

**NEW COMMERCIAL BUILDING**  
**(Long Version)**

Construction documents for most projects consist of drawings, specifications, and appropriate calculations. All elements shall complement each other. Completeness and coordination of all necessary information are the responsibility of the registered architect or professional engineer. Construction documents submitted to the building official must be of sufficient nature to clearly show the project in its entirety with emphasis on the following:

- Life safety
- Means of egress
- Barrier free accessibility
- Structural integrity
- Building code compliance
- Definition of scope of work

The required construction documents will depend upon the size, nature, and complexity of the project. The following is a suggested standard of the *minimum* required construction documents for review by building officials.

**Cover Sheet**

1. Project identification
2. Project address and a location map
3. All licensed architects and engineers identified
4. The licensed architect or engineer in responsible control (the professional responsible for project co-ordination) shall be identified. All communications should be directed through this individual.
5. Design Criteria list:
  - a. Occupancy group
  - b. Type Construction classification
  - c. Location of property
  - d. Seismic risk
  - e. Design loads
  - f. Structural systems
  - g. Square Footage/Allowable floor area
  - h. Fire sprinkler systems
  - i. Height and number of stories
  - j. Occupant load
  - k. Land use zone



### **Site Plan**

1. Proposed new building or structure and any existing buildings or structures, all property lines with dimensions, all streets, easements, and setbacks.
2. All utilities - water, sewer, storm, communication services, natural gas, telephone, and cable TV.
3. Electrical points of connection proposed utility service routes and existing utilities on the site.
4. All approved/required parking, drainage, and grading information.
5. Indicate drainage inflow and outflow locations and specify areas required to be maintained for drainage purposes.
6. A topographical survey should be provided with a benchmark elevation.
7. North arrow, graphic and stated scale, dimension of setbacks and the location and size of components delineated on the site plan.

**Geotechnical Report** Provide a geotechnical report for the proposed structure at that site.

### **Exterior Elevations**

1. Each elevation with vertical dimensions and heights, including openings.
2. Identify materials.
3. Show lateral bracing system, where applicable.
4. Provide dimensions and schedules.

### **Foundation Plan**

1. Show all foundations and footings - indicate size, locations, thickness, materials, and strengths, and reinforcing.
2. Show all imbedded anchoring such as anchor bolts, hold-downs, post bases, etc.
3. Provide dimensions for the location and size of all components delineated on the foundation plan.

### **Floor Plans**

1. Show all floors including basements.
2. Show all rooms, with their use, overall dimensions and locations of all structural elements and openings.
3. Show all doors and windows. Provide door and window schedules.
4. All fire resistance rated assemblies, areas of refuge, occupancy separations, fire blocking and draft stopping shall be shown.
5. Show dimensions for the size of all rooms and the locations of other components delineated on the floor plans.



### **Framing Plans and Roof Framing Plans**

1. Show all structural members - size, methods and details of attachment, connections, location, and materials for floors and roofs.
2. Show roof plan with dimensions for the location and size of all components delineated on the roof plan.

**Schedules** - Room finishes, doors, hardware, windows, plumbing, mechanical, electrical, and structural.

### **Addenda and Changes**

It shall be the responsibility of the individual identified on the cover sheet as the licensed architect or engineer in responsible control to notify the building official of all changes throughout the project and provide revised construction documents, calculations, or other appropriate documentation prior to commencement of that portion of the construction.

### **Revisions**

The party submitting changes shall be identified at the beginning of the approval process. For clarity, all re-visions should be identified and clouded on the construction drawings and appropriately marked in the project manual or resubmitted as a new set of construction documents.

### **Completeness of Documents**

Construction Documents for most projects consist of drawings, specifications, and appropriate calculations. All elements shall complement each other. Completeness and coordination of all necessary information is the responsibility of the registered design professional(s).

### **Building Sections Wall Sections**

1. Show materials of construction, non-rated and fire resistance rated assemblies, and fire resistance rated penetrations.
2. Show dimensions.

### **Mechanical System**

1. Show all units, sizes, mounting details, all ductwork and duct sizes.
2. Indicate all fire dampers where required.
3. Provide equipment schedules.
4. Submit energy conservation calculations.
5. Show dimensions of all elements.



### **Plumbing System**

1. Show all fixtures, piping, slopes, materials, and sizes.
2. Show point of connections to utilities, septic tanks, pre-treatment sewer systems and water wells.
3. Show dimensions of all elements.

### **Electrical system**

1. Show all electrical fixtures (interior, exterior and site), wiring sizes and circuiting, grounding, panel schedules, single line diagrams, load calculations and fixture schedules.
2. Provide fault-current calculations for entire system.
3. Show point of connection to utility.
4. Show dimensions of all elements.

### **Structural Systems**

1. Show foundation, structural members and where required provide structural calculations for the structural systems of the project.
2. Include calculations indicating compliance with seismic, wind, snow, and other design loads.
3. Completeness of the necessary calculations is the responsibility of the registered design professional.

### **Specifications** - Prepare specifications to further define:

1. Construction components.
2. Quality of the materials.
3. Delineation of the materials and methods of construction.
4. Wall, floor and ceiling finishes, exterior finishes,
5. Descriptions of all pertinent equipment.
6. Schedules may be incorporated into the project manual in lieu of being delineated on the construction drawings.

