



City of Lakeville  
*Positioned to Thrive*

## ADDITIONS BUILDING AND ZONING REQUIREMENTS (REVISED 4/22/2008)

### **PERMIT SUBMITTAL CHECKLIST:**

- Signed completed Building Permit application form.
- Two (2) Copies of a Certificate of Survey. Draw to scale the proposed addition and any other existing structures not shown on the survey. (i.e. sheds and pools)
- Two (2) Copies of plans showing proposed designs and materials. Plans shall be drawn to scale and shall include the following information:
  1. A foundation plan indicating the following:
    - Size and type of foundation
    - The basement floor plan may be incorporated into the foundation plan.
    - Proposed addition size.
    - Size of beams and headers.
    - Size and spacing of floor joists above.
    - Size, location and spacing of posts.
  2. A floor plan indicating the following:
    - Proposed addition size.
    - Size of beams and headers.
    - All rooms labeled as to use.
    - Direction and spacing of floor joists or roof trusses above.
  3. A cross section view indicating the following:
    - Size and type of footings and foundation.
    - Floor joist size and spacing.
    - Flooring material.
    - Ceiling height.
    - Type(s) of sheathing and siding material.
    - Type and R-value of roof, wall, floor, and foundation insulation.
    - Size and spacing of roof rafters and pitch of roof.
  4. Elevations indicating the following:
    - Height of structure from established grade.
    - Type of roof covering material.
    - Type of siding material.

Attached are examples of drawings which are intended as a **GUIDE ONLY!!**

## **GENERAL BUILDING CODE AND ZONING REQUIREMENTS:**

- Post and spread footings shall be designed and constructed below the minimum frost depth of 42 inches and shall be sized to carry the applicable roof and floor loads.
- Minimum 6 inches of fall from the foundation wall within the first 10 feet for drainage. Surface drainage shall be directed to swales or drains to keep water away from the structure. Swales within 10 feet of the structure shall have a minimum 2 percent slope. Impervious surfaces within 10 feet shall slope away at min 2 percent.
- Sill plates shall be anchored to foundation with ½ inch minimum anchor bolts in line with required reinforcing, embedded a minimum 7 inches into foundation. Minimum 2 bolts per plate section with one bolt located not more than 12 inches or less than 7 bolt diameters from each end of the plate section.
- Approved wood of natural resistance to decay or treated wood shall be used for sills or plates that rest on masonry/concrete foundations within 8 inches of finished grade, and for joists within 18” and beams within 12” of the ground.
- Foundations shall extend a minimum of 4 inches above grade when a masonry veneer is used and a minimum of 6 inches elsewhere.
- Exterior foundation walls that retain earth and enclose interior spaces and floors below grade shall be waterproofed.
- Drains shall be provided around all concrete and masonry foundation that retain earth and enclose habitable or usable spaces located below grade. Drain tiles shall be drained to daylight or to an interior sump basket and pumped to the exterior.
- Energy Code items:(i.e. wall insulation, vapor barriers, sealed boxes)
  - Min R-values for insulation
    - ⇒ Walls:R-19 (4 mil vapor barrier on warm side)
    - ⇒ Floors over unconditioned space:R-30
    - ⇒ Attics:R-38 (4 mil vapor barrier on warm side)
    - ⇒ Vaulted ceiling:R-38 with 1” air shoots from eave vents to ridge vent/open ventilated attic space, hot roof not allowed. (4 mil vapor barrier on warm side)
    - ⇒ Foundation Wall:R-10 (Interior or Exterior)
  - Note: Foam insulation shall be separated from interior space with an approved thermal barrier. (i.e. ½ inch gypsum)
- Must provide a 4 mil vapor barrier on the warm side of the framed wall before gypsum is applied, and a weather resistive building paper over the exterior sheathing before the siding is applied.
- Basements with habitable space and every sleeping room shall be provided with an escape or rescue window having:
  - A minimum net clear openable area of not less than 5.7 square feet.
  - A minimum net clear opening height dimension of 24 inches.
  - A minimum net clear opening width dimension of 20 inches.
  - A finished sill height of not more than 44 inches above the floor.
- Tempered glass shall be provided in hazardous locations as required by code.

- Cantilevered floors of the house shall not support the addition construction without special structural design.
- Roof rafters without ceiling joists must be provided with collar ties per code connecting the rafters or the rafters shall be connected to a ridge beam supported by a wall or girder truss.
- Min 22 inch by 30 inch access required to all attics with a head room of 30 inches or more and at least 30 square feet of area.
- Attic ventilation shall be installed at a minimum of 1 square foot per 150 square feet of attic space except that 1/300 is allowed provided that at least 50% and not more than 80% of the required ventilating area is provided by vents in the upper portion at least 3 feet above the eave/cornice vents with the balance of the required vents provided in the eave/cornice areas. (See the roofing guide for other information on roofing.)
- Stairs shall have a minimum tread depth of 10 inches and a maximum riser height of 7¾ inches. The risers and treads shall be uniform within 3/8 inch from the largest to smallest of each. The minimum stair width is 36 inches.
- Stairs with 4 or more risers shall be provided with a continuous handrail located 34 to 38 inches above the nosing. Open side(s) of stairways more than 30 inches above the floor shall be provided with a guardrail having intermediate rails spaced to resist the passage of a 4-3/8 inch sphere. The guardrail must be placed not less than 34 inches above the nosing of the treads.
- Effective August 1, 2008, all existing homes shall be equipped with UL listed carbon monoxide detectors within 10 feet of every sleeping room.(MN 299F.51) Carbon monoxide detectors shall be directly plugged into an un-switched outlet, hardwired, or battery powered.
- Smoke alarms shall be hardwired and interconnected with battery backup and installed in the following locations:
  - In each sleeping room.
  - Outside each sleeping room in the immediate vicinity of the sleeping rooms.
  - One per floor if no sleeping rooms are provided on that floor.

Note: Additions require that the entire home be brought up to code as far as smoke alarms, smoke alarms installed in existing finished locations of the house are allowed to be battery powered and not interconnected where the only means of interconnecting the smoke detectors requires the removal of finish materials.
- Step and kickout flashing shall be installed where roofs intersect with vertical wall surfaces.
- Fireplaces shall be installed per manufacturer's specifications and the install manual shall be available on site during inspections.
- Fasteners for pressure-preservative treated wood shall be of hot-dip zinc-coated galvanized steel, stainless steel, silicon bronze or copper. The coating weights for zinc-coated fasteners shall be in accordance with ASTM A 153.

Exceptions: One-half inch (12.7mm) diameter or larger steel bolts. Fasteners other than nails and timber rivets shall be permitted to be of mechanically deposited zinc-coated steel with coating weights in accordance with ASTM B 695, Class 55, minimum.

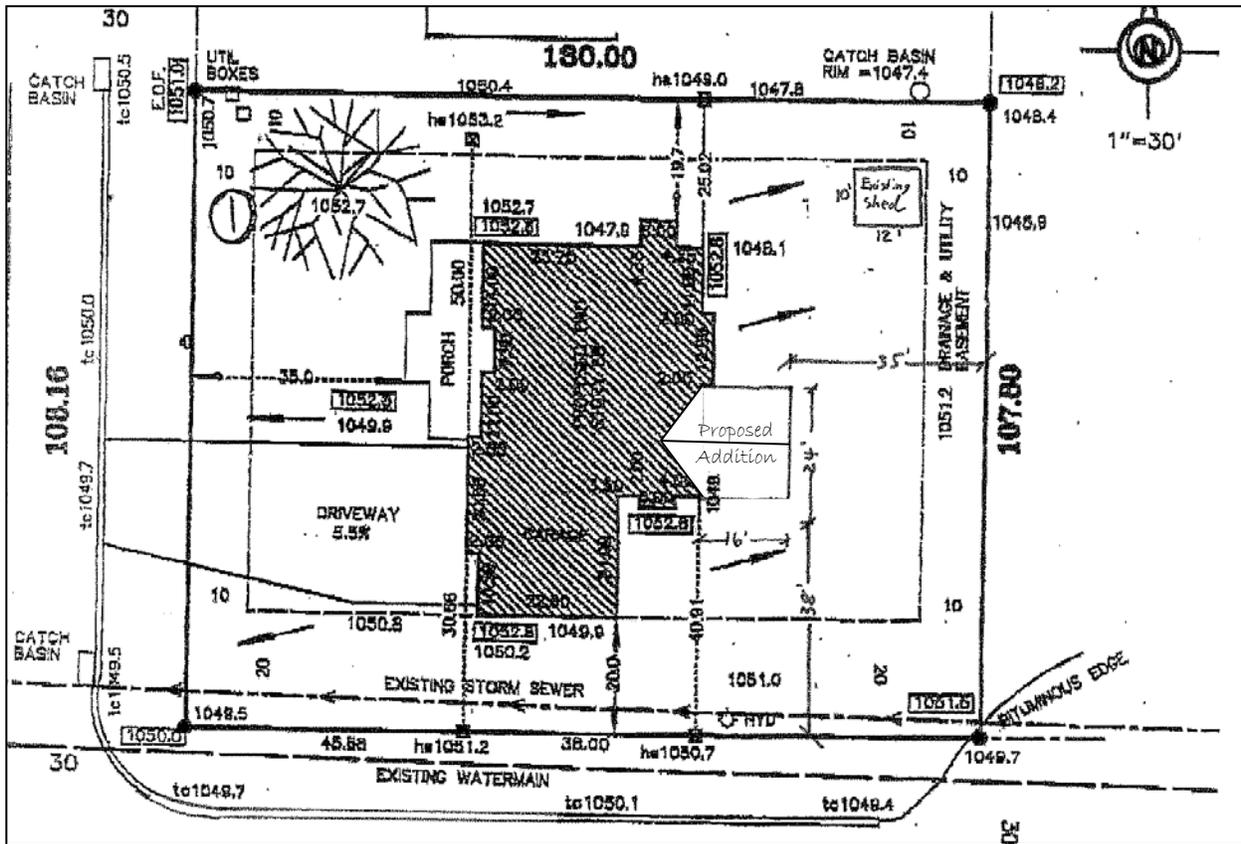
- Additions are subject to the setback requirements for principal structures in the district in which they are located.

### **REQUIRED INSPECTIONS:**

1. **Footings:** **PRIOR TO POURING CONCRETE!!**
2. **Foundation:** Prior to backfill.
3. **Electrical Rough-in:** With all joints made up and ready for the installation of the switch or outlet.
4. **Framing/Mechanical Rough-in/Plumbing Rough-in:** After all framing and rough-ins are complete and electrical rough-in has been passed.
5. **Insulation:** After framing inspection signed off.
6. **Electrical Final.**
7. **Final:** When the structure has been completed and electrical final has passed.

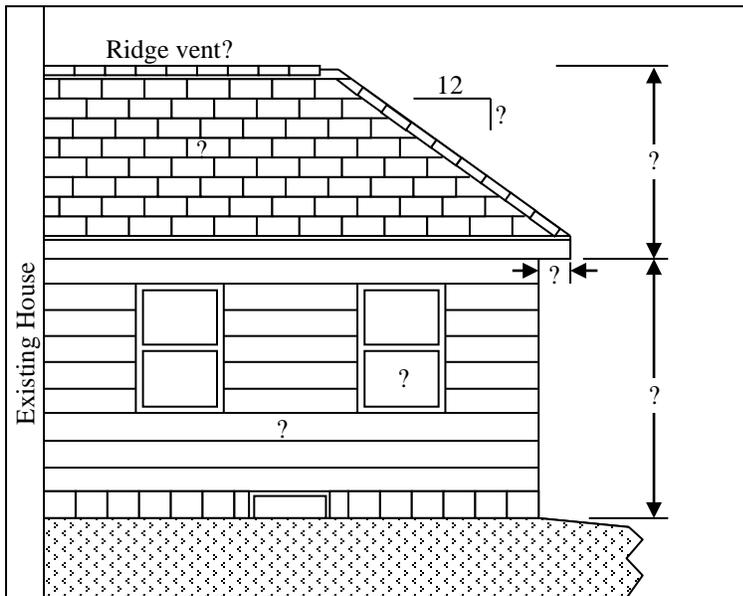
### **GENERAL NOTES:**

- This handout lists general code requirements relative to additions. Feel free to contact the Building Inspections Department at 952-985-4440 or stop in our office Monday through Friday from 8am to 4:30pm with specific questions to your project.
- The stamped, approved Plan and Survey shall be kept on the job site and readily available until the final inspection has been made.
- The Inspection Record Card shall be posted in the addition and shall remain posted until the final inspection has been made. Cards should be protected from the weather.
- Call 952-985-4440 between 8:00 A.M. and 4:30 P.M. to schedule for an inspection. **Provide at least 24-hour advance notice and provide permit number at time of scheduling.**



### Sample Survey

- Draw addition on survey to scale with dimensions showing proposed size and setbacks to property lines.
- Property pins to be located by owner if needed to verify setbacks.
- Show all existing structures, including pools and sheds.
  - a. All detached accessory buildings 120 square feet or less shall be set back at least 6 feet from any other building or structure on the same lot and shall not be located within a required buffer yard or drainage and/or utility easement.
  - b. All detached accessory buildings in excess of 120 square feet shall be set back at least 10 feet from any other building or structure on the same lot, and shall not be located within a required buffer yard or drainage and/or utility easement.
  - c. In all residential districts, swimming pools and any attached or functionally related deck that is more than 30 inches above grade shall be set back 10 feet from all adjoining lots and, except for fences and pump enclosures, shall be located at least 10 feet away from any other building or structure on the same lot and shall not be located within a drainage or utility easement or required buffer yard.



### Elevations

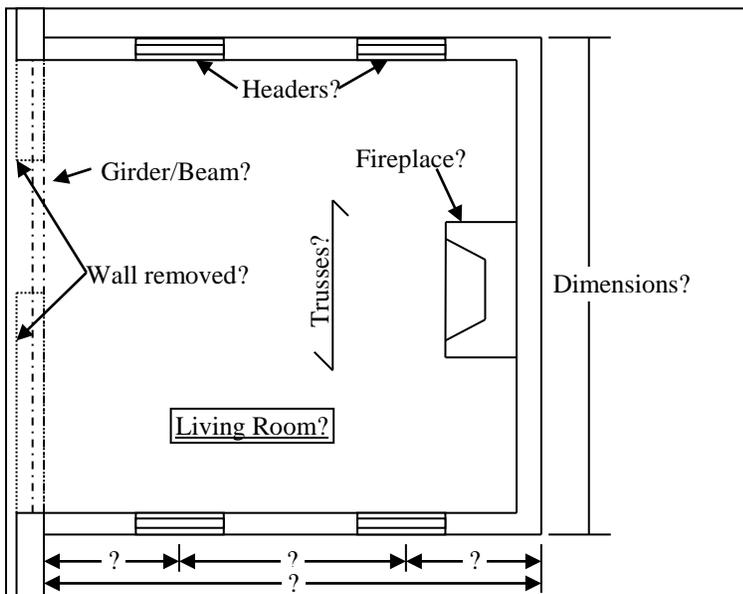
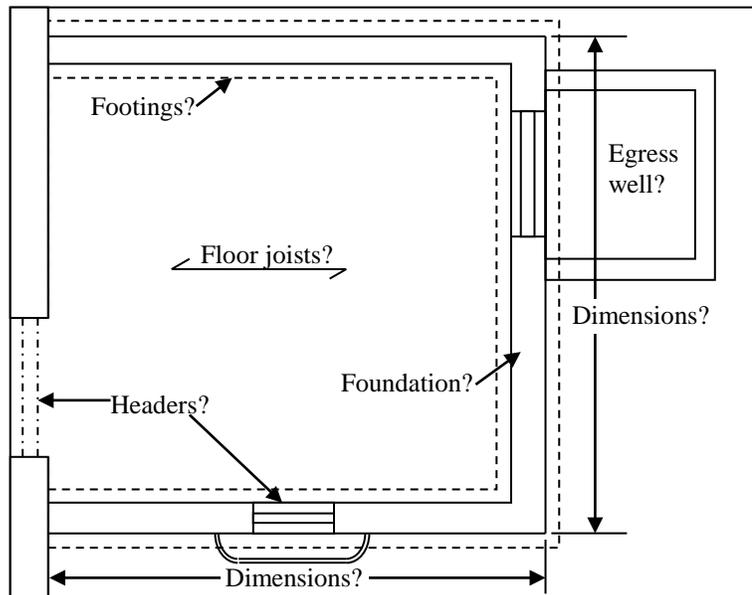
Elevations shall be included in addition plans and should show at the minimum the following items:

- Roof slope.
- Roofing material to be used.
- Roof vents. (Box or ridge)
- Typical overhang dimension.
- Siding material to be used.
- Window types. (i.e. double hung or casement)
- Height of structure from grade.

### Foundation Plan

Foundation plans shall be included in addition plans and should show at the minimum the following items:

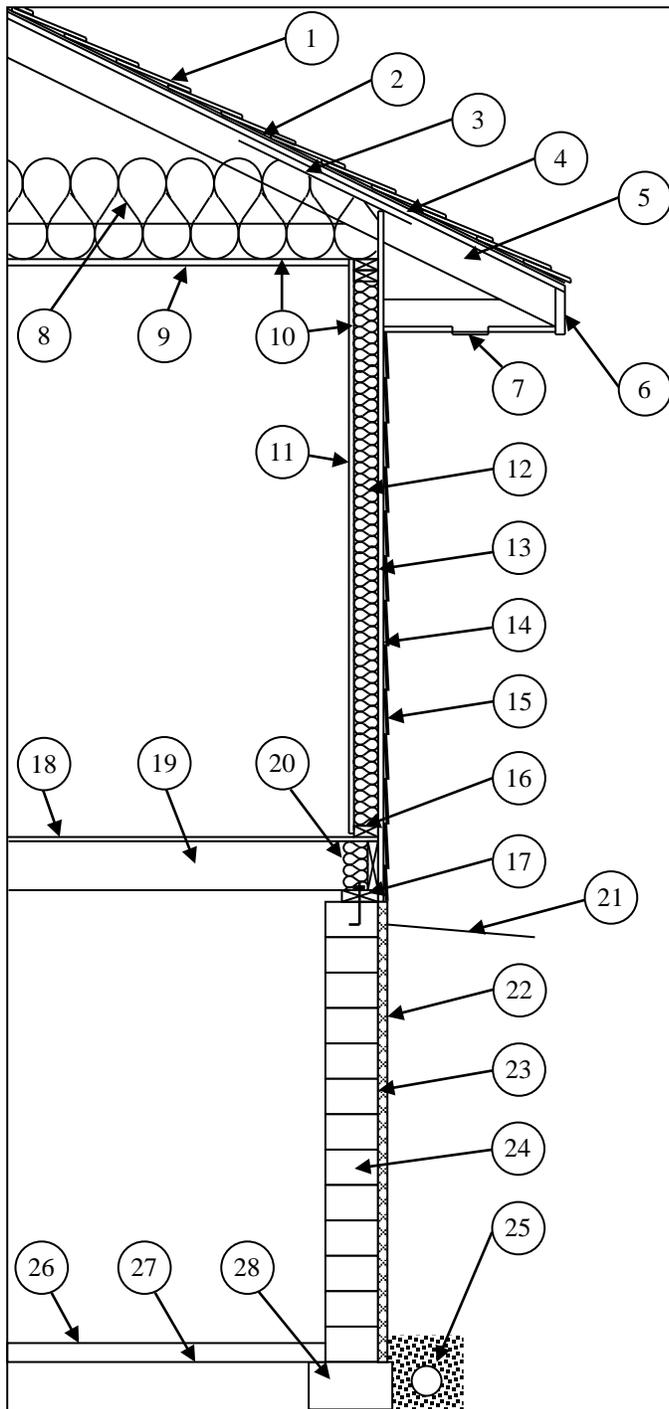
- Footing type and size.
- Foundation type, size and dimensions.
- Window locations.
- Headers or beam sizes.
- Floor framing above: type, size, spacing, and direction.
- Egress window wells.
- Basement finish layout if to be finished at this time.



### Floor Plans

Floor plans shall be included in addition plans and should show at the minimum the following items:

- Dimensions.
- Window locations.
- Fireplace if applicable.
- Header and beam sizes
- Roof framing type/direction. (i.e. Truss or Rafter)
- Girder locations if applicable.
- Show sections of existing to be demolished.
- Rooms labeled as to use.



1. Asphalt shingles or other roof covering.
2. Underlayment: min one layer 15# felt, or equivalent ASTM D 226 material slopes 4:12 or greater and 2 layers slopes 2:12 up to 4:12. Ice barrier: ASTM D 1970 product from eaves to 24 inches inside exterior wall line.
3. 1 inch air shoots from eaves to attic.
4. Roof sheathing.
5. Hand framed rafters of engineered truss.
6. Fascia Board.
7. Soffit vent.
8. Min R-38 attic insulation.
9. Gypsum ceiling.
10. 4 mil vapor barrier.
11. Gypsum wall board.
12. Min R-19 wall insulation.
13. Exterior wall sheathing.
14. Weather barrier. (building paper)
15. Exterior siding material.
16. 2x6 stud wall framing.
17. Sill plate connected to foundation with anchor bolts.
18. Subfloor.
19. Floor joists.
20. R-10 or R-19 rim insulation depending on energy code path, air sealed.
21. Grade.
22. Min R-10 rigid insulation.
23. Foundation waterproofing.
24. Foundation wall.
25. Exterior drain tile system.
26. Concrete slab.
27. Min 6 mil poly under slab.
28. Spread footing.

### **Section View**

Sample wall section shown. Materials, types and sizes are for example only and may be substituted with other code approved products. A typical wall section with materials to be used shall be provided in the construction plans with the permit application.