



Building Services Department

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Dock, Boat House/Port Construction Guide



Overview

All structural construction work on docks and boat houses require a building permit from Perry Township.

As a result of a 2015 decision by the Ontario Superior Court of Justice, a person with plans to build or place a dock or single-story boat house resting on, physically attached to or otherwise covering more than 15 sq. m of shore lands (lake bottom) will now require a permit under the *Public Lands Act* from the Ministry of Natural Resources and Forestry (MNRF). This includes expansions to existing structures that are greater than 15 sq. m (161 sq. ft.)

As the landowner, you are required to provide the following items that will form part of a complete building application including the applicable fee:

1. A letter of approval or copy of permit (if applicable) from the Ministry of Natural Resources and Forestry and/or the Department of Fisheries and Oceans. This applies to all new or additions to existing docks, boat houses and boat ports where the total area of the structure physical attached to or otherwise covering more than 15 sq. m. of shore lands (lake bottom) exceeds 15 sq. m. (161 sq. ft.).
2. Owner(s) with structure(s) located on the Original Shore Road Allowance (OSRA) must have authorization from the municipality or choose to purchase the ORSA from the municipality.
3. All steel docks that support a structure must also comply with 'Steel Dock with Structure Permit' requirements (refer to page 4)

Note: If you are doing any new construction or additions to an existing structure within the shoreline, you may require Planning approval from the Township.

General Requirements

A Building Permit is required for all accessory structures except where:

- The size of the structure is less than or equal to 10 m² (108 sq. ft.); and
- It is not attached to another structure; and
- The structure does not contain any plumbing.

Examples of General Zoning Restrictions:

Shoreline Residential (SR) lots under Zoning By-law 2014-21, the following would apply:

Lot Coverage: Maximum of 5 percent (5%) total coverage for accessory structures. (Please note that deck, dock and boathouse building areas count for this overall lot coverage).

The maximum area of a dock and deck within 30m of the shoreline shall be 60 sq. m.

The maximum permitted width of a boat house is 3.6 m (11.8 ft) or 15% of the lot frontage, whichever is the lesser and the maximum size (building area) is 30 sq. m (323 sq. ft.)

Setbacks: In most cases, the minimum required setbacks within the shore yard (30 m back from the water's edge) is:

- 3 m (9.8 ft.) for an interior side yard
- 20 m (65.6 ft) for an exterior side yard setback (lot abuts a Township road allowance)

Building Height: The maximum height for an accessory structure within the shore yard is 5 m (16.4 ft.) measured from the elevation of the ordinary water's edge to the highest roof ridge of any sloped roof.

The maximum width of all shoreline structures shall be 8 m (26.2 ft.) or 25% of the shoreline frontage, whichever is the lesser width.

No dock shall extend more than 10 m (32.8 ft.) into a waterway (except to provide 6 m (19.6 ft.) of dock in water not less than 0.8 m (2.6 ft.) in water depth but will not be more than 30 m (98.4 ft.) in overall length.

Please be aware that the side setbacks (property lines) are projected out into the lake to determine your required setbacks.

Note: All accessory structures must comply with the Township of Perry's Zoning By-law. If you are unsure whether the accessory structure complies or not, please contact the Building Services Department at 705-636-5941.

Steel Dock with Structure Permit Requirements

1. Steel docks that are to support a superstructure (boat house, boat port, etc.) are required to be designed by a professional engineer. The Ontario Building Code states in Division B, Sentence 4.3.4.1(1) that structural steel be designed in accordance with CAN/CSA S16 "Limit States Design of Steel Structures". This design is required in order to obtain a dock building permit.
2. Fabricators and erectors responsible for making welds for structures fabricated or erected under this Standard shall be certified by the Canadian Welding Bureau to the requirements of CSA Standard W47.1 (Division 1 or Division 2). A "Letter of Validation" is required from the fabricator to verify certification. Companies certified in Division 1 or 2 are required to employ or retain a Welding Engineer. These Welding Engineers are an essential component of a company's certification and perform many tasks including the review of drawings for welding connection details and welding symbols, and the preparation of welding procedure data sheets. Note that the structural Engineers who completes the design drawings are not considered as one of the requirements of certification. It is possible, however, that the structural Engineer and Welding Engineer be the same person.
3. The company that employs the welder must also have an individual qualified by the Canadian Welding Bureau as a supervisor. The supervisor is responsible for supervising the welder carrying out the welds on the structure. All welders employed by the certified company must hold valid qualifications issued by the Canadian Welding Bureau.
4. Construction of a dock is to be inspected by the professional Engineer who designed the structure, to ensure compliance with his/her design.
5. **Building permits will not be issued for the superstructure unless** a certificate of qualification has been submitted to the municipality for the welder, accompanied with a letter stating they have been contracted to construct the superstructure.

A final inspection will not be conducted until the municipality receives a letter (report) from the professional engineer stating that the structure has been constructed in accordance with the engineered design.

Application Requirements

- Completed building permit application form.
- Two copies of the most recent survey **or** detailed site sketch for the property showing dimensions of all existing buildings and structures, and their setbacks, drawn to scale. The site sketch is to include vegetative buffers, the proposed dock, boathouse or boat port and setback dimensions to all property lines are to be shown. (See attached sample site plan on page 7).
- Two copies of construction drawings including floor plans, elevations, and sections drawn to scale. Please note that when indicating building height (for boat houses or boat ports) the height is measured from the ordinary water's edge to the highest point of the proposed boat house/boat port. The attached template drawings and details could be used, providing all dimensions and information are shown on the "Floor Plan" (page 8).
- The current permit fee, payable at time of application by cheque, cash, debit, credit card (2% additional fee) or electronic payment. Cheques are made payable to "The Township of Perry". If choosing to make an online banking payment, please contact the municipality to obtain the online banking number.

Step by Step Application Instructions

1. Site Plan - Refer to the sample "Site Plan" on page 7.

Create or modify a copy of your own survey or site plan. Include all the dimensions and information as shown on the sample.

2. Floor Plan - Refer to the sample "Floor Plan" on page 8.

Create your own or modify the sample to show all of your supporting members, openings and structural information. For crib docks outline your cribbing area with stringers & decking. If engineered roof trusses are to be used then label "Engineered Roof Trusses" on the Floor Plan.

3. Elevations - Refer to the sample "Elevations" on page 9.

Create your own or modify the sample to show all of your openings. Note the direction each elevation is facing in the title block under each elevation (i.e. North, South, East, West). No openings are permitted in a wall within 4 feet of a property line.

4. Building Section – Refer to the "Building Section" on page 10.

Create your own or modify the sample provided to show framing details and building height. If a truss system is used please include the wording, "Trusses

as per attached” on the drawing and attach the engineered stamped truss drawings to your application.

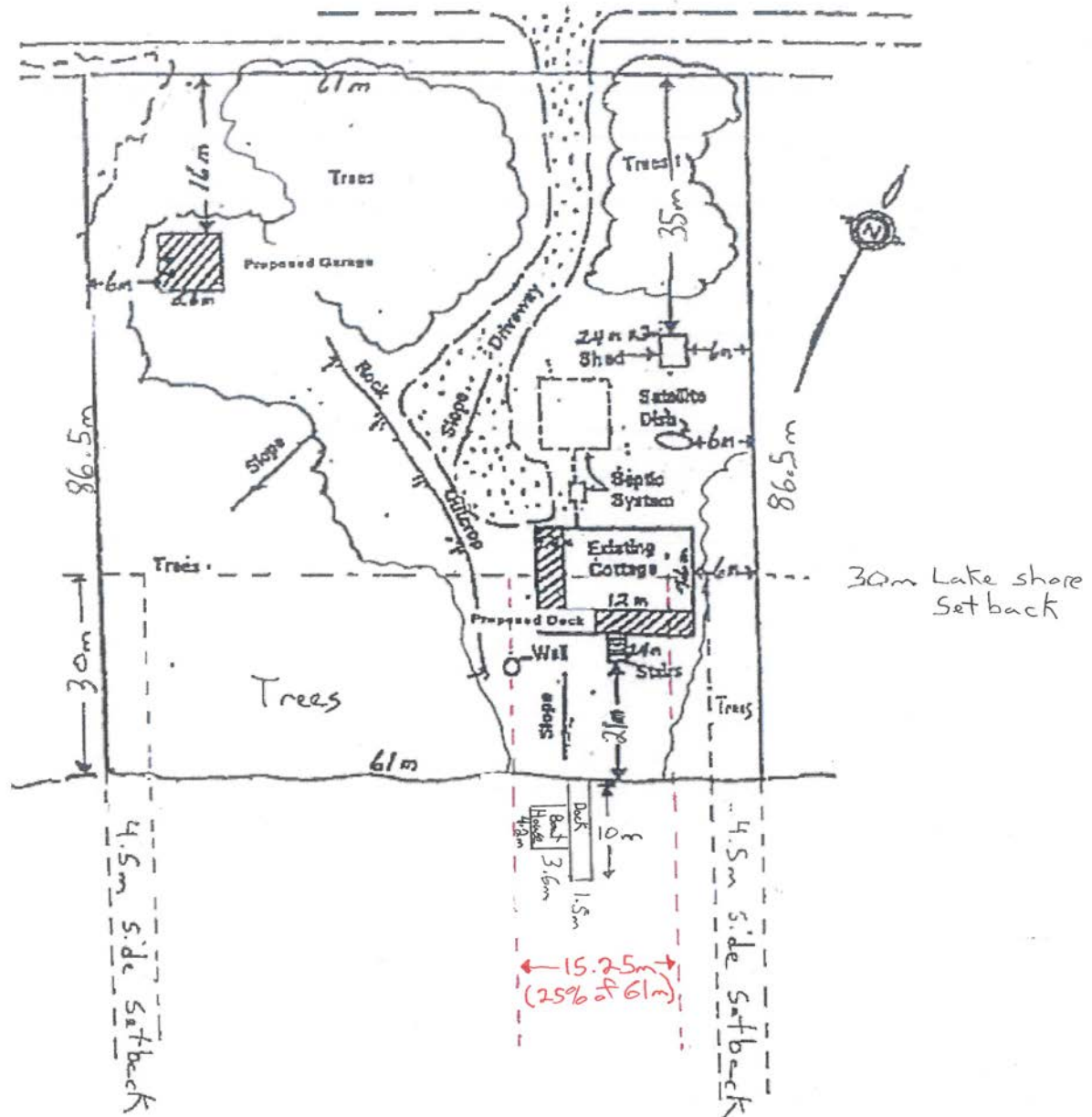
5. Foundation Designs – Refer to the “Dock Construction Details” on pages 11 to 14.

Foundation design begins with your dock. Provide construction detail outlining dock foundation (floating, pipe, crib or steel pile).

Note: Please provide your dock, boat house and/or boat port plans. In addition, any proposed prefabricated truss roof system must have a set of stamped drawings provided by a licensed Engineer with the Province of Ontario.

Sample Site Plan Sketch

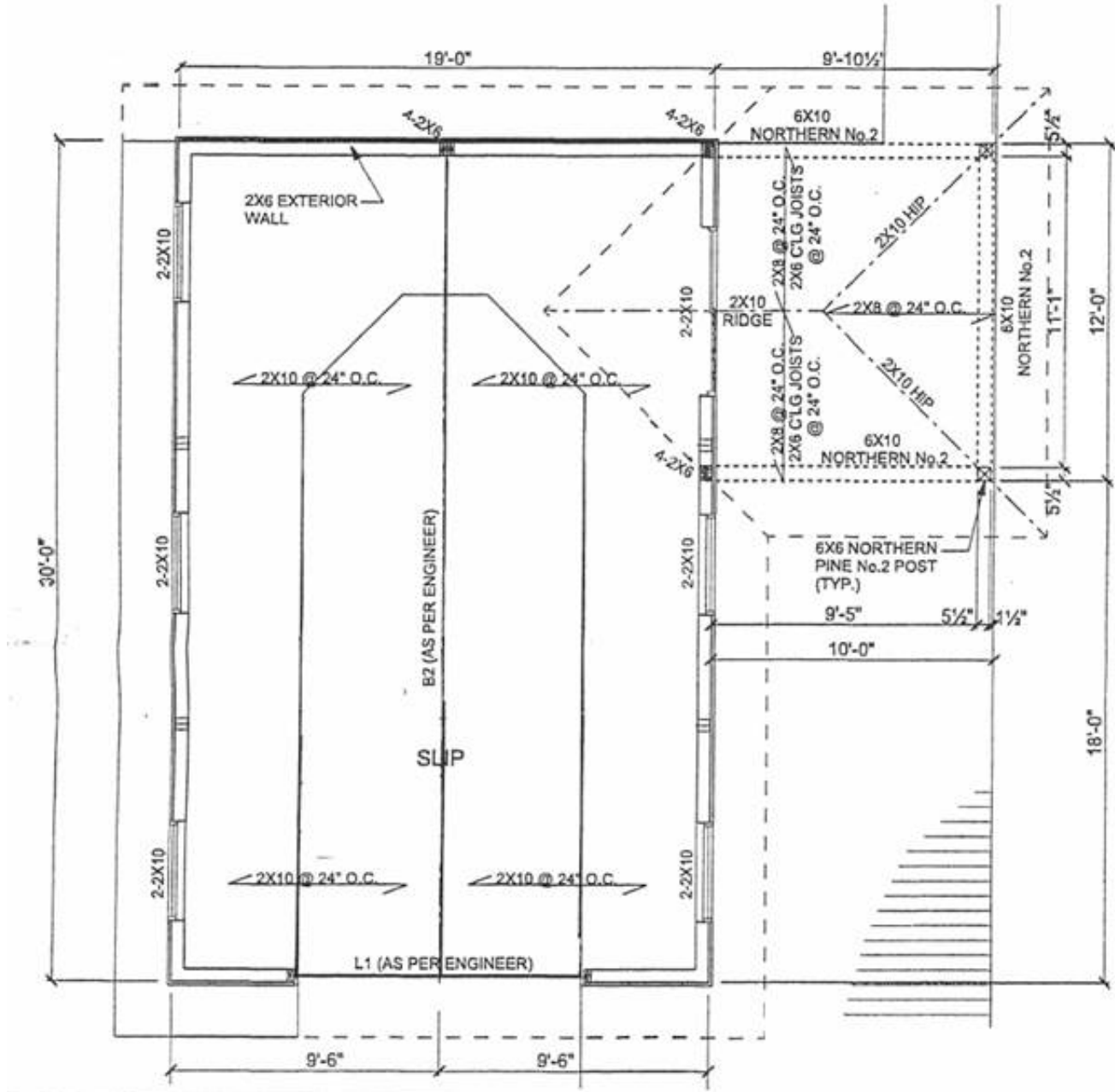
Dimension your own site plan similar to the one below and include the required information as set out in 'Site Information' table.



SITE INFORMATION:	
SITE FEATURES	AREA (ft ² /m ²)
Area of lot:	
Footprint of house:	
Footprint of existing accessory buildings:	
Footprint of proposed dock, boat house/port:	
Length of shoreline:	

Boat House Floor Plan

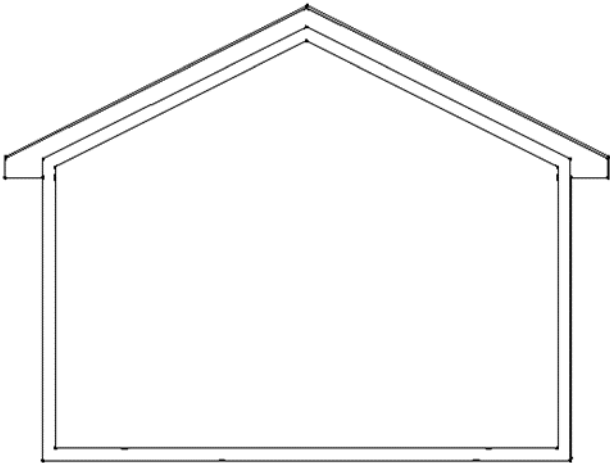
Draw a floor plan like the sample below and include building features such as truss/rafter direction/location and spacing on centre, window and door openings with header/lintel sizes, stud wall sizes with spacing on centre, eve overhang, etc.



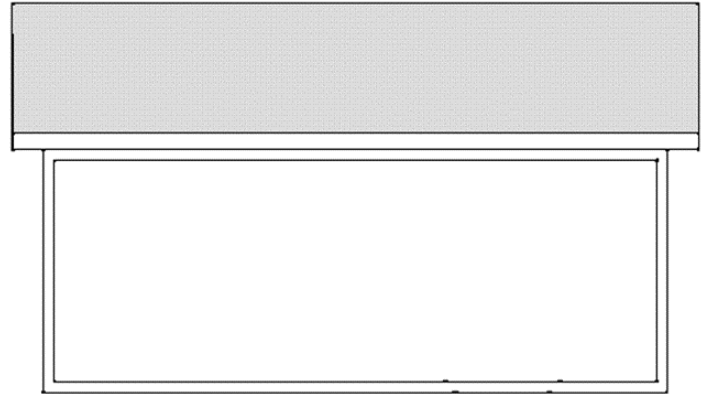
Note: Electrical Lighting Required by Ontario Building Code (O.B.C.)

Elevations

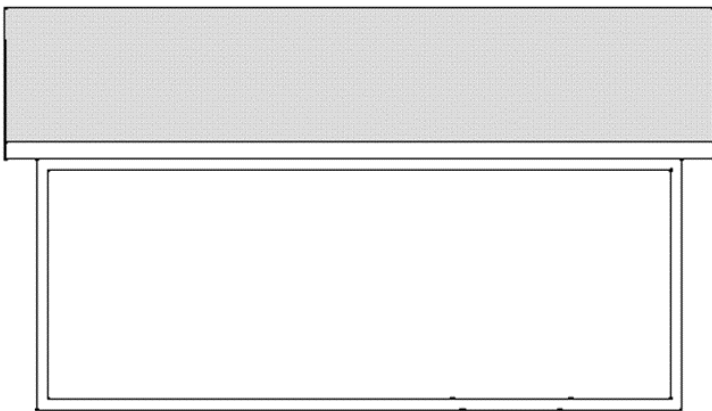
Label the building elevations (i.e. front, right, left and rear) or by indicating the facing directions (North, South, East, West). Be sure to include building features (i.e. window and door openings), size of openings and header/lintel sizes above the openings.



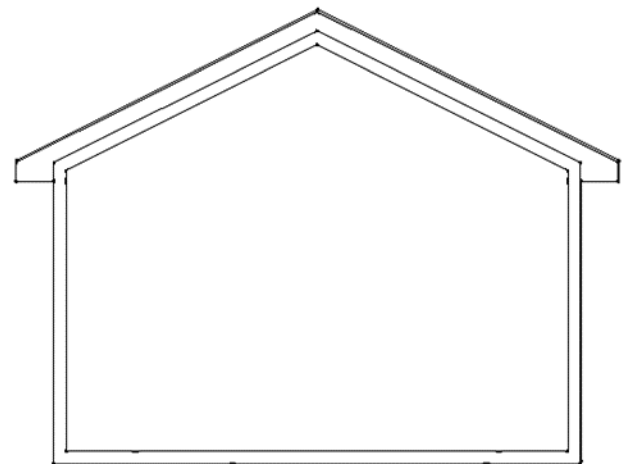
_____ ELEVATION



_____ ELEVATION



_____ ELEVATION

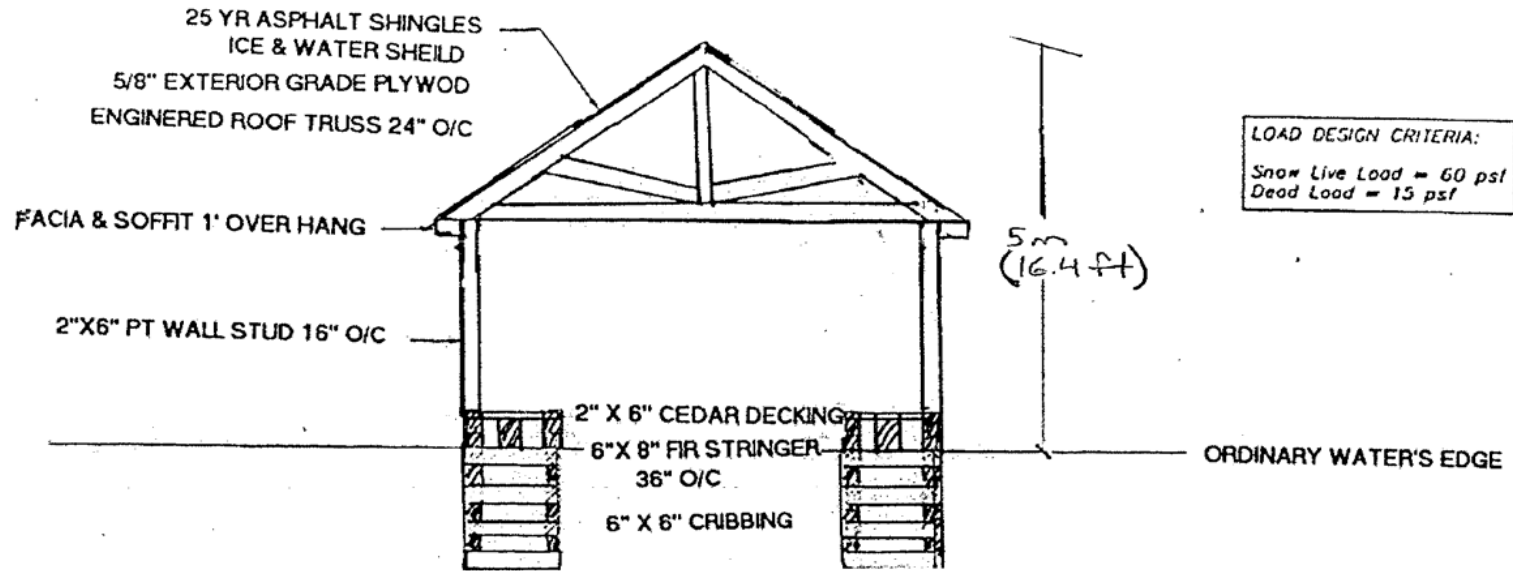


_____ ELEVATION

Note: Refer to the Framing Tables on page 15 to assist you with the Framing Structural Details.

Sample Building Section

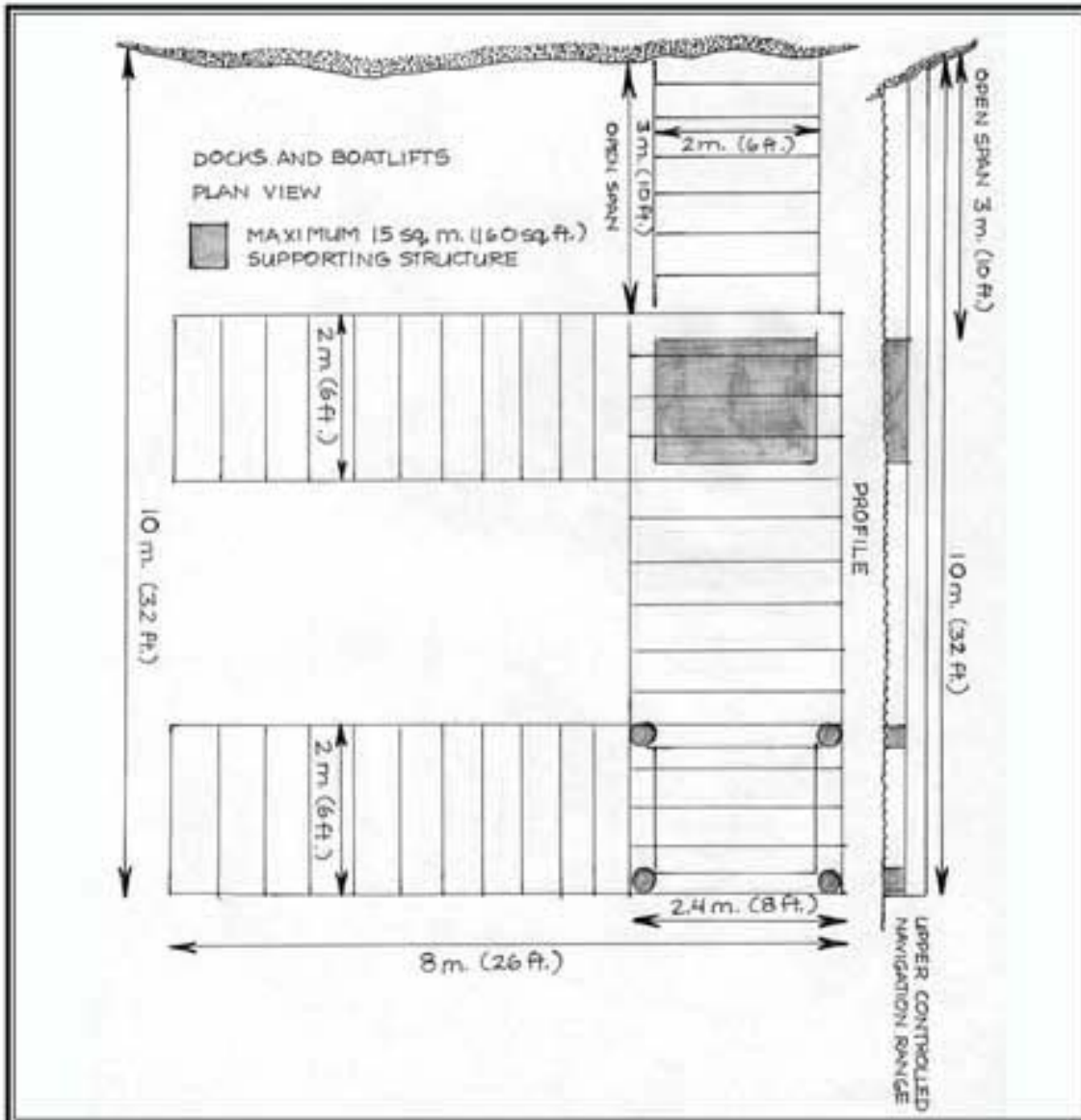
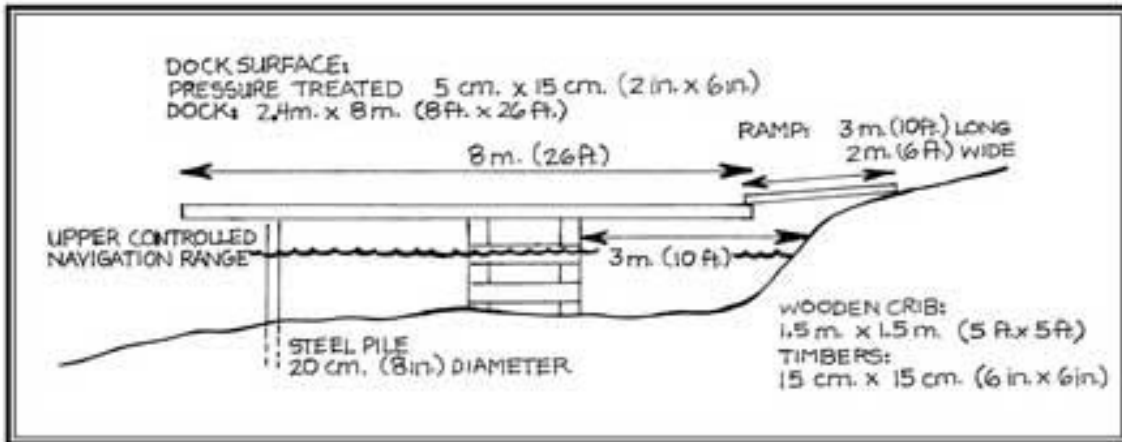
Indicate building height, soffit overhang and roof framing.



Span Table for Solid lumber timbers not exceeding 36" O.C. (crib dock stringers)

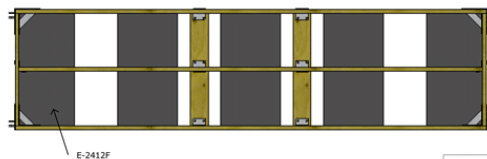
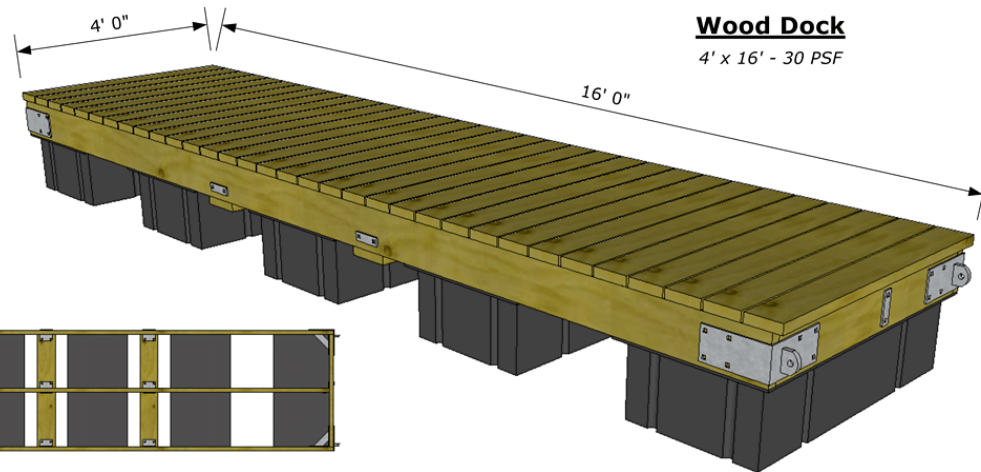
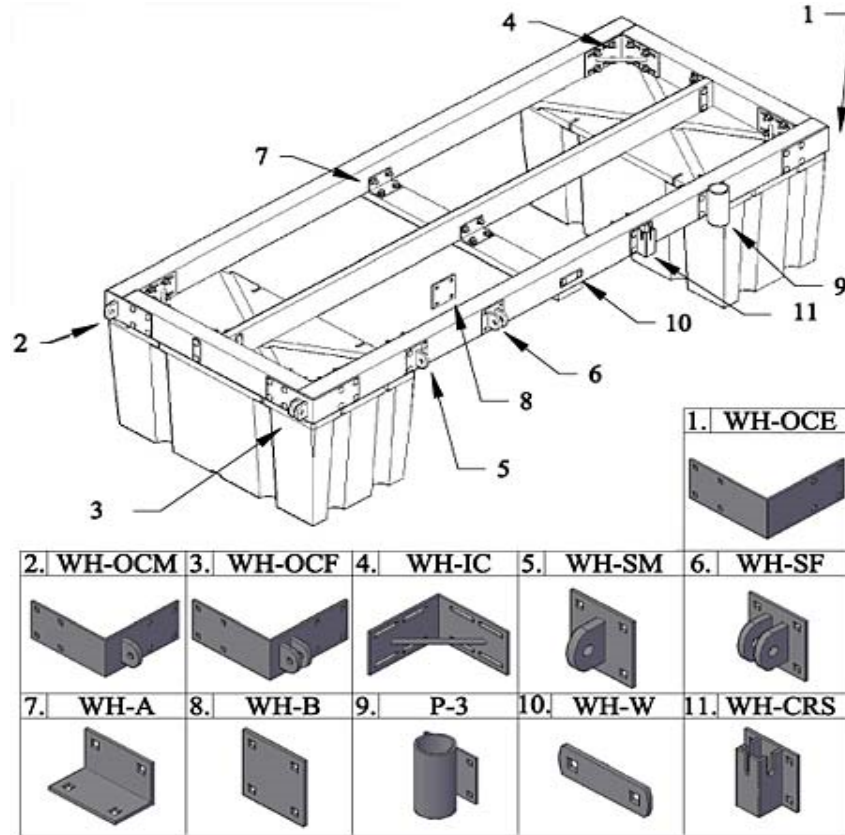
Timber	Size	Span
4 x 6	SS	10'
4 x 6	#1	9'
4 x 6	#2	9'
4 x 8	SS	14'
4 x 8	#1	12'
4 x 8	#2	12'
6 x 6	SS	11'
6 x 6	#1	11'
6 x 6	#2	10'
6 x 8	SS	15'
6 x 8	#1	15'
6 x 8	#2	14'

Dock Construction Detail (crib dock / steel piles)

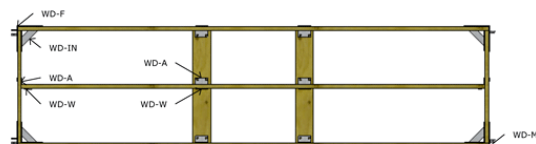


Dock Construction Detail (floating dock)

Supply information from dock manufacturer acceptable i.e. pamphlet with assembly / construction detail



Float Layout :: **A**
scale: 1/4"=1' 001



Hardware :: **A**
scale: 1/4"=1' 002

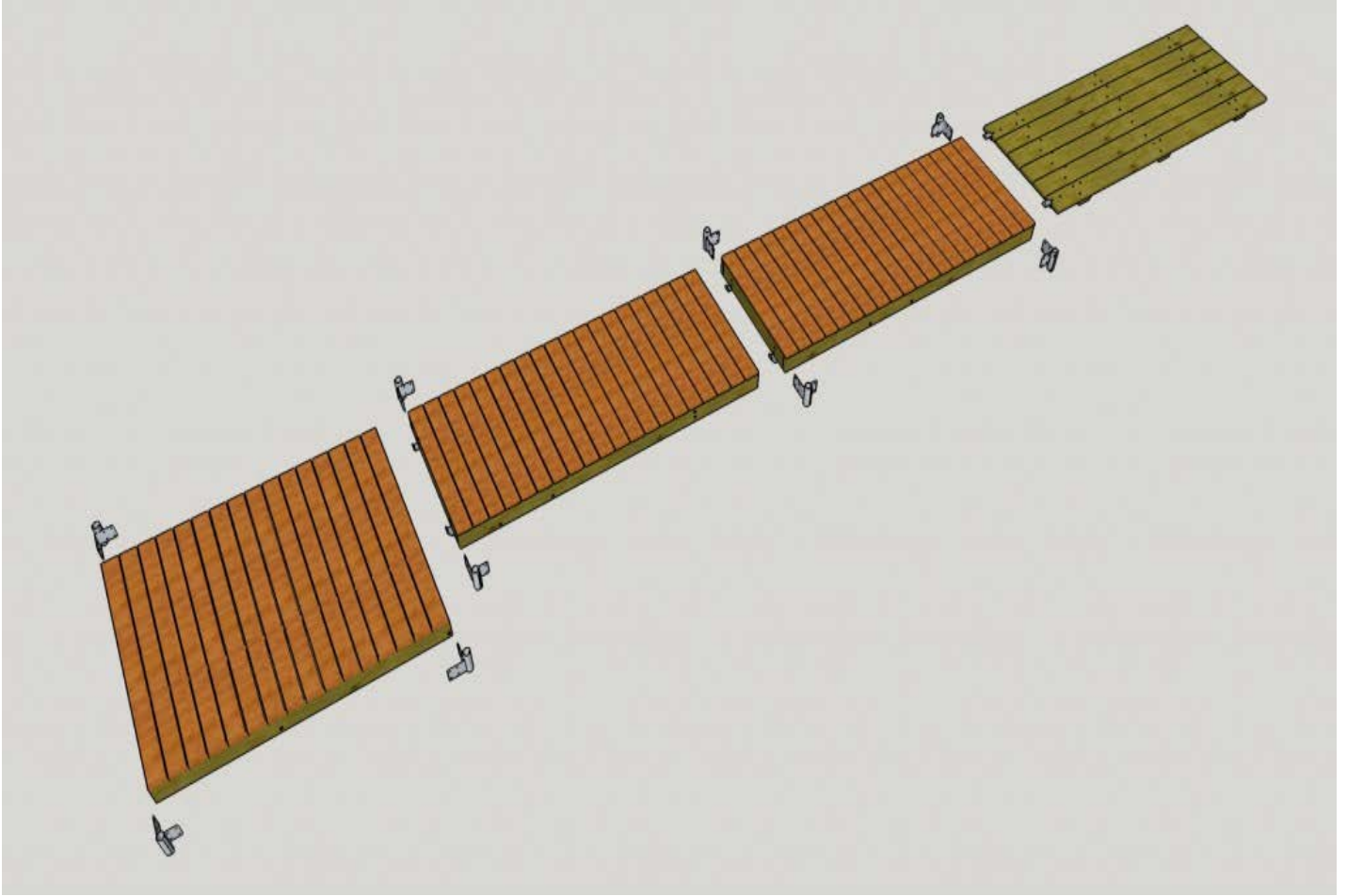
Dock Construction Detail (Pipe Dock)

Supply information from dock manufacturer acceptable i.e. pamphlet with assembly / construction detail



Dock Decking Detail (Pipe or Floating Dock)

Supply information from dock manufacturer acceptable i.e. pamphlet with assembly / construction detail



Provide detail of all framing members for stringers, beams, joists and decking for all dock construction. Be sure to outline the dimensions of the material (i.e. 6 x 8 stringers 28" O.C., 2 x 6 PT decking, 2 x 10 PT skirting around perimeter of dock)

Framing Tables

Span Table for Solid lumber timbers not exceeding 36" O.C. (crib dock stringers)

Timber	Size	Span
4 x 6	SS	10'
4 x 6	#1	9'
4 x 6	#2	9'
4 x 8	SS	14'
4 x 8	#1	12'
4 x 8	#2	12'
6 x 6	SS	11'
6 x 6	#1	11'
6 x 6	#2	10'
6 x 8	SS	15'
6 x 8	#1	15'
6 x 8	#2	14'

TABLE 1: Exterior Wall Framing

Supported Loads (including dead loads)	Minimum Stud Size mm (in)	Minimum Stud Spacing mm (in)	Minimum Unsupported Height, m (ft in)
Roof	38x64 (2x3)	400 (16)	2.4 (7 ft 10 in)
	38x89 (2x4)	600 (24)	3.0 (9 ft 10 in)
	38x89 (2x4)	400 (16)	3.0 (9 ft 10 in)
	38x140 (2x6)	600 (16)	3.0 (9 ft 10 in)

TABLE 2: Sample Building Features

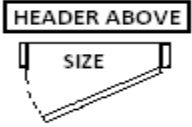

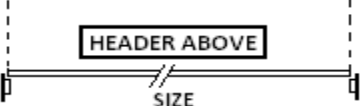
MAN DOOR	WINDOW	BOAT HOUSE DOOR	HEADER SIZES
			2-2x6 – 4' OPENING
			2-2x8 -6' OPENING
			2-2x10 – 8' OPENING
			2-2x12 – 10' OPENING

TABLE 3: RAFTER SIZING (or Engineered trusses as per manufacturer)

RAFTER SIZE	MAXIMIM CLEAR RAFTER SPAN		
	RAFTER SPACING		
	12" O.C.	16" O.C.	24" O.C.
2 x 4	8'-11"	8'-0"	7'-0"
2 x 6	14'-0"	12'-9"	11'-2"
2 x 8	18'-5"	16'-9"	14'-5"
2 x 10	23'-6"	21'-4"	17'-8"

- Do not use screws to assemble your beams or to secure your beams or any hangers

Roofing Note: Ensure roof snow loading designed for minimum of 42 lbs./sq.ft.