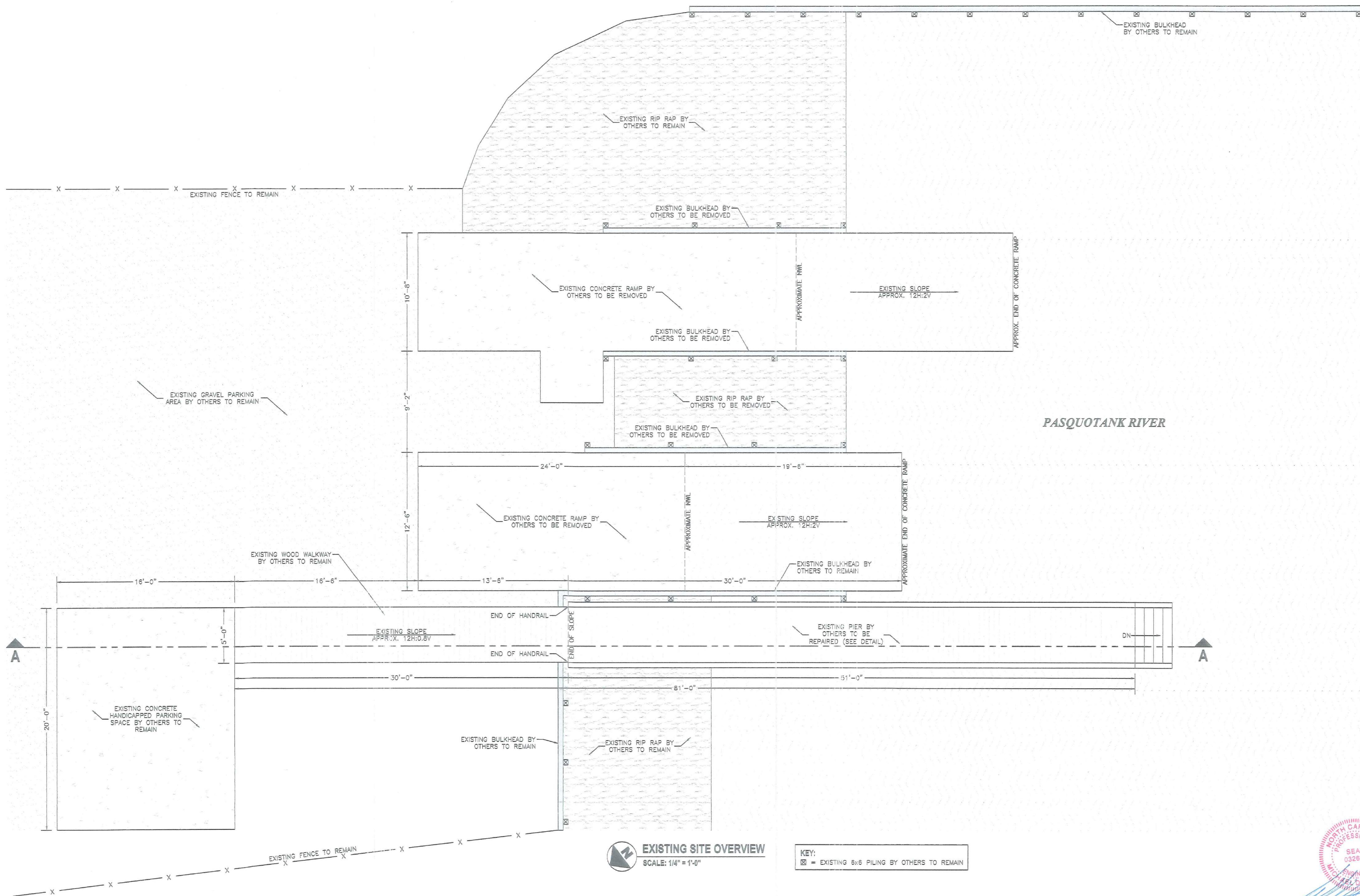
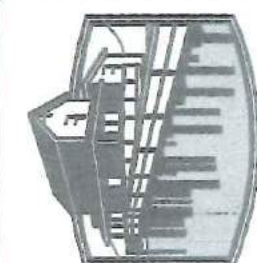




EXISTING SITE OVERVIEW
SCALE: 1/4" = 1'-0"

KEY:
[Symbol] = EXISTING 6x6 PILING BY OTHERS TO REMAIN

ENGINEER NOT RESPONSIBLE FOR EXISTING STRUCTURES

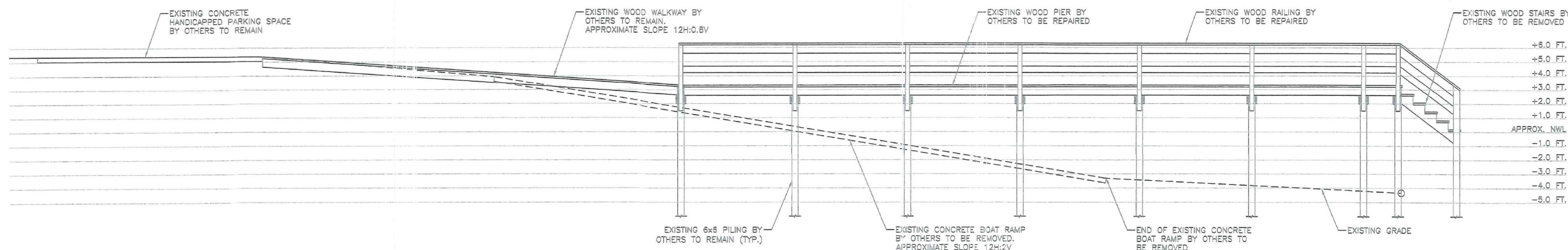


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CAMDEN COUNTY
NORTH CAROLINA
PROJECT: 230 MILLTOWN RD., SHILOH
DESCRIPTION: **BOAT RAMP & PIER REPAIR PLAN**

IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR BUILDER TO CONFORM TO ALL STANDARDS, PROVISIONS, REQUIREMENTS, METHODS, IN CONSTRUCTION, AND USES OF MATERIALS, IN BUILDINGS AND/OR STRUCTURES PROVIDED BY THE NORTH CAROLINA BUILDING CODE AND ANY OTHER LOCAL AGENCIES, AND IN ACCORDANCE WITH GOOD ENGINEERING AND CONSTRUCTION PRACTICES.

SCALE: 1/4" = 1'-0"
SHEET: **S1** OF **4**
DATE: 1-18-19
REVISED: N/A



EXISTING ELEVATION CROSS SECTION A-A

SCALE: 1/4" = 1'-0"
 NOTE: ELEVATION DATA IS APPROXIMATE AND IS PROVIDED FOR PLANNING PURPOSES ONLY. ACTUAL ELEVATION DATA SHALL BE PROVIDED BY A LICENSED SURVEYOR.



ENGINEER NOT RESPONSIBLE FOR EXISTING STRUCTURES



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PROJECT:	CAMDEN COUNTY	NORTH CAROLINA
230 MILITARY RD. SE 104	CAMDEN COUNTY	
DESCRIPTION: BOAT RAMP & PIER REPAIR PLAN		

IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR BUILDER TO CONFORM TO ALL STANDARDS, PROVISIONS, REQUIREMENTS, METHODS, IN CONSTRUCTION, AND USES OF MATERIALS, IN BUILDINGS AND/OR STRUCTURES PROVIDED BY THE NORTH CAROLINA BUILDING CODE AND ANY OTHER LOCAL, STATE, AND FEDERAL REQUIREMENTS WITH GOOD ENGINEERING AND CONSTRUCTION PRACTICES.

SCALE: 1/4" = 1'-0"

SHEET: **S2** OF **4**

DATE: 1-18-19

REVISED: N/A

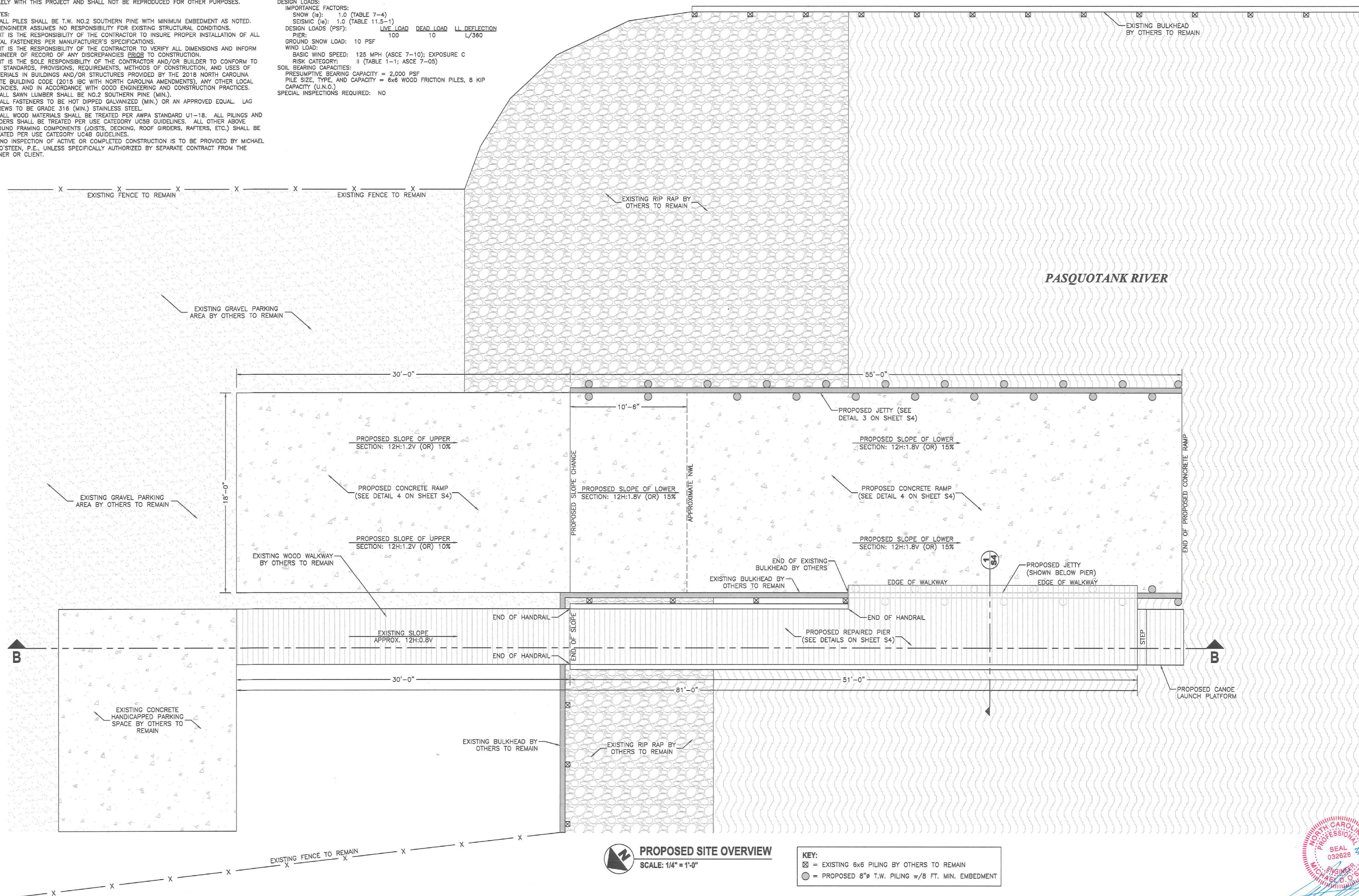
NOTES:

- 1) ALL PILES SHALL BE T.W. NO.2 SOUTHERN PINE WITH MINIMUM EMBEDMENT AS NOTED.
- 2) ENGINEER ASSUMES NO RESPONSIBILITY FOR EXISTING STRUCTURAL CONDITIONS.
- 3) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE PROPER INSTALLATION OF ALL METAL FASTENERS PER MANUFACTURER'S SPECIFICATIONS.
- 4) IF IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS AND INFORM ENGINEER OF RECORD OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- 5) IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR BUILDER TO CONFORM TO ALL STANDARDS, PROVISIONS, REQUIREMENTS, METHODS OF CONSTRUCTION, AND USES OF MATERIALS IN BUILDING AND/OR STRUCTURES PROVIDED BY THE 2018 NORTH CAROLINA STATE BUILDING CODE (2018 NORTH CAROLINA AMENDMENTS), ANY OTHER LOCAL AGENCIES, AND IN ACCORDANCE WITH GOOD ENGINEERING AND CONSTRUCTION PRACTICES.
- 6) ALL SAWN LUMBER SHALL BE NO.2 SOUTHERN PINE (MIN.).
- 7) ALL FASTENERS TO BE HOT DIPPED GALVANIZED (MIN.) OR AN APPROVED EQUIV. LAG SCREWS TO BE GRADE 316 (MIN.) STAINLESS STEEL.
- 8) ALL ROOF MATERIAL SHALL BE TREATED PER AWWA STANDARD U1-18. ALL PILING AND GIRDERS SHALL BE TREATED PER USE CATEGORY UCSB GUIDELINES. ALL OTHER ABOVE GROUND FRAMING COMPONENTS (JOISTS, DECKING, ROOF GIRDERS, RAFTERS, ETC.) SHALL BE TREATED PER USE CATEGORY UC4B GUIDELINES.
- 9) NO INSPECTION OF ACTIVE OR COMPLETED CONSTRUCTION IS TO BE PROVIDED BY MICHAEL D. HARRIS, P.E., UNLESS SPECIFICALLY AUTHORIZED BY SEPARATE CONTRACT FROM THE OWNER OR CLIENT.

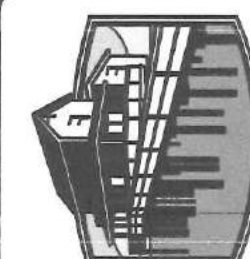
2018 APPENDIX B BUILDING CODE SUMMARY - STRUCTURAL DESIGN:
DESIGN LOADS:

IMPORTANCE FACTORS:
SNOW (s): 1.0 (TABLE 7-4)
SEISMIC (I_e): 1.0 (TABLE 11.5-1)
DESIGN LOADS (PSF):

	<u>LI</u>	<u>DEAD</u>	<u>WIND</u>	<u>DEFLECTION</u>
PIER:	100	10		L/360
GROUND SNOW LOAD:	10 PSF			
WIND LOAD:				
BASIC WIND SPEED:	125 MPH (ASCE 7-10);	EXPOSURE C		
RISK CATEGORY:	II (TABLE 1-1; ASCE 7-05)			
SOIL BEARING CAPACITIES:				
PRESUMPTIVE BEARING CAPACITY:	2,000 PSF			
PILE SIZE, TYPE, AND CAPACITY:	6x6 WOOD FRICITION PILES, 8 (U.N.C.)			
SPECIAL INSPECTIONS REQUIRED:	NO			



A circular red professional engineer seal for Michael D. O'Steen, North Carolina, License No. 032628. The seal includes the text "NORTH CAROLINA PROFESSIONAL ENGINEER" and "SEAL 032628". A handwritten date "4/12/19" is written over the seal. A blue ink signature is written across the bottom of the seal.

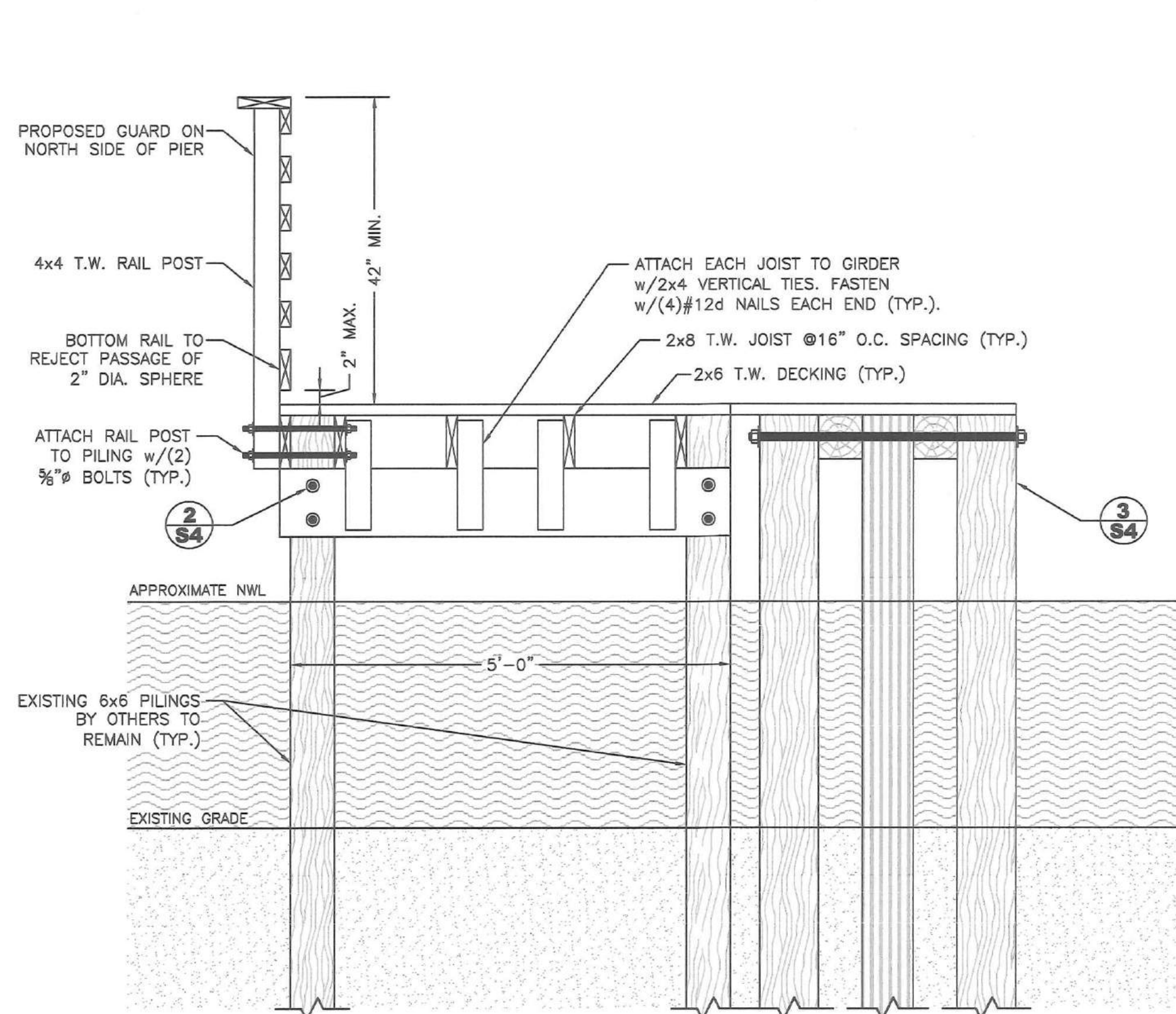


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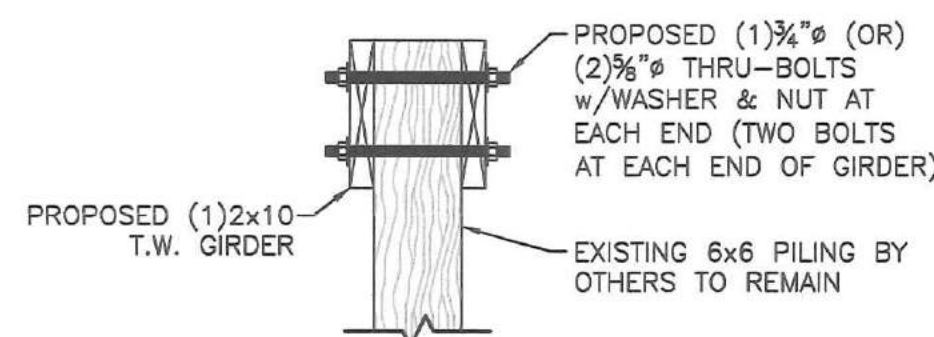
PROJECT:	<i>CAMDEN COUNTY</i>	CAMDEN COUNTY	NORTH CAROLINA
330 MILLTOWN RD., SHILOH			
DESCRIPTION:	<i>BOAT RAMP & PIER REPAIR PLAN</i>		

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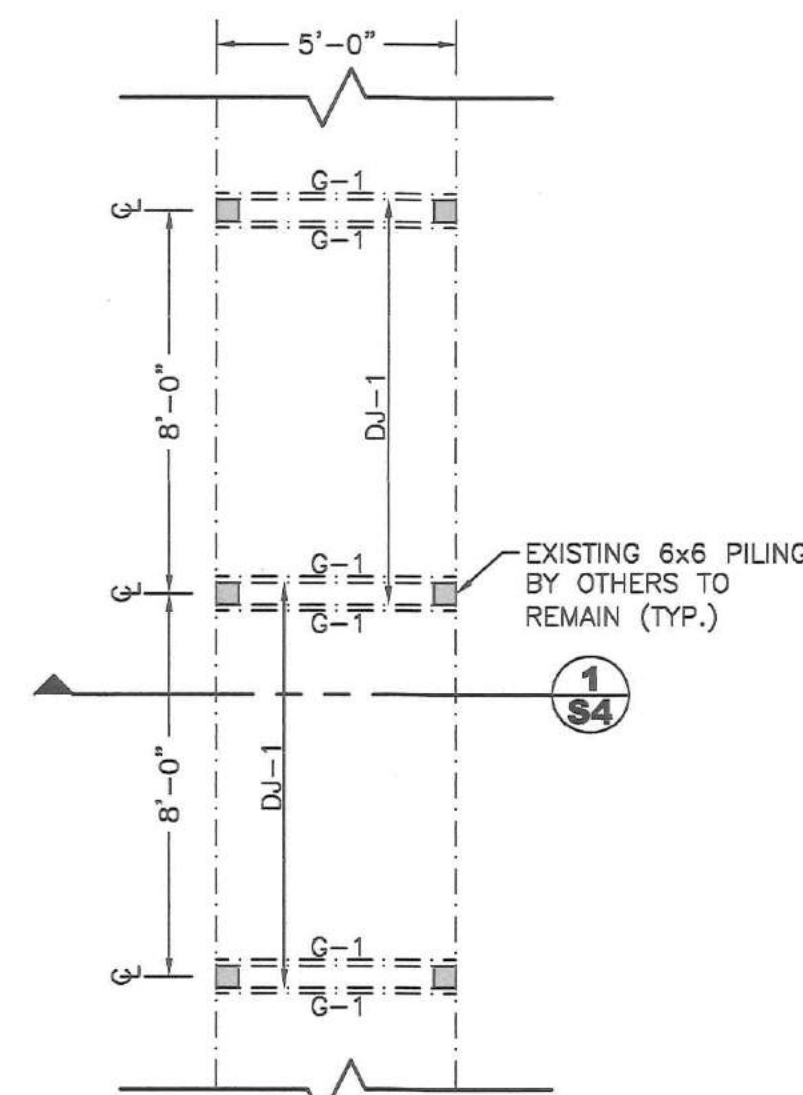
SCALE:	1/4" = 1'-0"
SHEET:	S3 OF 4
DATE:	1-18-19
REVISED:	2-11-19



1
S4 **PROPOSED PIER CROSS SECTION**
SCALE: 3/4" = 1'-0"
NOTE: GUARD SHALL BE CONSTRUCTED PER NORTH CAROLINA BUILDING CODE SECTION 1013.

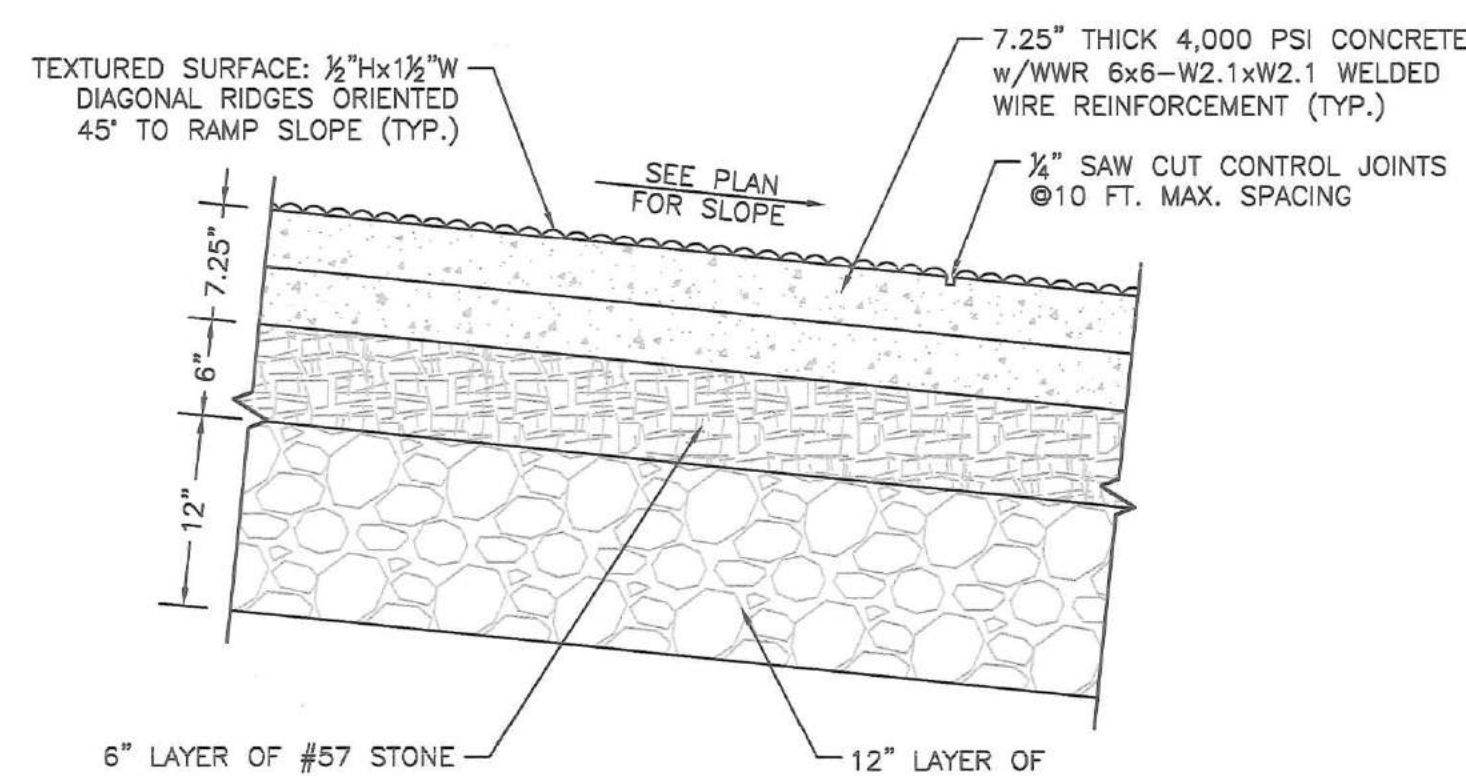


2
S4 **GIRDER TO PILING CONNECTION DETAIL**
SCALE: 1" = 1'-0"

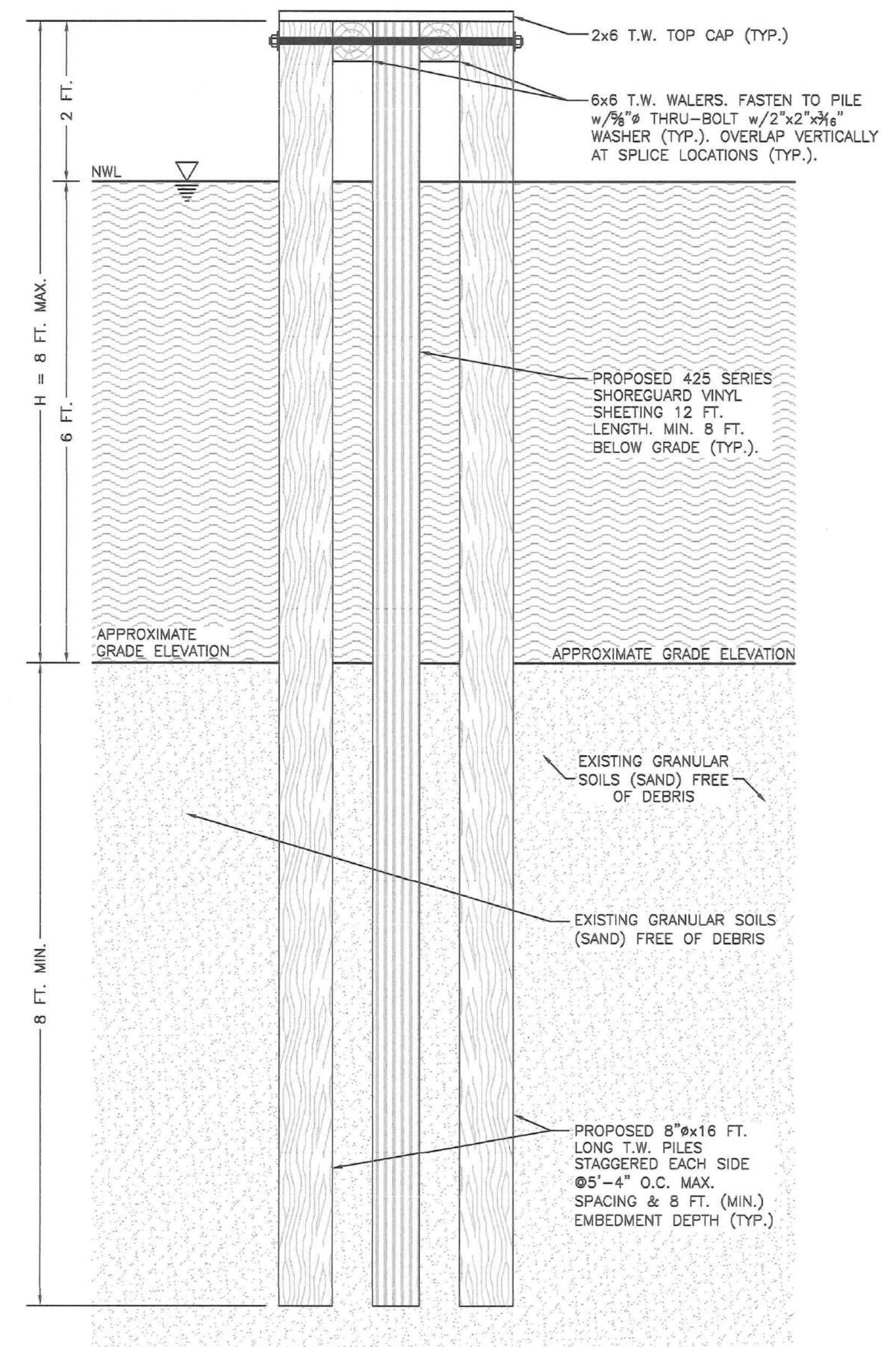


PROPOSED PIER FRAMING PLAN
SCALE: 1/4" = 1'-0"

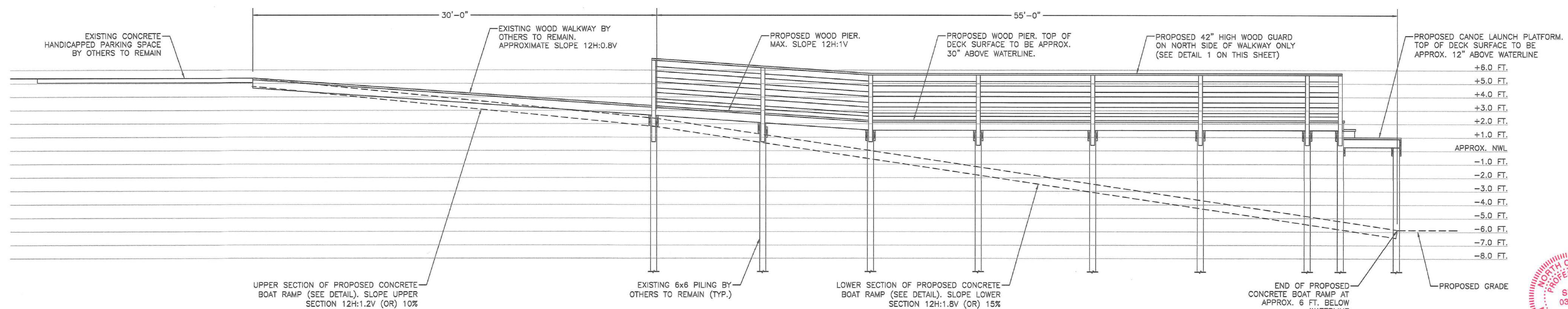
PROPOSED PIER FRAMING SCHEDULE	
MARK	DESCRIPTION
G-1	PROPOSED (1) 2x10 T.W. DECK GIRDER
DJ-1	PROPOSED 2x8 @ 16" O.C. T.W. DECK JOISTS



4
S4 **CONCRETE PAVEMENT SECTION**
SCALE: 1" = 1'-0"
NOTES:
1) WELDED WIRE FABRIC: ASTM A185.
2) 2" MIN. CLEAR CONCRETE COVER ON ALL REINFORCING.

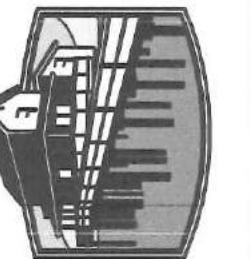


3
S4 **JETTY SECTION VIEW**
SCALE: 3/4" = 1'-0"



PROPOSED ELEVATION CROSS SECTION B-B
SCALE: 1/4" = 1'-0"
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ENGINEER NOT RESPONSIBLE FOR EXISTING STRUCTURES



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SCALE:
AS NOTED
SHEET:
S4 OF 4
DATE:
1-18-19
REVISED:
2-11-19