

266-A SHIELDS ROAD HUNTSVILLE, ALABAMA 35811 Phone: (256)746-2950 Fax:(256)746-2953 inspection@madisoncountyal.gov

Commercial Plan Specifications Designer's Guide

A guide for architects, engineers, designers, contractors, building owners, and builders regarding plan approvals from the Madison County Inspection Department

INTRODUCTION

This document has been prepared to communicate to the building community and the design community the necessary information needed in order to receive timely and accurate review of plans and specifications submitted for permit approval by the Madison County Inspection Department. It is intended to be a source of basic information and serve as a guide in the preparation of plans for which a construction permit is sought. The requirements found herein have as their basis Alabama law, requirements of the adopted building code and policy and procedures developed by the staff of the building department. The purpose of these rules and procedures is to ensure that all applicable laws governing review and approval of plans are adhered to, and to achieve the intent of the adopted building code which is the protection of the public health, safety, and general welfare. All aspects and requirements are not covered in this document, but can be found in the International Codes, the NEC, the NFPA 101 Life Safety Code, Madison County Building Code Resolution (exceptions included) and Alabama law. It is recommended that copies of the Madison County's adopted codes be used in the design and construction of any project. These codes include:

- 2018 International Code Council Building Code, Residential Code, Existing Building Code, Mechanical Code, Plumbing Code, Fuel Gas Code, Electrical Code, Swimming Pool & Spa Code,
- The National Electric Code, 2017 Edition
- The International Energy Conservation Code, 2015 Edition (per state mandate)

The Building Department does not sell code books, but they may be purchased from:

International Code Council
Birmingham District Office
900 Montclair Road
Birmingham, AL 35213-1206
[P] 205-591-1853
[F] 205-599-9871
http://www.iccsafe.org/

If further information is needed please contact us at:

Madison County Inspection Department 266-A Shields Road Huntsville, AL 35811-8816 (256) 746-2950 fax-746-2953

inspection@madisoncountyal.gov

Applications

The <u>application</u> is required to be completed fully. The **owner's information** section seeks information relating to who owns the property on which the improvements will be built. The **applicant information** is often different from the owner information, so please be sure it is completed.

Building Location information includes providing the address of the site where the improvements are to be built. The **Madison County House Numbering** (Contact Heather Renfroe @ 256-746-2900) is responsible for the proper assignment of addresses for residential and commercial buildings in Madison County.

Architect/Engineer & Contractor information is used to verify compliance with state law on preparing plans subject to the architect's registration law and compliance with local and state licensing law for contractors.

All contractors and subcontractors must be state licensed before work begins. The contractors license, business license and Certificate of Insurance is required to be submitted and updated.

For complete fee schedules see the resolutions as adopted

There will be a fee for each plan submitted for review. The cost for the plans review fee is applicable per plan as long as there are no changes to the reviewed plan. Plan review fees for buildings or structures. The fee for plans review shall be the total project valuation multiplied by \$0.001. Minimum plans review fee is \$150.

\$150 is due upon submission, this is a non-refundable fee, but will be allocated to the total fee pending purchase of the building permit.

Two full sets of plans along with a copy of the submitted plan in an electronic PDF format for each construction project is required. Plans and specifications shall be stamped by an architect and/or professional engineer in the State of Alabama if the building is over 2,500 square feet in size, or is an assembly, educational, institutional, or hazardous occupancy.

Standards for Building Plans and Specifications Submissions

The <u>Commercial Building Code Summary</u> is the initial document needed to begin the permit approval process. Accurate information is essential to expedite the plan review and construction process.

Plans and specifications submitted to the building official must be of sufficient detail to clearly show the project in its entirety with emphasis on the following:

- 1. Structural integrity
- 2. Life safety
- 3. Architectural barriers
- 4. Building code compliance
- 5. Definition of scope of work

Following is a suggested standard of drawings for review by building officials. Depending upon the size, nature, and complexity of the building, not all of the drawings listed below may be necessary. Also, additions and remodels may not require all the following for plan submittal and review.

Cover Sheet

- 1. Project identification
- 2. Project address and a location map
- 3. All design professionals identified.
- 4. The principal design professional (the professional responsible for project coordination) shall be identified. All communications should be directed through this individual.
- 5. Design Criteria list:

i. Occupancy group vii. Height and number of stories

ii. Type of constructioniii. Location of propertyiv. Flood zone

iv. Square Footage/allowable area x. Soil report

v. Design Loads

vi. Fire Protection Requirements

Each plan submitted must include the Commercial Building Code Summary Sheet

Submitted plans to include:

- Site/Plate Plan
- Grading & Drainage Plan
- Life Safety Plan
- Elevation Plan/Wall Section Details
- Foundation / Slab Plan
- Floor Plan(s)
- Structural Engineers plans
 (Foundation plans, Steel building
 plans, Truss Specifications and
 Layouts, TJI/LVL specifications
 and layouts, etc.)

- Electrical Plan
- Plumbing Plan
- Mechanical / Gas Plan

Site Plan

Show proposed new structure and any existing buildings or structures, all property lines with dimensions, all streets, easements, and setbacks. Show all water, sewer, electrical points of connection, proposed service routes and existing utilities on the site. Show all parking information. And Nearest Fire Hydrant Locations

Grading & Drainage Plan

Show all draining, and grading information. Indicate drainage inflow and outflow locations and specify areas required to be maintained for drainage purposes. When appropriate include a topographical survey and show north arrow. Must include Erosion Control Plan. Must include all piping information, existing and proposed runoff (cfs), any proposed ditches or channel improvements, any detention and/or retention facilities information and must include peak design flows and velocities. The Developer shall be responsible for securing any required permits by ADEM. The Developer shall provide that all required permits or approvals from ADEM have been appropriately requested and supported. Army Corp of Engineering information required if proposed area affects waterways or wetlands. Must meet AASHTO sight distance requirements. If the proposed site is located within any special flood hazard area as noted in the Madison County Flood Damage Prevention Ordinance, all flood information must be noted in this plan. If the proposed site is located within a subdivision this grading & drainage plan must meet the Madison County Subdivision Regulations. All plans must be stamped by an Alabama licensed and registered civil engineer.

Foundation Plan

Show all foundations and footings. Indicate size, locations, thickness, materials, strengths and reinforcing. Show all imbedded anchoring such as anchor bolts, hold-downs, post bases, etc. Provide a geotechnical report for the proposed structure at the site.

Life Safety Plan

Show on each floor the maximum travel distance, exit paths, exit capacity, and fire rated walls. This plan shall include Egress Calculations with total egress area, occupant loads, egress exit capacities, maximum number of exits on a per floor bases plus cumulative bases if within a common egress path.

Floor Plan

Show all floors including basements. Show all rooms, with their use, overall dimensions and locations of all structural elements and openings. Show all doors and windows. Provide door and window schedules. All fire assemblies with corresponding design, area and occupancy separations and draft stops shall be shown.

Framing Plans and Roof Framing Plans

Show all structural members, their size, and methods of attachment, bracing, strapping, location and materials for floors, roofs and layout plans.

Exterior Elevations

Show all views. Show all vertical dimensions and heights. Show all openings and identify all materials and show lateral bracing system, where applicable.

Building Sections and Wall Sections

Show materials of construction, non-rated and fire-rated assemblies, and fire-rated penetrations. Show dimensions of all heights.

Electrical System

Show all electrical fixtures (interior, exterior and site) wiring sizes, circuiting, grounding, Panel schedules, single line diagrams, load calculations and fixture schedules. Show point of connection to utility.

Plumbing System

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

Mechanical System

Show the entire mechanical system. Include all units, their sizes, mounting details, all duct work and duct sizes. Indicate all fire dampers and smoke detectors where required. Provide equipment schedules. Submit energy conservation calculations per State of Alabama.

Structural Calculations

Where required, provide structural calculations for the entire structural system of the project. Show design loads: wind, live, dead, etc.

Specifications

Either on the drawings or in booklet form, further define construction components, covering materials and methods of construction, wall finishes and all pertinent equipment. Schedules may be incorporated in project manual in lieu of drawings.

Addenda and Changes

It is the responsibility of the individual identified on the cover sheet as the principal design professional to notify the building official of all changes throughout the project and provide revised plans, calculations, or other appropriate documents prior to actual construction.

Revisions

For clarity, all revisions should be identified with a delta symbol (^) and clouded on the drawings or resubmitted as a new plan set.