



# FACILITIES DIVISION

**ACCS FORM 7-D**

## FINAL DESIGN REVIEW MEETING CHECKLIST

<b>PROJECT NAME:</b>			
<b>ACCS PROJECT #</b>		<b>DATE:</b>	<b>MEETING TIME:</b>
<b>MEETING LOCATION:</b>			

**NA 1. GENERAL**

- A.** Use of ACCS Transmittal Form (ACCS Form 4-A)
- B.** Contract Documents shall be submitted for review and approval by the Owner's Designated Representative and local AHJ or Independent Code Consultant prior to receiving bids.
- C.** Design Professional is responsible for submitting Final Contract Documents to the local AHJ in accordance with its requirements, where applicable.
- D.** Review and inspect Construction Bid Documents for the use of the most current ACCS Forms posted to the ACCS Facilities Website.
- E.** General Contractor shall be responsible for receiving Building Permit(s) and paying fees.
- F.** For projects that are required to include a Storm Shelter, the Design Professional shall include the Contractors Statement of Responsibility for the Construction of Tornado Storm Shelters (ACCS Form 5-G) in the plans and/ or in the Project Manual. The Code required third-party reviews shall be transmitted to the Owner with the Final Plans submittal.
- G.** Fire Alarm Contractors are required to permit their work through the Alabama Fire Marshall's Office and local Fire Official as applicable. The Design Professional's Final Contract Documents shall include this requirement.
- H. Registration Seals**
  - 1.** Final Contract Documents (Plans and Specifications) shall bear the Alabama seal of the professional who created them or supervised their creation
  - 2.** Each drawing prepared by or under the supervision of an Architect or Engineer shall bear the Alabama seal of the respective professional.
  - 3.** The Cover of the Project Manual shall bear the seal of the primary Design Professional for the project. Technical Specifications shall also bear the Alabama seal of the Architect, Engineer, or Design Professional who prepared them. The seal may occur on the Project Manual Cover, Index, or within the prepared specification section(s).
  - 4.** All documents sealed by Alabama Engineers shall be signed and dated. Engineers may only seal drawings prepared under their direct supervision for which they have relevant training and experience to indicate proficiency in the specialty area their seal is affixed to.
  - 5.** All revisions to the Plans and Specifications after issuance, including but not limited to Addenda, ASI's, Field Orders, and similar directives, must bear the seal of the Architect or Engineer of Record whose design is modified by the revision.
- I.** Sole Source Specifications are governed by Section 39-2-2(f) of the Alabama Public Works Law and can only be used based on the exceptions set out therein.
- J.** Specified and "Approved Equal" Sources: Refer to The Instructions To Bidders and General Conditions of the Contract for procedures pertaining or related to "Pre-bid Approval" and "Approved equal" sources. The ACCS Facilities Division recommends that three (3) or more sources of a product, material, system, or service be identified whenever possible and that the standard "Pre-bid Approval" procedures be reviewed and modified, if necessary, to accommodate specific project needs.
- K.** The Design Professional shall provide the ACCS Facilities Regional Project Director with a copy of the invitation to bid to contractors and a list of contractors contacted.
- L.** Add licensed State of Alabama Contractors to list as required to achieve maximum participation.

**NA 1. GENERAL (CONTINUED)**

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| M. | Discuss Liquidated Damages for which the Contractor and its Surety (if any) shall be liable according to the Contract. 6% per annum on the total Contract Sum or a specified \$ amount per calendar day? |
| N. | Review how rain days will be calculated for the project.   |
| O. | Review required Insurances Coverages and Builder's Risk.   |
| P. | Review and resubmit any changes to the date on the Notice of Upcoming Project so the ACCS Facilities Page Bid Calendar can be updated  |
| Q. | For projects that require board approval, bid openings should not occur from the 25th of the month through the 10th of the following month   |
| R. | Drawings and the Project Manual must be 100% completed before approval is given by ACCS Regional Project Director to go forward with the bid   |
| S. | For projects that require board approval, a Pre-Bid meeting is required  |
| T. | Review language in the Contract Documents regarding Unit Prices and overhead and profit  |
| U. | Review language in the Contract Documents regarding Allowances and overhead and profit   |
| V. | Supplementary Conditions will need review and approval by ACCS and Legal   |

**NA 2. MINIMUM DOCUMENT REQUIREMENTS**

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|-----|---|
| A.  | Written Correspondence addressing each comment to the Preliminary Submittal Comment Letter  |
| B.  | Updated Estimate of Probable Construction Cost and Project schedule   |
| C.  | Energy analysis for mechanical, electrical systems and the building envelope to confirm compliance with the adopted energy Code. COMcheck/DOE program is an acceptable compliance method.   |
| D.  | Final Project Manual (Specifications): During review of the Final Submittal, the ACCS Facilities Division will refer to the project specifications as necessary for confirmation of code compliance and coordination with the plans. The specifications shall contain complete information to complement the drawings, fully describing and defining all equipment, materials, workmanship, methods, and procedures to be included in the contract or project. These specifications are to be finalized to the extent necessary for bidding; therefore, they must also include the required contract documents and descriptions of bid alternates, if any are proposed. |
| E.  | <b>Project Specific:</b> The specifications shall be written for the particular project. Specifications having inapplicable, superfluous data or omissions are unacceptable. Specifications for separate, unrelated projects should not be combined.  |
| F.  | <b>"Front-end" Documents:</b> All ACCS project Bid Documents shall be accompanied by a Project Manual including verified, current ACCS Facility Division documents and forms as follows:  |
| 1.  | Advertisement for Bids (and/ or Declaration of Emergency and Invitation to Bid) ( <b>ACCS Form 5-A</b> , and <b>ACCS Form 5-B</b> respectively)   |
| 2.  | Instructions to Bidders ( <b>ACCS Form 5-C</b> )  |
| 3.  | Proposal Form ( <b>ACCS Form 5-E</b> )  |
| 4.  | Accounting of Sales Tax ( <b>ACCS Form 5-H</b> )  |
| 5.  | Bid Bond ( <b>ACCS Form 5-F</b> )   |
| 6.  | Construction Contract ( <b>ACCS Form 2-A</b> )  |
| 7.  | General Conditions ( <b>ACCS Form 2-B</b> )   |
| 8.  | Form of Performance Bond ( <b>ACCS Form 2-C</b> )   |
| 9.  | Form of Payment Bond ( <b>ACCS Form 2-D</b> )   |
| 10. | Alabama Vendor Disclosure Statement   |
| 11. | Statement of Field Observations ( <b>ACCS Form 6-C</b> )  |
| 12. | Application and Certificate for Payment ( <b>ACCS Form 6-D</b> )  |
| 13. | Schedule of Values ( <b>ACCS Form 6-E</b> )   |
| 14. | Inventory of Stored Materials ( <b>ACCS Form 6-F</b> )  |
| 15. | Progress Schedule and Report ( <b>ACCS Form 6-H</b> )   |

**NA 2. MINIMUM DOCUMENT REQUIREMENTS (CONTINUED)**

16.	General Contractor's Roofing Guarantee ( <b>ACCS Form 6-L</b> )
17.	Contractor's Statement of Responsibility for Construction of Tornado Storm Shelter ( <b>ACCS Form 5-G</b> )
18.	Contract Change Order ( <b>ACCS Form 2-F</b> )
19.	Contractor's Affidavit of Payment of Debts and Claims ( <b>ACCS Form 6-N</b> )
20.	Contractor's Affidavit of Release of Liens, ( <b>ACCS Form 6-P</b> )
21.	Consent to Surety of Final Payment ( <b>ACCS Form 6-Q</b> )
22.	Certificate of Substantial Completion ( <b>ACCS Form 6-K</b> )
23.	Sample Form of Advertisement of Completion ( <b>ACCS Form 6-M</b> )
24.	Certification of Structural Observations ( <b>ACCS Form 6-J</b> )
25.	Other administrative forms as applicable

**G. Roofing Specifications:** Roofing specifications shall contain specific language as outlined in Exhibit B - ACCS Design Standards for Construction Projects.

**H. Fire Alarm System:** Fire Alarm Specification shall contain specific language as required by Section 02 - Code Authority and Compliance, Paragraph A (2) (a).

**I. Vicinity Map(s):** Furnish on the first sheet of the drawings a Vicinity Map with direction and distances from the nearest town, city, or well-known community feature. The map should be of adequate scale and annotated with ample directions, so persons unfamiliar with the area may easily locate the job site.

**J. Site Plan(s),** drawn in sufficient scale, showing accurately and in detail

1.	Overall dimensions
2.	Adjoining streets and property lines
3.	North arrow and graphic scale
4.	Overall plan, orientation, and location of existing and proposed work; location to be shown by dimensions from existing reference points
5.	Contours (existing and proposed), including final grade elevations at all building corners and along building perimeters at such points as landings, walks, etc.
6.	Floor elevations of proposed and existing work
7.	Intended locations of future work or additions
8.	Walks, drives, or other features relative to the work including slopes and cross-slopes of accessible routes
9.	Locations and critical elevations of existing and proposed utilities, wells, disposal fields, etc.
10.	Benchmark(s)
11.	Parking facilities, including requirements for the physically handicapped
12.	Soil investigation data (separate presentation of data may be referred to on Site Plan)
13.	Detailed electrical and mechanical data unless shown elsewhere on separate electrical and mechanical site plans
14.	Easements

**K. Life Safety Plan:** The life safety plan(s) submitted with the preliminary plans shall be updated and incorporated into the final plans.

**L. Floor Plans:** Architectural "Working Drawings" of the floor plans of each floor should preferably be drawn at a scale of one-fourth inch per foot, but in no case less than one-eighth inch per foot. For large projects where the entire plan of the building cannot be shown on one sheet, a "Key Plan" shall appear on each of the working drawing plan sheets to designate the portion of the project to which each sheet applies. Each Architectural floor plan sheet must provide dimensions, room titles, north arrow, floor elevations, etc., for all the elements of that floor of the building and provide reference, by sheet number or symbols, to complementary data contained elsewhere in the drawings. Principal elements of the structural, mechanical, and electrical plans must be shown and noted where they influence the Architectural plan. Drawings at a scale of not less than one-fourth of an inch must be furnished for congested areas, toilet rooms, and areas in which equipment, etc., must be accurately located. Electrical, mechanical, and structural plans should not (for clarity) be superimposed upon finished Architectural floor plans.

**NA 2. MINIMUM DOCUMENT REQUIREMENTS (CONTINUED)**

- M. Roof Plan:** The roof plan should be at the same scale as the floor plans, or at a scale sufficiently large, to present with clarity: materials used, locations of valleys, ridges, cants, saddles, crickets, gutters, down spouts; projections through the roof such as skylights, chimneys, exhaust ducts or vents, penthouses, etc., changes in roof elevation; direction and amount of slopes, or other significant conditions. A positive slope of not less than 1/4 inch per foot shall be provided for all roofs in new construction. Positive drainage is required for all re-roofing work. "Positive drainage" means no standing water on the roof 48 hours after a rain.
- N. Elevation Drawings:** Illustrate all sides of the building, and other elevation drawings necessary to show all exterior wall surfaces, should be drawn to the same scale as the plans. These may be sectionalized to correspond to the plan sheets. In cases of very large projects, exception may be made and the use of a scale of not less than one-sixteenth inch to the foot may be used in order to show an entire elevation. If this is done, notations should be made to refer to the appropriate sectionalized plan drawings, and the necessary supplementary elevations provided at a scale of one-eighth inch to the foot. The elevations must clearly show the complete exterior and should include the following information: grade elevations, vertical dimension to floors, ceilings, roof slabs, materials, footings dotted-in and with noted elevation levels (if not clearly shown elsewhere), identification and scale.
- O. Building Sections:** Building sections should be furnished to clearly show any special conditions, special and typical room elevations, stairs, corridors, furred spaces, equipment and fixture locations; floor, wall, ceiling and roof construction; dimensions, levels, thicknesses and finishes.
- P. Details and Detail Sections:** Details and detail sections must be furnished and drawn to a scale large enough for clarity. These shall clearly show typical and special wall construction; dimensions and levels from roof to footings; typical and special window heads, jambs, sills, mullions, etc.; typical and special door heads, jambs, sills, transoms; special construction conditions or special Architectural features; cabinets, shelves, racks, wardrobes, chalkboards and tackboards, special equipment; stair risers, treads, landings, newels, rails, and construction features; typical and special trim.
- Q. Foundation Plans:** The foundation plans must be drawn at the same scale as the floor plans and contain sufficient information (or be supplemented by the necessary information in the form of large scale details, sections, schedules, notations, etc.) to indicate the size, shape, material, reinforcing, depths and elevations of footings and piers, columns, beams, walls, steps, slabs, openings, etc.; and all the dimensions necessary for the layout of the building. Foundation plans may be combined with limited basement plans as long as clarity is not sacrificed in these combined plans.
- R. Structural or Framing Plans:** Structural plans or framing plans must be furnished and drawn at the same scale as the Architectural plans. These plans shall clearly locate, describe and provide dimension foundations, footing elevations, columns, beams, girders, joists, studs, bolts, anchors, slabs, and reinforcing; floor and roof construction; lintels, purlins, trusses, bridging, etc. They must be accompanied by sufficient details, schedules, and notes to completely describe all the structural elements. They must contain a table of design loads used in their preparation.
- S. Plumbing Plans:** Plumbing plans must be furnished, drawn to scale no smaller than the Architectural plans with minimum 1/8" lettering. Include north arrow and graphic scale on all plan drawings. They shall include layouts of storm drainage piping, sanitary waste and vent systems, complete water supply systems, and gas supply and distribution; water, waste, and vent riser diagrams; location of all plumbing fixtures and equipment, and sewage disposal system. Plans shall include all the necessary details, legends and fixture and equipment schedules. Include details for piping connections to fixtures and equipment and notes to fully and clearly describe the required work. They shall show pertinent floor elevations and grades and shall be accompanied by a plumbing site plan to show the location, type, size, and extent of exterior lines, connections, and equipment (provided this information is not shown elsewhere). Floor plans shall indicate room names and numbers as shown on the Architectural plans. Plumbing plans must be prepared in accordance with acceptable engineering practice, the International Plumbing Code as currently adopted in the State Building Code, the current Alabama Building Energy Code, and requirements of the State Department of Public Health for water supply and sewage disposal. For projects involving demolition and/or renovation of existing systems, provide drawings adequately depicting the extent of the demolition, the extent of the existing system which is to remain (if any), and the location and method of connecting the existing and new systems.

**NA 2. MINIMUM DOCUMENT REQUIREMENTS (CONTINUED)**

- T. Mechanical Plans:** Mechanical plans shall be furnished, drawn at the same or larger scale as the Architectural plans with minimum 1/8" lettering. Include north arrow and graphic scale on all plan drawings. Except on very simple installations, these plans must be separate from the plumbing plans. They must fully and clearly define the sizes, types, locations, grades and levels, and installation of all equipment, piping, and ductwork. Single line indication for ductwork is not acceptable; these shall be drawn to scale showing sizes of ducts, dampers, grilles, outlets, etc. All mechanical equipment rooms must be drawn at a scale of not less than one-fourth inch per foot, accurately locating all equipment, duct, piping, and other system components, and identifying adequate space for access to equipment and components for maintenance. Sections through equipment rooms must be provided for congested areas. Mechanical plans shall show rated capacity, efficiency, and operating conditions for all equipment; necessary details, legends, piping diagrams, and schedules; plumbing and electrical connections; system controls and other data to confirm compliance with the International Mechanical Code as currently adopted in the State Building Code, the current Alabama Building Energy Code, and applicable NFPA standards. Floor plans shall indicate room names and numbers as shown on the Architectural plans. For projects involving demolition and/or renovation of existing systems, provide drawings adequately depicting the extent of the demolition, the extent of the existing system which is to remain (if any), and the location and method of connecting the existing and new systems. Outside air ventilation calculations must be indicated on the mechanical drawings.
- U. Fire Protection Plans:** Fire protection plans may be separate or combined with the plumbing plans. All areas to receive automatic sprinkler system protection shall be clearly identified as to hazard classification. At a minimum, plans shall indicate water supply to the building, outside control valve(s), fire department connection, sprinkler and standpipe risers, fire hose cabinets, and building zone control valve locations. Provide enlarged plans, at a scale not less than one-fourth inch per foot, for fire pump installations. Plans shall indicate general layout of equipment and piping to verify adequate space for installation, operation, and maintenance and shall include fire pump, jockey pump, controllers, test header, ventilation fans, etc.
- V. Electrical Plans:** Electrical plans shall be furnished, drawn to the same scale, or larger, as the Architectural plans with minimum 1/8" lettering. Except for very simple installations, the electrical plans shall be separate from the Architectural plans and the plans of other disciplines. They shall be prepared in accordance with requirements of the National Electrical Code currently adopted in the State Building Code and designed to confirm compliance with the energy code currently enforced by the State of Alabama. At a minimum, the electrical plans shall have the following:
1. Consist of lighting, power, fire alarm and auxiliary systems
  2. Show room names and numbers and north arrow as shown on the Architectural plans, with door swings also shown on the lighting plans
  3. Show, using standard symbols and notations, all electrical equipment, devices and fixtures; all connections inside and outside; schematic representations of branch circuits indicating locations and sizes of all conduits and cables or wiring by schematic representation of branch circuits on floor plans; circuits noted by numbers; names and capacities of special outlets; location and details of switchboards, motor control centers, power panels, lighting/control panels and other equipment; locations of fire alarm appliances and control panels; locations of auxiliary systems components
  4. Adequately depict the extent of any required demolition of existing electrical systems, the extent of existing systems to remain and location and method of connecting any existing and new systems
  5. Be supported by electrical legends, details, single line diagrams, power riser diagrams, panel schedules and lighting fixture schedules
  6. Be coordinated with the specifications
- W. Special Systems Plans:** Special Systems plans must be sealed by a design professional registered in the State of Alabama. These plans include, but are not limited to, food service, audio visual, etc.
- X. Project File Folders updated in Final Design and Meeting Minutes, Pre-Bid Meeting, Contractor Pre-Qualifications, and Bid Documents**

**NA 3. FINAL DESIGN EDITS AND CHANGES (IF ANY)**
**A.** Schedule the Final Design Follow Up Page Flip to review the following edits and changes:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.

**4.** All edits identified are completed and rechecked for completeness by the Owner and College. Approval of the Checklist is acknowledgment that all edits and changes are complete. A project is not approved to proceed to bid until all construction document (drawings and project manual) are finalized and approved by the Owner and College.

**ATTENDEE LIST**

NAME:	COMPANY:

**APPROVALS**

<b>BY:</b> _____ SIGNATURE OF ARCHITECTURAL/ENGINEERING FIRM	<b>DATE:</b> _____
<b>BY:</b> _____ OWNER'S DESIGNATED REPRESENTATIVE	<b>DATE:</b> _____
<b>BY:</b> _____ SIGNATURE OF REGIONAL FACILITIES DIRECTOR	<b>DATE:</b> _____
<b>BY:</b> _____ SIGNATURE OF ACCS CHIEF FACILITIES OFFICER	<b>DATE:</b> _____