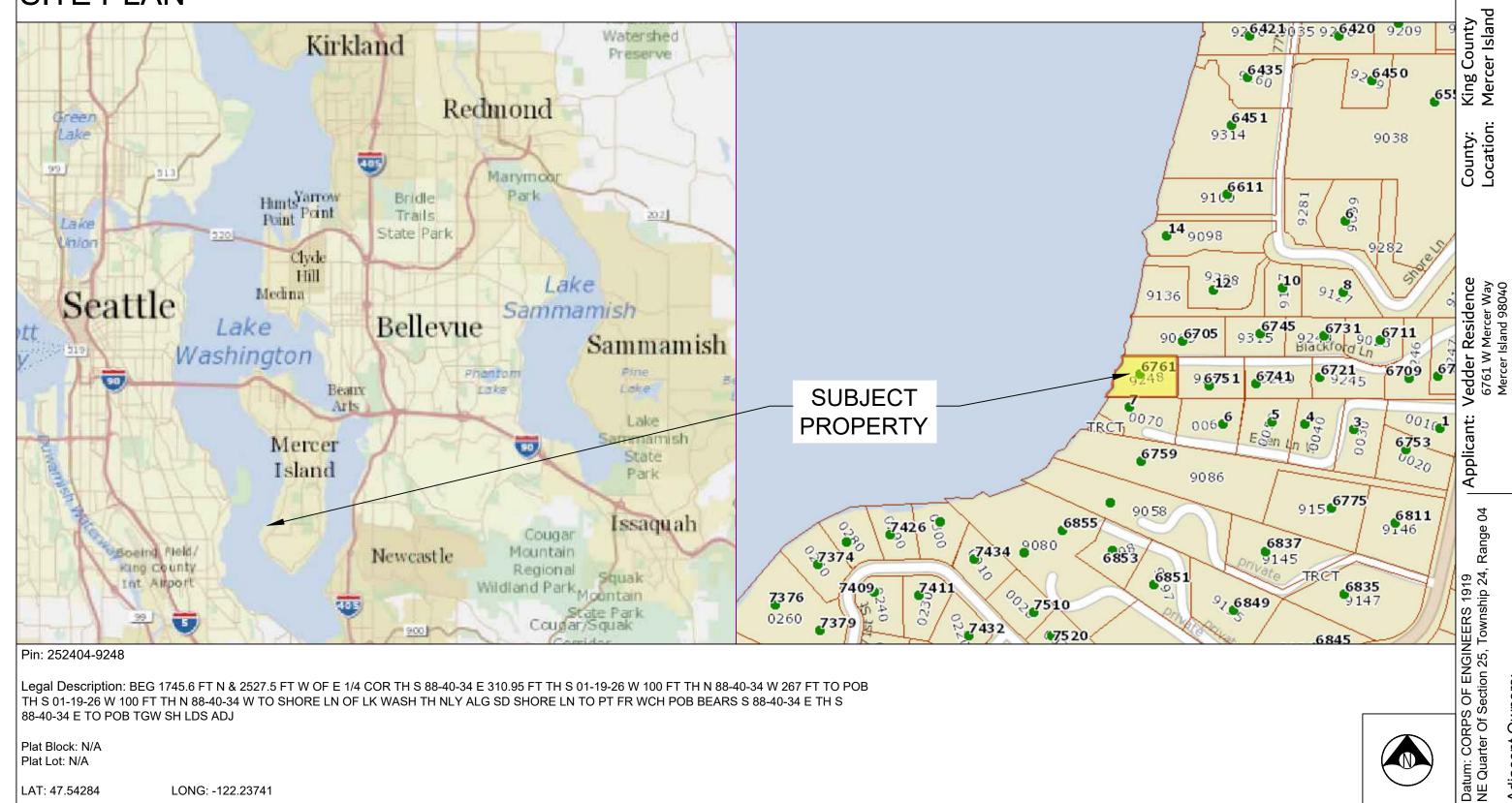
# SITE PLAN



Legal Description: BEG 1745.6 FT N & 2527.5 FT W OF E 1/4 COR TH S 88-40-34 E 310.95 FT TH S 01-19-26 W 100 FT TH N 88-40-34 W 267 FT TO POB TH S 01-19-26 W 100 FT TH N 88-40-34 W TO SHORE LN OF LK WASH TH NLY ALG SD SHORE LN TO PT FR WCH POB BEARS S 88-40-34 E TH S 88-40-34 E TO POB TGW SH LDS ADJ

Plat Block: N/A Plat Lot: N/A

LAT: 47.54284

LONG: -122.23741



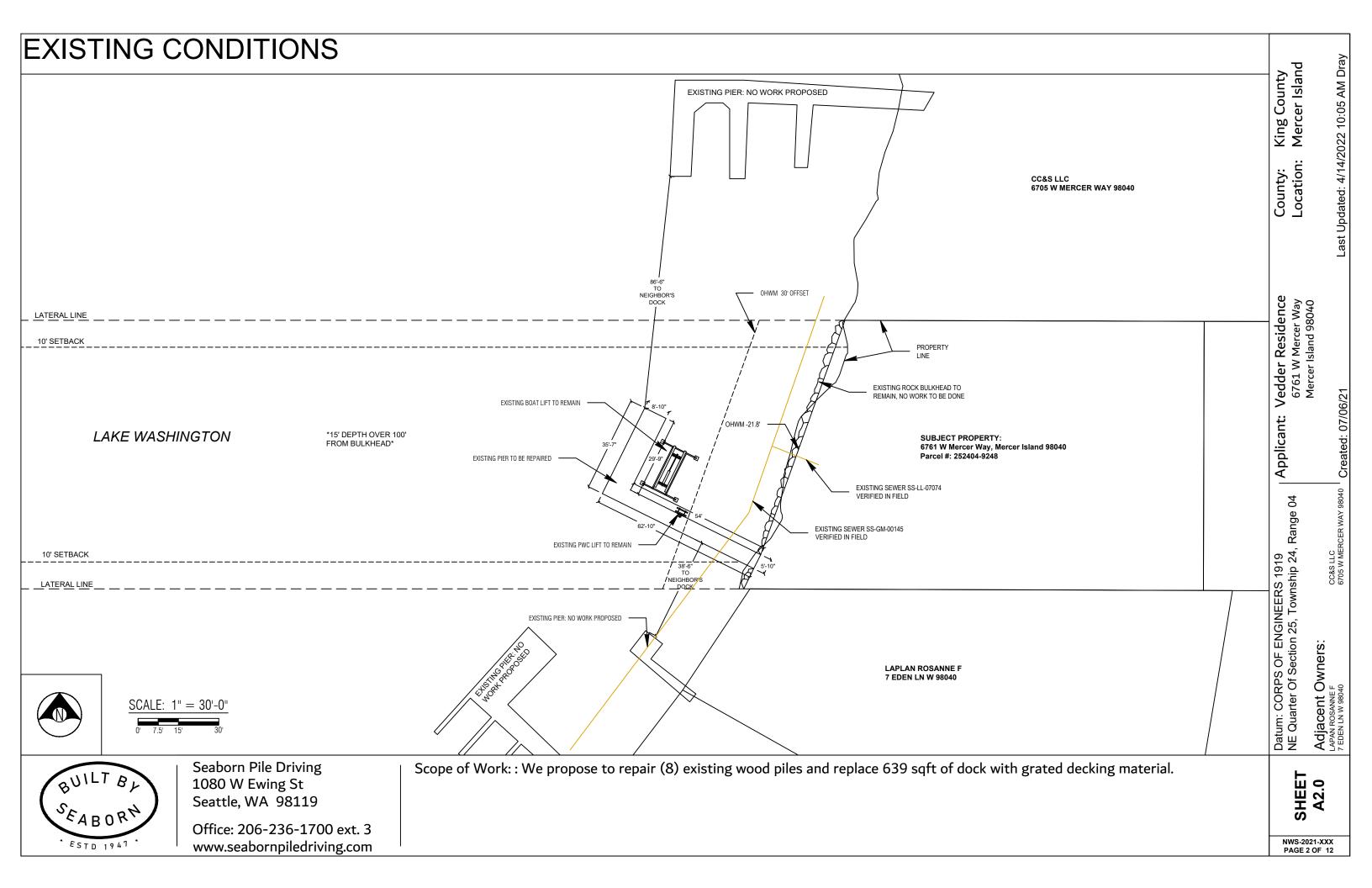
Seaborn Pile Driving 1080 W Ewing St Seattle, WA 98119

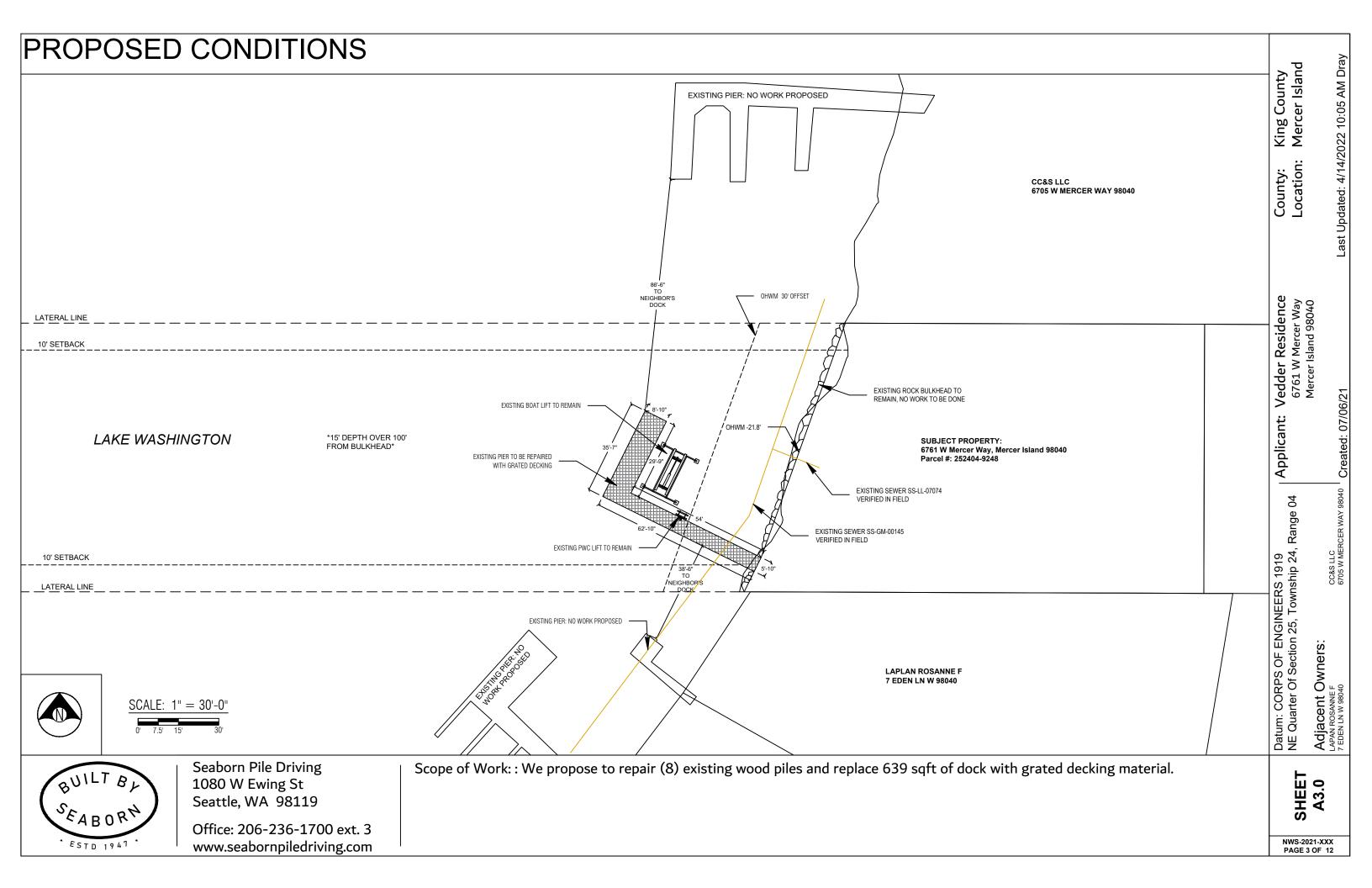
Office: 206-236-1700 ext. 3 www.seabornpiledriving.com Scope of Work: : We propose to repair (8) existing wood piles and replace 639 sqft of dock with grated decking material.

SHEET A1.0

Adjacent Owners: LAPAN ROSANNE F 7 EDEN LN W 98040

Last Updated: 2/7/2022 4:04 PM Dray





# PIER DETAILS - EXISTING/PROPOSED

## **EXISTING**

- (8) EXISTING CAPS
- (16) EXISTING PILES
- (55) EXISTING STRINGERS
- (79) TOTAL STRUCTURE ELEMENTS

### TO BE REPAIRED

- (8) EXISTING CAPS TO BE REPAIRED
- (8) EXISTING PILES TO BE REPAIRED
- (23) EXISTING STRINGERS TO BE REPAIRED
- (39) TOTAL STRUCTURE ELEMENTS TO BE REPAIRED
- (39)/(79) = 49%

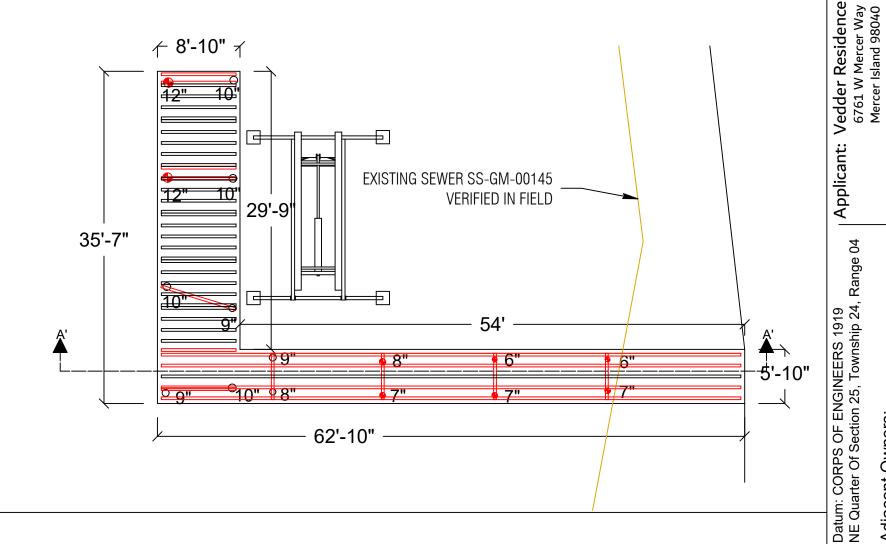
# **LEGEND**

- ⊕ (8) EXISTING PILES TO BE REPAIRED
- (8) EXISTING PILES NO WORK TO BE DONE

Area: 639 sqft (total)

Area: 639 sqft (new grated decking)

\*\*Grated decking material is a 43% light permeable



### **PLAN VIEW**



Seaborn Pile Driving 1080 W Ewing St Seattle, WA 98119

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

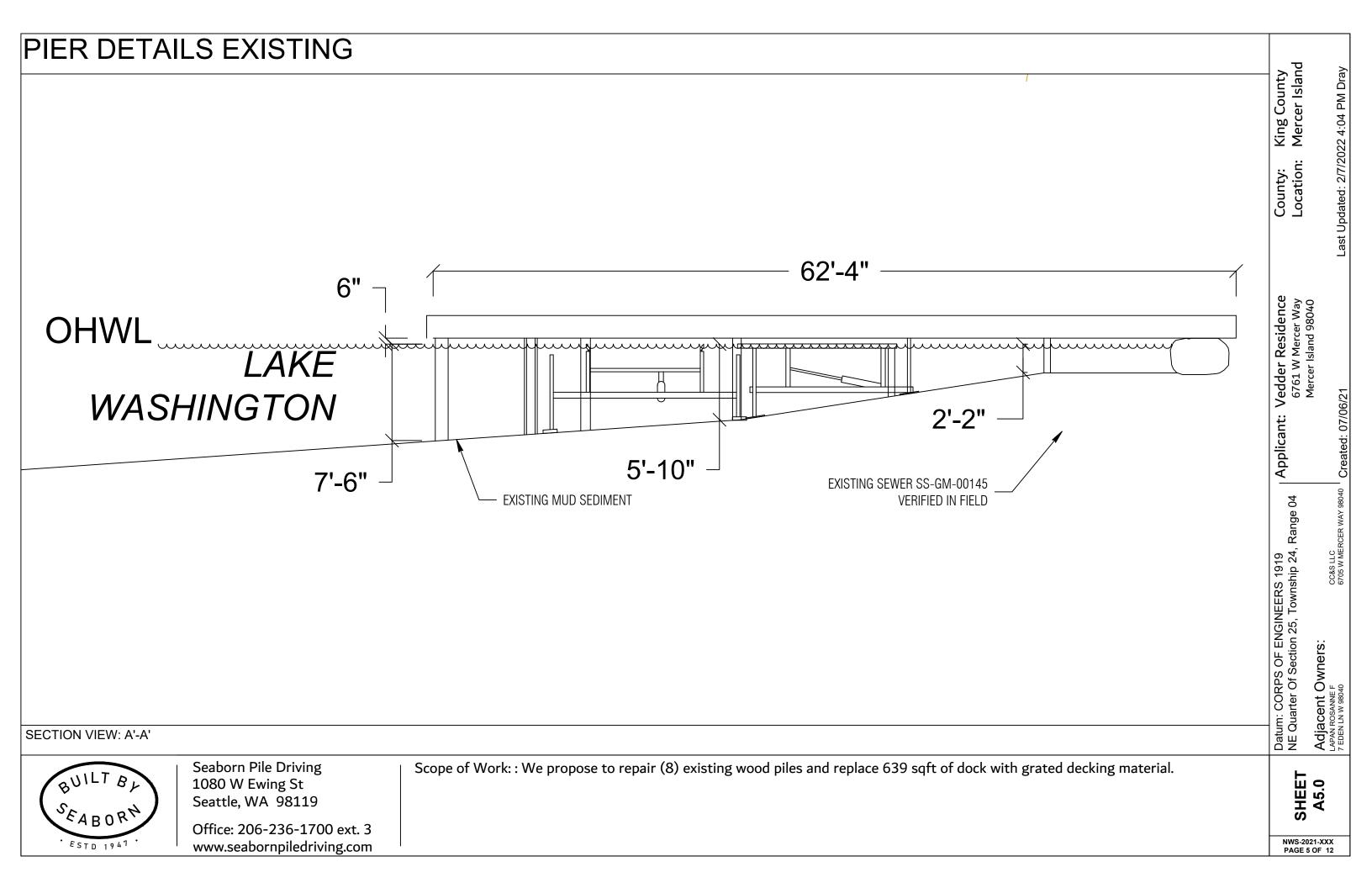
Scope of Work: : We propose to repair (8) existing wood piles and replace 639 sqft of dock with grated decking material.

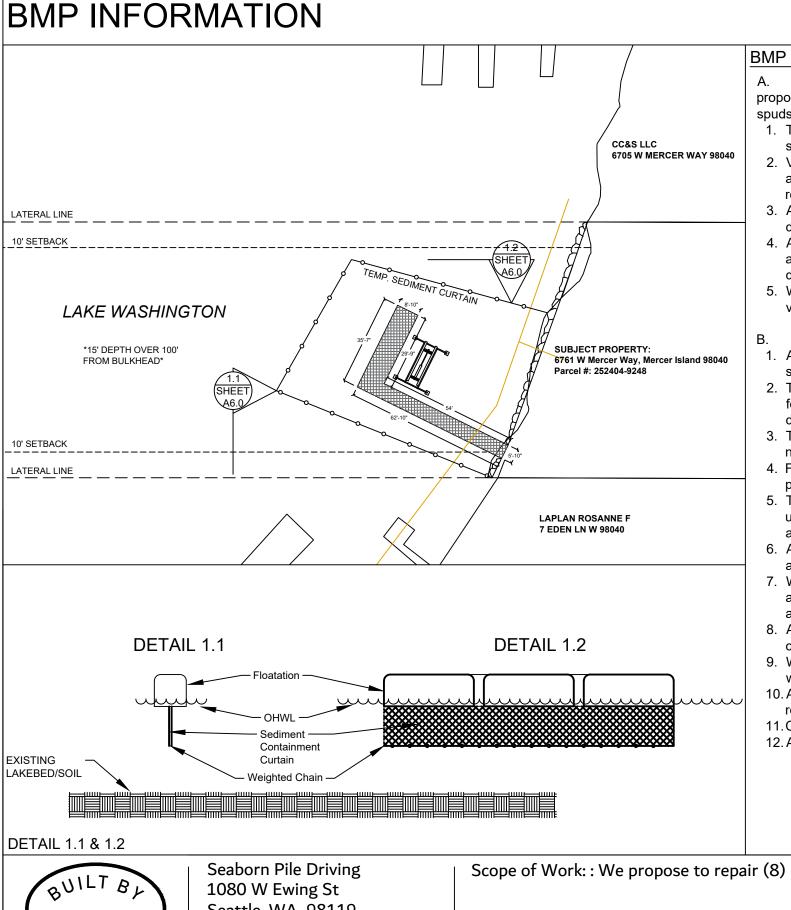
SHEET A4.0

Adjacent Owners: LAPAN ROSANNE F 7 EDEN LN W 98040

King County Mercer Island

> NWS-2021-XXX PAGE 4 OF 12





### **BMP NOTES:**

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.

ESTD 1947

Seattle, WA 98119

Office: 206-236-1700 ext. 3 www.seabornpiledriving.com Scope of Work: : We propose to repair (8) existing wood piles and replace 639 sqft of dock with grated decking material.

SHEI A6.

Adjacent Owners: LAPAN ROSANNE F 7 EDEN LN W 98040

King County Mercer Island

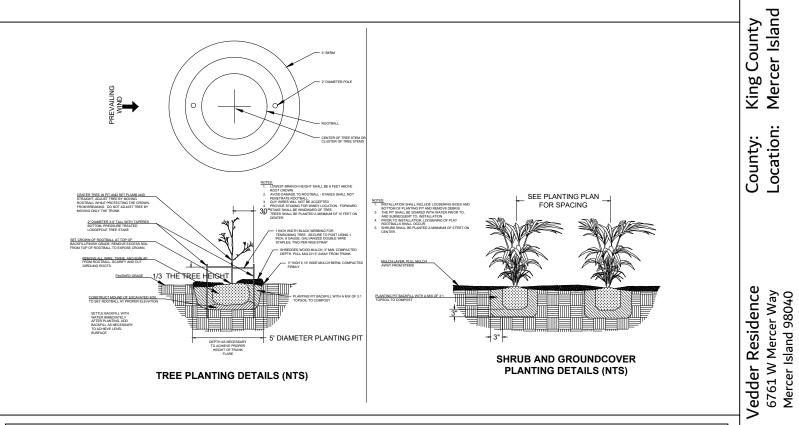
Vedder Residence 6761 W Mercer Way Mercer Island 98040

Applicant:

Datum: CORPS OF ENGINEERS 1919 NE Quarter Of Section 25, Township 24, Range 04

ast Updated: 2/7/2022 4:04 PM Dray

# 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
A Constant	Salix sitchensis	Sitka Willow	2	10 ft

SEABORN.

Seaborn Pile Driving 1080 W Ewing St Seattle, WA 98119

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

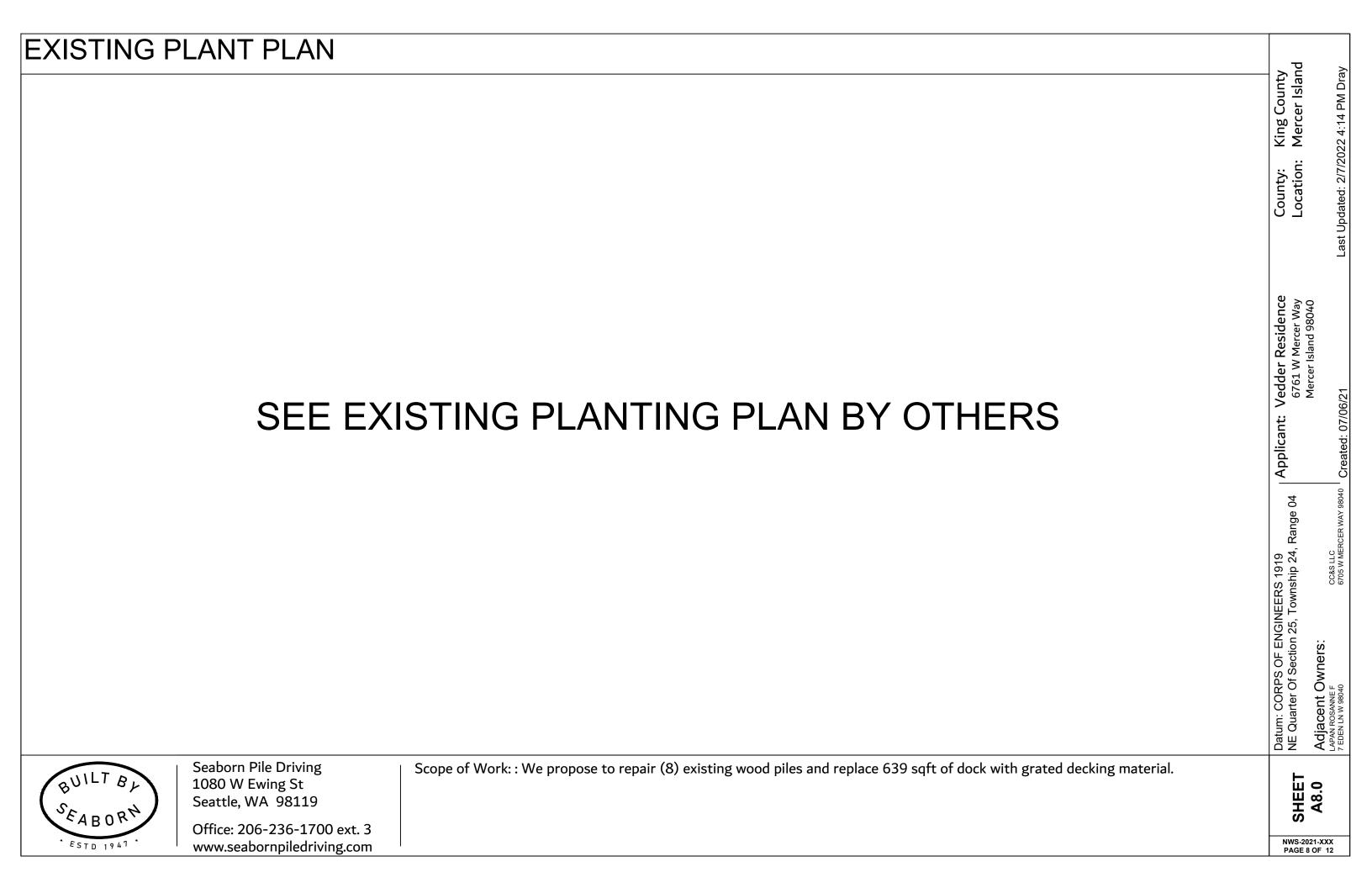
Scope of Work: : We propose to repair (8) existing wood piles and replace 639 sqft of dock with grated decking material.

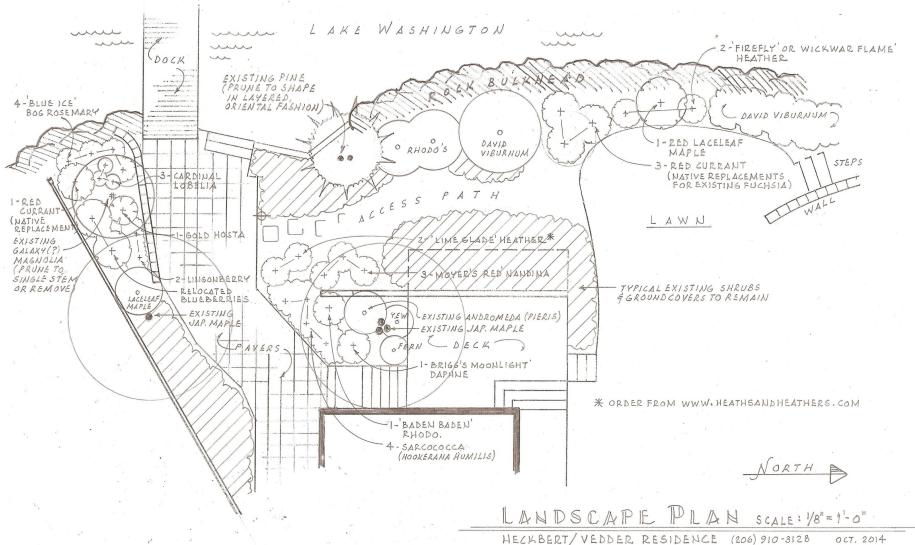
SHEET A7.0

Adjacent (LAPAN ROSANNE 7 EDEN LN W 9804

Applicant:

Datum: CORPS OF ENGINEERS 1919 NE Quarter Of Section 25, Township 24, Range 04





HECKBERT/VEDDER RESIDENCE (206) 910-3128 OCT. 2014 6761 W. MERCER WAY MERCER ISLAND, WA 98040 CRAIG B. ESVELT, LANDSCAPE ARCHITECT (425) 432-1587

# **GENERAL NOTES:**

### MATERIALS SPEC LIST:

### **Boat Lifts:**

\* SL10014ARW - 146" x 191"

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

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

### Piles:

Repair piles are done as a sleeve/strap method

**Dock:** being repaired/replaced

- \* 100 % of Decking
- \_42\_ % of stringers
- \* 100 % of caps

### **SEWER:**

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

### CODE REFERENCES: Mercer Island

"Development Standards for Replacement, Repair and Maintenance of Overwater Structures, Including Moorage Facilities" per MIMC 19.13050(F)(2).

- 2. Development Standards for Replacement, Repair and Maintenance of Overwater Structures, Including Moorage Facilities. The maintenance, repair and complete replacement of legally existing overwater structures is permitted; provided, that:
- i. All permit requirements of federal and state agencies are met;
- ii. The area, width, or length of the structure is not increased, but may be decreased;

### The area is not changing

iii. The height of any structure is not increased, but may be decreased; provided, that the height above the OHWM may be increased as provided in subsection (F)(2)(ix)(b) of this section;

### The height is not changing

iv. The location of any structure is not changed unless the applicant demonstrates to the director's satisfaction that the proposed change in location results in: (A) a net gain in ecological function, and (B) a higher degree of conformity with the location standards for a new overwater structure;

### The location is not changing

v. Piles shall not be treated with pentachlorophenol, creosote, CCA or comparably toxic compounds. If ammoniacal copper zinc arsenate (ACZA) pilings are proposed, the applicant shall meet all of the best management practices, including a post-treatment procedure, as outlined in the amended Best Management Practices of the Western Wood Preservers. All piling sizes are in nominal diameter; Any paint, stain or preservative applied to components of the overwater structure must be leach resistant, completely dried or cured prior to installation. Materials shall not be treated with pentochlorophenol, creosote, CCA or comparably toxic compounds;

### Piles are epoxy coated steel

Vedder Residence 6761 W Mercer Way Mercer Island 98040 vii. The applicant shall abide by the work windows for listed species established by the U.S. Army Corps of Engineers and Washington Fish and Wildlife;

### Work will be done within the windows specified

viii. 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; Ch. 19.13 Shoreline Master Program | Mercer Island City Code Page 29 of 34 The Mercer Island City Code is current through Ordinance 20C-13, passed June 16, 2020.

### No bank vegetation will be distrubed

ix. Structural Repair. The structural repair, which may include replacement of framing elements, of moorage facilities that results in the repair of more than 50 percent of the structure's framing elements within a five-year period shall comply with subsections (F)(2)(ix)(a) through (F)(2)(ix)(c) of this section. For this section, framing elements include, but are not limited to, stringers, piles, pile caps, and attachment brackets, as shown in Figure D:

### We are repairing only 50% of the structure

a.One hundred percent of the decking area of the pier, dock, and any platform lifts must be fully grated with materials that allow a minimum of 40 percent light transmittance;

### Not applicable

b. The height above the OHWM for moorage facilities, except floats, shall be a minimum of one and one-half feet and a maximum of five feet; and

c.An existing moorage facility that is five feet wide or more within 30 feet waterward from the OHWM shall be replaced or repaired with a moorage

### Not applicable

Last permit issued for property: Shoreline Exemption Permit April 21, 2014 Dock established/constructed: 9/13/1976



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 repair (8) existing wood piles and replace 639 sqft of dock with grated decking material.

E O SHEI A9.

Owners:

Adjacent (

King County Mercer Island

**Applicant**:

Datum: CORPS OF ENGINEERS 1919 NE Quarter Of Section 25, Township 24, Range 04

Last Updated: 4/14/2022 10:05 AM Dray

# **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.
- 3. 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.
- 4. 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.
- 7. 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 MOORAGE COVERS AND LIFTS SHALL BE FREESTANDING AND SHALL NOT BE ATTACHED TO THE DOCK, UNLESS NOTED OTHERWISE.

# **CODES AND STANDARDS**

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

# **DESIGN CRITERIA**

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

THERE IS NO SIGNIFICANT CHANGE TO THE GRAVITY OR LATERAL LOADING OF THE EXISTING TIMBER PILES; LOADS HAVE NOT BEEN CALCULATED FOR THESE CASES, AND THE EXISTING PILES ARE OK BY INSPECTION.

WIND DESIGN: WIND LOAD IS BASED ON ASCE 7 CHAPTER 29 WITH THE FOLLOWING

EXPOSURE CATEGORY = D  $V_{3S} = 98MPH$ 

RISK CATEGORY = II WIND IMPORTANCE FACTOR,  $I_{W} = 1.0$ 

DESIGN VESSEL IS 30' LONG WITH MAX SAIL AREA OF 345 SF

WAVE LOADS: P = 573 LBS

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

3NOW LOAD - 23 F3

SEISMIC LOADS: MOORAGE COVER R = 1.0DOCK PILING R = 2.0

> SEISMIC IMPORTANCE - 1.0 SD1 = 0.541q

# 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 F1554, GRADE 36.
- 8. ALL STEEL MEMBERS AND FASTENERS THAT ARE NOT EPOXY COATED SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 AS APPLICABLE.

# WELDING

- 1. ALL WELDING SHALL BE 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 ALASKAN CEDAR 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" x 3/16" THICK.

# **DECKING**

1. DECK GRATING SHALL BE SUNWALK 90 SERIES OR APPROVED EQUAL.

# **ABBEVIATIONS**

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

WIDE FLANGE

WITH

W/

kpff

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

NO. DATE BY REVISION

VEDDER RESIDENCE

6761 W MERCER WAY MERCER ISLAND, WA 98040

STRUCTURAL NOTES

DRAWN: GM PROJECT NO.: 2100134

DESIGN: SMS SCALE: AS SHOWN

CHECKED: AWB DATE: 12/15/2021

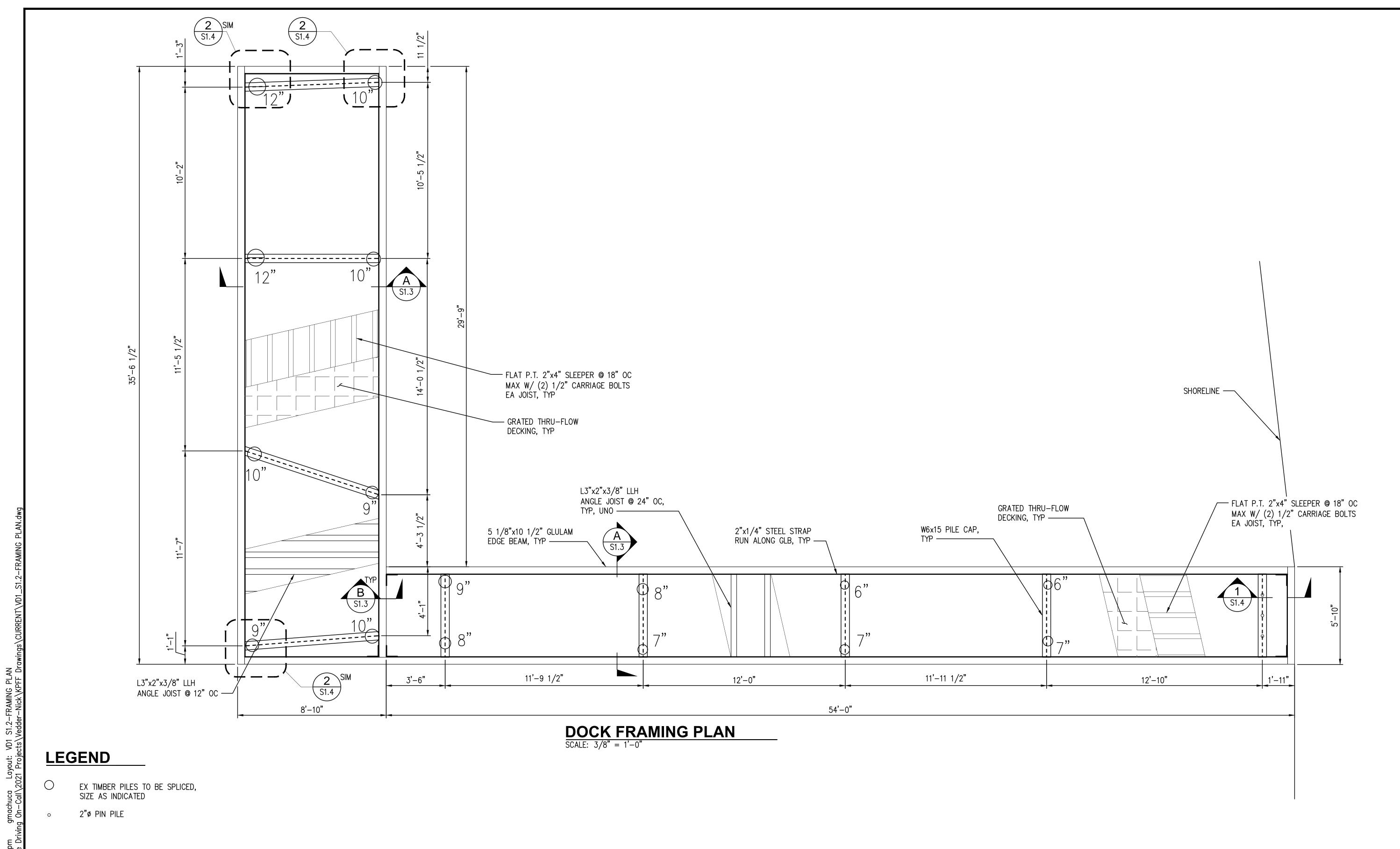
DRAWING NO.

S111

SHEET NO.

**01** OF **04** 

FOR PERMIT



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

	NO.	DATE	BY	REVISION
-				

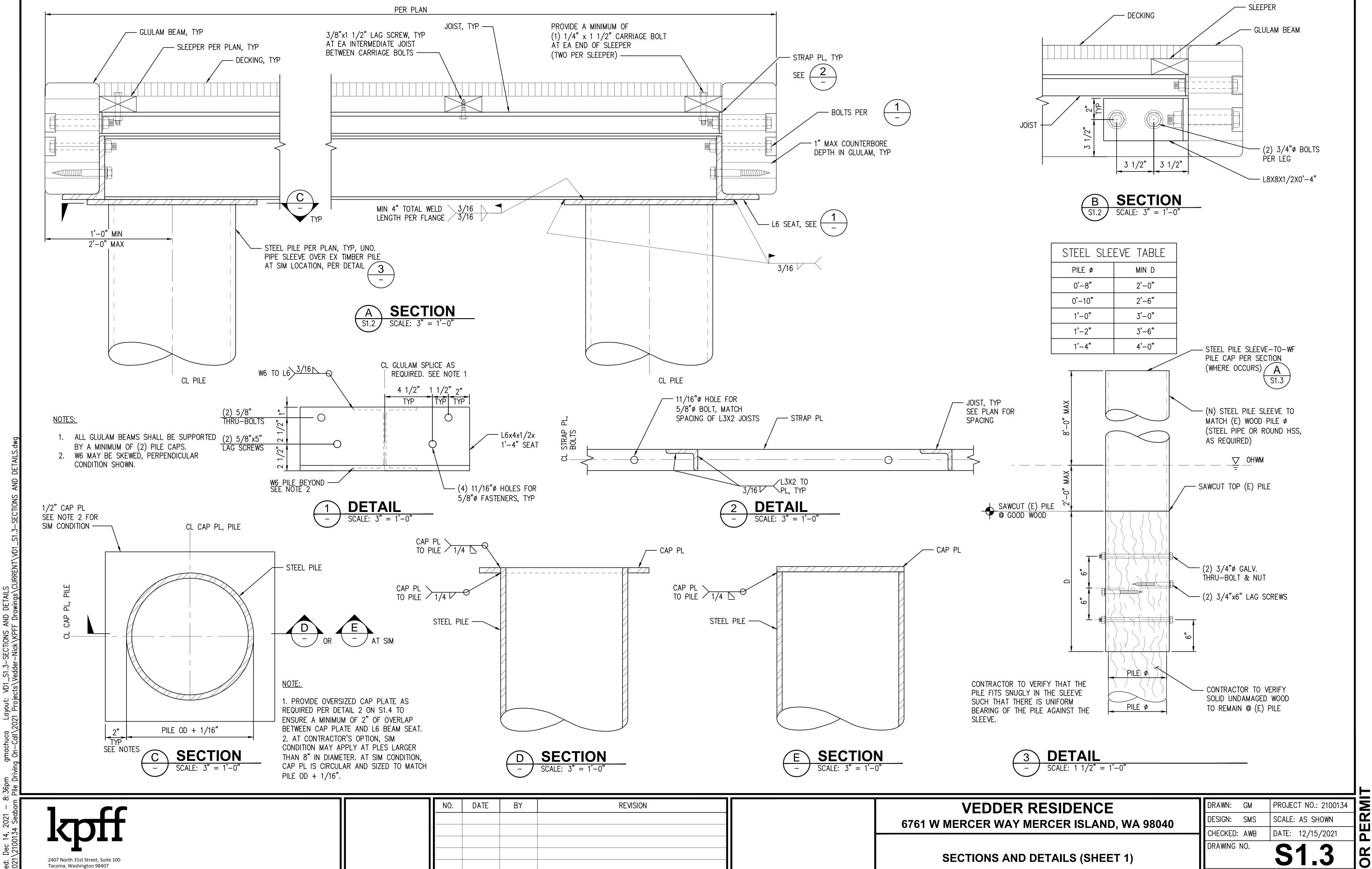
VEDDER RESIDENCE
6761 W MERCER WAY MERCER ISLAND, WA 98040

**DOCK FRAMING PLAN** 

DRAWING NO.	, ,
CHECKED: AWB DA	TE: 12/15/2021
DESIGN: SMS SC	ALE: AS SHOWN
DRAWN: GM PR	OJECT NO.: 2100134

SHEET NO.

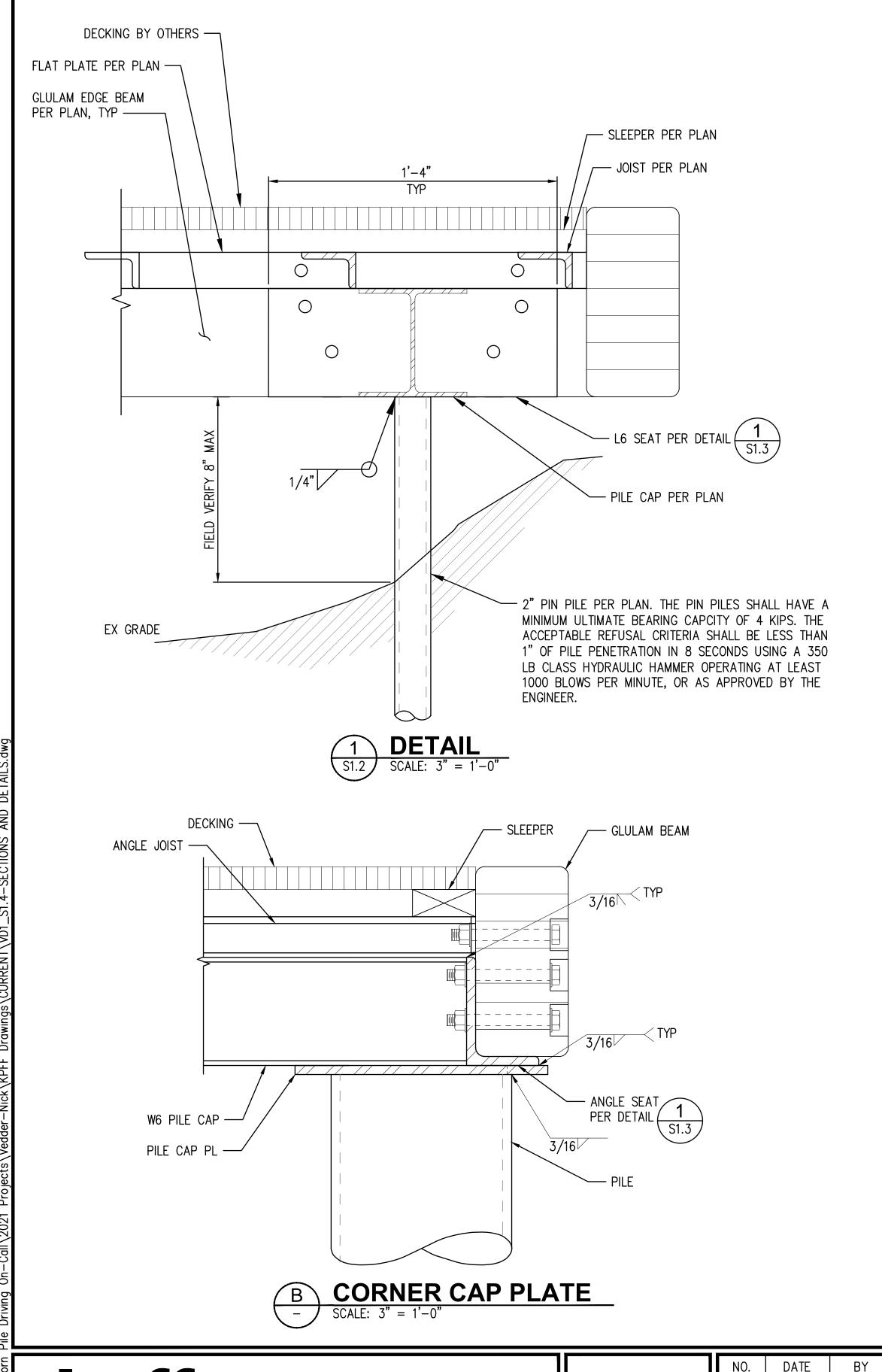
**02** of **04** 

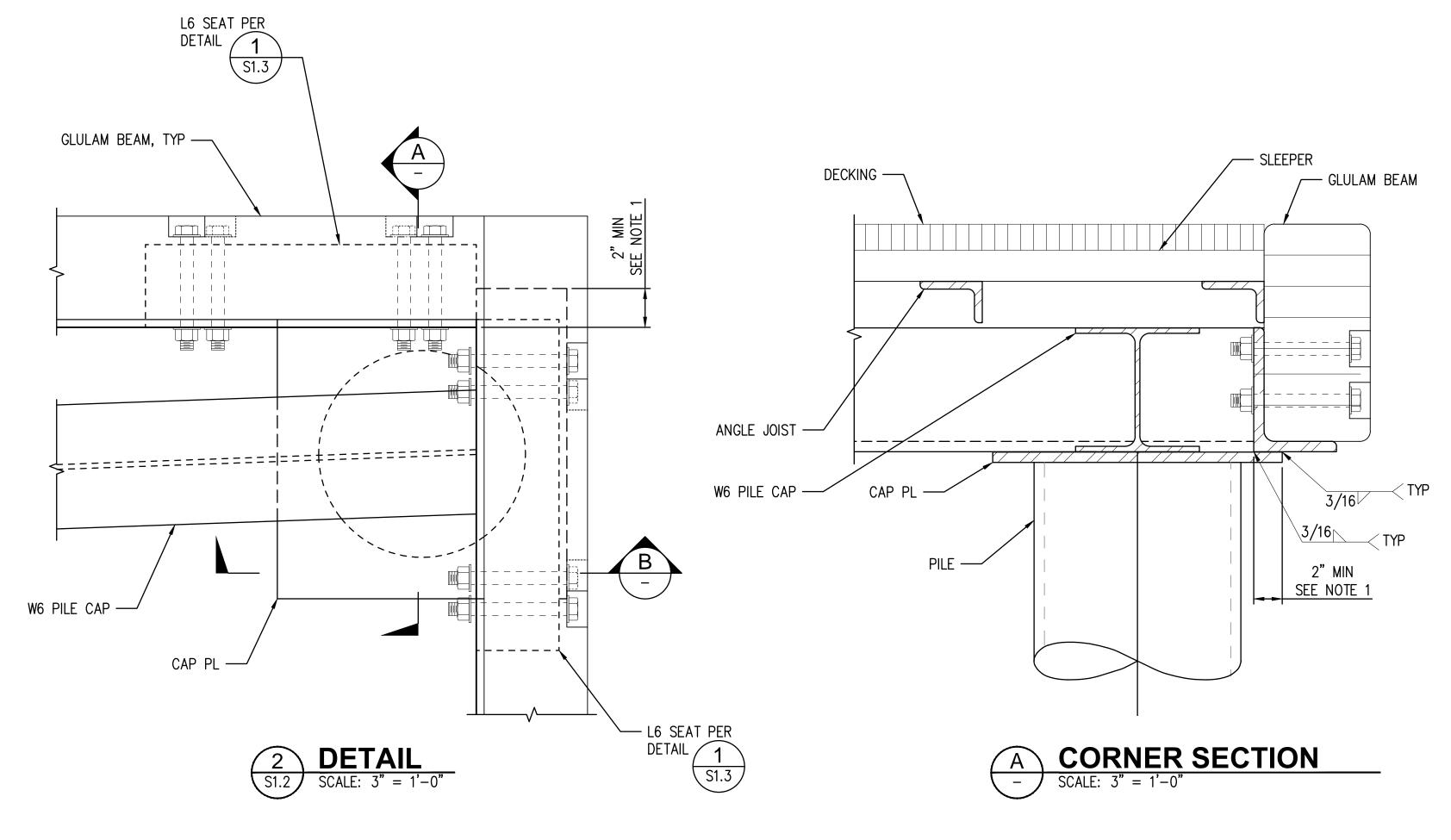


**03** OF **04** 

SHEET NO.

(253) 396-0150 Fax (253) 396-0162





# NOTES:

1. PILE CAP PLATE SHALL BE OVERSIZED, AS REQUIRED, TO PROVIDE A MINIMUM OF 2" OF OVERLAP BETWEEN L6 ANGLE SEAT AND PILE CAP PLATE.

# NOTES:

1. PILE CAP PLATE SHALL BE OVERSIZED, AS REQUIRED, TO PROVIDE A MINIMUM OF 2" OF OVERLAP BETWEEN L6 ANGLE SEAT AND PILE CAP PLATE.

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

	NO.	DATE	BY	REVISION
*				

**VEDDER RESIDENCE** 

6761 W MERCER WAY MERCER ISLAND, WA 98040

**SECTIONS AND DETAILS (SHEET 2)** 

DRAWN: GM	PROJECT NO.: 2100134	Σ
DESIGN: SMS	SCALE: AS SHOWN	2
CHECKED: AWB	DATE: 12/15/2021	PE
DRAWING NO.	C1 /	
	<b>.</b> 71_4	

SHEET NO.

**04** OF **04**