PLANS

General Requirements

- Five (5) complete sets of plans (double line drawings).
- All pages shall be firmly bound on one edge.
- All drawings shall be on 24” x 36” paper only and scaled at ¼” = 1’0”. Note: 1/8” = 1’0” scale shall be pre-approved by the building official.
- Plan sheets that are cut, pasted, taped or that have been altered by any means (pen, pencil, marking pen, etc.) SHALL NOT be accepted for plan check. No Pencil Drawings Shall Be Accepted.
- Plans sets shall be clear and legible and each page shall be numbered consecutively.
- All submitted construction documents shall be of sufficient detail to show clearly the project in its entirety with emphasis on the following:
  1. Structural integrity
  2. Fire and Life safety
  3. Accessibility
  4. Compliance with applicable codes
  5. Scope of work

Plans sets shall include the following:

- Cover Sheet
- Site Plan – Five (5) sets
- Exiting Plan with occupant loads (for each floor)
- Foundation Plan
- Floor Plan (for each floor)
- Seating & Furniture Layouts
- Opening and Finishes Schedules
- Floor Framing Plan (for each floor)
- Wall Framing Plan (for each floor)
- Roof Framing Plan
- Elevations (all sides)
- Complete construction details including material(s), sizes, connection details, and any details of special features.

INFORMATION REQUIRED ON PLANS

Cover Sheet

- Project identification to include the scope of work.
- Project address, location map and tax parcel number.
- Design professionals involved in the project, to include address, telephone numbers and email address.
- Project point of contact.
- Design criteria.
- Occupancy group.
- Type of construction.
• Square footage and allowable areas (allowable vs actual, provide calculations).
• Height and number of stories (allowable vs actual, provide calculations).
• Fire Sprinkler requirements.
• Occupant loading.
• Land use zone.
• Parking requirements.
• Design loads (wind, floor, roof, seismic zones and factors).
• Applicable Codes.
• Index of drawings.

Engineering
• Provide two (2) copies of stamped and signed engineering calculations.
• All engineering requirements are to be shown on the plans. All plan sheets which show any engineering shall be stamped and signed by the engineer of record (EOR)
• Special Inspection Schedule.

Foundation Plans - Scale ¼” = 1’0”
• Plan view of foundation - show the size and shape with a dashed line for the footing. Show size and location of all underfloor support footing pads.
• Slab on grade, if applicable, indicate which areas are slab on grade and method of insulation.
• Crawlspace vents.
• Crawlspace access.
• Ground cover.
• Carports, patios, breezeways, decks, retaining walls, etc. show extent and location and sizes of all slabs, foundations and footings. (These items may require a separate permit).

Floor Plans - scale ¼”=1’0”
• Label the use of each room.
• Openings - show and size all wall openings (doors and windows). Indicate if fixed or operable. Label all safety glaze openings. Call out on the plans the size and location of the attic access and any other openings in the floor and/or ceiling such as laundry chutes and dumbwaiters, etc.
• Doors - call out sizes and show direction of swing. Show sliding door locations. If a pocket door is proposed, show the entire pocket area. Provide a door and door hardware schedule.
• Stairs - show direction of travel (up or down).
• Plumbing fixtures - show locations of all fixtures, water heater, pressure tanks and expansion tanks.
• Furnace - show location and energy source.
• Indicate all fire walls, fire barriers, fire partitions, smoke barriers and their related assemblies. Provide the listing for all assemblies.

Framing Plans – Floor
• Engineered floor joist/trusses shall have the floor layout approved by the EOR.
• Layout – show direction of layout for floor joist, indicating any cantilevered areas. Show size and direction of underfloor supporting beams. Clearly indicate deck areas and the requirement for treated materials.
• Materials and species – show floor and deck framing including size, species, grade and spacing.
• Miscellaneous structural components - show double joist, blocking, headers, bearing points, etc.
• Connectors – beam to beam, post to beam and joist hangers. Call out size and locations.
• Stairs – show locations of rough openings, headers, double joist, etc.
Framing Plans – Wall

- Detail all wall systems.
- Show siding, wind infiltration barrier, sheathing, stud type, size and spacing, insulation type, vapor barrier, flashing and inside wall covering.

Framing Plans – Roof

- Two (2) sets of truss calculations and layout approved by the EOR.
- Layout – show direction of layout for ceiling joist, rafters and trusses.
- Roof members – call out size spacing, species, lumber grade and all headers and beams. Show and label hip masters, hip jacks, girder trusses, common trusses, hangers, bearing areas, etc.
- Indicate locations of roof mounted equipment and the associated engineering.
- Connectors – call out sizes and locations.
- Ridges, hips and valleys - call out size and species of ridge board, hip rafter, valley rafter and purlins.
- Skylights – call out size and locations.
- Indicate locations of draft stops.

Reflected Ceiling Plan

- Show light fixture locations. Indicate wattage of fixtures.
- Indicate locations of exit signs and emergency lighting fixtures.
- Indicate HVAC diffuser supply and return air locations.

Interior elevations

- Provide elevations of bathrooms indicating mounting heights of all accessible equipment installations with vertical height dimensions shown.
- Indicate the location of all signage and mounting heights.

Elevations – scale ¼” = 1’0”

- Exterior elevations – show all four elevation views of the exterior of the building. Indicate the locations of all windows and doors.
- Exterior finishes – siding type, roofing type, veneers, assemblies, etc.
- Vertical dimensions – show the height of each story.
- Existing and finished grade.

Cross Section and Details – scale ¾”= 1’0”

- Show sections of the structure that clarify in detail the typical conditions and describe otherwise hidden conditions.
- Provide a section-cut through the entire building. This is usually through the most complicated portion of the structure. Indicate areas that are detailed. This can be drawn to a scale of ¼”=1’0”.
- Foundation, footings and walls – show footing and wall sizes, required structural steel, anchor bolts and required six (6) inch separation between wood and finished grade. Show required clearances in the crawlspace area.
- Floor – call out the proposed floor system. Show size and type of floor sheathing, joists, joist spacing and insulation.
• Wall – call out the wall system. Show siding, wind infiltration barrier, sheathing, stud type, stud size and spacing, insulation type, vapor barrier and inside wall covering.
• Truss to wall – show connection of trusses to wall plate, blocking, venting, insulation and insulation baffle, roof sheathing, roofing type, overhang and roof pitch.
• Stairs – show stair rise, run, handrails, landing and headroom dimensions. Show one-hour fire separation in areas under stairs that are finished per IBC.
• Patios and decks – call out materials. Indicate height of finished floor from grade.
• Guards and handrails – show heights and spacing of pickets.
• Show that the building elements comply with fire-resistive requirements of the IBC.
• Provide details for rated walls complying with the IBC or specify the UL design number or the Gypsum Association File Number for all rated assemblies.
• Provide details of fire assemblies protecting penetrations through fire-resistive elements.
• Show sections for required parapet walls.
• Provide details/ICC report for rated suspended ceiling. Include UL approved detail for tenting of light fixtures.

Accessibility Information

• Ramps, doors, passages and clearances, provide dimension to illustrate compliance with ICC A117.1.
• Accessible toilets, lavatories and bathrooms, etc.
• Accessible public amenities to include signage.

Energy Code Compliance

• Complete set of Non-Residential Energy Code Compliance documents. To include:
  1. Nature and extent of the proposed work.
  2. Show sufficient detail pertinent data and features of the building, systems and equipment.
  3. Insulation materials, R-values, fenestration U-factors, mechanical and service water heating system and equipment types, etc. as required by WSEC section C103.2.
  4. Indicate the location of “Daylight Zones” and type of controls.

Plumbing Plan

• Complete plumbing plans to include all pipe isometrics, fixture layouts and water use calculations.
• Gas service and pipe sizes.
• Cross-connection control devices.
• Water-oil separation systems, grease interceptors and sizing calculations, etc.
• Plans shall be stamped and signed.
• Floor drains.

Mechanical Plan

• Equipment capacity and performance data.
• List fuel type and BTU/H output.
• Duct layout for supply with CFM levels.
• Return air vents, ducts and transfer methods.
• Piping and ductwork insulation and installation requirements.
• Fire and smoke damper locations and installation information.
• Commercial laundry appliance venting.
• Commercial kitchen hoods and ductwork.
• Plans shall be stamped and signed.