

**CITY OF SAINT LOUIS  
DEPARTMENT OF PUBLIC SAFETY  
BUILDING DIVISION  
GUIDELINES FOR  
DRAWING RESIDENTIAL DETACHED GARAGE PLANS**

The following form was prepared by the Building Division to be used only 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 five (5) 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 - Permit Section, Room 425, City Hall, between 8:00 a.m. and 4:30 p.m. Monday through Friday. The office is closed on all City holidays. One (1) set of photographs is required when: 1) located in a Historic District; 2) located within 300 feet of a park; 3) located within 300 feet of a Historic District or a landmark.

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 St. Louis Zoning Ordinance, the Building Code, and other ordinances dictate, and each will have to be reviewed on its own specific conditions after submittal.

**1.0 SITE PLAN**

- 1.1 Indicate size and shape of your lot
- 1.2 Indicate address and street (or streets if a corner lot)
- 1.3 Indicate alley location
- 1.4 Indicate size and location of existing house and other buildings
- 1.5 Indicate size and location of proposed detached garage
- 1.6 Indicate distance between the proposed detached garage and each of the property lines
- 1.7 Indicate distance between proposed detached garage and house

Detached Garage Guidelines

## **2.0 FOUNDATION PLAN**

- 2.1 Indicate length and width of the proposed detached garage foundation
- 2.2 Indicate size of footing
- 2.3 Indicate size of foundation wall
- 2.4 Indicate thickness of floor slab
- 2.5 Indicate slope of floor slab

## **3.0 FLOOR PLAN/FRAMING PLAN**

- 3.1 Indicate length and width of the proposed detached garage
- 3.2 Indicate distance from detached garage to each property line
- 3.3 Indicate size and spacing of wall framing systems
- 3.4 Indicate size and location of doors and windows
- 3.5 Indicate size, spacing and direction of span of roof framing system.

## **4.0 ELEVATIONS**

- 4.1 Indicate finish grade line and show depth of foundation and footing below finish grade
- 4.2 Indicate width and height of detached garage
- 4.3 Indicate the size and location of all doors and windows
- 4.4 Indicate size of header and/or lintel above all doors and windows
- 4.5 Indicate type of exterior siding or veneer
- 4.6 Indicate type of roofing material and slope of roof
- 4.7 Indicate gutters and downspouts

## **5.0 TYPICAL WALL SECTION**

- 5.1 Indicate size of footing
- 5.2 Indicate depth of footing below finish grade line
- 5.3 Indicate type and width of foundation wall and height above finish grade
- 5.4 Indicate thickness of granular fill and floor slab
- 5.5 Indicate size of sill plate
- 5.6 Indicate type, size and spacing of sill plate anchors to foundation wall
- 5.7 Indicate size and spacing of studs unless masonry structure is proposed
- 5.8 Indicate size and type of exterior wall sheathing, felt siding or veneer. **NOTE:** Exterior walls of all garages less than 3'-0" from the side property lines are required to have a one (1) hour fire rating
- 5.9 Indicate height from floor to ceiling
- 5.10 Indicate size and spacing of roof rafters. If pre-fab roof trusses are proposed, submit manufacturer's design specification and criteria, sealed by a registered Missouri engineer to the Building Inspector prior to installation of any trusses
- 5.11 Indicate size and spacing of collar beams

- 5.12 Indicate size and type of roof sheathing, felt, roofing material and slope of roof
- 5.13 Indicate gutters and downspouts

## **6.0 ADDITIONAL DETAILS**

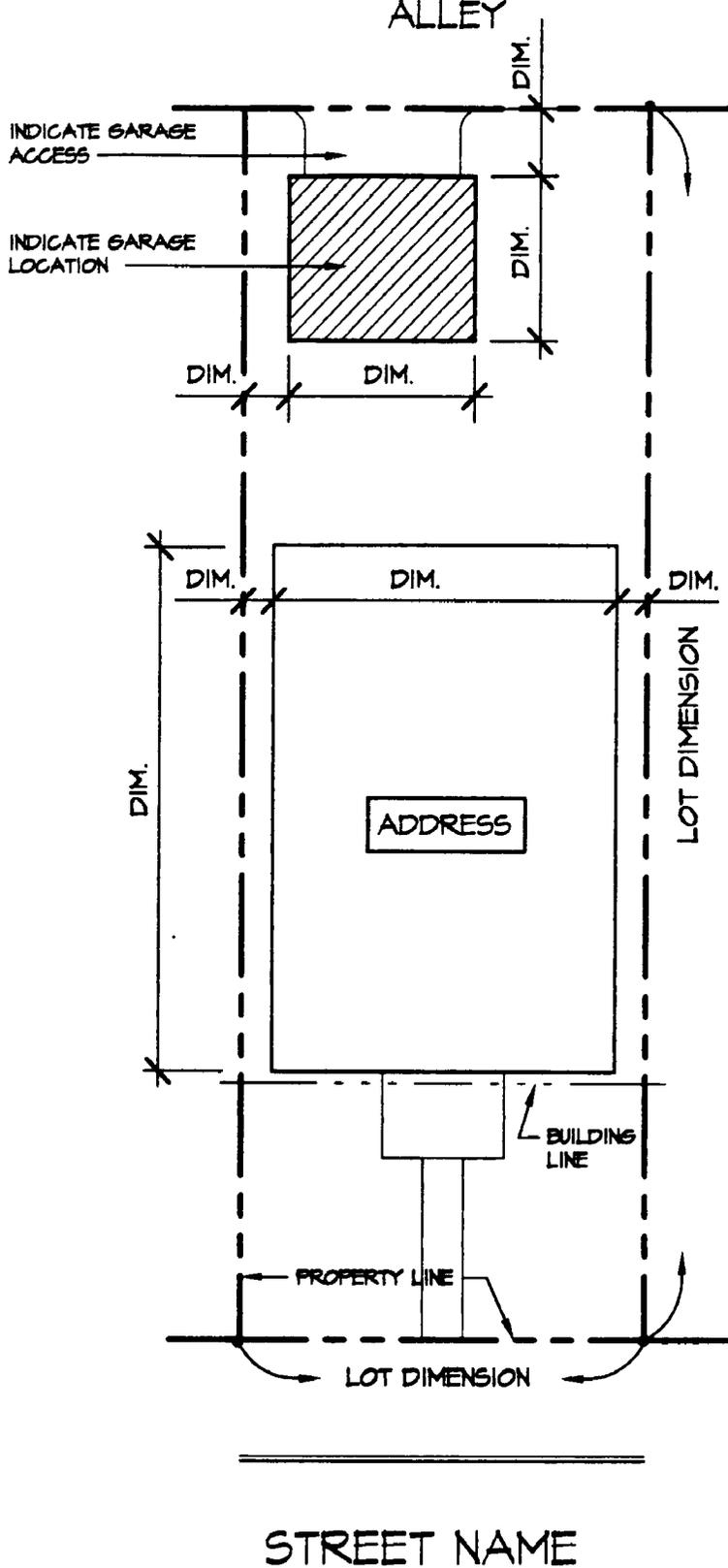
- 6.1 Indicate whatever information is necessary to show how your proposal will be constructed

For additional information, contact: Permit Section at (314) 622-3313.

## **7.0 GENERAL DETACHED GARAGE NOTES**

- 7.1 For specific side yard requirements for garages, contact the Zoning Section, Room 400, City Hall, (314) 622-3666. A general rule of thumb is a minimum of four (4) feet from any side property line.
- 7.2 Gutters and downspouts are required on all detached garages. Downspouts **shall not** be sewer connected provided the surface drainage water does not adversely effect the adjacent property or create a nuisance.
- 7.3 For use of pre-fab roof trusses - submit truss specification sheets, sealed by a Missouri registered engineer to the Building Inspector prior to installation. Specification sheets must be specific and correspond to actual trusses used - any truss modifications requires submittal
- 7.4 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.

Effective Date  
January 1, 2001



# SITE PLAN

DENOTE SCALE

DGSITE

NORTH



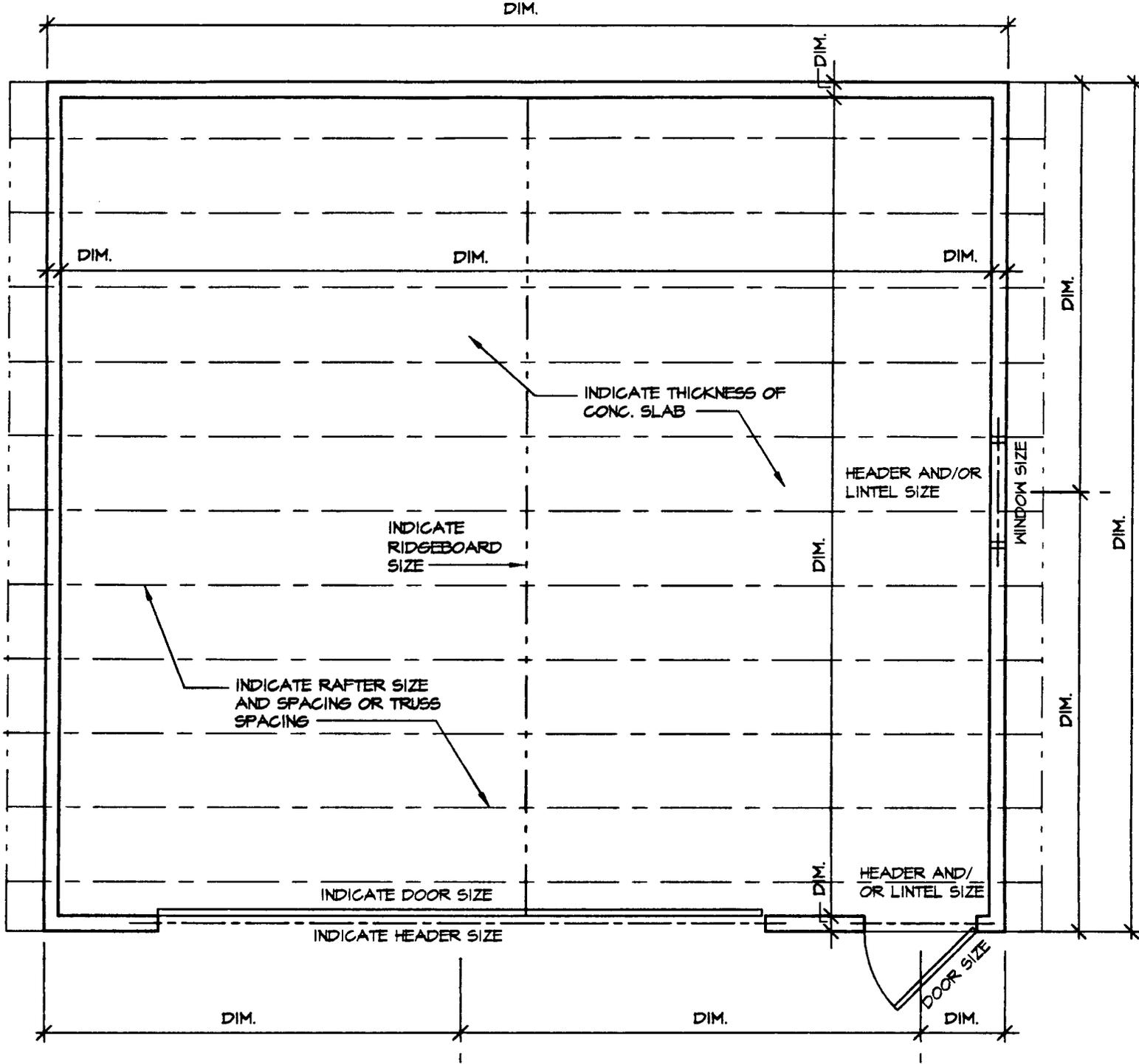
(INDICATE ORIENTATION)

City of Saint Louis - Building Division  
**RESIDENTIAL DETACHED GARAGE**  
 Guidelines and Standard Construction Details

Date: Jan., 2001

Drawing No.

1 of 6



# FLOOR PLAN

1/4" = 1'-0"

NORTH



(INDICATE ORIENTATION)

DGPLN

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

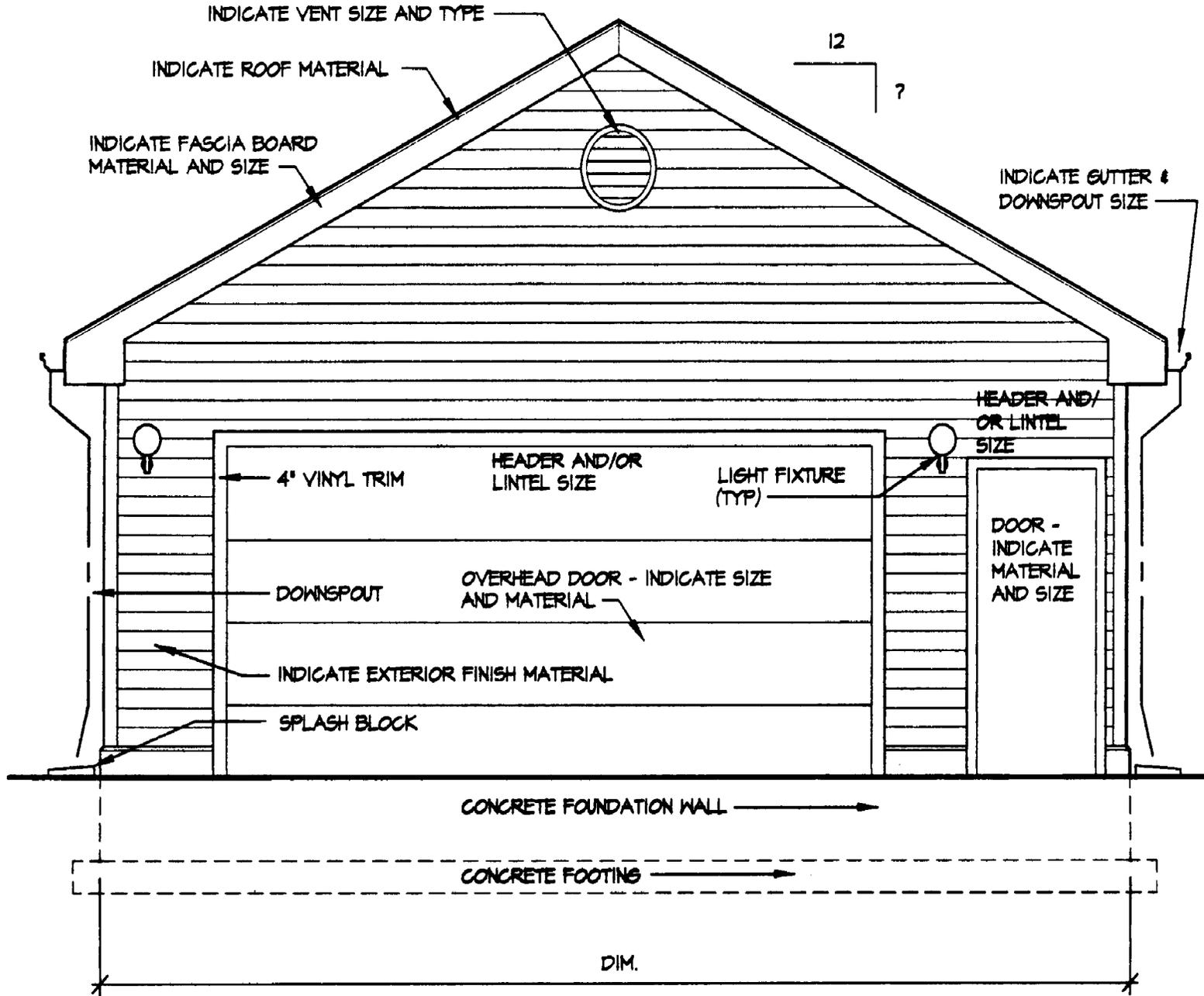
City of Saint Louis - Building Division  
**RESIDENTIAL DETACHED GARAGE**  
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Date: Jan., 2001

Drawing No.

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DG-PG2



# ELEVATION \*

1/4" = 1'-0"

DGEL1

\* INDICATE NORTH, SOUTH, EAST, OR WEST

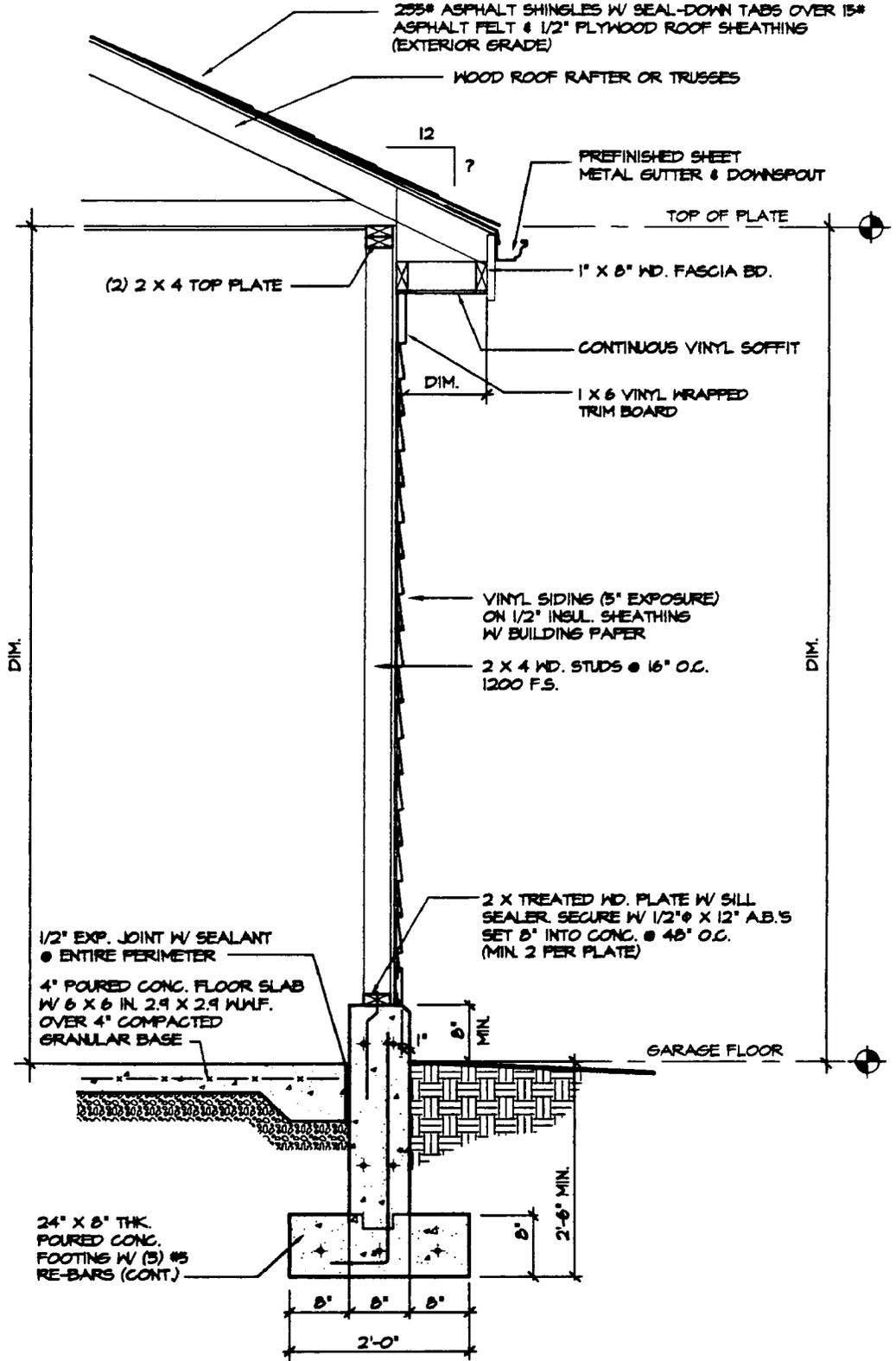
NOTE: SHOW ALL FOUR ELEVATIONS OF GARAGE

City of Saint Louis - Building Division  
**RESIDENTIAL DETACHED GARAGE**  
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# WALL SECTION

1/2" = 1'-0"

DGSEC2

(WOOD FRAMING W/ SIDING)

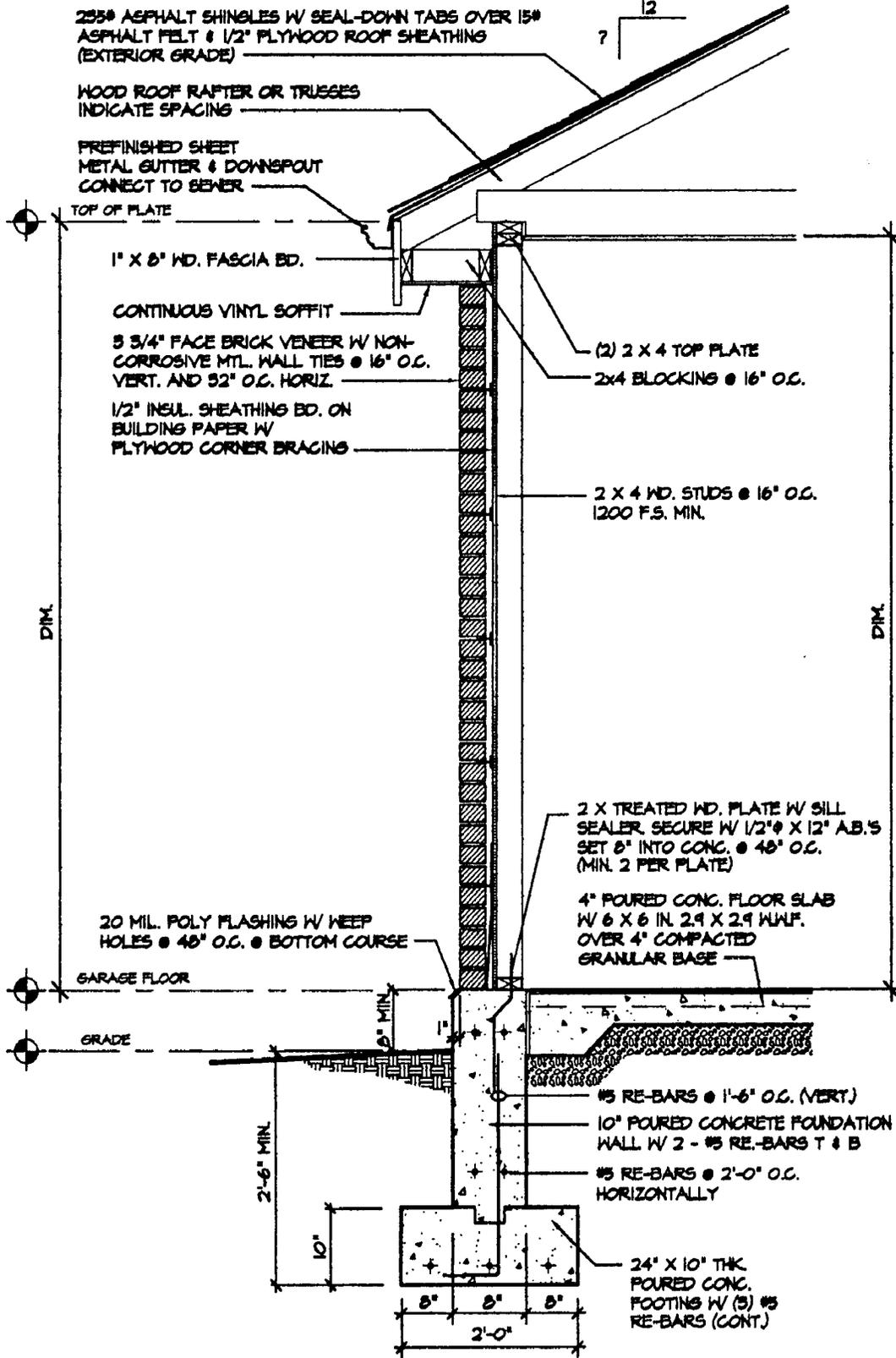
City of Saint Louis - Building Division  
**RESIDENTIAL DETACHED GARAGE**  
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DG-PG1



# WALL SECTION

1/2" = 1'-0"

AGWSECT1

(WOOD FRAMING W/ BRICK VENEER)

DC-PC5

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**RESIDENTIAL DETACHED GARAGE**  
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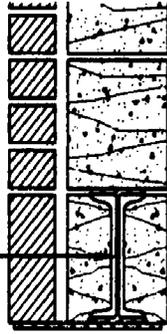
**BEAM DESIGN CONSIDERATIONS :**

1. 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

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

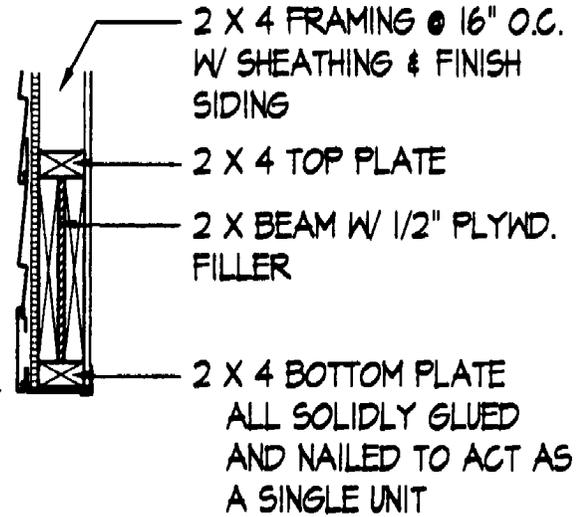
- 2 - 2 X 4's - 4' OPENING
- 2 - 2 X 6's - 6' OPENING
- 2 - 2 X 8's - 8' OPENING
- 2 - 2 X 10's - 10' OPENING
- 2 - 2 X 12's - 12' OPENING

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



MASONRY WALL

MUST BE DESIGNED BY REGISTERED MISSOURI ARCHITECT OR ENGINEER



WOOD FRAME WALL

**DOOR / WINDOW HEAD DETAILS**

3/4" = 1'-0"

DGDTL

City of Saint Louis - Building Division  
**RESIDENTIAL DETACHED GARAGE**  
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DG-PG6