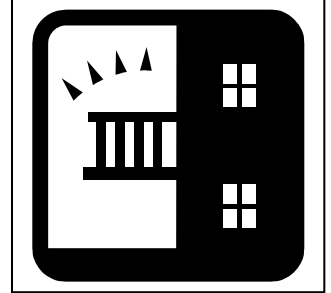


Decks



Permits

A building permit is required for any deck that is attached or adjacent to a building, or that is 30 inches or more above grade. A complete application includes:

1. A signed, completed building permit application form.
2. Two copies of a certificate of survey or site plan drawn to scale, indicating the lot dimensions, setbacks to property lines, and location and area of the existing and proposed structures.
3. Two copies of plans drawn to scale, including the following information:
 - a. Size and depth of footing
 - b. Size and spacing of posts
 - c. Type of lumber
 - d. Size of beams
 - e. Size and spacing of joists
 - f. Type of floor boards
 - g. Height of deck off ground
 - h. Height and design of guard rail/handrail
 - i. Size of deck
 - j. Distance to property lines

Inspections Needed

1. Call for a footing inspection after holes are dug but before pouring concrete.
2. Rough-in framing if floor joists/beams are not accessible after decking.
3. Final inspection when deck is complete.
4. Before digging, call the Gopher State One Call excavation notification center at 651.454.0002 to locate utilities. All utilities (gas, electric, phone, cable TV, etc.) will be located free of charge.

Required Setbacks*

	Front	Rear	Side **	Corner Lot Side
R-1 District	40	30	10/25	40
R-2 District	40	30	5/15	40
Detached Structures	Behind Principal Structure	10	10	Behind Principal Structure

*Setbacks are measured from the property line, not the curb.

** (Minimum Setback/Total of both sideyards on a lot)

Setback exception: In R-1 Districts, decks and steps may extend six (6) feet into the required front, side, and rear setbacks but in no case shall these encroachments be less than six (6) feet from any lot line. In R-2 and R-3 zoning districts, decks and steps shall not be less than three (3) feet away from any lot line.

Frost Footings

Footings must be at least 42 inches deep and 8 inches in diameter and flared to 14 inches at the bottom. (Note: 8-inch diameter footings may not be adequate for future porch additions.)

Required Wood

All wooden members of decks that are exposed to the weather, must be treated or rot resistant wood (i.e. redwood or cedar). Alternate materials, such as plastic decking must have a special testing report approved by the City.

Framing Details

Deck ledger boards must be bolted to the house. Joist hangers are required wherever joists do not have at least 1 ½ inches of bearing. Joist hangers require one nail per hole. Use only stainless steel, high strength aluminum or hot dipped galvanized fasteners.

Overhanging Joists and Beams (Cantilevers)

Joists should not overhang beams by more than two feet, nor should beams overhang posts by more than one foot unless a special design is approved.

Flashing

All connections between deck and dwelling must be waterproofed. Any cuts in exterior finish must be flashed.

Beam Sizes

Based on #2 or better Ponderosa Pine (treated).



Site Plan Example

A Certificate of Survey is required for new home construction. If an existing property does not have a Certificate of Survey on file when applying for a building permit for a proposed addition, garage, deck or other structure, a new Certificate of Survey will need to be prepared. In some cases, the City may waive the survey requirement and allow the submittal of a Site Plan. Use this handout when preparing a Site Plan as a guide.

What is a Site Plan?

A Site Plan is a plan drawn to scale showing the uses, structures, and other features proposed for a specific parcel of land.

A Site Plan should include the following information:

- Property lines with lot dimensions.
- Exterior dimensions of all existing and proposed structures, with dimensions to property lines.
- Total existing and proposed impervious surface including driveways, patios, pools, and structures.
- If trees are to be impacted by the project, the location and size of any significant trees located on the site.
- Name, address and phone number of the property owner.
- Address of the construction site.
- North arrow and scale.

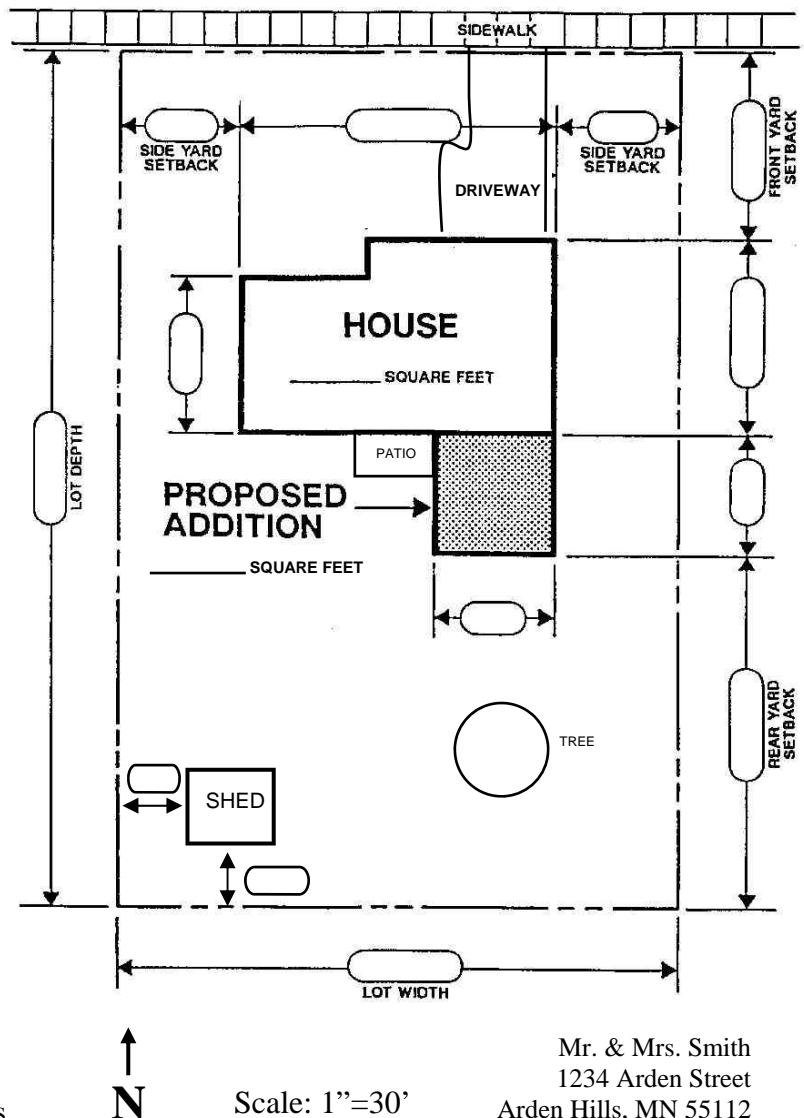
Additional Resources:

John Mennenga, Building Inspector:
651-792-7813

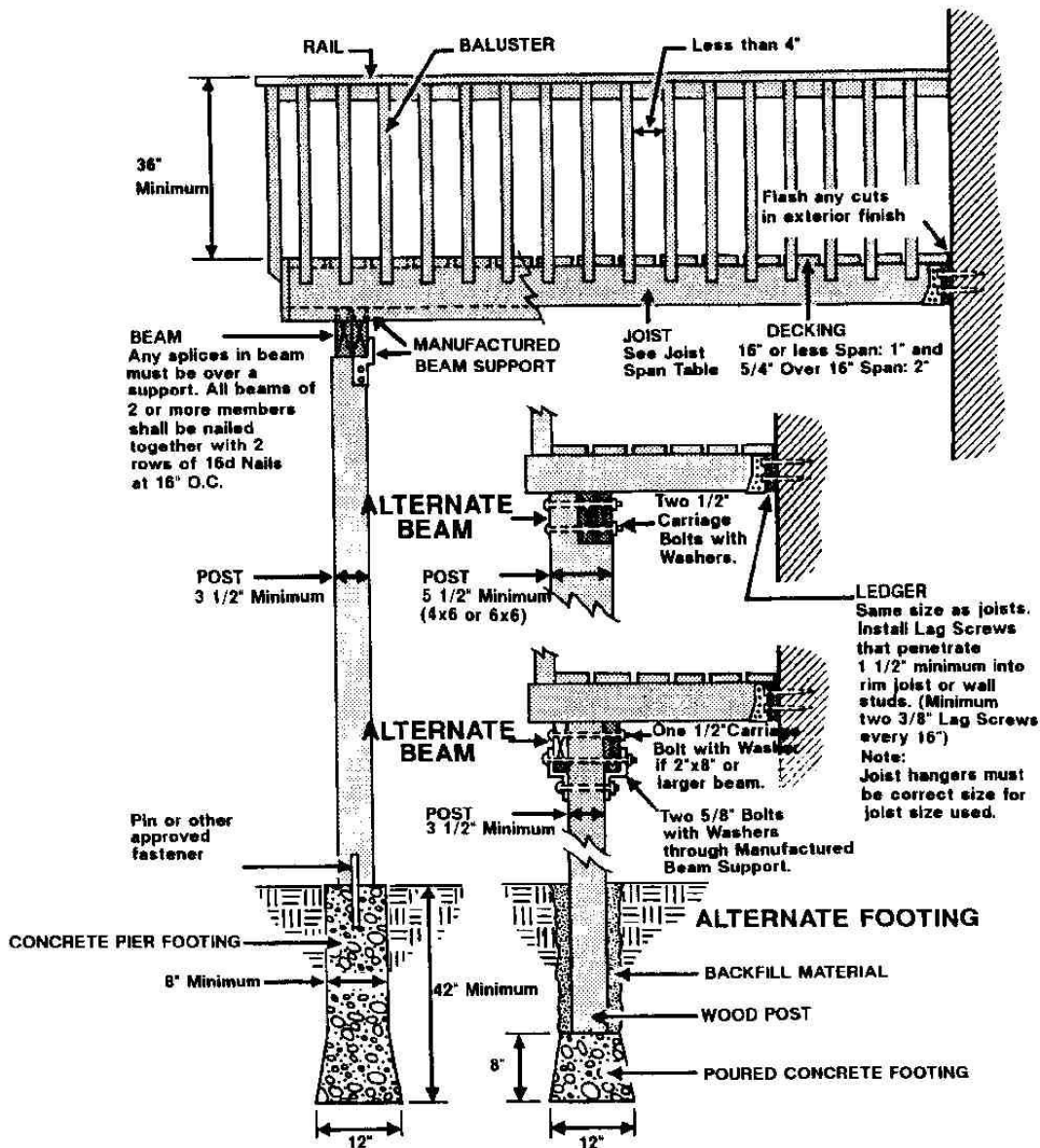
Meagan Beekman, City Planner:
651-792-7828

The Planning Department may be able to provide the following information:

- Aerial Photo – To determine location of existing structures.
- Plat Map or Survey – To determine lot dimensions and easement locations.
- Definition of Significant Trees and details on the Tree Preservation Ordinance



Mr. & Mrs. Smith
1234 Arden Street
Arden Hills, MN 55112
(651) 555-1234





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.doli.state.mn.us/contractor.html
E-mail: DLI.Contractor@state.mn.us

www.doli.state.mn.us
www.mncodes.org

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.*



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.doli.state.mn.us/bc_residential.html.

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 $4\frac{3}{8}$ 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 $7\frac{3}{4}$ -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 $\frac{3}{8}$ 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 $1\frac{1}{4}$ 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 $6\frac{1}{4}$ inches (160 mm) with a maximum cross section of dimension of $2\frac{1}{4}$ inches (57 mm).
2. Type II. Handrails with a perimeter greater than $6\frac{1}{4}$ 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 $\frac{3}{4}$ inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of at least $\frac{5}{16}$ inch (8 mm) within $\frac{7}{8}$ inch (22 mm) below the widest portion of the profile. This required depth shall continue for at least $\frac{3}{8}$ inch (10 mm) to a level that is not less than $1\frac{3}{4}$ inches (45 mm) below the tallest portion of the profile. The minimum width of the handrail above the recess shall be $1\frac{1}{4}$ inches (32 mm) to a maximum of $2\frac{3}{4}$ 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

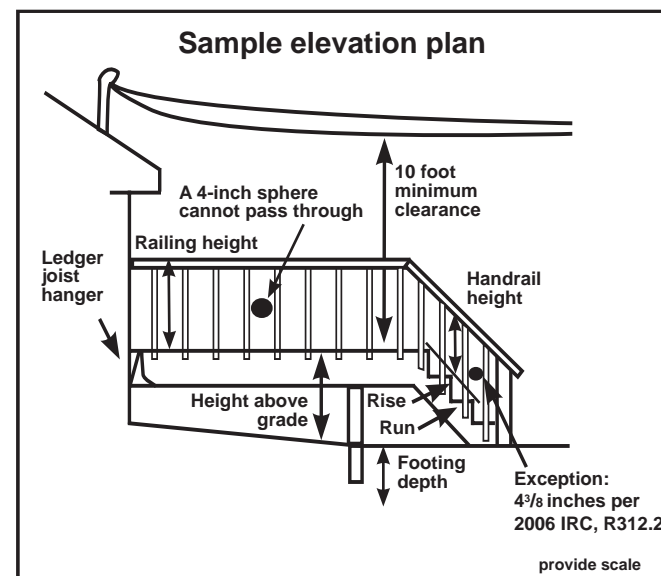
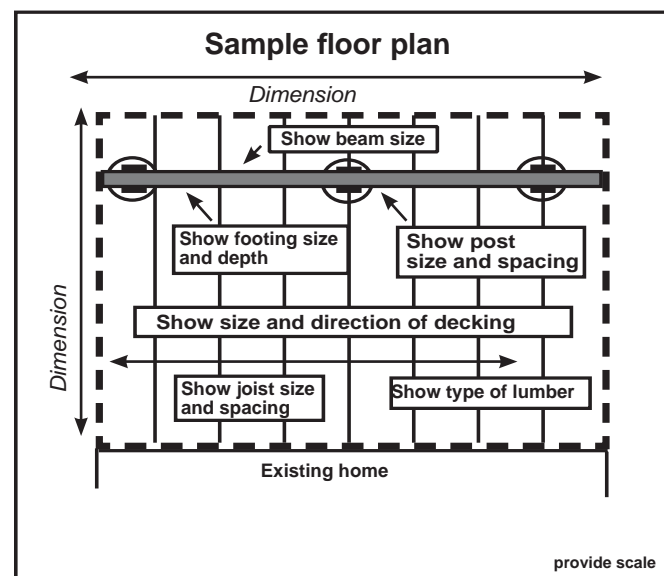
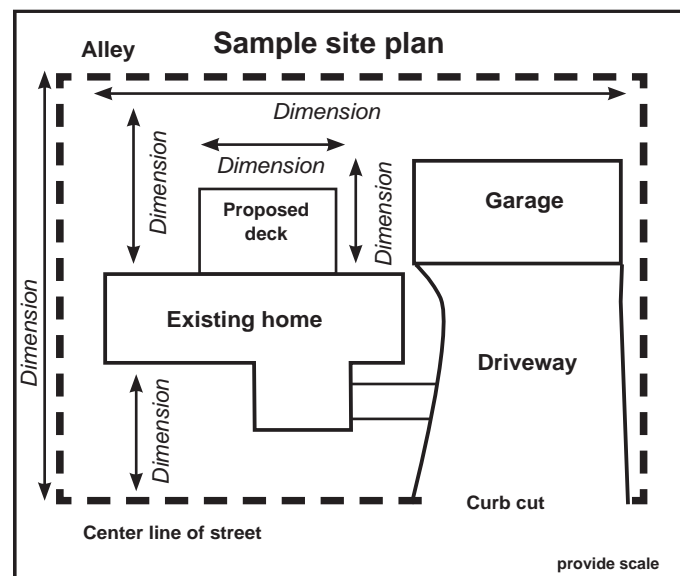
may need to be relocated to allow for construction of the deck. Septic systems and wells may be difficult to relocate, requiring an alternative location for the deck. Contact your local building department prior to placement of any deck that will interfere with these devices.

- 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).