

STRUCTURAL NOTES

GENERAL NOTES:

- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATION AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR SLEEVES, DEPRESSIONS AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
- ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD AND WITH ALL OTHER DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDED THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING (AND ACCOMPANYING FOOTINGS), GUYS OR TIEDOWNS.
- ADDITIONAL OBSERVATIONS AS A RESULT OF REJECTION OF WORK COMPLETED AND/OR ADDITIONAL OBSERVATIONS DUE TO THE DEFICIENCIES IN WORK OBSERVED WILL BE AT THE EXPENSE OF THE CONTRACTOR.

DESIGN CODES:

- 2018 NORTH CAROLINA STATE BUILDING CODE
- 2015 NATIONAL DESIGN SPECIFICATIONS (NDS) FOR WOOD CONSTRUCTION

DESIGN LOADS:

THE STRUCTURAL SYSTEM FOR THIS BUILDING HAS BEEN DESIGNED WITH THE FOLLOWING SUPERIMPOSED LOADINGS:

DESIGN LIVE LOADS:	
FLOOR (OFFICE)	50 psf
CORRIDORS (OFFICE)	80 psf
LIGHT STORAGE	125 psf

WIND:	
INTERIOR PRESSURE	5 psf

COMPONENT & CLADDING:  
ALL BUILDING COMPONENTS AND CLADDING ENGINEERED BY THE COMPONENT MANUFACTURER ARE TO BE DESIGNED BY THE MANUFACTURER'S ENGINEER FOR WIND LOADS DETERMINED PER THE NORTH CAROLINA STATE BUILDING CODE FOR THE BASIC DESIGN WIND VELOCITY, IMPORTANCE FACTOR AND EXPOSURE LISTED ABOVE.

SEISMIC:

IMPORTANCE FACTOR:	$I_e =$	1.0
RISK CATEGORY		II
MAPPED SPECTRAL RESPONSE ACCELERATIONS,	$S_s =$	0.14g
SPECTRAL RESPONSE COEFFICIENT,	$S_{D1} =$	0.07g
	$S_{D2} =$	0.15g
	$S_{D3} =$	0.11g

SEISMIC RESISTING SYSTEM:  
ORDINARY WOOD SHEATHED SHEAR WALLS

WOOD:

- STRUCTURAL 2x WOOD COMPONENTS HAVE BEEN DESIGNED AS SOUTHERN YELLOW PINE (SYP) OR HEM-FIR (HF) NO 2 OR BETTER AND SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE FIBER STRESSES AND PROPERTIES:

MODULUS OF ELASTICITY (E):	1,300,000 psi
BENDING (F <sub>b</sub> ):	850 psi
SHEAR (F <sub>v</sub> ):	75 psi

- WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PROTECTED OR PRESSURE TREATED IN ACCORDANCE WITH AITC-109.

- MEMBER SIZES SHOWN ARE NOMINAL UNLESS NOTED OTHERWISE.

- BOLTS IN WOOD ARE MACHINE BOLTS, UNLESS OTHERWISE NOTED. MACHINE BOLTS SHALL HAVE A SHANK DIAMETER WITHIN 1/64" OF THAT SPECIFIED. BOLTS ARE ASTM 307 STEEL. BOLT HOLES IN WOOD SHALL BE 1/32" OVERSIZE. WHERE STEEL IS CONNECTED TO WOOD, HOLES IN STEEL SHALL BE 1/16" OVERSIZE. PROVIDE STANDARD CUT WASHERS UNDER HEAD AND NUT WHERE BEARING IS AGAINST WOOD. WHERE STEEL SIDE PLATES ARE USED FOR CONNECTION, THE PLATE SHALL BE USED AS A TEMPLATE.

- ALL WOOD ELEMENTS SHALL BE ATTACHED PER THE FASTENING SCHEDULE OF THE 2018 NCSBC (TABLE 2304.9.1) UNLESS OTHERWISE NOTED.

- SEE ARCHITECTURAL DRAWINGS FOR WEATHER PROTECTION OF ALL EXPOSED WOOD MEMBERS.

WOOD SHEATHING:

- PLYWOOD ROOF, FLOOR AND WALL SHEATHING ARE DESIGNED AS DIAPHRAGMS AND SHALL COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 23 OF THE 2018 NCSBC.

- SHEATHING SHALL BE FASTENED IN ACCORDANCE WITH PLANS SHOWN SPECIAL NAILING REQUIREMENTS AND WITH THE APPROPRIATE SCHEDULE IN CHAPTER 23, UNLESS NOTED OTHERWISE.

- IN GENERAL, SHEETS SHALL BE 4'-0"x8'-0" AND SHALL BE LAID WITH FACE PLYS ACROSS FRAMING MEMBERS AND WITH END JOINTS STAGGERED 4'-0". NO PANEL SHALL BE USED WHICH IS LESS THAN 24" IN WIDTH ON FLOORS AND ROOFS. SHEATHING SHALL BE CONTINUOUS ACROSS 2 SPANS, MINIMUM.

WOOD FRAMING CONNECTORS:

- CONNECTOR MODEL NUMBERS SHOWN ARE "Strong-Tie" CONNECTORS AS MANUFACTURED BY "SIMPSON Strong-Tie Co.", 1450 DOOLITTLE DR., PO BOX 1568, SAN LEANDRO, CA 94577.

- ALL CONNECTORS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A653. CONNECTORS IN CONTACT WITH PRESSURE TREATED MATERIALS SHALL HAVE G-185 COATING. CONNECTORS NOT IN CONTACT WITH TREATED MATERIALS SHALL HAVE STANDARD G60 COATING.

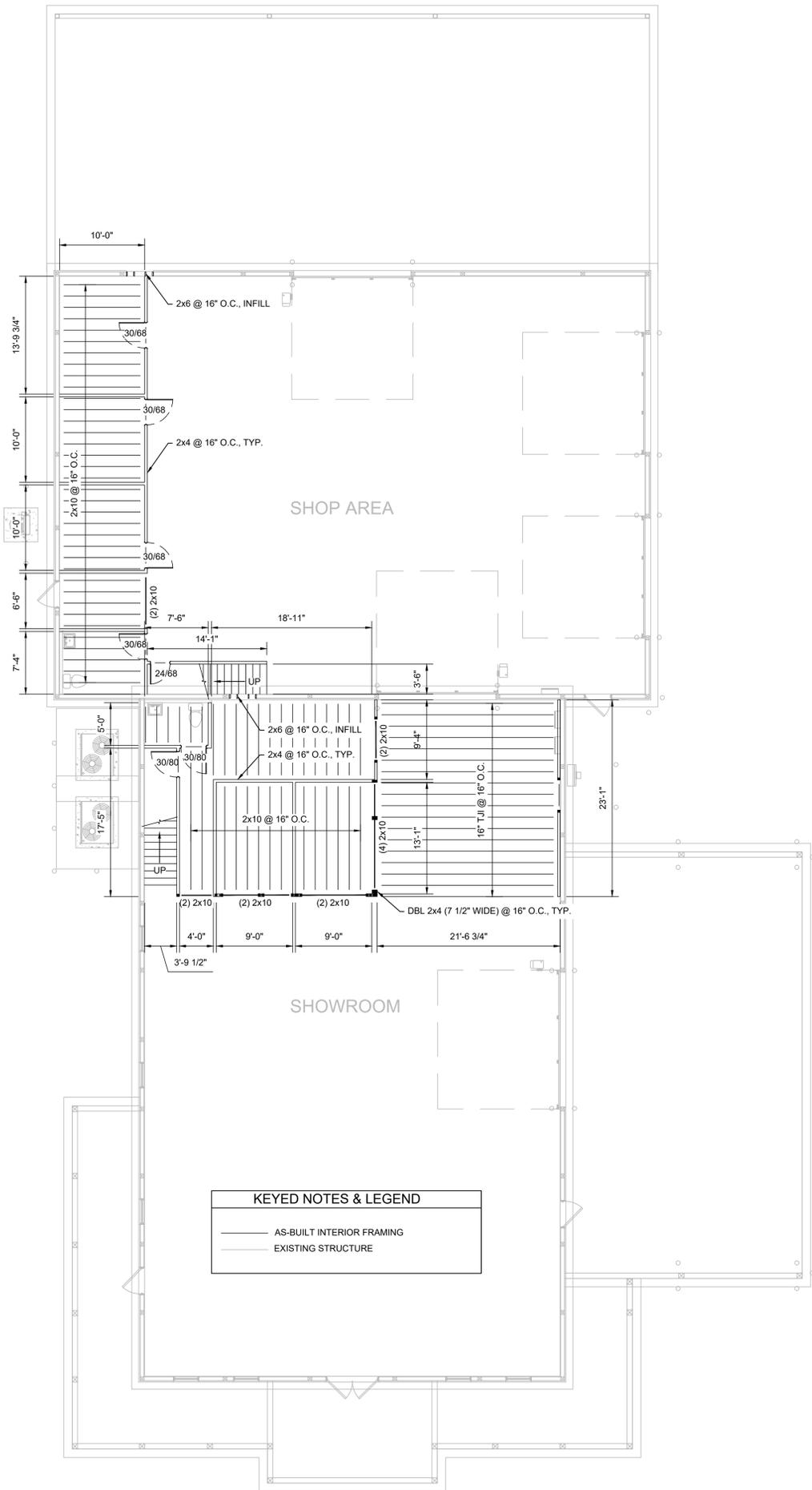
MANUFACTURED WOOD STRUCTURAL COMPONENTS:

- MEMBERS DESIGNATED "LVL" SHALL BE LAMINATED VENEER LUMBER AS MANUFACTURED BY BOISE CASCADE CORPORATION (VERSA-LAM), TRUS JOIST CORPORATION (MICRO-LAM), ALPINE ENGINEERED PRODUCTS (ASH-LVL), MITEK WOOD PRODUCTS (GANG-LAM LVL) OR APPROVED EQUAL, AND SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE FIBER STRESSES AND PROPERTIES:

MODULUS OF ELASTICITY (E):	1,900,000 psi
BENDING (F <sub>b</sub> ):	2,600 psi
SHEAR (F <sub>v</sub> ):	285 psi

- MEMBERS DESIGNATED AS "GLU-LAM" SHALL BE STRUCTURAL GLUED LAMINATED TIMBER MATERIAL. MANUFACTURE AND QUALITY CONTROL SHALL BE IN CONFORMANCE WITH ANSI/AITC-A190.1, "STRUCTURAL GLUED LAMINATED TIMBER". MEMBERS SHALL BE MARKED WITH A QUALITY CONTROL MARKING INDICATING CONFORMANCE WITH AITC-A190.1. ADHESIVE AND LAMINATIONS SHALL MEET THE REQUIREMENTS OF DRY CONDITION OF SERVICE, UNLESS OTHERWISE NOTED. A COAT OF END SEALER SHALL BE APPLIED TO ENDS OF MEMBERS IMMEDIATELY AFTER END TRIMMING. LAMINATING COMBINATIONS SHALL PROVIDE THE FOLLOWING MINIMUM ALLOWABLE FIBER STRESSES AND PROPERTIES:

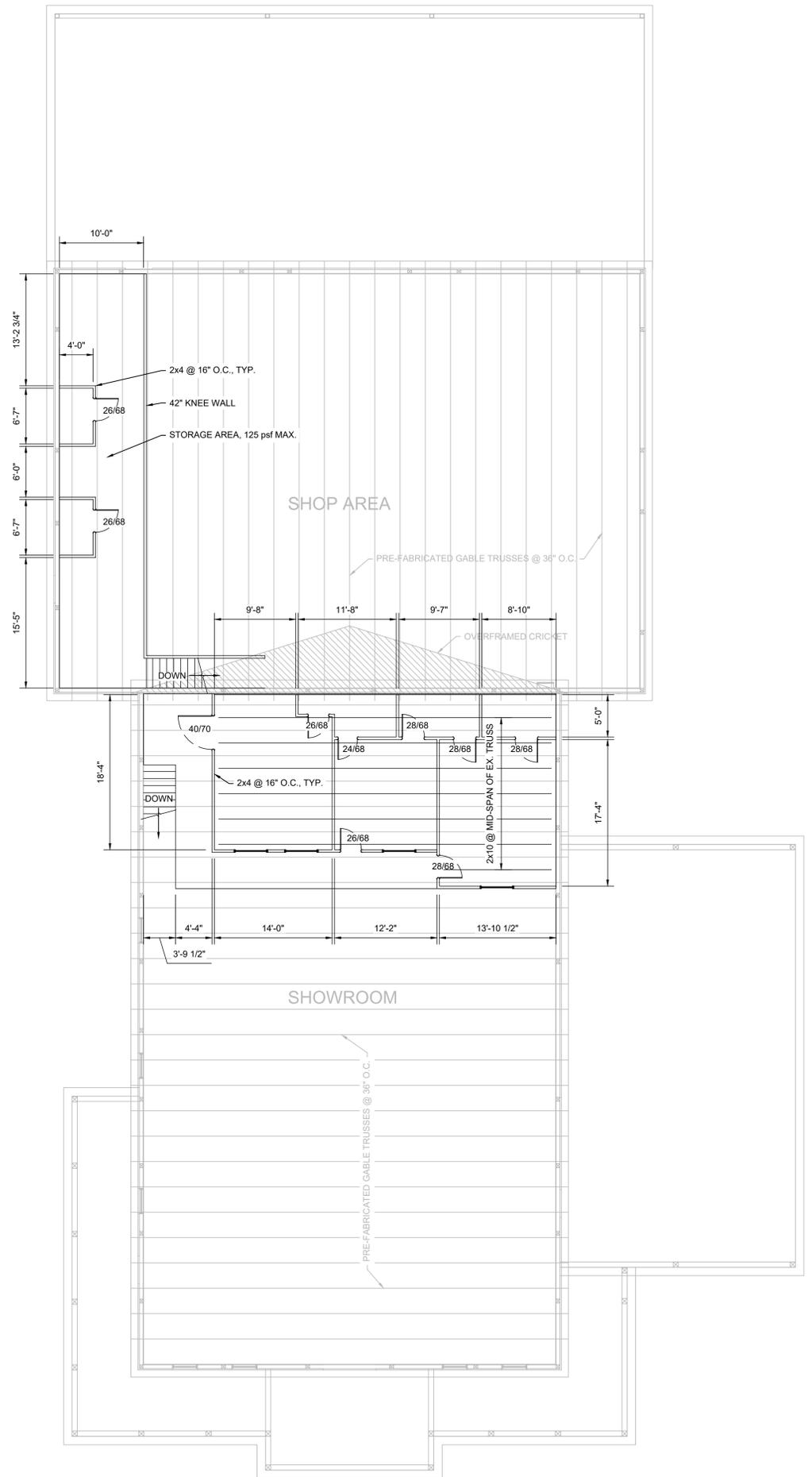
MODULUS OF ELASTICITY (E):	1,800,000 psi
BENDING (F <sub>b</sub> ):	2,400 psi
SHEAR (F <sub>v</sub> ):	165 psi
TENSION (F <sub>t</sub> ):	850 psi
COMP. PERP. (F <sub>c</sub> I):	470 psi



**KEYED NOTES & LEGEND**

- AS-BUILT INTERIOR FRAMING
- EXISTING STRUCTURE

1 SECOND FLOOR FRAMING Scale: 1/8" = 1'-0"



2 CEILING FRAMING Scale: 1/8" = 1'-0"

13200 STRICKLAND ROAD  
SUITE 114, BOX 332  
RALEIGH, NC 27613  
p. 919.957.5100 - f. 919.957.5101  
www.fdr-eng.com  
jfe@fdr-eng.com

Project Name  
**NC WAKEBOATS - INTERIOR UPFIT**  
BROADWAY, NC 27505

Sheet Title  
**GENERAL NOTES  
FRAMING PLANS**

DESIGNED BY:	JTF	
DRAWN BY:	JTF	
APPROVED BY:	HMH	
PROJECT #:	24-442	
DATE:	12/02/2025	
No.	Revision	Date

Sheet  
**S1.1**

Ownership of Instruments of Service: All reports, plans, specifications, computer files, field data, notes and instruments prepared by the design professional as instruments of service shall remain the property of the design professional. All common law, statutory and other reserved rights including the copyright therein.