADED RODS SHALL CONFORM TO ASTM F155, GRADE 36.
- 8. ALL STEEL MEMBERS AND FASTENERS THAT ARE NOT COATED SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 AS APPLICABLE.

WELDING

- 1. ALL WELDING SHALL PERFORMED BY WELDERS QUALIFIED FOR THE WELD AND POSITION SHOWN IN ACCORDANCE WITH AWS AND HAVING CURRENT CERTIFICATION FROM WABO.
- 2. ALL WELDS SHALL BE PERFORMED WITH PROCEDURES PREQUALIFIED OR QUALIFIED IN ACCORDANCE WITH AWS D1.1.
- 3. THE WELDS SHOWN ARE FOR THE FINAL CONNECTIONS, FIELD WELD SYMBOLS ARE SHOWN WHERE FIELD WELDS ARE REQUIRED BY THE STRUCTURAL DESIGN. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING IF A WELD SHOULD BE SHOP OR FIELD WELDED IN ORDER TO FACILITATE THE STRUCTURAL STEEL ERECTION.
- 4. WELDING ELECTRODES SHALL BE 70 KSI STRENGTH AND SHALL BE "LOW-HYDROGEN ELECTRODES."

WOOD

- 1. EACH PIECE OF LUMBER SHALL BEAR A STAMP INDICATING A GRADE MARK OF THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB), WESTERN WOOD PRODUCTS ASSOCIATION (WWPA), OR OTHER AGENCY ACCREDITED BY THE AMERICAN STANDARD COMMITTEE (ALSC).
- 2. DIMENSION LUMBER SHALL BE P.T. DOUG-FIR NO 2 OR BETTER.
- 3. STRUCTURAL GLUED LAMINATED TIMBER SHALL BE AC.AC 20F-V12.
- 4. WOOD SHALL BE SEASONED DRY WITH A MAXIMUM MOISTURE CONTENT OF 19%.
- 5. PRESERVATIVE TREATED WOOD SHALL CONFORM TO THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) UC4A. ALL WOOD SHALL BEAR A TREATMENT IDENTIFICATION MARK BY THE CERTIFYING AGENCY.
- 6. ALL BOLT HOLES IN WOOD MEMBERS SHALL BE A MINIMUM OF 1/32" TO MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER. PROVIDE PLATE WASHERS WHERE NUTS BEAR ON WOOD. CUT WASHERS SHALL MEASURE 2 1/4"ø x 3/16" THICK.

DECKING

1. GRATED DECKING SHALL BE SUNWALK 90 SERIES OR APPROVED EQUAL.

SPECIAL INSPECTION

1. ALL FULL PENETRATION WELDS SHALL BE UT TESTED BY A CERTIFIED TESTING

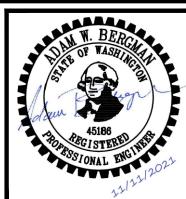
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AWS AMERICAN WELDING SOCIETY CENTER LINE **CLR** CLEAR COL COLUMN CONT CONTINUOUS DOUG FIR EACH **EXISTING** EX OR (E) GLULAM BEAM LONG LEG HORIZONTAL MINIMUM MANUFACTURER ON CENTER PLATE POUNDS PER SQUARE INCH POUNDS PER SQUARE FOOT PRESERVATIVE TREATED SQUARE FOOT REFERENCE SS STAINLESS STEEL THICK TYP TYPICAL **UNO** UNLESS NOTED OTHERWISE VIF VERIFY IN FIELD WABO WASHINGTON ASSOCIATION OF

BUILDING OFFICIALS WIDE FLANGE

W/

Tacoma, Washington 98407 (253) 396-0150 Fax (253) 396-0162



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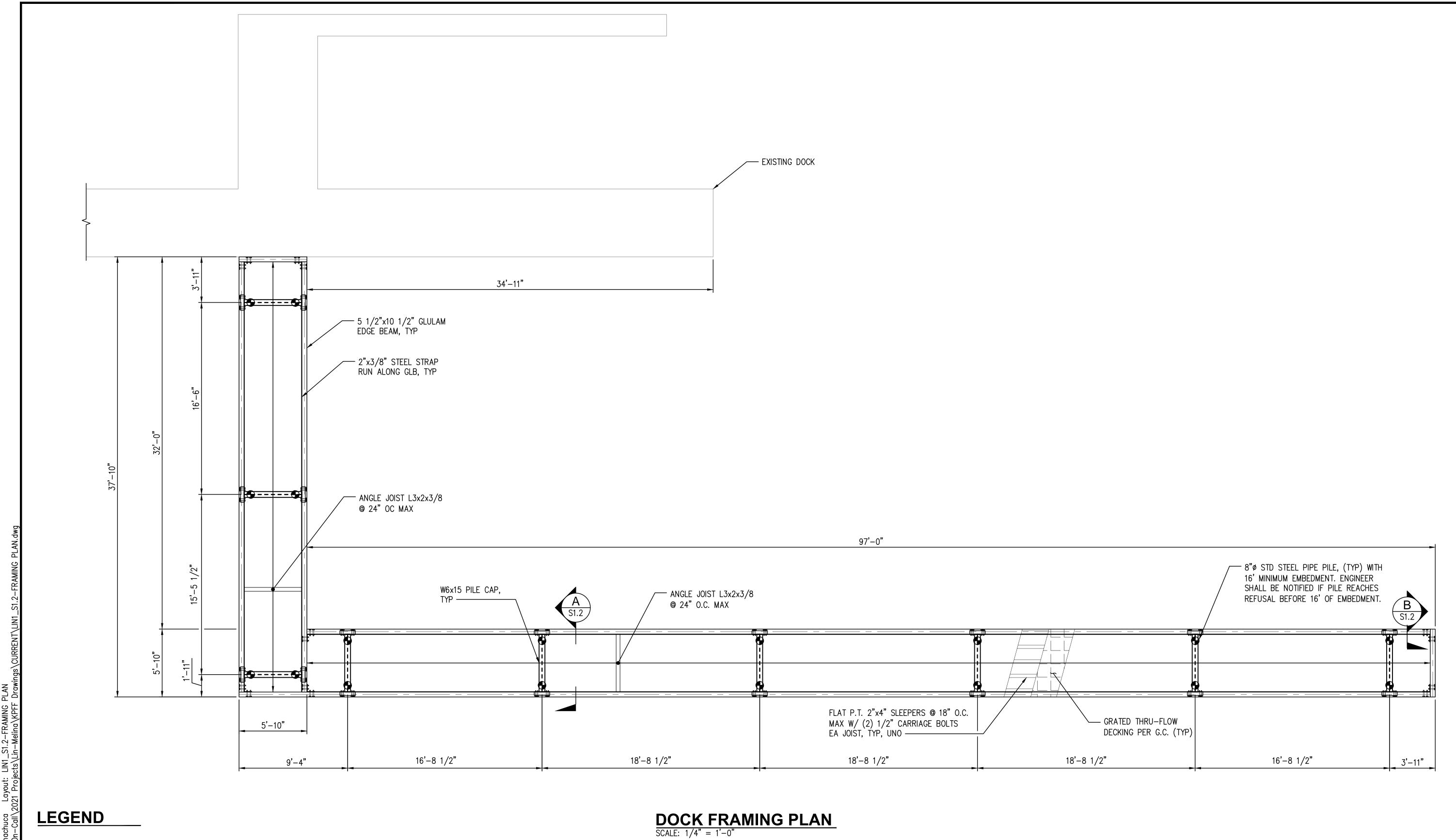
LIN RESIDENCE 8630 N. MERCER WAY MERCER ISLAND, WA 98040

STRUCTURAL NOTES

DRAWN: GM	PROJECT NO.: 2100134
DESIGN: DMR	SCALE: AS SHOWN
CHECKED: AWB	DATE: 11-11-2021
DRAWING NO.	S1.1

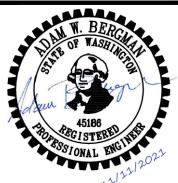
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01 OF **03**



PROPOSED 8"Ø STEEL PIPE PILES

2407 North 31st Street, Suite 100 Tacoma, Washington 98407 (253) 396-0150 Fax (253) 396-0162



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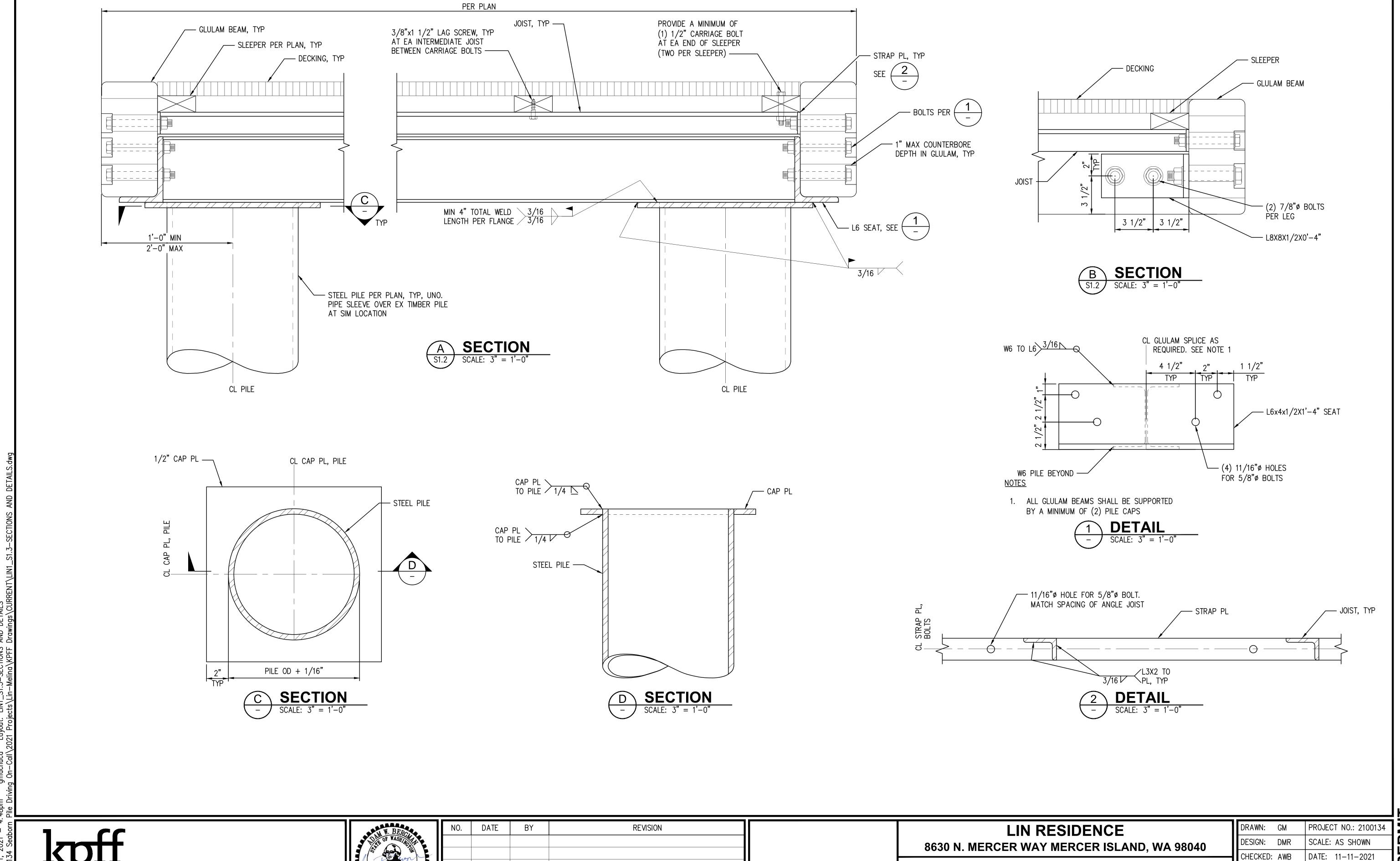
LIN RESIDENCE
8630 N. MERCER WAY MERCER ISLAND, WA 98040

DOCK FRAMING PLAN

	DRAWING NO.	S1.2	
4	CHECKED: AWB	DATE: 11-11-2021	
ı	DESIGN: DMR	SCALE: AS SHOWN	
1	DRAWN: GM	PROJECT NO.: 2100134	2
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SHEET NO.

02 OF **03**



2407 North 31st Street, Suite 100 Tacoma, Washington 98407 (253) 396-0150 Fax (253) 396-0162

ı	NO.	DATE	BY	REVISION
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SECTIONS AND DETAILS

	DRAWING NO.	S1.3	
\dashv	CHECKED: AWB	DATE: 11-11-2021	
ı	DESIGN: DMR	SCALE: AS SHOWN	Ω
	DRAWN: GM	PROJECT NO.: 2100134	2

SHEET NO.

03 OF **03**