

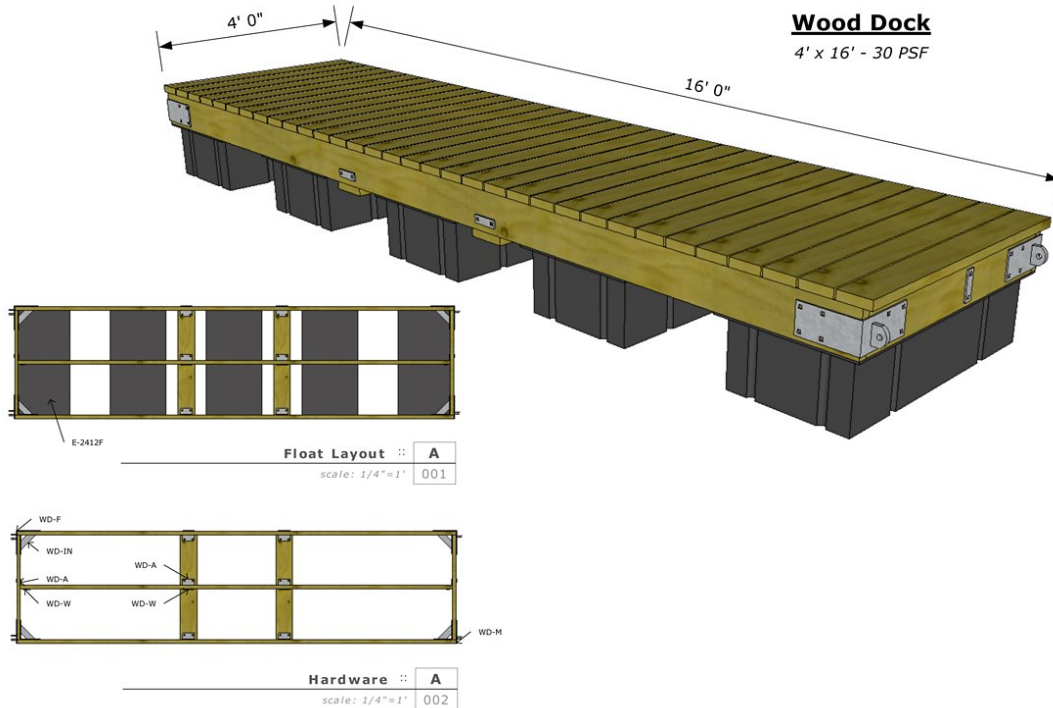


Building Services Department

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www.lakeofbays.on.ca

DOCK CONSTRUCTION GUIDE



THIS DOCUMENT DOES NOT SUPERCEED BUILDING CODE, TOWNSHIP BY-LAWS OR OTHER GOVERNMENT JURISDICTION (PROVINCIAL OR FEDERAL)

Dock and Boathouse Permit POLICY

Updated August 11, 2016

All construction work on docks and boathouses require a building permit (and possibly a development permit) from the Township of Lake of Bays. Please be advised that if you require a Development Permit, we cannot issue a building permit until the Development Permit has been issued. As a landowner, you are required to provide the following items that will form part of a complete building application including the applicable fee:

1. If you are doing any new construction or additions to an existing structure within the shoreline activity area, you will require a **Development Permit**;
2. A Ministry of Municipal Affairs and Housing application (the accompanying form) fully completed including Roll No;
3. A Detailed Site Plan, including information from a survey (if available), showing existing and proposed structures with dimensions and distances from property lines clearly shown;
4. Drawings of the proposed structure (including existing structures, if the project is for an addition/alteration), including a building plan, elevation(s), section and structural information that accurately describe the project. Please note that when indicating building height (for boat houses or boat ports) that the height is measured from the ordinary water's edge to the mid-point of the highest point of the surface of a flat topped boat house/boat port (excluding railings) or half the distance between the top of the highest load-bearing wall and the roof ridge of any sloped roof excluding dormers less than 2.4 metres (8 feet) in width up to a maximum of 25% of the total roof line. The maximum permitted height for shoreline structures is a maximum of 4.2 metres (13.8 feet). **All steel docks that will support a structure must also comply with Steel Dock with Structure Permit Policy**;
5. A letter of approval or permit number (if applicable) from the Ministry of Natural Resources and Forestry, and the Department of Fisheries and Oceans. This applies to all new or additions to existing docks, boat houses & boat ports where the total area of the structure over water exceeds 15 square metres (161 square feet);
6. Owner with structure located on Original Lakeshore Road Allowance must have a License of Occupation (Encroachment Agreement) or have compiled with Township of Lake of Bays policy AD-2.1.

The Building Department can only accept and review complete applications and plans. The review is to ensure that they meet Ontario Building Codes, Municipal by-laws and other applicable law (MNR & DFO).

Steel Dock with Structure Permit POLICY

- 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 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 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 of 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 complete 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 from the professional engineer stating that the structure has been constructed in-accordance with the engineered design.

General Requirements

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

- Size of the structure is less than or equal to 10m² (108 ft²) **and**
- Is not attached to another structure **and**
- Does not contain any plumbing.

Note: All accessory structures must comply with the Township of Lake of Bays Development Permit or Comprehensive Zoning By-Laws. For more information, contact The Township of Lake of Bays Building Services Department at 705-635-2272.

Examples of General Zoning Restrictions:

For Waterfront Residential lots (WR, Development Permit Bylaw):

Lot Coverage: Maximum 10% of the **total lot** coverage (Please be advised that dock & boathouse building area counts for this over all lot coverage).

Maximum of 40% coverage within the shore yard (Please note the **maximum** permitted gross floor area of a boathouse is 75% of the shoreline activity area coverage to a maximum of 129 m²(1500 ft²))

Setbacks: In most cases the minimum required setback within the shore yard (20 metres back from the water's edge) are:

4.5 m (14.8 ft) for an interior side yard setback and
10 m (32.8 ft) for an exterior side yard setback (your lot abuts a Township road allowance leading to water).

Building Height: In most cases the maximum height for an accessory shore yard structure is:

4.2 m (13.8 ft) measured from the elevation of the ordinary water's edge to half the distance between the top of the highest load-bearing wall and the roof ridge of any sloped roof **and shall not contain more than one storey.**

For Community Residential One lots (R1, Comprehensive Zoning Bylaw):

Setbacks: In most cases the minimum required setbacks are:

2.5m (8.2 ft) for Side Yard and
7.5m (24.6 ft) for Rear & Exterior Side Yard (your lot abuts a Township road allowance leading to water).

Building Height: In most cases the maximum height for an accessory shore yard structure is:

4.5m (14.8 ft) and shall not contain more than one storey.

Please be aware that the side setbacks are projected out into the lake.

If you are uncertain of your property zoning please contact your Building Services Department and we would be pleased to assist you (705)635-2272.

Application Requirements:

- Completed building permit application form
- Two copies of the most recent survey or detailed site plan for the property showing dimensions of all existing buildings and structures, and their setbacks drawn to scale. The proposed shore yard structure is to be plotted on the site plan and setback dimensions to all property lines are to be shown. (see attached sample site plan on page 6).
- Two copies of detailed construction drawings including floor plans, elevation and section details drawn to scale. Pages 7-15 are sample drawings of the construction detail required for dock & boat house building permits.
- The current permit fee, payable at time of application by cheque made to "The Township of Lake of Bays", cash or debit.

Step by Step Application Instructions

1. Site Plan

Refer to the sample 'Site Plan' on page 6 and 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 7. Create your own to show all of supporting members, your 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 (Please indicate the spacing on center & design snow load for the trusses).

3. Elevations

Refer to the sample "Elevations" on page 8. Create your own or modify the sample to show all of your openings. Use the 'Sample Features' legend below the sample 'Elevations' as a guide on how to draw windows, doors, and boat house doors onto your elevations. Note the direction each elevation is facing in the title block under each elevation (e.g. North, South, East, or West).

4. Building Section

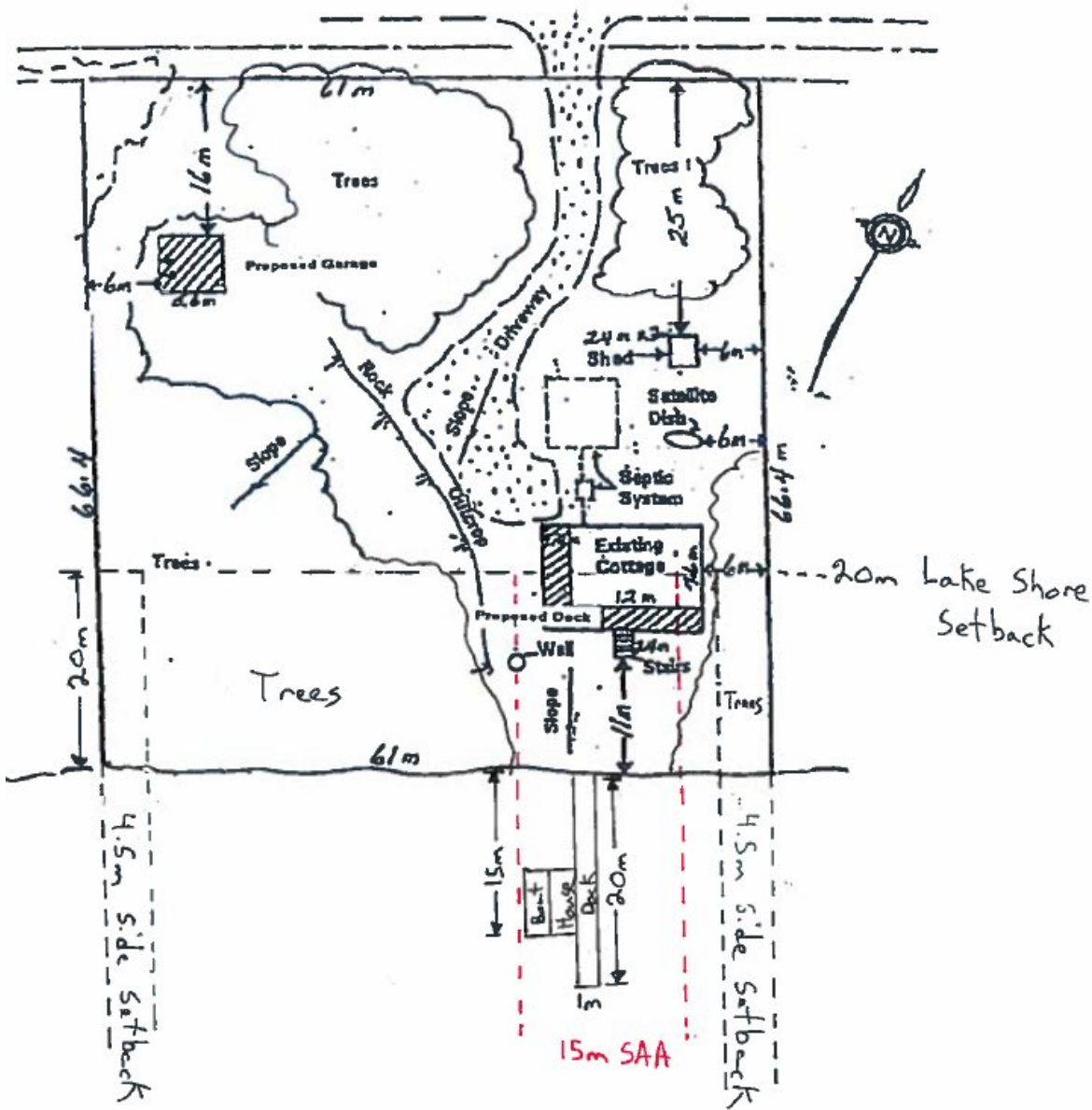
Refer to the 'Building Section' on page 9. Create your own to show framing details and building height. If a truss system is used please note: "Trusses as per attached truss layout" on the 'Building Section' and attach the engineered stamped truss drawings to your application.

5. Foundation Design

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

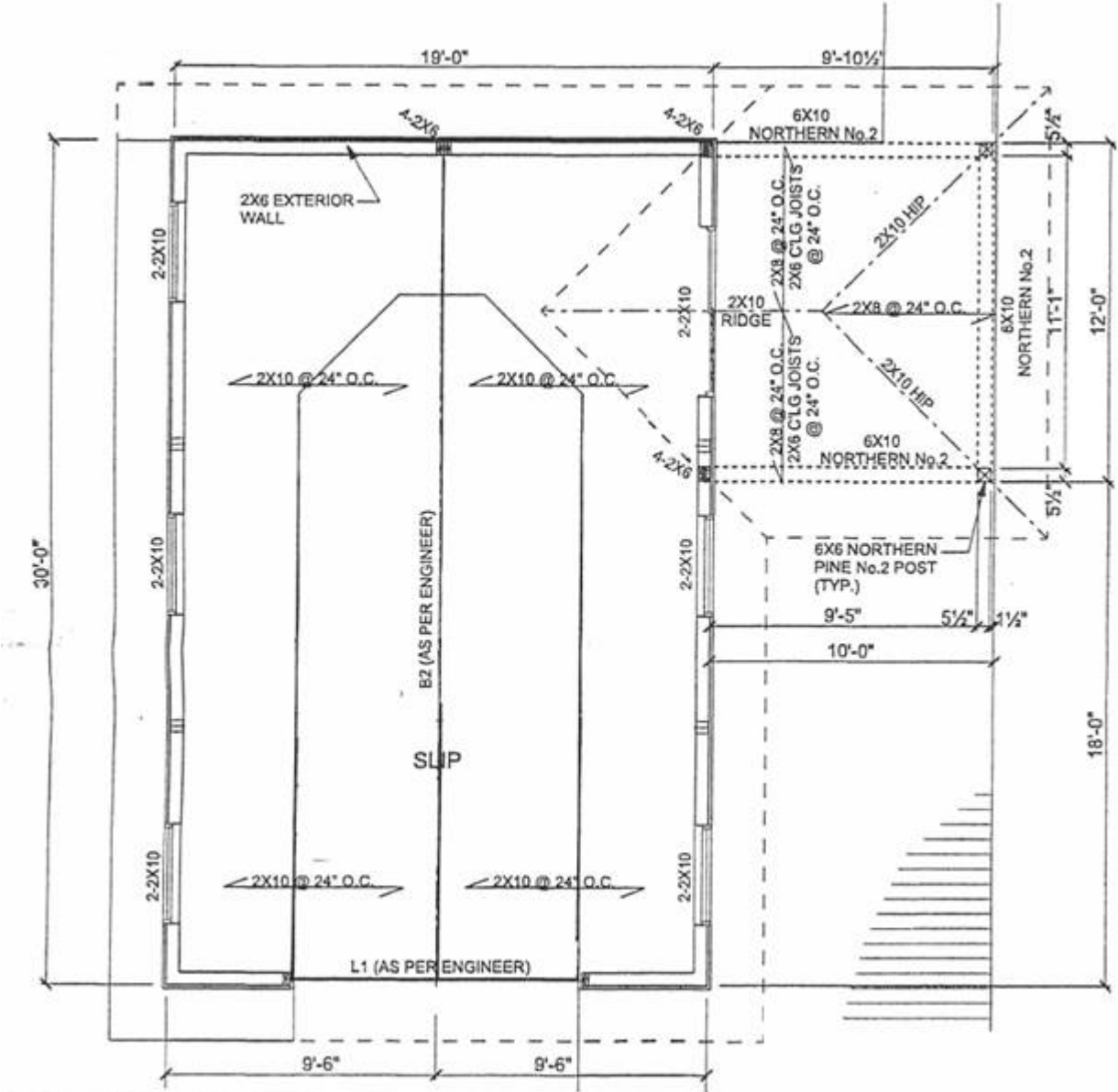
Note: Please provide your dock, boat house and/or boat port plans. **Please note,** that any proposed prefabricated truss roof system must have a set of stamped drawings provided by a licensed Engineer with the Province of Ontario.

1. Site Layout – Dimension your own site plan similar to below and include the ‘Site Information’ chart as shown below.



SITE INFORMATION:	
SITE FEATURES	AREA (ft²/m²)
Area of lot:	
Footprint of house:	
Footprint of existing accessory buildings:	
Footprint of proposed dock/boat house:	
Length of shoreline:	

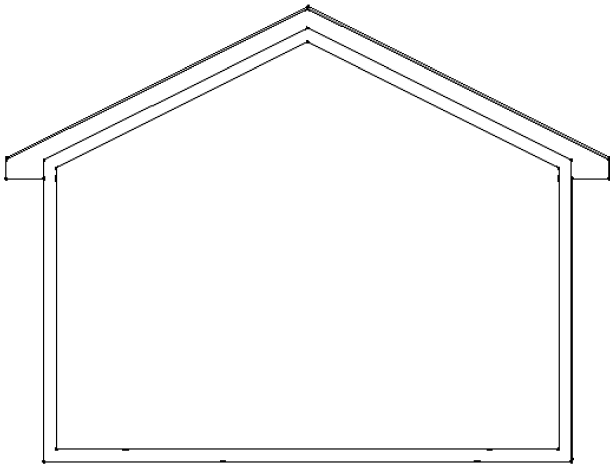
2. Boat House Floor Plan – Example of Construction Detail for Boat House.



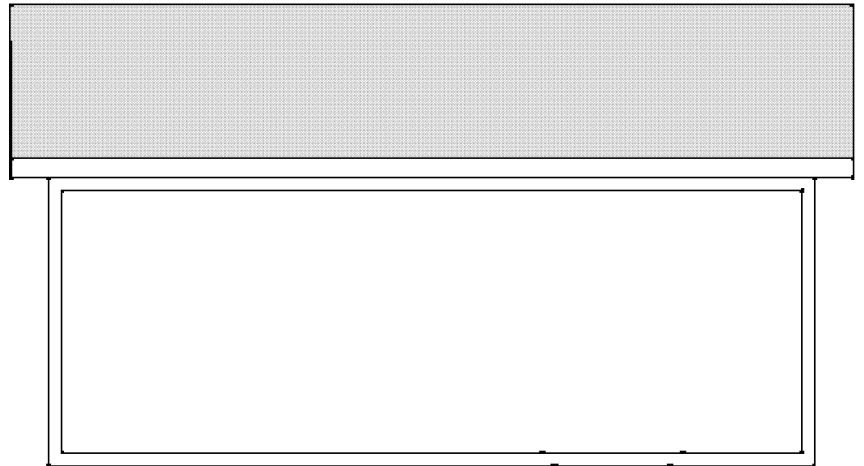
NOTE: ELECTRICAL LIGHTING REQUIRED BY O.B.C.
 Ensure all lighting as per the Township’s Dark Sky By-law.

HEADER (LINTEL) SIZES:	
HEADER SIZES	EXAMPLE FOR USE
2 ply 2x6 – up to 4’ opening	Man door or window
2 ply 2x8 – up to 6’ opening	Patio door or window
2 ply 2x10 – up to 8’ opening	Patio or boat house door
2 ply 2x12 – up to 10’ opening	Boat house door

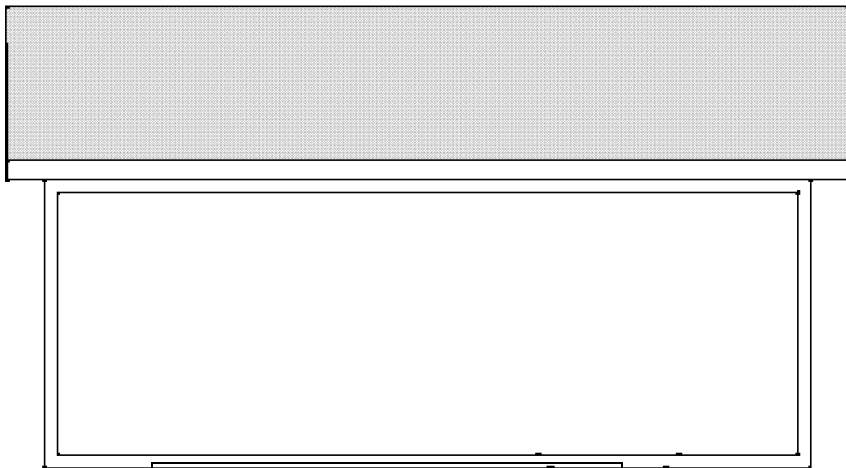
3. Elevations – Draw in the building features and indicate the facing direction using the elevations and title blocks below



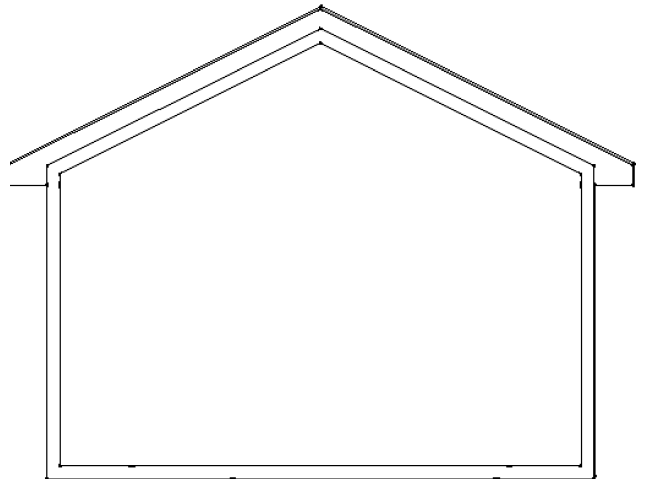
_____ ELEVATION



_____ ELEVATION

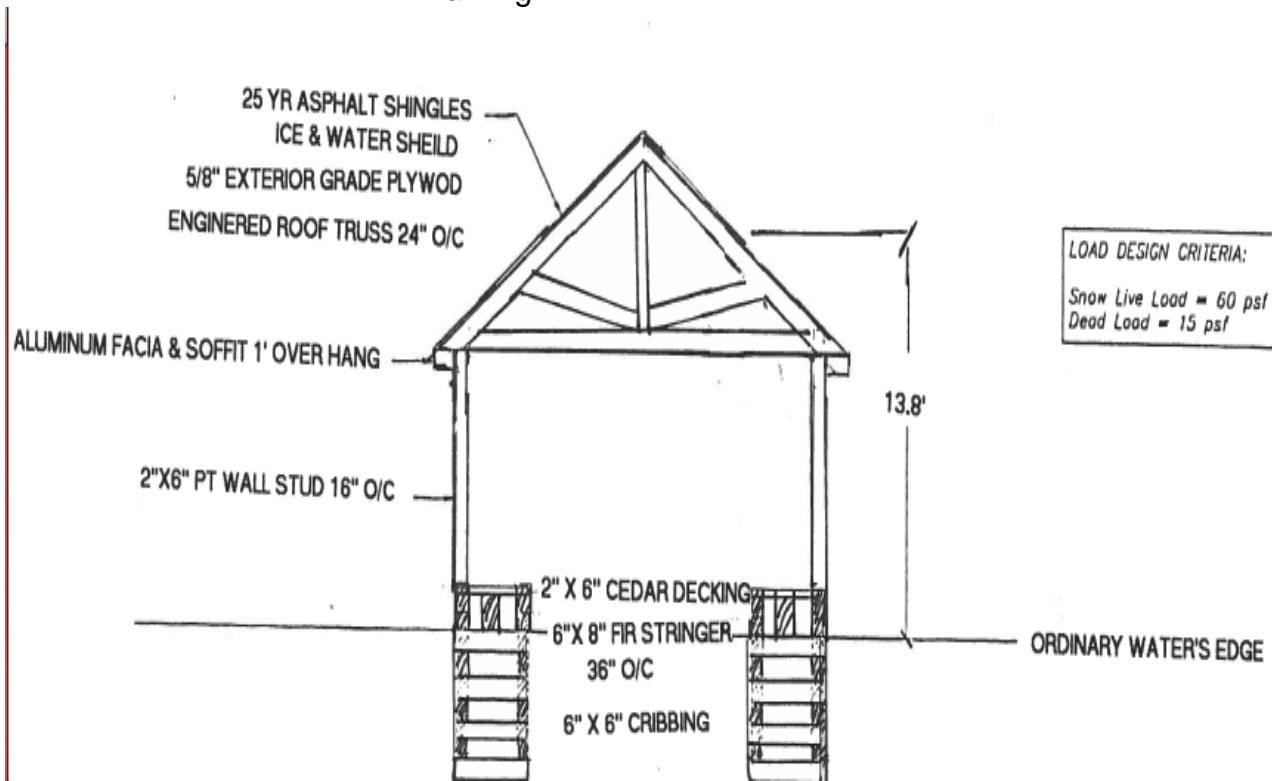


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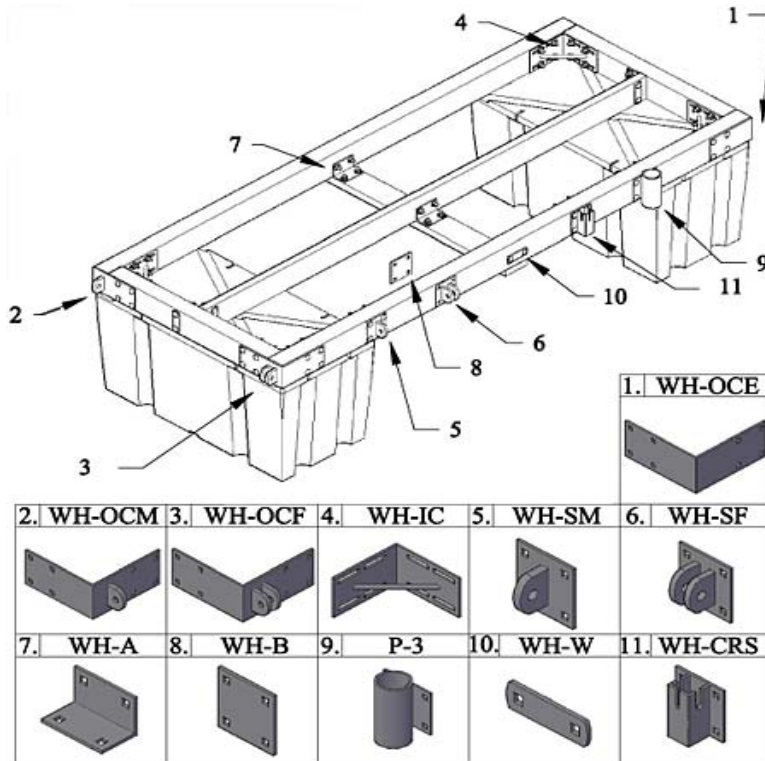
4. Building Section – Example indicate building height, soffit overhang and roof framing.



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

Timber size	Span
4x6 SS	10'
4x6 #1	9'
4x6 #2	9'
4x8 SS	14'
4x8 #1	12'
4x8 #2	12'
6x6 SS	11'
6x6 #1	11'
6x6 #2	10'
6x8 SS	15'
6x8 #1	15'
6x8 #2	14'

6. Dock Construction Detail – Supplied information from dock manufacturer acceptable (eg pamphlet with assemble/construction detail)
(floating dock)

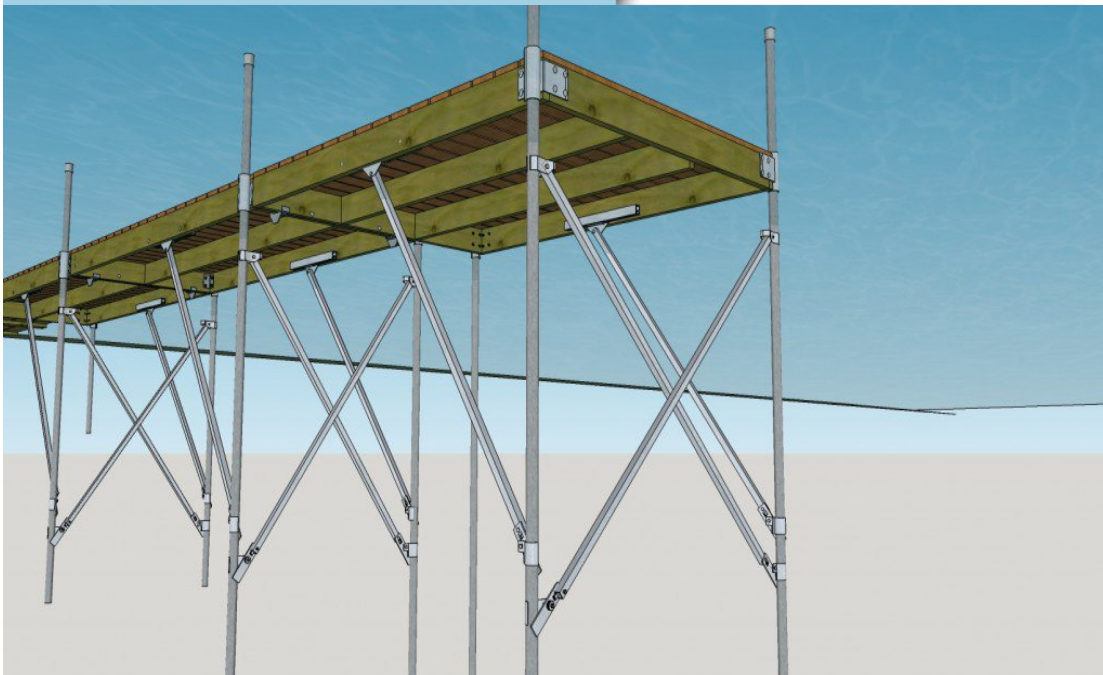
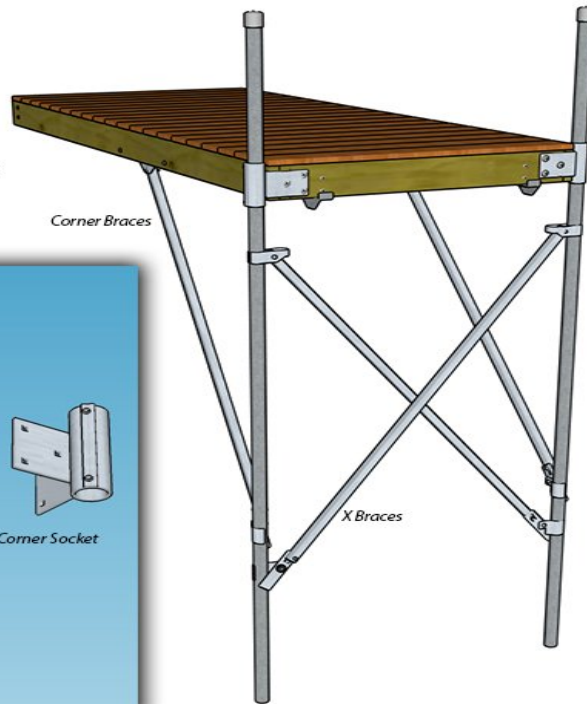
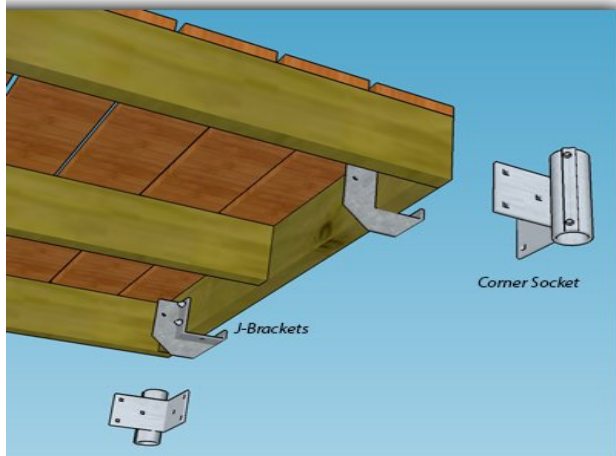


***Provide detail of each hardware component, framing members, fastening components, etc. (dock manufacturer can provide).**

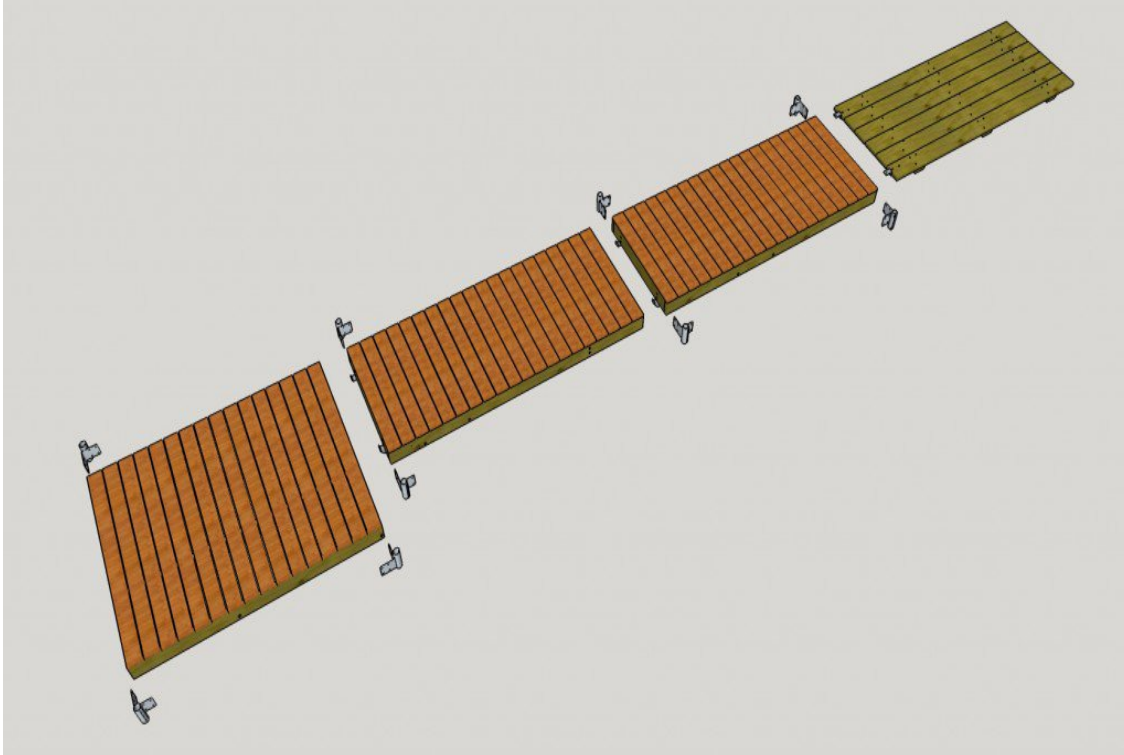
7. Dock Construction Detail – Supplied information from dock manufacturer acceptable (eg pamphlet with assemble/construction detail)

Wood Dock Section with Pipe Leg Bracing

Scroll your computer mouse over the picture to explore each part.



8. Dock decking Detail – Supplied information from dock manufacturer
(Pipe or floating dock) acceptable (eg pamphlet with
assemble/construction detail)



Provide detail of all framing members for stringers, beams, joists and decking for all dock construction. Be sure to outline the dimension of the material (eg 6x8 stringers 28" O/C, 2x6 PT decking, 2x10 PT skirting around perimeter of dock).

For assistance with your building application or general questions regarding dock construction please contact the Building Department (705)635-2272.

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