CITY OF IOWA CITY HOUSING AND INSPECTION SERVICES BUILDING DIVISION GUIDELINES FOR DRAWING RESIDENTIAL DETACHED GARAGE PLANS

The following form was prepared by the Building Division to be used <u>only</u> as a general guideline for the drawing of construction plans which are required to be submitted at the time of application for a building permit.

To make application for a building permit, the applicant shall submit two (2) sets of detailed construction plans drawn to scale on minimum 8 1/2" x 11" sheets of each of the following to the Building Division—Housing and Inspection Services, City Hall, between 8:00 a.m. and 4:30 p.m. Monday through Friday. The office is closed on all City holidays. If project is located in a Historic District or Conservation District or is a Historic Landmark, please go to www.icgov.org/default/?id=1484 for an application that will need to be submitted with the Building Permit application.

- 1. Site Plan
- 2. Foundation Plan
- 3. Floor Plan/Framing Plan
- 4. Elevations
- 5. Typical Wall Section
- 6. Additional Details (if necessary)

The following are lists of the items that should be shown on each of the above plans: The illustrations are guides for plan preparation only to give you a basic idea what each type of plan should look like and are not necessarily specific Code and other Ordinance requirements. Each individual site location, the location of the building on the site and/or size of building might vary as requirements of the lowa City Zoning Ordinance, the Building Code, and other ordinances dictate, and each will have to be reviewed on its own specific conditions after submittal.

SITE PLAN

- $\sqrt{}$ Indicate size and shape of your lot
- √ Indicate address and street (or streets if a corner lot)
- √ Indicate alley location
- √ Indicate size and location of existing house and other buildings
- √ Indicate size and location of proposed detached garage.
- √ Indicate distance between the proposed detached garage and each of the property lines
- √ Indicate distance between proposed detached garage and house
- $\sqrt{}$ Indicate location of easements on your lot

FOUNDATION PLAN

- √ Indicate length and width of the proposed detached garage foundation.
- $\sqrt{}$ Indicate size of footing and identify reinforcing
- √ Indicate size of foundation wall and identify reinforcing
- √ Indicate thickness of floor slab
- $\sqrt{}$ Indicate slope of floor slab

FLOOR PLAN/FRAMING PLAN

- √ Indicate length and width of the proposed detached garage.
- √ Indicate size and spacing of wall framing systems
- $\sqrt{}$ Indicate size and location of doors and windows
- √ Indicate size, spacing and direction of span of roof framing system

ELEVATIONS

- √ Indicate finish grade line and show depth of foundation and footing below finish grade
- √ Indicate width and height of detached garage
- $\sqrt{}$ Indicate the size and location of all doors and windows
- √ Indicate size of header and/or lintel above all doors and windows
- √ Indicate type of exterior siding or veneer
- √ Indicate type of roofing material and slope of roof

TYPICAL WALL SECTION

- √ Indicate size of footing
- $\sqrt{}$ Indicate depth of footing below finish grade line
- $\sqrt{}$ Indicate type and width of foundation wall and height above finish grade
- √ Indicate thickness of granular fill and floor slab
- √ Indicate size of sill plate
- √ Indicate type, size and spacing of sill plate anchors to foundation wall
- √ Indicate size and spacing of studs unless masonry structure is proposed
- √ Indicate size and type of exterior wall sheathing, felt siding or veneer. **NOTE:** Exterior walls of all garages less than 5'-0" from the side property lines are required to have a one (1) hour fire rating
- √ Indicate height from floor to ceiling
- Indicate size and spacing of roof rafters. If pre-fab roof trusses are proposed, submit manufacturer's design specifications and criteria, sealed by a registered lowa engineer to the Building Inspector at time of inspection
- $\sqrt{}$ Indicate size and spacing of collar beams
- √ Indicate size and type of roof sheathing, felt, roofing material and slope of roof
- √ Indicate gutters and downspouts

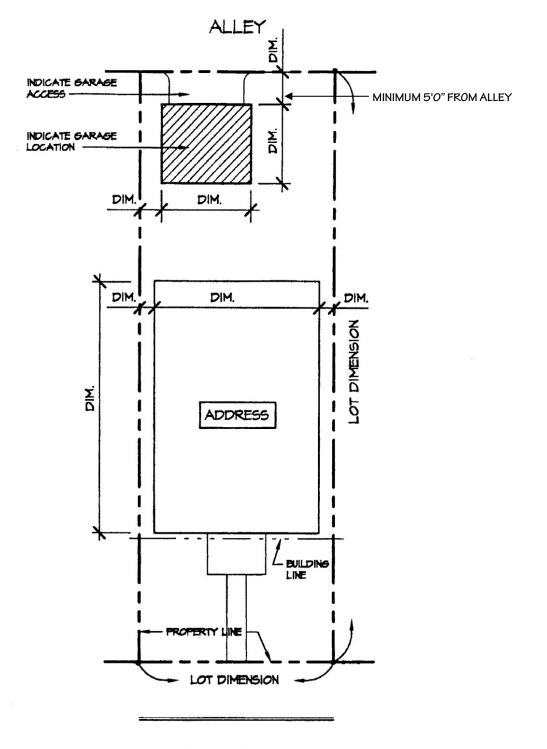
ADDITIONAL DETAILS

√ Indicate whatever information is necessary to show how your proposal will be constructed

For additional information, contact: Building Inspection Division at (319) 356-5120

GENERAL DETACHED GARAGE NOTES

- √ For specific side yard requirements for garages, contact the Housing and Inspection Services Department, City Hall (319) 356-5120. A general rule of thumb is a minimum of five (5) feet from any side property line.
- √ For use of pre-fab roof trusses—submit truss specification sheets, sealed by a registered engineer to the Building Inspector <u>at time of inspection</u>. Specification sheets must be specific and correspond to actual trusses used—<u>any</u> truss modifications requires submittal.
- √ All exterior walls, regardless of detached garage size, closer than three (3) feet from the side property lines are required to have a one (1) hour fire rating. Fire rating on exterior walls are usually obtained by use of a masonry/brick or 5/8 inch thick Type X fire rated gypsum board on both sides of stud.



STREET NAME

SITE PLAN

DENOTE SCALE

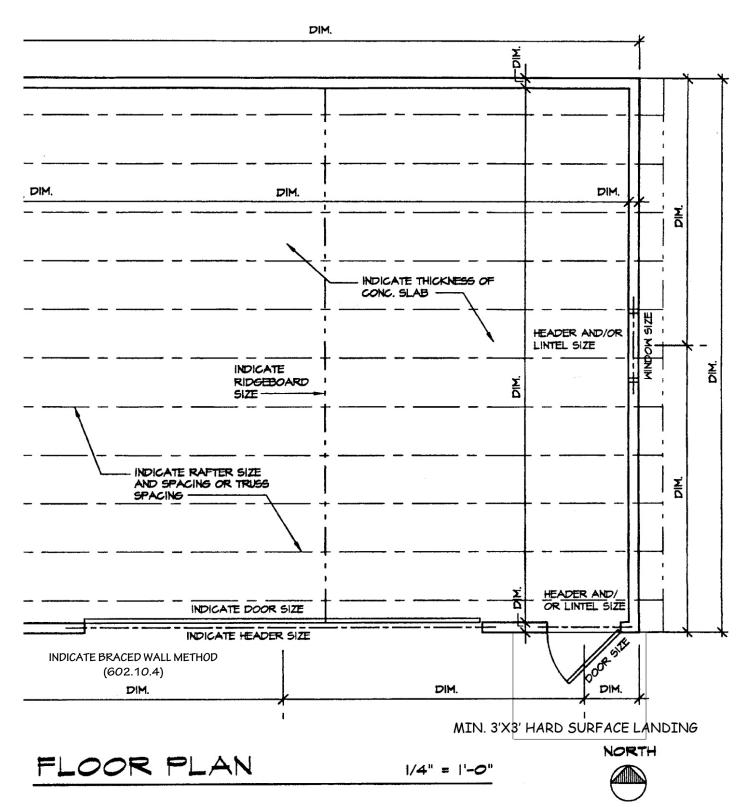


(INDICATE ORIENTATION)

City of Iowa City - Building Division RESIDENTIAL DETACHED GARAGE Guidelines and Standard Construction Details

Date:

Drawing No. 1 of 6



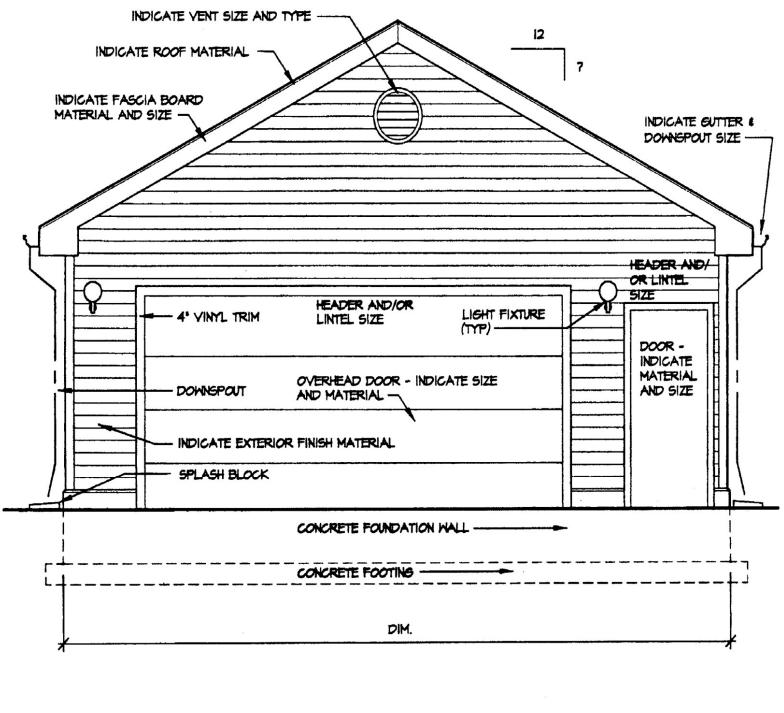
NOTE: IF PRE-ENGINEERED WOOD ROOF TRUSS IS USED, SUBMIT SEALED SHOP DRAWINGS PREPARED BY AN IOWA PROFESSIONAL ENGINEER.

(INDICATE ORIENTATION)

City of Iowa City - Building Division RESIDENTIAL DETACHED GARAGE Guidelines and Standard Construction Details

Date:

Drawing No. 2 of 6



ELEVATION *

1/4"=1'-0"

DGEL1

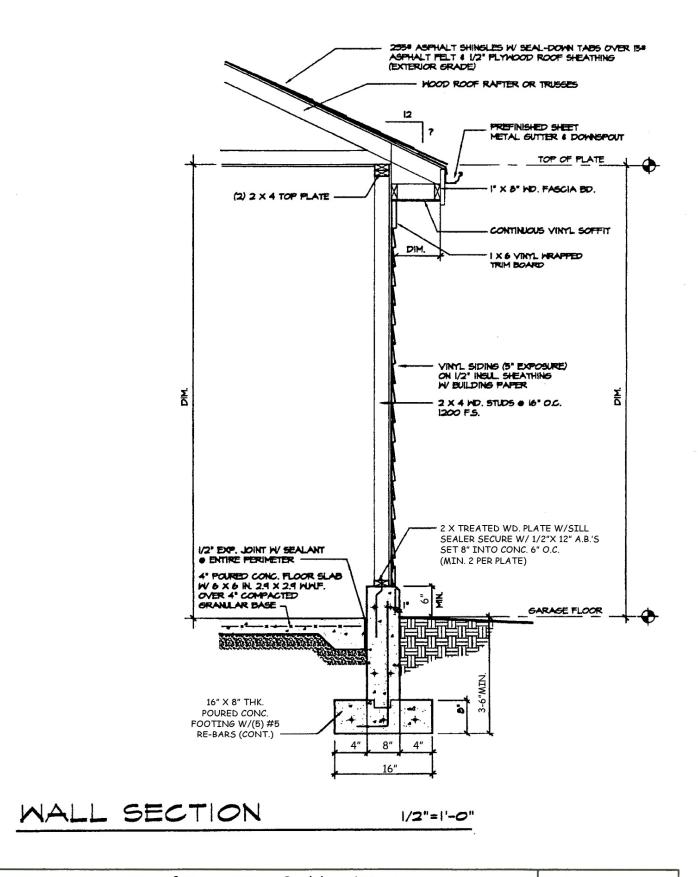
* INDICATE NORTH, SOUTH, EAST, OR WEST

NOTE: SHOW ALL FOUR ELEVATIONS OF GARAGE

City of Iowa City - Building Division RESIDENTIAL DETACHED GARAGE Guidelines and Standard Construction Details

Date:

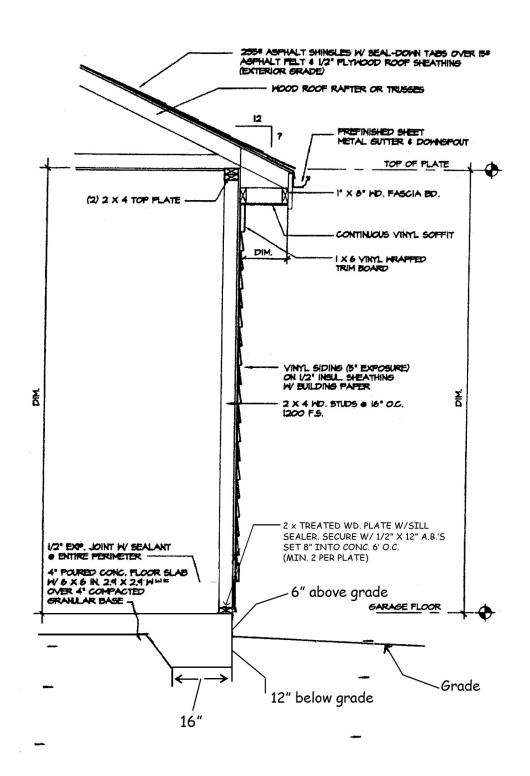
Drawing No. 3 of 6



City of Iowa City - Building Division RESIDENTIAL DETACHED GARAGE Guidelines and Standard Construction Details

Date:

Drawing No. 4 of 6



WALL SECTION

1/2"=1'0"

DGSEC2

WOOD FRAMING W/SIDING (LESS THAN 1,000 SF)

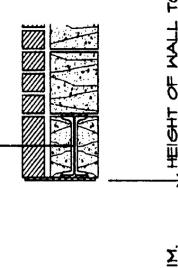
City of Iowa City - Building Division RESIDENTIAL DETACHED GARAGE Guidelines and Standard Construction Details Date:

Drawing No. 5 of 6

BEAM DESIGN CONSIDERATIONS:

- I. LENGTH OF SPAN
- 2. DIRECTION OF ROOF FRAMING
- 3. WEIGHT OF DOOR IF SUPPORTED BY BEAM
- 4. WEIGHT OF WALL ABOVE BEAM
- 5. WIND LOADING ON WALL
- 6. SPECIES, GRADE, & STRUCTURAL CHARACTERISTICS OF LUMBER FOR WOOD BEAMS

WIDE FLANGE STEEL
BEAM WITH STEEL PLATE
WELDED TO BOTTOM
FLANGE. MIN. 8" BEARING
• EACH END. GROUT CELLS
SOLID BELOW END BEARING



DEAM

BEAR

GENERAL HEADER SIZES FOR NORMAL WINDOW AND DOOR OPENINGS WITH WOOD FRAMING SUPPORTING ROOF ONLY:

2 - 2 X 4's - 3' OPENING

2 - 2 X 6's - 5' OPENING

2 - 2 X 8's - 6' OPENING

2 - 2 X 10's - 8' OPENING

2 - 2 x 12's - 9' OPENING

-2 x 4 Framing © 16" O.C. W SHEATHING & FINISH SIDING

- 2 X 4 TOP PLATE

2 X BEAM W/ 1/2" PLYWD. FILLER

2 X 4 BOTTOM PLATE ALL SOLIDLY GLUED AND NAILED TO ACT AS A SINGLE UNIT

WOOD FRAME WALL

DOOR / WINDOW HEAD DETAILS

3/4"=1'-0"

City of Iowa City - Building Division
RESIDENTIAL DETACHED GARAGE
Guidelines and Standard Construction Details

Date:

Drawing No. 6 of 6