COMMERCIAL PLAN SUBMITTAL GUIDE
CONSTRUCTION PLANS SHALL CONSIST OF THE FOLLOWING

- SITE PLAN
- ARCHITECTURAL PLAN
- STRUCTURAL PLAN
- HVAC, ELECTRICAL AND PLUMBING PLANS
- ACCESSIBILITY PLAN
- SPRINKLER PLAN
- ENERGY PLAN

Three (3) complete sets of construction drawings, signed, sealed and dated by a PA registered design professional, shall be submitted unless otherwise instructed.

Drawings must be at least 18" x 24" (but no more than 36" x 42") in size, drawn to scale of no less than 1/8"=1', with sufficient detail and clarity to fully indicate the nature and scope of the work to be performed.

PLEASE NOTE: Drawing submissions which do not meet plan size requirements or are not sufficient in clarity will be automatically rejected and returned to the applicant.

PLAN REQUIREMENTS & SPECIFICATIONS

SITE PLAN

- Size and location of all new construction and all existing structures on the site.
- Distances from lot lines.
- Established street grades and proposed finish grades.

ARCHITECTURAL PLANS

- Description of uses and the proposed use group(s) for all portions of the building. The design approach for mixed uses (as applicable).
- Proposed type of construction of the building.
- Fully dimensioned drawings to determine areas and building height.
- Adequate details and dimensions to evaluate means of egress, including occupant loads for each floor, exit arrangement and sizes, corridors, doors, stairs, etc.
- Exit signs/means of egress lighting, including power supply.
- Accessibility provisions.
- Description and details of proposed special occupancies such as a covered mall, high-rise, mezzanine, atrium, public garage, etc.
- Adequate details to evaluate fire-resistive construction requirements, including data substantiating required ratings.
- Details of plastic, insulation, and safety glazing installation.
- Details of required fire protection systems.

STRUCTURAL PLANS & ENGINEERING DETAILS

- Soils report indicating the soil type and recommended allowable bearing pressure and foundation type.
- Signed and sealed structural design calculations which support the member sizes on the drawings.
- Local design load criteria, including frost depth.
• Earthquake seismic zone/effective peak acceleration coefficient.
• Details of foundations and superstructure.
• Provisions for required special inspections.
• Applicable construction standards and material specifications (ie: masonry, concrete, wood, steel, etc.)

HEATING EQUIPMENT
• Equipment capacity (b.t.u.).
• Controls
• Appliance layouts showing location, access and clearances.
• Disconnect switches
• Indoor and outdoor design temperatures.

VENTILATION DATA, DUCTWORK AND EQUIPMENT
• Ventilation schedule indicating the amount of outside air (in c.f.m.) supplied to each room or space.
• Layout showing outside air intakes.
• Construction of ducts, including support and sheet metal thickness.
• Duct lining and insulation materials with flame spread and smoke-developed ratings.
• Exhaust fan ductwork layout and termination to the outside.
• Size of louvers and grilles for attic ventilation.
• Boiler and water heater equipment and piping details including safety controls and distribution piping layout.
• Gas and fuel oil piping layout, material, sizes, and valves.
• Combustion air intake quantities and details.
• Commercial kitchen exhaust equipment details including hood and fan drawings, details of automatic fire suppression, and clearances.
• Chimney and chimney connector or vent and vent connector details and connector gages and clearances.
• Mechanical refrigeration equipment data and details.
• Solid fuel burning appliance details including incinerator and fireplace drawings and details.
• Energy conservation equipment data and details.

PLUMBING PLANS
• The occupant load used to determine the number of required plumbing fixtures.
• Number and distribution based on the use group.
• Separate facilities for each sex.
• Accessible plumbing facilities and details.
• Anti-scald shower valves.
• Plumbing piping plan showing layout, pitch of drainage lines, cleanouts, size of traps, and riser diagram.
• Water supply and distribution plan showing piping sizes, valves, water heater details and temperature-pressure relief valve with discharge pipe.
• Sanitary drainage and vent system riser diagram showing drainage fixture units (dfu), sizes and vent termination details through the roof.
• Potable water system riser diagram showing piping sizes and provisions for protection of potable water supply. Piping support and installation schedule.
• Storm drainage details including rain gutter or roof drain sizes and downspout/leader sizes. Health care plumbing and fixture details.
ELECTRICAL PLANS

- Labeling criteria of all electrical equipment.
- Lighting floor plan including electrical circuits indicating conduit and wiring sizes.
- Power floor plans including electrical circuits indicating conduit and wiring sizes, equipment and disconnect switches.
- Exit sign/means of egress lighting location and power supply.
- Panelboard schedule.
- Lighting fixture schedule.
- Symbol schedule and diagrams.
- Specifications to include requirements for:
  - Raceway and conduit with fittings.
  - Wire and cable.
  - Electrical boxes, fittings and installation.
  - Electrical connections.
  - Electrical wiring devices.
  - Circuit and motor disconnects.
  - Hangers and supporting devices.
  - Electrical identification.
  - Service entrance and details.
  - Overcurrent protection.
  - Switchboards
  - Grounding.
  - Transformers
  - Panelboards.
  - Motor control centers.
  - Lighting fixtures.
  - Fire Protective signaling systems.
  - Automatic fire detection systems.
  - Emergency/standby systems.

ACCESSIBILITY PLANS

- Size and location of all new construction and all existing structures on the site.
- Location of any recreational facilities (ie: pool, tennis courts, etc.)
- Established street grades and proposed finished grade.
- Accessible parking, other locations of public access to the facility, accessible exterior routes and locations of accessible entrances.
- Description of uses and the proposed use group(s) for all portions of the building. The design approach for mixed-uses (as applicable).
- Fully dimensioned drawings to determine areas and building height.
- Adequate details and dimensions to evaluate accessible means of egress, including occupant loads for each floor, exit arrangement and sizes, corridors, doors, stairs, areas of refuge, etc.
- Adequate details and dimensions to evaluate the accessible route to areas required to be accessible, including corridors, doors, protruding objects, maneuvering clearances, clear floor space at fixtures and controls, etc.
- Accessibility provisions including but not limited to access to services, seating, listening systems, accessible fixtures, elevators, work surfaces, etc.
- Accessible plumbing facilities and details.
- Tactile signage provided.
- Details of required fire protection systems.
SPRINKLER PLAN REVIEW REQUIREMENTS

- Description and locations of uses within the building.
- Design details in accordance with the appropriate reference standard (ie: NFPA 13, 13D, 13R) as referenced by the ICC International Building Code.
- Design calculations indicating the discharge requirements of the system with evaluation of the arrangement and source of the water supply.
- Results of a current flow test indicating the location and date of the test.
- Working drawings indicating all pipe sizes and the spacing between branch lines and sprinklers on the branch line.
- Material specifications and equipment specifications. All materials used should be verified that they are installed in accordance with their listing.

ENERGY PLAN REVIEW REQUIREMENTS

- Three (3) sets of construction documents and other supporting data.
- Three (3) sets of exterior envelope component materials.
- U-factors of the envelope systems.
- U-factors of fenestration products.
- R-values of insulating materials.
- Size and type of apparatus and equipment.
- Equipment and systems controls.
- Other pertinent data as required to indicate compliance with the requirements of the Code.
- Com-Check information as provided from www.energycodes.gov

PLEASE NOTE A COMMERCIAL PLAN REVIEW TYPICALLY TAKES BETWEEN 10 - 30 WORKING DAYS DEPENDING UPON COMPLEXITY OF PLANS AND CURRENT WORKLOAD.