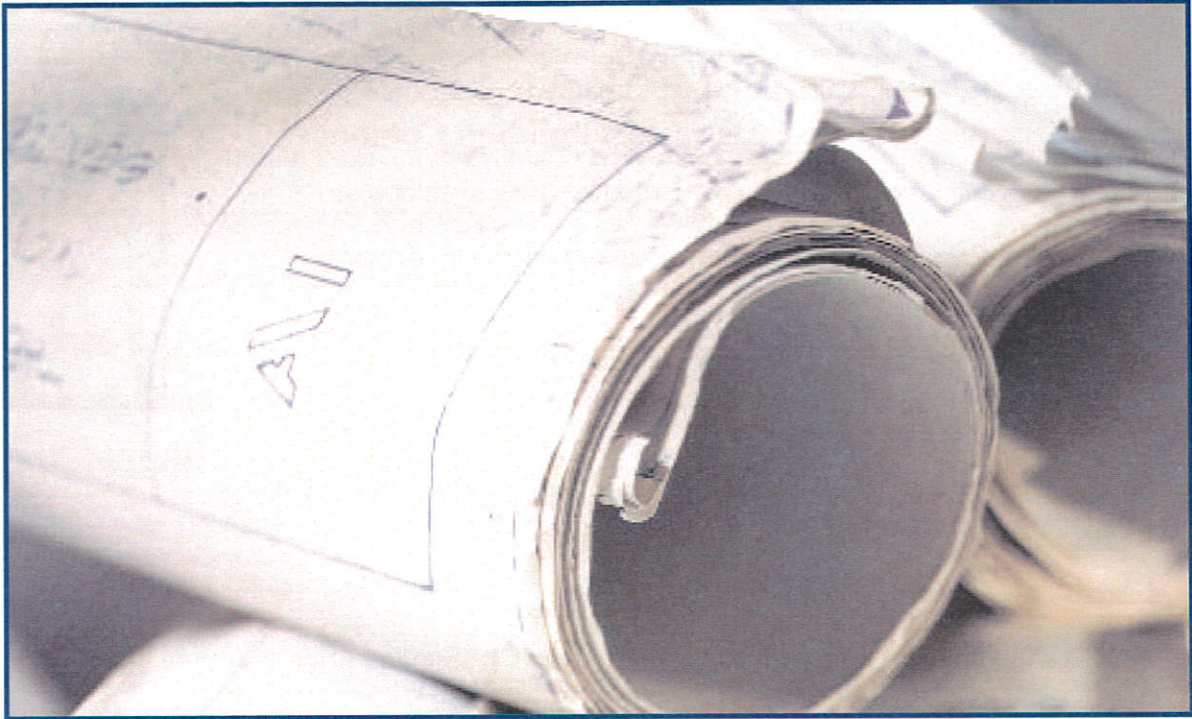


Plan Review Submittal Guide



Plans, specifications and other construction documentation for the initial plan review should be as complete as possible at the time of submittal. Use this convenient guide as a checklist when submitting your documents to help expedite the review process and avoid delays and resubmittals.

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BUILDING PLAN REVIEW

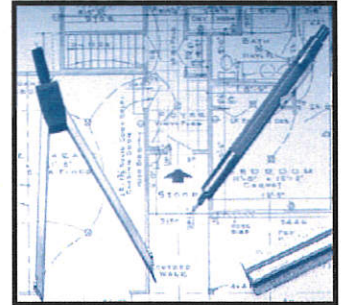
In order to process your review in a timely manner, the following guide should be used as a checklist to ensure your submittal is as complete as possible for the first review. If additional information is required, it will be requested during the review process.

TITLE BLOCK:

ARCHITECT • DATE • TYPE OF CONSTRUCTION • USE GROUP • INSTALLED FIRE PROTECTION • DESIGN OPTIONS

Submit Complete Building Plans and Specifications Showing Use of All Areas, Equipment Layout, Aisles and Building Components

1. ____ Indicate occupant load for all areas; include exiting system plan.
2. ____ Submit complete door schedule with catalog cuts for all doors, hardware sets and locksets.
3. ____ Submit all appropriate wall, floor, foundation sections and details.
4. ____ List all rated assemblies, diagram assemblies and design numbers
5. ____ Submit window and glazing schedule, interior finish schedule and flame spread ratings.
6. ____ List all building design loads.
7. ____ Submit shop drawings for steel supported systems (submitted prior to start of work).
8. ____ Indicate shop drawings for all fire protection systems (submitted prior to start of work).
9. ____ Submit steel structural calculations.
10. ____ Submit details for all special occupancy requirements (atriums, floor openings, high rise, covered malls, hazardous materials, etc.).
11. ____ Submit details for all special structures (skylights, roof panels, awnings, etc.).
12. ____ Indicate sequence of operation for all special systems (smoke control, elevator recall, etc.).
13. ____ Submit details showing all state and local accessibility requirements and catalog cuts for fixtures.
14. ____ Submit signed, sealed and dated construction documents per the state requirements.



Soil Report

1. ____ Show requirements for footings and support loads.
2. ____ Submit footings and foundation requirements and recommendations.
3. ____ Submit engineer's requirements for appropriate footings and walls to support loads.

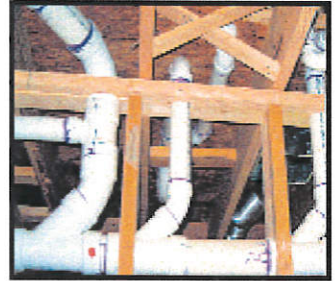
Site Plan

1. ____ Show setbacks, elevations, drainage, parking, outside lighting, lot grading and sanitary sewer.
2. ____ Show locations of fire hydrants and bench mark information.

PLUMBING PLAN REVIEW

Submit Complete Plumbing Plans & Specifications Including the Occupant Load and Number of Fixtures

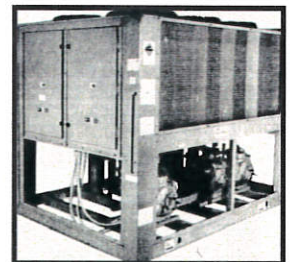
1. _____ Provide a riser diagram for all water piping including sizes, type of pipe and type of fittings.
2. _____ Provide a riser diagram for the drain, waste and vent system including sizes, type of pipe, and type of fittings.
3. _____ Indicate the separation between the water service and sewer.
4. _____ For copper tubing, indicate type of pipe, fittings and lead-free solder.
5. _____ Indicate drinking fountains or bottled water.
6. _____ Indicate the type of backflow protection provided (RPZ requires floor drains).
7. _____ Provide catalog cuts for all fixtures, faucets and plumbing equipment.
8. _____ Indicate indirect drainage and storm water pipe locations.
9. _____ Indicate the type and location of all special valves, appliances and devices.
10. _____ Show thermal expansion tank, temperature relief and vacuum reliefs as necessary for water heaters.
11. _____ Show type of roof drainage, area of discharge, type and size of pipe, location of cleanouts, and location of secondary (emergency) system. Primary and secondary systems shall be separate systems.
12. _____ Indicate the location(s) of all drainage pipe cleanouts.
13. _____ Provide details for accessible access to the plumbing fixtures: size of water closet enclosure, height of water closet, grab bars, lavatory, tissue holder, mirror and length of the grab bars.



MECHANICAL PLAN REVIEW

Submit Complete Mechanical Plans Showing Location and Type of All Mechanical Equipment and Appliances

1. _____ Provide catalog cuts with installation instructions, listing BTU input and approved locations for all mechanical equipment.
2. _____ Provide duct design criteria including size, type and gauge of the duct work, and type and location of all supports. Include additional details for all hazardous exhaust systems.
3. _____ Indicate the location of the duct smoke detectors in any system over 2,000 cfm including supervision.
4. _____ Submit a complete ventilation schedule showing the mechanical code occupant load, the supply, return and outside air for each room or area.
5. _____ Submit gas piping plan including location of meter, system pressure, type and size of pipe, and BTU demand for each section of pipe or appliance.



6. _____ Indicate size and location of the combustion air intakes (one high/one low required).
7. _____ Show a 110 V GFCI outlet within 25 feet of all rooftop equipment.
8. _____ Provide piping details including schematics for boilers, hydronic heat and refrigeration.
9. _____ Provide catalog cuts for factory-built fireplaces and details for masonry fireplaces.
10. _____ Provide details for any kitchen hood and exhaust systems including size and gauge of hood and duct, size and type of exhaust fans, shop drawings for suppression system, cleaning schedules, automatic power shutoff and portable extinguisher.
11. _____ Indicate the type, location and rating for the fire and/or smoke dampers and access panels.

EXISTING BUILDING PLAN REVIEW

Submit Complete Plans and Specifications Showing Use of All Areas, Equipment Layout, Aisles and Building Components

1. _____ Plans shall be signed and sealed in accordance with the requirements of your state.
2. _____ Provide the information required for a new building or for the building addition including complete plans and specifications.
3. _____ Provide a floor plan for existing building showing use, occupant load, and existing system including square footage of all areas.
4. _____ Indicate the construction type and use group for the existing building or adjacent tenants.
5. _____ Indicate the type of fire protection systems in the existing building.
6. _____ Indicate the type and location of the plumbing fixtures in the existing building.
7. _____ Indicate size, demand and distance to existing gas system, including size of pipe and system pressure.
8. _____ Indicate the loads of existing building and provide calculations showing existing loads and new loads.
9. _____ Provide a site plan showing the location of the existing and new building.
10. _____ Provide calculations/details showing changes or additions to existing fire protection systems.
11. _____ Indicate changes to the existing mechanical systems.
12. _____ Indicate changes made to the existing building for upgrading the access to conform to the new requirements.



ENERGY PLAN REVIEW

Submit

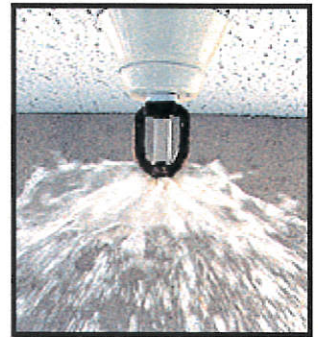
1. _____ ComCheck or ResCheck: Envelope, Lighting, Mechanical, Check Test.
Appliance information, Exterior Lighting information.
2. _____ Exterior Lighting - exterior photo cell or time clock operated.

3. _____ Water heater piping diagram indicating recirculation or heat traps.
4. _____ Thermostat for each HVAC equipment.
5. _____ Details shall include R-values, fenestration U-factors and SHGC's, Equipment types, sizes and controls; Duct sealing, Insulation; and Air Sealing.

SPRINKLER PLAN REVIEW

Submit Complete Sprinkler Plans Showing All Sprinkler Locations

1. _____ Indicate water flow test, pressure, location, time, date, witness and seasonal adjustment.
2. _____ Show the type of pipes, joints, fittings, dimensions and lengths.
3. _____ Show sprinkler protection for all areas and square footage for each sprinkler.
4. _____ Indicate the number, type and temperature ratings for all sprinklers.
5. _____ Submit catalog cuts for all sprinklers, pipe fittings and equipment.
6. _____ Indicate the building occupancy and submit details for process and storage equipment.
7. _____ Submit section and plan views of racks or shelving and storage heights.
8. _____ Submit description of special systems; show valves and trim.
9. _____ Show locations of gauges, test valves, main and auxiliary drains.
10. _____ Show arrangement, drainage, piping, threads and height for fire department connection.
11. _____ Indicate flushing and documentation for the underground or lead-in connection.
12. _____ Indicate that a 200 psi hydrostatic test will be witnessed by the local official.
13. _____ Perform a main drain test to obtain the static and residual pressures.
14. _____ Show hose rack layouts (storage areas in compliance with NFPA 231 or 231C).
15. _____ Indicate the location and show all details for hangers.
16. _____ Show supervision of valves and flow switches.
17. _____ For hydraulically calculated systems, submit complete calculations, sprinkler system summary sheet and flow diagrams.
18. _____ Show all reference points or nodes.
19. _____ Provide the calculations used to obtain all special design densities.



FIRE ALARM REVIEW

Submit a Floor Plan Showing the Location of All Equipment and Devices

1. _____ Submit catalog cuts for all equipment.
2. _____ Submit a zone chart or device address list.
3. _____ Submit battery calculations that include all power-consuming devices.
4. _____ Indicate name of monitoring agency and listing of the agency.
5. _____ Submit voltage drop calculations for the initiating and alarm device circuits.
6. _____ Submit sequence of operations and special applications.
7. _____ Indicate type of wire and protection of wire when exposed to physical damage.
8. _____ Indicate a system test which indicates a test for each device.



SPECIAL EXTINGUISHING SYSTEM REVIEW

Submit a Floor Plan Showing the Location of All Equipment and Devices

1. _____ Submit catalog cuts for all equipment.
2. _____ Submit a zone chart or device address list.
3. _____ Submit battery calculations that include all powerconsuming devices.
4. _____ Indicate name of monitoring agency and listing of the agency.
5. _____ Submit voltage drop calculations for the initiating and alarm device circuits.
6. _____ Submit sequence of operations and special applications.
7. _____ Indicate type of wire with protection when exposed to physical damage.
8. _____ Indicate a system test that indicates a test for each device.



ACCESSIBILITY REQUIREMENTS

Required Elements for Accessibility

☐ Accessible Routes	☐ Platform Lifts	☐ Parking	☐ Means of Egress
☐ Windows	☐ Doors	☐ Entrances	☐ Drinking Fountains
☐ Seating	☐ Detectable Warnings	☐ Work Surfaces	☐ Telephones
☐ Area of Refuge	☐ Restrooms/Baths	☐ Ramps	☐ Curb Ramps
☐ Stairs	☐ Controls	☐ Alarms	☐ Elevators
☐ Storage	☐ Signage	☐ Lifts	

Specific Facility Type Requirements

1. ☐ Provide cuts of all plumbing fixtures.
2. ☐ Indicate dwelling use requirements.
3. ☐ Indicate auditorium and assembly area requirements.
4. ☐ Provide details for bathtubs and shower stalls in buildings other than dwelling units.

Exterior Requirements

1. ☐ Indicate accessibility routes.
2. ☐ Indicate total parking spaces for physically challenged, number, sizes and location of spaces.
3. ☐ Indicate sidewalk size from the parking to the building.
4. ☐ Indicate size and slope of ramps and curb cuts.
5. ☐ Submit drawing of above ground handicapped signs.
6. ☐ Provide detectable warnings in hazardous locations.



Interior Requirements

1. ☐ Indicate egress doors into occupiable spaces to have approved handles.
2. ☐ Provide catalog cuts for accessible door hardware (handles, closers, thresholds).
3. ☐ Show adequate maneuvering clearances at doors to gain access to rooms.
4. ☐ Indicate required handrails on both sides of stairs and ramps.
5. ☐ Indicate locations of hall call buttons, floor destinations, tactile characters (elevator lobbies).
6. ☐ Provide detectable warnings in hazardous locations.
7. ☐ Indicate size of floor access to public area telephones, heights of operable parts and hearing impaired equipment.
8. ☐ Indicate protection for objects protruding into walks, halls, corridors, passageways or aisles above the finished floor of walking surface.

9. _____ Indicate special occupancy requirements.
10. _____ Indicate clear floor and knee space for accessible drinking fountains and lavatories.
11. _____ Indicate location of water closets relative to walls and other fixtures.
12. _____ Indicate the height to the top of the water closet seat for the accessible fixtures.
13. _____ Indicate the height above the finished floor surface, bar sizes, length of bars and distances from walls for required grab bars at the water closet. Indicate height and location of required toilet paper dispensers.
14. _____ Indicate areas of refuge for physically challenged.

ELECTRICAL PLAN REVIEW

Submit Complete Electrical Plans Showing Location of All Devices

1. _____ Provide a floor plan showing the fixtures, outlets, equipment, transformers, panels, subpanels, receptacles and special systems.
2. _____ Indicate the type and size of the service (above ground or underground) with the location of meters and main disconnects.
3. _____ Indicate the size and type of all wire and number of all conductors in each conduit or raceway for each circuit.
4. _____ Indicate the size and type of all conduit and/or raceways.
5. _____ Indicate the use and amperage (load) for each circuit.
6. _____ Show the number of circuits, size of circuit breakers, location and size of main disconnect.
7. _____ Show the location of the convenience outlets at all appliance and rooftop equipment.
8. _____ Submit load calculation charts for all panelboards and main service with demand factors.
9. _____ Show emergency lighting to all rooms, spaces, corridors and access routes.
10. _____ Indicate method of connecting exit and emergency lights to the building electric system.
11. _____ Indicate type and location for ground, ground conduit and a bonding jumper at water meter.
12. _____ Indicate the size and type of ground conductors.
13. _____ Show the location of all GFCI outlets.
14. _____ Indicate the location and classification of all hazardous areas and special systems.

