4107 West Beyer Road
Duluth, MN 55803
218-721-3778

MINIMUM REQUIRED INFORMATION FOR DECK APPLICATIONS

Building permits are required for any deck that is attached to a building or any deck platform that is elevated more than 30 inches above grade.

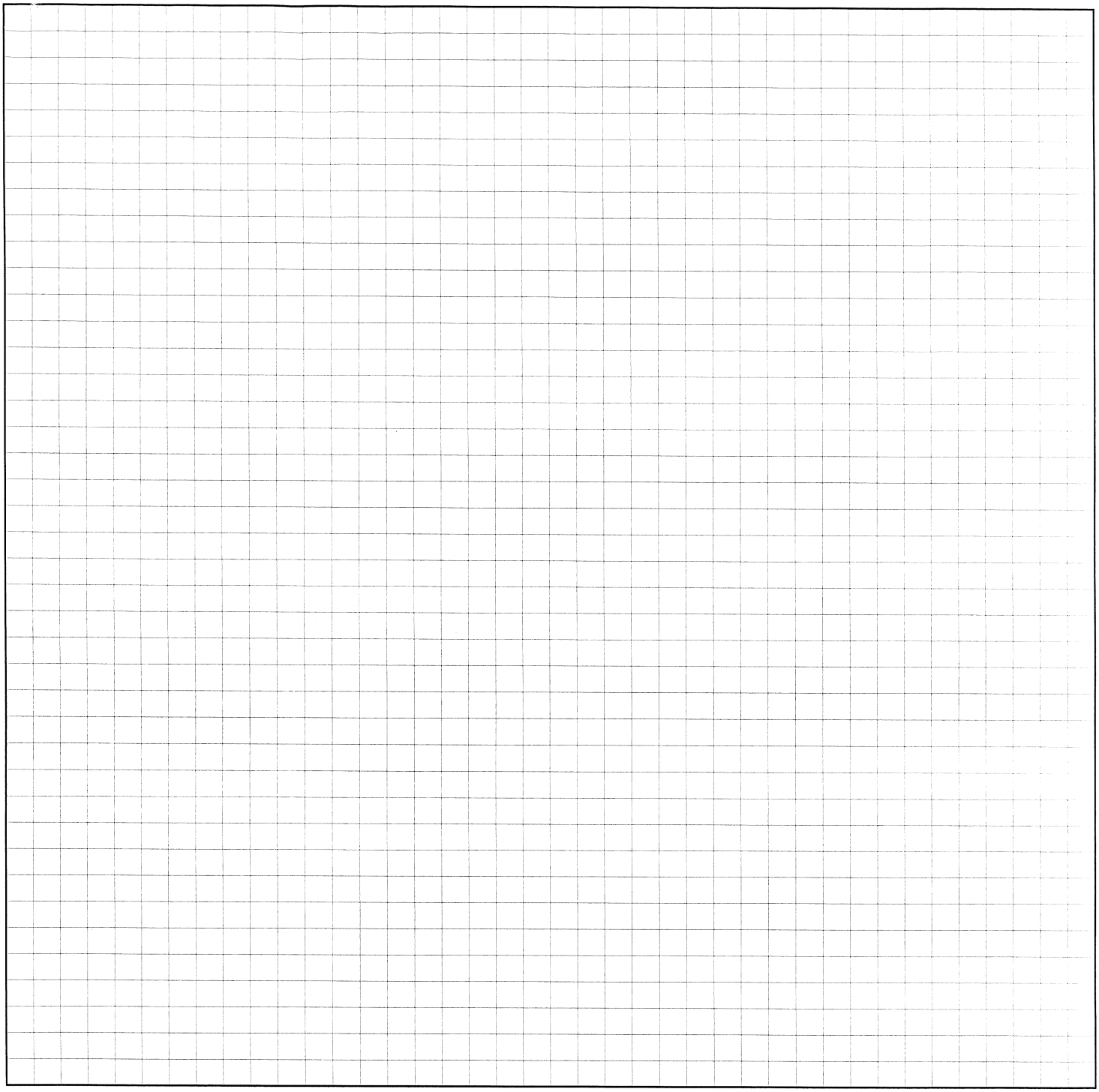
1. Building Permit Application
2. Site Plan
3. Deck Elevation

LAND USE RESTRICTIONS

Setbacks from property lines vary depending on the zoning district your home is located in. Contact city hall at 218-721-3778 for the requirements in your location. This is an important first step in the planning process of any building project.

REQUIRED INSPECTIONS

1. **Footing/concrete slab:** To be made **PRIOR TO THE POURING OF ANY CONCRETE.**
2. **Framing:** To be made after framing is complete.



North Arrow Required
Scale: 1" = _____ Feet

SITE PLAN

Do Not Use Pencil

Site Address _____

_____

Owner's Name _____

This Site Plan ia an accurate and complete representation of the footprint(s) of all existing and proposed structure(s) and their location(s) on the subject property.

Applicant Signature _____

Date

Proposed Structure Setbacks:

Side yard - _____

Side yard - _____

Centerline of road - _____

Rear yard - _____

_____

EXAMPLE Site Planning Sketch Form

About the Sketch:

The sketch is to graphically illustrate your proposed project(s). Include all locations and labels of wells, septic system, septic expansion area, driveway, access roads, wetlands, and areas of vegetation removal and grading. Also, label the locations and sizes of all existing and proposed structures and indicate distances to property lines, shore, road centerline, and others.

Structure Type (e.g. House, garage, addition, deck, etc.)	Proposed Structure #1	Proposed Structure #2
	Garage	Deck
Project (Structural) Setbacks (Horizontal Distance)		
Side-yards are the side property lines — Side-Yard Near[1]	76 Feet	76 Feet
Side-Yard Far[1]	100 Feet	100 Feet
Rear-Yard	131 Feet	156 Feet
Distance to Shoreline	125 Feet	88 Feet
Road Centerline	164 Feet	189 Feet

Make sure ALL these distances and labels are on the Sketch

How to Draw a Site Sketch

Step 1: Draw in **roads** and road names.

Step 2: Draw lot **boundaries and lengths.**

Step 3: Draw and name **wetlands, lake, streams, and rivers**.

Step 4: Draw and identify **existing structures** and structure dimensions (if any).

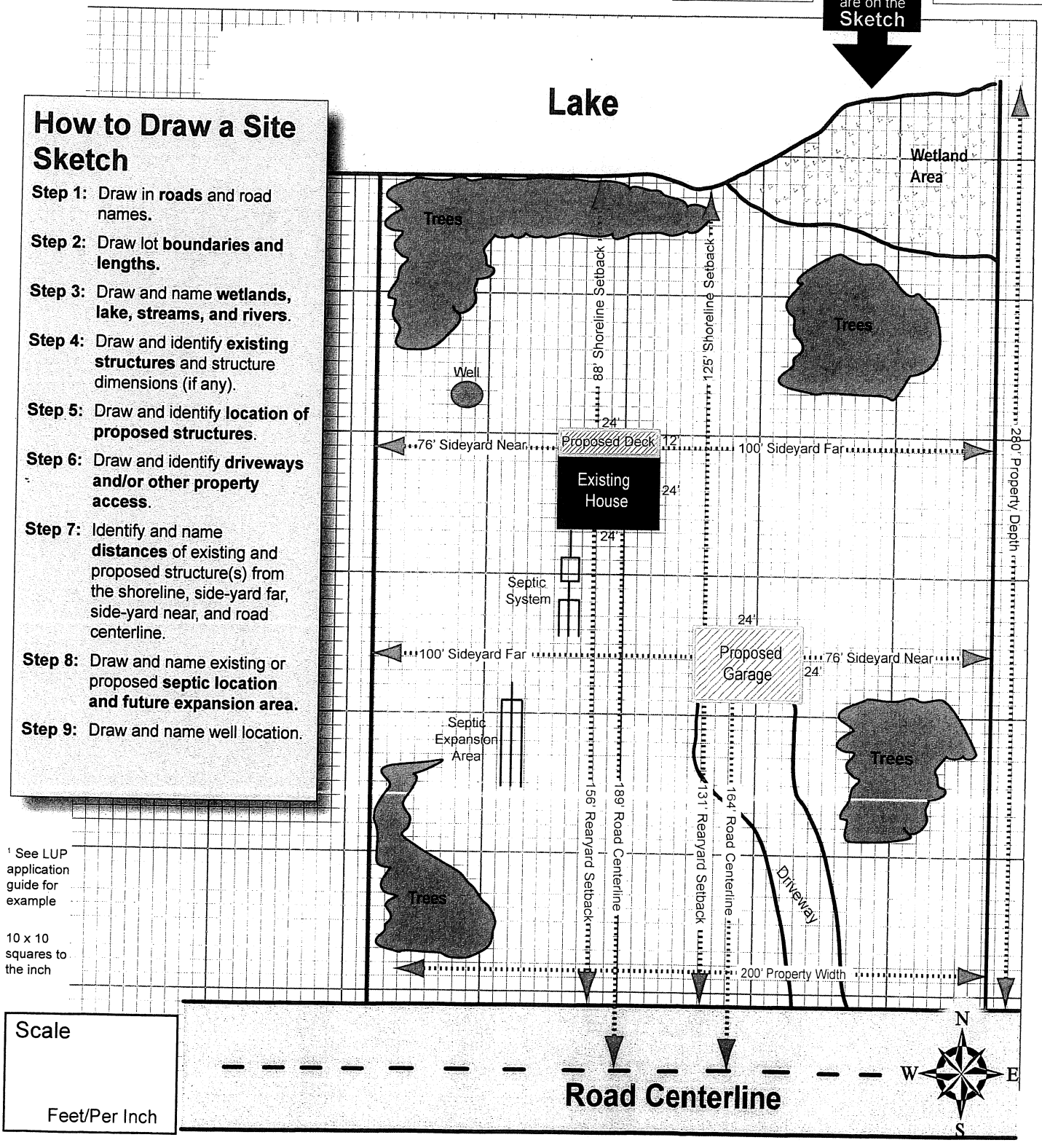
Step 5: Draw and identify **location of proposed structures**.

Step 6: Draw and identify **driveways and/or other property access**.

Step 7: Identify and name **distances** of existing and proposed structure(s) from the shoreline, side-yard far, side-yard near, and road centerline.

Step 8: Draw and name existing or proposed **septic location and future expansion area.**

Step 9: Draw and name well location.



[1] See LUP application guide for example

10 x 10 squares to the inch

Scale

Feet/Per Inch

City of Rice Lake

4107 West Beyer Road • Duluth, MN 55803 • (218) 721-3778

Deck Elevation

This is a sample of a typical deck elevation. Your plan may differ from the assembly shown.

Draw Your Own Elevation Representing Your Project. Provide dimensions and information as indicated.

Decking Material

_____

Joist Size / Spacing

_____

Joist Species / Grade

_____

Joist Hangers

_____

Joist / Beam Connection

_____

Ledger Size / Species

_____

Beam Size / Species / Grade

_____

Beam Cantilever

_____

Beam / Column Connection

_____

Beam / Column Diag. Bracing

_____

Column Size / Species / Grade

_____

Column / Pier Connection

_____

Concrete Pier Dia.

_____

Concrete Pier Reinf. / Dowels

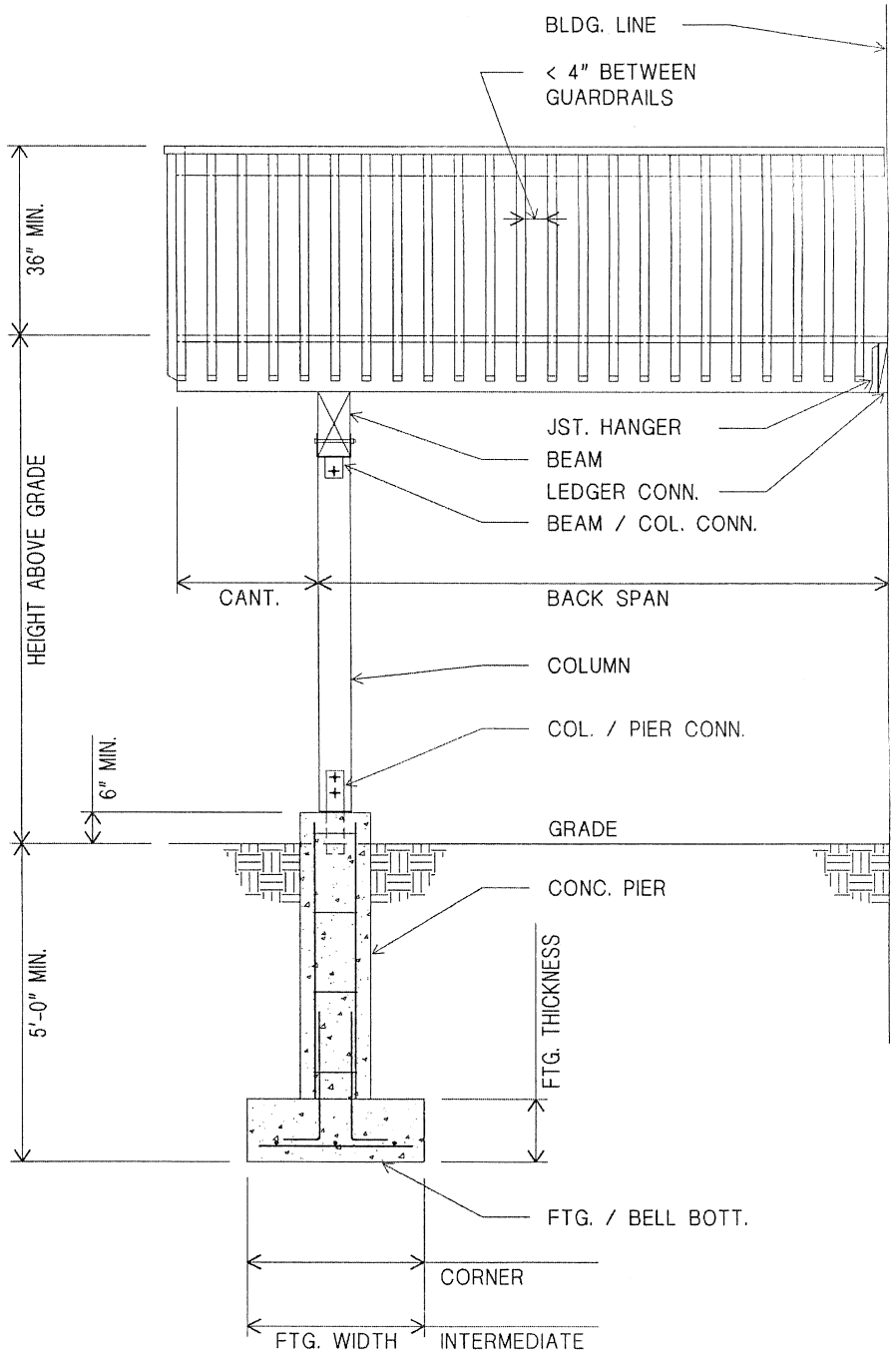
_____

Corner Footing Reinf.

_____

Intermediate Footing Reinf.

_____



MINNESOTA DEPARTMENT OF
LABOR & INDUSTRY

Department of Labor and Industry
Construction Codes and Licensing Division
443 Lafayette Road N.
St. Paul, MN 55155
Phone: (651) 284-5012 or 1-800-657-3944
TTY: (651) 297-4198 Fax: (651) 284-5749

The State of Minnesota adopts a set of construction standards known as the Minnesota State Building Codes (MSBC). The MSBC contains safety requirements relating to structure, mechanical, plumbing, energy, electrical, elevators, manufactured buildings and life safety.

The information in this brochure is for general reference for residential construction projects. Contact your municipal building official regarding permits and specific code requirements for residential construction within your community.

To confirm if your contractor is licensed in Minnesota contact the:

Department of Labor and Industry
Residential Building Contractors
Phone: (651) 284-5069 or 1-800-657-3944
www.dli.mn.gov/ccld/LicVerify.asp
E-mail: DLI.Contractor@state.mn.us

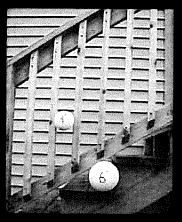
www.dli.mn.gov

05-07

Gopher State One Call
Call at least two full business days before you dig.
Phone: 811 or (651) 454-0002
www.call811.com

DECKS

Guidelines for planning the construction of a deck.



Construction Codes and Licensing

Permits

Building permits are required for all decks that are attached to the home or are 30 inches or more above grade. Decks and platforms not more than 30 inches above adjacent grade and not attached to a structure with frost footings, do not require a building permit and may require a zoning or land-use permit.

Decks and platforms are required to meet the land-use requirements of the community's zoning code. An important first step is to contact the local planning and zoning department with questions.

A municipality may require permit fees, plan reviews and inspections

Permit fees are established by the municipality. The plan review is done by the building official in order to spot potential problems or pitfalls that may arise. The building official may make notes on the plan for your use. Inspections are performed at various stages of construction to verify code compliance. Actual permit costs can be obtained by calling your local building inspection department with your estimated construction value.

Your building inspector will need:

1. An application for permit.
2. A site plan or survey.
3. A deck plan with all applicable structural details.

Required inspections

1. **Footings:** After the holes are dug, **but prior to pouring of concrete!**
2. **Framing:** To be made after framing is completed. This inspection can be completed at the time of the final inspection if all parts of the framing will be visible and accessible with prior approval of the building official.
3. **Final:** Is done after completion.

Setbacks from property lines vary depending upon the city and zoning district your home is located in. Contact the building department in your community for the requirements in your location. This is an important first step in the planning for any deck project.

Notice regarding pressure-treated wood

When a pressure-preservative-treated wood is used, it must comply with the American Wood Preservers Association UI Standard based on exposure (exterior) and use (above ground or ground contact). The lumber must bear the quality mark (stamp or end tag) of an approved inspection agency. Designers, builders and home owners need to verify that proper hardware (hangers, nails, brackets) are appropriate with the particular treatment of the lumber. This not only applies to decks utilizing these products, but sill plates and posts as well. Additional information is available online at www.dli.mn.gov/ccld/OpinionDivisionBuilding.asp.

General building code requirements

The 2007 Minnesota State Building Code adopts the 2006 International Residential Code (2006 IRC). All "R" code references provided in this brochure pertain to the 2006 IRC.

a. Footings must extend to frost depth (if attached to the house).

b. Decks need to be designed for a 40-pound-per-square-foot live load and balconies to a 60-pound-per-square-foot live load. Decks exposed to the weather must be constructed of approved wood with natural resistance to decay such as redwood, cedar or treated wood. Ledger boards must be bolted or lagged to the building and all connections between the deck and dwelling must be flashed. Before using alternative building products, check with your local building official.

c. Columns and posts in contact with the ground or embedded in concrete, earth or masonry must be of pressure-treated wood approved for ground contact.

d. Cedar or redwood posts need an 8-inch separation from the ground.

e. All decks, balconies or porches, open sides of landings and stairs that are more than 30 inches above grade or a floor below must be protected by a guard not less than 36 inches in height. Grade is measured at edge of structure. 2006 IRC guard opening limitations states required guard on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow passage of a sphere 4 inches (102mm) or more in diameter. Exceptions: 1. The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 6 inches (152 mm) cannot pass through. 2. Openings for required guards on the sides of stair treads shall not allow a sphere 4 3/8 inches (107 mm) to pass through (R312.2).

f. If a stairway is to be provided, it must be no less than 36 inches in width. Stairways may be constructed having an 7 3/4-inch-maximum rise (height) and a 10-inch-minimum run (length). The largest tread rise and tread run may not exceed the smallest corresponding tread rise or run by more than 3/8 inch. Stairway illumination is required by the code. Open risers are permitted, provided the opening between the treads does not permit the passage of a 4-inch-diameter sphere.

g. Handrails are required on all stairways having four or more risers. All required handrails shall be of the following types or provide equivalent graspability.

1. Type I. Handrails with a circular cross section shall have an outside diameter of at least 1 1/4 inches (32 mm) and not greater than 2 inches (51 mm). If the handrail is not circular it shall have a perimeter dimension of at least 4 inches (102 mm) and not greater than 6 1/4 inches (160 mm) with a maximum cross section of dimension of 2 1/4 inches (57 mm).
2. Type II. Handrails with a perimeter greater than 6 1/4 inches (160 mm) shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4 inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch (8 mm) within 7/8 inch (22 mm) below the widest portion of the profile. This required depth shall continue for at least 3/8 inch (10 mm) to a level that is not less than 1 3/4 inches (45 mm) below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1 1/4 inches (32 mm) to a maximum of 2 3/4 inches (70 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm). (R311.5.6.3).

The top of handrail must be not less than 34 inches nor more than 38 inches above the nosing (front edge) of treads and they must be returned to a wall or post.

h. The electrical code requires overhead power lines to be located a minimum of 10 feet above decks and platforms. Existing lines may need to be raised if a new deck is to be installed beneath them.

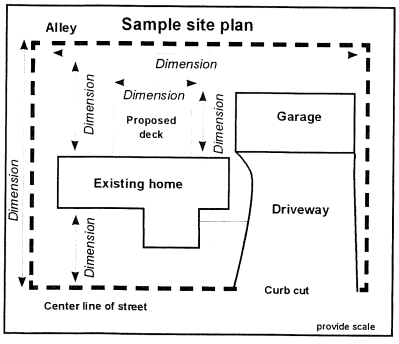
i. When locating a deck, care must be given to the location of outside gas and electric meters, wells and septic systems. These may need to be relocated to allow for construction of the deck. Septic systems and wells may be difficult to relocate, requiring an alternative location for the deck. Contact your local building department prior to placement of any deck that will interfere with these devices.

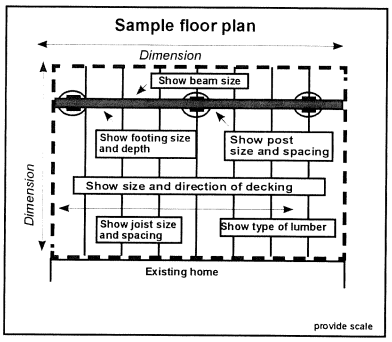
j. Some communities use a remote outside water-meter-reading device that may need to be relocated to allow for construction of a deck. These devices must be relocated properly and may require special tools. Prior to placement of any deck that will interfere with the operation or accessibility of the reader, contact your local building department or water department to obtain information and procedures about relocating these devices. Note: For specific code requirements, please contact your local building department.

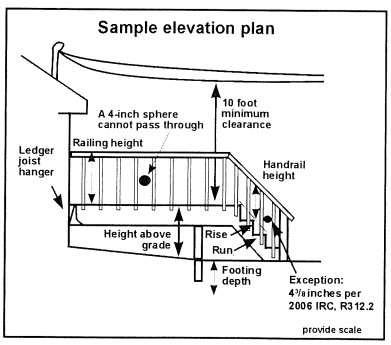
Plans: Site, floor and elevation

The text and sample drawings below show the minimum detail expected to ensure the permit process proceeds smoothly. **Two sets of each site, floor and elevation plan are required.** Plans do not need to be professionally drawn. Plans should include all of the information requested and drawn to scale.

A certificate of survey or site plan should be drawn to scale that indicates the lot dimensions, the location and size of the existing structure(s) and the location and a size of the proposed structure. Indicate the setbacks from property lines of the existing and proposed structure(s). Include the septic system area and wells, if applicable.







Floor plan

1. Proposed deck size.
2. Size and spacing of floor joists.
3. Size and type of decking material.
4. Size, type, location and spacing of posts.
5. Size and type of beams.

Elevation plan

1. Height of structure from grade.
2. Size and depth of footings.
3. Guard height and spacing (if any).
4. Stairway rise or run and handrail height (if any).
5. Clearance of overhead wires (if applicable).