The most important step in the permit process is the submittal and review of building plans. The purpose of the plans is to provide a detailed written document of the scope of your project. If you are having a number of contractors bid on your project, it is in your best interest to provide plans independent of a contractor. This ensures contractors that bid on your project will be bidding on the same plans. This will also make it easier to compare bids.

When the City receives your plans, a staff member will review your plans to determine in advance that the proposed work complies with the various building rules. The goal is to uncover potential problem areas while the project is still on paper and save you costly corrections later. Applicants are asked to provide two sets of plans. The City retains one set, the other set will be returned to the permit applicant with any corrections noted.

Plans must be detailed. They must also be neatly drawn and drawn to a useable scale. One-quarter inch to one foot is a common scale for floor plans and building plans. Typical residential plans would include a site plan, foundation plans, floor plans, cross sections, elevations, details of various structural components, and a window schedule. Plans should include dimensions and information on use of rooms, wall and ceiling finishes, and lumber sizes and spacing. It is helpful if each page identifies the address of the project as well as the owner’s name.

Plans can be prepared by a property owner, contractor, or drafting service. 8 ½ X 11 sheets can be used for projects that aren’t too large.

If your project is very complex, you may find it advantageous to hire a professional designer to assist you. Also, if your design involves complicated framing techniques or the use of steel I-beams, for example, you may be required to verify that the designs meet code as a part of the plan review process. The Building Safety Division may require that a licensed engineer provide this verification.

Once your plans are reviewed and approved, it is very important that you do not change the plans without prior approval of the Building Safety Division. If you change the plans,
you run the risk of code violations and negate the purpose of having the plans reviewed in the first place.

The following is a description of what should be included on various portions of the plans:

**Site Plan**
The site plan is a scale drawing of the lot showing the location of each building on the lot. The site plan should indicate the address of the property, the scale to which the drawing was prepared, and indicate the orientation of the drawing with a north arrow. The size of each building must be shown as well as the distance from each building to the property lines and to other buildings. The new construction should be clearly identified on the site plan. Any water features, retaining walls, or other physical features should be shown. Distances from buildings must be shown to property lines and not streets, sidewalks or alleys.

**Foundation Plans**
Foundation plans indicate the path and location of the footings, footing dimensions, and general notes on the foundation design.

**Elevations**
An elevation plan is a view of the building, as one would see it from each side of the building. Elevations help to show the scale of the project, the building height, and exterior finishes. They also help to determine the number of stories of a building, which can effect certain building code requirements.

**Floor Plans**
Floor plans should be submitted for each floor affected by a building project. The floor plan should show the location and identity of each room, room dimensions, locations of windows and doors, fixture locations, and items such as smoke detectors. A window schedule should be provided with the floor plans. The schedule should indicate the location of the window, the manufacturer, the window size (manufacturer's model number), and if the window is safety glazed.

**Cross Sections**
Cross sections show a view through the building’s framework from foundation to the peak of the roof. Multiple cross sections may be necessary to portray the various work proposed.

Cross sections should show the following:
- Footing width and depth including rebar placement
- Foundation type (masonry, concrete, or wood)
- Foundation height and thickness
- Rebar locations
- Framing details
- Anchor bolt locations
- Sill plates
- Floor joist size and spacing
- Stud size and spacing
- Exterior and interior sheathing
- Exterior wall coverings
- Insulation and vapor barriers
- Roof framing including truss drawings
- Joist and rafter size and spacing
- Roof pitch,
- Eave details
- Insulation and vapor barriers
- Roof sheathing
- Underlayment
- Ventilation methods
- Ice and water barrier installations
- Roofing type

Descriptive notes may be included to address specific issues such as treated plates, header sizes, fastener schedules, etc.
EXISTING DWELLING

PIN NEW FOOTING TO EXISTING CENTER PAD 24” X 24” 10” DEEP

8” x 20” FOOTING W/ 2 #4 REBAR

Scale ¼ “ = 1 Ft
TYPICAL BUILDING ELEVATIONS

1/2 Inch OSB Sheathing w/Cedar Lap

3 1/2 Inch

#4 Rebar at 30" O.C. each

1/4 Inch = 1 Foot
4" Sand Base

8 Ft 2X4 Stud 16" o.c. w/ Treated Sill Plate and Double Top Plate

Manufactured Wood Trusses 24" o.c.

10 Inch by ½ Inch Anchor Bolts 6 Ft o.c., 12 inches from end of each piece

240# Asphalt Shingles over Type I Felt.

½" CDX Plywood

12' 6" From Peak to Top of Floor

8-Inch Poured Concrete Wall 96" High w/ ½ Inch

12' 6" From Peak to Top of Floor

4" Sand Base

SCALE ¼" = 1 FOOT

10 Inch by ½ Inch Anchor Bolts 6 Ft o.c., 12 inches from end of each piece

½" CDX Plywood
Concrete Footing
w/ 2 #4 Rebar

Finished Grade

4-Inch Drain Tile

Pea Rock

4-Inch Sand Base

6-mil Polyethylene Vapor Retarder

8” X 20” Concrete 20” w/ 2 #4 Rebar

Foundation damp proofing

3.5-Inch Concrete Floor

2X6 Treated Sill Plate over Sill Sealer

5/8” Gypsum Board over 4 mil vapor

¾ Inch T&G Plywood over 2X10 Floor Joists, #2 Hem-Fir – 16” o.c.

½ Inch CDX Plywood

2X6 Double Top Plate

96”

1/2” Gypsum Board over 4 mil Vapor Retarder

2X6 Bottom Plate

½ Inch Anchor Bolts 6 Ft o.c., 12” from ea end

R-10 Rigid Insulation

R-44 Attic Insulation

½ Inch CDX Plywood

2X6 Studs, 16” o.c. SPF Stud Grade

R-19 Fiberglass Insulation

2X6 Studs, 16” o.c. SPF

½ Inch Anchor Bolts 6 Ft o.c., 12” from ea end

Finished Grade

R-10 Foundation Insulation

4-Inch Drain Tile

Pea Rock

Foundation damp proofing

3.5-Inch Concrete Floor

2X6 Treated Sill Plate over Sill Sealer