Commercial Plan Review Requirements

Building Plan Review Requirements

- 1. Plan(s) showing to scale (1/4") the size and location of all new construction and all existing structures on the site. Distances from lot lines, established street grades and the proposed finished grades. Site plan shall be drawn in accordance with an accurate boundary line survey.
- 2. One copy of report signed and sealed by a reporting engineer or registered design professional.
- 3. Geo-technical report or soil investigation with any recommendation.
- 4. Three (3) sets of plans and specifications signed and sealed by a registered design professional licensed in the state where the construction is to be performed.
 - Front, rear and side elevations
 - Type(s) construction
 - Use group(s) and use of each area or room
 - Occupant load of each area or room
 - Means of egress plan
 - Rated assembly details with design numbers
 - Window, door and finish schedule
 - Design loads and design calculations
 - Shop and prefabricated component drawings
 - Wall, floor, roof and foundation sections
 - Details, connections and material designation

Plumbing Plan Review Requirements

- 1. Plan(s) showing to scale (1/4") the size and location of all new construction and all existing structures on the site. Distances from lot lines, established street grades and the proposed finished grades. Site plan shall be drawn in accordance with an accurate boundary line survey.
- 2. Three (3) sets of plans and specifications signed and sealed by a registered design professional licensed in the state where the construction is to be performed.
 - Isometric diagram of potable water supply system with fixtures, locations and WSFU values
 - Isometric diagram of DWV system with fixtures, locations and DFU values
 - Hangers and supports
 - Indirect waste piping
 - Details of special devices: backflow, grease trap, sewer pump, oil separator, and steam boiler
 - Specifications for all fixtures, appliances, piping material and connections for all plumbing systems
 - Design basis for sizing of potable water supply system
 - Storm drainage calculations
 - Material designation

Mechanical Plan Review Requirements

- 1. Plan(s) showing to scale (1/4") the size and location of all new construction and all existing structures on the site. Distances from lot lines, established street grades and the proposed finished grades. Site plan shall be drawn in accordance with an accurate boundary line survey.
- 2. Three (3) sets of plans and specifications signed and sealed by a registered design professional licensed in the state where the construction is to be performed.
 - Location and size of equipment
 - Air distribution and return air system
 - Ventilation and exhaust schedule(s)
 - Duct detection system
 - Combustion air
 - Gas piping diagram
 - Oil piping diagram
 - Hydronic piping diagram
 - Chimney system
 - Vent system
 - Design calculations
 - Floor plan(s) of systems and piping
 - Material designation

Electrical Plan Review Requirements

- 1. Plan(s) showing to scale (1/4") the size and location of all new construction and all existing structures on the site. Distances from lot lines, established street grades and the proposed finished grades. Site plan shall be drawn in accordance with an accurate boundary line survey.
- 2. Three (3) sets of plans and specifications signed and sealed by a registered design professional licensed in the state where the construction is to be performed.
 - Location of electrical devices: lighting, receptacles, switches, equipment, appliances, transformers, panels, and subpanels
 - Size, type and number of conductors in conduit and raceway
 - Size and type of conduit and raceway
 - Panel and subpanel schedule with load calculations
 - Single line diagram
 - Load calculations for service equipment
 - Size, locations and type of connection for ground wires and connectors
 - Emergency lighting and exit signs
 - Location of GFCI receptacles
 - Size and demand of electrical appliances, equipment and devices
 - Grounding and overcurrent protection systems

Fire Alarm/Detection System Plan Review Requirements

- 1. Three (3) sets of plans and specifications signed and sealed by a registered design professional licensed in the state where the construction is to be performed.
 - Types of systems or services
 - System signals and functions
 - Monitoring
 - Location of alarm initiating devices
 - Types of alarm initiating circuits
 - Primary and secondary power sources
 - Wiring types and methods
 - Manufacturers' specifications
 - Manufacturers' installation instructions

Extinguishing System Plan Review Requirements

- 1. Three (3) sets of plans and specifications signed and sealed by a registered design professional licensed in the state where the construction is to be performed.
 - Amount and type of agent in system
 - Size, length and arrangement of piping
 - Description and location of nozzles
 - Location and function of detection devices
 - Location and function of operating devices
 - Flow rates of nozzles
 - Types of fire extinguisher(s)
 - Cleaning schedule
 - Material designation

Dry Chemical Extinguishing System, NFPA 17 Wet Chemical Extinguishing System, NFPA 17A Carbon Dioxide Extinguishing System, NFPA 12 Sprinkler Extinguishing System, NFPA 13

Sprinkler/Standpipe Plan Review Requirements

- 1. Plan(s) showing to scale (1/4") the size and location of all new construction and all existing structures on the site. Distances from lot lines, established street grades and the proposed finished grades. Site plan shall be drawn in accordance with an accurate boundary line survey.
- 2. Three (3) sets of plans and specifications signed and sealed by a registered design professional licensed in the state where the construction is to be performed.
 - Water supply test results
 - Make, type, location and orifice size of sprinkler heads
 - Number of sprinkler heads on each riser per floor
 - Total area protected by each system on each floor
 - Total number of heads on each dry pipe, preaction, deluge or combination system
 - Temperature rating and location of high-temperature sprinkler heads
 - Make, type, model and size of alarm on dry-pipe valve
 - Make, type, model and size of preaction or deluge valve
 - Capacity of each dry-pipe system
 - Type and location of alarm bells
 - Type, location and methods of securing sprinkler system
 - Control valves, check valves, drain pipes and test connections
 - Pipe size, type and schedule
 - Types of fittings and joints and locations of welds and bends
 - Location and size of riser nipples
 - Size and location of hose outlets and hose racks
 - Supervision of valves and switches
 - Signed and sealed calculations for hydraulically designed systems
 - Full height cross section
 - Location of fire walls
 - Location of partitions
 - Occupant load of each area or room
 - Use of each area or room
 - Areas or rooms that are not sprinklered
 - Material designation
 - Fire department connection
 - Classification of system(s)
 - Classification of occupancies

Commercial Cooking System Plan Review Requirements

1. Three (3) sets of plans and specifications signed and sealed by a registered design professional licensed in the state where the construction is to be performed.

A. Hood

- Canopy or non-canopy
- Material, gauge, joints welded, surface
- Exhaust CFM
- Make-up air
- Grease removal device, size, accessibility and angle
- Clearances

B. <u>Duct Construction and Termination</u>

- Each independent system
- Material, gauge and connection to hood
- Collection points
- Air velocity
- Cleanout location
- Penetration protection
- Clearances
- Front lot line, air intake, above roof
- Above adjoining ground level
- Weather protection

Accessibility Plan Review Requirements

- 1. Provide two site plans indicating van accessible parking spaces, car accessible parking spaces, access aisles, travel route and changes in elevation throughout accessible route. (ANSI 117.1 section 502)
- 2. Provide title page indicating occupancy group, type of construction and International Building Code Version. (IBC 2009 or IEBC 2009)
- 3. If occupancy is designed under existing structures codes submit declaration that 20% of cost of construction is provided for accessibility. (IBC 3409.6 or IEBC 506.2)
- 4. Provide site plan detailing accessible parking spaces, access aisles, route and signage. (UCC 403.42a(h)(5&6))
- 5. All built in furnishings must be ADA compliant, provide specifications. (ANSI 117.1 section 901.1)
- 6. All patient examinations are required to be ADA accessible. (PA L&I interpretation)
- 7. Provide entry doors with a net clear opening of 32 inches (36" door) with door open 90 degrees in all public restrooms, examination rooms and offices. (ANSI 117.1 section 404.2.3)
- 8. All bathrooms must be ADA compliant, the only exception for this is bathrooms accessible through a private office. (IBC 1109.2)
- 9. Provide latch side clearance on both push and pull sides of all doors. (ANSI 117.1 section 404.2.4)
- 10. Provide specifications for break room including the following items:
 - a. Counter height (ANSI 117.1 section 902.3)
 - b. Toe and knee clearance at sink (ANSI 117.1 section 306)
 - c. Frontal or parallel approach to sink (ANSI 117.1 section 602.2)
 - d. Bowl depth (ANSI 117.1 section 606.5)
- 11. Provide a minimum of one operable window in each living, dining and sleeping area of type A & B dwelling units. The operable part of each window shall be within the reach ranges outlined in section 1002.9. (ANSI 1102.13)
- 12. Provide ADA compliant bathrooms through type A & B dwelling units as per 1003.11.1. All bathrooms must be accessible except bathrooms that occur on a level not required to be accessible. (ANSI 1002.11)
- 13. Provide that the leading 2 inches (nosing) of all stairway treads have visual contrast of dark-on-light or light-on-dark from the remainder of the tread. (ANSI 504.5)