ARKANSAS

BUILDING

AUTHORITY

MINIMUM STANDARDS & CRITERIA

2012

TABLE OF CONTENTS

SECTION ONE: GENERAL/DEFINITIONS

Section	Title	Page
1-100	Scope	1-1
1-101	Purpose	1-1
1-102	Function	1-1
1-103	Organization	1-1
1-104	Regulatory Authority	1-1
1-105	Grievance Procedures	1-2
1-106	Definitions	1-2

SECTION TWO: DESIGN REVIEW SECTION

Section	Title	Page
2-100	Design Professional Services Selection Procedures	2-1
2-101	Selection Authority Schedule	2-1
2-102	Authorization To Conduct Selection	2-2
2-103	Public Notifications Required	2-3
2-104	Design Professional Qualifications	2-3
2-105	Responding Procedures	2-3
2-106	Selection Method	2-4
2-200	Standard Fee Schedule For Professional Services	2-6
2-201	Design Professional's Basic Services Defined	2-6
2-202	Architectural/Building Related Engineering Services Fees	2-7
2-203	Other Design Professional Services	2-8
2-204	Seismic Design Fee Allowances	2-9
2-205	Specialized Consultants	2-9
2-206	Interior Design Services	2-9
2-207	Boundary/Topographic Land Surveying Services	2-9
2-208	Geotechnical Engineering Services	2-9
2-209	Environmental Engineering Services	2-9
2-210	Asbestos Consultants	2-10
2-211	Design Services Fee Schedule	2-10
2-300	Professional Services Contract Development	2-11
2-301	Project Specific Type Contracts	2-11
2-302	Design Professional (Multiple Project Type) Contracts	2-12
2-303	Lump Sum Or Hourly Fees	2-12
2-304	Additional Services Fees	2-12
2-305	Multipliers For Reimbursable Expenses	2-13
2-306	Acceptable/Allowable Reimbursable Expenses	2-13
2-307	Unacceptable Expenses	2-14
2-308	Progress Payments To The Design Professionals	2-14
2-309	Projects With Fixed Limits Of Construction Cost	2-15
2-310	Projects Exceeding Construction Funding After Bidding	2-16
2-311	Omissions And Errors In Construction Documents	2-16
2-312	Design Professional's Liability Insurance	2-17
2-313	Other Insurance Required Of The Design Professional	2-19
2-314	Professional Services Contract	2-19
2-315	Attachments To The Professional Services Contract	2-20
2-316	Amendments to Professional Services Contract	2-20
2-400	Procedures For Project Development And Construction	2-21
2-401	Initiation Of Project	2-21
2-402	Feasibility Study Requirements	2-22
2-403	Programming	2-22

2-404	Financing And Contingency Budgeting	2-23
2-405	Project Coordinator	2-23
2-406	Building Codes Adopted	2-24
2-407	Regulatory Agencies Review	2-24
2-408	Unacceptable Design Configurations	2-26
2-409	Phased Projects	2-26
2-410	Project Schedule	2-27
2-500	Building Commissioning	2-28
2-501	Need for Commissioning	2-28
2-502	Types of Commissioning	2-28
2-503	Commissioning Agent	2-29
2-504	Submittal Requirements	2-30
2-600	Asbestos Surveys and Management Plans	2-30
2-601	Asbestos Projects General	2-30
2-602	Asbestos Projects Subject to ABA Review/Approval	2-30
2-603	Asbestos Consultants	2-31
2-604	Plan Review Submittals	2-31
2-605	Project Supervision and Monitoring	2-31
2-700	Floodplain Management Program Standards	2-31
2-701	Authorization	2-31
2-702	Development Subject to Permitting Requirements	2-32
2-703	Procedures	2-32
2-704	Permits	2-33
2-705	FEMA Map Designations and Types	2-34
2-706	General Requirements	2-34
2-707	Elevation Requirements in Floodplains	2-36
2-708	Recommended Development Types in a Floodplain	2-36
2-709	Structures Not Permitted Below the Base Flood Elevation	2-38
2-710	Structures Permitted Below Base Flood Elevation	2-39
2-711	Manufactured Homes and Portable Buildings	2-39
2-712	Utility and Site Improvement Projects	2-40
2-713	Variance	2-40
2-714	Reporting a Flood Event	2-42
2-800	Energy Conservation	2-43
2-801	Life Cycle Cost Analysis	2-43
2-802	Automated Controls	2-44
2-803	Manual Controls	2-44
2-804	Equipment Efficiency	2-44
2-805	Energy Star Building Program	2-45
2-900	Design Standards	2-45
2-901	Design Philosophy	2-45
2-902	Design Standards And Requirements For Agencies	2-46
2-903	Specification Standards	2-47
2-904	Drawing Standards	2-52
2-905	Quality Control	2-56
2-1000	Accessibility For Individuals with Disabilities Standard	2-56
2-1001	Review Authority	2-57
2-1002	Acts, Codes and Standards	2-57
2-1003	Owner/Agencies Responsibility	2-58
2-1004	Construction Documents Submittal Requirements	2-58
2-1100	Grading Standards	2-58
2-1101	Standards for Grading Around Structures	2-59
2-1102	Standards for Grading Streets and Ways	2-59
2-1103	Standards for Drainage Channels	2-60

2-1200	Minimum Roofing System Requirements	2-60
2-1201	Determination Of The Proper Roof System	2-60
2-1202	Steep Roofing	2-61
2-1203	Single Ply Membranes/Unconventional Roofing System	2-61
2-1204	Roof System Components	2-62
2-1205	Rooftop Mounted Mechanical Equipment	2-66
2-1206	Minimum Roof Slopes For Positive Roof Drainage	2-67
2-1207	Roof Access Requirements	2-67
2-1208	Workmanship/Quality Control	2-68
2-1300	Fundamental Mechanical/Electrical Requirements	2-73
2-1301	General Requirements	2-73
2-1302	Mechanical Systems	2-74
2-1303	Plumbing Systems	2-75
2-1304	Electrical Systems	2-76
2-1400	Fundamental Cabling Systems Requirements	2-76
2-1401	Planning Requirements	2-77
2-1402	Telecommunications Rooms	2-78
2-1403	Cabling Standards	2-78
2-1404	Wire Management	2-79
2-1405	Identification	2-80
2-1406	Documentation	2-80
2-1500	Plan Review Requirements	2-81
2-1501	Plan Review Authority	2-81
2-1502	Plan Review Schedule	2-81
2-1503	Plan Review Submittal Requirements	2-82
2-1504	Plan Review Drawing Requirements	2-83
2-1600	Approval to Bid or Proceed	2-100
2-1601	Agency Approval	2-100
2-1602	Bid Date Requests or Request to Proceed	2-100
2-1603	Contract Documents Provided To The Contractor	2-100
2-1604	Record Copies Of Project Documents	2-101
2-1605	Design Professional Project Observation Requirements	2-101
2-1700	Capital Improvement Alternative Delivery Methods	2-104
2-1701	Project Criteria	2-102
2-1702	Selection Of Design Professionals	2-102
2-1703	Selection Method For Design Professionals	2-103
2-1704	Basic Services Defined	2-103
2-1705	Project Schedule	2-103
2-1706	Plan Review Requirements	2-104

SECTION THREE: CONSTRUCTION

Section	Title	Page
3-100	Introduction	3-1
3-101	Capital Improvements	3-1
3-102	Agency Officials	3-1
3-200	Capital Improvement Request/General Requirements	3-1
3-201	Contracts	3-2
3-202	Emergency Contracting	3-3
3-203	Sole Source Contracting	3-4
3-204	Split Purchases	3-5
3-205	Capital Improvements For Leased Premises	3-5
3-300	Bidding Rules	3-5
3-301	Bidding Pre-Requisites	3-5

3-302	Plans and Specifications	3-5
3-303	Advertising/Pre-Bid Conference	3-5
3-304	Bid Announcements	3-6
3-305	Bid Date and Location	3-6
3-306	Sealed Bids	3-6
3-307	Authority for Opening Bids	3-7
3-308	Bid Opening and Recording	3-7
3-309	Bid Tabulation	3-8
3-310	Scrivener Errors	3-8
3-311	Contractor's License	3-8
3-312	Bid Security	3-8
3-313	Subcontractor's bids	3-9
3-314	Alternates	3-9
3-315	Contract Award	3-9
3-316	Davis-Bacon Act (Federal Funds)	3-9
3-317	Arkansas Prevailing Wage Rates	3-10
3-318	Contractor's Insurance Requirements	3-10
3-319	Acknowledgement of Addenda	3-12
3-320	Contract Time	3-13
3-321	Late Bids	3-13
3-322	Modification of Bids	3-13
3-323	Withdrawal of Bids	3-13
3-324	Qualifications of Contractors	3-13
3-325	Obligations of Bidders	3-14
3-326	Additions to or Deletion From the Documents	3-14
3-327	Announcing Low Bidder	3-15
3-328	Protests	3-15
3-329	Resolution of Protest	3-15
3-330	Unsuccessful Bid	3-15
3-400	Contract Administration	3-15
3-401	Construction Observations	3-15
3-402	Invoice/Pay Request	3-16
3-403	Liquidated Damages	3-17
3-404	Design Prof. Contract Administration Responsibilities	3-17
3-405	Award of Contract	3-18
3-406	Construction Contracts	3-18
3-407	Pre-Construction Conferences	3-19
3-408	Change Orders	3-19
3-500	Project Closeout	3-20
3-501	Record Drawings	3-21
3-502	Delivery of Guarantees, Bonds, Maintenance Manuals	3-21
3-503	Completion Certificates, Affidavits	3-21
3-504	Duties of Design Professional on State Projects	3-22
3-600	Payment Requests	3-22
3-601	Payments	3-23
3-602	Final Payments	3-23
3-603	Delay in Processing Payments Documents	3-23
3-700	Capital Improvement Alternative Delivery Methods	3-23
3-701	Project Criteria	3-24
3-702	Selections and Contract Award Process	3-24
3-703	Contract Oversight	3-25
3-800	Capital Improvement Historic Sites	3-25
3-801	Project Criteria	3-25

SECTION FOUR: BUILDING OPERATIONS

Section	Title	Page
4-100	Introduction	4-1
4-101	Preventative Maintenance Requirements	4-1
4-102	Building Cleaning and General Building Management	4-2
4-103	Building Rules and Regulations	4-3

SECTION FIVE: REAL ESTATE SERVICES

Section	Title	Page
5-100	Purpose	5-1
5-101	Real Estate Services Responsibility	5-1
5-102	Determination by ABA of Desirability of Available Space	5-4
5-103	ABA Policy For Leasing	5-5
5-104	ABA Space Allocations Standards For Lease Space	5-9
5-105	ABA Lease Forms #1 and #2	5-11
	State Lease Form #1 (Private Lessors)	5-11
	State Lease Form #2 (ABA as Lessor)	5-16

SECTION SIX: REAL PROPERTY TRANSERS

Section	Title	Page
6-100	Real Property Offer and Acceptance (Purchase)	6-1
6-101	Closing of Real Property (Purchase/Sale)	6-2
6-102	Exemption From Real Property Taxes	6-2
6-103	Sale of Real Property	6-2
6-104	Protest	6-2
6-105	ABA Real Property Database	6-2

SECTION ONE
GENERAL/DEFINITIONS

1-100 SCOPE

This document shall be known as the Arkansas Building Authority Minimum Standards and Criteria (MSC). Copies of this manual may be obtained from Arkansas Building Authority (ABA). It may also be examined in the Office of the Secretary of State or at the Office of the Circuit Clerk in any county in the State. ABA maintains a website at "www.arkansasbuildingauthority.com". The MSC may also be reviewed or downloaded from this site. The purpose of this document is to establish standards and procedures as required by Ark. Code Ann. § 22-2-101 et seq. and by other applicable laws.

1-101 PURPOSE

ABA has various duties and responsibilities involving capital improvements, real estate transfers and leases. Capital improvements are overseen and managed in part by the Construction, Design Review and Building Operations Sections. The Real Estate Services Section oversees the state leasing of publicly or privately owned space as well as transfers of State real property.

1-102 FUNCTION

Although ABA has specific tasks, which it carries out on a daily basis, it also has within its organization the expertise to serve various state entities in the resolution of special problems relating to state-owned and leased buildings. Other functions of ABA are described by law and as determined by the Director or the Council, or both.

1-103 ORGANIZATION

(A) ABA functions under the guidance of the Council pursuant to Ark. Code Ann. § 22-2-101 et seq. which is also known as the "Arkansas Building Authority Act," and empowered to establish policies, guidelines, standards and procedures to guide and govern the agency, however in certain instances, ABA may promulgate rules of its own.

(B) The daily operation of the agency is administered by a Director who is appointed by the Governor and confirmed by the Senate. Four sections are established in the ABA with each section having duties as specifically assigned by law and with the administrator of each office being directly responsible to the Director. These sections are: the Building Operations Section, the Construction Section, the Real Estate Services Section and the Design Review Section. The Director may transfer the various duties and functions among the various sections of the agency and effect any other organizational or administrative changes that may be necessary to bring about the efficient and effective implementation of the applicable laws.

1-104 REGULATORY AUTHORITY

The authority of ABA and its Council to issue rules and regulations is established by Ark. Code Ann. § 22-2-101 et seq. and other applicable laws. All agencies within ABA jurisdiction are within the jurisdiction of the MSC, including Institutions of Higher

Education who have entered into agreements with ABA pursuant to Ark. Code Ann. § 22-2-113 (b) (1).

1-105 GRIEVANCE PROCEDURES

(A) If any person, organization or agency believes they have a non-employee related grievance with ABA due to ABA action(s) or omission(s), they should first attempt to resolve the grievance informally with the Administrator of the ABA Section involved. If this is not possible, the person believing himself to be aggrieved should send a letter to the Administrator explaining his grievance in as much detail as possible and requesting an audience with the Director.

(B) Within five (5) working days of receipt of this letter, the section head or designee must schedule a meeting with the alleged aggrieved person, the Director, the Section Administrator and all other parties directly involved, and notify the alleged aggrieved party and all other parties in writing of the date, time and location of this meeting. This meeting must be set within thirty (30) calendar days of receipt of the letter of grievance. The Director may, at his discretion, conduct the meeting as an informal meeting or a formal hearing. If the grievance cannot be satisfied in one meeting, the Director may schedule as many as three additional meetings within thirty (30) calendar days of the first meeting or he may ask that the grievance be heard at the next regularly scheduled meeting of the ABA Council. If the grievance cannot be resolved in four meetings, with the Director, then it must be submitted to the next regularly scheduled meeting of the Council. Any grievance taken to the Council must be heard according to the by-laws of the Council, and the procedures set forth in the Arkansas Administrative Procedures Act (Ark. Code Ann. § 25-15-201 et seq.).

1-106 DEFINITIONS

(A) As used within the entirety of the Minimum Standard and Criteria, masculine pronouns when used within the following sections shall also include the feminine and legal entities.

(1) Americans with Disabilities Act Accessibility definitions are located in § 2-1000.

(2) Addendum/Addenda means a supplement or supplements to the bid documents, issued prior to the submission of bids, for the purpose of clarifying, correcting, deleting or adding to the bid documents previously issued.

(3) Agency means any state agency including state boards, commissions, agencies, departments, and institutions of higher learning, which are under the jurisdiction of ABA pursuant to Arkansas laws or regulations.

(4) Alteration means work performed to change the interior arrangement or other physical characteristics of an existing facility or installed equipment so that it can be adapted to a new use.

(5) Bid Documents means all documents associated with the bid process, which includes but are not limited to the advertisement, invitation to bid, instruction to bidders, the bid form, and the proposed contract documents including any addenda issued prior to the receipt of bids.

(6) Bid Formalities means requirements established by statute for bidding that shall not be waived.

(7) Bid Tabulation means a tabulation of all bids received, reflecting bidders name, address, license number (if applicable), amount of bid(s), receipt of bid bond, acknowledgement of addenda, and sub-contractors' names.

(8) Building or Facility means all or any portion of building, structures, equipment, roads, walks, parking lots, parks, sites, or other real property or interest in such property.

(9) Building Operations Administrator means the Arkansas Building Authority Building Operations Section Administrator.

(10) Building Operations Section means the Arkansas Building Authority Building Operations Section.

(11) Capital improvement means all lands, buildings, structures, utilities, on-site and off-site improvements, and other appertaining improvements, existing or future, and all construction, repairs, alterations, demolitions and renovations thereof which are undertaken, owned, operated, or otherwise managed by a state agency except those exempted by law or regulation. However, demolitions used within this meaning, pertains to the bidding/awarding/contracting of such projects and does not in any way abrogate the rules pertaining to the DFA M&R program.

(12) Change Order is defined as an amendment to the contract that is a written authorization executed by the Owner, Design Professional, Contractor, and approved by ABA to change the design or scope of work from the original plans, specifications, or other contract documents. This can include changes in price and time to complete the project. A change order must fall within the original capacity of the project. Upon proper execution and ABA approval, the change order modifies the original contract between Owner and Contractor and becomes part of the contract documents.

(13) Commissioning means a systematic process of ensuring that building systems perform interactively according to the design intent and the Owner's operational needs. This is achieved beginning in the design phase by documenting the design intent and continuing through construction, acceptance, and the warranty period with actual verification of performance, operation and maintenance (O&M) documentation verification and training of operating personnel. (See also re-commissioning and retro-commissioning)

(14) Competitive Bid means bidding by quote from a minimum of three (3) invited bidders for capital improvements where solicitation of bids by formal means is unnecessary due to the quote bid limit. Competitive bids may be solicited by mail, telephone, email, fax or in person by the purchasing agent.

(15) Construction means making or forming an improvement by combining parts, labor, or materials; the erection, alteration, or repair of a structure or physical object under the jurisdiction of ABA.

(16) Construction Administrator means the ABA Construction Section Administrator.

(17) Construction Section means the Arkansas Building Authority Construction Section.

(18) Contract Documents means those documents which comprise a contract in a capital improvement project including but not limited to the owner agency/contractor agreement, the general and supplementary conditions of the contract, plans or drawings or both, specifications, all addenda, modifications, and change orders together with any other items stipulated as being specifically included.

(19) Council means the Arkansas Building Authority Council.

(20) Design Professional means a person or firm who provides professional expertise in order to carry out a capital improvement. Design professionals may include but may not be limited to the following professionals: Planners (land, city, utilities, etc.), Architects, Landscape Architects, Surveyors (land), and Engineers (Consulting and Professional Engineers providing expertise in various licensed fields only that is, civil, electrical, mechanical, structural, sanitary, etc.).

(21) Design Review Section means the Arkansas Building Authority Design Review Section.

(22) Director means the Director of Arkansas Building Authority.

(23) Element means and includes but not limited to an architectural or mechanical component of a building, facility, space, or site, e.g. telephone, curb ramp, door, drinking fountain, and seating.

(24) Final Completion means the agency, with ABA approval, acceptance of a project from the contractor or Lessor upon certification by the design professional, if applicable, that the project is complete and in accordance with the contract documents; final acceptance is confirmed by making the final payment unless otherwise stipulated at the time of making such payment or by letter of notification and rent commencement in leasing situations.

(25) Formal Bid, as used within the Construction Section, means a bid that has been solicited through published plans and specifications in accordance with statutory requirements including; legal advertising stating a bid time, bid date, and bid opening at a published location; bond requirements; wage determination (if applicable), etc. Formal Bid, as used within the Real Estate Services Section means a bid that has been solicited through published specification and criteria, advertised notice stating a bid time and date for a bid opening at a published location.

(26) Formalities means any procedural, administrative, or clerical requirements not required by statute. Formalities may be waived where such waiver is in the best interest of the agency or state. Formalities in bid documents, which contain the word “shall” may be waived where such waiver is in the best interest of the agency and not required by statute.

(27) Improvements means a change or addition that improves the original intended purpose, performance or appearance of an existing facility or equipment.

(28) Intent to Award means a letter to the contractor who has the successful bid for a project stating that it is the owner's intent to award him a contract. Intent to award letters may be issued to assist contractors in obtaining performance bonds prior to issuance of a contract.

(29) Maintenance Work means the repair, but not the replacement, of existing facilities or equipment when the size capacity, type or extent of the existing facility or equipment is not thereby changed or increased.

(30) Minimum Standards and Criteria - and other like phrases means those standards and criteria relating to bidding and requests for proposals, construction, design, maintenance, roofing, transfers of property, including but not limited to the purchasing or selling of property, and leasing of state agencies' capital improvements or leasing of private properties to state agencies or entities as adopted by the Council after appropriate deliberation and where advisable, public hearings, or notice to interested persons and organizations. The Arkansas Building Authority Minimum Standards and Criteria is also referred to as the “MSC.”

(31) MSC means the Arkansas Building Authority Minimum Standards and Criteria.

(32) Notice to Proceed means a written notice to proceed with prosecution of the work on a specific project in accordance with an ABA approved contract.

(33) Performance Specification means a specification which generally describes the characteristics of the item required, e.g. the style, type, quality, character, economy of operation and purpose to be served by the item and the results required of the item provided. It does not restrict the bidder to a specific brand, make, or manufacturer, nor does it tell the Contractor how to achieve the required result.

(34) Proprietary Specifications means a specification that limits or restricts the bidder to two (2) sources only for a product or service. Specifications are considered proprietary when: (1) Only two (2) manufacturers or suppliers can provide an acceptable product or system and where no substitutions are allowed; (2) Only one manufacturer can provide an acceptable product or service but two (2) or more vendors or suppliers can compete to provide the product or system.

(35) Real Property means building(s) or land(s) or both; real estate.

(36) Real Estate Services Section means the Arkansas Building Authority Real Estate Services Section.

(37) Real Estate Services Administrator means the administrator of the ABA Real Estate Services Section.

(38) Re-Commissioning means the process of re-verifying the performance of building systems that have been commissioned previously to ensure the systems continue to operate according to the design intent or current operating needs. Re-commissioning may be initiated periodically or in response to building renovation or a change in usage.

(39) Retro-Commissioning means the process of commissioning existing building systems that were not commissioned when originally constructed. It is a process to

ensure building systems perform interactively according to the design intent and/or meet the Owner's current operational needs. This is achieved by documenting the design intent where possible and the current operational needs measuring the existing performance, implementing necessary operational and/or system modifications, followed by actual verification of performance, operation and maintenance (O&M) documentation verification, and training of operating personnel.

(40) Repair: The necessary work to restore a facility component or fixed asset to its intended use.

(41) Request for Proposals means all documents, whether attached or incorporated by reference, utilized for soliciting proposals for negotiated work or services.

(42) ABA means Arkansas Building Authority.

(43) Shall as written in the pages of the Arkansas Building Authority Minimum Standards and Criteria denotes a mandatory requirement. Formalities in bid, requests for proposal, or request for qualification documents, which contain the word "shall", may be waived where such waiver is in the best interest of the agency and not a requirement by law.

(44) Site means a parcel of land bounded by a property line or a designated portion of a public right-of-way.

(45) Site Improvements means various improvements including but not limited to landscaping, paving for pedestrian ~~l~~and vehicular ways, outdoor lighting, recreational facilities, and similar site additions.

(46) Split Purchases means dividing a capital improvement purchase into various components to avoid bidding procedures.

(47) Standard Professional Services Contract means the agreement, along with any initial or subsequent attachments or amendments, between the agency and the design professional pursuant to Ark. Code Ann. §19-11-1001.

(48) Sole Source means a product, item of equipment, service or combination of these which is available from only one manufacturer, vendor or provider in an area to the exclusion of others (e.g. within the constraints of the particular project whether geographic, time, material, software support, or other). If products, equipment, or services are franchised to only one vendor in an area, the vendor would be considered a Sole source for such products, equipment or services specified for the project.

(49) State Architect means the ABA State Architect.

(50) State Engineer means the ABA State Engineer.

(51) Substantial Completion means the project contracted for or a designated portion thereof, is sufficiently complete, in accordance with the contract documents, so the owner agency may occupy the work, or designated portion thereof, for the use for which its is intended despite minor defects to be corrected or minor incomplete aspects of the work.

(52) Work means all labor, materials, equipment, and other services necessary to perform the complete services, or any separate identifiable part thereof, or to provide the completed product required by the Contract. In construction, work includes, but is not limited to performing services, furnishing labor, furnishing and incorporating materials and equipment into the construction to provide the entire completed construction, or the various separately identifiable parts thereof, as required by the contract documents.

(B) Questions relating to these definitions should be addressed to the administrator of the Section involved.

SECTION TWO
DESIGN REVIEW SECTION

2-100 DESIGN PROFESSIONAL SERVICES SELECTION PROCEDURES

(A) To ensure an equitable opportunity for all practicing design professionals, and in accordance with Arkansas Code Annotated § 22-2-101 et. seq., ABA has initiated the following procedures that shall be followed to select firms or individuals to perform professional services for capital improvement projects. All agencies except as exempted by law, are required to use the MSC.

(B) Agencies shall comply with the Department of Finance and Administration, Office of State Procurement guidelines and policies in the development of requests for qualifications, structure of evaluation committees and evaluation of responses in the solicitation, evaluation and selection of design professional under this section.

(C) Any reference to the words "the Section" within Section Two shall mean the Design Review Section.

2-101 SELECTION AUTHORITY SCHEDULE

(A) Agencies' whose fund's have been appropriated by the General Assembly to the Agency or appropriated to ABA for specific buildings within Pulaski County shall have the responsibility for selecting the Design Professional. Any questions regarding the interpretation of this method should be directed to the ABA Design Review Section.

(B) Agencies desiring to enter into a professional services agreement wherein the contemplated fee, exclusive of reimbursable expenses, are $5000 or less, may contact any qualified provider without ABA approval and negotiate an agreement for the required services.
SEE LEGISLATIVE UPDATES AT THE END OF SECTION 2

(C) Agencies desiring to enter into professional services agreements wherein the contemplated fee, exclusive of reimbursable expenses, do not exceed $25,000, may utilize a purchase order for these services in accordance with Ark. Code Ann. §19-11-1012(b)(9)(A). Agencies may enter into such purchase order agreements without prior approval of ABA.
SEE LEGISLATIVE UPDATES AT THE END OF SECTION 2

(D) Agencies desiring to enter into a professional services agreement wherein the contemplated fee, exclusive of reimbursable expenses, are more than $5000 but $25,000 or less, may solicit qualifications from 3 or more qualified providers without ABA approval. Agencies should review Ark. Code Ann. §19-11-801 before initiating the process. The following is the recommended process: **SEE LEGISLATIVE UPDATES AT THE END OF SECTION 2**

(1) Issue a letter of request to the selected firms describing the nature of the services desired, the description of the project contemplated and require interested parties to submit a statement of qualifications and or pertinent information;

(2) Form a selection committee to evaluate the qualifications of the respondents and select the firm or individual to negotiate with;

(3) Should negotiations for a fee of less than $25,000 fail, Agencies may approach their next selection and initiate negotiations. If negotiations are unsuccessful with all respondents, the agency should determine to terminate the selection process and either re-evaluate the scope of

services required and begin this process over or move to the formal selection process described in this section;

SEE LEGISLATIVE UPDATES AT THE END OF SECTION 2

(4) While these agreements ($25,000 or less) are not submitted to ABA or DF&A for prior approval, Agencies must report the agreements to DF&A/OSP in accordance with their rules.

SEE LEGISLATIVE UPDATES AT THE END OF SECTION 2

(5) While ABA approval is not required for contracts $25,000 or less, Agencies can make a written request for ABA assistance in the selection process. (See §2-102 on the process of written requests.)

SEE LEGISLATIVE UPDATES AT THE END OF SECTION 2

(E) Agencies desiring to enter into a professional services agreement wherein the contemplated fee, exclusive of reimbursable expenses exceeds $25,000 shall follow the procedures described in § 2-102 through § 2-106.

SEE LEGISLATIVE UPDATES AT THE END OF SECTION 2

(F) Selection of design professionals and consultants will be coordinated by the State Architect or State Engineer or designee depending upon their respective or related fields.

(G) Agencies desiring to enter into a sole-source professional services agreement wherein the contemplated fee, exclusive of reimbursable expenses exceeds $5,000 shall follow the procedures established by DF&A/OSP. Upon DFA/OSP approval of a contract which exceeds $25,000 in fees (excluding reimbursables), the Agency shall attach a copy of the justification and approval to the contract when submitting for ABA review.

SEE LEGISLATIVE UPDATES AT THE END OF SECTION 2

2-102 AUTHORIZATION TO CONDUCT SELECTION

(A) Advertising shall not be implemented until approved by the Section. The Section shall assign the solicitation process the appropriate RFQ number for tracking purposes. This RFQ number shall be referenced on all documents and correspondence related to the selection process and shall be shown on the lower left-hand corner of the first page of the professional services contract. Any Agency requiring design professional services or other appropriate consultants, regardless of the nature of funding, shall submit by letter their intentions, and request "Authorization to Proceed" from the Section, providing the following information:

(1) Agency name and project;
(2) Location of project;
(3) Description of services desired;
(4) Source of funding;
(5) Description of the work to be accomplished and approximate square footage where applicable;
(6) Approximate time frame for the anticipated need to start and complete the project;
(7) Agency Project Coordinator and telephone number.
(8) Estimated cost of the construction project or estimated total fees that will be expended over the life of the contract.
(9) Acknowledgement that the agency has the request for qualification (RFQ) document ready for distribution.

(B) Draft of advertisement, name of newspapers advertising in, and deadline for submitting advertisement. Notice shall be placed on the ABA website. Published notices shall run at least one (1) time. The date of publication shall not be less than one (1) week before the day fixed therein for the receipt of the responses. See 2-105 EXCEPTION.

(C) The draft advertisement should contain but not be limited to the following information:

(1) Advertisement cost billing information from the Agency including the name, address, and phone number of the purchasing official to which all invoices should be submitted;
(2) Notice to the Design Professional as needed (i.e.: Architects, Engineers, Environmental Consultants or specialized fields such as Electrical Engineers);
(3) Name of the Agency, division, department and location of the project; and RFQ number;
(4) A brief description of the project, including the approximate square footage for new construction or renovations and the desired services;
(5) The desired deadline for responses to the request for qualifications;
(6) Instructions for obtaining a copy of the Request for Qualifications package (i.e. website address, telephone number, contact name);
(7) The name, address, and phone number of the Agency person to whom the responses should be directed.

2-103 PUBLIC NOTIFICATIONS REQUIRED

After approval by the Section to conduct selection procedures, the selecting Agency shall be required to publish a notification that Design Professional services are being solicited. A notice shall be published in at least one (1) statewide newspaper for each project pursuant to the advertisement criteria under §2-102(C). Agencies are encouraged to publish notification in other publications, including but not limited to newspapers or trade journals with general circulation in the county where the project will be located.

2-104 DESIGN PROFESSIONAL QUALIFICATIONS

The following are minimum qualifications required for Design Professionals desiring to contract for design services with the State:

(A) All Design Professionals shall demonstrate their capability to perform the design of the project to the satisfaction of the selection committee.

(B) All Design Professionals, except for geo-technical engineers, whether prime or serving as consultants to the prime, shall have in force professional and general liability insurance in the amounts shown in § 2-311 and § 2-312 and proof of compliance shall be attached to all standard professional services contracts.

(C) All Design Professionals, whether prime or serving as consultants to the prime, shall be licensed in their respective disciplines in Arkansas or shall be capable of being licensed and shall do so immediately in accordance with their respective licensing entities, if awarded the project. Bid documents shall not be released to bidders without Design Professional's Arkansas registration stamp or seal and signature as evidence of compliance.

2-105 RESPONDING PROCEDURES

Allow a minimum of one (1) week after the last advertisement ~~in~~ for the receipt of responses from interested design professionals. Responses shall be in writing and in the format stipulated in the RFQ, (FAX or telegram communications are not acceptable), and addressed to the Agency official identified in the RFQ document. EXCEPTION: Allow a minimum of not less

than two (2) weeks for projects that are large or complex and that might require the services of an out-of-state design or consultant firm.

2-106 SELECTION METHOD

(A) After the response period, the receiving Agency, if it decides to move forward, shall take one of the following actions:

(1) For design professional type services or single project contracts wherein the estimated construction cost is less than one million dollars ($1,000,000), pursuant to Arkansas Code Annotated § 19-11-801 through § 19-11-805, Agencies may select a design professional from annual statements of qualifications on file with the Agency. Nothing in this policy shall prohibit an agency from conducting an individual solicitation for on-call services or single projects regardless of estimated cost.

(a) Agency shall issue a public notice of their intent to solicit annual statements of qualifications and performance data from interested design professionals in accordance with § 2-103.

(b) Agency shall maintain qualifications received on file for a period of not more than 12 months after closing date of solicitation.

(c) When an Agency has a need for design professional services, the agency shall notify the Section of the need and the type of services desired. The Agency shall select no less than three (3) qualified firms (or individuals) from the qualifications on file and shall submit the names of the firms (or individuals) selected for consideration to the Section.

(d) The Section shall review the list of consultants and the scope of the services desired to determine that the correct type of design professionals are being considered. Upon a favorable determination, the Section will issue a letter of authorization and the Agency may then proceed with the selection process. The Section may requests additional information as necessary to conduct this review.

(e) Agency shall then evaluate the qualifications of the consultants and select the best qualified candidate capable of providing the desired services and negotiate a contract. The agency shall conduct oral interviews of all selected candidates prior to making the final selection.

(f) Agencies shall initiate a contract with the Design Professional and then submit it to the DFA/OSP for review, approval, and processing. Prior to final approval, DFA/OSP submits contracts and amendments for the Section to review which are under its jurisdiction. Agencies may request the assistance of the Section in the negotiation phase of the contact development.

(2) For project specific contracts wherein the estimated construction cost is over one million dollars ($1,000,000) per project, Agencies shall select design professionals from qualifications received from a specific public notifications of request for qualifications.

(a) The Agency shall convene the Preliminary Selection Screening Committee. This Screening Committee shall be composed of no less than three (3) members from the particular Agency desiring design professional services. It is recommended members should have subject matter experience or expertise in the areas the project will affect, and/or financial management, contracting or experience managing construction or design professional services contracts.

(b) The Preliminary Selection Screening Committee shall meet at a designated time and place, and review all responses. There shall be no more than five (5) finalists selected. A minimum of three finalists may be selected for smaller, low budget projects (under $5,000,000). The agency may request the assistance of the Section during the selection process. If requested, a Section representative will be assigned to the committee to guide the committee through the process but shall not vote. If five (5) or less firms (three (3) or less for smaller projects) respond, the Agency may submit a written request to the Section for a waiver from the pre-selection process provided the Agency agrees to interview all firms that responded. If only one firm responded, the Agency may submit a written request to the Section for a waiver of the pre-selection and interview process and may begin negotiations with the firm that responded to the advertisement. The Agency may also request authorization to begin the selection process over. Nothing shall prohibit an agency from interviewing more than the initial five (5) finalists, if the agency determines that is in their best interest to do so upon written approval of the Section.

(c) Upon completion of the pre-selection process, the committee chairperson shall complete the Design Professional Selection Tracking Form and return it to the Section with the following information: list of all responses received, list of respondents selected for evaluation, list of respondents selected for interview, and list of committee members.

(d) Within three (3) working days, the agency shall notify all responding applicants by mail of the selection results, naming the finalists selected for interview.

(e) The Final Selection Screening Committee shall be made up of the Preliminary Selection Screening Committee. While it is recommended that no substitution of members of the final selection committee occur, if more than 3 members served on the pre-selection committee, agencies may reduce the number to a minimum of 3 members. .

(f) The final selection shall be made by the Agency following the interviews and oral presentations from the finalists selected by the Preliminary Selection Screening Committee. Notice of said interviews shall be mailed to the finalists notifying the respective finalists of the time and location of the interview at least ten (10) days prior to the interview. Exception: Allow fifteen (15) working days for projects that are large or complex and that may require the services of an out-of-state design or consultant firm.

(g) Each finalist shall be given a specific time to make their presentation and a time schedule to follow. The order of presentations shall be determined by random drawing during the pre-selection process.

(h) Preliminary designs or suggested designs shall not be permitted during the selection process and shall be grounds for disqualification. However, audio/video presentations and boards may be used to help communicate that the firm understands the nature of the proposed project and unique design challenges that may be encountered.

(i) Nothing in the MSC shall be construed to prohibit an ABA representative from attending any pre-selection or final selection proceeding for the purposes of auditing the process.

(j) The Agency shall forward the name of the Design Professional selected to the Section within two working days after the final selection is approved by the Agency. This notification will become part of the permanent record and the Agency shall notify all finalist of the result of the

interviews. With the notification to the selected design professional, the Agency shall initiate a contract with the Design Professional and submit it to the DFA/OSP for review, approval, and processing. The DFA/OSP shall forward to the Section the contracts and amendments subject to ABA review. Agencies may request the assistance of the Section in the negotiation phase of the contact development.

(B) Agencies shall be responsible for maintaining a complete record of the selection process from initiation through execution of the contract and contract closeout. This record shall include copies of all qualifications, scoring, notes, and correspondence including the firms not selected for consideration. ABA is responsible for maintaining documents or copies thereof which have been submitted in the approval process.

(C) At the conclusion of the selection process submit to the Section a compact disk containing a copy of the initial request to begin the selection process, Section letter of authorization to proceed, the advertisement publication (tear sheet), a copy of the RFQ documents, one complete copy of each respondent's qualification package received and a copy of the completed ABA tracking form, and copies of all letters on notification. The professional services contract may not be approved until receipt of this information. To facilitate tracking, the contract shall reference the assigned RFQ number. The disk_submitted to ABA should be labeled with the RFQ number and project name or type of services requested.

2-200 STANDARD FEE SCHEDULE FOR PROFESSIONAL SERVICES

The fees shown in schedule §2-211 are the maximum that will be allowed and are considered necessary for the performance of adequate professional services, unless exempted by law. Any increase beyond the scope of the fee schedule must be approved by the ABA Director if such increases are determined to be in the best interests of the state.

2-201 DESIGN PROFESSIONAL'S BASIC SERVICES DEFINED

(A) Basic services, when referred to in the following fee schedules, shall be defined as follows and include all the services of the architectural, landscape architect, civil, mechanical, electrical, and structural consultants under one (1) basic fee. For review of funding and Agency programs refer to §2-401 through 2-404.

(1) Estimate of probable construction cost. Provide a separate line item for each of the technical specification divisions.

(2) Perform life cycle cost analysis of building components and systems in accordance with the Arkansas Energy Office rules for Energy Efficiency for Public Buildings for new construction projects exceeding 20,000 SF and renovation projects exceeding 20,000 SF wherein the estimated construction cost exceeds 50% of the insured valued of the building.

(3) Schematic design, approximately 15% complete. (To be submitted to Agencies only for approval.)

(4) Design development, approximately 50% complete. Include an estimate of the annual operation costs and energy consumption of all utilities, using industry standard average energy use for the building type. (To be submitted to the Agencies only for approval.)

(5) Seismic Design as required for projects to comply with Arkansas laws and the current Arkansas Fire Prevention Code.

(6) Construction documents. 100% complete documents to be submitted to the Agencies for review and following the agency review, submitted on to the Section for review and approval. Include an up to date copy of the estimated annual operation cost and energy consumption submitted with the design development documents. Consumption data shall be expressed in terms of total BTUH/SF/YR for new buildings and additions over 20,000 SF and for renovations exceeding 20,000 SF wherein the estimated cost of the renovation exceeds 50% of the insured value of the building. For all other projects, Consumptions shall be expressed as total BTUH/YR for the affected work.

(7) Agency reviews as applicable, which includes but is not limited to, ABA, the State Fire Marshall, and the Arkansas Department of Health.

(8) Advertisement, bidding of project, and contract negotiations as required to conform to the project funding.

(B) Basic Services are also to include periodic construction observation (site visits) by the prime Design Professional and all consultants at key critical times, for that applicable portion of the work for which they are involved, during construction and construction administration, including:

(1) Contract, bonds, insurance requirements review, coordination of contract documents and processing to the Construction Section;

(2) Shop drawing and material submittal reviews by the appropriate Design Professional or consultant;

(3) Periodic observation reports, a minimum of one (1) per month, complying with § 2-1605, “Design Professional Observation Requirements”, prepared by the Design Professional and appropriate consultants and furnished to the Agency and the Construction Section. Include sub-consultant site visit(s) and an observation report(s) which is provided with the prime design professional’s observation report and certification of contractor’s payment applications.

(4) The appropriate Design Professional or Consultant shall monitor and ensure that all Agency operations/orientation/training or equipment manuals, or all, are submitted, reviewed, approved and transmitted to the Agency. Acknowledgment of this transmittal shall be included in the final closeout documents.

(5) Receive for the Agency from the Contractor, "record" drawings and all project close-out items pursuant to §3-500 through §3-504 and prepare a compact disc containing the record documents.

(6) Follow up inspection by all parties within thirty (30) days prior to the expiration of the one (1) year Contractor's Warranty.

2-202 ARCHITECTURAL AND BUILDING RELATED ENGINEERING SERVICES FEES

(A) Fees shall be based on the Design Services Fee Schedule shown in §2-211. This fee schedule is to be used for all Architectural, Civil, Landscape Architecture, Structural,

Mechanical, and Electrical Design Professional Services. These fees shall be considered part of “Basic Services” for a project as defined in §2-201.

(B) Fee schedule shall be used to determine the base fee, which includes all consultants noted above, computed on the basis of the design professional providing all basic services, as defined in this Standards and Criteria manual, times a percentage of the total construction cost.

(C) Base fees shall include the "full services" (unless otherwise negotiated) of all normal consultants, i.e., civil, architectural, landscape, structural, mechanical, and electrical, per §2-201.

(D) Note: All standard professional services contracts, negotiated as a percentage of construction cost, shall pay compensation to the Design Professional on the basis of actual construction cost, including all negotiations and change orders through final acceptance and payments to the contractor. Estimated construction cost, as approved by the Agency, shall be used until the bids are accepted, or if the project is canceled.

2-203 OTHER DESIGN PROFESSIONAL SERVICES

For boundary or topographical land survey services refer to §2-207; for Geo-technical engineering services, refer to § 2-208; for environmental engineering services, refer to § 2-209; for interior design services refer to § 2-206; for seismic design fee allowance refer to §2-204 and for asbestos consultant fees refer to §2-210.

2-204 SEISMIC DESIGN FEE ALLOWANCES

(A) For projects requiring seismic design and certification to comply with Arkansas laws and the current Arkansas Fire Prevention Code, fees may be increased, with the approval of the Section, as follows:

(1) Arkansas Seismic Design Categories A, B, and C: Basic services as defined under §2-200, §2-201.

(2) Arkansas Seismic Design Category D: Multiply base fee only, up to 1.04, maximum.

(3) Arkansas Seismic Design Category E: Multiply base fee only up to 1.05, maximum.

(4) Where applicable, the multipliers may be used to compute the seismic design allowance in Seismic Design Categories D and E only. These allowances shall be listed under the base fee shown on the standard professional services contract under "Compensation" as: Seismic Design Fee Allowance, "Category D" (or "E") = $ (Amount). Do not list as a combined fee.

(B) Compliance with all applicable seismic design building codes shall include all ABA defined structural and normal non-structural elements. Refer to § 2-900.

(C) Additional Services for Non-Structural Elements (All Zones). Earthquake resistant design of specific, "out-of-the-ordinary" items or equipment not listed, may require "additional services" on the standard professional services contract, unless otherwise negotiated, for these non-structural seismic design bracing details. These "additional services", may be negotiated on an hourly, lump sum, or percentage of construction cost agreement when approved by the Section.

(D) Additional Services for Dynamic Structural Analysis: Should dynamic structural analysis be required for the seismic design of a structure to meet all applicable building codes, this analysis shall be considered an "additional service" under the standard professional services contract or its attachment, unless otherwise negotiated. This expense shall not be incurred without the approval of the Section.

2-205 SPECIALIZED CONSULTANTS

Fees may be negotiated on a percentage of construction cost, lump sum, or hourly fee (not to exceed) agreement with approval by the Section. Specialized consultants could include the following specialized fields including but not limited to: acoustical, theatrical lighting, parking, food service, solar, computer, exhibit planners, building commissioning, graphic, geo-technical, testing, land surveying, and land planning. Include a line item for each specialized consultant's fee under "compensation" in the Professional Service Contract and list as "Additional Services-[TYPE OF CONSULTANT] Fees".

2-206 INTERIOR DESIGN SERVICES

A basic interior design service fee not to exceed ten percent (10%) maximum of the total cost of all furniture, draperies, equipment, fixtures, paintings, artifacts, and the like, including planning and observation of placement and installation of same, shall be used by all agencies. Extra services desired by the owner shall require prior approval by the Section. Include all "Interior Design Fees" under "compensation" in the Professional Service Contract and list as "Additional Services-Interior Design Fees".

2-207 BOUNDARY OR TOPOGRAPHICAL LAND SURVEYING SERVICES FEES

Boundary or topographical land surveys are considered a specialized engineering services and fees for these types of services shall be negotiated on an hourly not-to-exceed rate or a lump sum commensurate with the scope of the survey. Fees for this type of service require the approval of the Section. Prior to finalizing the negotiations, agencies shall submit a draft of the scope of the work and the proposed fee arrangement to the Section.

2-208 GEO-TECHNICAL ENGINEERING SERVICES FEES

Geo-technical investigations are considered a specialized engineering service and fees for geo-technical services may be negotiated on an hourly not-to-exceed fee or a lump sum agreement. If conditions are such that a lump sum (not to exceed) cannot be guaranteed, then a unit price per boring or trench may be included to cover the suspected conditions that may be encountered. Fees for this type of service require the approval of the Section. Prior to finalizing the negotiations, submit a draft of the scope of the work and the proposed fee arrangement to the Section.

2-209 ENVIRONMENTAL ENGINEERING SERVICES FEES

For projects involving purely environmental engineering services, excluding asbestos consulting services, independent of a new building construction project and where the services of the engineer are contracted directly to the Agency, the fees may be negotiated on a percentage of the construction cost, lump sum, or hourly fee (not to exceed) agreement with approval by the

Section. Prior to finalizing negotiations, submit a draft of the scope of the work and the proposed fee arrangement to the Section.

2-210 ASBESTOS CONSULTANT FEES

Asbestos inspection, design, air monitoring and project management services are considered a specialized consulting services and fees for these types of services shall be negotiated on an hourly not-to-exceed rate, a daily or abatement shift rate or a lump sum commensurate with the scope of the project. The Section shall approve fees for this type of service. Agencies shall submit a draft of the scope of work and the proposed fee arrangement to the Section prior to finalization of negotiations.

2-211 DESIGN SERVICES FEE SCHEDULE

(A) The following fee schedule for basic services as defined in § 2-201 is based upon a percentage of the total (final) construction cost including all adjustments (increases and decrease) by change order or negotiations and as modified by the footnotes at the bottom of this schedule. For projects less than $50,000 or more than $50,000,000, fees may be negotiated subject to ABA approval.

CONSTRUCTION COST	BASIC FEE
Less than $50,000	As Negotiate d
$50,001 to $75,000	9.25%
$75,001 to $100,000	9.00%
$100,001 to $200,000	8.75%
$200,001 to $300,000	8.50%
$300,001 to $400,000	8.25%
$400,001 to $500,000	8.00%
$500,001 to $600,000	7.75%
$600,001 to $700,000	7.50%
$700,001 to $800,000	7.25%
$800,001 to $900,000	7.00%
$900,001 to $1,000,000	6.75%
$1,000,001 to $20,000,000	6.50%
$20,000,001 to$ 22,500,000	6.25%
$22,500,001 to $25,000,000	6.00%
$25,000,001 to $27,500,000	5.75%
$27,500,001 to $30,000,000	5.50%
$30,000,001 to $32,500,000	5.25%
$32,500,001 to $35,000,000	5.00%
$35,000,001 to $37,500,000	4.75%
$37,500,001 to $40,000,000	4.50%
$40,000,001 to $42,500,000	4.25%
$42,500,001 to $50,000,000	4.00%
Over $50,000,000	As Negotiated

(B) Prior to applying any of the modifiers listed below, Agencies shall submit a request to the Section for authorization to negotiate a contract containing these modifiers. The request shall

include a description of the services to be added or deleted and the range the Agency intends to negotiate to.

(1) For simple projects such as warehouses, parking lots, parking decks, agricultural facilities or similar, deduct a minimum of 1% from the fees indicated.

(2) For projects involving the site adaptation of an existing design such as a standard bath house, employee residence, or similar, deduct a minimum of 2% from the fees indicated.

(3) For complex projects such as hospitals, medical or research facilities, laboratories containing extensive amounts of scientific equipment, add a maximum of 1.5% to the fees indicated.

(4) For projects involving the renovation of existing structures where accurate as-built information does not exist, add a maximum of 2% to the fees indicated to allow the design professional to survey the facility and develop accurate plans of existing conditions.

(5) For projects where more intense observation is required to ensure proper execution of the project such as but not limited to; installation of underground utilities, pouring of massive or structural concrete structures, add a maximum of 4% to the fees indicated. Agencies are encouraged to negotiate these additional fees on an hourly rate not to exceed the 4% maximum. These services shall be listed on the professional services under “compensation” as a separate line item entitled “Additional Project Observation”.

2-300 PROFESSIONAL SERVICES CONTRACT DEVELOPMENT

(A) All professional service contracts and amendments shall be submitted on the forms developed and approved by DFA/OSP only. Attachments to these standard forms are permitted and encouraged. All attachments shall be edited to be in compliance with applicable rules and laws.

(B) Contracts may be amended to increase or decrease the fees, to add or replace sub-consultants or modify the terms and conditions at any time during the contract period and may be amended to extend the time annually until the project is completed. However, the contract may not be amended to extend the time beyond maximum limits for professional services contracts as established by laws and the DFA/OSP rules.

(C) All contracts and the selection of the design professional shall be only as approved by the Section , and must follow all ABA MSC rules and OSP rules regarding submission schedules, fees and reimbursable expenses for reporting and tracking unless exempted by law.

(D) All reports, studies, budget cost estimates and the like produced under these contracts shall be submitted to the Section for record in the same manner as plan reviews.

2-301 PROJECT SPECIFIC TYPE CONTRACTS

(A) Agencies are required to use a project specific contract for each capital improvement project where the estimated construction cost exceeds $1,000,000 including contingency cost. These contracts shall not be amended to add additional projects or to increase the scope of the work to add or alter additional buildings, or to make additional improvement to site work or utilities beyond the original defined scope in the solicitation for design service.

(B) Fees for professional services under this type of contract are customarily based on a percentage of the construction cost as established in § 2-211. Fee arrangements other than a percentage fee require written justification submitted to the Section for approval prior to negotiating the contract. Additional services beyond the basic fee may be added as appropriate and as defined in § 2-200.

(C) Agencies may enter into design professional contracts for project specific type of contracts in which the project is less than $1,000,000.

2-302 DESIGN PROFESSIONAL (MULTIPLE PROJECT TYPE) CONTRACTS

(A) In some instances, Agencies may elect to enter into a standard professional services contract with an architect, engineer, or consultant for multiple minor projects or minor projects which are time critical during the contract period. Do not use the phrases “Indefinite Delivery or Open End” when referring to these contracts. The use of these phrases implies that these contracts will not end. State contracts must have a finite term and cost. These types of contracts are referred to as design professional contracts as defined in Arkansas Code Annotated § 19-11-1001.

(B) These types of contracts are to provide professional services for small projects and additions, particularly renovation and maintenance type projects, that do not exceed $1,000,000 in construction cost. These types of contract are also applicable for feasibility studies, programming studies, budget estimates, technical assistance, emergency damage recovery projects and other similar activities involving architectural or engineering expertise.

(C) Fees for each individual project under this type of contract should be based on a percentage of construction cost, lump sum, or an hourly (not to exceed) type contract. Detail statement of work documents or task order assignment documents should be developed for each assignment defining the scope of the assignment, fee arrangement, completion time and deliverables required from the consultant at the time of the project assignment. Fee payments should be closely audited to ensure they do not exceed the maximum allowable fee authorized by the assignment order. Terms for these contracts must remain the same for the duration of the contract period.

2-303 LUMP SUM OR HOURLY FEES (NOT TO EXCEED)

As an alternative to the fees as a percent of construction cost set forth in § 2-211, the Agency may negotiate a lump sum or hourly (not to exceed) fee contract, subject to approval by the Section. The lump sum or hourly (not to exceed) fee should be based on the estimated construction cost, which is applied the percentages set forth in § 2-211 or a lesser percentage figure may be used if the Agency determines that portions of the design work can be furnished by other qualified sources.

2-304 ADDITIONAL SERVICES FEES

(A) Fees for “Additional Services” may be based on lump sum or hourly (not to exceed), unit prices. “Additional Services” fees shall be agreed upon in writing prior to the encumbrance of expense.

(B) Multipliers for additional services may not be used in an attachment to a professional services contract or invoice for services unless approved by the Agency and the Section in the initial standard professional services contract. Design Professionals may include a "multiplier" only where “above normal and lengthy” coordination of the additional services of outside specialized consultants is involved and approved by the Agency. This multiplier shall not exceed 1.10 times actual cost and should be clearly stated in any invoices for payment.

(C) Multipliers shall not be applied to equipment, material, or incidentals furnished to complete a project. Only consultant or personnel charges are applicable.

2-305 MULTIPLIERS FOR REIMBURSABLE EXPENSES

(A) Certain contracts, such as the AIA Document, “Abbreviated” "Standard Form of Agreement Between Owner and Architect", provide for the use of multipliers when computing the expenses incurred by the Architect (Design Professional), his employee, or consultants. Multipliers shall not be used when submitting invoices without the written agreement of the Agency and the Section during the initial preparation of a standard professional services contract. Multipliers up to a maximum of 1.10 times actual expenses for the procurement, coordination, and review of the work required such as legal surveys, geo-technical services, specialized consultants requested by the Agency, and the like, may be used only if acceptable to the Agency and the Section, and are clearly stated and referenced to the standard professional services contract in an attachment.

(B) Reimbursable expenses for material items, printed materials, and reproduction of plans and specifications, testing lab fees, or Agency review fees shall not be billed or invoiced with any multipliers. Invoices are accepted for actual expenses incurred only. Expenses will not be accepted without an invoice.

2-306 ACCEPTABLE/ALLOWABLE REIMBURSABLE EXPENSES

(A) Certain expenses will be incurred during a construction project, which may need to be included in all standard professional services contracts and also included as allowances in the design professional's contract under “Reimbursable Expenses”, such as:

(1) Reproduction of design and bid documents (blueprints, printing, electronic media, cost, and the like). NOTE: These expenses to the Agency are limited to those provided the review agencies during the design review phases of the project, the minimum number of set required to bid the project subject to approval of the Agency, and the minimum numbers of sets to be furnished to the successful contractor (§2-1603). This includes all bid documents, drawings, specifications, addenda, negotiated changes, and change orders. Sub-contractors and suppliers requesting additional copies shall be responsible for all printing and shipping costs. The Design Professional shall furnish documentation of all printing and delivery cost. Acceptable documentation for printing cost shall be an invoice on letterhead or business forms from an outside printing company or service. Invoicing for these services on the design professional’s letterhead only is not acceptable.

(2) Land and topographical surveys.

(3) Geo-technical soils testing services and material testing (soils compaction, asphalt, concrete, and similar testing services).

(4) Agency review fees, (example, Health Department plan reviews.)

(5) Postage and delivery expenses (including overnight or priority shipping when authorized by the Agency) related to transmittal of submittal documents, contracts, pay applications, and correspondence related to the project or contract. Request for reimbursement of these expenses must be accompanied by a receipt from the provider or a photo copy of the envelop showing the address of the recipient and value of postage when using regular mail where a receipt is not otherwise rendered.

(B) Travel Expenses:
(1) Out of state travel expenses, including airfare, lodging, meals, ground transportation, parking and tolls, for in-state design professionals when specifically requested by the Agency. Reimbursement rates shall be subject to the guidelines published by DF&A for out of state travel by state employees.

(2) In state travel expenses, including airfare, lodging, meals, ground transportation, parking and tolls, for out of state design professionals and out of state specialized consultants when specifically requested by the Agency. Reimbursement rates shall be subject to the guidelines published by DF&A for out of state travel by state employees

2-307 UNACCEPTABLE REIMBURSABLE EXPENSES

(A) Professional service contract and/or invoices for services shall not list any of the following as a “Reimbursable Expense”:

(1) Mileage to and from a project site at any time.

(2) Any other connected travel expenses such as meals, lodging, and parking (except for out-of-state travel when specifically requested by the Agency).

(3) Facsimile communications (fax).

(4) Long distance telephone expenses.

(5) In-house computer or CAD time or equipment expense.

(6) Telegrams.

(7) In-house printing or reproductions.

(B) This applies to all design professionals and consultants, including geo-technical consultants, whether in-state or out-of-state. These expenses are considered normal overhead costs covered in the contract agreement, and are not reimbursable expenses.

2-308 PROGRESS PAYMENTS TO THE DESIGN PROFESSIONAL (RENDERING OF COMPENSATION)

(A) While contract requirements may vary greatly, a mutually agreed upon Method of Rendering of Compensation shall be established in the standard professional services contract, under

Section V, "Rendering of Compensation", or in a separate attachment. Compensation may be paid monthly or in stages of completion, but compensation or invoices may not be paid or processed until an Agency has received that portion of work.

(B) In a normal, average construction project, compensation for services and reimbursable expenses may be paid at the end of the following stages:

(1) Schematic Design: Up to 15% of fee (after completion of the Owner/Agency Review).

(2) Design Development: Up to 50% of fee (after completion of the Owner/Agency Review, where applicable).

(3) Construction Documents: Up to 75% of fee (after completion of ABA Plan Review and approval).

(4) Bidding, Negotiations, Award, Contract Administration: Up to 80% of the fee (after issuance of notice to proceed).

(5) Construction Administration through the final inspection and final punch list preparation up to 95% of fee.

(6) Project Closeout: Up to 100% after processing final pay request and project closeout items (Maximum 45 days). (Refer to §3-500 through §3-600)

(C) Any supplemental contracts (such as AIA Owner/Architect Agreements) listed as an "Attachment" to the standard professional services contract shall agree as to language and intent for all compensation, reimbursables, multipliers, and the like, noted.

2-309 PROJECTS WITH FIXED LIMITS OF CONSTRUCTION COST

(A) Where applicable, the Agency and the Design Professional may jointly agree to a fixed limit of construction cost as a condition of a standard professional services contract between the Agency and the Design Professional (or on the project assignment form or letter for projects executed under multiple project type contracts). If such a fixed limit has been established, the Design Professional and the Agency will cooperate to mutually agree with the Section on contingencies for design, bid climate and price escalation, on building program scope, construction materials, equipment, component systems, and types of construction to be included in the contract documents.

(B) The fixed limit of construction cost shall be included with all plan review submittals to the Section. The fixed limit of cost shall be stated in bold letters on the cover sheet of all documents submitted for review. The cost shall be stated in the following manner, "FIXED LIMIT OF CONSTRUCTION COST = (enter dollar amount)." This statement shall be removed from the documents prior to publishing for bids. Budgetary concerns by all parties shall be resolved during program review and the schematic design phase, before the first plan review submittal to the Section.

(C) Where this fixed limit of construction cost is exceeded, the Design Professional shall, without additional compensation, modify the construction documents as necessary to comply with the fixed limit, if provided under the terms of the standard professional services contract.

2-310 PROJECTS EXCEEDING CONSTRUCTION FUNDING AFTER BIDDING

(A) When it becomes apparent, after bids have been opened and reviewed, that the project cannot be awarded because of budget overruns, and that bids exceed the maximum allowed for negotiations pursuant to Arkansas laws, the Design Professional shall initiate the following steps:

(1) Meet with the designated project coordinator of the Agency or campus to review bids, budgets, program, and Owner's needs, within seven (7) working days.

(2) Review project costs with bidders for areas of possible savings or cost reduction. Analyze areas of excessive cost.

(3) Review project with the Agency’s Project Coordinator(s), the Section, and the Construction Section to resolve project status as quickly as possible.

(4) Modify bid documents as approved and directed by all parties and resubmit the bid documents to the Section for review, comments, and approval for re-bidding.

(5) Re-bid project. Coordinate bid date with the Construction Section.

(6) The Design Professional may be required to re-design the project for re-bid without additional compensation. Additional redesigns beyond one (1) re-bid may be eligible for additional compensation subject to the approval of the Section.

(B) Other than reimbursables for printing costs, no additional compensation for re-bidding will be allowed unless approved in writing by the Section.

2-311 OMISSIONS AND ERRORS IN CONSTRUCTION DOCUMENTS

(A) Omissions, or errors, or both in construction documents often arise from unrealistic project schedules, lack of communication, failure to coordinate, review, or edit construction documents accordingly, as well as many other shortcomings in the design and construction process.

(B) The Agency project coordinator should work closely with the chosen design professional to set realistic project schedules which allow time for review and coordination by all parties, particularly during the scheduled ABA plan reviews.

(C) Failure to include necessary construction detailing, lack of coordination in the architectural, civil, structural, mechanical, electrical, and other, portions of the drawings and specifications, may result in costly change orders.

(D) If these change orders are reasonably attributed in whole or part to errors or omissions on the part of the design professional or his consultants, the Design Professional shall without additional compensation (to the degree the change orders are responsibly required because of the errors and omissions of the Design Professional), correct or revise all errors or omissions in its designs, drawings, specifications and other services, and prepare construction change orders to effect corrective work. Good judgment and fair practice should be exercised by all

parties in making these types of decisions. The Section and the Construction Section will review all decisions respectively.

(1) An omission of an item (such as a flagpole inadvertently left out of a set of project bid documents) which would have otherwise been included in the base bid for the project should not be used to penalize the Design Professional. However, if remedial work to the landscaping or concrete paving is needed to allow for installation of the flagpole at a later, less opportune time in the course of construction, then the Design Professional may be held responsible for these remedial costs (assuming the Agency has reasonably documented this requirement during preparation of bid documents for the project).

(2) In general, when additional costs are incurred in a construction project, which are directly attributed to negligent errors or omissions or both on the part of the Design Professional, said Design Professional may be required to bear some or all of the costs for remedial work needed to correct these negligent errors or omissions. The Design Professional should work closely with the Agency and the General Contractor to ensure that all errors or omissions or both are corrected in a timely manner, before any remedial costs are incurred, to contain and reduce change order costs. Errors and omissions should be resolved between the Agency and the Design Professional whenever possible, and as quickly as possible.

(3) The Administrator of the applicable section(s), shall have the authority to settle or resolve disputes concerning errors or omissions in a set of bid documents prepared for any Agency project utilizing professional judgment and accepted standards of care required of Design Professionals.

(4) Any dispute involving negligent omissions, errors, or both not resolved by the Agency and the Design Professional shall be submitted to the Section. Either party may then request a conference review with the Section and the other party to attempt to resolve the issue. Request to the Section shall include but not be limited to a description of the omission or error, all documentation related to the item or items in question, copies of all meeting notes, and correspondence, or instructions referring to the issues in question. The requesting party shall copy all other parties on the request and documentation. All other parties shall submit a letter stating their position on the issue and any additional documentation related to the issue within 10 working days to the Section and copy all other parties. The Section will review the information provided and issue a letter of opinion within 15 working days (30 working days after receipt of the initial request) or request additional information from the parties.

(5) Change Orders required as a result of an error, omission, or both may not be eligible for Design Professional fee compensation. For omissions, the Design Professional may be assessed a percentage of the cost of the change order, subject to the Section approval as determined in § 2-312, to cover the additional cost of the work due to failure to include the work in the original bid package. For an error, the Design Professional may be assessed the full cost of the change order, not as punishment, but in fulfillment of the principal of betterment, that the owner should not be required to pay twice for the same element of construction.

2-312 DESIGN PROFESSIONAL'S LIABILITY INSURANCE

(A) The Design Professional shall carry professional liability insurance covering negligent acts, errors and omissions. Include a copy of the current certificate of insurance as an attachment to the standard professional services contract. The minimum policy value shall be $500,000 except

that the value shall be increased to a minimum of $1,000,000 for projects where the estimated construction cost is between $5,000,000 and $20,000,000. For projects exceeding $20,000,000 in estimated construction cost, the policy value shall be a minimum of 5% of the estimated construction cost. The Design Professional may utilize a Project Specific Professional Liability Policy for projects exceeding $5,000,000 in estimated construction cost. The Design Professional shall be required to disclose the size and nature of all pending claims against his liability insurance during the negotiation phase. The Design Professional shall maintain this insurance in force after the completion of the services under the contract for a period of one (1) year after substantial completion of the construction.

(B) Neither the Section's nor the Agency's review, approval, acceptance of, nor payment for, any of the services required shall be construed to operate as a waiver by the Owner of any rights or any cause of action arising out of the Contract. The Design Professional shall remain liable to the State for reasonable project costs, which are incurred by the State as a result of negligent acts, errors, or omissions, or both on the part of the Design Professional. This liability shall extend to the Prime Design Professional's subcontractors and consultants in the performance of any of the services furnished.

(C) The Design Professional may be held responsible for reasonable project costs resulting from its professionally negligent acts, errors, omissions, or other breaches of the applicable standards of care established by Arkansas laws or regulations. Liability may include, but not be limited to, the Design Professional's own cost of for labor and other in-house cost, any resulting Contractor Change Order cost including demolition, cutting patching, repairs, or modification of work that is already in place. The Design Professional may also be held responsible for any Contractor or Owner delays or damages, and any judgment, fines, or penalties, against the Agency resulting from the Design Professional's professionally negligent acts, errors, omissions, and other breaches of the applicable standards of care.

(D) However, the Design Professional may not be held responsible for the cost of the correct equipment or system which should have been originally specified, except that the Design Professional shall be responsible for any increased cost, whether the result of inflation, reordering, restocking or otherwise of incorporating the corrected work into the Contractor's Change Order

(E) Upon determination that there may be Design Professional financial responsibility involved, the Design Professional shall be contacted by the Agency. The Design Professional shall be advised of the design deficiency, informed that it is the Agency's opinion that the Design Professional may be financially responsible, and requested to provide a technical solution to the problem, including a cost estimate. The Design Professional shall be given the opportunity to take the measures necessary to minimize the consequences of such defects within a timely manner without jeopardizing the integrity of the project. The Agency Project Coordinator shall promptly inform the Section of the issue and shall keep the Section informed until the issue is resolved.

(F) If the Design Professional refuses to cooperate in the negotiations, the Agency shall have the right to proceed with the remedial construction and/or change order negotiations without the Design Professional. Disputes shall be resolved as set forth in the Standard Professional Services Contract.

(G) Alternatively, the Design Professional may discharge its financial responsibility through negotiations with, and direct payment to, the Contractor. This action must be participated in and approved by the Owner. Evidence of the Agency's participation and approval of these negotiations and a description of the corrective action and cost incurred by each party shall be reported in writing to the Section for record.

2-313 OTHER INSURANCE REQUIRED OF THE DESIGN PROFESSIONAL

(A) Prior to the start of any work under the Professional Services Agreement, the Design Professional shall provide to the Agency Certificates of Insurance forms approved by the State and shall maintain such insurance until completion of all work under the agreement.

(B) The minimum limits of liability shall be as follows:

(1) Workers' Compensation: Standard Arkansas Workers' Compensation Policy with statutory requirements and benefits.

(2) Employers Liability: $100,000 minimum.

(3) Broad Form Comprehensive General Liability: $1,000,000 minimum

Combined Single limit coverage. The State shall be named as an additional insured with respect to the services being provided. The coverage shall include but not be limited to premises/operations liability, Products and completed operations coverage, independent contractors liability, owners and contractor's protective liability, personal injury liability.

(4) Automobile Liability**:** Arkansas Statutory Limits

2-314 PROFESSIONAL SERVICES CONTRACT

(A) Selection of architect, landscape architects, interior designers, engineers, land surveyors, and other related building consultants shall be coordinated and verified by the Section. When the Agency has completed the selection process the agency shall prepare a standard professional services contract. All basic compensation items, compensation for additional services, and reimbursable expense items, shall be carefully reviewed by both the Agency and design professional before signing the standard professional services contract. The signature page of this form shall be the only signature page in the agreement. Delete or strikeout the signature pages from all attachments to avoid confusion. Upon request, the Section is available for contract draft reviews between the Agency and the design professional.

(B) For Compensation and Reimbursable expenses, see §2-200 et seq. and §2-300 et seq. Additional services of the Design Professional may be based on a percentage of construction cost, lump sum or hourly fee with a not to exceed amount stated on the contract.

(C) All standard professional service contracts and amendments shall be submitted to the DFA/OSP website. DFA/OSP will forward the contracts and amendments to the Section for review. Contracts or amendments expected to receive Legislative review must have attached appropriate information regarding the contract or amendment. Contracts shall also contain disclosure forms and documents pursuant to EO 98-04. Appropriate information includes but is not limited to: Agency name; project description; construction and Design Professional funds; #

of standard professional services contracts; identify Design Professional and the objectives and scope; Design Professional fees; estimated construction cost; contract control number; amendment compensation with explanation; Design Professional reimbursables with breakdown; contract extension date; name of the contractor; contract amount and change orders. Contracts shall be completed in its entirety prior to submission for review. Particular attention will be given to areas concerning “Calculations for Compensation” and “Description of Services to be provided.

(D) Failure to meet the DFA/OSP submittal schedule for review and approval can cause a delay of 30 days or more for legislative review. All standard professional services contracts $25,000.00 or more require Legislative review. The standard professional services contract form takes precedent over any and all attachments regarding time, funds, and compensation.

SEE LEGISLATIVE UPDATES AT THE END OF SECTION 2

2-315 ATTACHMENTS TO THE PROFESSIONAL SERVICES CONTRACT

(A) Agency and Design Professionals may wish to add attachments to the standard professional services contracts. These attachments may be used to clarify the extent of the professional services, either basic or additional, for the Agency and the Design Professional. When Agencies and Design Professionals wish to add attachments to the standard professional service contract, the following shall be done:

(1) Attachments shall be referenced Attachment "A", "B", "C", or “1”, “2”, “3” and the like, and referenced on the contract under "Objectives and Scope".

(2) Attachments shall be neatly typed additions or the Agency and Design Professional may choose to use the standard American Institute of Architects "Abbreviated Standard Form of Agreement Between the Owner and the Architect", the Engineers Joint Council on Construction Documents “Standard Form of Agreement Between Owner and Engineer”, or other documents approved by the Section. (ABA neither endorses nor rejects the use of these documents.) If these documents are used, they shall be carefully edited to fully agree with the standard professional services contract, Arkansas laws and regulations including the MSC regarding allowable fees, compensation, multipliers, acceptable reimbursable expenses, and the like, and the services to be provided under the contract. Hourly rates and attachments shall remain in place for the duration of the contract, subject to annual or biennial review and negotiations. The language contained within the standard professional services contract shall take precedence over all attachments except the ABA “Basic Services Defined” attachment.

(B) In addition, the ABA "Basic Services Defined" (refer to § 2-201) shall be attached to, or added under the AIA contract, Article 12, "Other Conditions or Services." All contracts shall adhere to the ABA "Basic Services Defined" as a condition of the contract.

2-316 AMENDMENTS TO PROFESSIONAL SERVICES CONTRACT

(A) Any modification to an existing standard professional services contract requires the submission of an "Amendment" for approval by all parties, as per the original contract, including, but not limited to, changes in the project cost and scope of the project, fee or hourly rate adjustment, reimbursable expenses or additional services adjustments, contract extension, funding change (character code), and additional sub-consultants.

(B) The base fee in a standard professional services contract will normally remain constant for the duration of a project. However, if the funding or scope of the project changes significantly enough to reduce or increase the base fee allowed by the ABA Standard Fee schedule (see § 2-211), then the standard professional services contract shall be amended by both parties to reflect the new base fee agreement, and submitted for approval.

2-400 PROCEDURES FOR PROJECT DEVELOPMENT AND CONSTRUCTION
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2-401 INITIATION OF PROJECT

(A) Many projects begin with a needs analysis and planning for the acquisition of property or space to be developed or renovated. For major project, this process begins months or years before a budget and appropriation request can be prepared. In conjunction with the Department of Finance and Administration, the Section reviews the capital project appropriation requests submitted for funding each biennium. Often, these request are insufficient to cover the total cost of construction desired once funded and approved for bidding. The Section is available to assist Agencies in this long term planning phase to help ensure that adequate space or funding is requested.

(B) As a part of the needs assessment and budgeting process, agencies often conduct or have performed certain studies or exercises such as feasibility studies, building space or systems programming studies, financing and contingency budgeting. While some agencies may have adequately experienced staff to perform these initiatives, others may not. The Section is available to assist with these activities or to assist the Agency with the selection of outside consultants specializing in these types of services.

(C) An Agency may initiate a pre-design study before developing a capital project budget request or after the project has been funded. The intent of the pre-design study is to reduce the amount of uncertainty related to the scope of the project, identify major project/funding milestones, selection of the proper delivery method for construction, establish project costs, and project timelines. While it is best to conduct such studies before a budget request is finalized, there may be significant advantage to applying such studies to projects which have already been funded to ensure that the project remains in the existing budget, meets the minimum program needs and is executed in a timely manner. Pre-design studies may include but are not limited to activities such as project analysis, program analysis, site analysis, preliminary cost projections or existing budget analysis, operations and maintenance impact analysis, staffing analysis and development of preliminary scope of work for the design process. Agencies may utilize their own staff in the production of this study or may use outside consultants for all or part of the study. The Section is available to assist with these activities or to assist the Agency with the selection of outside consultants specializing in these types of studies. It is not necessary to use the same design professional who prepares a pre-design study to perform the design phase of the project. These activities can be mutually exclusive of each other. By the same measure, preparation of a pre-design study or other pre-design service does not exclude a design professional from seeking a contract for the design phase of the project.

(D) During the initial phase of the project design, Agencies shall review whether revisions to the Comprehensive Annual Financial Report (CAFR) should be made. Determinations of whether to add new asset equipment or remove old asset equipment from the report shall be made. In

addition the project plans and specifications shall designate how assets will be disposed of and who shall bear the responsibility of the disposition.

2-402 FEASIBILITY STUDY REQUIREMENTS

(A) A feasibility study may be required to determine the initial building program needs, property requirements, probable construction cost and site improvement costs. The study may include but not be limited to other non-construction cost such as financing cost, design service fees, equipment cost, furnishing cost, and contingency cost in order to determine if a project is economically feasible and if adequate source of funding is available.

(B) The feasibility study should determine site selection needs, such as property size, zoning, utilities, acquisition costs, floodplain management, drainage costs, environmental review, pedestrian and vehicular access, parking needs, and storage needs as applicable. Building size and area requirements for all functions including the electrical, lighting, heating, cooling, and building system requirements should be addressed. Estimated construction, operation, and utility costs based on square footage and specific development costs, should be computed. Operational and staffing cost for security, maintenance, janitorial and building operators should be included on a cost per square foot basis as a part of the study. The study should include a brief discussion of the requirements and possible solutions for each area along with a line item cost estimate for each area. Consideration should be given to future expansion capabilities in all cases. The feasibility study should be used as a basis to help establish funding and to guide the Agency's Project Coordinator in selection of, and directing the work of, the appropriate Design Professional.

(C) Design Professionals shall be selected in accordance with the MSC (refer to § 2-100 et seq.). The Agency shall obtain approval from the Section prior to initiating a feasibility study with outside consultants or design professionals.

2-403 PROGRAMMING

(A) Unless otherwise negotiated, basic programming costs for a project are not covered under basic services provided in a standard professional services contract. The Agency shall provide the Design Professional with a minimum program of all project requirements, including site and building requirements, a program of required spaces, their approximate size or square footage, and all needed functions required for the building or project site, including all basic electrical, lighting, heating, cooling, and building system requirements. This information should be provided prior to negotiating a contract with the Design Professional. Copies of this information shall be included in the plan review submittal to the Section for informational purposes.

(B) If the Agency cannot provide a minimum program as described above, the Agency may include under "Additional Services" to standard professional services contract, a "not to exceed" cost for programming. This should be invoiced per the number of actual hours spent in preparation of the program, up to the "not to exceed" cost stated in the contract. The Agency should only incur this expense with the approval of the Section.

(C) When programming is provided by the Agency, review and needed corrections and compilations to the overall building program for site analysis, the addition of circulation space, mechanical equipment space, ancillary and storage space, and the like, as well as review and coordination of all electrical, lighting, heating, cooling, and building system requirements, shall

be considered part of the Schematic and Design Development Phase furnished under basic services, unless otherwise approved by the Section. A copy of the program approved by the Agency Project Coordinator shall be included in the Plan Review submittal to the Section.

2-404 FINANCING AND CONTINGENCY BUDGETING

"Authorization to Proceed" with the project will be given to the Agency concerned, providing appropriate funding is available for the project. It is recommended that all cost estimates for construction, all projected building costs, and all methods of finance include a contingency fund. Contingency funds should be used to offset inflation, unforeseen expenses, and/or cost overruns on construction projects. Items that could or may be covered by a contingency fund are unexpected utility work or relocation, damaged roof decking replacement, rock excavation, and the like. Contingency funding normally should not exceed 10% and should depend on the cost and complexity of the project, with a proportionately smaller amount as project budgets increase. While 5 to 10 percent may be necessary on low cost projects, this percent may be excessive on higher cost projects (1-1/2 to 2-1/2 percent may be sufficient). Overall building budgets should be reviewed with the Section, and the Design Professional chosen to perform the work. Contingency funds are not set up to cover the cost of errors in design and construction by the Design Professional, or for lack of coordination on their part, which requires remedial work during completion of construction. Refer to § 2-311 for Errors and Omissions.

2-405 PROJECT COORDINATOR

(A) The Agency shall assign a Project Coordinator. Name and position of Project Coordinator shall be submitted to ABA, on a form approved by ABA, for record with the First Review submittal. Project Coordinator shall not be changed without written notice to the Section.

(B) The responsibilities of the Project Coordinator shall cover the following:

(1) Allow the Agency to work closely with the Design Professional.

(2) Cooperate with the Section in all design and budget decisions, including compiling and

approval of the Agency's program for the project and approval of the estimated construction cost at each plan review submittal.

(3) Help make decisions regarding programming and operational restraints to best benefit the Agency and to bring the scope of the project within the estimated construction cost as submitted by the Design Professional and approved by the Agency.

(4) Be aware of the project status at all times. Attend all meetings and keep records accordingly.

(5) Keep the Agency Director advised as to the project progress at all times.

(6) Maintain adequate records of the project for future use, including plans, specifications and record drawings.

(7) Serve as the Agency primary contact regarding all matters concerning the Capital Improvement Project.

(8) Pre-review all submittals from the Design Professional prior to forwarding to the Section for review. The Project Coordinator shall ensure that all submittals meet the project requirements as defined for the Design Professional and as required for an ABA submittal (refer to § 2-1500 et. seq.).

(9) The Project Coordinator shall forward all submittal data to the Section along with any comments or supplemental instructions issued to the Design Professional. If the Agency has no comments to forward, the transmittal letter should so note and should include a statement to the effect that the submittal generally meets the scope of the project as defined to the Design Professional and that the estimated construction cost is within the established budget for this project. Ensure that all submittals are forwarded to ABA in the order that meets the Agency's priority needs. This will prevent ABA from reviewing a low priority project that has been submitted directly by the Design Professional.

(10) The Project Coordinator shall receive and review all comments regarding the submittal review by the Section and shall be responsible for distribution of these comments to all appropriate parties. The Project Coordinator shall ensure that the Design Professional responds to all comments in writing and notify the Design Professional and the Section in writing if he disagrees with a comment or a response. Responses shall be included with the next submittal package. It is acceptable and encouraged to include the direct responses from the Design Professional to the ABA comments. It is the Project Coordinator's responsibility to ensure that each comment is addressed and to his Agency's satisfaction before submitting responses to the Section.

2-406 BUILDING CODES ADOPTED

(A) The adopted building code for State projects is the Arkansas Fire Prevention Code as adopted by the Arkansas State Police, State Fire Marshall's Office. Arkansas laws and ABA Minimum Standards and Criteria shall have precedence over the Arkansas Fire Prevention Code where they exceed the requirements of that code. All project designs shall comply with all Arkansas laws and the Arkansas Fire Prevention Code.

(B) Other codes, rules or standards may be applicable to a specific project. It is the Agency's and Design Professional's responsibility to determine all applicable codes for each specific project. A partial listing of the more common codes applicable to state agency projects can be found on the ABA website at "www.arkansasbuildingauthority.com".

(C) The Section shall reference these codes, State Law, and the ABA Minimum Standards and Criteria in its review of documents presented for review.

2-407 REGULATORY AGENCIES' REVIEW

(A) In addition to reviews completed by the Section, design professionals are encouraged to work closely with municipal building officials and/or fire chiefs throughout the planning stages of State funded capital improvements. It is recommended that such municipal authorities be given the opportunity to review such plans to coordinate zoning, parking, and street utility and fire department requirements (specific fire protection, building access, fire lane, and the like requirements). Special requirements may be needed according to available equipment and fire-fighting/emergency procedures. Coordination with and review by the local fire official is a mandatory requirement.

(B) The Design Professional shall be responsible for coordinating a project directly with these regulatory agencies, independently from the Section, allowing adequate time for plan reviews and approval before submitting final plans to the Section for review. The Project Coordinator shall submit copies of all regulatory review Agency comments, waivers, variances and instructions regarding the project, including local fire official reviews, with the ABA plan review submittal.

(C) The following is a partial list of the regulatory agencies mentioned above which have adopted design and/or construction standards and may require pre-construction plan review and approval. Design professionals should request copies of all acts, laws, and adopted standards from these individual agencies. This listing is not exclusive of any other Agency, which may under special circumstances exercise design authority.

(1) Department of Health:

(a) Division of Plumbing and Natural Gas (plumbing systems, domestic water, septic design, swimming pools, and the like);

(b) Division of Radiation Control & Emergency Management (X-ray, nuclear medicine, installation or safety evaluations);

(c) Division of Sanitarian Services (kitchens, restaurants, and the like);

(d) Division of Engineering (waste water systems, water systems and districts, cemeteries, swimming pools, and the like);

(e) Division of Health Facility Services (hospitals, health units, and the like).

(2) State Police: State Fire Marshall (fire code review, life safety, and the like);

(3) Department of Labor (elevator safety, including inclined stairway chairlifts and vertical wheelchair lifts, boiler inspection, industrial hygiene, OSHA reviews);

(4) Department of Environmental Quality: (Resources Conservation and Recovery Act of 1976 when Federal funding exceeds $10,000; Storm Water Pollution Prevention Plan for disturbed sites in excess of 1 acre, asbestos issues and other required environmental reviews);

(5) Division of Services for the Blind of the Department of Human Services (vending facilities in state owned or leased properties);

(6) Highway and Transportation Department (highway access, right-of-way design). Contact local district headquarters' engineer;

(7) Office of Long Term Care within the Division of Medical Services of the Department of Human Services, (long term care facilities/nursing homes);

(8) Arkansas LP Gas Board (review/inspect rural installation of LP storage tanks and gas meters);

(9) Arkansas Industrial Development Commission, Energy Division, (Arkansas Energy Efficient Standards for New Building Construction);

2-408 UNACCEPTABLE DESIGN CONFIGURATIONS

(A) Certain configurations have proven too expensive or result in excessive maintenance activity or utility costs.

(B) These following configurations shall not be accepted for use in State owned building designs unless they are submitted for approval in writing to Section, prior to the schematic design review submittal to the Agency. A copy of the approval letter from the Section shall be included with the plan review submittal to the Agency and with the final submittal to the Section.

(1) Pedestrian or vehicular circulation (other than for maintenance) on roofs of habitable spaces or support spaces such as pedestal pavers, on a plaza, over occupied spaces, shall not be accepted.

(2) Sloped glazing (except for Greenhouses), such as ridge or sloped skylights, which increases heating and cooling capacity requirements.

(3) Rooftop mounted, heating or cooling units and associated piping and/or ductwork, which increases foot traffic, roof penetrations, maintenance requirements, and re-roofing costs.

(4) Seismic Design Upgrades for Existing Buildings in Seismic Design Categories D and E: Upgrades of existing structures involved in additions, alterations, or retrofitting in Seismic Design Categories D and E shall be submitted for approval prior to beginning Schematic Design. Design changes required by failure to follow this procedure shall be the responsibility of the Design Professional.

(5) Buildings located in the Floodplain: All additional design requirements associated with building in a Floodplain shall be submitted to the Section prior to beginning Schematic Design. The additional cost of design changes required by failure to follow this procedure shall be borne of the Design Professional.

(6) Air-conditioning systems which do not meet the requirements of the Arkansas Mechanical Code or the Energy Code for ventilation air. This includes systems which, when set to meet this standard, will be operating outside of their intended design parameters and will result in a reduced life expectancy for the equipment.

2-409 PHASED PROJECTS

(A) Where a project size or complexity requires funding in stages and takes many years to complete, the Agency and Design Professional shall take the following steps in ensure project completion in a timely and prudent manner:

(1) Be aware that future funding is subject to termination.

(2) Work to the budget established in the funding for each phase or portion of the project.

(3) Establish a building program for the established budget for each phase only.

(4) Base all work in the schematic design and design development and construction bid documents, for the funded portion of the project only. Do not obligate the Agency for design services beyond the project funding limits. Any authorization for Design Professional services beyond available funding must be approved in writing by both the Section and Agency officials.

(5) Do not bid or obligate funding for partial construction, such as slab work only, for a project, which will be unused, and of no value until future funding is established for completion.

(6) Coordinate project requirements as to master planning, funding, and program review in the Schematic Design Review Plan Review submittal to the Agency.

(B) Agencies are required to disclose the estimated cost, scope and timeline including all phases in accordance with Ark. Code Ann.§19-4-1402. When it is determined that at project will be constructed in multiple phases, the Agency shall submit a statement to ABA describing the estimated scope of the capital improvement project, a description of the estimated timeline for implementing each phase of the project, and a breakdown of the estimated cost of the total project showing each phase's cost. The statement shall bear the signature of the Agency Project Coordinator or other authorized Agency Official. This statement shall accompany the first submittal to the Section and shall be updated if the estimated scope, timeline or costs change prior to the approval to proceed with the first phase of the work. The statement shall be updated and re-submitted with each subsequent phase submitted for the Section review.

2-410 PROJECT SCHEDULE

(A) Prior to commencing the design work, the Project Coordinator shall submit to the Section a projected "Project Schedule" developed in conjunction with the Design Professional, which shall include the following anticipated dates:

(1) Date of schematic design plan review submittal to the Agency.

(2) Date of design development plan review submittal to the Agency.

(3) Date of construction document plan review submittal to the Agency.

(4) Date of 100% complete plan review submittal to the ABA Section.

(5) Dates for bidding and construction start and estimated completion date.

(B) Upon submittal of this schedule, the Section will assign a project number to the project. This number should be referenced on all correspondence and shown in a prominent location on the cover sheet of plans and specifications submitted for review. If the Agency desires to have this project number assigned at an earlier time for its internal tracking purposes, the Agency should submit a written request to the Section indicating the official title the project will be listed under, the name of the design professional (if known at that time), the estimated budget for the project, and a brief description of the project. For ABA tracking purposes, the name of the project shall remain the same through the completion of the construction phase of the project.

(C) When it becomes apparent that the schedule must be altered, the Project Coordinator shall submit a revised schedule to the Section immediately.

2-500 BUILDING COMMISSIONING

Commissioning is a systematic process of designed to ensure that building systems perform interactively according to the design intent and the Owner's operational needs. This is best achieved beginning in the design phase by documenting the design intent and continuing through construction, acceptance, and the warranty period with actual verification of performance, operation and maintenance (O&M) documentation verification and training of operating personnel. When properly performed, commissioning can often reduce the overall cost of a project, reduce the time required to complete a project, increase the quality of a project and increase the probability of a successful startup of a project. These cost reductions and quality improvements often exceed the cost associated with the commissioning process.

2-501 NEED FOR COMMISSIONING

(A) Today's buildings and our expectations in their performance are becoming increasing sophisticated. Like any sophisticated machine, a building should be set-up and balanced to operate properly and may require a periodic tune-up to remain operating at peak efficiency. Agencies are encouraged to consider the concept of total building commissioning on new construction projects and major renovations. Commissioning when applied from the beginning of the design process and continuing through the warranty period can result in projects that cost less to construct, startup with fewer problems, and have proper documentation for operations and maintenance. In many cases, the cost of the commissioning process is offset by a reduction in construction cost, change orders and startup problems.

(B) With utility cost and maintenance cost escalating at rates above the average rates of growth in the State's economy, reductions in operations and maintenance cost are an essential part of an agency's obligations to being a good steward of public funds. Commissioning can be a vital part of the process of controlling these costs within an acceptable limit. In many instances including existing buildings, the cost of the commissioning process can often be returned in 2 years or less with the reduction in energy cost alone.

(C) When agencies elect to pursue green building design certifications such as Leadership in Energy Efficient Design (LEED), Green Globes or similar certifications, these processes usually have a prerequisite requirement to perform fundamental commission and offer addition points toward certification for additional or total commissioning. These programs often require the commissioning for points to be conducted by an independent third-party firm.

2-502 TYPES OF COMMISSIONING

(A) Commissioning is a systematic process of ensuring that building systems perform interactively according to the design intent and the Agency's operational needs. This is achieved beginning prior to the design phase by documenting the Owner's program requirements. The process is continued through the design phase by documenting the design intent and through construction, acceptance and the warranty period with actual verification of performance, operation and maintenance documentation verification and the training of operating personnel.

(B) Re-commissioning is the process of re-verifying the performance of building systems that have been commissioned previously to ensure the systems continue to operate according to the design intent or current operating needs. Re-commissioning may be initiated periodically or in response to a building renovation or a change in building usage.

(C) Retro-commissioning is the process of commissioning existing building systems that were not commissioned when originally constructed. It is a process to ensure building systems perform interactively according to the design intent and/or to meet the Agency's current operational needs. This is achieved by documenting the design intent where possible and the current operational needs, measuring the existing performance, implementing necessary operational and system modifications followed by actual verification of performance, operation and maintenance documentation verification and the training of operating personnel.

(D) Testing, Adjusting, and Balancing (TAB) is a form of commissioning that can apply to mechanical and electrical systems in a building. TAB is routinely specified in the construction project as a portion of the mechanical work in the technical specifications sections. Many specifications require the TAB specialist to be the supplier of the air devices or the controls vendor. The intent behind this type of specification is to require someone with a working knowledge of the air devices or the controls to be the TAB technician. In this approach, the TAB technician is a sub-contractor that is not directly responsible to the Agency.

2-503 COMMISSIONING AGENT

(A) The relationship of the commissioning agent or the TAB technician to the Agency is critical to the success of the project. The commissioning agent should be under direct contract to the Agency and should act as the Agency's representative during the design and construction phases of the project. This direct relationship allows the commissioning agent to freely express ideas concerning design changes that will enhance the project goals and in reporting the correct status of the project construction and operation of the system components. During the training and documentation phase, this direct relationship allows the commissioning agent to objectively evaluate the training and documentation to ensure that adequate time and preparation is provided to meet the Agency's expectations. While many small projects may be adequately handled by the concept of a TAB technician as a sub-contractor even these types of projects may be better served by the inclusion of an independent commission agent.

(B) Commissioning agents are typically professional engineers who have developed the specialty expertise necessary to advise and evaluate construction for defects and omissions and to provide or oversee the startup and the testing and balancing of systems and components. Commissioning agents also understand the documentation necessary to properly own and operate a building and understand the technical and operational parameters of a building well enough to oversee the training of the Agency's operating personnel. While professional registration is not always a requirement or necessity; it is a desirable qualification when considering the total building commissioning concept. It is desirable to find a firm or team that contains professional representation in all of the critical building trades. Commissioning agents and TAB consultants shall be considered as specialized engineering consultants and as such shall be selected and contracted in the same manner as engineering consultants. (Refer to §2-100). The Commissioning Agent or TAB consultant should be selected before or at the same time as the building design team. The Commissioning Agent's contract and the Design Professional's contract should clearly define the role the agent will have as the Agency's representative.

(C) The building Design Professional's contract should clearly acknowledge the role of the Commissioning Agent. The Agency is responsible for coordinating the two contracts. To make one contract subordinate to the other would make the process less effective.

2-504 SUBMITTAL REQUIREMENTS

Commissioning plans and specifications that are developed as a part of a commissioning project must be submitted to the Section for review and approval prior to issuing to the construction contractor. Input from the commissioning agent during the design phase should be carefully documented to evaluate the validity of recommended design changes. These changes should be included in the plan review submittals under the heading "Commissioning Agent's Recommendations". The activities of a Commissioning Agent may affect the progress or schedule of the building construction project particularly where defects or omissions are discovered. The construction bid documents should acknowledge the presence of an independent commissioning agent on the project and should clearly define the role of the agent and the responsibilities of the contractor to the agent as an authorized representative of the Agency.

2-600 ASBESTOS SURVEYS AND MANAGEMENT PLANS

It shall be the policy of ABA that State owned buildings be surveyed for asbestos containing materials (ACM) before demolition or construction work begins or where otherwise required by State and Federal laws and regulations. Even if no demolition or construction work is planned; ABA encourages operators of state owned buildings to obtain a survey for asbestos. The survey report should be used to make building maintenance/service personnel or interested building occupants aware of the location and condition of the ACM. A management plan for each surveyed building should be developed in accordance with federal guidelines and industry practices.

2-601 ASBESTOS PROJECTS GENERAL

The Arkansas Department of Environmental Quality (ADEQ) regulates activities related to Asbestos Containing Materials (ACM). Refer to ADEQ Regulation 21 for the State's policy and procedures related to ACM. Inspection and design of abatement materials or projects shall be performed only by persons properly licensed by ADEQ when the activity or quantity of materials equal or exceed the limits regulated by the Department. Certain activities involving quantities below the ADEQ threshold may regulated under OSHA regulations for worker protection. These activities must be performed by personnel properly trained and certified for this activity pursuant to Ark. Code Ann. §20-27-1001 et seq. It may be in the agency's best interest to have such activities performed by a licensed abatement contractor prior to the general construction activities

2-602 ASBESTOS PROJECTS SUBJECT TO ABA REVIEW AND APPROVAL

(A) When an Agency contemplates an asbestos abatement project wherein a separate abatement contractor and the estimated cost of the abatement contract exceeds the limits shown in § 3-101, this type of project shall be considered a capital improvement project and shall fall under the jurisdiction of ABA.

(B) For stand alone type projects, plans and specifications (for the abatement project and the replacement materials) shall be submitted to the Section for review and approval. These projects shall be subject to the bidding requirements under Section 4.

(C) For projects wherein the asbestos abatement is included as a part of the general construction bid package, the plans and specifications must be submitted to ABA for review as a part of the general construction review documents and those services listed in above in (B) are applicable. The asbestos consultant should be under contract to the prime Design Professional as a sub-consultant.

2-603 ASBESTOS CONSULTANTS

Unless adequately trained, experienced, and licensed personnel are employed by an Agency, ABA recommends that private sector licensed asbestos consultants be utilized to survey, investigate, prepare abatement documents, and monitor abatement activities. Asbestos consultants shall be considered as design consultants and as such may be hired in accordance with §2-101 and State law governing procurement of consulting contracts. Asbestos consultants shall be licensed and bonded pursuant to Ark. Code Ann. § 20-27-1001 et seq. which mandates the Arkansas Department of Environmental Quality with the authority to license asbestos abatement consultants and asbestos abatement contractors as well as for certifying air monitors, contractor-supervisors, inspectors, management planners, project designers, and workers involved with demolitions, renovations, and asbestos-response actions.

2-604 PLAN REVIEW SUBMITTALS

For projects subject to ABA approval, before a bid date is provided, these documents shall be reviewed and approved by the Section. A designer who is properly licensed by ADEQ shall prepare the bid documents for asbestos abatement projects. The designer's license number must appear on the cover sheet for projects submitted for review.

2-605 PROJECT SUPERVISION AND MONITORING

Abatement contractor activities should be adequately supervised and monitored by the asbestos consultant. The frequency of inspections and type of air monitoring shall be as established by State and Federal laws and regulations. On abatement projects occurring in occupied buildings, supervision and monitoring of the abatement work should be more intense, as dictated by the particular project circumstances.

2-700 FLOODPLAIN MANAGEMENT PROGRAM STANDARDS

It shall be the policy of ABA and its Council to assure that all state properties coming under ABA jurisdiction shall comply with the Floodplain Management Program.

2-701 AUTHORIZATION

(A) The Section shall review all capital improvement projects to determine whether the proposed development will be reasonably safe from flooding. If the proposed site is within a flood prone area, a development permit shall be submitted and approved prior to releasing the project for bidding or construction.

(B) All requests to the Section for variance from these guidelines shall be submitted through the Arkansas Natural Resources Commission to the Federal Insurance Administrator. ABA shall provide all available technical assistance concerning the flood management program to all requesting state agencies. ABA shall cooperate with the Arkansas Natural Resources

Commission, the Federal Insurance Administrator and with all agencies in implementing an effective flood management program. Flood hazard boundary maps may be examined at ABA or the Arkansas Natural Resources Commission or in some cases, in the local Soil Conservation Service Office. Maps are also available at the FEMA website, www.FEMA.gov.

2-702 DEVELOPMENT SUBJECT TO PERMITTING REQUIREMENTS

(A) Developments subject to the ABA floodplain management program include but are not limited to; improvements to or new construction of buildings, structures, mining, dredging, excavating, drilling operations, filling, grading, paving, landscaping, or storage of equipment of materials.

(B) New project sites should be carefully selected to avoid development in a known floodplain, flood hazard area or wetland. Prior to selecting a site the Agency should review all available data and consult with the Section to minimize the impact of developing in a floodplain on the project.

(C) Renovation or alteration project sites should be reviewed to determine if the site is in a known floodplain. While interior renovations and roofing projects may not necessarily require a floodplain development permit, the expenditure of funds on projects located within a floodplain may not be a wise use of public funds. Additionally, if the project site is located in the floodplain, the Agency should discuss this finding with its insurance risk management representative to ensure that the existing facilities are adequately covered for flood damage or loss.

2-703 PROCEDURES

(A) Any Agency considering the development of any construction project or wishing to enter any existing structures in participation in the National Flood Insurance Program, shall adhere to the following procedures:

(1) Submit the exact location and a brief description of the project to the Section.

(2) The Section will locate the project on the applicable flood hazard boundary map and advise the submitting Agency as to whether:

(a) The project is not in a flood management area and they may proceed without further consideration of the ABA flood management program.

(b) The project is in a flood management area, but is a conforming use and they must comply with ABA flood management program guidelines.

(c) The project is in a flood management area and is a non-conforming use. In this case, the submitting Agency may relocate the project so that it does conform, or may apply for a variance using the procedures outlined in these standards.

(B) The Section shall review proposed development to assure that all necessary permits have been received from those governmental agencies from which approved is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972.

(C) Failure to comply with the provisions of the ABA floodplain management program may result in the loss of Federal or State disaster assistance for the recovery and reconstruction of flood damaged facilities. Furthermore, under circumstances of repeated loss, the Agency and the State may be denied Federal funds for other programs or activities.

(D) Agencies are encouraged to prepare, or have prepared, scaled maps of their campus or site showing all man made features and the boundary of any floodplain on the property. Where base flood information is available, the elevations of the base flood and existing structures should be noted. This information is critical in the planning of future developments at the site. If the Agency has such information prepared, a copy shall be provided to the Section for record.

2-704 PERMITS

(A) When an Agency proposes to develop property within the boundaries of the 100-year floodplain or an ABA designated flood hazard area, the Agency shall submit an application for a development permit on a form approved by the Section. The form shall include but not be limited to the following information:

(1) Application number (Agency Project Number issued by the Section)

(2) Date of application

(3) Name of the Agency/Owner of the property

(4) Address of the development site (or legal description if an un-developed site)

(5) Type of development
(6) Brief description of the development

(7) Base flood elevation at the site

(8) Elevation of the lowest floor of the proposed structure

(9) Acknowledgement of attachments to the permit application

(10) Typed name and phone number or the applicant and signature and date.

(B) The Agency should attach all information pertinent to the application that will support the application. Such attachments should include but are not limited to:

(1) A copy of the FEMA map for the project site with the exact location of the project site marked.

(2) Copies of other regulatory agency permits such as those required under Sections 401 and 404 of the Federal Water Pollution Control Act and Amendments.

(3) Elevation Certificates

(4) Certification of No Increase in the Base Flood Elevation or no rise certificate

(5) Flood-proofing certificate

(6) Certification for water supply systems, sanitary sewer systems and on-site waste disposal systems.

(7) Notification of the alteration or relocation of a watercourse.

(C) The Section shall review the permit application and approve or disapprove the application. Requests for additional information may be made in conjunction with the initial review of the application.

(D) If the application is approved, the floodplain administrator will issue a development permit for the design phase of the project. A copy of the permit shall be posted at the project site during the construction and available for review by ABA or any other regulatory agency during normal business hours at the site.

(E) At the completion of the project but prior to final acceptance, ABA will review the development site to verify compliance with the permit requirements. The floodplain administrator will sign off on the permit signifying that the development complies with the permit requirements. If non-compliant work or construction is discovered, the Agency shall make the necessary corrections for compliance or the project will be designated as a non-conforming use site under the ABA floodplain management program.

(F) In riverine situations, the Agency shall notify ABA, adjacent communities, and the State NFIP Coordinator at the Arkansas Natural Resources Commission prior to any alteration or relocation of a watercourse, and submit copies of such notifications to the Federal Insurance Administration. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained. This assurance shall be accompanied by and engineering study of the before and after conditions and shall have been prepared by a registered professional engineer.

2-705 FEMA MAP DESIGNATIONS AND TYPES

(A) FEMA is the official source for all floodplain maps used in the ABA floodplain management program. FEMA began publishing flood hazard boundary maps for the United States in 1977. These early maps were constructed from information obtained from other sources such as the Army Corps of Engineers, US Geologic Survey Services, US Soils Conservations Service and other available sources. In some instances the data used to compile these source maps had not been updated in many years. In many parts of the State, these older maps are still the effective maps in use.

(B) FEMA regularly reviews these maps and will issue updated maps periodically when new or better flood study information is available. These maps will be designated by a community panel number and an effective date. Some maps will be designated as Flood Hazard Boundary Maps (FHBM), Flood Insurance Rate Maps (FIRM), Special Flood Hazard Areas (SFHA) or other designations.

(C) Maps are issued in several formats. Some older maps will be printed on ledger size paper (11”x17”) and are commonly referred to as “plates”. Larger format maps are printed and folded much like a road map and are commonly referred to a “panels”. Newer maps are being issued

in an electronic format and are referred to as a “DFIRM” or digital map. Some maps are available for viewing and or purchasing at the FEMA website (www.fema.gov).

(D) Due to the methodology of producing the original maps and the incorporation of better information from actual field studies, sometimes property which is shown in a known floodplain may actually be at an elevation that is above the established base flood elevation. In these instances, the Agency or owner may submit an application to FEMA to have the property in question removed from the floodplain for insurance purposes. FEMA evaluates these applications and may issue a letter of map amendment (LOMA) or letter of map revision (LOMR). The actual map panel may not be redrawn to reflect this change until the next scheduled revision.

(E) Some maps or portions of maps will show a floodplain boundary but will not show the elevations of the base flood. In these cases, the Section may determine the approximate base flood elevation by one or more of the following methodologies; contour interpolation, obtain a base flood elevation determination from another authoritative source, review of high water marks from previous flood events, review of flood studies prepared by other government or private agencies. In the absence of a base flood elevation determination by FEMA, the Section determination will be the official determination for that specific site.

(F) Some maps or portions of maps will show a floodplain boundary with base flood elevation data but will not indicate a designated floodway. In these cases, the Section will use the established base flood elevations and may designate a portion of the floodplain as a floodway for the purpose of regulating the development in the floodplain. The area selected and designated a regulatory floodway shall be based on the principle that the area chosen for the regulatory floodway must be designed to carry the waters of the base flood, without increasing the water surface elevation of that flood more than one foot at any point in the floodplain. The ABA designated floodway will be the official determination for that specific project site.

(G) Some areas of the State have not yet been mapped by FEMA for flood hazard areas. When a project site falls within an unmapped area, the Section will determine if the project site is located within a potential flood prone or hazard area. When the project site is determined to be in a flood hazard area, the Agency shall be required to relocate the project outside of the ABA determined hazard area or to provide an engineering study to verify the site will not be in a 100-year flood hazard area.

2-706 GENERAL REQUIREMENTS

(A) Encroachment, including fill, new construction, substantial improvements, and other development are prohibited within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses, performed in accordance with standard engineer practice that the proposed encroachment would not result in any increase in flood levels within the floodway during the occurrence of the base flood discharge. Engineering analyses shall be prepared by a registered professional engineer.

(B) Except in unnumbered Zone “A”, until a regulatory floodway is designated, no new construction, substantial improvements, or other development (including fill) shall be permitted.

(C) Notwithstanding any other provisions, encroachment may be permitted within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the

requesting Agency first applies to FEMA for a conditional FIRM and floodway revision, fulfills the requirements for such revisions as established under the provisions of NFIP Regulations, Section 65.12, and receive the approval of the Flood Insurance Administrator.

(D) Construction of new structures or substantial improvements to existing structures are prohibited within the floodplain unless it has been demonstrated through hydrologic and hydraulic analyses, performed in accordance with standard engineer practice, that the proposed construction would result in an increase in flood levels of less than 1-foot within the floodplain during the occurrence of the base flood discharge. Engineering analyses shall be prepared by a registered professional engineer.

(E) Adequate drainage paths around structures on slopes are required within the floodplain to guide floodwaters around and away from proposed structures.

(F) New structures or modifications and equipment installed within a floodplain shall be installed using methods and practices that minimize the potential for damage or loss due to flooding.

2-707 ELEVATION REQUIREMENTS IN FLOODPLAINS

(A) Elevation of the lowest floor level for structures and the elevations of equipment pads for equipment located in the floodplain shall be as show in this paragraph.

(B) Where no FEMA map exists and the project site is located in a flood-prone area, the minimum elevation shall be 2 foot above adjacent grade.

(C) Where a FEMA map exists but no base flood elevation data is provided within 500 feet of the project site location, the minimum elevation shall be 2 foot above the base flood elevation established by ABA.

(D) Where a FEMA map exists but no base flood elevation is provided at the project site and a base flood elevation is noted within 500 feet of the site or a base flood elevation is obtained from another authoritative source such as a Corps of Engineers study or Highway Department study, the minimum elevation shall be 1 foot above the base flood elevation accepted by ABA.

(E) Where a FEMA map exists and a base flood elevation is provided at the project site, the minimum elevation shall be 1 foot above the elevation shown on the map, in the flood insurance study if available, or as interpolate between elevations shown on the map.

2-708 RECOMMENDED DEVELOPMENT TYPES IN A FLOODPLAIN

(A) While it is strongly desirable to prohibit development within the floodplain, ABA recognizes that there are beneficial developments that, when constructed properly, can provide vital public spaces while minimizing the potential for damage or loss due to flooding. Agencies are encouraged to reserve the floodplain for these uses to the maximum extent possible.

(B) When possible, floodplains at an Agency site or campus should be reserved for their natural purpose. Leave floodplains in their natural state as wildlife or bird habitats. Agencies shall maintain the floodplain and floodway in a manner that will reduce or minimize the accumulation of debris in the floodwaters, which may inhibit or restrict the free flow of the waters. When clearing or landscaping of a floodplain is necessary to reduce fire hazards, for safety and

security or to enhance the scenic view from a building or gathering point, the area located within the boundaries of the floodplain should be left as a green belt or space. Erosion control measures shall be implemented to ensure that flood events do not create erosion or unacceptable levels of sediment transportation.

(C) Development of walking, biking and riding trails within the floodplain particularly along the stream or river are encourage to allow the public to experience the beauty of these natural features. Amphitheaters and gazebos may be constructed within the floodplain provided that they are securely anchored to prevent floatation or collapse and are constructed of materials to resist flood damage. Agencies should emphasis the purpose of the floodplain and floodway through the use of informational and interpretive signs and exhibits.

(D) Sports fields and playgrounds may be constructed within the floodplain. Equipment installed must be properly anchored and constructed of materials that resist flood damage. Bleachers and stands may also be installed provided that they are properly anchored to prevent flotation, collapse and allow the free flow of floodwater through the structure. Concession stands that are enclosed on four sides must be elevated above the base flood elevation in accordance with § 2-706.

(E) Parking lots may be constructed within the floodplain provided no overnight parking is allowed at the site. Parking lot lighting must be installed on an elevated concrete pedestal with the hand-hole installed above the base flood elevation. All wiring shall be installed to prevent the entry of water into the conduit system. The electrical disconnect serving the lighting circuits must be installed above the base flood elevation and preferably outside the floodplain. Consideration to the anticipated velocity of floodwaters shall be considered in the selection of the paving system to minimize the loss of paving during a flood event. Provide adequate signage indicating that part or all of the parking is located in a known floodplain and that flooding may occur without warning during periods of heavy rainfall. Layout and location of signage must be included in the review submittal to the Section.

(F) Campsites and recreational vehicle parking may be constructed within a floodplain provided that the following conditions are met:

(1) Campsites may be constructed with permanent tent pads and accessories such as grilles, seating, fire rings and similar appurtenances. Campsites may be suitable for tents or pull along campers only. Tents and pull along campers shall be on site no more than 7 consecutive days and must be suitable for strike-down within less than 1 hour. No permanent cabins, lodges; or similar structures are allowed unless the lowest floor level is elevated above the base flood elevation in accordance with § 2-707.

(2) Recreational vehicles shall be on the site for fewer than 180 consecutive days and must be fully licensed and ready for highway use. A recreational vehicle is considered ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions. Vehicles not meeting these requirements must be installed to meet the elevation and anchoring requirements for “manufactured homes”.

(3) Where overnight camping is allowed within a floodplain, the Agency shall have a written formal emergency plan for staff use in the notification of campers and the evacuation of the affected campsites. The Agency shall also install signage at each campsite advising the camper

that the site is located with a known flood hazard area and shall provide a clearly designate evacuation route to a safe location. Signage shall clearly mark the evacuation route and area of refuge. When campers check in at the campground, the Agency shall provide printed instructions on the evacuation procedures during flooding and shall provide the campers with a map showing the evacuation route, signage and area of refuge. Sign design and locations shall be indicated on plans and submitted for review.

(4) Agencies should also post warning signs at all locations within its property that may be subject to flash flooding regardless of whether the area is located in a known floodplain. Signage should advise that the area is known to be subject to flash flooding during heavy rains and that caution is advised during rainy weather. The signage should also provide directions to the closest exit from the flood prone area.

(5) Campsites and recreational vehicle parking may be provided with utility hook-ups such as electricity, water and sewer provided that these utilities are designed to prevent the entry of floodwaters into the piping systems. Electrical connections within the floodplain area shall have a disconnecting means located outside the floodplain or at an elevation above the base flood elevation and shall be accessible by the campground operators to disconnect power during flood events.

(G) Telecommunication towers, utility poles or towers, underground utilities and similar facilities may be constructed in the floodplain provided that facilities are designed to resist collapse due to floodwaters, are properly anchored and permit the free flow of water in and around the structures. For utility service lines such as water, sewer, gas, electric and similar, the piping system shall be designed to prevent the entry of floodwater.

2-709 STRUCTURES NOT PERMITTED BELOW THE BASE FLOOD ELEVATION

(A) Residential structures, institutional restrained occupancy facilities, hazardous materials storage, educational facilities, emergency services facilities and office buildings shall not be constructed with the lowest floor below the base flood elevation.

(B) Water treatment and sewage treatment plants shall not be constructed with the lowest floor or operations level below the base flood elevation. When topography requires that such facilities must be constructed below the base flood elevation, the facility shall be protected from flooding by the use of levees or floodwalls and provided with reliable means to remove rain water before over topping the critical treatment tanks or structures.

(C) Where these types of structures must be located within a floodplain, the Agency must elevate the building or equipment pads above the base flood elevation by installing suitable fill. This installation must comply with the provisions of paragraph 2-706.

(D) The Agency may make application to FEMA for the site to be removed from the floodplain based on this fill activity. If FEMA approves the application they will issue a letter of map amendment based of fill (LOMAF). A copy of this letter must be submitted to the Section before the plans can be approved for bidding or construction. Note that this approval is for insurance purposes under the National Flood Insurance Program only and may not result in a premium reduction under the current State master insurance policy. The Agency shall verify the insurance requirements and restrictions with its insurance risk management representative.

2-710 STRUCTURES THAT MAY BE PERMITTED BELOW THE BASE FLOOD ELEVATION

(A) Non-residential structures may be permitted if dry flood proofed or wet flood proofed subject to the Section approval. Types of structures that will be considered include but are not limited too, picnic pavilions, park restroom facilities, parking garages, boat storage, marine dock facilities (including dock-mounted stores).

(B) For dry flood proofing, the structure and attendant utility and sanitary facilities, shall be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. The elevation of the dry flood proofing must be equal to the elevations noted in § 2-707, certified by the design profession and documentation submitted to the Section for review and approval.

(C) For wet flood proofing of new construction and substantial improvements, fully enclosed areas below the base flood elevation which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must be certified by a registered engineer or architect and meet or exceed the following minimum criteria;

(1) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodways.

(2) Automatic vents and screens must be periodically inspected and tested to ensure proper operation during a flood event. The Agency shall maintain a record of each test procedure and result along with maintenance records on the automatic type vents.

(3) Structure shall be constructed with materials resistant to flood damage and allow for quick sanitary cleanup and return to service. Materials that support the growth of mold shall be prohibited.

(D) Structures shall be adequately anchored to prevent flotation, collapse, or lateral movement of the structure or equipment resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy and velocity of the water. The potential for debris impact must also be considered as well as the probability for the structure or contents becoming debris for downstream property. Designs for meeting this requirement must be certified by a registered engineer or architect.

(E) Facilities shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. Designs for meeting this requirement must be certified by a registered engineer.

2-711 MANUFACTURED HOMES AND PORTABLE BUILDINGS

(A) Manufactured homes or portable office or classroom buildings should not be located in a floodplain if other property at the site or campus is outside of the floodplain. When these types of structures must be located in a floodplain, the Agency may raise the grade on which the structure sits and the surrounding grade to meet or exceed the base flood elevation.

(B) The chassis shall be supported by reinforced concrete piers or other foundation elements of equivalent strength and shall be no less than 36 inches above the base flood elevations and be secured to an adequately anchored foundation system to resist floatation, collapse, and lateral movement. All mechanical and electrical equipment (including ductwork) shall be installed in accordance with paragraph 2-710(E).

(C) When an existing manufactured home or portable building which has been located below the base flood elevation has incurred “substantial damage” as the result of a flood, it shall not be replaced or repaired unless the provisions of paragraphs 2-711(A) & (B) are meet.

2-712 UTILITY AND SITE IMPROVEMENT PROJECTS

(A) All public utilities and facilities, such as sewer, gas, electrical, telecommunication, water systems, and roadways shall be located and constructed to minimize or eliminate flood damage.

(B) Adequate drainage shall be provided to reduce exposure to flood hazards around these facilities.

(C) New and replacement sanitary sewage systems shall be designed to minimize infiltration of floodwaters into the systems and discharges from the systems into waters.

(D) Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(E) Roads and driveways for normal access may be constructed below the base flood elevation as the topography may require. Roads and drives required for access by emergency vehicles during a flood for evacuation or emergency rescue or response shall be constructed at or above the base flood elevation.

(F) Bridges and crossings of streams, creeks and primary drainage paths of floodwaters may be constructed below the base flood elevation provided that proper signage is installed advising of “low water crossing, do not enter when water is above roadway”. Construction must be in compliance with paragraph 2-706 and other applicable paragraphs of the ABA floodplain management program.

2-713 VARIANCE

(A) The issuance of a variance is for floodplain management purposes only. Insurance rates are determined by statute according to actuarial risk and will not be modified by the granting of a variance. Therefore, while a variance initially offers relief to a developer Agency, for example, though lower construction costs, higher insurance premiums may offset or exceed the reduced cost of construction. The ABA Council, after examining the applicant’s hardship, shall approve or disapprove a variance request. While the granting of variances generally is limited to a lot size less than one-half acre, deviations from that limitation may occur. However, as the lot size increases beyond one-half acre, the technical justification required for issuing a variance increases. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or a State Inventory of Historic Places, without regard to the procedures described in this section**.**

(B) If an Agency wishes to construct a non-conforming structure in a flood management area, that Agency shall:

(1) Submit a description of the proposed project in enough detail to allow consideration of the eleven variance factors listed below.

(2) Submit a written detailed response to each of the variance factors listed below. ABA will consider the variance in conjunction and either disallow the variance, thereby requiring that the project be relocated, or submit it to the Council for consideration:

(a) Danger to life and property due to increased flood heights or velocities caused by non-conforming structure.

(b) Danger that materials may be swept downstream and cause injury to persons or property.

(c) Ability of any proposed water supply or sanitary systems to prevent disease, contamination, and unsanitary conditions.

(d) The susceptibility of the proposed facility and its contents to flood damage and the practicality of plans to prevent such damage.

(e) Importance of the proposed facility to the state or local community.

(f) Degree of necessity that the proposed facility be placed in this location.

(g) Availability and practicality of alternate locations.

(h) Compatibility of the proposed facility with existing development.

(i) Relationship of the proposed facility to the comprehensive plan and floodplain management program for the area.

(j) Safety of access of the facility in times of flood, particularly for emergency vehicles.

(k) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site.

(C) Procedures for the granting of variances are as follows:

(1) Variances shall not be issued by the Council within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result;

(2) Variances may be issued by the Council for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the ABA floodplain management program requirement;

(3) Variances shall only be issued by the Council upon:

(a) A showing of good and sufficient cause;

(b) A determination that failure to grant the variance would result in exceptional hardship to the applicant; and

(c) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing State or Federal Laws.

(d) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

(D) ABA shall notify the applicant in writing that:

(1) The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as $25 annual premium for $100 of insurance coverage; increased deductibles per claims and in some instances, insurance coverage may be denied.

(2) Such construction increases the risk to life and property.

(3) Any terms or conditions of the variance approval.

(4) This information constitutes notification to the applicant of the criteria for and consequences of the issuance of the variance.

(5) ABA shall maintain a record of variances and report the number of variances to the Federal Insurance Administrator when requested.

2-714 REPORTING A FLOOD EVENT

To provide for effective management of floodplain development, it is essential that ABA be informed about each flood event in sufficient detail to plan future developments and adjust the floodplain management program. Therefore, agencies shall report each flood event to the ABA designated floodplain administrator and to its respective insurance risk management representative. The report shall include but not be limited to the following items:

(1) Date of the flood event.

(2) Rainfall in inches and duration of rain in hours (if known).

(3) A description of the damage to structures and facilities (include photos).

(4) A map of the campus or site showing the boundaries and elevations of the flooding at high water. If a map is not available, mark the high water at 100-foot intervals along the perimeter and on structures that were partially flooded and notify ABA. ABA will attempt to locate a suitable map and assist the agency with this documentation.

(5) Attach copies of news articles or reports that indicate the magnitude of the flood. If an authoritative source such as the Corps of Engineers or National Weather Service designates the event as a particular frequency event such as a 25 year, 50-year, 100-year event or similar, include a copy of this information.

It is not the intent of this policy to inhibit an Agency's response to or recovery from a flood event. This report should be completed after the emergency is over and submitted no later than 60 days after the event. However, an Agency may request a 30-day extension if submitted in writing. The request should include the date of the event brief description of the damages and the estimated date the full report can be submitted.

Once an insurance settlement has been determined, the Agency shall submit a supplement to the report noting the value of the total losses and the amount of the insurance settlement. This information is requested for tracking purposes only.

2-800 ENERGY CONSERVATION

(A) The life cycle cost of operating a building, including energy cost and labor cost, can often exceed the cost of the building construction by 8 to 10 times. Efforts to reduce energy consumption or improve employee efficiency by as little as 10% can often result in lifetime cost savings equaling the cost of new construction. It is therefore incumbent upon each building operator, manager, and designer to be aware of the issue regarding energy consumption in the building and to plan construction and operations as wisely as possible to minimize the energy consumption while meeting the operational needs of the facility and while promoting a healthy indoor environment.

(B) Energy Conservation for only the sake of avoiding energy consumption can often lead to indoor environmental problems that can have a potential cost far greater than the value of the energy saved. All energy plans should consider not only the energy reduction but also the impact upon the building materials, systems and upon the occupant's health and productivity. Pursuant to the Arkansas Energy Code and the Arkansas Fire Prevention Code, all new construction projects and renovations shall comply with these codes. Agencies should give careful consideration to the principles of the standards and codes for incorporation into the project design to allow a stable base from which the building operator can begin to manage the building's energy consumption. All occupied buildings shall be designed to maintain the indoor environment within the parameters of the "Comfort Envelope" as defined in the ASHRAE Fundamentals Handbook. This envelope defines a range of temperatures and humidity levels that are deemed to be acceptable to most occupants under normal activity levels.

2-801 LIFE CYCLE COST ANALYSIS

In accordance with the Arkansas Energy Office (AEO) rules for Energy Efficiency and Natural Resource Conservation in Public Buildings, Agencies and the Project Designer are required to evaluate all material and equipment selections on the basis of life cycle cost as opposed to a first cost only for new construction projects exceeding 20,000 SF and for renovations of buildings exceeding 20,000 SF wherein the renovation cost exceeds 50% of the insured value of the building. During a competitive bid process for construction, often the product having the better life cycle cost can be incorporated into the project for little or no incremental cost over the lesser quality product. Agencies should evaluate the proposed products at a 30 year life cycle. Careful consideration should also be given to the utility escalation rates, the maintenance rate and the discount rates for the cost of money. These factors can vary significantly from those applied to private sector cost (shorter life cycle) and if improperly applied can invalidate the analysis. Agencies are encouraged to use life cycle costing on all other projects to the extent that it is economically feasible.

2-802 AUTOMATED CONTROLS

Where possible use automatic controls for HVACR systems and for lighting applications. Space temperature and humidity should be controlled by automatic controls capable of maintaining the space set-point within a fixed upper limit and lower limit. Where practical, provide for the automatic setback or setup of the space temperature during the un-occupied periods. Avoid turning off systems where the rise in space temperature or humidity above the ASHRAE recommended maximums might result in damage to the building materials or growth of microbiological organisms. Avoid exposing the building water systems or other components to potentially damaging freezing conditions. Where possible, use space occupancy sensors such as motion sensors to control lighting and individual room air conditioning terminal units allow setback or to turn out the lights when a space is unoccupied. Where sufficient natural lighting exist due to windows or skylights, use automatic lighting controls to regulate the overall space lighting levels.

2-803 MANUAL CONTROLS

When automatic controls are not part of the building systems, the building manager should develop policies for each building or facility. These policies should be written and distributed to all employees. The policy should encourage the conservation of energy through the direct involvement of the building occupants. Occupant efforts should include activities such as turning lights off when not in use; maintaining thermostat settings as directed by the building manager; set-back or set-up thermostat settings during the un-occupied periods; do not leave windows open when the building heating or air conditioning systems are in operation; use the blinds or drapes to moderate the lighting level in the space so as to take maximum advantage of the natural lighting and so as to reduce the building air conditioning load; leave blinds or drapes closed when the space is un-occupied and over the weekends and holidays; do not use electrical space heaters in spaces that are air-conditioned. Adjust the heating/cooling set-points or encourage employees to dress in multiple layers of lightweight clothing such as jackets or sweaters, which can be removed or added to accommodate individual variations in comfort levels.

2-804 EQUIPMENT EFFICIENCY

(A) Do not overlook water conservation as an opportunity to reduce or manage the building operating cost. When selecting water-cooled or liquid-ring seal equipment, consider the water usage rates. When designing or operating lawn irrigation systems, consult with the Cooperative Extension Service to determine the maximum water rates for all vegetation. Evaluate the soil conditions with regards to absorption rates. Where possible, provide irrigation systems that calculate the evaporation transpiration rate based on local conditions. It is more effective to have multiple watering cycles to allow ample time for the water to absorb into the soil than to have longer cycles, which result in excessive run-off. Be cautious not to over water especially where large trees are concerned. The damage caused by the loss of an old growth tree due to over watering can be many times the cost of proper watering in that area. Where possible, use plumbing fixtures with infrared sensors to activate the flow of water. This not only saves water but also is also more sanitary and reduces the transmission of bacteria from hand contact with the fixture.

(B) Agencies and designers should endeavor to specify new equipment and fixtures to be Energy Star compliant. Energy Star equipment has been tested and certified to be low energy

consuming during normal operation. In addition many Energy Star products such as computers have built-in power reduction modes that further reduce energy consumption during non-use or standby periods. Building managers should encourage occupants to not defeat or disable these energy reduction features. Equipment, like building systems, should be selected based on the best life cycle cost for each specific application.

2-805 ENERGY STAR BUILDING PROGRAM

(A) The Energy Star Building Program is a voluntary partnership between U.S. organizations and the U.S. Environmental Protection Agency (EPA) to promote energy efficiency in buildings. These organizations represent owner-occupied public and privately owned buildings. The EPA provides participants in the program with unbiased technical information, customized support services, public relations assistance, and access to a broad-range of resources and tools.

(B) The Energy Star Building Program allows building owners to benchmark their building's energy performance relative to other similar properties in the program database. The Energy Star Building Label is awarded to buildings performing in the top 25% percentile of the market. This mark of excellence in energy performance signifies that the building has out-standing energy performance, lower operating cost and superior value. Buildings qualifying for the Energy Star Building Label are eligible to receive a placard to display on the building denoting the building as an Energy Star Building and the year date the building was certified.

(C) The Energy Star Building Labeling program is co-sponsored by the EPA and the U.S. Department of Energy. Information concerning the program criteria and participation can be accessed through the EPA web site at www.epa.gov/buildinglabel. Agencies are encouraged to apply for the building label.

(D) The Energy Star Portfolio Manager building benchmarking program is recommended for agencies subject to the energy reduction mandate of Executive Order 09-07 and Arkansas Code Annotated § 22-3-2001 et. Seq. as a tool to monitor and achieve the goals of the Agency's Strategic Energy Plan.

2-900 DESIGN STANDARDS

(A) The standards contained herein are considered the minimum acceptable for capital improvement projects submitted to the Section. Agencies and their design professionals are encouraged to exceed these standards when in the best interest of the State. If the Agency encounters a situation whereby these minimum standards cannot be met, the Agency shall submit a written request to the Section for a waiver of each specific standard. The wavier request shall define the conditions of the project that cannot meet the MSC, the applicable paragraph references for which the waiver is sought, the cost of compliance with the MSC if the waiver is not granted, and the cost of the proposed alternate construction and why the Agency cannot comply with the standards under the proposed project. All waivers must be approved by the Section in writing prior to the first plan submittal to the Section.

2-901 DESIGN PHILOSOPHY

(A) The goal of the Agency and its consulting Design Professionals should be to create a capital investment that meets the user's functional requirements, program requirements and provides the most economical life cycle cost for the taxpayer. Buildings and structures will often be used

for periods exceeding fifty (50) years and consequently, should be designed for durability, adaptability, and economy of operation and ease of maintenance. The State currently has many functioning buildings that are over fifty (50) years old.

(B) Building system components should be selected on the basis of life cycle cost. If an increased first cost or initial cost can be documented to show a reduced life cycle cost for the State, particularly for operating and personnel cost, then the design should incorporate the more expensive first cost feature or system. Studies have shown that the initial construction cost for most buildings equals 10 percent or less of the total cost of owning and operating a building over the life cycle of the building. Agencies shall require the Design Professional to produce life cycle cost data for review before approving a design element or system where required by the AEO rules for Energy Efficiency and Natural Resource Conservation in Public Buildings.

(C) Agencies must be alert to ensure their consulting Design Professionals exercise discipline in their designs to promote efficient use of facility space in terms of floor area and building volume. Exterior design features and materials should be consistent with the architectural character of the surrounding buildings and should complement the natural materials at the site. Excessive features or unusual geometry, which are not related to the function or intended use of the facility, shall be avoided.

(D) Acceptance of a particular design does not imply that other more cost effective designs are not acceptable. Good architecture can be achieved simply by good design which implies sensitivity to scale, mass, proportion, color, materials, lighting and detail, none of which necessarily cost more.

2-902 DESIGN STANDARDS AND REQUIREMENTS FOR OWNER/AGENCIES

(A) The Agency and the Design Professional should be aware of differences between private work and work performed for the State. Failure to comprehend these basic differences in rules and policies can result in costly disputes, protest, claims, and document re-submittals. The Design Professional should become familiar with these differences, which include but are not limited to the following areas:

(B) Since the knowledge and experience of the contractors bidding on the project is unknown, drawings and specifications requirements shall be clear as to the intent of the work. The plans and specifications must be clear, concise, and provide thorough detailing of existing and new construction.

(C) Sections, details, and dimensions must be in sufficient quantity, clarity and detail to allow the bidder to understand what is expected, to make takeoffs of material types and quantities, and once hired, to prepare shop drawings and execute the construction. This particularly applies to stairs, special connections for framing, typical details of system interfaces, flashing for roofs, walls, and similar building features.

(D) Details should clearly distinguish between existing and new construction. The drawings must also clearly show the beginning and the ending point of demolition requirements.

(E) The project design is solely the responsibility of the Design Professional. Specifications requiring the contractor to provide engineering design are not acceptable unless the products specified for contractor design are closed-engineering systems. Closed engineering systems

may include pre-engineered metal buildings, elevated water storage tanks, prefabricated trusses, post tensioned structural concrete slabs, pre-cast concrete systems and common steel structural connections. Other systems can be classified as closed-engineering systems if approved in writing by the State Engineer. When closed-engineering system specifications are used, the Design Professional shall include the requirement for such systems designs to be stamped by a professional engineered duly licensed to practice in the State pursuant to Ark. Code Ann. §22-9-101 et seq. Closed-engineering system shop drawings shall be submitted through the Design Professional to the engineer of record for review and approval for incorporation into the overall project design.

(F) In order to encourage competition required in the expenditure of public funds, performance specifications that define a desired result or assembly are strongly preferred. If performance specifications are not practical, and a manufactured product must be used to define a desired result of assembly, then at least three manufacturers and three products should be referenced. Do not reference both manufactured products and performance criteria because conflicts in the performance criteria and the product performance may create ambiguity and result in the misapplication of a product, a protest, or a claim.

2-903 SPECIFICATION STANDARDS

(A) Specifications shall clearly define the quality, performance, and installation standards for the Work and the conditions under which the Work is to be executed. They shall be in sufficient detail to describe the materials, equipment and supplies, and the methods of installation and construction. Required tests and guarantees shall be indicated in the specifications.

(B) Federal Specifications, MILSPECS, Corps of Engineers Specifications, Arkansas Highway and Transportation Department Specifications and the like, often contain requirements or standards, which are not applicable to State work. Those specifications may contain requirements and options ranging from the lowest quality to the highest quality product, which must be carefully reviewed, selected and identified in the specifications. Therefore, it is recommended that all reference to these types of specifications be avoided.

(C) Specifications shall be on 8 ½” by 11” sheets and bound into a project manual with bid sets preferably printed on both sides of the sheet. Type print size shall be suitable for microfilming and shall not be smaller than 12-point type size. The table of contents pages, or index, shall be dated with the same date as the drawings and shall be sealed and signed by the appropriate Design Professionals.

(D) The Project Manual shall include but not be limited to:

(1) Title of Project and Name of Agency;

(2) Names, address, phone and fax numbers of the Design Professional and all consultants;

(3) An index of all contents;

(4) Notice of Invitation to Bid;

(5) Instructions to Bidders;

(6) Bid Form;

(7) The General Conditions;

(8) Supplemental General Conditions, (if applicable);

(9) Contract Between Owner and Contractor;

(10) Workers Compensation Insurance Certificate;

(11) Standard Performance and Payment Bond;

(12) List of Drawings;

(13) Other Division Zero (0) Requirements, as appropriate;

(14) Technical Specification (Divisions 1-49 Applicable Sections);

(a) Technical Specification Sections shall be numbered with appropriate six digit section numbers corresponding to the CSI numbering system. The preferred paragraph numbering system format is the Alpha Numeric format.

(b) Technical Sections shall be subdivided into the Part I-General, Part II, Products, Part III-Execution format.

(15) Appendices containing Soils Report, Asbestos Report, or other information pertinent to the project but not a part of the Work. Such material should be noted as, “INFORMATION ONLY”, for use by the Contractor as he deems appropriate.

(E) The four (4) types of specifications used on State projects are performance specifications, non-proprietary specifications, proprietary specifications and sole source specifications.

(F) Performance Specification or Non- Proprietary formats are the preferred methods of specifying materials, equipment and systems. A non-proprietary specification shall be written either as a generic performance specification (preferred); or as a specification naming a minimum of three (3) manufacturers with model or series numbers. The following describes the ABA requirements for performance specifications and non-proprietary specifications.

(1) A generic performance specification must be written to describe the required characteristics, performance standards, capacities, quality, size or dimensions, and the like, of the item or system. The specifications must be written with sufficient detail to allow manufacturers to determine if their product meets the requirements of the project. Include only the salient features that will be used to judge a product’s acceptability for the project. The performance specification shall not name manufacturers or brand name products.

(2) A non-proprietary specification may be based on a manufacturer/model number type specification and must list at least three (3) manufacturers with their respective model numbers. Each of the listed manufacturers/model numbers must have been determined by the Design Professional to meet the specifications and be acceptable. If a named manufacturer prepackages or preassembles its item or system, the model number shall be specified. If the

named manufacturer(s) custom builds the item or system, naming of model numbers is not required. When model numbers are used in a specification, be aware that each number and letter may be a unique identifier for various features of that manufacturer's product line. Avoid listing model long numbers. Limit the model number to the point necessary to describe the appropriate series of products and describe the unique product characteristics in the body of the specification or the schedules.

(3) The non-proprietary specification must describe the required characteristics, performance standards, and capacities that will be used to determine equal products. Do not specify extraneous characteristics that do not relate to the products' performance or suitability for the project. The specification shall not be contrived to exclude any of the manufacturers listed or to benefit any one (1) manufacturer over any of the other manufacturers. If only two (2) acceptable manufacturers can be found and documented by model number but other equal products are acceptable if found by the bidder, the Design Professional may list only those two (2) manufacturers and the phrase "or equal". If the phrase "or equal" is used the design professional may only reject the unnamed substitute if there is clear evidence of non-compliance in the submittal information presented for review or documented evidence that the substitute product or material has failed to perform satisfactorily as intended.

(G) A specification is proprietary if it fails to meet requirements of a generic specification or a non-proprietary specification. Although a proprietary specification should be avoided because it restricts competition, circumstances such as space limitations, mandatory performance standards, compatibility with an existing system, and the like, may leave no other reasonable choice. Two (2) typical situations that may require proprietary specifications are:

(1) When only two (2) manufacturers or suppliers provide an acceptable product or system, when there are no equals and when no substitutions are allowed or

(2) When only one (1) manufacturer is available, but two (2) or more vendors or suppliers can purchase the material and compete to provide the product or system to contractors or bidders.

(H) A specification is sole source when it names only one (1) manufacturer or product to the exclusion of others, or when it is contrived so that only one (1) manufacturer, product, or supplier can satisfy the specification. A product or piece of equipment that is available only through a single franchised vendor is also considered to be a sole source item.

(I) Proprietary and sole source specifications may be used only when the Agency has determined that a proprietary or sole source specification is in the best interest of the State and that use of alternate materials or equipment will be cost prohibitive. When a sole source specification is used, the specification shall clearly identify the materials or equipment as a proprietary or sole source item, the approved supplier or installer and a cost allowance shall be allocated in the appropriate section for Allowances in the project manual. In this manner, all bidders will have equal pricing for all allowance items within their bid price. For projects awarded by summation of unit pricing, the item(s) may be shown as a unit price line item without the allowed cost shown. The Agency shall incorporate the proprietary or sole vendor/supplier's pricing based on the final construction drawings into the allowance item and shall retain a copy of the vendor/supplier's price proposal for the item for record. To ensure that accurate cost accounting of allowances is maintained, adjustments in the allowance cost during the construction phase shall be by individual line items matching the allowance schedule. Combining multiple allowance items into a single price or lumping allowance adjustments into a

single pricing with other items is prohibited. It is acceptable and appropriate to include allowance adjustments with other cost items in a single change order provide supporting documentation is attached to delineate the allowance adjustments.

(J) Prior to advertising the project for bids that contain sole source specifications, the Agency is encouraged to either procure the sole source item and specify it as Owner furnished/Contractor installed or the Agency may pre-select a sole source item through a competitive life cycle cost request for proposals (RFP). The product having the lowest life cycle cost shall be selected and shall be included in the specification as an allowance cost item listing manufacture, product number, allowance price, vendor contact name, address and phone number and the manufacturer's quote number. The specifications shall clearly indicate that the specified product was selected on the basis of a Life Cycle Cost Analysis.

(K) The use of standardized specifications or "guide specs" as a basis or resource for editing has many advantages for the Design Professional, the Reviewer and the Contractor. The Design Professional shall edit the guide specifications to include only the materials, requirements, and procedures applicable to the project. Specifications, which are submitted without editing, will be rejected as an incomplete submittal. Where Military guide specifications are used on a project, they shall be edited to delete references to Military and Federal Specifications. References to the Contracting Officer shall be changed to the Agency. Also, requirements for tests, inspections, and visits to the manufacturer's plant, and the like, which are not normally required for state projects shall be deleted.

(L) The Design Professional shall not require samples, shop drawings, or similar materials to be submitted for approval prior to receipt of bids without the specific written approval of the Section. The specifications must contain sufficient information to describe to the contractor and bidders the performance and quality standards that will be used to evaluate the submittals.

(M) Complex or sensitive systems such as locking systems, detention equipment and security control systems for prisons often require manufacturers with a proven history of reliable, operable equipment in special situations with minimal malfunctions. In these instances, sole source or proprietary specifications may be appropriate.

(N) Projects for the State are not "testing grounds" for new type of materials or equipment. However, the fact that a material is newly developed does not preclude its use if documentation of recognized, independent laboratory tests clearly shows that the material will meet the applicable requirements for the project. The Agency shall submit a written request and justification to the Section for approval to specify a new product or material prior to the Final Plan Review submittal. Unless the manufacturer of a new product furnishes factual data sufficient to evaluate the product, it should not be considered for use. If a new product is considered for use, a competitive-type specification should be written to assure that a competitive; good-quality product will be obtained. In instances where competitive specifications are not appropriate, a sole source or proprietary specification may be appropriate. The Agency, with the approval of ABA, may authorize use of a new material, equipment or system for a particular project on a trial basis for observation or evaluation.

(O) Specifications must clearly indicate the requirements for the project. Words or phrases, which are vague or may be interpreted more than one way often lead to problems during bidding or construction and result in change order or claims. The following instructions are

intended to reduce common errors and conflicts evolving from interpretations of the specifications.

(1) Under Requirements, do not say, “the Work consists of.” Drawings should show the entire ‘scope of the work’. If necessary to list certain parts, say “Generally, the Work includes…”

(2) In lieu of reference to the accompanying drawings, use the words “as shown,” “as indicated,” “as detailed” or “as approved by…,” “as directed by…..,” “as permitted by…….”

(3) The Contractor is responsible for determining the packages of work for each subcontract. It is acceptable to specify certain specialty work to be performed by person qualified, certified or licensed (if appropriate) and experienced in this type of work. If it is necessary to reference a specific trade group, it may be referred to as that group or trade by the CSI division number or section number i.e.: “Division 26” for electrical work instead of “electrical sub-contractor” or “Section 283100-Fire Detection and Alarm” instead of “fire alarm contractor”.

(4) Do not use “etc.” This term is too indefinite for bidding and inspection purposes.

(5) Minimize the use of cross-references and in no case use paragraph numbers for this purpose. If it is necessary to refer to a particular paragraph, do so by its section number and title (e.g. Section 03 30 00, Cast-in-Place Concrete).

(6) Do not include a paragraph in the various sections entitled “Work not Included”, describe only the work that is included under the respective sections.

(7) Specifications should clearly delineate air conditioning ducts, heating ducts and piping systems, which require insulation. The phrase “insulating all ducts except in conditioned spaces” has resulted in differences of opinion and claim situations. All duct systems should be appropriately designated as supply, exhaust, outside air intake, transfer, relief, or return and further clarified by stating insulating requirements.

(8) Do not confuse “any” and “all”: “Correct any defects” should read “Correct all defects.”

(9) Do not confuse “either” or “both”; e.g., “Paint sheet metal on either side” should read “Paint sheet metal on both sides.” “Either” implies a choice.
(10) Do not confuse “or” and “and”; e.g., “The equipment shall not have defects in workman-ship and material.” The use of “and” in this sentence indicates both requirements must be met. e.g. “Additives that decrease strength or durability are not permitted.

(11) Do not use “and/or.” The courts have considered this phrase to be intentionally ambiguous and, therefore claims are often rendered in favor of the Contractor.

(12) Use statements that are definite and contain no ambiguous words and phrases “Remove” implies to take away from its current location. If “remove” is used, the Design Professional must also indicate whether to dispose of, salvage, or re-install the material “removed”. “Reinstall” implies putting the existing back in the indicated place. If “reinstall” is used, the Design Professional must also indicate that the Contractor must carefully remove the item, properly store it, and then “reinstall” the item at appropriate time. “Replace” implies removal of old material and furnish and install new material. The preferred wording would be to “remove” and “provide”.

(13) “Provide” is defined as “furnish and install.” When material or equipment is “furnished” by the Agency directly or under other contracts for installation by the Contractor, the term, “install” should be used; however, the Contractor may be required to “provide” foundations, fastenings, and the like, for the installation. If the word “install” is used alone, the Bidder or Contractor has a right to assume, on the basis of the definition cited, that the Agency will “furnish” the materials in question.

(14) Do not include equipment schedules in the specifications. Equipment schedules should be provided on the plans for quick access and review. The construction record prints are often used by the building maintenance and operation personnel on a daily basis. Having the equipment schedule information readily available on the plans can save critical time and avoid confusion during an operational emergency or repair.

(15) Ensure that the plans and specifications do not contain statements or requirements similar to the following: “[Contractor][Supplier][Installer] must have a minimum of X-years of experience in [installation][manufacture] of the specified [project][product] or must have [office][facilities] located within X-miles of the project site.” These types of statements can be construed to unfairly limit competition in the procurement of State funded projects by unnecessarily excluding some Arkansas providers and can result in bid protest which may result in lengthy delays in award of the project or rejection of all bids and necessitate re-bidding and or redesign of the project. This prohibition will not negate the use of LEED MR Credit 5 for regional materials as this credit allows materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site. This range encompasses the entire state of Arkansas regardless of project locations so no Arkansas manufacturer or provider will be excluded by this requirement.

2-904 DRAWING STANDARDS

(A) The following represents the minimum requirements, standards, and expectations applicable to all drawings prepared for bidding and construction on state projects. Refer to § 2-1504 for a description of the contents of each discipline submittal. Note that not every category will be used on every project. The Design Professional shall select the appropriate categories for each specific project.

(B) Arrangement of Drawings: Drawings shall be arranged in the following order with the discipline identifying character shown:

T Title Sheet & Index

TS Topographical Surveys & Plot Plan Drawings

B Boring Logs & Soils Data

D Demolition Drawings

C Civil Site Drawings

L Landscaping Drawings

FA Fire Service Access Drawings

A Architectural Drawings

K Kitchen Equipment Drawings

S Structural Drawings

M Mechanical (HVAC) Drawings

FP Fire Protection Drawings (Sprinkler Systems)

P Plumbing Drawings

E Electrical Drawings

* Special Category Drawings (Assigned by the Section)

* For special categories such as laboratory case work, acoustical plans, audio-visual plans, and the like, that do not readily fit into the defined categories; contact ABA for a drawing category assignment.

(C) Drawing Numbers: Drawings shall be sequenced by discipline letter and number, i.e., A1, A2, A3.1, A3.2, S1, S2, and the like. For large projects (exceeding 20 sheets) the Section recommends the designer use a flexible numbering system such as A1.01, A1.02 for plans, A2.01, A2.02 for sections, and the like. This will allow Designer to insert additional drawings as the project develops without requiring a re-numbering of sheets.

(D) Sizes of Drawing Sheets: Drawing sheet size, except in special cases approved by the Section, shall be 24” by 36” (preferred) or, alternatively, 30” by 42”. Drawings shall be prepared so as to be suitable for microfilming and for making clear, legible half-size reproductions.

(E) Lettering: Unnecessary letter embellishments, poor spacing, careless lettering, weak lines, and lettering which is crowded or too small result in illegible films and poor reproductions. The minimum height for hand lettering on all projects shall be 1/8”. Mechanical (typed or CADD) lettering shall be 1/10” minimum and in all caps. Make minimum gap between lines equal to one-half the letter height. Lettering and line weight must be in accordance with classical drafting practices.

(F) Detail Numbers: Each plan view, section view or detail shall be given an individual detail number to facilitate written and verbal communication.

(G) Scales: An indication of the scale of the object drawn shall be located directly under the title of each plan, elevation, section, detail, and the like. (Example: Scale 1/8”=1’0”). All floor plans shall be drawn at a minimum scale of 1/8” = 1’-0”. The use of a smaller scale for floor plans must be approved in writing by the Section prior to the first submittal. Avoid odd size scales such as 3/32” = 1’-0” as these scales often lead to takeoff errors. In addition to the standard inch/foot scale, provide a graphic bar scale that can be used for the approximation of dimensions on reduced size plan sets. Use break lines and match lines for larger building plans. For sheets with one plan such as a floor plan or site plan, the title should be located

centered under the main part of the plan or at the lower right-hand corner of the sheet. The north arrow should be located at the right side of the title.

(H) Provide a master listing of all applicable abbreviations and symbols used in the set of drawings or provide a listing of all common abbreviations and symbols at the beginning of the drawings and provide a listing of the discipline specific abbreviations and symbols at the beginning of each discipline. For complex piping schematics, electrical riser diagrams of special system layouts, the designer is encouraged to provide an abbreviated legend of symbols on those specific sheets to minimize the need to flip sheets to find critical symbols.

(I) Topographic and civil site drawings shall conform to the approved site plan and shall show building location by dimensions, existing and approximate new finished grades, roads & walks, temporary & permanent erosion and sediment control devices, and storm-water management facilities.

(J) Boring logs representing soil conditions encountered in the site investigation including pertinent logs from previous explorations in the project location should be presented in the project manual for informational purposes. Logs shall show the ground elevation, the depths of borings, depths and classifications/descriptions of materials encountered, blow counts per ASTM D-1586, ground water elevation, and other pertinent information. Boring locations relative to the project shall be shown on a small-scale location plan or on the Site Plan.

(K) Building Floor Plan drawings for all disciplines shall be oriented the same to avoid confusion and to facilitate overlaying of drawings. It is customary for a building plan to be oriented with north toward the top or left edge of the sheet. All plans shall have a North Arrow for orientation. For projects where the plan is divided and shown on multiple sheets, provide a key plan on each plan sheet and crosshatch or shade the area of the key plan shown on the sheet. Provide clearly defined match lines and reference the sheet where the match can be found. Avoid showing construction information across the match lines as this can lead to confusion and duplication of material counts.

(L) The drawings shall describe/show the Work to be provided by the Contractor. Existing features, structures, or improvements to remain shall be so noted. Existing features, structures, or improvements to be demolished and/or removed shall be clearly identified. Work, improvements, demolition or construction, which the Agency will perform or have performed by separate contract, shall be identified as “Not in Contract” or “NIC” if the abbreviation has been defined. Do not use the phrase “Work by Others”.

(M) All foundation and floor plans shall be drawn to a scale not less than 1/8”=1’-0” with all necessary dimensions shown. Roof plans are preferred at 1/8=1’-0” scale; however, roofs without mechanical equipment and metal/shingled pitched roofs may be drawn at a 1/16”=1’-0” scale if approved in writing by the Section prior to the first submittal to the Agency. Foundation, floor and roof plans shall show all permanent equipment vents, utilities or pipe penetrations, openings and such items affecting the construction. All plans shall be provided with column numbers or grid numbers to facilitate written and verbal communication describing the location of specific information on the plan.

(N) Design live load capacity for all floors and the roof in pounds per square foot shall be noted on structural floor plans.

(O) Every floor plan or partial plan or space shall be provided with a unique room number and/or name. All schedules shall reference the specific room number to which the schedule applies. Reflected ceiling plans shall show room numbers, locations of lights, HVACR items, sprinkler heads, speakers, smoke detectors, and the like.

(P) Enlarged plans to 1/4” scale shall be furnished to clearly show the location and arrangement of built-in equipment/casework and of the furniture, fixtures, equipment, and the like, which influence the location of utilities, including electrical, plumbing, heating, and the like, and the assignment of space within the project.

(Q) A minimum of one transverse and one longitudinal section through the building shall be shown along with as many additional sections as are needed for understanding the overall construction requirements. Include necessary dimensions on each. All elevations shall be drawn to scale at not less than 1/8” equals 1’-0”.

(R) Typical wall sections shall be drawn at not less than 3/4”=1’-0” scale. Typical window, door and special opening details shall be drawn at 1-1/2”=1’-0” scale or larger.

(S) Provide stair sections for each stair configuration including dimensions, sizes, framing members, components, and any special details required.

(T) Provide all necessary interior and exterior details, including special doors, windows, woodwork, paneling or other decorative work, toilets and washrooms, and the like, with plans and elevations at a minimum scale of 1/4”=1’-0” and with construction details at a minimum of 3/4”=1’-0”.

(U) Door schedules shall include door number, label or type, size, material, frame, lintel, and remarks. Also provide elevation and detail references. Window schedules shall include make or type, size, material, and lintel remarks. Also provide elevations and details, if required for complete description. Finish schedules shall include space or room number, space name, floor finish, wall type/finish, ceiling type/finish, ceiling height, base, wainscot, remarks, and other comments, if required.

(V) Provide an enlarged plan view of each unique mechanical, electrical or equipment room. Equipment room plans shall be drawn at 1/4”=1’-0” scale minimum. Provide a minimum of one section through each equipment room drawn at 1/4 = 1’-0” minimum to clarify the height of, equipment, ductwork, piping and the like. Provide one (1) longitudinal section and one transverse section through the building (minimum) to show mechanical and electrical work with relation to the work by other disciplines. Provide other partial sections as required to clearly explain the scope of the work and to describe the restrictions at congested areas.

(W) Relation of Drawings and Specifications: Drawings generally indicate the scope of work, locations, relationships, and dimensions while specifications generally indicate quality, performance and installation requirements. Drawings and specifications shall supplement each other and must not conflict. Terminology used in specifications and drawings should be the same. For State projects, the drawings and specifications are considered complimentary of each other and neither shall take precedence over the other. Where conflicts arise between the drawings and specifications, the more stringent requirement shall apply.

(X) Since the final plan review drawing submittals are, in the opinion of the Design Professional, complete and ready for bid, all drawings submitted for final review shall bear the Arkansas registration seal and signature of the individual or individuals responsible for its design (and corporate seals where applicable). To prevent incomplete drawings from being mistaken as construction drawings, the Design Professional shall over stamp the seal with either "Preliminary" or "Not for Construction" or "For Review Only". To facilitate proper review by the Section, the name and registration numbers on the seal should be visible and legible.

(Y) All drawings and the specifications submitted with the final plan review responses and issued for bid or construction shall be dated with the same date which is established by the Design Professional as the date the documents are (or will be) complete. Documents printed for bidding shall bear the date described above with no revision numbers or dates. In accordance with Architectural Act and the Engineering Act, the Design Professional shall sign and date the stamp.

2-905 QUALITY CONTROL

(A) The Design Professional shall be responsible for the professional and technical accuracy and coordination of all designs, drawings, specifications, cost estimates and other work or materials furnished under the standard professional services contract.

(B) The Design Professional shall perform a Quality Control review of the specifications and drawings prior to making a plan review submittal to the Agency. The Design Professional shall ensure that the plans and specifications being submitted for review meet the MSC submittal requirements and that all elements of the design have been coordinated with respect to function and location. It is not the responsibility of the Agency, ABA, or the Contractor to ensure that the plans have been coordinated from sheet to sheet and discipline to discipline.

(C) The cover sheet of all plans and specifications submitted for review to the Section shall contain the following statement signed by the responsible Design Professional who is a Principal in the firm. Failure to perform proper coordination or to include and sign this statement may be grounds for rejection of the submittal without review. This statement may be removed from the cover sheet prior to issuing the plans for bids:

> " A Quality Control check, including the appropriate coordination among disciplines, has been made on this project's documents, and corrections related to this check have been made. The undersigned principal/owner states that these plans and specifications as submitted for review are, to the best of his or her knowledge and ability, complete and ready for review."

Signed _____Date_____
(name and title)

(This statement need not appear on sets of documents issued to bidders)

2-1000 ACCESSIBILITY FOR INDIVIDUALS WITH DISABILITIES STANDARDS

(A) Purpose: The requirements in this standard are intended to make buildings and facilities accessible to and usable by, individuals with disabilities such as but not limited to; the inability to walk, difficulty walking, reliance on walking aids, blindness and visual impairment, deafness and hearing impairment, coordination, reaching and manipulation disabilities, lack of stamina,

difficulty interpreting and reacting to sensory information, and extremes of physical size. Accessibility and usability allow individuals with disabilities to access, enter, and use a building or facility.

(B) This standard provides guidance for design and specifications for constructed elements that make spaces accessible.

(C) This standard can be applied to the design and construction of new buildings and facilities, renovations, alterations and rehabilitation of existing buildings and facilities and is applicable to permanent construction as well as temporary construction and emergency conditions.

(D) Ark. Code Ann. § 6-20-1407(e) authorizes the Section to review and approve construction documents for new public school facilities for compliance with this standard prior to bidding or construction. Construction documents submitted for review shall comply with these standards.

2-1001 REVIEW AUTHORITY

(A) The Section is responsible for the review of accessibility standards and criteria for capital improvement projects of those state agencies under its jurisdiction and for public school new construction projects. (See Ark. Code Ann. §6-20-1407 (e)).

2-1002 ACTS, CODES AND STANDARDS

(A) There are numerous codes and standards which address accessibility issue in the constructed environment. The most common are the 2010 ADA Standards for Accessible Design which is the current standards adopted by the U.S Department of Justice(USDOJ), ANSI A117.1 Standard for Accessible and Usable Buildings and Facilities which is the standard adopted by the Arkansas State Fire Marshall through the Arkansas Fire Prevention Code (AFPC), the Uniform Federal Accessibility Standards (UFAS) which applies to certain projects funded partially or fully with Federal funds, and the Fair Housing Accessibility Guidelines adopted by the U.S. Department of Housing and Urban Development (HUD) just to name a few.

(B) Since one or more of these standard may apply to a particular project (i.e. the ADA Standard and AFPC will apply to most projects subject to ABA review), the design professional should gain familiarity with the standards that apply to their specific project prior to submitting for review. When competing standards have differing requirements on a particular project, the most stringent requirement (the one providing the most accessibility) must be met.

(C) In certain projects, the use of a design guide other than the ADA Standard or the AFPC may be warranted or mandated by the funding source. Several of the standard accessibility guide documents are considered “Safe Harbor Documents” by the_enforcement authority of other document review agencies. When the design professional prepares construction plans using one of the “safe harbor documents” he should include a note on the coversheet or the accessibility details sheet stating which guideline documents were used in the preparation of the plans and specifications.

(D) Copies of the Standards for Accessible Design, Code of Federal Register (Federal law pertaining to ADA) and technical guideline bulletins published by the US Department of Justice and the Access Board may be obtained at the following website www.ada.gov or by calling the US Department of Justice ADA Information line at (800) 514-0301 voice or (800) 514-0383 TDD.

(E) Furthermore, copies of the American with Disabilities Act of 1990 are available in the following alternate formats: large print, Braille, electronic file on computer disk, and audiotape. Copies may be obtained from Architectural and Transportation Barriers Compliance Board at (202)-272-5434 (Voice) or (202)-272-5449 (TTY). These telephone numbers are not toll-free numbers. For toll free ADA information call 1-800-872-2253. For email access, refer to TA@access-board.gov. The ACT addresses program requirements and defines the situations for which accessibility must be provided. The ADA Standards provide scoping and technical requirements that define the method or manner in which the constructed environment must be built to provide program access. The limits of ABA's review is to the constructed environment as governed under the Act and as defined in the current enforceable ADA Standards. It is within this parameter that the Section reviews are limited to the technical requirement of the scoping provided in the submitted construction documents. The Section does not provide commentary on the scoping or program requirements for the agency's facilities. ABA review will be limited to the technical requirements for the scoping provided in the construction documents presented for review.

2-1003 OWNER/AGENCY RESPONSIBILITIES

Owners are responsible for ensuring all facilities are in compliance with accessibility acts, laws and codes. Owners should evaluate facilities for the minimum scoping requirements, such as minimum number and types of accessible parking spaces on a campus and the like, to ensure compliance with the ADA and ADA Standards. These evaluations should be reviewed when contemplating future capital improvement projects.

2-1004 CONSTRUCTION DOCUMENT SUBMITTAL REQUIREMENTS

(A) Unless the project has been approved under the Delivery Method, a full set of plans and specifications should be submitted to the Section for review when the documents are 100% complete. A full set of documents is required for plan review and record.

(B) Plans submitted for Agency and ABA review should clearly define the elements and features required to be accessible. Partial plans, section views, elevations and details shall be provided at a scale large enough to show all applicable clearance and mounting heights and dimensions for each unique accessible feature. The drawings shall include but not be limited to the following:

(1) Provide a plan view of the building showing the intended accessible path into the building and to each accessible space or clearly describe the accessible path with a general or keyed note on the plan. Incorporating the accessible path by arrows, shading or other identifiers on the life safety plan is an acceptable method.
(2) Where parking is a part of the project, define the accessible path from the designated parking into the building.

(3) Where multiple buildings are included in the scope of the project show the accessible path between buildings.

(4) Where construction of a public transit stop such as a bus or trolley stop is included in the scope of the project or is existing on the developed site, define the accessible path between the stop and the project facilities.

(5) A detail sheet (or sheets) should be provided with the standard accessible elements shown and dimensioned and the plans should be cross referenced to the appropriate details. Referencing the ADA Standard is not a substitute for proper and accurate dimensions or specifications. Specific information on the drawing is required for the construction phase.

(6) Technical specifications shall clearly require that accessible components such as door hardware, furniture and fixtures be manufactured to meet accessibility standards and installed in accordance with the standards and manufacturer's recommendations. Components requiring adjustment to pressure thresholds of the standards shall clearly specify the minimum and maximum allowable limits as required by the standards.

(7) Field construction techniques and issues often arise that can cause a designed accessible element to be built out of compliance. Field verification during the construction phase by the design professional, building inspectors, and the building owner are essential to ensuring that non-compliant issues are identified early and corrected before the project is completed. Plans and specifications shall have sufficient details and dimensions to allow proper verification during and after construction.

2-1100 GRADING STANDARDS

To promote good drainage, ease of maintenance and ease of travel in and around state facilities, the minimum slopes or grades shall be established. Where existing natural grades prohibit re-grading to these standards without excessive cut or fill, obtain approval of the Section prior to the schematic design submittal.

2-1101 STANDARDS FOR GRADING AROUND STRUCTURES

CONDITIONS	MAXIMUM		MINIMUM		PREFERRED
Side slopes with vehicular access	10%	10:1	2.0%	50:1	1-3%
Back slopes with vehicle access	15%	6.6:1	2.0%	50:1	1-5%
Side slopes without vehicular access	15%	6.6:1	2.0%	50:1	1-10%
Back slopes without vehicular access	20%	5:1	2.0%	50:1	1-10%
Grassed athletic fields	2%	50:1	0.5%	200:1	1%
Berms and mounds	20%	5:1	5.0%	20:1	10%
Mowed slopes	25%	4:1	----	----	< 20%
Unmowed grass banks	Soils natural angle of repose				< 25%
Planted slopes and beds	10%	10:1	0.5%	200:1	3-5%

2-1102 STANDARDS FOR GRADING STREETS AND WAYS

CONDITIONS	MAXIMUM		MINIMUM		PREFERRED
Crown of improved streets	3%	33:1	1%	100:1	2%

Crown of unimproved streets	3%	33:1	2%	50:1	2.5%
Side slopes on walks	4%	25:1	1%	100:1	1-2%
Tree lawns	20%	5:1	1%	100:1	2-3%
Slope of shoulders	15%	6.6:1	1%	100:1	2-3%
Longitudinal slope of streets	20%	5:1	0.5%	200:1	1-10%
Longitudinal slope of driveways	20%	5:1	0.5%	200:1	1-10%
Longitudinal slope of parking areas	5%	20:1	0.5%	200:1	1- 5%
Longitudinal slope of sidewalks	5%	20:1	0.5%	200:1	1-5%
Longitudinal slope of valley section	5%	20:1	0.5%	200:1	2-3%

Note: Refer to § 2-1000 for grading requirements to meet ADA Guidelines.

2-1103 STANDARDS FOR DRAINAGE CHANNELS

CONDITIONS	MAXIMUM		MINIMUM		PREFERRED
Swale side slopes	10%	10:1	1%	100:1	2%
Longitudinal slope of swales-grass invert	8%	12:1	1%	100:1	2%
Longitudinal slope of swales-paved invert	12%	8.3:1	0.5%	200:1	5%
Ditch side slope-grass invert	8%	12:1	1%	100:1	3%
Ditch side slope-paved invert	10%	10:1	---	---	6%

2-1200 ROOFING SYSTEM REQUIREMENTS

These Minimum Roofing Systems Requirements are to provide design professionals and State personnel with functional, working guidelines to aid in the determination of the required roofing systems and specifications. A proper understanding of the roofing industry, methods of construction, application, workmanship, and its inherent problems and pitfalls is necessary in order to design a proper roof system.

2-1201 DETERMINATION OF THE PROPER ROOF SYSTEM

(A) In designing and specifying the proper roof system for a new building, the following should be considered:

(1) Type of building refers to a state owned or leased property (library, office buildings, campus buildings, the like.) under ABA oversight.

(2) Special considerations refer to what goes on in the building. For example, will there be a pool, a unique use inside the structure? The uses of the building will determine roof traffic, surfacing, need for a vapor retarder sheet and insulation ("R" value) requirements.

(3) External considerations include high winds, snowfall, rains and their concentrations, and outside contaminating processes.

(4) Life of the building determines how long it will be expected to last.

(5) Building and Regulatory Codes refer to Underwriters Laboratories, Factory Mutual, and the various applicable local, state and national codes.

(6) Structural considerations mean that the roofing system must work with the other building components. For example, are the edges of the roof deck flush or are there parapets. Dimensions of the building and shape of the roof deck will determine the need for expansion joints. Any protrusion ~~in~~ through the roof will require flashing materials.

(B) The Roofing System as specified should be a complete and compatible system. The system should be manufactured by a manufacturer doing business in this region of the United States. The design professional shall investigate the need for, and specify all roofing components needed for a complete roof assembly.

2-1202 STEEP ROOFING

(A) Asphalt shingles on sloped roofs shall be Class "A", fiberglass based, asphalt shingles with a recommended 25-year minimum limited warranty over felt underlayment installed as per manufacturer's specifications minimum slope: 4 in 12. “Peel & stick” self-adhered Ice and Water Shield synthetic underlayments are recommended along the roof perimeter, valleys and penetrations.

(B) Wood shingles shall not be used on buildings unless approved in writing by the Section. Any shingles used shall carry the "B" classification as listed by the Underwriters Laboratories, Inc. Minimum slope: 4 in 12.

(C) Metal roofing systems on sloped roofs in excess of 1 in 12 slope (minimum: 2 in 12 (+) slope preferred) are acceptable when properly detailed and specified.

2-1203 UNCONVENTIONAL ROOFING SYSTEMS

(A) Unconventional roofing systems (roof systems other than Built-up, Modified Bitumen, EPDM (Ethylene Propylene Diene Monomer) or Single-Ply)) shall be submitted for review to the Section, for approval on a case by case basis for use on the roof of a State building under ABA oversight.

(B) Criteria for approval shall be:

(1) Acceptable material and method of application;

(2) Ability of local installers to apply the proposed roof system;

(3) Ability of the State to obtain competitive bids on the proposed roofing system;

(4) Proven track record of the system and the manufacturer; and

(5) Roof warranty available from the manufacturer for the particular installation.

2-1204 ROOF SYSTEM COMPONENTS

(A) Decking:

(1) The type of structural deck and the complete roofing system to be used should be determined by the design professional. Slope for drainage shall be achieved by structural means if possible. If structural slope is not feasible, a lightweight concrete fill, sloped perlite board, or tapered insulation board shall be specified.

(2) The structural deck must be designed to provide an adequate "foundation" or base for the roofing system. In addition to supporting all design loads, it must also be relatively smooth, free of humps, depressions, offsets at joints, allow for expansion and contraction, and be rigid enough to support the equipment and materials needed to apply the roof system without undergoing excessive deflection or deformation, which could impair the life of the roofing system.

(3) Metal decks shall be fabricated from adequate gauge steel, accurately aligned, securely anchored to structure below. Provide side lap connections to prevent displacement between adjacent sheets. The design professional shall inspect deck for any possible defects prior to the installation of any insulation and roofing.

(4) On poured decks such as concrete, gypsum, light weight insulating concrete, the like, adequate drying time for the material shall be allotted prior to application of the roofing membrane.

(5) Over low slope wood decks, always specify a nailed down layer of sheathing, (5 lb. rosin paper), as a separator sheet followed by felt underlayment and a layer(s) of insulation to prevent problems with roofing such as nails backing out, expansion and contraction, the like.

(B) Insulation:

(1) Insulation thickness shall be specified by the design professional and be such that when combined with complete roof and ceiling construction, shall have an overall heat transmission coefficient to obtain a satisfactory "R" value meeting applicable energy use codes. Insulation should have sufficient density and rigidity to span any flutes or irregularities in the decking and support the weight of all anticipated traffic on the roof without crushing or breaking down of the edges. The design professional or consultants or both shall verify the insulation requirements for each particular building and roofing system. Provide adequate ventilation in the plenum spaces to prevent moisture and condensation from damaging the interior spaces of the building.

(2) All insulation shall be applied in two (2) layers with all joints broken and staggered. All insulation boards shall be installed in the same direction throughout, unless fields are separated by an expansion joint. Butt edges of insulation tightly and cut in neatly around all roof penetrations.

(3) Insulation shall be secured to deck using approved fasteners conforming to Factory Mutual System, Class I construction for wind uplift protection unless otherwise approved by the Section.

(C) Securement/Fasteners: All roof assemblies for new construction shall meet or exceed specifications for Factory Mutual System, Class I, construction in regard to wind uplift protection.

(D) Fire, wind, and code requirements: New roof construction on buildings shall meet or exceed all applicable codes. In addition, the roof assembly shall meet or exceed specifications for Underwriters Laboratories, Inc., Class "A" construction and Factory Mutual System, Class I construction, in regards to fire resistivity and wind uplift. When re-roofing existing buildings, this may not always be possible, especially when re-roofing over existing membranes. Submit plans and specifications to the Section for approval.

(E) Vapor Retarder Sheets:

(1) The design professional shall investigate the need for, and specify as required, the proper vapor retarder sheet and its applications. All buildings with high humidity (such as swimming pools where moisture migration will be a problem) should be specified with vapor retarders unless otherwise approved by the Section.

(2) The vapor retarder sheet shall be installed over the roof deck prior to the installation of the insulation or roof membrane or both. Seal all edges, punctures, and around all penetrations through the roof to form an envelope enclosing the insulation.

(3) The vapor retarder application shall meet all fire retardant requirements which building use requires. Refer to applicable building codes for requirements. Determine proper attachment for wind uplift protection from manufacturer's specifications.

(F) Venting Base Sheets are usually heavy-coated base sheets with an embossed grid designed to channel current moisture out of built-up and modified bitumen roof assemblies and prevent blistering. Venting base sheets are primarily used on re-roofing applications or to vent moisture out of poured gypsum or lightweight concrete decks. Application is by spot mopping to existing membranes or mechanical attachment to a nailable deck. In some instances, it is more desirable and economical to use gypsum board or perlite "re-cover" boards in lieu of a separate venting base sheet. Moisture release vents should always be specified in conjunction with a venting base sheet. See § 2-1204 (G).

(G) Moisture release vents shall be installed on all roof systems when required for certain type of poured decks and re-roofing over existing membranes. Vents for bitumen roof systems shall be only ‘factory made’ vents with spun aluminum housings designed to vent moisture out, but not allow moisture back into the roofing system. ‘Shop built’ sheet metal vents are not acceptable for use on buildings. Moisture release vents are primarily designed to vent moisture from a roof system including insulation and to reduce the possibility of blistering. To properly vent, holes should be cut all the way down to the deck, or vapor retarder sheet where applicable, according to the manufacturer's specifications.

(H) Membranes for Built-Up Roof Systems:

(1) Built-up roofing membranes for buildings shall be asbestos-free felts with fiberglass and/or polyester mats.

(I) Membranes for Modified Bitumen Roof Systems:

(1) Membranes for Modified Bitumen roofing shall be a minimum of an asbestos-free felt with fiberglass and/or polyester mat overlaid with a modified bitumen cap sheet.

(J) Roof surfacing for Built Up and Modified Bitumen Roof Systems:

(1) For APP (or Atactic Polypropylene) Modified Bitumen and Built Up Roof Systems: An Energy Star® approved fibrated aluminum roof coating (asbestos free) (A.S.T.M., D-2824, Type III) applied in two (2) separate coats, at the rate of 1 1/2-2 gallons per 100 sq. ft., is the preferred roof coating for state-owned buildings. Aggregate ballast is not recommend for built-up roofing with aluminum coating.

(2) For (or Styrene-Butadiene-Styrene) Modified Bitumen Roof Systems: Ceramic Granules or Metal Clad “Veral”

(3) For Built-Up roofs, where aggregate ballast is allowed by code: All aggregate surfacing shall be clean, dry, rounded pea-gravel ranging in size from 1/4" to 3/8", applied as per manufacturer's specifications for the particular installation. (400 pounds per square, minimum is the typical application.) Light color aggregates are preferable to aid in heat reflectivity.

(4) Asphalt and Emulsion coatings are not recommended.

(K) Roof Cants

(1) Roof cants shall be required at all vertical projections including walls, equipment curbs, and the like on bituminous roof systems. Cants shall be securely set in hot steep asphalt or cold applied adhesives. Precautions should be taken to avoid bitumen drippage where it can occur, such as steel decks. Provide a minimum face width of 4" to provide a transition of the roofing felts from the horizontal to the vertical face.

(L) Membrane Flashing:

(1) All membrane roof flashing shall be compatible with the manufacturer's installed system.

(2) Membrane roof flashing shall be provided at all vertical projections, roof perimeters, curbs, parapets, walls, roof penetrations and elsewhere as required, and should be properly designed and carefully detailed to provide a watertight installation.

(3) All membrane flashing at vertical surfaces shall extend a minimum of 6" above the top of the cant strip (10" above the roof surface if a 4" cant is used) and 8" onto the roof surface from the bottom edge of the cant. Do not hot mop the base flashing above the top of the cant strip. Bituminous membrane flashing shall be set in hand rubbed applications of industrial roof cement. The top edge of the membrane shall be sealed and metal counterflashing provided for protection. Do not surface mop base flashing of bituminous roof systems with hot asphalt.

(M) Metal Counterflashing:

(1) Metal counterflashing shall be provided over all membrane flashing where it occurs at vertical projections, parapet walls, equipment curbs, and the like.

(2) A two-piece locking type counterflashing shall be used in all masonry wall construction. The horizontal flashing part shall be laid in the wall during construction at the proper height. The vertical face of the counterflashing shall lock in place and be removable to facilitate maintenance and re-roofing.

(3) The counterflashing should be approximately 4" in height, have a hemmed edge and turn out at the bottom to form a drip edge. The counterflashing should never extend below the top edge of the cant.

(4) Refer to §2-1205(O) for the type, gauge, and quality of sheet metal to be specified and used.

(5) Cast-in-place reglets are acceptable. Specify only non-deteriorating type metal. Surface mounted extruded aluminum anchor bars will be acceptable if no other method is feasible. Anchor bars shall be fabricated of non-deteriorating type metal, of sufficient strength and rigidity, have pre-punched, slotted holes for attachment, using heavy-duty fasteners. (Note: Plastic anchor pins are not acceptable).

(N) Sheet Metal Components:

(1) All metal components of the roof assembly shall be fabricated of a non-deteriorating metal free of dents, waves and blemishes.

(2) 24-guage pre-finished sheet metal or Mill finish aluminum of .032" thickness (minimum) shall be the standard material used on buildings.

(3) Other non-deteriorating metals such as copper and stainless steel are acceptable.

(4) 24-gauge pre-finished sheet metal or .040" thickness aluminum is recommended for scuppers, guttering, down spouts and splash pans.

(O) Expansion Joints:

(1) Provide expansion joints in the roofing system wherever structural expansion joints occur, wherever structural framing or roof decks change direction or materials, and where roof areas dictate the need for an expansion joint.

(2) Provide additional expansion joints within the roofing system itself wherever the roof perimeter is interrupted by either a projection into, or out of, the major field of roofing to form an isolated segment of roofing at the same elevation and as may be required by the dimensional stability of the several components used.

(3) Curb type expansion joints, in lieu of low profile type, are desirable for purposes of maintenance and longevity. Treated 2x's should be used of sufficient height to install cant strips and membrane flashing of sufficient height for a watertight installation.

(4) Consider using, warranty permitting, metal expansion joint covers of .040" mill finish aluminum in lieu of neoprene expansion joints for all roof and roof-to-wall expansion joint conditions on state owned buildings. Hex-head fasteners shall only be used. Nails are prohibited.

(P) Roof Penetrations:

All roof penetrations shall be flashed as recommended by the roofing membrane or metal panel manufacturer furnishing materials for the particular installation and the recommendations of the National Roofing Contractors Association, based on the best, current roofing practice.

(Q) Roof Drainage:

(1) All roof drains are to be located at the low points of the roof deck. Areas drained should be limited so that no drain exceeds 4" diameter. Locate drains so that all roof surfaces may be readily drained (each side of expansion joints, and the like.). The roof drain itself should be set a minimum of 3/4" below the roof surface. Taper insulation in a 3'0" diameter around drains.

(2) Coordinate roof drain placement with drainage slopes so as to stay within acceptable limits according to manufacturer's recommendations. Install roof crickets between drains where required to properly drain roof areas.

(3) Roof drains shall be interior where possible in order to allow for future expansion of the building.

(4) Every roof shall have an appropriate overflow scupper or emergency roof drain to prevent flooding or roof failure should the roof drains become stopped up.

(R) Roof Protection Walk Pads:

(1) In most cases roof pads or walk boards are not recommended on roof except in extreme high traffic conditions that may include but are not limited to:

(a) Roof top protection walk pads are only recommended on roofs where mechanical equipment, flagpoles, penthouses, laboratory experiments, and the like, are located which requires periodic maintenance and protection from daily foot traffic.

(2) Walk pads should be neatly laid out and designed in such a manner as to not impede roof drainage.

(3) 12" X 24" is the recommended size of the individual pieces of roof protection walk pads. Walk pads shall comply with and be installed per roof membrane manufacture’s warranty requirements.

(4) Walk pads should be installed prior to aggregate surfacing, or, if smooth surface roof membranes, before the application of the coating.

(5) In many instances, simply adding an extra layer of membrane for walk paths and roof protection is preferred.

2-1205 ROOFTOP MOUNTED MECHANICAL EQUIPMENT (Self-contained heating and/or cooling package units and associated ductwork)

(A) Mechanical equipment shall not be located on the roof unless contained in a separate mechanical roof penthouse or submitted for approval in writing to the Section prior to the first plan review. Refer to §2-408 regarding unacceptable design configurations.

(B) In those instances where mechanical equipment is approved to be located on the rooftop, due to the building budget or design, the following guidelines should be followed:

(1) Rooftop equipment (defined here as self-contained heating and/or cooling package units and associated ductwork), which is elevated above a roof, shall be designed with adequate support and clearance. The larger a piece of equipment is, the more clearance it will require. Provide a minimum of 10" clearance above the finished roof surface and additional clearance as required sufficient to maintain and re-roof the building. Contact or refer to National Roofing Contractor's Association's "for recommended minimum heights of equipment and support systems above the roof.

(2) Rooftop equipment shall be adequately supported and attached to the structural system of the building.

(3) Provide vibration isolation, as required.

(4) Legs of equipment (of substantial size and weight) supports should be surrounded by a pitch pan filled with 1" of fast setting gypsum cement and topped off with a commercial Pitch Pan Sealer sloped to shed water. Lightweight equipment should be set on water-resistant treated wood blocking and secured to the roof structure (with metal straps) as needed for protection and safety.

(5) Protect pitch pans and pan sealants by installing watertight aluminum or pre-finished sheet metal umbrellas with drawbands attached to equipment support legs.

(6) Provide support for any piping or lightweight equipment on the roofs. Piping or equipment shall be supported by treated wood blocking set on an extra layer of loose membrane set in industrial roof cement on the roof surface. Electrical conduit shall not be surface run on the roof.

2-1206 MINIMUM ROOF SLOPES FOR POSITIVE ROOF DRAINAGE

(A) All state facilities of new construction shall be required to have roof surfaces, with a minimum slope of 1/4" per foot for positive drainage.

(B) Where possible, roof slopes shall be accomplished structurally, in lieu of large amounts of tapered insulation fill to reduce costs and weight on the structural system.

(C) Avoid excessive slopes (in excess of 1/2" per foot) in built-up and modified bitumen roof assemblies which cause slippage and bitumen run-offs. Use proper fasteners and bitumen for the slope of the roof and the type of roof assembly.

(D) On re-roofing of existing facilities, the roof slope may be reduced to 1/8" per foot. The existing roof should be surveyed for areas which pond water. These areas should be leveled or filled as required and practical for the type of substrate. Verify that equipment curbs, counterflashing heights, and the like, are of sufficient height for re-flashing after the installation of new tapered insulation and roof membrane.

2-1207 ROOF ACCESS REQUIREMENTS

(A) Roof access for inspection and periodic maintenance shall be required on all buildings.

(B) A lockable, factory produced roof access scuttle (minimum size 2'6" X 3'0") with an insulated curb and hinged door, shall be located as directed by the owner's representative in a convenient location such as a janitor's closet, mechanical equipment room, and the like.

(C) A heavy duty metal ladder (20" wide, minimum) shall be provided at all roof access scuttles. Bolt ladder to floor, wall, and scuttle curbing. Ladders shall comply with current OSHA requirements.

(D) Access to all roof levels shall be provided. Utilize lockable type doors, windows (of sufficient size), roof access scuttles or exterior mounted rungs or ladders to provide access.

(E) When re-roofing existing buildings, verify need for roof access and provide as needed. Coordinate locations with the owner's representative.

2-1208 WORKMANSHIP/QUALITY CONTROL

(A) Installer's Qualifications: Installers shall be recognized roofing contractors, specializing in the chosen system roof application, skilled and experienced in the type roofing required. In addition, installer shall be familiar with the specific requirements and methods needed for proper performance and workmanship in accordance with recognized standards of the industry and the manufacturer

(B) Pre-Installation Conference: A pre-installation conference shall be held prior to installation of any roofing and associated work on a state building. The pre-installation conference shall be initiated by the design professional at the proper time with a minimum of three (3) day notice for the following parties to attend:

(1) Installer's representative (roofing sub-contractor).
(2) General contractor's representative (where applicable).

(3) Mechanical contractor's representative (where applicable).

(4) Electrical contractor's representative (where applicable).

(5) Deck installer's representative (where applicable).

(6) Testing services representative (where applicable).

(7) Design Professional.

(8) ABA Construction Section representative.

(9) Agency representative or project coordinator.

(10) Physical plant or maintenance representative.

(C) Review the Following with All Concerned Representatives:

(1) Letter from manufacturer furnishing roofing system/roof warranty, stating manufacturer has reviewed job specifications and agrees to furnish warranty as specified.

(2) Project requirements, drawings, specifications, construction details, and the like.

(3) Material submittals, manufacturer's requirements for bonding (where applicable).

(4) Deck condition, installation (where applicable).

(5) Storage of materials.

(6) Installers' set-up directions.

(7) Safety considerations.

(8) Protection of rooftop, building and grounds.

(9) Scheduling of work.

(10) Roof inspection, testing.

(11) Weather limitations. Rejection of "phased" construction.

(12) Application of materials/building and regulatory codes.

(13) Clean-up.

(14) Project close-out. A record shall be made by the design professional of the pre-installation conference discussions, the decisions and agreements reached, and a copy of the record shall be made available to each party attending

(D) Roofing Materials Delivery and Storage Requirements Delivery:

(1) No materials are to be delivered to the site prior to approval of the materials submittal, the pre-installation conference, and the owner's representative's approval.

(2) No materials are to be delivered to the site without the proper arrangements for placement, storage and protection from the weather.

(3) Agencies and their representatives are instructed not to accept delivery or be responsible for acceptance.

(4) Deliver materials in manufacturer's original containers, dry, undamaged, seals and labels intact.

(E) Sheet Material Storage:

(1) Storage of all sheet materials (roll goods) and insulation shall be subject to the following requirements: If within 50 miles of contractor's warehouse: All sheet materials (roll goods), insulation, and the like, shall be trucked to job daily from enclosed warehouse storage.

(2) All other storage shall conform to the following:

(a) Enclosed trailer, vans, or truck storage on the project site.

(b) Canvas (no plastic sheeting is acceptable) tarpaulins, with material on wooden pallets, 6" minimum above the ground, secured by ropes, top and sides of all material protected from moisture and rain.

(c) Bitumen may be stored separate, adjacent to kettle location.

(F) Rejection of “Phased” Construction:

(1) The installer shall not "phase" the application of the roofing system. The roof system components shall be applied consecutively as recommended by the manufacturer (within the limits of a days work, and be weather-tight so that in the event of inclement weather, no damage will occur to the roof components or interior contents of the building. "Phased" roof construction will be rejected by the owner’s representative and shall be removed and replaced by the installer.

(2) Final surfacing of aluminum coating, where applicable, may be delayed until the roof membrane cap sheet has properly weathered. Allow owner’s representative time to inspect roof surfaces, all roof surfaces shall be clean and dry for approximately 48 hours prior to application of final surfacing.

(G) Weather Condition Limitations:

(1) Proceed with roofing and associated work only when weather conditions will permit unrestricted use of materials and quality control of the work being installed, complying with all requirements of the specifications and recommendations of the roofing materials manufacturers, without "phased" construction.

(2) Proceed only when the installer is willing to guarantee the work as required and without additional reservations and restrictions. Record decisions or agreements to proceed with the work under unfavorable weather conditions, and contact ABA, Construction Section. State the reasons for proceeding and the names of the persons involved in the decisions, along with changes (if any) in other requirements or terms of the contract.

(H) Protection and Clean-Up

(1) Rooftop Protection and Clean Up

(a) Protect roof surfaces over which work is to be performed.

(b) Exercise care and caution that roofing materials placed on rooftop do not overload structure, or damage decking or other roofing materials.

(c) Take care to prevent bitumen, aggregate and debris from running into and clogging roof drains and rainwater conductors. Remove trash and debris promptly.

(d) Schedule work in order not to track over and damage newly installed roofing in place. If absolutely necessary to cross a newly applied roof area, coordinate exact protection procedures with owner's representative.

(e) The installers shall be responsible for all damage to any related items to his trade and will be responsible for the cleaning and repair or replacement of any such items.

(2) Building Protection and Clean-up:

(a) Properly and efficiently protect building and work of other trades from damage by roofing materials during the performance of the work.

(b) The installer shall protect building walls and other surfaces from disfiguration by bitumen stains, runs or spillage, etc. and the installer shall bear the labor and material costs for repair of these surfaces from damage by the roofing installer's work.

(c) Protection of the building and its interior contents is mandatory. The installing contractor shall submit a written plan for providing this protection to the owner's representative for approval. The installing contractor shall furnish plastic sheeting to protect computers, word processors, printers, typewriters, and any other sensitive equipment in the building.

(d) It is suggested, and may be necessary, for the installing contractor to contract with the Agency's designated employee(s) (custodial or physical plant) for after hours clean-up and protection.

(3) Grounds Protection and Clean-up:

(a) Coordinate access, parking, storage of materials and equipment on the grounds with the owner's representative designated at the pre-installation conference.

(b) Protect the grounds, lawn, landscaping, shrubbery, and the like, from abuse and damage during roofing work.

(c) Remove trash, debris, wrapping, and the like, promptly and clean up daily around the job.

(d) The installer shall be responsible for removing all equipment and surplus material from the grounds prior to final acceptance of the work. Installer shall leave his portion of the work, as specified, clean, and in complete order. Upon final completion, the ground shall be cleaned of all trash, debris, gravel, bitumen, lumber, scraps, and the like, and the grounds raked to conditions prior to roof work.

(I) Installer's Guarantee

(1) Terms: Upon completion of all work and as a condition of its acceptance, deliver to the owner a written guarantee signed by the general contractor and the installing sub-contractor agreeing to correct all leaks and defects in the roofing system work.

(2) Time Period: The time period for correction of the roofing system work shall be two (2) years from the date of final acceptance of the roof by the owner's representative and ABA. Sixty (60)

days before the end of the two-year period, review roof conditions of the site with the owner and all parties concerned and correct all defects in conformance with the original specifications

(3) Warranty Repairs: During the correction of work period, the roofing installer shall, upon notice from the owner, make immediate temporary repairs and notify the roofing materials manufacturer, a report made, and, if covered by this guarantee or the roofing materials manufacturer's guarantee, the roof shall be permanently restored to a water-tight condition, at no cost to the owner.

(J) Manufacturer’s Roof Warranty

(1) A Manufacturer's Warranty shall be required on all re-roofing, new construction, and associated roof work on ~~a~~ state buildings unless the cost and size are very minor. General: Specified work shall be guaranteed by the roofing materials manufacturer for a period as specified (maximum term and maximum penal sum available) starting from date of final acceptance by the owner, of the completed roofing system. The materials manufacturer shall approve the roof warranty. Surety company bonds are not acceptable. Submit one (1) copy of the roof warranty on manufacturer's standard printed form to the Agency, upon acceptance of the roof.

(2) Specified work shall be inspected by qualified representatives of the manufacturer during its installation and at final completion, for conformance to manufacturer's warranty program. Minimum follow-up inspections shall be made in accordance with the manufacturer's requirements and corresponding observations and reports provided to the owner.

(K) Installer’s Warranty Signs

(1) Provide 10" X 12" minimum size painted signs (quantity of signs as needed or specified) made of aluminum with a light color background and letters of a contrasting color. Use paint that is compatible with the aluminum. Make the sign to read as follows:
"DO NOT MAKE REPAIRS OR ALTERATIONS TO THIS ROOF" without the written approval from the Agency's authorized representative. This roof is maintained until (insert the date, month and year, two years after date of final acceptance), by (insert contractor's name, address, and telephone number).
(2) Permanently post signs as directed by the owner’s representative. Provide as least one (1) sign on each roof of the building where new roof work occurs.

(L) Roof Inspections/Roof Cuts

(1) The design professional's specifications, based on the manufacturer's recommended installation procedures, when approved by the owner and ABA, will become the basis for inspecting and accepting or rejecting actual installation procedures used on the work.

(2) Roof Inspections: Provide safe access to the roof for proper inspection by the owner’s representative. Notify the roofing materials manufacturer whenever roofing work is to be done in sufficient time to arrange all inspections necessary for bonding of the roof system. Keep the owner’s representative and Construction Section, informed of the status of the project and schedule for completion.

(3) Roof Tests, Roof Cuts:

(a) Roof cuts will be made only when considered absolutely necessary to determine compliance with specifications.

(b) When necessary, cut 4" X 42" test samples (to cut a total cross-section of all roof plies), of installed roofing as directed by the owner's representative. Immediately repair roof to conform to adjacent roof construction without cost to the owner.

2-1300 FUNDAMENTAL MECHANICAL AND ELECTRICAL REQUIREMENTS

These requirements apply to new construction and renovation projects only. Existing conditions or systems are exempt these requirements. Agencies are encouraged to upgrade existing systems to meet these requirements as much as practical when equipment or system components are replaced.

2-1301 GENERAL REQUIREMENTS:

(A) Mechanical and Electrical systems should be appropriate for the intended application regardless of the geographic location in the state. Location should be considered from a standpoint of availability of a competent service organization. Where critical replacement parts cannot be delivered within 24 hours, consideration should be given to inventorying these parts on-site. However, it is not the intent of a capital improvement project to stock the Agency's supply shelves. Other sources of funds are available for that purpose.

(B) Systems shall be capable of meeting the intended operational parameters of the application year round without requiring special seasonal reconfigurations. Controls should be clearly labeled and described so as to allow the operator to manage the system with a minimum of training. In all new system specifications, include a specific training time and course outline for the contractor to provide to Agency personnel. It is recommended that all training classes on the control systems and the system operational concepts be supplemented with videotape information or with compact disk interactive training aids. This data should be customized for the particular application to avoid confusion and promote operational awareness.

(C) New design concepts, equipment and materials should be carefully evaluated before incorporating them into a State project. While agencies are not discouraged from incorporating new and innovative solutions to design problems, state projects should not be used as the proving grounds for new concepts or ideas. Therefore, if an Agency desires to try to new design concept or material, the Section may approve such applications for the intent of observation to determine the suitability of such applications for other projects. Agencies shall submit a written request for approval to the State Engineer for use of such new concepts or materials. The request shall include but not be limited to the following information:

(1) A detailed description of the application or material.

(2) Backup literature from the manufacturer or supplier.

(3) A discussion of how this application differs from other applications utilizing conventional concepts or materials. Include the unique features of each situation that have lead to selecting this concept or material.

(4) A discussion of the expected cost difference between the conventional systems and the proposed systems.

(5) A discussion of what benefits the Agency expects to achieve over the conventional systems approach.

(6) A discussion of how the Agency expects to monitor the application for verification of expected results.

2-1302 MECHANICAL SYSTEMS

(A) Air handing units, pumps, boilers and other mechanical equipment requiring frequent inspection and service should be located within the building or in separate buildings with interconnecting chases or pipe tunnels. Equipment shall be located in rooms with ample space to provide routine maintenance, component replacement, operation and inspection without requiring demolition of the building structures or unnecessary climbing or crawling by service technicians or mechanics. Equipment located outdoors should be installed on the ground on solid foundations with concrete service pads around the equipment.

(B) When equipment must be installed on the roof, provide raised equipment platforms that allow roof replacement and maintenance or full perimeter curb to eliminate the need to re-roof under the equipment. Equipment shall be selected with water tightness of the roofing system in mind. Equipment that is prone to allowing leaks to penetrate the unit casing, interiors or connections during normal and wind blown rain shall be avoided. Where equipment is mounted above the roof, provide a service platform on the service access sides of the equipment. Provide stairs that are integral to the platform to avoid the need for ladders to gain access to the work platform. Conform to OSHA safety requirements with regards to platforms, ladders, confined spaces and the like. When it is absolutely necessary to have piping, conduits, ductwork, etc. across the roof, specify “zero penetration support systems with non-rusting base supports to distribute the equipment weight without damage to the roof membrane or insulation. Ensure that the installed system will resist the design wind loads without damage to the supported system or the roof.

(C) Air handling equipment should be specified with access doors with view ports between each major section or component to allow inspection of the operating equipment without requiring the shutdown and opening of the unit. Provide internal lights with exterior mounted pilot light switches on units exceeding ten (10) feet in width or height. For package split-system equipment, provide a means to remove and clean the cooling coils and heating coils without requiring complete dismantling of the system.

(D) Mechanical air conditioning system should be specified with the highest operating efficiency permitted by the project budget while still allowing for competitive bidding. Minimum acceptable seasonal energy efficiency ratio (SEER) shall be 12.0 and minimum energy efficiency ration (EER) shall be 10.0 Indirect, gas-fired heating equipment shall have a minimum annual fuel utilization efficiency (AFUE) of 80%. Agencies are encouraged to require higher efficiencies

(E) The use of alternative energy sources for both heating and cooling are encouraged. Agencies should consider the effects of diversity and quantity aggregation on their ability to negotiate utility rates and their ability to provide uninterrupted service at an affordable cost to the State.

(F) Mechanical systems shall meet the requirement of the Arkansas Energy Code, (ASHRAE Standard 90.1 for energy efficiency) and the ASHRAE Standard 62 for indoor air quality. Equipment shall be selected to meet these requirements without requiring the equipment to operate outside of the manufacturer's recommended performance envelope during the extremes of summer or winter. Operation of the equipment during these extremes should not shorten the intended life of the equipment or sub-components.

(G) Mechanical system designs should be conducive to promoting good indoor air quality. Air equipment subject to exposure to condensed moisture should be constructed of materials that do not promote or support biological growth. These surfaces should be sloped to a drain point that will readily remove the moisture from the system. These surfaces should be easily accessible for periodic inspection and cleaning. The remainder of the system should also be readily accessible for inspection and cleaning. Filter selections in air systems should consider not only the particle size to be arrested but also the possibility of odor transmission through the system. Frequency and cost of replacement media should be considered however, the cheapest filter media is often the least desirable from an air quality standpoint and a frequency of replacement standpoint. Unless otherwise specified by the Agency or dictated by the specific application, all HVACR systems shall maintain the space temperature and humidity within the bounds of the "comfort envelope" as defined by the ASHRAE Fundamentals Handbook. This comfort envelope is generally accepted as a region where the indoor temperature and humidity will be acceptable to the majority of the occupants.

2-1303 PLUMBING SYSTEMS:

(A) Plumbing systems shall be designed pursuant to all state and federal laws and regulations.

(B) Back-flow prevention shall be applied to each project as required to protect the public water supply and the interior building distribution systems from the potential for cross contamination from a non-potable or contaminated source. Many building projects will require an approved back-flow prevention device to be installed on the incoming water service prior to the first connection tap. In addition, all connections to mechanical systems or equipment shall be provided with an approved back-flow prevention device at the connection to the equipment or at the point where the dedicated piping system for makeup water begins. Back-flow devices shall be installed in accessible locations and provided with an adequate drain connection to allow proper operation and inspection.

(C) All fire sprinkler services and standpipe systems shall be installed with an approved back-flow prevention device.

(D) All lawn irrigation systems, agricultural/aquatic operations and wash racks shall be provided with an approved back-flow prevention device to protect the public water supply and eliminate cross connection contamination within the facility.

(E) All heating water equipment shall be selected for energy efficient operation. Gas fired heating equipment shall have a minimum AFUE rating of 80%.

(F) All plumbing fixtures shall be selected and installed in a manner that is conducive to ease of cleaning of the fixture, support, and surrounding area. Cleanliness promotes good indoor air quality and a healthier indoor environment. System designs should not result in wet, damp or pooling water, which can be a source of microbiological growth or promote the formation of mold and mildew if left un-cleaned.

2-1304 ELECTRICAL SYSTEMS:

(A) Electrical distribution systems shall be designed to allow rapid comprehension of the basic system layout. Where multiple voltages will occur within a space or structure, careful consideration should be given to the layout, routing, labeling and color coding of conductors and components to minimize potential injuries due to confusion of the various systems.

(B) Where three-phase power is available, utilize this power for larger motor loads.

(C) The use of copper conductors and copper busses is recommended. Where aluminum conductors are to be considered, ABA recommends that aluminum not be used on branch circuits below the distribution panel level. ABA recommends that all terminations on aluminum conductors be made with bolt-on or weld-on lugs only. Panel-board termination bars or lugs utilized with aluminum conductors should be made of copper, cadmium or other approved materials rated for use with aluminum or copper.

(D) Where buildings are provided with a 480/208/120 volt system, perform an economic analysis of the cost benefit of 277 volt lighting verses 120 volt lighting.

(E) Specify lighting fixtures, lamps and ballast for energy efficiency and to minimize the amount of hazardous waste that may be generated by the Agency during routine maintenance replacement.

(F) Specify high efficiency transformers when the transformer losses are included in the utility metering. Utilize transformers that are operationally stable at the anticipated operating conditions.

(G) Where critical operations include electronic equipment or computers, utilize transformers that minimize harmonic distortion or provide electrical isolation of susceptible equipment or circuits. Provide neutral conductors sized for 200% of the line conductor capacity.

(H) Provide a minimum of 10% spare circuit capacity at each panel to allow future growth. Provide a minimum of 25% growth capacity on wire management system for each systems future growth.

(I) Circuits serving critical loads or equipment should be provided with a minimum ride through capability to allow continuous operation of the equipment or component during nominal dips in power to 70% of RMS voltage and for momentary outages of 1/2 cycle or less.
(J) All new construction shall be evaluated for lightning risk hazard in accordance with the procedures outline in NFPA 780.

2-1400 FUNDAMENTAL CABLING SYSTEMS REQUIREMENTS

(A) The following sections pertain to the planning, installation, maintenance and documentation of the various new cabling systems of 90 volts or less in state owned buildings.

(B) The development, installation and management of cabling systems presents many unique problems for building managers and operators. Agencies shall endeavor to ensure that each system is properly designed and installed to minimize the potential for problems to develop. Therefore, building operators and managers shall maintain up to date documentation of each

cabling system to allow proper maintenance, identification of system components and coordination with other projects. When systems are abandoned, the Agency shall require the obsolete cabling to be removed from the premises.

(C) Projects subject to the jurisdiction of the Arkansas Department of Information Services (DIS) shall be coordinated with DIS at the earliest opportunity. The Agency Project Coordinator shall notify DIS of the project. Comments or requirements of DIS should be incorporated into the project design in a timely manner. Copies of all comments or requirements shall be forwarded to the Section with the plan review submittal. When DIS is responsible for providing telephone or data services or for arranging the activation of these services, agencies shall allow ample time in the construction project for this coordination. Agencies shall promptly inform the Section and DIS of all changes in the project scope and schedule to avoid delays.

2-1401 PLANNING REQUIREMENTS

(A) The following types of cabling projects are not considered capital improvements and are not subject to this policy:

(1) Cabling between components of a system which is routed exposed in the space and passes between components (i.e. cabling between the computer and peripherals on the workstation).

(2) Cabling routed exposed in the space between the system component and the network connection (i.e. the telephone or computer on the workstation and the network outlet in the wall, floor, or ceiling).

(3) Cabling routed exposed in the space between system components for television, radio, and satellite broadcast or audio/visual systems.

(B) All other cabling projects, including the systems above when routed concealed or in conduit, are considered capital improvements subject to State and Federal laws and regulations.

(C) All cabling projects contracted independently or that are part of a larger project which exceed the amounts established in Ark. Code Ann. § 22-9-101 shall have the plans and specifications prepared by a registered professional engineer licensed to practice in Arkansas. Conversely, projects below the limit set forth in Ark. Code Ann. § 22-9-101 requiring the involvement of a professional engineer; the plans and specifications shall comply with all other provisions of the MSC. Nothing in this policy shall prohibit agencies from utilizing the service of a competent registered professional engineer for these smaller projects.

(D) Plans for cabling projects shall be drawn to scale not less than 1/8” = 1’-0”. Scaled drawings are necessary to allow for proper quantity take-off and verification. The plans shall show the location of the cable entry into the building, the location of the telecommunication room or termination board for the cable entry. The plans shall show the routing of the cabling between the termination board and the individual run out. Run outs shall be grouped or bundled to minimum the congestion above ceilings, below floor, or in other chase spaces. A single line may be used to graphically represent multiple cables in a run. Designate the quantity or types of cables in each run.

(E) Cabling systems should be planned with flexibility and growth in mind. Systems should be segregated and labeled to avoid confusion and accidental cross connection. Face plates and

jacks should be color coded to facilitate user connection of equipment to the appropriate systems. In facilities where frequent reorganization of spaces occur, the location of outlets should be reviewed to ensure an adequate number of outlets are installed in each space to accommodate minor reorganization without requiring a major re-cabling project.

2-1402 TELECOMMUNICATION ROOMS

(A) In new construction project or major renovation project, provide at least one wiring room on each floor in each building. Rooms should be located as near to the center of the floor as practical. In multistory buildings, stack the telecommunication rooms above one another to allow vertical wiring chases between floors.

(B) For very large buildings or buildings where it is not practical to locate the rooms near the center of the floor, provide 2 or more rooms per floor. Wiring rooms should be located such that the length of cabling between the telecommunication room and the most remote outlet face plate is no more 100 meters (330 feet), for data networks or the maximum cable length recommended by the system manufacturer for other types of systems.

(C) Telecommunication rooms and cabling termination rooms shall be a minimum size of 8 feet by 12 feet (not just 96 square feet). For systems containing more than 100 faceplate outlets, the minimum room size shall be 10 feet by 15 feet (not just 150 square feet). For projects containing multiple wiring systems, (i.e. data, telephone, public address, security, and CATV.) the Agency shall review the cable installation requirements and should increase the minimum size of the room or provide separate wiring rooms for each system. When system terminations can be consolidated into one room, the maintenance and management of these systems is simplified.

(D) Many cabling systems include components that require strict environmental controls. Review these requirements and provide the appropriate air-conditioning and power quality services. Many systems require redundant cooling or power, which may necessitate additional capital cost during the installation. Review these requirements and identify them during the planning stage.

(E) Recommend a minimum of eight (8) electrical duplex outlets (2 on each wall) on isolated electrical circuits in each room. These outlets should have isolated ground conductors and dedicated neutral conductors. Isolated outlets should be color coded for positive identification (i.e. orange). Recommend at least 4 general power duplex outlets (1 on each wall) for power tools. These outlets should not be on the same panel board or circuit as the electronic equipment in the room.

2-1403 CABLING STANDARDS

All cabling shall conform to the latest industry standards applicable to the specific system at the time of installation. Cabling not installed in a closed conduit system should be specified to be plenum rated cabling regardless if the space is a return air plenum or not. This will eliminate the need to replace the cabling system if the HVACR system is renovated to a return plenum system. In addition, plenum rated cabling generally develops less smoke and has a reduced flame spread in the event of a fire thus improving the fire safety of the building.

2-1404 WIRE MANAGEMENT

(A) Efficient wire management can be achieved with a properly planned wire management system. Cable trays or "J" hook systems should be installed in all major corridors and hallways. For large projects with multiple cabling systems, provide multiple cable trays, divided trays or multiple hook systems to allow segregation of each cable system. Cable management systems should be provided with a 25% growth capacity for each cable system.

(B) Cable trays and hooks shall be attached to building structural members or wall framing systems only. Do not attach or support wire management systems from other building systems such as HVACR, piping, conduit systems or ceiling support wires. Extend wire management systems into the ceiling areas of all telecommunication rooms or cable termination rooms. Cable trays should run the length of the room along the center of the room. Where possible, extend conduit from the back box to the corridor ceiling where the wire management system runs. Provide plastic bushing at conduit termination to minimize damage to cable jacket.

(C) Provide pull boxes and long sweep elbows in conduit systems to facilitate cable pulls. Pull boxes shall be at a maximum spacing of 300 feet in outdoor conduits without bends. If one or more 90° bends are included in a run, reduce the maximum spacing to 100 feet.

(D) Provide spare empty conduits with each exterior run and with runs between floors or wiring rooms. Recommend a minimum of two (2) four-inch conduits be provided as spares in new construction or major renovations. Provide pull cords in each conduit to facilitate future cable installation.

2-1405 IDENTIFICATION

(A) Each cable system shall be clearly labeled as to the type of service the system provides. Agencies are encouraged to develop a standard practice for labeling and identifying cabling both in conduit and exposed. The following is one recommended scheme of color coding cabling and conduit to facilitate quick recognition of various systems. Other industry standard schemes are acceptable.

System Type	Color Code
(1) Data cables	Blue
(2) Data (fiber optics)	Orange
(3) Fire Alarm	Red
(4) Telephone (voice/fax/modem)	White
(5) Security	Yellow
(6) Sound, Paging, Music	Gray (with label)
(7) Access control	Black (with label)
(8) CCTV	Black (with label)

(9) CATV	Black (with label)
(10)Satellite	Black (with label)
(11)Building Automation Systems (BAS)	Black (with label)

(B) Pull box and junction box cover plates inside buildings should be color-coded the same as the system cable. The name of the system should also be labeled on the cover (i.e. “CATV”).

(C) Terminal boards, punch down panels, and cabinets should be labeled as to system type. In addition, clearly identify the point of demarcation between the building cable system and the utility connection point. Include the name of the service provider, phone number, contact person (if known) and the account number to facilitate service calls and coordination.

(D) When empty non-metallic conduit systems or systems containing fiber optic cable or other non-traceable cables are installed below grade, provide a metallic tracer wire inside the conduit or immediately above the conduit or a detectable trench tape to facilitate future locating of the conduit.

(E) A cable labeling system should be developed by the Agency to facilitate tracking and trouble shooting after installation. As a minimum the cabling shall be labeled on both ends and at junctions to identify where the cable originates and where it ends.

2-1406 DOCUMENTATION

(A) Building managers/operators should maintain a complete record of each cabling system. The record should include the “As-Built” drawings, cable test/certification reports, system start-up records, catalog-cut sheets of cable and accessories, name of the installing firm, phone number, and copies of all warranties.

(B) As-Built drawings should show routing on scaled drawings. The route and identification number of each cable should be clearly shown as well as the location of all wiring rooms, front end equipment and demarcation points. Drawings should include riser diagrams or schematics to facilitate rapid understanding of the system and trouble-shooting.

(C) Where continuity or performance testing is required, the record documentation should include the specifications for the test, the data points gathered during the test and the results of the test. All problems identified during the test and all deviations from the specification requirements should be clearly outlined and discussed in a summary at the front of the report. Include copies of all certificates or letters of certification in the front of the report.
(D) Documentation should include the “approved submittal drawings”, catalog cut sheets, or shop drawings for all components. Submittals should be bound tab and divided into discrete system components. Include the name of the installing firm and phone number. Copies of warranties and guarantees should also be included in the manual. The documentation should also include a listing of the manufacturers recommended spare parts by name and product number.

2-1500 PLAN REVIEW REQUIREMENTS

The following guidelines pertain to the submittal of construction documents to the Section for review. (See §2-410 for additional responsibilities and duties of the Agency.)

2-1501 PLAN REVIEW AUTHORITY

(A) The Section reviews capital improvement construction documents for compliance with the MSC during its normal review of capital improvement projects. Such review does not relieve the Design Professional from the responsibility for designing in accordance with state and federal laws and regulations. While the Section endeavors to provide a thorough review of the documents presented for review, the Section shall assume no liability for the completeness, accuracy, or constructability of the documents approved for bidding. The Section approval for bidding implies only that the documents reviewed contain the minimum amount of information required to achieve a reasonably accurate price for the actual value of the work contemplated.

(B) While some code reviews are performed under the terms of various Memoranda of Understandings between ABA and the Agency or authority having jurisdiction, the review provided by ABA does not relieve the Design Professional from the responsibility for full compliance with these codes and good design practices.

(C) The Section reserves the right to reject a submittal for incompleteness, unacceptable design configuration or failure to meet the requirements of the Arkansas Fire Prevention Code or other applicable codes, rules, or standards, or if the submittal lacks the detailing or information necessary for proper review and bidding.

2-1502 PLAN REVIEW SCHEDULE

(A) Plans shall be submitted for review when the documents are 100% complete and considered ready for bidding or construction. (Refer to § 2-201).

(B) Nothing in this policy shall prohibit an Agency from requesting additional plan reviews at the schematic design and design development phases of production. The Section will provide review commentary to aide the Agency in assessing the appropriateness of the design and to ensure the design process remains on track for timely completion. All requests for additional reviews shall be submitted in writing to the Section for approval.

(C) Design Professionals may request a preliminary review of the project or portions thereof to ensure that the design direction chosen will result in a review submittal that will meet final review requirements. Request for such review meetings shall be submitted in writing to the administrator of the Section and shall include a brief description of the topics to be discussed

(D) The Agency shall schedule a minimum of thirty (30) calendar days for the plan review process. If the submittal is deemed to be incomplete, the review time will be stopped and the Agency Project Coordinator will be notified in writing of the discrepancies and given an opportunity to provide the additional information. The review time will recommence upon receipt of the additional information in its entirety.

(E) The Agency shall respond to all ABA review comments in writing and shall submit one set of corrected plans and specifications with the responses to the comments. ABA shall review the

responses and verify that all commentary has been satisfactorily addressed. The Agency shall schedule a minimum of 5 working days after receipt in the Section for this review. If additional commentary is necessary, comments will be issued in writing and this process will be repeated. If no additional comments requiring additional review are necessary, the project will be released so that the bidding or contracting process can begin.

2-1503 PLAN REVIEW SUBMITTAL REQUIREMENTS

(A) While exceptions may occur, the following represents the minimum documentation required for most capital improvement projects.

(B) Provide two (2) complete sets of all submittal documents and correspondence. One copy shall be in paper form and one copy shall be in electronic form. The electronic copy shall be submitted to the Section in a readable format which is acceptable to the Section such as Adobe Acrobat PDF format on one or more compact disks.

(C) Only documents that are considered 100% complete shall be submitted for a review. These submittals shall be ready to issue for bidding without requiring additional notes, details or other work. Do not submit projects that are less than 100% complete. Plans and specifications approved, as a final review should not require extensive or lengthy addenda to complete or change the scope of work and should not result in excessive change order requests due to uncoordinated documents or lack of information.

(D) The following documents shall be included in the ABA Review Submittal.

(1) A completed copy of the ABA Review Submittal Cover Sheet.

(2) Transmittal letter from the Agency Project Coordinator indicating that the information contained in the submittal package has been reviewed by the Agency, that the information complies with the project program and the final cost estimate is within the Agency's project budget as described in the certification of available funds or the Method of Finance (MOF).

(3) One (1) copy of the professional services contract containing the initial contract, attachments and amendments. For projects executed under multiple-projects type contracts, include a copy of the task order assignment, delivery order or letter of assignment issued to the design professional for this assignment. If the design professional was engaged under a purchase order (in lieu of a standard contract form), submit a copy of the purchase order and attachments describing the services to be provided.

(4) An updated statement of the final estimated construction cost. Cost figures should be broken down by Division and Section or sub-system components such as paving, windows, millwork, painting, and the like, as required to determine an accurate projection of cost. As a minimum provide a line item for each of the CSI Divisions and for the General Conditions contained in Division 0.

(5) A copy of the Agency program provided to the Design Professional along with any revisions and a copy of any pertinent meeting notes reflecting a change in the scope of work since the first submittal to the Agency. Include a copy of the funding source noting any revisions since the first submittal.

(6) If a feasibility study or pre-design study was performed, submit a copy of the ABA approval letter for each study.

(7) Provide complete Project Manual containing all appropriate CSI Division specifications including Division 0 and the Invitation to Bid. Be advised that a separate submittal of the Invitation to Bid, Division 0 and Division 1 specifications to the Construction Section will be required upon approval of the plan review submittal.

(8) Provide complete drawings as shown under §2-1504. All drawings and the project manual shall be stamped and signed by the appropriate Design Professional. Provide a preliminary or Not-for-Construction over stamp of the Design Professionals seal.

(9) Submit copies of approval letters from all regulatory review agencies.

(10) If the project site will be located in a floodplain, submit a copy of the permit application to development in the floodplain in accordance with § 2-700 et. seq.

2-1504 PLAN REVIEW DRAWING REQUIREMENTS

(A) Title Sheet (T1)

(1) Title of Project.

(2) Location of Project.

(3) Name of Agency.

(4) List of all design consultants, with phone numbers and addresses.

(5) Arkansas Fire Code Prevention Certification Statement.

(6) QC Review Statement

(7) ABA Agency Project Number

(8) Agency Project Number (if different than ABA assigned number).

(9) State Location Map

(10) Vicinity Maps of City and Campus.

(11) Arkansas Fire Prevention Code Analysis Data.

(a) Occupancy Classification
(b) Minimum Occupant Loads
(c)Type of Construction
(d) Allowable Height
(e) Allowable Building per Floor
(f) Gross Floor Area for Each Floor of all Buildings
(g) Net Floor Area for Each Assembly Occupancy Classification

(h) Horizontal Separation Distances
(i) Exit and Access Corridor Protection Strategy
(j) Seismic Design Category
(k) Seismic Use Category

(12) Index of All Drawings in the Project. (For large projects, the index of drawings and other information may be placed on Sheet T2).

(B) Topographical Surveys & Plot Plans (TS):
(1) Survey shall meet the Arkansas Minimum Standards for Property Surveys and Plats". A registered land surveyor licensed to practice in Arkansas shall stamp and sign these plans.

(2) Where required by the scope of the project, provide a legal description of the subject property.

(3) Show property lines and surrounding features affecting future development.

(4) Show the location of all known easements, flood plan boundaries and other features that will limit or prohibit development of the site. Note the elevation of the 100-year floodplain on the plan and define the perimeter or extent of this elevation with a bold line. (Recommend you shade or crosshatch a screened pattern within the boundaries of the flood plan for clarity). Include a source data reference on the plan identifying where the flood plan information was obtained.

(5) Show contour elevations at minimum of 5-foot intervals for undeveloped areas of the site and 1 foot or 2 foot intervals within the project limits as necessary to accurately describe the site terrain. Indicate the path and contour of all existing surface run off drainage into and out of the site.

(6) Show the location of existing utility lines, materials, and sizes and surface features. When underground utilities are shown and could not be verified during the survey, provide a disclaimer statement on the plan noting the source of the assumed information. When information is derived from public utility records, include the location of the record archive, a contact phone number and the plate or drawing record from which the information was taken.

(7) Show the locations of existing buildings, towers, tanks, wells, pads, old foundations, drives, lots and the like.

(8) Show the location, size and type of existing means of access to the site. Where bridges, trestles, or other load limit or height limiting structures are located along the access routes note the posted load limit or height restriction. Where height restriction exist and are not posted (such as utility line crossings, and the like, determine the minimum clear height under the structure at the center of the road or access drive. Where gravel or paved roads are shown on the plans identify these roads by their official name or designation number (i.e. Country Road 69).

(9) Show location of permanent monument markers on the site and the coordinate information describing the monument location.

(10) Show location, size, and type of all trees greater than 3 inches in diameter within the project limits. Show other prominent trees or vegetation on the plan site that may affect the project development. Where heavily wooded or bushy areas exist, define the approximate profile of the perimeter of these areas and note as heavily wooded, wooded, bushy, marsh, swamp or the like.

(11) Provide a north arrow and a plan scale in a prominent location on the plan. The preferred location is the bottom center of the plan sheet or the lower right-hand corner of the plan sheet.

(C) Boring Logs and Soils Data

(1) Provide a small-scale plan of the site and building showing the location where samples were taken. Distinguish between borings and test pits.

(2) Indicate the surface ground elevation, the depths of each boring or test pit, and the blow counts per ASTM D-1586 at each bore.

(3) Note the classification/description of materials encountered. Indicate the ground water level at each boring or pit. Note the general site conditions and recent weather history if known (i.e. heavy rains in general area over the last month, and the like.) Include other pertinent data.

(4) Provide a brief description of site geology and subsurface conditions encountered.

(D) Demolition Drawings
(1) Show the location of all existing elements that will affect the work or be used as a reference point.

(2) Clearly define elements that are to remain after the demolition is complete. Coordinate the location of this information with the new construction plans to avoid omissions or errors.

(3) Clearly define the beginning point and the ending point of the demolition work. Where possible, provide a flag symbol indicating these points.

(4) Clearly state on the drawings how the demolished materials are to be disposed. If materials or equipment are to be retained by the owner, clearly identify these items and note where the removed item is to be stored. Avoid using the phrase “Owner has the first right of refusal on demolition materials.” Coordinate this activity with the Owner prior to issuing the plans.

(5) Clearly indicate all temporary and permanent closures of penetrations in building envelopes. Indicate temporary or permanent backfill requirements where demolition opens the existing site or removes structures.

(6) Clearly note the size, location, and type of material for piping systems, electrical systems, and the like, that will be abandoned in place. Where possible in existing structures, require the contractor to label piping, and the like, that is to be abandoned with the date of the contract drawings i.e.: “Abandoned May 2000.” Labels should appear on both ends of the abandoned system.

(E) Civil Site Drawings

(1) If the project is to be constructed on a newly acquired state property, provide a legal description prepared by an Arkansas Registered Land Surveyor or refer to the description provided on the Topographic Survey sheet if one is provided in the set of plans.

(2) Show the location of all adjacent buildings, tanks, structures, towers, and the like in the vicinity of the proposed building project. Show the location, size, and type of all trees greater than 3-inches in diameter that may affect the construction or access to the construction area.

(3) Show the location of the boundary of the 100-year Flood Plain as it relates to the project site. Show the elevation contour of the 100-year flood level. Lightly shade or crosshatch the area within the flood plain boundary and clearly indicate all new work within this area. Include a reference to the source of the data.

(4) Show the location of all known existing utilities and new utilities including the location of all connection points. Where connection to existing utilities are governed by the local utility company, provide the name and phone number of the local company. Provide connection details, temporary flushing details, and details for expansion and thrust blocking where applicable. Note that Arkansas One-Call is to locate all underground utilities as required by the Ark. Code Ann. § 14-271-101 et seq.

(5) Where roadways, driveways, parking lots, sidewalks, and other paved areas are to be provided, show locations of all control joints, constructing points, and expansion joints. Provide details of joints, turndowns, and reinforcing. Provide cross-section view of paving showing the sub-base and paving materials.

(6) Show existing grade contours as thin dashed lines and new contours as heavy solid lines. Where extensive cut and fill are required, show cut and fill cross-sections. Where roadways, driveways, and parking lots are to be constructed, show cross-sections and profiles as necessary to clearly define their construction. Where cut and fill are required, show location of designated areas on the site for surplus or stockpile materials. Show spot elevations at all critical control points and construction points. Note the finished floor elevation of the first floor located above grade. For buildings with basements or sub-levels, also include the finished floor elevation for the lowest level.

(7) Show the location of all drainage features on the site. For new construction, show the intended path of surface runoff drainage. Indicate the direction of flow by placing arrows in the direction of the flow. Where existing or new drainage structures occur, show the inverts in and out of boxes, drop inlets, manholes, and the like. For long runs of underground drainage piping provide plan and profile drawings indicating the depth of the piping and structures, the slope of the system and the cover depth above the system. Where the piping system material must change as the piping passes under a road or drive or where the system extends above grade to cross as low area or streambed, clearly indicate the change on the profile and the plan view.

(F) Landscaping Drawings

(1) Show the location of all landscaping beds, retaining walls, and water features. Include schedules showing the planting types and sizes. Indicate planting season limits and watering schedules.

(2) Show location and type of irrigation system heads. Show the head spray pattern and radius. Show the location of zone control valves, drain valves, and isolation valves. Show the layout of the piping distribution system. Show location of the connection to the public or private water supply and the approved backflow prevention device. Show location of all control panels and transformers requiring power above 24-volts. Show the location of the source power or refer to the appropriate electrical drawing for the location of main power and connections.

(3) For systems with future extension or potential for future growth, show the location of all sleeves under driveways, sidewalks, and lots as required to extend future services without cutting and patching paving.

(4) Provide staking details for all trees and shrubs that are not self-supporting. Provide installation details for each type of irrigation head, zone valve and, backflow prevention device.

(G) Fire Services Access

(1) Show locations of all buildings and structures around the project site.

(2) Show the location of all drives, roads, parking lots and sidewalks large enough to allow passage for emergency service vehicles.

(3) Show locations and types of all fences or barricade structures around the site that may limit access or impede evacuation in an emergency. Where gates are installed that restrict access to the building or site, provide a “Knox Box” that is keyed to the local fire department or emergency response service.

(4) Show the total square footage and number of floors on the building plan. Show the type of construction as determined by the Arkansas Fire Prevention Code.

(5) If specific areas of the site have been designated as areas of assembly or refuge for the building occupants, show the locations on the plans.

(6) Show the approximate location of the building entrances and exits, the approximate location of the following items if applicable.

(a) Fire alarm panel or fireman’s service panel.

(b) Main power disconnect switch, or shunt power trip device.

(c) Area of rescue inside the building.

(d) Fire stair towers

(e) Elevator shafts.

(7) Show locations of all fire hydrants within 500 feet of any point on the building and within the area covered by the plan view.

(8) Show the location of the fire department connections, post indicator valves, and fire pump if applicable.

(H) Architectural Drawings

(1) Floor plan drawings shall be shown at a scale no less than 1/8” = 1’-0”. For large buildings, use match lines to separate the building plan as required to fit this scale. For large buildings requiring match lines, provide an overall composite plan at a scale smaller than 1/8” to show the relationship of all areas to one another. Show the match line locations on this plan and reference the 1/8” scale plan sheet number for each area. Show the room name and number for each space. Show the detail marks, elevation marks, and door and window marks referenced to the door and window schedules. Provide legends, material notes and general notes as required to describe the work.

(2) Provide dimensional plans separate from the general floor plans as necessary to describe and dimension the size and relationship of the space and features. Dimensions may be shown on the general floor plans and enlarged plans provided the sheets do not become so cluttered as to be illegible or difficult to read.

(3) Provide larger-scale drawings for toilet areas, elevator lobbies, entry lobbies, special use rooms, and similar spaces where more intricate work is to be performed by the contractor. Drawings shall be shown at a minimum scale of 1/4” = 1’-0”.

(4) Provide exterior elevations of all faces of the buildings. Elevations shall be shown at a scale not less than 1/8” = 1’-0”. Elevations should indicate the building materials to be used, the texture of materials and the color of the finished surfaces. Where accent bands or features are used, provide clarification of the size, type and color. Show exterior features such as gutters, downspouts, railings, screens, construction joints, expansion joints, masonry control joints, and the like. Show locations of all building section cut lines, detail marks, and door and window marks. Indicate the relationship between the finished floor and the exterior grade. Show the floor to floor height by dimension. Dot in the footings or foundation.

(5) Provide at least one traverse section and one longitudinal section through each major axis of the building. These sections may be shown at a scale of 1/8” = 1’-0”. Provide additional large-scale building and wall sections as required to properly understand and construct the building. Building sections shall clearly illustrate all building materials, sizes, spacing and attachment. Show all through wall flashings, roof flashings, flashings at slabs, floor and the like. Show the relationship between the floor slab and the footings or supporting structure. Note the finished floor elevation for each floor and the elevations of perimeter footings or upper floor supports. Show the relationship of the finished floor to the exterior grade. Show the location of perimeter insulation and foundation drainage systems. Indicate special feature details such as ceiling heights, furr-downs, coffered-ceilings, skylights, and the like. Provide details at each unique condition through the ceiling cavity where the relationship between the ceiling height and the structural framing changes the space available in the ceiling cavity for mechanical and electrical systems. Show the location of the vapor barrier or air barrier in each exterior wall section and roof section.

(6) Provide large-scale details of unique construction features of the building. Where special angle cuts are required on masonry materials, framing materials or finish materials, provide details at a scale large enough to clearly define the desired detail. Coordinate the plans with these details to ensure that the contractor can determine where these special cuts occur. Where special patterns are to be formed in the finish materials, provide large-scale plans,

elevations and details as necessary to describe the work. Provide large details of typical construction elements as necessary to describe the building construction.

(7) Provide door and window details as required to describe the size, style and installation of each unique door and window. Provide details showing the head, jamb and sill or threshold condition for each door or window. Details shall be shown at a scale large enough to show the framing and attachment requirements. Provide door schedules and window schedules in a graphic format as required to define the type, size, location, hardwood, finish, operation and accessories required for each.

(8) Provide a room finish schedule for each space in the building. Schedule should include the room number, name, location, floor material and finish, base, wall material and finish, ceiling cove, ceiling material and finish and any special trim or features. Provide notes as required to adequately describe the finish treatments desired. Provide references to the appropriate specification sections where additional information can be found.

(9) Where built-in furniture, casework or millwork is to be included in the construction project, provide large scale plans, elevations, sections and construction details as required to describe the size, construction, and finish of these elements. Provide detail reference marks as required on the floor plans and the millwork plans as required to accurately locate the details and the space where they apply. Built-in millwork should be designed to be as simply to construct, as the function of the millwork will permit. Where customized furniture is to be a part of the construction contract provide the detailing necessary to construct the piece. Clearly note all such pieces as “custom built’ (i.e. “Custom Built Desk”).

(10) Provide reflected ceiling plans for each floor (including floors with open structure). Drawing shall indicate the types of ceiling materials, pattern of layout and changes in elevations of the ceilings. Note the height above the finished floor for each section of ceiling. Show the location of all ceiling mounted devices such as light fixtures, air devices, access doors, speakers, sprinkler heads and similar devices. These devices shall be coordinated with the various discipline drawings to ensure that the contractor can install the sub-systems correctly. A reflected ceiling plan is not a substitute for properly coordinated plans.

(11) Provide a plan view of the roof system at a scale not less than 1/8” = 1’-0” or the same as the floor plan. Design Professional may request a waiver from this requirement for large scale projects where needed. Show the size and location of all expansion joints, roof drains, emergency roof drains, scuppers, overflow scuppers and roof vents. Show the pitch or slope for each section of the roof. Indicate the materials of construction and the color of the finish materials. Show the access to all roof levels. For multi-story buildings with roof mounted equipment requiring maintenance, provide at least 2 roof access points to provide an alternate means of escape during an emergency. Where skylights or clerestory glass is provided over atrium or high spaces, provide OSHA safety cages or approved alternate protection to prevent maintenance personnel from falling through the glazing. Where roof mounted equipment requiring maintenance or inspection access, provide footpath walkways to minimize damage to the primary roof membrane. Where absolutely necessary to have pipes, conduits, and the like. across a roof, specify “zero penetration” portable suspended pipe hangers with non-rusting base supports to distribute weight without damage to the membrane. Provide details for all penetrations, joints, abutments, and changes in materials or elevations. Details shall be drawn large enough to clearly indicate the location of each layer of material, attachment and overlap necessary to provide a proper seal, lap or flashing. The use of bold lines to indicate ambiguous

details without clearly showing the installation requirements shall be prohibited. Refer to § 2-400 for additional information.

(12) Provide a Life Safety plan for each building. Show the location of all required fire exits. Show the locations of all other exits meeting the requirements of a designated fire exit. Show the locations of all rated partitions and the rating requirements. Provide details of typical rated wall construction keyed to the floor plans. Provide details for recommended penetrations and openings in rated partitions. Show the location of the fireman service command center if applicable.

(13) Provide all information related to the Americans with Disabilities Act (ADA) accommodations and access. Show where the ADA parking accommodations will be provided and clearly design the routes of access and exit to the building. Show the location of ADA facilities including ADA toilets, drinking fountains, vertical transport, sleeping rooms, bathing facilities and the like on the plans. Reference other architectural drawings as necessary to locate the construction details and dimensioning. Provide details of all ADA required special features such as handrails, door controllers, ramps, curb cuts and the like. Provide a riser type detail showing the ADA mounting heights of counter tops, work surfaces, thermostats, light switches, fire alarm devices, door handles, toilet fixtures and other features included in the work to provide for a central point of information regarding the heights of these elements. Do not merely refer to ADA requirements or guidelines.

(14) Where modular furniture or movable furniture will be a part of the contract, provide plans showing the specific locations for each component by component name or model number. Provide legends and schedules as necessary to adequately describe the components in the plan view. Provide elevation views of modular workstations and furniture to allow verification of functionality and to describe the scope of the work. Furniture not provided as a part of the contract shall be clearly labeled as “Not in Contract” (NIC) or as Owner furnished/Contractor installed.

(15) When seismic restraint of non-structural elements is required by code, provide details of typical acceptable restraining methods. Show locations of all restraints on the plans and cross reference the appropriate details. Provide the basic design criteria for the restraining system including the seismic zone/category in which the project is located.

(I) Kitchen Equipment Drawings

(1) Floor plan drawings shall be shown at a scale no less than 1/8” = 1’- 0”. Food preparation areas and food service area plans shall be drawn at a minimum scale of 1/4” = 1’ – 0”. Plans should show the relationships for all fixed and movable furniture, equipment and appliances. Provide area names to define the various function areas in the food service drawings (i.e. preparation, cooking, baking, serving, and the like.)

(2) Provide an equipment schedule that identifies each piece of equipment’s function, power and utility requirements, motor sizes and voltage requirements where applicable and a reference product manufacture and model number. Where equipment, fixtures or furniture must be custom fabricated for this specific project, note in the schedule that the item is “custom built”.
(3) Provide details and elevations as required to describe the fabrication and installation requirements for all fixtures and furniture. Where components must be custom built, provide the

fabrication details necessary for the contractor to select the proper materials, methods dimensions and finishes required to construct the project.

(4) Where connections are required by other trades, do not refer to “connection by plumbing sub-contractor or the like.” (Refer to § 2-903 (P)). ABA considers equipment ~~of~~ as fixtures which are permanently attached to the building structure by anchor bolts or fasteners or which require hardwired or permanent connection to the building mechanical or electrical systems to be “capital improvements and as such shall be subject to compliance with all Arkansas laws and regulations including but not limited to Ark. Code Ann. § 22-9-101 et seq. (Public Works Codes), Ark. Code Ann. § 17-15-101 et seq. (Licensing for Engineers), Ark. Code Ann. § 17-30-101 et seq. (Licensing for Architects). Furniture or equipment, which is completely portable or movable and only requires a plug-in connection or a quick copper connection are considered as furniture and not as a capital improvement.

(J) Structural Drawings

(1) On the first sheet of the structural drawings, provide the information pursuant to Ark. Code Ann. §12-80-101 et seq. and the Arkansas Fire Prevention Code regarding seismic design. Provide a brief description of the type of foundation and framing system used. Reference the sub-surface soil investigation and survey (company and date). In no investigation has been performed, indicate all assumptions used for the foundation design. Describe the live load allowances included in the system design. Note the allowances used for partition loads, mechanical and electrical system loads and the allowance for movable items such as furniture and the like.

(2) Foundation drawings shall include a notation for the design bearing values for all spread footings and caissons and bearing loads for all pilings. Show details for all slab and footing interfaces including those for interior partitions. Show the locations and spacing for all construction, expansion and control joints on all concrete expanses. Show locations of perimeter insulation systems, under-slab drainage and foundation drain system. Where expansive clay soils or other unsuitable soils are indicated, show the requirements for the proper backfill of a suitable material or engineered system to provide the proper bearing support. When collapsible forms are required to compensate for subsurface expansion, show the detail requirements for installation and control.

(3) For all plans, show the minimum concrete strength required for each part of the structure as required to comply with the Arkansas Fire Prevention Code. For special areas such as mezzanines, show the maximum safe live load that the Owner may place on the mezzanine after construction. Show the steel yield point strength for all reinforcing and structural steel.

(4) Framing plans shall show the size of each element and the dimensional location. When the framing system includes areas such as shear walls, which should not contain penetrations, these areas shall be clearly noted and shaded or hatched to allow rapid location and identification during the review process. On systems such as post tension slabs where penetrations must be exactly located, show all locations by dimension and provide a cautionary note for the contractor advising him of the restrictions or precautions necessary to follow during construction regarding the cutting of additional openings.

(5) For pre-engineered systems such as pre-engineered metal building, tilt-up slab construction, pre-tension slabs, post-tension slabs, or modular prefabricated construction, provide sufficient

information and details as required for the fabrication to meet the requirements of the project. Include all design values necessary to fabricate the structures and to allow independent verification that the furnished product meets the design intent. Include plan views and elevations of these pre-engineered systems to allow review of the concept and coordination of work designed by other trades such as mechanical, electrical and architectural finishes.

(6) Provide schedules showing all grade beams, pilings, caissons and other elements where size, type, strength and special connections must be coordinated to ensure proper construction. Include other schedules as required to allow accurate bidding, construction, and field verification or as required to communicate the design intent. This can include, but are not limited to, column schedules, beam schedules, truss schedules and the like.

(7) Show all typical and special connection details. Indicate the location and type to allow quick coordination and review.

(8) Show section views and elevations as required to indicate the connection locations of beams, floors, joints, trusses, and the like. Where sections do not show the floor below, provide a dimension reference to the top of the beam, bearing elevation of the joist or other element that will allow accurate determination of the clear space below the bottom of the structural elements. This dimension should be in reference to the finished floor below or in elevation dimensions (i.e. 10’-0” above 2nd floor or elev. 112’-6”).

(K) Mechanical Drawings

(1) Show the locations of all heating, ventilating, and air conditioning equipment on the plan view. Provide each piece of equipment with an unique designation mark keyed to the equipment schedule. Equipment shall be located as required to provide proper access for maintenance and repair. Equipment shall also be located as required to facilitate future removal and replacement without requiring the demolition of walls, windows, or other perimeter features of the building. Where replacement will require removal of louvers, other equipment, piping or ductwork, clearly indicate the separation points on the plans. Use bolted flanges or other replaceable type connections. Where replacement or installation will require removal of a wall, door, window or the roof, the design professional must obtain written approval from the Section prior to the submission of the final review documents (construction documents).

(2) Show the routing of all ductwork and piping on the plan views. Ductwork shall be shown double line all the way to the diffuser or grille. Differentiate between high velocity ductwork, double wall ductwork, single wall ductwork and internally insulated ductwork with a distinctive shading or hatching pattern. Differentiate between different duct system materials such is PVC, aluminum, galvanized and the like in a similar manner. Piping 6 inches and larger shall be shown double line on plan and section views at 1/4” = 1’-0” scale or larger. Piping 10 inches and larger shall be shown double lined on plans and section views at 1/8” = 1’-0” and larger. All other piping shall be single line and bold. Show reducers, increaser and when fittings on all ductwork and piping at each change in size. Provide arrows on the piping plans indicating the direction of flow and direction of slope of the lines.

(3) Where the HVACR system contains refrigeration equipment with remote condensers, condensing units or fluid coolers, show the routing of the refrigerant piping between each piece of equipment on the plan and section views. On small systems such as package coolers or split system air conditioners, the designer may use a single line to represent both the suction and

liquid lines. Provide dual designation on the line (i.e. RS/RL) and provide the size of both lines in the dimension note. Where hot gas by-pass, double suction risers or similar special lines are required, show these lines separate from the combined suction and liquid lines. Provide refrigerant piping schematics for each unique system. Show all the refrigerant specialty items and isolation valves. The designer may show the pipe sizes in a schedule format for each unit adjacent to the piping schematic.

(4) Show the airflow quantity at each air device with a balancing damper to facilitate capacity verification and final air balance. For special areas such as laboratories, isolation rooms, special procedure rooms, and hazardous storage or sterile storage rooms, show the pressure relationship for that space relative to the adjacent spaces such as positive pressure, negative pressure, or neutral pressure. This is not required for toilet rooms, janitor closets, or similar spaces, which are clearly negative to the adjacent spaces. The designer may indicate the pressure relationship for these spaces if necessary to clearly communicate specific design intent. The sum of the air flow quantities in a zone shall match the capacity of the air handling unit or terminal devices in the respective zone plus or minus an appropriate amount as required to maintain the space pressure relationship.
(5) Show the exact location for each fire damper, smoke damper, control damper, balancing damper, control sensor device and the access door to each device on the plans and section views. In variable volume systems, show the locations for all relief doors upstream or downstream of every fast closing damper as required to prevent the collapse or rupture of the duct system.

(6) Where ductwork penetrates a floor or a roof and where a duct rises up or down, show the cross section of the duct with the appropriate diagonal marking and shade a portion of the cross sectional view to prominently show the location of the penetration or riser on the plan view. Provide a note indicating the size and direction of the riser and to where it goes (i. e. 10/10 up to 2nd floor).

(7) Where hydraulic or steam piping systems are provided, show the location of all expansion joints or loop and the locations of all anchors and guides required to control the expansion. In steam systems, show the locations of all traps and vents required for the proper startup and maintenance of the equipment. Show these locations on the plan views. Include the locations of access doors where required. When designed offsets in these systems create traps or air pockets, show a drain and vent location to facilitate future drain and fill of the system.

(8) When hydraulic systems require freeze protection additives such as a glycol or brine solution, show the estimated system volume on the drawings along with the percentage by weight or by volume of the anti-freeze additive and the type of additive required. This may be noted on the system flow diagram. Ensure that all equipment capacities have been adjusted to account for the additive.

(9) Provide an enlarged plan view of each unique mechanical room at 1/4” = 1’-0” minimum. Show the location of all HVACR equipment, piping, ductwork, controls panels and the locations of all electrical panels, plumbing equipment and other equipment within the room. All non-HVACR equipment should be shown dashed and a reference provided to the appropriate sheet where that equipment can be found. Coordinate the location of these items to ensure proper code clearance, maintenance access, and operational access.

(10) Provide at least one cross section view of each mechanical room showing the elevation of the equipment, ductwork and piping in the room to allow the contractor sufficient information for bidding and to allow verification of proper access for service and replacement of equipment. Large or complex rooms may require multiple section views to clarify these issues. All section views should be drawn to a minimum scale of 1/4” = 1’-0”.

(11) Provide at least two cross sectional views through the building along each of the major axis showing the mechanical systems. The minimum scale for these views shall be 1/8” = 1’-0”. Provide additional enlarged scale sectional views as required at crossovers of ductwork and piping, furr-downs, and offsets under major structural members to clearly describe the installation limitation at these areas. Reference all known or possible interference from other trades such as sprinkler piping, electrical conduits, plumbing drains, and the like. Where these large-scale sections do not show the floor to floor view, provide a dimension to the finished ceiling and bottom of the structure to allow verification of the clearance (i.e. 10’-0” ceiling and 11’-6” bottom of joist, and the like).

(12) Provide details of typical connections, mounting details, piping specialties and unique installations. Details may be drawn “not to scale” provided the detail is not required to clarify a clearance or service access issue. In these cases, show the detail at an appropriate scale. Cross-reference the sheet number to where the specific detail applies. Also provide a detail flag on each plan sheet, which references the appropriate detail number on the detail sheet. Provide an individual detail number on each detail to facilitate this cross-referencing. Provide as many details and detail sheets as necessary to clearly communicate the installation requirements for the project.

(13) Provide flow schematic for chilled water, heating water, condenser water, steam systems, and other heat transfer systems. Show the relationship of the equipment in the process. Show all piping connections control elements and valves necessary for the proper operation and maintenance of the systems. Size all piping, vents, drains and valves. Show capacity, flow and pressure loss for generating equipment. The diagram should be drawn to enhance rapid understanding of the system. For complex systems, provide diagrams in a ladder type arrangement to eliminate line crossings and the need for isometric views to clarify flow path. Correctly show the flow path and the relative location of all components, junctions and branches. Do not change the relative location of flow junctions to avoid line crossings. Provide arrows indicating direction of flow on each pipe segment. Show all make-up valves, relief valves, pressure reducing valves, and expansion tanks. Show the pressure rating and capacity of each on the diagram. For complex systems with numerous valves, fitting, and components provide multiple versions of the basic diagram with control capacities, or sub-system elements super-imposed on the diagram

(14) Provide control diagrams for each unique system or unit. Diagrams shall show the locations of all sensors and control elements. Provide a designation for each component and a legend or schedule for symbols on the same sheet (i.e. mixed air sensor and the like). Show the set point and alarm points on the diagrams or in the schedules. Indicate the type of control point for each device (i.e. Analog Input AI). Include the sequence of operation on the sheet with the control diagram. Ensure that the sequence is clearly spelled out as to the actions and reactions of the components to the command or control signal. When pipe mounted or duct mounted sensors are installed, provide a spare well adjacent to the control device to allow field verification of the device operation or the media temperature or pressure with portable, hand

held instruments. Provide a schematic diagram for each network LAN showing the location of each panel and workstation connection and the equipment it serves.

(15) Provide equipment schedules on the drawings. Do not schedule equipment in the specification's manual. Schedules shall be arranged in graphic format with the major operating conditions defined and the capacities shown. Include the electrical requirements showing the power voltage, phase, amperage, motor horsepower's and brake horsepower. For major equipment such as chillers and boilers, include the energy efficiency rating. Provide sufficient data to allow purchase, startup and balancing of the system or equipment. Include data necessary to trouble shoot equipment in the event of a startup or operational problem. Schedules shall be provided for each type of equipment or component (i.e. air handler, air devices, pumps, traps, and the like). Provide a unique designator for each piece or type of equipment. Ensure that the schedule title and designator are consistent with the plan labels. In the header for each schedule, show the specification section number where that item can be found (i.e. Air Handlers – 15850).

(16) Where seismic restraints are required by code, provide details of typical acceptable restraining methods for piping, ductwork, and equipment. Show locations of all restraints on the plans and cross reference the appropriate details. Provide the basic design criteria for the restraining system including the seismic zone in which the project is located. Where the code allows exemptions or exceptions based on pipe size or location of piping or ductwork relative to the supporting structure, note the exceptions on the plan. Designers are encouraged to lay out system piping and equipment in a manner which eliminates where possible the need for costly restraints and minimizes the hazard to the building occupants during a seismic event.

(L) Fire Protection Drawings:

(1) Show location and types of sprinkler heads. Provide a different symbol for each type of head.

(2) Show the hazard classification for each area with a different classification.

(3) Show the locations and ratings of all fire and smoke partitions. Show all fire doors, smoke vents or fire shutters.

(4) Show the location of the fire service entrance. Show a detail of the service entrance including all valves and devices in the entry riser. Include the locations of the test drains, alarm devices, seismic connections and backflow preventers.

(5) Where a fire pump is required, show a minimum of 1/4" = 1'-0" scale plan review of the pump room and a minimum of one (1) cross-section view of the room showing the elevation of the piping and valves.

(6) When standpipe risers are required, show the location and size of the piping from the service entrance to each riser. Show the location and size of each hose or fire department connection. Indicate the mounting height of each hose cabinet or fire department connection.

(7) When sprinkler heads are installed in electrical rooms, computer rooms, telecommunication rooms elevator shafts or elevator machine rooms, show the temperature ratings for these special heads and indicate if these are pre-action or deluge type systems.

(8) Show the area of coverage by special systems such as dry-pipe systems, pre-action systems, or non-water systems. In non-water systems, show the complete layout of piping, storage tanks, and system controllers.
(9) Show the locations of all control valves and tamper switches in the system. Show other devices that require interconnection with the building fire alarm system or other alarm or monitoring systems.

(10) Show the location of all piping and the preferred routing throughout the building. Size all piping, including branch piping, on the bid documents. The designer may use the pipe size chart provided in NFPA 13 or may perform the hydraulic calculations necessary to size the piping. It is permissible to allow the successful contractor to submit an alternate layout in the shop drawing phase subject to review and approval by the engineer.

(11) Provide the details necessary to show the preferred or acceptable mounting requirements and piping support systems. Where systems are subject to seismic design requirements, provide the seismic restraint details necessary to comply with the requirements of the zone in which the system is installed. Show locations of all restraints on the plans and cross reference the appropriate details.

(M) Plumbing Drawings

(1) Show the locations of all plumbing fixtures, equipment, drains, vents, outlets and valves necessary for isolation, operation or emergency service on the floor plans. Enlarged plans may be used to show exact locations.

(2) Clearly define which piping is located below the floor, above the ceiling or exposed in the occupied spaces. Piping subject to freezing shall be installed on the warm side of the building insulation or provide with heat trace system.

(3) Size piping on the plan views. Show increasers and reducers at the point where sizes change. Show sizes of piping risers, or headers concealed inside chases or where they pass through a floor.

(4) Crosshatch or shade all plumbing fixtures and equipment for ease of location. Provide a unique designation for each type of fixture or equipment.

(5) Provide waste and vent risers in accordance with the requirements of the Arkansas State Plumbing Code. Size the piping on the floor plans and these diagrams. Show the size of each vent thought the roof and designate these penetrations on the risers and plan views with their size. (i.e. 4” VTR).

(6) Show the locations of all roof drains and area drains on the plan views. Show where all drains terminate or discharge. Where emergency overflow drains or scuppers are to be used, show locations and sizes. Provide correct locations and details on the plumbing drawings and cross-reference the appropriate locations and details on the correct architectural sheets.

(7) Show the locations of all cleanout plugs and manholes as required by the Arkansas State Plumbing Code. On open drain inlets, outlets, and all connections to manholes and catch

basins, show the elevation of the top of the feature as well as the flow line inverts of all inlets and outlets.

(8) Provide a schedule showing the sizes, capacities, operating characteristics, and design basis product name for all plumbing equipment (i. e., water heaters, pumps, compressors, and the like). Plumbing fixtures may be scheduled in the specifications however; the preferred location is on the drawings.

(9) For special piping systems such as natural gas, medical gas, laboratory gas, process piping and the like, provide the same information as generally described above. For small projects, multiple systems may be shown on the same plan view. For large or complex projects such as laboratories and hospitals, provide separate plans for clarity. For systems such as reverse osmosis, de-ionized water or ultra-pure water systems, show all components in their respective locations on a flow schematic. Ensure that complete specifications are provided for each component in the system. Do not rely on the Contractor or the Vendor to size the system and select the components.

(10) Provide details for fixtures and equipment connections showing all valves, accessories, mounting supports, hangers and auxiliary connections to other systems as necessary to communicate the installation requirements, operation requirements and the maintenance shutoff or removal points. Provide control interlock diagrams for equipment with automatic controls. For systems containing tanks or holding vats, show all header piping requirements, tank, cylinder or vat sizes in gallons or cubic feet and methods for securing the tanks in place. If alarms are required for notification of over temperature, over pressurization, overflow or low volume, note these set points on the details or control interlock diagrams.

(11) Where seismic restraints are required by code, provide details of typical acceptable restraint methods for piping and equipment. Show locations of all restraints on the plans and cross reference the appropriate details. Provide the basic design criteria for the restraint system including the seismic zone in which the project is located. Where the code allows exemptions or exceptions based on pipe size or location of piping relative to the supporting structure, note the exceptions on the plan. Designers are encouraged to lay out system piping and equipment in a manner which eliminates where possible the need for costly restraints and minimizes the hazard to the building occupants during a seismic event.

(N) Electrical Drawings:

(1) Show the source and voltage characteristics of all power sources. Show the exact location for connections to existing power, telephone, fiber optics, security and other services to the project. Where such connection points are shown on other drawings such as civil drawings, reference the sheet number where these connection points can be found. Coordinate these cross-references to ensure the proper connection and entry points are shown. Indicate the ownership of the existing utility to which these connections are to be made. Some State facilities own their own distribution networks and many do not. Provide a phone number and a contact name for the owning agent to coordinate connection requirements. Provide a detail of each utility entry into the building.

(2) Lighting layout shall indicate the switching and circuiting of each fixture or group of fixtures. Circuiting shall indicate the power source panel and the circuit breaker number for that circuit. Emergency egress lighting shall be crosshatched or shaded so the fixtures will standout for

rapid identification during review of the drawings. When emergency power is provided by a generator, or other backup source, the circuiting lines connecting fixtures and outlets should be designated with an “E” to identify these circuits as emergency power. Each fixture symbol shall contain an identification designator that is keyed to the fixture schedule.

(3) Power outlets shall be circuited in the same manner as lighting circuits. Indicate the mounting heights of outlets to ensure proper installation. Where outlets must be installed in a specific pattern or spacing, provide dimensional plans and elevations. In the absence of the specific dimensional location of outlets, the contractor will install the box on the nearest stud or blocking. Where power is provided to equipment, show the exact location of the disconnect switch. Indicate the starter location and note if the starter is to be furnished unit mounted with the equipment. Show the size of the power conductors and the conduit serving the equipment.

(4) Show the location of all system components such as fire alarm, security, closed circuit television, sound, paging, telephone, computer and the like. When the systems to be furnished are complex or may be installed by a specialty contractor, provide separate drawings for these systems. Ensure that all components and locations are coordinated with other trades in the design phase. Where systems are simple or small in nature, they may be combined with other system drawings such as the lighting or power. When the interconnecting cabling for these systems may pose an interference with other trades, show the preferred or engineered routing of the cabling and conduit. As a minimum, provide riser diagrams or schematics for each system. Show the location of all system head end or front-end panels, control stations and sub panels. When a system must interlock or interface with another system such as the fire alarm and fire sprinkler system, show the exact location of such interfaces and the specific interlock requirements.

(5) Perform the lightning hazard calculations as defined in NFPA-780 and include this information on the cover sheet or in the electrical general notes. If a lightning protection system is to be provided, show the locations of all air terminals, interconnecting grounding cables, down leaders and ground termination points. Where grounding is connected to other grounding systems, show the connection point and the location of the other grounded systems termination points. Show all details necessary to describe the attachment of air terminals, cabling support, penetrations of the building envelope and attachment to the grounding rods or other systems. Indicate the location of all test points necessary to measure the system resistance and specify the maximum permissible resistance allowed by the system design.

(6) Show the location of main electrical rooms. Provide enlarged scale drawing as necessary to show and designate all equipment. For rooms containing equipment over 6’-0” tall, provide section views of equipment in the room showing installed elevations and clearance above the equipment. Ensure that all equipment including branch panels and disconnect switches are installed with proper clearances in front of and above the unit as required by the National Electrical Code NEC Article 110. Ensure that all panel locations are coordinated with other equipment in the space. Show the locations of all panels on the small-scale plans also.

(7) All new buildings and additions and renovations of more than 4000 SF of space shall include at least one (1) dedicated telecommunication room per floor sized in accordance with the recommendations in the appropriate EIA/TIA Standards but no less than the size shown in § 2-1402. Show the location of all cable entry, mounting rack, backboards, operator stations, UPS equipment, and power outlets. For mission critical operations, provide emergency lighting in the room. Clearly define on the drawings who will be furnishing the interconnection cabling (i.e.

cable and terminations by the contractor or by the owner). Specify plenum rated cabling in all installations not in conduit regardless of whether or not the ceiling cavity is currently a return air plenum.

(8) Provide a wire management system in all new construction for the installation of special systems wiring which will not be installed in conduit raceways. The wire management system shall be attached to the building structure or walls in a manner so as not to overload the structure. Wire management systems shall be designed to accommodate multiple systems without electronic interference or creating a code violation. Where necessary provide multiple systems for dedicated use by a single system. Wire management system and attachments should be designed to allow a minimum of 25% future growth for each wiring system.

(9) Provide electrical details and system details as required to completely describe the installation requirements and interconnection with other systems installed by other trades. Particular attention should be paid to the installation of exterior lighting fixtures, special interior fixtures such as chandeliers, operating room lights, and the like. Details of special grounding requirements should also be included.

(10) Provide riser diagrams or schematics showing the relationship of major components such as panel boards, transformers and service entrances. Risers shall also be provided for special systems such as fire alarm and security systems. For large or technically complex projects, provide one-line diagrams showing the source of power, or service and the size and relationship of subcomponents such as distribution panels, breakers, fuses, switches and routers to each major sub-panel or element. These diagrams shall also include the size of the wiring and conduit between elements and the ratings of the breakers, fuses, switches and routers with enough information being provided to describe the limits of the capacity of the system and components.

(11) Provide schedules for all lighting fixtures, transformers, panel boards and specialty systems components. Schedules shall include the voltage rating for each item, the capacity of the item and any power losses or inefficiency of the fixture or equipment. Equipment producing a heat loss (greater than ½ of 1 percent of the equipment rating) shall include the manufacturers heat loss in Btu's on the schedule. Equipment producing radio frequency interference (RFI) or electromagnetic interference (EMI) greater than that allowed by FCC regulation shall be noted on the schedule and any special shielding requirements necessary to control or eliminate this interference should be noted and detailed or specified. Schedules shall be provided for each type of equipment or component (i.e. fixtures, transformers, generators, the like.) Provide a unique designator for each piece or type of equipment or fixture. Ensure that the schedule title and designator are consistent with the plan labels. In the header for each schedule, show the specification section number where that item can be found (i.e. Transformers-16460). Panel board schedules shall be presented in a graphic format and shall include a designator for what each circuit feeds to facilitate the development of the panel board directory. Do not limit the panel board schedule to a description of the quantity of certain size breakers such as circuits 1,2,3,4 = 20A or "provide 20-20A/1P breakers.

(12) Where seismic restraints are required by code, provide details of typical acceptable restraint methods for piping and equipment. Provide the basic design criteria for the restraint system including the seismic zone in which the project is located. Were the code allow exemptions or exceptions based on pipe size or location of piping relative to the supporting structure, note the exceptions on the plan. Designers are encouraged to lay out system piping

and equipment in a manner which minimize the need for costly restraints and eliminates where possible the hazard to the building occupants during a seismic event.

2-1600 APPROVAL TO BID OR PROCEED **[INTENTIONALLY LEFT BLANK]**

2-1601 AGENCY APPROVAL

(A) Upon Agency approval of the completed construction documents (previously submitted including responses to the Section comments), the Agency Project Coordinator shall inform the Section and the Design Professional in writing that the Agency accepts and approves the drawings as submitted. There shall be no changes from the date of the letter unless submitted and approved by procedures initiated by ABA.

(B) The approval to bid or approval to proceed letter is valid for 1-year from the date of the letter. If the project has not bid within that 1-year period, the project must be re-submitted to the Section for review and approval.

2-1602 BID DATE REQUESTS, OR REQUEST TO PROCEED WITH CONSTRUCTION

(A) Bid date requests to the Construction Section may not be made until approval from the Section has been given. If the Design Professional is responsible for coordinating the bid date, written approval must be secured from the Agency prior to bidding. The Construction Section must be contacted to coordinate a bid date, time, and location. Upon coordination with the Construction Section, the project may be advertised and bid documents released to bidders. (Refer to § 3-200 & 3-303)

(B) For projects subject to ABA bidding and contract management, a separate submittal of the "front end documents" may be required to the Construction Section prior to the establishment of a bid date.

(C) An Agency may not enter into a contract for a negotiated capital improvement project unless allowed by law and prior approval of plans and specifications has been provided by the Section.

2-1603 CONTRACT DOCUMENTS TO BE PROVIDED TO THE GENERAL CONTRACTOR

(A) The Owner and Design Professional shall provide the successful general contractor with the minimum necessary copies of the contract documents as outlined below, however, this section shall not preclude lesser amounts, if agreed upon by the Owner and Contractor.

PROJECT SIZE (COST)	NO. OF SETS TO ISSUE
$0 - $500,000	10 sets
$500,001 - $1,000,000	15 sets
$1,000,001 - up	20 sets

(B) The project general contractor shall be responsible for the cost and distribution of additional bid documents to his respective sub-contractors. Partial sets of the contract documents shall not be allowed. All trades shall have complete contract documents for reference.

2-1604 RECORD COPIES OF PROJECT DOCUMENTS

(A) At the final completion of the project, the Design Professional shall submit one (1) copy of the complete set of the project documents on a CD Rom. See §3-500(D).

(B) In addition, if any of the drawings or specifications were prepared by computer assisted drafting (CAD) or word processing, the Design Professional shall also provide one copy of all computer generated “read only” documents to ABA and one copy of the “read only” documents to the Agency) for record purposes.

(C) Acceptable formats for word processing, spreadsheets database, presentation graphics and other similar documents are Microsoft Office Products or other formats converted and saved as such. Cost of the microfilm and electronic media are reimbursable from the Agency.

(D) When drawings or specifications are not produced electronically, the Design Professional shall have the documents scanned in to a photo image such as a TIFF image, PDF file, or an AutoCAD file for record purposes. These files shall be furnished on compact disk. The files shall be capable of being opened by an industry standard file manager such as Adobe Acrobat Reader, Kodak Image reader or similar software. Verify the Agency preference prior to submitting these types of files.

(E) Agencies requiring electronic media copies should carefully consider environmental storage requirements. It is recommended that electronic information be transmitted on compact disc and backed-up with a tape drive where possible.

(F) If an Agency utilizes portions of existing reproducibles or electronic media for bidding purposes, i.e., carpet replacement, ABA requires all title blocks (of the original design professional) be removed and new title block information provided before project is released to any bidders.

(G) Design professionals providing electronic media, tracings, reproducible, "as-built" record drawings, the like, may request that release agreements limiting their use be signed prior to releasing to the Agency or ABA. These release agreements shall be carefully reviewed by legal representation of the Agency and submitted to ABA for review before signing. Improper use of a Design Professional's work may result in claims for additional compensation.

(H) If the Design Professional is required to deliver any services required hereunder in the form of electronic encoded media, the printed representation of such media furnished by the Design Professional shall be the official record of the Design Professional's service. Agency shall have a right to rely on such printed representation in connection with any subsequent modification of such electronic media. The Agency and ABA recognize that the printed material represents the intent and instructions of the Design Professional but does not represent the “as-built” condition of the project. The Agency must obtain written authorization from the design professional allowing the use of the documents for any purpose other than the specific intended use of those documents.

2-1605 DESIGN PROFESSIONAL PROJECT OBSERVATION REQUIREMENTS

(A) The Design Professional and his consultants shall conduct construction observation visits to the construction site as part of the basic professional services. (Refer to § 2-201.) The design

professional shall conduct visits to determine the progress and performance for all capital improvement contracts. On-site observations shall concur with the contractor's pay request and shall be submitted in written form with the pay request.

(B) Construction observation of the project by the prime Design Professional and all consultants at key critical times during construction for that applicable portion of the work for which they are involved, shall be as required to observe fulfillment of the construction documents.

(C) Both the Design Professional and all consultants shall submit a typed construction observation report or summary of any observed construction deficiencies, with follow-up correspondence to the Agency's Project Coordinator on ABA approved forms. Copies of the Design Professional's and all consultant's construction observation reports and follow-up correspondence shall also be forwarded to the Construction Section and shall accompany the Contractor's monthly payment request.

(D) The Agency Project Coordinator and the Design Professional shall carefully evaluate the need for more intense project observation than the basic services provides. This may include projects requiring the installation of underground utilities, the construction of critical concrete structures and similar projects where the normal course of construction may render critical elements of the project unavailable for inspection due to the placement of finish materials

(E) On projects where this may result in the inability of the Agency to accept the project with confidence that the work has been properly installed, the Agency may desire to require more intense observation by the Design Professional than would normally be provided by the basic services agreement. The Agency shall negotiate the rates for additional observation during the original contact negotiations. If it becomes necessary to expand the design professional's scope of services by amendment, consult with ABA prior to negotiating the amendment.

(F) For instructions regarding construction observation and administration, and project closeout requirements please refer to §3-500 through §3-600.

2-1700 CAPITAL IMPROVEMENT ALTERNATIVE DELIVERY METHODS

Pursuant to Ark. Code Ann. §19-4-1415, unless exempted, ABA has authority to oversee contracts in the amount of $5,000,000 or more, which are not awarded in the traditional design-bid-build method, but rather awarded through negotiations.

2-1701 PROJECT CRITERIA

Refer to § 3-701.

2-1702 SELECTION OF DESIGN PROFESSIONALS

(A) The procedures prescribed in § 2-100 shall apply to the selection of Design Professionals utilized for projects under this section.

(B) Refer to § 2-102 (A) and add the following requirement:

(1) The Agency shall indicate that the contemplated project exceeds $5,000,000 in estimated construction cost, excluding land costs, and that the Agency intends to utilize a type of negotiated contracting for the construction phase.

(2) Refer to § 2-102(C). The draft advertisement shall clearly indicate that the design services required would be utilized on a project that the Agency intends to award through negotiations in lieu of the traditional design-bid-build process. The notice shall also indicate that the selected professional will work with the Agency's contractor in the development of the project budget, construction options and administrative procedures for managing the project under "fast track" conditions if applicable.

2-1703 SELECTION METHOD FOR DESIGN PROFESSIONALS

(A) Selection of Design Professionals shall be as prescribed in § 2-106 except that the pre-selection committee shall consist of five (5) members, three (3) from the Agency and two (2) from ABA. The ABA Director shall determine the members form ABA and the respective Agency Director shall determine the members from the Agency.

(B) Refer to § 3-700 et. seq. for the selection of construction managers and contractors.

2-1704 BASIC SERVICES DEFINED

(A) Refer to § 2-201 for Basic Services Defined. All services listed shall apply except as follows:

(1) For "fast track" projects, the schematic design and the design development phases shall be condensed as required to verify the budget estimate via contractor pricing.

(2) Construction documents may be developed in phases as necessary to maintain the project delivery schedule.

(3) For "fast track" projects, the Design Professional shall obtain all "as-built" information from the contractor and shall compile this information into an accurate set of record drawings and specifications for submittal to the Agency in printed form and in electronic form.

(B) A copy of these record drawings shall be provided to ABA in electronic form only.

2-1705 PROJECT SCHEDULE

(A) Refer to § 2-318 (C) for basic schedule requirements.

(B) For projects utilizing a "fast track" methodology, the Design Professional shall assist the Agency in developing a "Request for Proposals" package to be utilized in the selection process for the contractor or construction manager. The RFP shall be submitted to the Section and Construction Section for review and approval prior to issuing to potential contractors. The requirements of the RFP shall closely match the requirements of a schematic design plan review submittal. Include appropriate specifications for the desired building materials and equipment.

(C) The Agency shall submit a schedule of activities listing the proposed milestone submittal dates to ABA including but not limited to the following:

(1) Submittal of request to begin selection of the design professional.
(2) Submittal of request to select commissioning agent (if applicable).
(3) Submittal of contractor selection RFQ document for review and approval.
(4) Submittal of design professional services contract for approval.
(5) Submittal of commissioning agent services contract (if applicable).
(6) Submittal of contractor contract.
(7) Submittal of first plan review.
(8) Beginning date of construction phase and expected duration of construction.

Refer to § 2-1706(E) for submittal schedule requirements using “fast track” construction.

2-1706 PLAN REVIEW REQUIREMENTS

(A) All plans shall be submitted to ABA for review and approval prior to delivery to the contractor or construction manager for pricing. Refer to §2-1500 et. seq. for basic plan review submittal requirements.

(B) Projects not utilizing the “fast track” method shall be submitted to Design Review when the plans and specification are considered 100% complete and ready for bidding or construction. The design professional shall make schematic design and design development submittals to the Agency as required to obtain approval by the Agency to proceed to final construction documents. The documents will be provided to pre-selected contractors for preparation of proposals to construct the facility.

(C) For projects utilizing a “fast track” methodology, the first review submittal shall consist of the documentation normally contained in a schematic design submittal. This first submittal shall contain sufficient information to adequately describe the scope and materials of the total project design. If the contract with the contractor has been implemented, a copy of that contract shall also accompany the submittal.

(D) For “fast track” projects, intermediate submittals shall be made at frequencies necessary to maintain the project schedule and appropriate quality control. This process may result in multiple partial submittals. Each partial submittal shall represent one or more discrete portions of the work, which can be designed, priced and constructed independently of other portions without resulting in de-construction or rework of the portions previously constructed. These individual packages shall be submitted when the plans and specifications for that element of the work is 100% complete.

(E) The Agency Project Coordinator shall submit a schedule of the desired submittal review packages with the first review submittal. The schedule shall indicate the type of submittal package (i.e. Site Work), the estimated cost of that element of construction, the estimated date of submittal and the date the contractor will require approved plans in order to maintain the desired construction schedule. Each submittal package will be labeled with the appropriate title and a volume number beginning with the first submittal which shall be labeled “Comprehensive Schematic Design-Volume 1. The Agency shall follow the schedule submitted and approved by ABA and shall update the full schedule timelines and cost estimates at each subsequent submittal. Deviations from the schedule require ABA approval.

(F) The contractor shall not begin work on a given element of the project until that package of documents has been approve to proceed by the Section. The plans and specifications issued to the contractor for construction shall be stamped “Approved for Construction.”

(G) At some point in the process of developing the plans and specifications, the contractor must establish a guaranteed maximum price for the construction contract. When that point has been reached, the Design Professional shall issue a complete set of the documents used to generate that guaranteed price and label the cover as the “GMP Set” along with the issue date. Copies of this set of documents shall be forwarded to the Agency Project Coordinator, the Contractor, the Section and the Construction Section for record keeping. These documents will be the basis of reference for all future adjustments in the cost of the contract. It shall be noted that while changes in the documents may not constitute a change in the GMP, all changes must be documented by change order even if there is no increase or decrease in the contract sum. Approved plans and specifications must accompany all change orders submitted to the Construction Section. In addition, a copy of the Sections’ approval to proceed letter shall be included with the change order documentation.

2013 LEGISLATIVE UPDATES
(EFFECTIVE AUGUST 16, 2013)
EDITOR'S NOTES

The laws regarding utilization of licensed design professionals were not revised. Agencies must still utilize licensed engineers for capital improvements projects which are $25,000 or more and must utilized licensed architects for capital improvement projects which are $100,000 or more.

Page 2-1

2-101 SELECTION AUTHORITY SCHEDULE:

2-101(B): Agencies desiring to enter into a professional services agreement wherein the contemplated fee, exclusive of reimbursable expenses, are $10,000 or less, may contact any qualified provider without ABA approval and negotiate an agreement for the required services. (Act 1189 of 2013 revised this amount from $5,000 to $10,000.) **RETURN TO 2-101(B)**

2-101(C): Agencies desiring to enter into professional services agreements wherein the contemplated fee, exclusive of reimbursable expenses, do not exceed $50,000, may utilize a purchase order for these services in accordance with Ark. Code Ann. §19-11-1012(b)(9)(A). Agencies may enter into such purchase order agreements without prior approval of ABA. (Act 1189 of 2013 revised this amount from $25,000 to $50,000.) **RETURN TO 2-101(C)**

2-101(D): Agencies desiring to enter into a professional services agreement wherein the contemplated fee, exclusive of reimbursable expenses, are more than $10,000 but $50,000 or less, may solicit qualifications from 3 or more qualified providers without ABA approval. Agencies should review Ark. Code Ann. §19-11-801 before initiating the process. The following is the recommended process:
(1) Issue a letter of request to the selected firms describing the nature of the services desired, the description of the project contemplated and require interested parties to submit a statement of qualifications and or pertinent information;
(2) Form a selection committee to evaluate the qualifications of the respondents and select the firm or individual to negotiate with;
(3) Should negotiations for a fee of less than $50,000 fail, Agencies may approach their next selection and initiate negotiations. If negotiations are unsuccessful with all respondents, the agency should determine to terminate the selection process and either re-evaluate the scope of services required and begin this process over or move to the formal selection process described in this section; **RETURN TO 2-101(D)**

Page 2-2
2-101(D) Cont'd
(4) While these agreements ($50,000 or less) are not submitted to ABA or DF&A for prior approval, Agencies must report the agreements to DF&A/OSP in accordance with their rules.
(5) While ABA approval is not required for contracts $50,000 or less, Agencies can make a written request for ABA assistance in the selection process. (See §2-102 on the process of written requests.) (Act 1189 of 2013 revised these amounts from $5,000 to $10,000 and from $25,000 to $50,000. **RETURN TO 2-101(D)**

2-101(E): Agencies desiring to enter into a professional services agreement wherein the contemplated fee, exclusive of reimbursable expenses exceeds $50,000 shall follow the

procedures described in § 2-102 through § 2-106. (Act 1189 of 2013 revised these amounts from $25,000 to $50,000. RETURN TO 2-101(E)

2-101(G): Agencies desiring to enter into a sole-source professional services agreement wherein the contemplated fee, exclusive of reimbursable expenses exceeds $5,000 shall follow the procedures established by DF&A/OSP. Upon DFA/OSP approval of a contract which exceeds $50,000 in fees (excluding reimbursables), the Agency shall attach a copy of the justification and approval to the contract when submitting for ABA review. (Act 1189 of 2013 revised these amounts from $25,000 to $50,000. RETURN TO 2-101(G)

Page 2-20

2-314 PROFESSIONAL SERVICES CONTRACT

2-314(D) Failure to meet the DFA/OSP submittal schedule for review and approval can cause a delay of 30 days or more for legislative review. All standard professional services contracts $50,000.00 or more require Legislative review. The standard professional services contract form takes precedent over any and all attachments regarding time, funds, and compensation. (Act 1189 of 2013 revised these amounts from $25,000 to $50,000. RETURN TO 2-314(D)

SECTION THREE
CONSTRUCTION SECTION

3-100 INTRODUCTION

(A) Ark. Code Ann. § 22-2-102 et seq. provides authority to ABA to promulgate such reasonable rules and procedures as may be required to carry out its duties consistent with the purposes of this Act. The Construction Section provides a review of all applicable legal restraints and requirements to assure compliance with all laws pertaining to the contracting of capital improvements, which includes but is not limited to Ark. Code Ann. § 22-9-101 et seq. (Public Works Law) and Ark. Code Ann. § 19-4-1401 et seq. (Accounting and Budgetary procedures).

(B) The Council has adopted the following rules in the interest of uniform application of all laws, encouraging a maximum of competition and participation among those interested in doing business with the State, and above all, establishing a climate which produces the greatest return for the taxpayers' dollars in the contracting of capital improvements.

(C) Any reference to the words "the Section" within this section shall mean the Construction Section.

3-101 CAPITAL IMPROVEMENTS (Revised November 27, 2017)

(A) Whenever an Agency intends to construct buildings and facilities or to make repairs or additions and improvements to existing buildings and facilities, the procedures as outlined in this manual must be followed.

(B) Capital improvement projects $35,000 or less shall be exempt from ABA (Construction and Design Review Sections) oversight. Capital improvement projects in the amount of $25,000.00 or less may be bid or made by the open market. These projects shall be known as a "Small Order."

(C) Capital improvement projects which exceed $25,000 and are $35,000 or less (between $25,000.01 and $35,000.00) shall be contracted by contacting and requesting a minimum of three (3) bonafide bidders to bid the work. These projects shall be known as a "Quote Bid."

(D) See §3-408 (E) for guidance pertaining to change orders which increases the contract above the exempt amount.

3-102 AGENCY OFFICIALS

All contracts, unless exempted, shall be processed and approved by the Section. Upon sufficient justification, bid openings may be performed by persons other than the Section. Justification may include a health or safety, or both, related emergency. Under such circumstances, Agency procurement staff shall be responsible for adhering to all laws, rules and regulations, including processing of bid protests.

3-200 CAPITAL IMPROVEMENT REQUESTS - GENERAL REQUIREMENTS

(A) When an Agency requests a capital improvement unless specifically exempted from oversight, the Agency shall submit to the Design Review Section, a cover letter identifying the capital improvement (see section 2) with sufficient plans and specifications so as to describe

what is required for formal bidding. When an Agency requests capital improvements on non-state owned or state owned leased facility they could be required to receive approval from the Real Estate Services Section, see also §5-103 (M).

(1) The project manual (specifications) shall be based on the CSI (Construction Specification Institute) format. All items, equipment, materials, etc., shall be specified under each of the appropriate Master Format Divisions.

(2) The original specifications shall be submitted using a standard size paper of 8 1/2" X 11". A minimum of 1" left side margin will be provided for binding.

(3) Upon approval by the Design Review Section of the project plans and specifications, Agencies must complete and return the Project General Information and Project Disclosure Statement forms.

(B) Upon the Design Review Section approval of the plans and specifications, the Section shall notify the Design Professional to submit the Divisions “00” and “01” documents electronically to the Section for review and approval. The Section will coordinate with the Design Professional to set the bid date, place legal advertising, receive and open bids. Billing for legal advertising will be sent to the requesting Agency. Bid dates shall not be set until the invitation to bid, bid forms divisions “00”and “01” documents have been initially reviewed by the Section. Bid openings shall not take place until the final set of bid documents have been approved by the Section. The Section shall furnish the Agency with the bid results. Upon the Agency’s selection of a contractor, the Agency shall notify the Section within the time frame established by the Section so that the contract may be awarded. A request for re-bid may be approved upon sufficient justification. Bids shall expire as provided within the bid documents unless an extension is agreed upon by the lowest responsible bidder and the Agency.

(C) Intent to Award: Once the Section receives the Agency’s selection of a contractor and the Contractor approved by the Section, a contract will be prepared by the Design Professional (or by the Agency if the Design Professional is not under contract to perform such services) and submitted with the intent to award to the Contractor. This enables the Contractor to acquire the performance and payment bond and the applicable insurance polices/certificates and disclosure statements. A contract will not be approved until these documents are received by ABA.

(D) Notice to Proceed: Upon approval by the Section, ABA will retain the original contract and a copy of the contract, performance and payment bond, certificate(s) of insurance and disclosure statements will be forwarded to the Agency official for disbursement, to the Contractor and the Design Professional. Design professionals who have contract administration shall be responsible for coordination and the issuance of the notice to proceed and shall provide a copy of the notice to proceed to the Section and Agency.

(E) Unless exempted, no capital improvement contract shall be awarded to other than the lowest responsible bidder.

3-201 CONTRACTS

Contracts for capital improvement, regardless of the source of funds involved, shall be issued in accordance with §3-400 et seq. Capital improvement contracts for projects, which exceed $20,000 shall be approved by the Section prior to the start of work, and must specify the exact dollar amount to be paid. A performance and payment bond shall accompany the contract. The

contract shall contain the applicable language, disclosure forms and documents, and approval pursuant to the Governor's Executive Order 98-04. A set of back up documents shall accompany the contract. Applicable back up documents shall include: insurance documents, Executive Order 98-04 forms or approval or both; illegal immigrant disclosures, minority participation disclosures, proof of advertising (if placed by a non ABA staff); performance and payment bond. The dollar amount of the capital improvement contracts shall include, but is not limited to all taxes, insurance, bonds, and freight costs. All contracts shall be submitted in one (1) original and shall be accompanied with the documents listed above. The Section will retain the original and the backup documents.

3-202 EMERGENCY CONTRACTING

(A) Capital improvement contracting may be made pursuant to Ark. Code Ann. §22-9-201 where unforeseen or unavoidable circumstances occur:

(1) When human life, health, safety or state property is in jeopardy.

(2) To reconstruct facilities, construct new facilities and related site work due to fire, storm, riots, etc.

(3) Construction or repairs to immediately needed equipment or facilities where delay would result in overall higher expenditures or cause the Agency to lose revenue due to not providing the service responsible for, but is not limited to, medical treatment, education, military armories.

(4) Where unsuccessful bids (see §3-330) occur and the Section determines that additional advertising of bids would be futile.

(B) The Agency shall invite a minimum of three (3) competitive bids, unless the emergency is critical or obviously single source such as public utility. If time does not allow, bids may be submitted via quote bid instead of sealed bids upon prior approval by the Section.

(1) Prior to the invitation, Agencies shall provide the names of the proposed bidders to the Section for verification of eligibility.

(C) The Section must be contacted in advance for prior written approval where time permits. Where time does not permit prior written approval, telephone, fax or electronic mail approval must be obtained at the earliest practical date from the Section. The Section shall receive and record details on all telephone approvals. ABA shall provide agencies notice of its determination after a review of the Agency's justification is conducted. All project plans and specifications must be processed through the ABA Design Review Section. Upon approval, the Agency through coordination with the Section can process the bid and award of the contract. The following documentation is required when submitting an emergency contract for approval:

(1) Written justification setting forth the circumstances of the emergency. Agencies may access emergency related documents at "www.aba.arkansas.gov".

(2) Insurance Certificate.

(3) Performance and Payment Bond issued in accordance with Arkansas laws and rules. The bond must be filed in the county where the work is to be performed.

(4) List of subcontractors as required under Ark. Code Ann. §22-9-204.

(5) Contractor must be properly licensed with the Contractors Licensing Board (refer to Ark. Code Ann. §17-25-101 et seq.)

(6) Any other applicable document required by law or rule including but not limited to EO 98-04 (Disclosure).

(7) All drawings and the project manual on engineering projects which exceed 25,000 and architectural projects which exceed $100,000 shall be stamped, sealed and signed by the appropriate Design Professional.

(8) One (1) original of the Contract and related back up documentation.

3-203 SOLE SOURCE CONTRACTING

(A) Sole source on capital improvements will be approved only when there are no other available sources to perform the required work. Sole source contracting may involve leases processed through the Real Estate Services Section in which the non-public lessor has the sole authority to approve contractors to perform work on non-state property. Sole source contracting does not relieve the statutory requirements for license, insurance and bonds; nor the requirement for processing all project plans and specifications through the Design Review Section. Agencies shall submit a written request to the Section setting forth the circumstances which justify their sole source request. If approved, the following documentation is required when submitting a contract for approval:

(1) A written request setting forth the circumstances which justify their sole source request.

(2) Insurance Certificate.

(3) Performance and Payment Bond issued in accordance with Arkansas laws and rules. The bond must be filed in the county where the work is to be performed.

(4) List of subcontractors pursuant to Ark. Code Ann. § 22-9-204.

(5) Contractor must be properly licensed pursuant to Ark. Code Ann. § 17-25-101 et seq.

(6) Any other applicable document required by law or rule including but is not limited to EO 98-04.

(7) One (1) original of the contract and related back up documentation.

(8) All drawings and the project manual shall be stamped, sealed and signed by the appropriate Design Professional.

(B) Agencies may invite multiple bidders, as approved by ABA, which involve proprietary specifications (as defined in §1-106) because maximizing competition is the goal within the limited parameters of qualified sources.

3-204 SPLIT PURCHASES

The Section shall not condone splitting of purchases to avoid these listed bidding procedures. When an Agency is found practicing split purchases, it shall result in revocation of the Agency's purchasing authority. Refer to § 3-102.

3-205 CAPITAL IMPROVEMENTS FOR LEASED PREMISES (STATE AND NON-STATE PROPERTY)

See Section 5-103 for agency contracting of improvements when the state is not the owner of the leased premises.

3-300 BIDDING RULES

These bidding rules are applicable to all bids produced by ABA, a Design Professional or an Agency for state projects. In those instances where an agency has not contracted for the administrative services of a Design Professional, the Agency is responsible for performing those duties which include all phases from bidding to closeout of the project.

3-301 BIDDING PRE-REQUISITES

(A) Before an Agency shall advertise for bids for construction, all requirements shall be met pursuant to the General Accounting and Budgeting laws and other applicable laws. Agency officials (refer to § 3-102) shall follow these bidding rules when processing bids.

(B) Certification of Project Amount:

(1) Agencies must have sufficient appropriations and funds for the capital improvement project prior to the solicitation of bids. Agencies are responsible for verification or receiving approval of any Methods of Finance or any sufficiency of funds Agencies must certify the appropriated amount for the award of the contract. The amount certified on the project general information sheet is the amount appropriated as defined in Ark. Code Ann. §22-9-203(h).

3-302 PLANS AND SPECIFICATIONS

(A) Agencies, through their Design Professional, shall ensure adequate numbers of plans and specifications be made available to prospective bidders. One set of specifications and half-sized drawings will be provided to the Section within three (3) days of the first advertisement, or in the case of an emergency or sole source contract prior to the issuance to bidders. Failure to do so may cause the delay or cancellation of the bid date. See Section 2-1603 for plan disbursement requirements for the successful Contractor at the award of contract.

(B) All drawings and the project manuals shall be stamped, sealed and signed by the appropriate Design Professional. No drawing used for the construction project shall be allowed on the site stamped or otherwise marked as “Not for Construction” or any other similar term. The Contractor will maintain a set of “approved for construction” drawings on the job site at all times.

3-303 ADVERTISING / PRE-BID CONFERENCE

(A) Once the plans and specifications have been given final approval by the Design Review

Section the capital improvement project shall be advertised pursuant to Ark. Code Ann. § 22-9-201 et seq. and § 19-4-1401 et seq. Proof of advertising shall be furnished to the Section when the advertisement is not issued by ABA. The Agency will be responsible for any advertising costs.

(B) (1) Pre-Bid Conference / General: While pre-bid conferences are recommended, they are not mandatory unless so designated in the plans and specifications. Should an Agency determine that a pre-bid conference is to be conducted, it should be held at a time and place after the last advertisement has been published. Design Professionals shall conduct the meeting and inform all prospective bidders on the substantive elements regarding the project requirements, special conditions and any other unique bidding requirements. Contact the Section for additional pre-bid conference requirements or information.

(2) Mandatory Pre-Bid Conference: Agencies shall seek approval from the Section by submitting justification as to the necessity of a mandatory pre-bid conference. Only those unique or special conditions shall warrant approval. Conditions which can be readily explained in the project manual, plans or specifications, or all, shall not be sufficient justification for approval. Design Professionals shall conduct the meeting and inform all prospective bidders on the substantive elements regarding the project requirements, special conditions and any other unique bidding requirements. Design Professionals shall be responsible for establishing the official beginning of the meeting pursuant to the time stated in the bid documents. Failure to attend by the established official time and remaining until Design Professionals terminates the conference shall be grounds for bid rejection due to unresponsiveness for failure to attend the meeting in its entirety. However, should the mandatory conference fail to include for discussion the unique or special conditions approved for the mandatory pre bid conference, then no bidders shall be rejected for failing to attend and the project shall be advertised for at least one (1) additional time and shall provide for a time and place for an additional pre-bid conference which shall not be mandatory.

3-304 BID ANNOUNCEMENTS

Any interested bidder may sign up (free of charge) for email bid announcements by going to the ABA website. Bid announcements and bid results are also posted on the ABA website (www.aba.arkansas.gov).

3-305 BID DATE AND LOCATION

Bid openings will be approved by the Section, only after receipt of the approval to bid letter from the Design Review Section. Bid openings are to be held on the premises of ABA unless other locations are approved by the Section.

3-306 SEALED BIDS

(A) All bids shall be submitted in a sealed envelope. Bidders shall comply with Ark. Code Ann. § 22-9-204 and the bid documents with respect to the listing of subcontractors. Every envelope should indicate the name of the bidder, project, project number, date and time of opening. Bidders utilizing a shipping courier (such as FedEx, UPS, DHL, etc.) should enclose the bid in an inner envelope with the above stated information listed. Upon receipt at the Section, or an approved alternate site, each bid shall be date and time stamped and held in a secure place until the bid opening. No bid may be surrendered to any person after it has been submitted

except upon written request and authorization from that bidder. (Refer to Withdrawal of Bids, § 3-323).

(B) All capital improvement bids shall include all costs such as sales tax, use tax, permits, and insurance. The Contractor on capital improvement projects, where labor and materials are furnished as defined by the Arkansas tax laws is the user and is responsible for the appropriate taxes. There are no provisions for a Contractor to avoid taxes by using the tax-exempt number of any Agency.

3-307 AUTHORITY FOR OPENING BIDS

The responsibility for the supervision of opening bids is with the Section, ABA, unless special justification, such as a critical emergency has been determined by the Section to allow an Agency to open bids under §3-102. The person authorized to read the bids shall first review the bid documents to determine if the bid is responsive. Items determining responsiveness include but not limited to: Bid Form is complete, applicable bid security in the correct amount, and if a bid bond is utilized as bid security, the agent's power of attorney as his authority shall be enclosed bid amount (numerically shown), proper signatures, addenda acknowledgement, corrections or changes initialed, and applicable subcontractors are listed. Contractors submitting a bid must be licensed in accordance with the Contractors Licensing Board. If all documents appear to be properly submitted and executed, the official may proceed to read the bid. If any statutory formality is omitted, the bid should be declared non-responsive and remain unread. Formalities other than statutory may be waived.

3-308 BID OPENING AND RECORDING

(A) Bids shall be opened and read by a representative of the Section, at the designated time and place. Representatives of the Agency are recommended to be present at the bid opening. The Section representative is responsible for establishing the official expiration of time. In those instances where this is not practical or possible for the representative to attend the bid opening, the Section, may delegate this authority to a representative of the Agency. Also see § 3-305 thru 3-307.

(B) Bids may be opened in any order, but if listed on a prepared tabulation, they should be opened in such order. The review of licensure and bid security are the responsibility of the Section or the Agency official depending upon which entity is conducting the bid opening (see § 3-102). The bid tabulation form must be sent (faxed or mailed) to the Section within two (2) working days of the bid opening. Refer to §3-309 for Bid Tabulations.

C) After the bids are opened and reviewed, a letter will be sent to the Agency by the Section with the results of the bid opening along with the apparent low bidder's submittal and a form to be completed and returned by the Agency to the Section designating one of the following. The Agency may:

(1) Bid Acceptance: The letter regarding the bid results must be completed and signed by the Agency. Agencies shall return the original to the Section.

(2) Rejecting all Bids and Rebidding: If the Agency wishes to reject all bids and rebid, it shall provide justification to the Section. Requests for rebids which contain revisions to the bid documents must be reviewed and approved by ABA before a new bid date will be set.

(3) Negotiation. The Section must be contacted before any negotiation can occur. Unless the project was bid and awarded under the historic site laws, emergency contracting procedures or the Alternative Delivery method, all negotiations shall be made pursuant to Ark. Code Ann. §22-9-203 and requirements under the minimum standards and criteria unless exempted by law.

(4) Bid or Award Cancellation: Agencies shall provide written justification to the Section for cancellations of a bid opening or award of contract.

3-309 BID TABULATION

If bids are opened by the Agency then all tabulations must be sent (faxed, mailed or electronic email) to the Section within two (2) working days of the bid opening. Bid tabulations must contain the following information which includes but is not limited to: the date and time of the bid opening; the project number; the amount of the bid; the contractor names, whether a bid security was included along with the bid security amount, and the listing of any applicable subcontractors. The Section will determine the responsiveness of all submitted bids. Determination of the lowest responsible bidder is the responsibility of the Agency. The Section will complete the official bid tabulation upon the determination.

3-310 SCRIVENER ERRORS

Rejection of a bid due to scrivener error may be made pursuant to Ark. Code Ann. § 19-4-1405. The criteria under this law must be met before a bidder may receive relief including but not limited to serving written notice to the ABA Director any time after the bid opening, but no later than seventy-two (72) hours after receiving the intent to award, excluding Saturdays, Sundays, and Holidays.

3-311 CONTRACTOR'S LICENSE

Pursuant to Ark. Code Ann §17-25-101 et seq., for all state capital improvement projects, including residential projects, each contractor, including commercial, residential and residential remodeler, is required to be properly licensed with the Contractors Licensing Board and should indicate on his bid form his current license number as issued by the applicable licensing entity. The Section is responsible for licensure verification as well as the Agency official performing the bid opening pursuant to §3-102. Nothing in this section shall be construed to limit the authority of Ark. Code Ann. §17-25-315.

3-312 BID SECURITY

(A) All bids received shall be accompanied by a bid security for all bids exceeding $20,000. Acknowledgement of the bid security shall be made aloud. The official reading of the bids shall indicate the bid security amount, the form of security as either a cashier's check or a bid bond. The official shall review and verify the bid security including but not limited to applicable agent licensure and power of attorney. Ark. Code Ann. § 19-4-1405 and § 22-9-203, and § 22-9-401 et seq. govern bid securities for capital improvements.

(B) Failure to execute the Contract, submit and file an acceptable payment and performance bond, obtain proof of liability insurance, provide illegal immigration certifications and disclosure documents pursuant to EO98-04, within the time specified in the bid documents after the intent to award has been issued to the bidder shall be just cause for the cancellation of the award and forfeiture of the bid security which shall become the property of the Agency, not as a penalty but

in liquidated damages sustained. Award may then be made to the next lowest responsible bidder, or the work may be rebid and constructed under contract or otherwise as the State determines. The responsible low bidder who fails to execute the Contract will not be considered for an award of contract on any subsequent bid of that project.

3-313 SUBCONTRACTOR'S BIDS

The listing of subcontractors on the form of proposal shall be made pursuant to Ark. Code Ann. § 22-9-204 and the bid documents. The designated official as stated in §3-308 shall verify the licenses of the applicable subcontractor's listed.

3-314 ALTERNATES

State projects under ABA jurisdiction shall not include the use of deductive or additive alternates.

3-315 CONTRACT AWARD

(A) Once the bid results are determined, and the Agency has requested to enter into a contract, intent to award a contract shall be prepared by the entity who has contract administration duties. A contract will not be issued until a performance and payment bond is received in accordance with Ark. Code Ann. § 18-44-501 et seq. and § 22-9-401 et seq. and other applicable documents are properly executed and received.

(B) Contracts shall be awarded pursuant to all applicable laws including but not limited to Ark. Code Ann. §22-9-201 et seq., and §19-4-1401 et seq. No capital improvement contract shall be awarded to other than the lowest responsible bidder.

(C) The Section shall retain the original of the contract. Copies of the Contract, the performance and payment bond, certificates of insurance, disclosure and certification statements will be forwarded to the Agency project coordinator upon ABA approval for disbursement. Upon approval the Design Professional may issue the Notice to Proceed to the Contractor. The Section shall receive a copy of the notice.

(D) The State reserves the right to rescind the award of any contract at any time before the execution of the contract by the parties and approval of ABA without any liability against the State.

3-316 DAVIS-BACON ACT (Federal Funds)

(A) The Davis-Bacon Act, pursuant to 40 U.S.C. 276(a) et seq., grants to the Secretary of Labor the power to determine wage rates paid to laborers and mechanics of contractors and subcontractors engaged in any construction activities supported by federal funds. The Davis-Bacon and related acts provide prevailing wage protection to workers on federal funded construction projects. These laws require the payment of locally prevailing wage rates and fringe benefits to employees of contractors or subcontractor performing work on federally financed or assisted construction projects valued in excess of $2,000. Under the provision of the Act, the Contractor or their subcontractors are to pay workers employed directly upon the site of the work no less than the locally prevailing wages and fringe benefits paid on projects of a similar character. The Davis-Bacon Act directs the Secretary of Labor to determine such local prevailing wage rates.

(B) Agencies are responsible for providing specific federal regulations, guidelines and procedures as directed by their Federal Grantor/ funding source to the Design Professional or any party that will publish work requiring the expenditures of Federal funds.

(C) The advertisement of the notice for such projects and the invitations for bids shall state that federal funds are being used and that Davis-Bacon Wage Rates will apply.

3-317 ARKANSAS PREVAILING WAGE RATES

Wage determinations shall be published pursuant to Ark. Code Ann. §22-9-301 et seq., unless exempted. Questions regarding applicability of wage rates should be made to the Arkansas Department of Labor for prevailing wage applications. The advertisement of the notice for such projects and the invitations for bids shall state the State Wage Determinations shall apply whenever applicable.

3-318 CONTRACTOR'S INSURANCE REQUIREMENTS

(A) Dollar amounts and types of coverage limits for all insurance policies shall be set by the Agency. Deviations from the types of insurance and amounts set less than what is stated below, shall be documented by the agency and maintained in the Section project file. Before an Agency enters into a contract for the construction or alteration of facilities or repairs to existing building, grounds or facilities, it shall ensure that the Contractor has complied by showing proof with the following insurance requirements have been met:

(B) The Contractor shall purchase and maintain such insurance as will protect him from claims set forth which may arise out of or result from the Contractor's operations under the Contract, whether such operations be by himself or by anyone directly or indirectly employed by any of them, or by anyone for whose acts may be liable.

(C) Builder's Risk Insurance: The Contractor shall procure and maintain during the term of contract Builder's Risk Insurance or Installation Floater Insurance, and any extended coverage which shall cover damage for capital improvement projects. Perils to be insured are fire, lightning, vandalism, malicious mischief, explosion, riot and civil commotion, smoke, sprinkler leakage, water damage, windstorm, hail and property theft on the insurable portion of the Project on a 100 percent completed value basis against damage to the equipment, structures, or material. Exception: Contract documents which do not require coverage based upon inapplicable coverage (such as demolition or abatement work).

(D) GENERAL REQUIREMENTS: While it is not a requirement, it is recommended agencies accept policies issued by an insurer which has a claims paying ability rating of not less than "B+" or better as to claims paying ability by A.M. Best or not less than "A" by Standard and Poors rating service, or has an equivalent rating as established by one other nationally recognized statistical rating organization satisfactory to Agency. All policies shall contain a waiver of subrogation against the Owner, Owner's lenders ("Lender") and any designate agent of the representative of Owner (Owner's Agent").

(E) CANCELLATION/NOTIFICATION PROVISIONS: Each insurance policy shall contain a clause providing that it shall not be canceled by the insurance company without written notice to the Owner of intention to cancel that is in accordance with Ark. Code Ann. § 23-66-206.

(F) PROOF OF INSURANCE: ABA approval of contract shall be conditional upon the Contractor providing proof of insurance to the Owner. The Contractor shall be financially responsible for all deductibles or self-insured retentions.

(G) EQUIPMENT AND MATERIALS: The Contractor shall be responsible for any loss, damage, or destruction of its own property or that of any subcontractor's equipment and materials used in conjunction with the work.

(H) SUBCONTRACTORS: The Contractor shall require all subcontractors to provide and maintain general liability, automobile and workers' compensation insurance coverage substantially similar to those required of the Contractor. The Contractor shall require certificates of insurance from all subcontractors as evidence of coverage. Contractor will be the responsible party for any and all claims by subcontractors if subcontractor fails to have appropriate insurance.

(I) CONTRACTOR'S INSURANCE REQUIREMENTS:

(1) Commercial General Liability: The Contractor shall obtain, at Contractor's expense, and keep in effect during the term of the contract, Commercial General Liability insurance covering bodily injury and property damage containing minimum limits of one million dollars ($1,000,0000) written on a per occurrence form with a two million dollars ($2,000,000) aggregate limit. This insurance shall include personal injury coverage with employment exclusion deleted, and contractual liability. Such coverage shall include products and completed operations and shall not be excluded under the commercial general liability insurance. Nothing shall prohibit an Agency from requiring increased amounts than stated herein.

(2) Umbrella Liability: The Contractor shall be required to furnish umbrella liability coverage, and keep in effect during the term of the contract which provides excess limits over the primary coverages. Agencies must refer to the recommendation of the Risk Management division of the Arkansas Insurance Department on the minimum amount of coverage.

(3) Automobile Liability: The Contractor shall obtain, at Contractor's expense and keep in effect during the term of the contract, automobile liability insurance including hired and non-owned coverage in minimum amounts of one million dollars (1,000,000) per occurrence.

(4) Workers' Compensation and Employers' Liability: The Contractor, its subcontractors, if any and all employee providing work, labor or materials used in connection with this work.

(5) Contractor's Equipment:

(a) The Contractor shall be responsible for any loss, damage or destruction of its own property or that of any subcontractor's equipment and materials used in connection with this work.

(b) Contractor will purchase at Contractor's own sole cost and expense such policy to cover contractor's owned property.

(c) Contractor will provide waiver of subrogation to Owner.

(d) Pollution Liability: If requested by Owner at any time, Contractor shall, at Contractor's expense, obtain and maintain in force and effect for the term of the contract Pollution Liability

Insurance covering losses caused by pollution conditions that result from the performance of the Contract. This requirement also applies to any consultant or contractor engaged by Contractor or performing construction, geotechnical, well drilling, abatement activities or contractor services.

(e) Pollution Liability Insurance shall cover Owner costs and liabilities attributable to bodily injury; property damage, including loss of use of damaged property or of property that has not been physically injured; clean-up cost; and defenses, including costs and expenses (including attorney's fees) incurred in the investigation, defense or settlement of claims. Contractor shall maintain such insurance in an amount of at least two million dollars (2,000,000) per loss with annual aggregate of at least five million dollars ($5,000,000). Nothing shall prohibit Agencies from increasing the amounts stated herein.

(i) If coverage is written on a claims-made basis, Contractor represents that any retroactive dates applicable to coverage under the policy precedes the effective date of the letter; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of three (3) years or as required by law beginning from the time that services under the contract are completed.

(ii) If the scope of work as defined in this Contract includes the disposal of any hazardous or non-hazardous materials from the Projects site, the Contractor must furnish to the owner evidence of pollution liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting waste under this Contract. Such coverage must be maintained in amounts conforming to applicable laws, rules and regulations.

(f) Remediation: Remediation Contractor shall provide liability insurance for the removal or remediation of asbestos including the transportation and disposals of asbestos waste materials from the Project site. Limits of insurance shall be not less than those required under the Commercial General Liability policy. Depending on the nature and amount of asbestos to be removed/abate, Owner may request higher limits than those required by the Commercial General Liability policy.

(g) Additional Requirements: All policies shall be provided by insurers qualified to write the respective insurance in the State of Arkansas, be in such form and include such provision as are generally considered standard provisions for the type of insurance involved.

3-319 ACKNOWLEDGEMENT OF ADDENDA

Any or all addenda will be acknowledged on the bid form and such acknowledgment shall be stated during the reading of the bids. Failure by the bidder to acknowledge all addenda shall be considered as a non-responsive bid. Every effort should be exerted to eliminate addenda. If addenda are necessary they should be issued as soon as possible, but in any event not later than twenty four (24) hours before receiving bids. An addendum, upon approval by the Section, which only sets a later bid date, may be issued anytime before time has been called for the opening of bids. While failure to acknowledge all addenda renders a bid non-responsive, failure to acknowledge addenda which only sets a later bid date or time, or both, shall not be deemed to be non-responsive. In the event an addendum requires changes in the scope of the project, an appropriate extension of the bidding period should be granted. Changes in the scope of the work or specifications shall require review and approval by the Design Review Section. No addenda shall be issued without the prior approval of the Section. Within this subsection, issued means delivery of addenda by fax transmission to, hand delivered to electronic

notification or picked up by potential bidders who received plans and specifications from the official plan distribution entity. Design Professionals are responsible for issuance of all addenda and documentation relating to its issuance (not receipt). Bidders are responsible for verifying if any addenda were issued prior to submitting a bid.

3-320 CONTRACT TIME

The period of time allocated for the substantial completion of the work shall be stated as a calendar date or as calendar days. The Agency, with input from the Design Professional, shall decide on the amount of liquidated damages and the amount of such damages to be included in the project specifications. Refer to § 3-403.

3-321 LATE BIDS

All bids received shall be recorded by date and time on the sealed bid envelope. The recorded time and date shall be determinative regarding issues of lateness. Bids received at the office designated in the invitation to bid, but after the time has been called for receipt will not be considered, unless, it is determined that the late receipt was due solely to mishandling by the State after receipt at the State office designated in the invitation.

3-322 MODIFICATIONS OF BIDS

Bidders may submit written modifications to their bid at any time prior to the exact time set for receipt of bids. Modifications may be made on the bidder's envelope. No modifications made shall show the base bid amount. The bidder must sign any bid modification.

3-323 WITHDRAWAL OF BIDS

Withdrawal of bids by fax is authorized, but such withdrawal must be verified by a follow up letter from the bidder before such withdrawal is finally accepted, but only if the withdrawal is made prior to the time being called for the opening of the bid. Withdrawal by fax shall only cause the bid to remain unopened and unread for such period of time as required to receive confirmation by letter but no later than 3 business days. A bid may also be withdrawn in person by a bidder, or his representative, provided, his identity is made known and he signs a receipt for the bid, but only if the withdrawal is made prior to the exact time set for receipt of bids.

3-324 QUALIFICATIONS OF CONTRACTORS

(A) Contract awards should be made to the lowest responsible bidder. Breaches of responsibility may include but not limited to:

(1) Conviction for of a criminal offense in connection with obtaining or attempting to obtain a public or private contract or subcontract, or in the performance of such contract or subcontract.

(2) Conviction under State or Federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or any other offense indicating a lack of business integrity;
(3) Conviction under State or Federal antitrust;

(4) Violation of contract provisions, as set forth below:

(a) Failure to perform in accordance with the specifications or within the time limit provided in the state capital improvement contract; or

(b) Failure to perform or unsatisfactory performance in accordance with the terms of one or more contracts;

(5) Failure to post bid or performance bonds as required by laws or rules;

(6) Substitution of work or materials without the prior written approval of the Agency and the Design Professional; however these approvals shall not in any manner diminish the Section's approval of change orders;

(7) Failure to replace inferior or defective work or materials after notification by the Agency or the Section to which such services or materials has been provided or delivered;

(8) Refusal to accept a contract awarded pursuant to the terms and conditions of the contractor's bid;

(9) Falsifying invoices, or making false representations to any Agency or State official, or untrue statements about any payment under a contract or to procure award of a contract, or to induce a modification in the price or the terms of a contract to the contractor's advantage;

(10) Collusion or collaboration with another contractor or contractors in the submission of a bid or bids that results in, or could result in lessening or reducing competition for a bid;

(11) Falsifying information in the submission of any document in any process related to the capital improvement project.

(12) Failure to make appropriate and timely payments to their subcontractors;

(13) Any other act or omission the Agency determines to demonstrate that the Contractor cannot act in a responsible manner, including but is not limited to suspension or debarment by any other governmental entity for any cause, which may include but not limited to Contractors who are suspended or debarred by the State Department of Labor or deemed unqualified by the Contractor's Licensing Board.

3-325 OBLIGATIONS OF BIDDERS

At the time of opening of bids each bidder will be presumed to have read and to be thoroughly familiar with the plans and contract documents, including all addenda. Failure to do so is solely at the bidder's risk. The failure or omission of any bidder to examine any form, instrument or documents shall in no way relieve any bidder from any obligation in respect to his bid pursuant to Arkansas Gross Receipt Tax Rules. Bidders on capital improvement projects which are not tax exempt; and successful bidders cannot avoid sale or use taxes for whom they are performing the work for.

3-326 ADDITIONS TO OR DELETION FROM THE DOCUMENTS

All deletions, changes, additions, or alterations of the bid documents will be acknowledged and read aloud. If such modifications are not waived, the bid shall be declared non-responsive and

rejected. Corrections or change of figures must be noted and unless initialed by authorized officials, shall be sufficient grounds for rejection.

3-327 ANNOUNCING LOW BIDDER

Until such time as the bids have been reviewed and certified, any announcement or reference to the low bidder will use the phrase, "apparent low bidder". Contract awards should not be made on the day of bid opening except in special cases and approved by the Section.

3-328 PROTESTS

Any actual or prospective bidder who is aggrieved in connection with the project documents, or award of a capital improvement contract has the right to protest to the Construction Administrator, or the Agency that opened and read the bid pursuant to §3-102. The protest shall be submitted in writing within five (5) business days after the bid opening; in the event a bidder is declared non-responsive or rejected after the five (5) day period, the bidder shall have three (3) business days from the declaration to submit a protest. All protests shall identify the project by bid number or with sufficient detail to identify the project, and shall with specificity, set forth the allegations of the acts or omissions related to the protest. Since time is of the essence in award of all capital improvement contracts, protests and their resolution shall be resolved promptly. ABA shall be informed of protests to Agency Officials and their response. Subcontractors or suppliers are not considered bidders under this subsection. Only official representatives of the actual or prospective bidder may submit a protest. This section shall not be construed as a waiver of the State's right to reject any or all bids and to waive any formalities.

Any and all protests regarding the Agency determination of the lowest responsible bidder shall be made to the Agency with copy to ABA in the timeframe stated above and in the manner stated in §3-329.

3-329 RESOLUTION OF PROTEST

The Construction Administrator, the Agency official (performing the bid opening) or a designee of either office shall have authority to settle or resolve a protest of an aggrieved bidder actual or prospective, concerning the project bid documents, solicitation, or award of a contract.

3-330 UNSUCCESSFUL BID

In the event no responsive bids are received or the bidders are deemed not responsible or both, and it is determined by the Section that further solicitation of bids would be futile, the contract may be awarded to any available qualified contractor only after obtaining the approval of the Construction Administrator or designee.

3-400 CONTRACT ADMINISTRATION

This section is applicable to all agency capital improvement projects regardless of whether a design professional has contract administration duties or not.

3-401 CONSTRUCTION OBSERVATIONS

A) The Section has the responsibility of periodic construction observations on all projects unless

exempted. If the Agency has capital improvement project issues, which need to be addressed involving the Contractor or the project or both, the Agency should immediately notify the Section. Pre-construction meetings should include ABA personnel. Notification of pre-construction meetings shall be provided to the Section five (5) calendar days prior to the meeting.

B) When the project is presumed to be complete, the Section shall be notified by the Design Professional so that the certification of final completion may be signed by the parties, including ABA. Notification shall be provided to the Section five (5) calendar days prior to the certification of final completion. Final pay requests and release of retainage will not be approved by the Section until all close out procedures have been completed. See § 3-500 through § 3-504.

3-402 INVOICE/PAY REQUEST

(A) All invoices/pay requests shall be submitted to the Agency. All invoices and pay requests shall be processed in accordance with § 22-9-201 et seq. and § 19-4-1401 et seq.

If the invoice or pay request is for partial pay, then the amount of retainage pursuant to Ark. Code Ann. § 22-9-601 et seq. shall be withheld and shown on the invoice/pay request. No amount of the retainage shall be released until the conditions under the law are met. If the invoice/pay request is for full payment, no retainage is withheld.

(B) The following shall accompany any partial releases of retainage for phased work as well as the final pay request:

(1) An affidavit from the Contractor stating that other than those noted written exceptions no existing debts are owed and that all payments due to subcontractors or suppliers have been made regarding the capital improvement project. The Contractor shall submit a copy with the final invoice/pay request to the Agency. The Agency shall then submit a copy with pay request to the Section.

(2) Documentation that the Surety Company has approved and consented to the final payment. Approval of the surety company for final payment to the Contractor shall not relieve the surety company of any of its obligations.

(3) Retainage release pay request package prepared by the appropriate entity and submitted to the Section, including:

(a) Final pay request/invoice indicating retainage release executed by the Contractor, Design Professional and Agency; (not required to be submitted to ABA for phased completions)

(b) One (1) copy of the Certificate of Substantial Completion;

(c) Letter from Design Professional verifying that all punch list items have been completed by the Contractor, and approving the following if applicable:

(i) Commencement date of the Contractor's warranty period shall become effective on the date of substantial completion and shall not be less than one year;

(ii) Roof(s) warranty(s) Installer's warranty and the manufacture warranty if specified;

(iii) Termite Inspection Certificate;

(iv) Operational and Maintenance Manuals;

(v) Certificate of Air Balance; and

(vi) As built mark up prints and shop drawings provided by the Contractor for use by the design profession in the preparation of record drawings. (Not required for phased completions)

(4) Certification of Final Completion: Certification of final completion will occur when the Contractor, Design Professional, Owner and ABA have signed and certified the project meets final completion which includes but not limited to all phases of the work, closeout documentation has been provided and punch list items are complete. A meeting with representatives from the parties above, shall occur on site prior to any project final certification (not required for phased completions).

3-403 LIQUIDATED DAMAGES

Any amount of liquidated damages owed by the Contractor to the Agency for delay in project completion will be calculated by multiplying the “amount per day” of liquidated damages specified in the contract documents by the number of days, which occur between the contract completion date (as amended by applicable change orders) and the date of issue of the certificate of substantial completion date. Deductions for liquidated damages can be deducted from the final pay request. Prior to final payment approval and retainage release, the Agency shall provide to the Section written documentation and justification regarding any assessment of liquidated damages. The final payment will be reflective of such actions. The Agency with input from the Design Professional, shall decide on the amount of liquidated damages and the amount of such damages to be included in the project specifications.

3-404 DESIGN PROFESSIONAL CONTRACT ADMINISTRATION RESPONSIBILITIES

(A) After the Design Professional has received written approval from ABA that the project has been approved for bid, the Section, shall set a bid opening date, time and place prior to any advertising for bids. Agency officials pursuant to §3-102 shall coordinate bid dates with the Section. Bids shall be solicited for the project in accordance with Arkansas laws and rules (Refer to § 3-200 (B)).

(B) One (1) copy of half size plans and specifications shall be provided to the Section within three (3) business days after the first advertisement or plan/specification disbursement. Failure to do so may cause a delay or cancellation of the bid opening. Any addenda to the plans and specifications must be reviewed and approved by the Section prior to issuance. Design Professionals shall submit addenda, which require a change in scope of work in sufficient time to allow for appropriate ABA review and comment.

(C) If the bid plans and specifications have been modified during negotiations (after the bid opening but prior to the award of contract) then one (1) set of the modified plans and specifications shall be furnished to the Design Review Section for review and approval. Upon approval, a set of the final construction documents issued shall be provided to the Section. Additionally, any modifications to the plans and specifications after the award of contract shall be submitted to the Design Review Section for review and approval. Upon approval, a set of plans and specifications shall be furnished to the Section.

(D) Detailed instructions for Design Professionals can be found in §2-100 et seq. pertaining to the Design Review Section. The Section will not approve bid opening time, place, or date without final plan review and approval from the Design Review Section. Observation reports shall be submitted by the Design Professional (Refer to §§2-201, 2-206, and 2-1605.) For payment of professional services, see §2-308.

E) Design Professionals will complete all other contract administrative duties and responsibilities as noted in the MSC and all other standard services and responsibilities pursuant to their professional services contract.

3-405 AWARD OF CONTRACT

(A) After the lowest responsible bidder has been determined a letter of intent to award a contract may be issued by the Design Professional. Once issued, a contract is to be submitted to the Section, for approval with one complete set of as contracted plans and specifications (see §3-406). A notice to proceed shall not be issued, nor is any work to commence until and unless the contract has been approved by the Section.

(B) No capital improvement contract shall be awarded to other than the lowest responsible bidder. If the apparent low bidder is not determined to be the lowest responsible bidder, Agencies should contact the Section.

Refer also to §§ 3-315.

3-406 CONSTRUCTION CONTRACTS

(A) The Design Professional, will prepare the construction contract and after execution by the Contractor and Agency, the one (1) original along with the appropriate documents shall be forwarded to the Section for review and approval. The following information shall be submitted: bonds, insurance certificates, proof of advertising if placed by the Agency or Design Professional, illegal immigration certification, disclosure forms and documents pursuant to EO 98-04 shall accompany the contract. The Section will review and approve or disapprove all construction contracts. The ABA contract number shall be used in pay requests, payments, correspondence, etc., pertaining to the contract.

(B) The Section will retain the original set of documents and copies will be forwarded to the Agency Project Coordinator for disbursement, to the Contractor and the Design Professional. The Design Professional shall issue a notice to proceed. Within ten (10) business days after the decision to proceed, the Contractor shall submit a complete breakdown of the project cost (schedule of values) and project schedule to the Design Professional who in turn shall provide such to the Agency and the Section. No payment shall be made to the Contractor until the breakdown of project costs and project schedule are provided. The Contractor shall deliver to the Owner and the Section a copy of the Contract and Grant Disclosure Statement along with a statement of the listed subcontractor's contract amounts, subcontractors Grant and Disclosure statements and any other statements requiring disclosure.

(C) The ABA construction project file shall contain copies of bonds, contracts, certified bid tabulation, insurance certificates, Design Professional agreements, proof of advertising, change orders, observation reports, processing of final payment requests and the applicable disclosure forms and documents pursuant to EO98-04. Documentation reflecting justification and approval

shall also be contained in the project file if the contract was made pursuant to historic preservation, alternative delivery, sole source or emergency procedures.

(D) Refer also to §§ 3-315, 3-503. Refer to § 3-408 for information regarding contract change orders.

3-407 PRE-CONSTRUCTION CONFERENCES

A member of the Section may be available for pre-construction conferences. All notices of conferences specifying the time, date and location shall be delivered to ABA no later than working five (5) days before the scheduled conference date. Conferences shall be conducted at a location convenient to the site (Agency decision) with all parties (ABA, Agency project coordinator, Contractor and Design Professional) involved. All necessary information for discussion shall be made available including but is not limited to all subcontractors, applications for payments, payment procedures, change order process, construction time schedule, project superintendence, safety procedures, etc., that would be of significance to the project. The Design Professional shall provide the minutes of these proceedings to the parties involved. The Design Professional shall deliver a copy of the minutes, including the sign in sheet, to the Section within five (5) business days of the meeting.

3-408 CHANGE ORDERS

(A) A change order is an amendment to the original contract that may include but is not limited to changes in the dollar value of the contract or the time for completion. Change Orders shall be submitted for approval to the Section after agreement is reached by the Agency, Design Professional, and the Contractor as to the change. A Change Order is not effective until approved by the Section. Emergency change orders may be effective by following the same rules as emergency contracts. The distribution of change orders will be the same as the original contract.

(B) The Agency or authorized representative must submit with the Change Order form documentation stating the work to be accomplished or deleted, any revisions to the contract time and the exact dollar amount. In addition to the Section's review and approval of the change order, the Design Review Section shall review and approve any changes regarding the scope of the project within its jurisdiction. Submittals shall be in one (1) original along with the appropriate backup documentation.

(C) The Design Professional shall prepare the change order and have the Contractor and the Agency and the Design Professional execute it. After the signatures have been received, the Section will determine if the documentation is in order and approve the change order accordingly and provide the copies to the Agency Project Coordinator for disbursement to the Contractor and Design Professional. The Section shall maintain the original of the change order. If proper documentation is not provided, the change order will be returned to the sender.

(D) Change orders shall be approved by the Section, before work is done, unless prior approval by the Section has been granted.

(E) The Section shall not be responsible for review nor approval of change orders on exempt contracts (Refer to § 3-101) unless the change order increases the total contract amount to more than the exempt amount. If the exempt contract is increased to more than the exempt amount by a change order, the Agency shall seek approval from the Section by submitting the

original contract or purchase order along with justification for the increase. Under no circumstances shall an Agency abuse this process to subvert any law or rule relating to capital improvements.

(F) All drawings pertaining to the work referenced within the change order shall be stamped, sealed, and signed by the appropriate Design Professional prior to submission to ABA.

(G) The documentation for change orders shall include any applicable copies of all requests for pricing from the Design Professional and responses from the Contractor and the subcontractors. Pricing and supporting documentation must comply with the contract documents.

3-500 PROJECT CLOSEOUT

(A) Substantial Completion: The Contractor shall notify all parties involved of the date upon which he will be ready for substantial completion at least five (5) calendar days in advance. The project architect or engineer and a representative of ABA and the agency will schedule and perform the observation to verify if the construction meets substantial completion status. No statement of substantial completion shall be effective without the Section's approval. The Agency or Design Professional shall submit one (1) original and applicable documents to the Section for review and approval. The Section will retain the original; copies will be forwarded to the Agency Project Coordinator the Contractor and Design Professional.

(B) Upon completion of the punch list items, the Contractor may submit a request for final payment. ABA shall be provided all necessary approvals including consent of surety, release of claims, certificate of final completion, payment document for final payment from the Contractor and the Agency's request for final payment. Contractor shall furnish copies of all maintenance manuals and warranty items to the design professional prior to the request for final payment. See § 3-402 for required documentation.

(C) Project Close Out Finals: The Contractor shall notify the Design Professional that he is ready for a final review at least five (5) calendar days in advance, at which time the Design Professional, with the Agency and representatives of ABA will conduct a final review (walk through); and, if acceptable, accept the facility. All mechanical, (HVACR-Plumbing), Electrical, or other building systems shall be checked and inspected completely at the time of final review prior to project final acceptance. The mechanical system should be balanced once per each major seasonal change by the Contractor under the administration of the Design Professional during the first year warranty period as per the project specifications. Written instructions concerning seasonal adjustment should be issued to the Agency/Owner for use by the applicable Agency building maintenance staff. The Design Professional shall provide ABA with a letter stating that all systems have been inspected and deficiencies listed have been corrected. Upon completion of the project, a certification of final completions shall be signed by the Contractor, Design Professional, Agency and ABA.

(D) When the project has reached final completion, the Design Professional shall provide to the Section and Agency Representative a CD Rom with the following information:

(1) Complete bid proposals of all bidders;

(2) Substantive correspondence relating to the project;

(3) Complete pay applications and design professional inspection reports and photos;

(4) Manuals/specification books;

(5) All Contractor warranty and equipment warranty documents;

(6) Inspection and permit documents issued by Federal or State entities with approvals and/acceptance of Work;

(7) All record documents; and

(8) All equipment and system inspection and acceptance documents.

The CD-Rom shall be in an ABA approved readable format (MS-Word, MS-Excel, pdf, jpg, and tif files are acceptable). Failure to provide the above items may cause delay in the Design Professional's final payment. The information must be set up within folders for easy discovery. Upon request of the Design Professional, ABA will provide additional instructions on the required formatting or placement of documents or both, along with other requirements of the CD-Rom.

3-501 RECORD DRAWINGS

The Contractor shall, during the progress of the work keep an accurate record of all changes and corrections from the layouts shown on the drawings. Record of changes may be kept by accurately marking all changes on a set of prints during the progress of the job. Exact locations of all underground utility service entrances and their connections to utility mains as well as all valves, etc., which will be concealed in the finish work shall be accurately indicated on the drawings by measured distances. Depths as well as horizontal distances shall be shown. Upon completion of the work and prior to final payments, the Contractor shall furnish to the Design Professional, one (1) set each of "record" reproducible prints legibly and accurately drawn to indicate all changes, additions, deletions, etc., from the contract drawings. The Design Professional shall verify and add to information as required and transmit these reproducible prints to the Agency. On ABA owned property the Design Review Section shall receive the copy of the "record" drawings of reproducible prints or cd-rom copies for record keeping. In this instance the Section will still receive a cd-rom with the above stated data.

3-502 DELIVERY OF GUARANTEES, BONDS, MAINTENANCE MANUALS

Upon completion of the work and before final payment will be authorized, the Contractor shall furnish the Design Professional, for review and approval prior to transmission to the Agency, the Contractor's one-year acceptance warranty (the warranty period begins upon the date as stated in the substantial completion document, bonds, roof warranties, termite inspection, maintenance and operation manuals and operation training, air balance data, shop drawings, catalog data, as-built "record" reproducible prints, etc., as called for under the various Divisions of Specifications. Certification of the above will be made by the Design Professional and attached to the Contractor's request for final payment.

3-503 COMPLETION CERTIFICATES, AFFIDAVITS

Before final payment the Contractor shall furnish to the Design Professional one (1) executed copy of the required documents which shall be attached to the Contractor's request for final payment.

3-504 DUTIES OF DESIGN PROFESSIONALS ON STATE PROJECTS

(A) The Design Professional shall maintain up-to-date files on each project, which shall include project plans and specifications, shop drawings, record drawings, and observations and inspection reports. The Design Professional shall provide to ABA any and all applicable contracted medium regarding the project prior to their final payment. All drawings are the property of the Design Professional; however, the State retains the right to obtain copies of all drawings upon request and payment of direct reproduction costs. Drawings produced for State projects shall not be used or incorporated into any other projects unless permission to do so is provided in writing from ABA and the Design Professional. Refer to §2-1605 for Design Professional project observation requirements.

(B) Design Professionals shall be responsible for reviewing all closeout documents, manuals and warranty items for approval and compliance with the contract documents.

3-600 PAYMENT REQUESTS

(A) Requests for payments from capital improvement funds shall be made by the use of a payment document using the General Accounting Procedures pursuant to AASIS.

(B) Each payment document shall indicate, the ABA project number and be supported by the Design Professional's certification of the Contractor’s estimates. Estimates must be broken down by units of work normally used to calculate the work accomplished during the invoicing period.

(C) The Design Professional shall conduct site visits to determine the responsibility and performance required by the Contract Documents. Refer to §2-1605 for Design Professional's project observation requirements. Observations shall concur with the Contractor's payment request and shall be submitted in written form with the pay request.

(D) Observation reports by Design Professionals are required once a month at a minimum. The use of the standard A.I.A. Document G-711 "Architect Field Report" or other approved form is acceptable. Reports are to be maintained on file by the Design Professionals and shall be provided to the Owner/Agency and the Section on a monthly basis.

Minimal observation reports shall include but not limited to the following phases of construction:

(1) Foundation.

(2) Roof deck.

(3) Roofing and Insulation,

(4) Mechanical Equipment Installation.

(5) Electrical Equipment Installation

(6) Prior to application of interior wall, backfilling trenches, laying concrete, and ceiling finishes concealing the work (i.e. plumbing, electrical, HVACR) shall be observed.

(7) Plumbing equipment and fixtures.

(E) Contractor final pay requests must be approved by the Design Professional. Payment requests shall be submitted by the Contractor in one (1) original.

3-601 PAYMENTS

(A) For contracts in which a payment and performance bond was issued, a copy of all payment documents including labor or materials or both shall be sent to the Agency for approval prior to any payment being released. Where a payment document is supported by two (2) or more invoices, the Contractor shall provide documentation clearly evidencing the total to be paid. Failure to provide documentation shall result in return of the payment document to the Contractor.

(B) If pay estimates are not approved, the Contractor involved shall be notified in writing immediately and shall be informed as to the reasons for non-approval.

(C) Late payment penalties may be assessed pursuant to Ark. Code Ann. §19-4-1411 and §22-9-205.

3-602 FINAL PAYMENTS

(A) The following shall accompany the final payment document for contracts:

(1) Contractor's invoice.

(2) Certificate of Final Completion.

(3) Contractor's release of claims.

(4) Consent of surety

(5) Agency request for final payment.

(6) The Design Professionals acceptance and certification letter.

3-603 DELAY IN PROCESSING PAYMENT DOCUMENTS

Any penalties for the delay in processing of payments may be processed in accordance with Ark. Code Ann. §19-4-1411, §22-9-205.

3-700 CAPITAL IMPROVEMENT ALTERNATIVE DELIVERY METHODS

Pursuant to Ark. Code Ann. §19-4-1415, ABA, unless exempted by law, has authority to approve and administer contracts (contractor, construction manager, architect or engineer) for projects that exceed $5,000,000, which are awarded through negotiations instead of the bid process. This type of alternative delivery method of contract shall be referred to as "negotiated work".

3-701 PROJECT CRITERIA

(A) Agencies may utilize “negotiated award” status for projects, which include but are not limited to the following criteria: Project’s programming requires “Fast Tracking”; traditional design-bid-build process is less fiscally advantageous than negotiated work; and negotiated work is more practical for project needs.

(B) Prior to utilization of negotiated award, Agencies shall make a written request and provide justification to the ABA Director for the use of alternative methods and give justification for an alternative delivery method pursuant to § 3-700. The ABA Director may approve the request after reviewing the documents submitted. The Agency shall cooperate with the ABA Director if more information is requested. If approved by the ABA Director, the Agency shall then submit the project for review by the Arkansas Legislative Council. No contract shall be awarded without the approval of ABA and Legislative Council review.

3-702 SELECTIONS AND CONTRACT AWARD PROCESS

(A) All selection processes involving the Design Professional, Contractor or contract manager shall be made in accordance with §3-700. See also §2-1700 for the Design Professional selection process.

(B) The pre-selection committee shall consist of five (5) members. The ABA Director shall determine the two (2) members from ABA. The respective Agency director shall determine the three (3) members of the Agency.

(1) A request for proposals (RFP) shall be made in accordance with §3-700. The Agency shall prepare all RFPs. ABA shall approve the draft of the RFP prior to its publication. RFPs for Contractor’s services shall have a statement in regards to the state or federal prevailing wage.

(2) The pre-selection team shall meet at a designated time and place to review the proposals. No more than five and no fewer than three applicants shall be selected. ABA may waive the minimum amount if less than 3 proposals are submitted. The Agency shall notify the finalists within five (5) business days of the selection determination.

(C) The final selection committee shall consist of three (3) members of the Agency. The Agency director shall determine the members of the final selection committee. The Agency shall notify ABA and the finalists of the time and date that the final selection interviews will be held. The Agency shall notify the successful finalist within five (5) business days. While ABA may attend the final selection meeting, it shall not vote in the matter.

(D) The State reserves the right to reject any and all proposals and to waive any formality in the negotiation and award process.

(E) Once the final selection is determined, the Agency may begin to enter into final negotiations with the successful finalist. Nothing shall prohibit the Agency from entering into negotiations with other finalists, if final negotiations are not successful.

(F) Before ABA may approve any contracts:

(1) The contractor, engineer, architect, or construction manager shall be licensed in accordance with §3-700;

(2) Contract Documents shall be reviewed in accordance with all related laws and rules and the ABA Division 00 requirements and §2-706

(3) The Contractor or Contract Manager (Refer to §3-315) shall submit a performance and payment bond(s); and

(4) Insurance amounts and processes relating to such shall be in accordance with §3-318;

3-703 CONTRACT OVERSIGHT

The Section has contract oversight and responsibility.

(A) The Design Professional shall provide the Section current approved for construction plans and specifications as the project progresses. The plans will be in half size. A copy of the plans and specifications that the GMP is established on will be provided to the Section, the Design Review Section, Agency official, and Contractor and the plans and specifications will be stamped or duly noted as "Guaranteed Maximum Price" and "Approved for Construction" with the date and signature and/or seal of the Design Professional. For additional Design Professional requirements see §2-1706.

(B) Phased Fast Track Projects: Notice to Proceed will be issued to the Contractor for each approved for construction phase of the work. No work may commence on any phased of work without ABA approval.

3-800 CAPTIAL IMPROVEMENTS HISTORIC SITES

Pursuant to Ark. Code Ann. §§22-9-208 through 22-9-211, ABA, unless exempted by law, has authority to approve and administer contracts for projects awarded pursuant to the Historic Site laws:

§22-9-208 – Legislative intent and construction

§22-9-209 – Advertising of contracts

§22-9-210 – Award of Contract

§22-9-211 – Payment

3-801 Project Criteria

Agencies requesting to utilize the Historic Site method of contracting shall send written request and justification to the ABA Director for placement on the ABA Council agenda. Upon ABA Council approval, the request may be forwarded for review by the Arkansas Legislative Council and approval by the Chief Fiscal Officer of the State. Nothing shall prohibit an agency from applying for Legislative Council review prior to the ABA Council review approval.

SECTION FOUR
BUILDING OPERATIONS

4-100 INTRODUCTION

The following minimum maintenance standards & criteria are established pursuant to Ark. Code Ann. § 22-2-101 et. seq. These standards are designed to address the areas of management, maintenance and operation of all public buildings and capital improvements in order to provide a clean, safe and comfortable working environment for employees and the public of the State of Arkansas. Any reference to the words “the Section” within Section Four shall mean the Building Operations Section

4-101 PREVENTIVE MAINTENANCE REQUIREMENTS

(A) In an effort to sustain safe and comfortable working environment in state owned buildings, the following requirements shall be performed pursuant to applicable state and federal laws and regulations; and in a manner deemed appropriate by the Agency director responsible for the maintenance and operations of the state owned building:

(1) Work Authorization System: The Building’s Maintenance Office shall maintain a work-order system which provides for a method of documentation.

(2) Equipment Inventory: Building maintenance offices shall have a complete inventory of building equipment requiring regular maintenance attention which can be documented. This inventory should include, but should not be limited to air conditioning machines, boilers, pumps, fans, air compressors and other building service system components.

(3) Technical Library: Each building maintenance office shall maintain a library of as-built (record) drawings which show structural, architectural plan, mechanical systems, electrical systems, site details and manufacturers operating manuals necessary to operate and maintain the physical plant.

(4) Plant Logs: All buildings with central heating and cooling systems shall implement the use of daily logs to record boiler and water chiller operations. Logs should indicate the unit number and location of the equipment and in addition be initialed and dated. The building maintenance official is responsible for development of log forms to the building’s specific mechanical and electrical systems. Information on the log sheet shall include but is not limited to steam pressure, sight glass on boilers, water temperature (out and return), blow down, chemical test, safety valve test, low water test, pumps checked, and the night set back status for boilers; the date and time for air temperature for ambient space, the compressors’ oil level/temperature reservoir/leaving the cooler/pressure, the gears’ oil level/temperature, chillers’ water temperature in/out, refrigerators’ level/pressure/temperature, the condensers’ water temperature in/out and refrigerators’ pressure for chillers.

(5) Equipment Maintenance Records: Building maintenance offices shall have a preventive maintenance program on all equipment requiring regular maintenance attention. This program should consist of documented schedules of regular preventive maintenance assignments and documentation reflecting maintenance is being performed on a regular basis. Building maintenance offices shall also maintain adequate records of repair history of major components of equipment. In addition, if the Owner Agency utilizes maintenance contracts or extended warranties on equipment or materials, (beyond the one year contractor warranty for new

construction), the maintenance offices shall maintain a list of the contacts (name and phone numbers) for the warranties along with a description of what the contract or warranty covers and the expiration date of the warranty. Maintenance staffs are expected to implement timely repair and maintenance procedures that are adequate to preserve the serviceability of all building systems.

(6) Chemical Water Treatment: All buildings with central heating and cooling systems shall use a water treatment program to prevent corrosion, scale, and algae build-up. Each building maintenance office shall maintain a record of water test analysis performed on a monthly basis during the respective heating and cooling seasons.

(7) Painting: Facilities shall be painted on an as needed basis to preserve surfaces against deterioration.

(8) Roof Maintenance: Maintenance offices shall inspect all building roofs on a periodic basis and maintain a record of those inspections. Built-up roofs shall be inspected twice a year. All roofs shall be inspected immediately after severe weather events. Maintenance staffs are expected to repair or cause to be repaired on a timely basis and implement maintenance procedures of roofs, roof drains, scuppers, base flashing, and gutters that are adequate to prevent deterioration of the roof and building.

(9) Masonry Maintenance: Masonry walls will be water-proofed, caulked, repainted and repaired with sufficient frequency to preserve surfaces and maintain a reasonably attractive appearance.

4-102 BUILDING CLEANING AND GENERAL BUILDING MANAGEMENT

(A) The following requirements and schedules shall be performed pursuant to applicable state and federal laws and regulations; and in a manner deemed appropriate by the Agency director responsible for the maintenance and operation of the state owned building:

(1) Building Cleaning: All buildings shall be cleaned with adequate frequency and diligence to protect the public health, and maintain the aesthetics of interior surfaces.

(2) Emergency Procedures: All buildings shall have an evacuation procedure to follow in the event of fire, bomb threats, or other emergencies. Building management shall conduct a fire drill at least once each year. Evacuation plans shall be posted in conspicuous locations along all evacuation routes to allow occupants and visitors to quickly determine the nearest path of egress in an emergency.

(3) Landscape Maintenance: All maintenance offices shall maintain grounds, malls, plazas, walks, parking lots, and streets in a manner designed to preserve the state's investment in landscaping.

(4) Energy Management: All building management offices shall have in place an on-going energy management program, designed to operate the facility/facilities in an efficient and economical manner. Set points should be inspected on an as needed basis but no less than once per quarter.
(5) Energy Conservation: Agencies shall maintain their facilities in accordance with their approved Strategic Energy Plan (StEP) in accordance with laws (see Ark. Code Ann. §22-3-2001 et seq.), rules and EO 09-07 regarding sustainability and energy efficiencies.

4-103 BUILDING RULES AND REGULATIONS:

(A) Each Owner Agency Director shall be responsible for developing and administering the building rules and regulations for his building and property. The rules and regulations should be provided to the building tenants in a written and bound form. The following requirements and schedules shall be performed pursuant to applicable state and federal laws and regulations; and in a manner deemed appropriate by the owner Agency director responsible for the maintenance and operation of the building.

(1) Parking: Parking should not be allowed in fire lanes.

(2) Weapons: Pursuant to Arkansas Code Annotated § 5-73-306 (10) concealed weapons are prohibited to be carried into any state office. Law Enforcement, Law Enforcement Retirees, and Parole Board Members who meet the criteria under Ark. Code Ann. § 5-73-301 et seq. (Law Enforcement), §12-15-202 (Law Enforcement Retirees) and §16-93-209 (permits issued to Parole Board Members) may carry a concealed handgun onto state property. This prohibition does not affect items considered to have historic, archival or educational purposes and have been approved by the director of the agency where the item will be stored or exhibited.

(3) Alcoholic Beverages and Controlled Substances: No alcoholic beverages or controlled, non-prescribed substances are allowed inside the building or on property grounds. Alcoholic beverages should not be allowed on the property (building or grounds) except as authorized by state laws, regulations or governor's directives.

(4) Disturbances: No conduct shall be allowed which creates a loud or unusual noise or nuisance; or which obstructs the usual use of entrances in an emergency; or in any manner creates a security or safety risk or endangers the safety of the building tenants or the public.

(5) Posting and Distribution of Materials: No signs shall be posted in the common or public areas of the building except as authorized by Building Operations officials.

(6) Assembly: Agency Heads, or Designees, reserve the right to: limit the number of persons entering their office area; demand that the premises be vacated and, if needed, call authorized Law Enforcement Officers to assist in such.

(7) Preservation of Property: The improper disposal of rubbish on property; the willful destruction of or damage to property; the theft of property; the creation of any hazard on property; the throwing of articles of any kind from or at the building or climbing on any part of a building or structure shall be prohibited.

(8) Persons entering ABA buildings and facilities shall upon request:

(i) sign in by providing both full (not initials) first and last name; and

(ii) provide proper identification.

(iii) Entry may be refused to anyone not in compliance with (i) or (ii), or both.

SECTION FIVE
REAL ESTATE SERVICES

5-100 PURPOSE

This manual has been compiled to provide every state agency, board or commission with written standards for the most economical and efficient utilization of space and with written procedures to be followed in leasing that space. Any reference to the words "the Section" within Section Five shall mean the Real Estate Services Section.

5-101 REAL ESTATE SERVICES RESPONSIBILITY

Pursuant to the Arkansas Building Authority Act (Ark. Code Ann. § 22-2-102 et seq.), the Real Estate Services Section of ABA is the leasing agency for all state agencies (agencies, boards, commissions and institutions of higher education).

(A) The Section has the responsibility to act as the leasing agent for all state agencies, and component parts thereof, acting either as Lessor or Lessee, including space in all private sector and public buildings.

(B) The Section shall with input from the agency, evaluate, determine and approve the needs of the Agency. The Section shall locate appropriate rental space, and act as the agent for the Agency in negotiation of the lease for such rental space.

(C) Pursuant to Ark. Code Ann. § 22-2-114 (a) (2), all state agencies shall execute and enter into leases with the Section when so requested for the leasing or renting of space and facilities in any public buildings.

(D) Any Agency or component thereof, making a request for lease space shall submit justification to the Section in written form with the signature of the agency's Director or an authorized designee thoroughly outlining information which includes but is not limited to the Agency division(s) to occupy the space, the date of the request and the date the space is needed, the name and phone number of the agency contact person, the type of space needed, location needs, special location factors, terms desired, budgeted amounts for rents, operational costs, and anticipated moving expenses, alterations or special requirements, and parking requirements. This written request shall be submitted ninety (90) days prior to the date the space is needed and shall contain the following additional information:

(1) List of positions to occupy the space and the functions of each position by state employment grade.

(2) List of special requirements such as telecommunications room, library, hearing room, conference room, etc. and the function of those requirements. List any other pertinent information that would affect the planning of the space needs and the efficient operation of the Agency, including special HVAC requirements, i.e. ventilation for specific areas.

(3) List of storage requirements.

Requests not containing this information shall be returned to the Agency without action. The Section shall locate appropriate space and negotiate a lease between the facility owner and the Agency. If space is available in a public building, the lease will be negotiated for placement in the public building. If space is not available in a public building, then the Section shall obtain adequate space in a privately owned facility. It is unlawful for agencies to enter into any lease negotiations with any building owner or manager without the approval of the Section (See Ark. Code Ann. § 22-2-114(a)(1) . If such negotiations take place, the lease shall not be ratified. If the Agency requests the lease document be ratified, the Agency shall be required to appear before the ABA Council at the next regular meeting to explain their actions and the reasons for ratification.

(E) Standards for the utilization of space and the allocation of space to state agencies have been adopted by the Council and are a part of these standards as found in Section 5-104. These standards shall be used as a basis for all planning, leasing of space, allocation of space, or advising state agencies on leasing considerations. When available, the Design Review Section may provide or assist in space planning services through the Section.

(F) The Council has adopted a standard lease form for leasing of privately owned facilities and a standard form for leasing of ABA owned properties. Copies of these forms are located at the end of this section.

(G) Preferences to leased property within a Central Business District shall be granted pursuant to Ark. Code Ann. § 22-2-114 (a)(5)(A). The Section shall grant preferences in accordance with applicable laws and in the following manner:

GUIDELINES FOR CONSIDERATION OF LEASE PROPERTIES:

(1) Establish a rating system for Evaluation:

5 – Excellent	"As is" condition meets applicable codes and compliance; premises can easily conform to state's need and meets space criteria.
4 – Very Good	Some modifications are necessary for occupancy but are reasonable and achievable; can conform to the state's need and criteria.
3 – Acceptable	Numerous modifications and building system replacement or upgrade are necessary to meet codes and compliance, but achievable. Some compromise may be necessary in space planning to satisfy need.
2 – Fair	Extensive modifications required to meet criteria; space planning for maximum efficiency of space will be compromised; restricting flexibility
1 – Not Acceptable	Modifications required far exceed the feasibility to conform. Structurally inferior and not adaptable to meet the space need and criteria.

(2) Survey Area for Available Properties:

Upon receipt of space request, the Real Estate Section shall conduct a visual survey and consult the Available Space Database maintained by the Section for properties available for Lease. The Section may choose to advertise the space through the local newspaper or ABA website (www.aba.arkansas.gov) or both.

(3) Evaluate Property:

(a) Survey all properties by visual inspection and assess condition of building systems;
(b) Obtain plans or specifications from the property owner if available;
(c) Determine property's ability to conform to space need;
(d) Compile a summary of modifications required to conform to state needs.;

(4) Obtain Proposal:

(a) Provide property owner a summary of observed modifications (additional modifications may be necessary with more extensive inspection);
(b) Provide property owner a description of the space request and provide specifications and floor plan if available;
(c) Obtain a lease proposal inclusive of the initial recommended modifications and lease criteria; and
(d) Confirm terms with property owner/agent.

(5) Rating Properties by Categories:

(a) Divide the available properties into one of two categories:
    (1) Located within the Central Business District (CBD)
    (2) Located outside the CBD (non-CBD)
(b) Rate the properties according to the established rating system in 1.
(c) The following factors should be taken into consideration:
    (1) Cost-effectiveness by the State to meet the space criteria
    (2) Level of compromise by the State to meet the need
    (3) Restrictions or impairments in use or access
(d) Determine the highest rated property for each category (CBD/non-CDB)

(6) *Comparison of Proposals*

The highest rated CBD and non-CBD properties will be compared. If the CBD property meets all criteria and does not restrict or impair the services for which the lease is intended or the rental rates are justified in a non-CBD location, the CBD property will be granted the preference.

Nothing in the above and foregoing section will prevent the State from leasing with a non-CBD property owner in accordance with Ark. Code Ann. § 22-2-114 (a)(5)(A).

(H) The Section may utilize a Request for Proposal (RFP) selection process when locating lease options in response to an Agency's request for lease space in excess of 5,000 square feet and for a

term up to ten (10) years. The Section will advertise through local newspapers and the ABA Website, such leasing needs; and will provide RFP packages to any property owners or managers interested in submitting a proposal in response to the RFP inquiry. This procedure awards based on selected criteria evaluation. Those proposals submitted with the proposed physical address found within the Central Business District (CBD) of the requested city shall earn the maximum weighted value for the "Location" criteria of the evaluation portion of the RFP selection process unless otherwise stated. The lease award shall be given to the proposal which, in the opinion of the Section and the Agency, serves the best interests of the State and is in accordance with applicable laws and regulations. Nothing in this section shall prohibit the Section from negotiating directly with a Lessor without utilizing the RFP process if it determines that it is in the State's best interest to do so.

(I) The Section may also utilize a formal bid procedure for the leasing of new construction(contract is between the private lessor and the prime contractor) when locating lease options in response to an Agency's request for lease space in excess of 10,000 square feet and for a term of fifteen (15) years. The bidding and award of contracts under the public works laws do not apply. The Section will advertise this request for formal bids through local newspapers and the ABA Website and will provide formal bid packages to any interested party. This is a two step process: (1) the site submittal(s) and approval(s); and (2) submission of a bid consisting of a price per square foot. Bidders who obtain an option to purchase of sites they propose in step #1 above, shall obtain ownership of the property pursuant to the time frame established within the bid criteria upon acceptance of their bid. The State reserves the right to reject any or all bids and to waive any formalities. At the public bid opening, the Section shall open and compare the bids and thereafter award the lease to the lowest responsible bidder, but only if it is the opinion of the Section and the Agency that the best interests of the State would be served thereby and in accordance with applicable laws and regulations. Nothing in this section shall prohibit the Section from negotiating directly with a Lessor without utilizing the bid process if it determines that it is in the State's best interest to do so.

(J) If determined by the Section to be in the State's best interest, the Section may enter into a negotiated lease for a lease term which longer than any of the terms stated in (H) or (I) should the Lessor provide the State or any entities, or both, an option(s) to purchase the premises. While the Lessor and the Section may negotiate additional lease terms and conditions within the lease or subsequent amendments, the standard terms/conditions contained within the promulgated lease form at the time of execution shall prevail should any conflict arise between any standard terms or conditions or both and any non-standard term(s) or condition(s) or both.

5-102 DETERMINATION BY ABA OF DESIRABILITY OF AVAILABLE SPACE

(A) Square Footage: A comparison of the square footage required to satisfy Agency needs with the square footage available in a given facility. Space leased shall be no more than 5% less nor 15% greater than stated Agency needs. Square footage required shall be determined according to the § 5-104 of this document.

(B) Analysis of Building Facilities: An analysis of the sustainable and energy-efficiency qualities and condition of building facilities, including mechanical systems, elevators, toilets, parking, public/common areas, building envelope (window wall, windows & doors), location relative to associated agencies, availability of storage and proximity to the other related offices of association.

(C) Operational cost of occupying the space for the term of the lease:

(1) Annual square foot cost of the leased space;

(2) Cost of interior modifications or TI Allowance (tenant improvement) provided by Lessor;

(3) The availability of all utility services and their estimated cost, if not included in the lease through utility history, if available by the Lessor;

(4) Cost of janitorial services if not included in the lease;

(5) Any other factors which would affect the actual cost to the Agency, i.e. parking, additional electrical requirements, custom furniture and fixtures, etc.

(D) Time factors affecting need for space.

(E) Capacity to accommodate future need of the Agency for space and services.

(F) Handicapped Accessibility and Special Accommodations: All buildings leased or rented in whole or in part for use by the state under any lease or rental agreement entered into shall be in accordance with the contractual terms and applicable accessibility guidelines. In all instances in which a Lessee employs an individual or individuals who require an emergency evacuation auxiliary aid to safely exit state-owned property during emergency situations, the Lessee is required to, and is solely responsible for obtaining, maintaining and training in the use of the said auxiliary aid. Any necessary installation of said device shall be coordinated with the approval of the Lessor.

(G) All leases shall be made pursuant to the Governor's Executive Order 98-04. Disclosures shall be made pursuant to the order and all necessary forms shall be completed and sent to the Section.

(1) All Lessors and Lessees shall be required to complete a disclosure certification form regarding their utilization of services of any real estate broker(s) for any and all lease negotiations.

5-103 ABA POLICY FOR LEASING

(A) Pursuant to Ark. Code Ann. §22-2-114 (a)(1), no Agency, board, or commission may renew or negotiate a lease, the Section is the responsible leasing agent for all state agencies.

(B) Requests for lease action (whether lease renewals or request for new or additional space) shall be submitted to the Section at least ninety (90) days prior to the effective date of the space request or change is needed. The Request shall be submitted to the Section and shall include the information indicated in paragraph 5-101(D) of this document. This information should be as complete and accurate as possible since it will be used to determine space allocation to the Agency.

(C) All leases for real property, including but ~~is~~ not limited to offices, parking, storage, warehouses, land, antenna and towers must be approved by the Section and require a Lease Number assigned by the Section. The approved lease number must be used by all agencies.

The only exception shall be for short term use of facilities. Memorandums of Understanding or other type of agreements should be utilized. Examples of these types of agreements that are exempt from the Section approval are:

(1) Classrooms (from 1-9 months)
(2) Per Seat Fees
(3) Per Semesters
(4) School Years (9 months)
(5) Short Term Specialty Classes
(6) Golf, Bowling, Gyms, Spa's for classes
(7) Conference/Meeting Rooms (from 1-10 days)
(8) Workshop/Seminars
(9) Fair Booths
(10) Testings
(11) Graduations
(12) Ball Fields (including seasonal rentals)
(13) Short-term Storage (less than 1 year)
(14) Modular Units (less than 1 year)

(a) Memorandum of Understanding Exemption: Lease of modular units (portable buildings) for a period of 1 year or more shall be submitted to the Section in the same manner as traditional office space and shall require ABA approval. ABA recommends the lease of modular units should be planned on a temporary basis and not be utilized as a long term or permanent use of space. Examples of temporary use are as follows: utilization for disaster relief, while a facility is undergoing a capital improvement, temporary classroom space due to over-enrollment or temporary use for a site specific special program.

(D) Lease space will be provided to or negotiated for agencies on the basis of the Agency's submittal of the completed request for lease space with an authorizing signature and the Agency's justification for the existing need.

(E) Space in public buildings shall be negotiated pursuant to Ark. Code Ann. § 22-2-114. The number of moves will be kept to a minimum and efforts will be made that functional area remain as contiguous space.

(F) All leases may be terminated on thirty (30) days written notice to the Lessor if State or Federal appropriations of funds are insufficient for the Agency to continue the operations for which the leased premises are being used.

(G) When negotiating rental rates, the State will not exceed the rental rate prevailing in the community for comparable facilities. Annual square foot price limits will be based on current market conditions in a locality, and rental rates will vary from city to city in the state. State policy for rental rates will reflect the state's position as a prime tenant. New Leases shall be supported by documentation which will reflect the lease rates available for comparable facilities in the market at the time the new lease was negotiated.

(H) It is preferable for the private sector Lessor to furnish all utilities except telephone/data and to furnish janitorial service. Private sector Lessors shall be required to provide maintenance of the building and building systems in all circumstances. However, in those instances involving consideration in the nature of a public advantage, in which the lease is negotiated in favor of the State in such instances as a significant reduction in rent or an exchange-in-services arrangement, or both, the requirement that the private sector Lessor provide all maintenance for the building and building systems, or casualty insurance may be exempted if it is determined to be in the best interests of the State.

(I) All State Agencies must receive invoices submitted by the Lessor to process rental vouchers. While rent may be paid monthly or quarterly, prior ABA approval is required for annual payment(s) and shall be reflected in the lease.

(J) Rentable area shall be computed by the standard method of floor measurement as adopted by the Building Owners and Managers Association International (BOMA). ANSI/BOMA Z65.1-2010, as amended.

(K) Rental overlap, between the beginning date of a new lease for different premises and the last date of occupancy for existing premises, shall be held to a minimum and shall only occur when moving arrangements require an overlap.

(L) The Section will serve as contact between the Agency and Lessor or as the contact between the Agency and the tenant when the Agency is the Lessor in all matters pertaining to the lease prior to lease execution. Agencies shall be permitted to contact the Lessor for day-to-day issues, including but is not limited to invoices/payments, routine maintenance and repairs, and annual inspections. Agencies shall report any and all non-routine maintenance and repair issues to the Section. The Section shall act as the liaison between the two parties should lease interpretation and terms enforcement become necessary.

(M) Whenever possible, the Section shall lease space requiring only renovations necessary to accommodate the requesting Agency. Renovations shall always be held to the absolute minimum necessary to allow the Agency to function in the leased space. When renovation is necessary, the cost of such renovation shall be borne by the Lessor except when such renovation is to accommodate specific agency functions, which would be of no use or value to future tenants. It is the policy of the State to encourage the Lessor to provide any special alterations and improvements required to make the space suitable for the requesting agency, and to recapture this expenditure over the term of the lease as part of the rent. Lump sum payment by the State for improvements shall require prior approval of ABA. After the initial lease is in place and during the lease term, if the Agency requests tenant improvements, these guidelines must be adhered to:

(1) Request for Lease Action form containing information in 5-101(D);

(2) For work estimated under $5,000.00, the requirements in (1) must be approved by the Section;

(3) For work whereby the agency contracts (outside of the Lease Agreement and payment is not made through rent) for the work directly with a Contractor and is estimated over $5,000.00 but less than $20,000.00, the requirements in (1) must be approved by the Section and the Agency must submit it to the Section along with: a bid tabulation of three (3) competitive bids in which all taxes, permit fees are inclusive in the bids; bid specifications and drawings; any disclosure forms required under Executive Order 98-04; any required bonds and the purchase order. Any required notice of legal advertising must be made in accordance with Arkansas laws and rules; and

(4) All work whereby the agency directly contracts (outside of the Lease Agreement and payment is not made through rent) for the work with a prime contractor and is estimated over $20,000.00 must be formally bid in accordance with Arkansas laws and regulations including but not limited to the public works laws. The requirements found in (3) above apply and must be submitted to the ABA Construction Section.

(1) Through (4) only can occur after the lease has been amended to allow the State to make these alterations if the current lease does not authorize these type improvements. All of #1, #2, and #3 and #4 would apply when the State pays a lump sum for the work to a contractor, not to the Lessor. The State can contract directly with the Lessor only when the Lessor held that right in the State approved lease or in an amendment. In these circumstances, the Agency would use sole source purchasing procedures. This method is the least desirable. However, situations may occur where there is no other alternative.

(5) If the Lessor cannot or will not provide for design professional services, the selection of such professionals shall be the responsibility of the Agency. (See the selection process in Section Six). Plans and specifications shall be made pursuant to Ark. Code Ann. § 22-9-201, which requires observation by registered design professionals for certain levels of expenditures.

(N) Modular office space leased and occupied by state agencies for one (1) year or more are considered leased space. Requests for this type of temporary space should be processed in the same manner as requests for new or additional space. (See §5-103(C)(14)(A))

(O) Pass-through escalation clauses in which the State agrees to pay all increases in property taxes, services, and/or utilities shall not be negotiated, nor approved. Escalations shall be pre-determined and negotiated with the original lease agreement.

(P) Information concerning leases shall be released pursuant to the Arkansas Freedom of Information Act.

(Q) When space has been located which meets the requested criteria, the Section shall negotiate and prepare for signature the standard State lease agreement. The agreement shall be signed by Lessor, Lessee, and approved by ABA. No lease document is valid unless signed by the proper ABA authorities. The Section shall ensure distribution of lease copies to the Lessor and Lessee.

(R) Agencies may enter into leases for residential dwellings or apartment-type facilities for use as living quarters, no lease, except for use as living quarters, shall be entered into which the premises is located in residential dwellings or in apartment type dwellings. (Example: A room in a residence cannot be leased as office space.)

(S) All leased premises for agencies not located within a state-owned building must be identified with a separate address for each defined premises. Leased premises shall not be shared with any private entity or use, other than for official state or public purposes. The leased premises shall have a separate entrance from any other place of business unless the premises is supported by funding, such as grant programs, stipulated by an agreement with other entities which includes but is not limited to agencies and political subdivisions. All non-state Lessors or Sublessors shall state within the Lease Agreement their ownership or subletting rights of the leased premises.

(T) While lease agreements may reflect that office furnishings or equipment is being utilized or shared, the lease for such commodities may only be made with approval from the Department of Finance and Administration. Such reflections in the lease agreement for the premises must be identified through an itemized inventory and attached as a lease exhibit. Lease agreements, which combine the use of the premises and commodities, are discouraged and should only be done if it is in the best interest of the State. The use of separate lease agreements for such commodities is encouraged.

(U) Agencies entering into Memorandum of Understandings for the purpose of planning temporary space in the event of disasters shall submit the executed agreement to the Section even though ABA is not a party to the agreement. Agencies shall provide immediate notification to ABA upon activation of the agreement due for disaster relief.

5-104 ABA SPACE ALLOCATION STANDARDS FOR LEASE SPACE

(A) Private Offices	Area
(1) Commissioner or Department Director	240
(2) Deputy Commissioner or Deputy Director	200
(3) Departmental Division Director or Administrator	180
(4) Chief Departmental Fiscal or Personnel Officer	160
(5) Section Head	140
(6) Professional or Technical	120
(7) Line Staff positions requiring private office due to job function	100

(B) Reception and Public Areas	Area
(1) Receptionist + 4 Visitors	120
(2) Receptionist + 6 Visitors	160
(3) Receptionist + 8 Visitors	220
(4) Receptionist + 10 Visitors	240
(5) Public counter per work station	75

(C) Open Area Work Stations	Area
(1) Clerical	48
(2) Clerical with reference	60
(3) Clerical with side chair	64
(4) Clerical with reference and side chair	80

(D) Conference, Meeting and Hearing Rooms *Based on 20 s.f. per person*	Area
(1) Consultation or Interview (2 – 4 people)	80
(2) 14 to 16 people	300
(3) 18 to 20 people	375

(4) 22 to 24 people		450
(5) 36 to 38 people		600

(E) Auxiliary Space		Area
(1) File Room	(per file cabinet)	10
(2) Copier Room	(per copier)	175
(3) Information Technology Room	(minimum)	32
(4) Employee Break room (based on serving at the same time)		
Up to 5 people		120
6 to 10 people		180
11 to 15 people		220

(F) Service Areas		Area
(1) Janitorial Closet		24
(2) Electrical Closet	(minimum clearance as required by building codes) (3' clearance in front of equipment & 12' above)	
(3) Telecommunications Closet	(minimum)	32
(4) ADA Unisex Restroom	(minimum dimensions)	7'6" x 6'
(5) Mechanical space		See below

(G) Circulation

Corridor and circulation space, toilet rooms, stairs, elevators and separate mechanical space should not exceed 25% of the total building area. Ratio of net leasable area to gross building area should result in a building efficiency of 75% - 85%.

Arkansas Building Authority
STATE OF ARKANSAS
COUNTY OF PULASKI
Standard Lease Form 1
Approved by Attorney General
<Month/Date/Year of Effective Date>

Lease Term:
Annual Rent: $
Square Feet:
Rate:$
Type: New -:
Worked By:
Agency: County:
Lease #:

STATE OF ARKANSAS LEASE AGREEMENT

This Lease is made this day of _____, 20___, by which Lessor leases the PREMISES to Lessee through ABA, Lessee's Leasing Agent.

For the purposes of this Lease Agreement the following definitions apply:

"LESSOR" means: <LESSOR'S NAME>, <individual, partnership or corporation>

"LESSEE" means: <STATE AGENCY AND PERMANENT ADDRESS>, an agency of the State of Arkansas.

"ABA" means the Real Estate Services Section of Arkansas Building Authority. By law ABA is the leasing agency for LESSEE. Arkansas Code Annotated §22-2-114. ABA is not an additional LESSEE and therefore shall not owe any rent.

"PREMISES" means the property which is the subject of this Lease which is further described in paragraph #1.

1. DESCRIPTION OF PREMISES:

Approximately 0,000 square feet of <type of space> located at <street address>; all situated in the City of <city name>, County of <county name>, Arkansas.

2. TERM:

The initial term will begin on _____ and end on _____ . The LESSEE may elect to extend the term not more than ninety (90) days upon the same terms by written notice to LESSOR, not less than thirty (30) days before the end of the initial term.

3. RENT:

The LESSEE agrees to pay $_____ per calendar month on or before the tenth (10) day of each such period, upon invoice from the LESSOR. If the Term commences on a day other than the first day of a calendar month, then the installment of the Rent for such month shall be prorated upon a daily basis at the rate of $_____per day.

4. UTILITIES AND SERVICES:

The LESSOR will furnish the following utilities and services:

___ - Electricity

___ - Gas

___ - Water and Sewer

___ - Lamps, tubes, ballast and replacements

____ - Elevator Service

____- Trash Removal

____ - Janitorial Services and Supplies

5. MAINTENANCE, REPAIR AND REPLACEMENT:

The LESSOR shall maintain the leased PREMISES, including the building and all equipment, fixtures, and appurtenances furnished by the LESSOR under this Lease, in good repair and tenantable condition, except in case of damages arising from the acts of the LESSEE'S agents or employees. For the purpose of so maintaining said PREMISES and property, the LESSOR may at reasonable times, and with the approval of the authorized LESSEE representative in charge, enter and inspect the same and make any necessary repairs hereto. The LESSOR shall be responsible for maintaining all structural supports and exterior walls of the building, including windows, doors, and passageways from the lobby, street and parking areas leading to the leased property, and the adjacent sidewalks and entrance lobby, in good order and repair, and free of snow, ice, rubbish and other obstructions. LESSOR shall provide lawn and plant maintenance and shall provide monthly pest control service. LESSOR shall maintain in good working order and repair all plumbing, toilet facilities and other fixtures and equipment installed for the general supply of hot and cold water, heat, air-conditioning (including monthly maintenance and filters).

6. FAILURE TO PERFORM:

The covenant to pay rent and the covenant to provide any service, utility, maintenance, or repair required under this Lease are dependent. If the LESSOR shall breach any of the conditions required to be performed by it under this Lease, LESSEE may cure such breach and deduct the cost thereof from rent subsequently becoming due hereunder. If LESSOR fails to correct a deficiency within thirty (30) days after written notice from ABA and LESSEE, or within an appropriate shorter period stated in the notice, in the event of a deficiency constituting a hazard to the health and safety of the LESSEE'S employees, property, or any other person, ABA and LESSEE may elect to terminate this Lease.

Nothing shall prohibit the LESSEE from extending the time periods stated above if LESSEE determines that it is in its best interest to do so and LESSEE determines that the LESSOR is diligently seeking to cure such failure or breach and the deficiency can be corrected within the extended time period in a manner that will ensure throughout the time period as well as upon completion, the safety of the LESSEE’S employees, property and other persons.

7. DAMAGE BY FIRE OR OTHER CASUALTY:

LESSOR shall bear the risk of loss by fire or other casualty and shall maintain fire and extended coverage insurance to the full replacement value of the PREMISES. If the PREMISES are destroyed by fire or other casualty, this Lease will immediately terminate. In case of partial destruction or damage, so as to render the PREMISES unsuitable for the purposes for which they are leased, as determined by LESSEE and ABA, the LESSEE, may terminate the Lease by giving written notice to the LESSOR through ABA, within fifteen (15) calendar days thereafter; if so terminated, no rent will accrue to the LESSOR after such partial destruction or damage; and if not so terminated, the rent will be reduced proportionately by supplemental agreement hereto effective from the date of such partial destruction or damage.

Nothing shall prohibit the LESSEE from extending the time periods stated above if LESSEE determines that it is in its best interest to do so and determines in addition that the LESSOR is diligently seeking to cure the partial destruction or damage and the partial destruction or damage can be corrected within the extended time period in a manner that will ensure throughout the time period as well as upon completion, the safety of the LESSEE'S employees, property and other persons.

8. ALTERATIONS:

The LESSEE may attach fixtures and install signs in or to the PREMISES with LESSOR'S approval, which shall not be unreasonably withheld. Such fixtures and signs shall remain the property of LESSEE and may be removed from the PREMISES within a reasonable time after the termination of this Lease provided the LESSEE shall restore the PREMISES to a condition as good as at the beginning of this Lease, ordinary wear and tear excepted.

ABA, acting as agent for LESSEE, may during the course of this Lease negotiate with LESSOR for other improvements to be made in the PREMISES. No additional cost or fee for services or work will be charged by LESSOR without the prior written authorization of ABA.

9. TERMINATION:

In addition to other remedies provided herein, the LESSEE may terminate this Lease by thirty (30) days written notice to LESSOR by ABA if the LESSEE'S funds are insufficient for it to continue the operations for which the PREMISES are being used.

10. SPECIAL PROVISIONS:

The parties agree that the terms and conditions of this Lease shall be read together and harmonized whenever possible; however in the event of a conflict between Section 10 or Section 11 and any other provisions elsewhere in this Lease Agreement, the provisions contained in Sections 1-10 (Special Provisions (a) through (e) and Section 11 (Miscellaneous (a) through (e) shall prevail.

(a) LESSOR shall be responsible that this facility conforms to the Arkansas Fire Prevention Code, as amended, Arkansas State Plumbing Code, The National Electrical Code, and any other state and local laws, codes, authorities, etc., applicable to the leased facility including the Arkansas adopted Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG).

(b) Failure to make any disclosure required by Governor's Executive Order 98-04, or any violation of any rule, regulation, or policy adopted pursuant to that Order, shall be a

material breach of terms of this contract. Any LESSOR, whether an individual or entity, who fails to make the required disclosure or who violates any rule, regulation, or policy shall be subject to all legal remedies available to the LESSEE.

(1) The LESSOR shall prior to assigning this Lease with any person or entity, for which the total consideration is greater than $25,000, requires the assignee to complete a Contract and Grant Disclosure and Certification Form. The LESSOR shall ensure that any contract agreement, current or future between the LESSOR and an assignee for which the total consideration is greater than $25,000 shall contain the following:

Failure to make any disclosure required by Governor Executive Order 98-04, or any violation of any rule, regulation or adopted pursuant to that Order, shall be a material breach of the term of this Sublease. The party who fails to make the required disclosure or who violates the rule, regulation, or policy shall be subject to all legal remedies available to the LESSEE.

(2) The LESSOR shall transmit to the agency a copy of the Contract and Grant Disclosure and Certification Form completed and signed by the assignee and a statement containing the dollar amount of the Sublease. The LESSOR shall transmit to ABA a copy of the disclosure form within ten (10) days of entering into any agreement with assignee.

(3) The terms and conditions regarding the failure to disclose and conditions which constitutes material breach of contract and rights of termination and remedies under the Executive Order 98-04 are hereby incorporated within.

(c) The LESSOR hereby acknowledges that <insert real estate broker firm or individual> <is/was> the LESSOR'S sole agent(s) for these lease negotiations and states that the named broker(s) <is/are> licensed by the State of Arkansas for such transactions.

(d) The State shall not be responsible for the payment of any taxes or assessments for the PREMISES.

(e) Lessor asserts that <he/she/it> <is/is not> the true owner of the PREMISES and the LESSOR'S rights to the PREMISES <are/are not> pursuant to a lease or sublease.

(f) ADD ADDITIONAL SPECIALIZED PROVISIONS HERE

11. MISCELLANEOUS:

(a) The Lease and any modifications or amendments to it will not be valid without the written approval of ABA.

(b) This Lease shall benefit and bind the parties hereto and their heirs, personal representatives, successors and assigns.

(c) The LESSEE may terminate this Lease by written notice from ABA to LESSOR upon the taking by eminent domain of any part of the PREMISES. This provision does not prevent the LESSEE from claiming or recovering from the condemning authority the value of LESSEE'S leasehold interests.

(d) Nothing in this Lease shall be construed to waive the sovereign immunity of the STATE OF ARKANSAS or any entities thereof.

(e) This Lease contains the entire agreement of the parties.

Executed by the parties who individually represent that each has the authority to enter into this Lease.

LESSOR	LESSEE
By:_____	By:_____
Date:_____	Date:_____
ARKANSAS BUILDING AUTHORITY As Agent for	
By:_____ <Name>, Administrator of Real Estate Services	By:_____ <Name>, Director
Date:_____	Date:_____

Arkansas Building Authority
STATE OF ARKANSAS
COUNTY OF PULASKI
Standard Lease Form 2
Approved by Attorney General
Month/Date/Year of Effective Date

Lease Term:
Annual Rent: $
Square Feet:
Rate: $
Type: New
Worked By:
County: Agency:
Lease #:

STATE OF ARKANSAS LEASE AGREEMENT BETWEEN STATE AGENCIES

This Lease is made this day of _____, <year>, by which Lessor leases the PREMISES to Lessee.

For the purposes of this Lease Agreement the following definitions apply:

"LESSOR" means: ARKANSAS BUILDING AUTHORITY, <permanent address >, an agency of the State of Arkansas.

"LESSEE" means: <STATE AGENCY AND PERMANENT ADDRESS>, an agency of the State of Arkansas.

1. DESCRIPTION OF PREMISES:

Approximately _____ square feet of office space located in the _____ Building at _____; all situated in the City of <city name>, County of <county name>, Arkansas, further described as follows:

2. TERM:

The term of this Lease will begin on <date> and end on <date>, unless the term shall be sooner terminated as hereinafter provided.

3. RENT:

The LESSEE agrees to pay to LESSOR the sum of $_____ per calendar annum, payable in monthly installments of $_____, apportionable on a daily basis at $_____ Such amount to be paid to LESSOR at: <address>, Little Rock, AR 72201.

This Lease will commence on the date which the LESSEE shall have commenced business operations upon the leased PREMISES. In the event that the term of the Lease shall commence on a day other than the first day of the calendar month, the LESSEE shall pay, upon the commencement date of the term, a portion of the fixed annual rental described in the foregoing provision, prorated on a daily basis.

4. UTILITIES AND SERVICES:

It is understood that the rental paid by the LESSEE is for the purposes of reimbursing the LESSOR for providing maintenance and repair of all mechanical and structural systems, janitorial service,

utilities, pest control, security, trash removal, grounds, including applicable parking areas, maintenance, insurance, and all other expenses normally associated with the maintenance and operation of the lease PREMISES. LESSOR may seek additional reimbursements from LESSEE for “after-hour call outs” of ABA Building Operations Personnel due to acts or omissions by LESSEE’S employees, representatives or invitees.

5. ALTERATIONS:

The LESSEE may attach fixtures and install signs in or to the PREMISES with LESSOR'S approval, which shall not be unreasonably withheld. Such fixtures and signs shall remain the property of LESSEE and may be removed from the PREMISES within a reasonable time after the termination of this Lease provided the LESSEE shall restore the PREMISES to a condition as good as at the beginning of this Lease, ordinary wear and tear excepted. Any subsequent requested space alterations, attaching fixtures, and erecting additions after the initial construction has been completed and accepted by the LESSEE shall be the responsibility of the LESSEE. No services or work will be performed for which an additional cost or fee will be charged by LESSOR without the prior written authorization of the LESSEE.

6. ADDITIONAL PROVISIONS:

LESSOR and LESSEE mutually agree that the following additional provisions are hereby added to become a part of this Lease Agreement:

(a) LESSOR shall bear the risk of loss by fire or other casualty and shall maintain fire and extended coverage insurance to the full replacement value of the PREMISES. If the PREMISES are destroyed by fire or other casualty, this Lease will immediately terminate. In case of partial destruction or damage, so as to render the PREMISES unsuitable for the purposes for which they are leased, as determined by LESSOR, the LESSOR, may terminate the Lease by giving written notice to the LESSEE, within fifteen (15) calendar days thereafter; if so terminated, no rent will accrue to the LESSOR after such partial destruction or damage; and if not so terminated, the rent will be reduced proportionately by supplemental agreement hereto effective from the date of such partial destruction or damage.

(b) LESSEE agrees to accept the lease PREMISES in "as is" condition. All modifications will be at the expense of the LESSEE.
<OR if alterations are made that are specific to the Lessee’s operations conditional language can be added to state:
(1) Alterations shall remain the property of the LESSEE.
(2) Alterations shall be removed by LESSEE within thirty (30) days upon Lease termination or expiration, unless alterations are accepted in writing by ABA.
(3) LESSEE shall restore the PREMISES in a condition as good as at the beginning of the Lease term; ordinary wear and tear excepted.

(c) This Lease shall benefit and bind the parties hereto and their heirs, personal representatives, successors and assigns.

(d) Nothing in this Lease shall be construed to waive the sovereign immunity of the STATE OF ARKANSAS or any entities thereof.

(e) In all instances in which a LESSEE employs an individual or individuals who require an emergency evacuation auxiliary aid to safely exit the PREMISES during an emergency situation, the LESSEE is required to, and is solely responsible for obtaining, maintaining, and training in the use of said auxiliary aid. Any necessary installation of said device shall be coordinated and approved by the LESSOR. This requirement shall apply in all instances regardless of whether the individual(s) with disabilities are employed at the time of the execution of this Lease, are hired and employed after execution of this Lease, or a current employee regardless of hire date becomes disabled so as to require an emergency evacuation auxiliary aid.

(f) LESSEE shall not sublease nor assign this Lease without the written approval of the LESSOR.

(g) This Lease contains the entire agreement of the parties.

7. BUILDING RULES:

The LESSEE agrees to cooperate with LESSOR in enforcing the Building Rules attached hereto and incorporated herein by reference as Exhibit "A". In the case that LESSEE is notified by LESSOR of Building Rule infractions committed by LESSEE'S employees or invitees, LESSEE agrees to take prompt and appropriate action to correct such violations.

8. RELOCATION

Nothing in this Lease shall be construed to prohibit or lessen LESSOR'S authority to relocate LESSEE, therefore when requested by LESSOR, LESSEE agrees to execute and enter into a lease or an amended lease with LESSOR or other public entity for the leasing of space in any public buildings as deemed by the LESSOR to be in the best interests of the State.

Executed by the parties who individually represent that each has the authority to enter into this Lease:

LESSOR: LESSEE:

ARKANSAS BUILDING AUTHORITY

By:_____ By:_____

<Name>, Title, Real Estate
Services Section

Date:_____ Date:_____

By:_____

<Name>, Director

Date:_____

SECTION SIX REAL PROPERTY TRANSFERS

6-100 REAL PROPERTY OFFER AND ACCEPTANCE (PURCHASE)

(A) All Agency real estate transactions, unless exempted, involving transfers of property ownership are governed by Ark. Code Ann. §22-6-601. Agencies should review this code provision. Agencies have several duties under this law in regards to requests and notifications prior the purchase or sale of properties. Transfers of ownership include, purchases, sales, donations, transfers of like property, and transfers between state entities. Any and all questions pertaining to real estate transfers should be directed to the Real Estate Services Section Administrator. Agencies may contact the Real Estate Services Administrator for a copy of quick reference guides for the purchase or sale of property.

(B) Agencies shall obtain an appraisal of the property for all real estate transactions. Appraisers shall be properly licensed in accordance with Arkansas laws and regulations. Once the services are obtained, Agencies shall give notice to the ABA Director.

(C) All offers and acceptances should state that it shall be conditional upon approval by the Governor. All offers and acceptances and applicable documents shall be delivered to the Real Estate Services Section. The section shall make a recommendation to the Director. Agencies may request advice and counsel of the Attorney General's office for the purchase of property. The Real Estate Services Section may assist agencies in making the conditional offer and acceptance and in obtaining the necessary review and/or approvals. Once the applicable documents are received by ABA, the ABA Director will transmit his recommendation to the Governor. Once a determination is made by the Governor and transmitted to the ABA Director, the ABA Director shall forward it to the Agency.

(D) It is preferable that all offers and acceptances be reviewed by the Real Estate Services Section Administrator prior to the Agency's execution of the document. A copy of the appraisal shall accompany the offer and acceptance at this stage of the review. ABA shall notify the Agency of its review of the offer and acceptance as well as notify the Agency of the property's flood plain status. All offers and acceptance shall contain the appropriate language pursuant to EO98-04.

(E) The Real Estate Services Section is responsible for reviews and approvals of lease-purchases of property in accordance with Ark. Code Ann. §22-2-114 and any other law or regulation.

(F) Guidelines regarding the sale and purchase of properties are available by contacting the Real Estate Services Administrator.

(G) Prior to any offer of purchase or receipt of any property regardless as to the form of transfer, agencies shall request to a review of the floodplain status of the property pursuant to §6-500 et seq.

6-101 CLOSING OF REAL PROPERTY (PURCHASE/SALE)

(A) Purchase: Buyer and seller shall be responsible for their respective closing costs. As soon as practical after closing the deed shall be filed by the Agency receiving the real property in the proper county clerk's office. Agencies are encouraged to review Ark. Code Ann. § 26-60-601 regarding exemptions from revenue stamps; Ark. Code Ann. § 22-5-411 regarding the filing of deed with the State Land Commissioner; and Ark Code Ann. §25-16-706 regarding Seller's responsibility regarding purchase of a title commitment.

(B) Sale: The Real Estate Services Administrator may assist state agencies in coordinating the closing of property. Buyer and seller are responsible for their respective closing costs. Closing is expected to be within 30 days of the bid opening or acceptance date.

6-102 EXEMPTION FROM REAL PROPERTY TAXES

The Agency, if purchasing property that has been previously taxed, should request an exemption from the county tax assessor for real property taxes as soon as possible after closing and recording of the deed if such a request is necessary.

6-103 SALE OF REAL PROPERTY

All sales of real property owned by agencies shall be made pursuant to Ark. Code Ann. §22-6-601. This code provision should be reviewed for questions concerning governor's approval, appraisals, appraiser's oaths, advertising, bid bonds, bid openings and award of contract through a bid process, the circumstances in which negotiations for the sale of state land is allowed, as well as remaining fund balances from the receipt of monies. Agencies should consult Ark. Code Ann. § 22-6-113 concerning the state's retention of mineral interests in any sale of state real property.

6-104 PROTEST

Any bidder or prospective bidder who is aggrieved in connection with the specifications, solicitation for or award of a sale of land pursuant to Ark. Code Ann. §22-6-601(g)(h), has the right to protest to the Real Estate Services Administrator. The protest shall be submitted in writing within five (5) work days after the bid opening and identify the project by bid number or with sufficient detail to identify the project, and shall with specificity set for the allegations of the acts or omissions related to the protest. ABA shall endeavor to resolve protests promptly.

6-105 ABA REAL PROPERTY DATABASE

(A) All agencies including the Arkansas Department of Transportation and Highways, the Arkansas Game and Fish Commission shall provide to ABA a list of Agency owned real properties by December 31, 2001. Information shall:

(1) Include, but is not limited to the legal description of the property, the physical address of the property, if available; the existing use of the property or future use if no current use exists; amount of acreage; square footage of structures located on the property and the types of structures on the property, including but not limited to office building, residence, tower and recreational facilities.

(B) Right of Ways and Easements shall be exempted from the listed information.

(C) Provide the information to the Real Estate Services Section through a Microsoft Access 97 (or higher) or Microsoft Excel 97 (or higher) spreadsheet. Agencies should consult with the Real Estate Services Administrator for the specified fields. Agencies who cannot provide the information in this format shall seek prior approval of the Real Estate Services Administrator Section for another format.

(D) Agencies shall update this information by notifying the Real Estate Services Section upon any transfer of real property. Written notification to ABA shall be within 10 working days of the transfer.