WEST VIRGINIA SECRETARY OF STATE

MAC WARNER

ADMINISTRATIVE LAW DIVISION

eFILED

2/21/2019 11:48:06 AM

Office of West Virginia
Secretary Of State

NOTICE OF AGENCY APPROVAL OF A PROPOSED RULE AND FILING WITH THE LEGISLATIVE RULE-MAKING REVIEW COMMITTEE

AGENCY: School Building Authority Of WV

TITLE-SERIES: 164-06

RULE TYPE: Legislative

Amendment to Existing Rule: No

Repeal of existing rule: Yes

RULE NAME: 164-06 School Building Authority Reporting Procedures

PRIMARY CONTACT

NAME: Tamela Brewer

ADDRESS: 2300 Kanawha Boulevard East

Charleston, WV 25311

EMAIL: tamela.a.brewer@wv.gov

PHONE NUMBER: 304-558-2541

CITE STATUTORY AUTHORITY: 18-9D-20

EXPLANATION OF THE STATUTORY AUTHORITY FOR THE LEGISLATIVE RULE, INCLUDING A DETAILED SUMMARY OF THE EFFECT OF EACH PROVISION OF THE LEGISLATIVE RULE WITH CITATION TO THE SPECIFIC STATUTORY PROVISION WHICH EMPOWERS THE AGENCY TO ENACT SUCH RULE PROVISION:

§18-9D-20 Authority to Promulgate rules; legislative authorization; effective date of rules; technical deficiencies waived.
(a) The authority is hereby empowered to promulgate, adopt, amend or repeal rules in accordance with the provisions of article three-a[§§ 29A-3A--1 et seq.]. chapter twenty-nine-a of this code.

§18-9D-21. Authorizing rules of School Building Authority
§18-9D-21(f) The legislative rule filed in the State Register on the twenty-seventh day of September two thousand seven and amended by the School Building Authority and refiled on the tenth day of December two thousand seven, relating to the School Building Authority (School Building Authority reporting procedural rule) is authorized.

The intent of the proposed changes to the Legislative Rules is to reflect industry standards, changes to WVBE Policy 6200 and directives for localized decision-making.

DATE eFiled FOR NOTICE OF HEARING OR PUBLIC COMMENT PERIOD: 6/26/2018

DATE OF PUBLIC HEARING(S) OR PUBLIC COMMENT PERIOD ENDED: 7/26/2018

COMMENTS RECEIVED: No

(IF YES, PLEASE UPLOAD IN THE COMMENTS RECEIVED FIELD COMMENTS RECEIVED AND RESPONSES TO COMMENTS)

PUBLIC HEARING: No

(IF YES, PLEASE UPLOAD IN THE PUBLIC HEARING FIELD PERSONS WHO APPEARED AT THE HEARING(S) AND TRANSCRIPTS)

RELEVANT FEDERAL STATUTES OR REGULATIONS: No

WHAT OTHER NOTICE, INCLUDING ADVERTISING, DID YOU GIVE OF THE HEARING?

SUMMARY OF THE CONTENT OF THE LEGISLATIVE RULE, AND A DETAILED DESCRIPTION OF THE RULE'S PURPOSE AND ALL PROPOSED CHANGES TO THE RULE:

The intent of the proposed changes to the Legislative Rules is to reflect industry standards, changes to WVBE Policy 6200 and directives for localized decision-making.

STATEMENT OF CIRCUMSTANCES WHICH REQUIRE THE RULE:

School Building Authority Reporting Procedures

SUMMARIZE IN A CLEAR AND CONCISE MANNER THE OVERALL ECONOMIC IMPACT OF THE PROPOSED LEGISLATIVE RULE:

A. ECONOMIC IMPACT ON REVENUES OF STATE GOVERNMENT:

NA

B. ECONOMIC IMPACT OF THE LEGISLATIVE RULE ON THE STATE OR ITS RESIDENTS:

NA

C. FISCAL NOTE DETAIL:

Effect of Proposal	Fiscal Year		
	2019 Increase/Decrease (use "-")	2020 Increase/Decrease (use "-")	Fiscal Year (Upon Full Implementation)
1. Estimated Total Cost	0.00	0.00	0.00
Personal Services	0.00	0.00	0.00
Current Expenses	0.00	0.00	0.00
Repairs and Alterations	0.00	0.00	0.00
Assets	0.00	0.00	0.00
Other	0.00	0.00	0.00
2. Estimated Total Revenues	0.00	0.00	0.00

D. EXPLANATION OF ABOVE ESTIMATES (INCLUDING LONG-RANGE EFFECT):

NA

BY CHOOSING 'YES', I ATTEST THAT THE PREVIOUS STATEMENT IS TRUE AND CORRECT.

Yes

Benjamin Ashley -- By my signature, I certify that I am the person authorized to file legislative rules, in accordance with West Virginia Code §29A-3-11 and §39A-3-2.

~~TITLE 164~~
~~LEGISLATIVE RULE~~
~~SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA~~

~~SERIES 6~~
~~SCHOOL BUILDING AUTHORITY REPORTING PROCEDURES~~

~~§164-6-1. General.~~

~~1.1. Scope. -- This legislative rule establishes the guidelines and procedures related to requirements for School Building Authority reporting procedures.~~

~~1.2. Authority. -- W. Va. Code §18-9D-20.~~

~~1.3. Filing Date. -- April 2, 2008.~~

~~1.4. Effective Date. -- April 2, 2008.~~

~~§164-6-2. Incorporation by Reference.~~

~~2.1. A copy of Appendix H and I from the School Building Authority Policies and Procedures Manual is attached and incorporated by reference into this policy. Copies may be obtained in the Office of the Secretary of State and in the office of the School Building Authority of WV.~~

~~§164-6-3. School Building Authority Reporting Procedures.~~

~~3.1. Financial, Planning and Construction Reports.~~

~~3.1.A. SBA Exhibit A-1 - Project Description and Finance Plan.~~

~~This form, included in the Grant Agreement, is used to identify the specific project location, the scope of the work to be done, an estimate of the cost of the work and the amount of the grant approved by the SBA. (Appendix H)~~

~~3.1.B. SBA 113 - Construction Observation Report.~~

~~This report is to be completed weekly by the clerk-of-the-works or the county administrator responsible for the SBA building program. It is designed to report the progress of construction and to report to the county board of education highlights or concerns regarding the construction's progress. These reports are to be attached to the project's daily logs for the corresponding week and be made available to the SBA's project representative during site visits.~~

~~3.1.C. WVDE P-1 - Application for Project Approval (Rev. 2/28/92).~~

~~This report is to be submitted twice by the county, initially with the schematic documents when they are submitted to the SBE and the SBA for review. Preliminary review documents required with the P-1 form are: (1) educational specification and educational program; (2) schematic documents; (3) outline specifications, and (4) first estimate of probable construction costs. A final P-1 is to be submitted to both agencies at the completion of the project with a BP-13-A or when appropriate, SBA 139 completion report prior to requisition for final payment. When a project does not require a design review, it is the responsibility of the county facility administrator to initiate the P-1 form to both the SBE and the SBA.~~

~~3.1.D. WVDE BP-13-A - Certificate of Project Completion (Rev. 10/94).~~

~~A certificate of completion is submitted to the SBE and the SBA upon completion of a project in order to effectuate a close-out of the project. Final payment to the county for a specific project is dependent upon acceptance of the project and sign off of the BP-13-A by the SBA. The architect or project administrator shall arrange an inspection tour with the appropriate officials. Projects utilizing multiple prime contractors shall complete the SBA 139 form to designate completion of each contractor's responsibility and trigger final payment of SBA funds. No occupation of a new facility or renovated facility shall occur until a certificate of occupancy is provided by the fire marshal and final approval to occupy the facility is granted by the SBA.~~

~~3.1.E. Evaluation of Performance.~~

~~The county board of education is responsible for completing evaluations on each contractor and architectural/engineering firm that has performed work on a SBA funded project using the appropriate SBA evaluation form and submitted with the BP-13-A or SBA 139 project completion forms.~~

~~1. Contractor Evaluation Report (SBA 124).~~

~~2. Architect/Engineering Evaluation Report (SBA 125).~~

~~3.1.F. The grant recipient shall provide the School Building Authority a copy of the final certified testing, adjusting, and balancing (TAB) report for new HVAC systems installed in schools. The report must be prepared by an independent agent, directly representing the building owner and qualified to perform testing, adjusting and balancing of HVAC systems in accordance with the requirement of W. Va. Code §18-9(e)-3 and those requirements found in SBA Appendix I – Architectural and Construction Regulations. The report will include the findings of the TAB contractor's evaluation of the new HVAC system and final HVAC performance data. The TAB contractor will perform the duties as described in the project construction documents in cooperation with the design engineer and building contractors. (Appendix I)~~

~~I. ARCHITECTURAL AND CONSTRUCTION REGULATIONS~~

~~A. Application for Project Approval (WVDE/SBA P-1 Report – Rev.12/11/91~~

~~This report is to be submitted twice by the county, initially with the blueprints when they are submitted to the SDE and the SBA for review, and a final WVDE P-1 is to be submitted to the SDE and the SBA at the completion of the project with a WVDE BP-13-A or SBA Form 139 completion report.~~

~~B. Procurement of Architectural/Engineering and Construction Management Services~~

~~State agencies and their political subdivisions are required to comply with Article 1, Chapter 5G of the W. Va. Code regarding Procurement of Architectural, Engineering and Construction Management Services. All grant recipients are required to submit to the SBA office staff the names of the firms being considered to perform architectural, engineering design, or, if required, construction management or construction analyst services on all projects where budget is fully or partially funded by the SBA. Unless, otherwise authorized by the Authority, the architectural, engineering and construction management services shall be performed by companies within the State of West Virginia and must be licensed to perform the desired services in the State of West Virginia. In order to fully comply with this requirement, the following procedures must be followed:~~

- ~~Submit the list of firms showing interest in performing design or construction management services to the SBA office staff upon receipt for review and approval prior to developing the "short" list for interviews.~~

- ~~Submit the "short" list of at least three firms, two of which must be West Virginia resident firms, being considered to be the most qualified for the services required to the SBA office staff for review, prior to interviewing the firms.~~

- ~~Architectural and Engineering firms being considered for the building design, must be informed at the time of their interview that the SBA requires that the work pertaining to each professional design discipline, i.e.: Architectural, Mechanical, Electrical, Civil and Structural be performed by a certified and licensed individual of that discipline. Architectural firms will submit the firm names and certificates of each individual design discipline in their project interview. Performance of this work by individuals licensed in the appropriate discipline will be verified by submission of bid and design documents to the SBA that have stamped A/E seals on those sections pertaining to that discipline.~~

- ~~Once the interviews have been conducted, the firms shall be ranked in order of preference. The preferred list shall be forwarded to the SBA office staff for review and approval, prior to further negotiation or recommendation to the local board of education or governing body making final approval.~~

- ~~Services shall be rendered under standard AIA contracts.~~

- ~~Additionally, the SBA requires that engineering design professionals performing services on all SBA funded projects meet the following criteria:~~

1. ~~The engineer of record must be a registrant in good standing with the State of West Virginia Board of Professional Engineers,~~
2. ~~The designer must be a registered professional engineer, licensed in the State of West Virginia in a specific engineering discipline,~~

~~3. The engineer must be trained and registered in the specific discipline associated with the work being designed, and place his/her seal only on engineering designs for their specific discipline(s),~~

~~4. The engineer shall only place their seal on plans for school projects that were prepared by him/her or under his/her direct supervision, and~~

~~5. The engineering firm must be registered to conduct business in the State of West Virginia and hold a certificate of authorization from the West Virginia Board of Professional Engineers.~~

~~Upon request, grant recipients may be required to submit qualification information from each of the firms being considered to the SBA.~~

~~The SBA encourages the use of standard AIA construction documents and agreements. Utilization of a Construction Manager or Construction Analyst may be required by the School Building Authority on a project by project basis.~~

~~C. Design Fees~~

~~Design fees shall be calculated based on a percentage of the construction cost. Construction costs are calculated based on the lowest acceptable qualified bid(s) for constructing the building. The cost for alternative designs that are not constructed shall be born by the grant recipient unless approved by the SBA. Construction costs does not include fees for the construction manager, clerk-of-the-works, construction analyst (paid for under additional services), legal fees, site acquisition or other project cost not directly associated with the construction of the building. Architect and engineering fees may also be applied to the cost of furniture and equipment only if the architect prepares the contract documents and administers the contract for the installation of the furniture and equipment. Maximum SBA reimbursement for architectural and engineering fees will be in accordance with the most current SBA fee schedule. The educational agency may agree to pay fees in excess of the maximum SBA amount, however, the additional cost for these fees will be the responsibility of the educational agency. Reimbursable expenses for document printing and distribution for agency approval shall be paid from grant funds as a direct cost plus reasonable and customary overhead and profit.~~

~~D. Architectural and Engineering Fees~~

~~The SBA fee schedule must be used for all projects when SBA funding is provided. Grant recipients must use Standard AIA agreements and contract document forms or request SBA approval to use alternative agreements. Architectural and Engineering (A&E) fees are established by the SBA and should be considered as the maximum allowable to receive SBA reimbursement. Should the grant recipients choose to exceed the SBA maximum allowable design service fees, the difference in cost will be the responsibility of the grant recipient.~~

~~SBA reimbursements of A&E design service fees shall be based on a percentage of the actual construction cost for contracts awarded. Fees associated with alternative designs not awarded will be the responsibility of the grant recipient and paid as additional services by the grant recipient. Fixed fees based on percentages of the construction cost will be calculated using the most current SBA approved fee schedule times the actual construction cost. For purposes of calculating design service fees based on a percentage of the construction cost, construction costs include the value of construction contracts awarded construction and the cost of furniture and equipment where the architect provided professional services associated with the preparation of bidding documents for the furniture and equipment. Approved construction change orders A&E fees will be calculated at the same percentage established for the project based on the actual construction costs subject to the conditions under Section H (Fees Relating to Change Orders).~~

~~Incidental reimbursable expenses for surveys or other pre-approved project expenses may also be paid from project funds. A stipulated sum design service contract may also be used with the approval of the SBA office. Stipulated sum fees would be based on an amount agreed upon by both parties for professional services regardless of the construction cost.~~

~~Construction costs do not include costs associated for a construction manager, clerk-of-the-works, construction analyst, licenses, permits, B&O taxes and change orders caused by A&E errors and omissions or change orders which do not require the services of the A&E firm. Fees associated with construction change orders will be reviewed by the SBA and the owner and additional professional service fees will be paid based on services required to effectuate the construction change.~~

~~E. Fee Modifications~~

~~Consideration will be given to modifying the SBA fee structure if a particular project is considerably more complex or if the project requires substantially more special consultants to complete. Fee modifications will be negotiated during the A & E procurement process and approved by the SBA before design service contracts are executed.~~

~~F. Multiple Prime Contracting Fees~~

~~The Basic Service Fee schedule may be adjusted for multiple prime construction contracts at the discretion of the SBA. Compensation for additional services for multiple prime construction contract administration shall be negotiated based on the number and complexity of the contracts. The maximum SBA reimbursement for compensation for administration of multiple prime contracts shall not exceed the SBA A&E fee schedule amounts without approval of the SBA.~~

~~G. Prototypical School Design Fees~~

~~The West Virginia Legislature encourages the use of prototypical designs where possible in West Virginia public schools. Where SBA funding is provided, county boards of education shall consider prototypical school designs as an alternative to the traditional planning and design process. Design service fees will be adjusted when prototypical designs are used. A&E fees are negotiable and will be based on services required. The basic service fee for an original design shall be 100% of the maximum allowable based on the SBA fee schedule.~~

~~Should the county board elect to use a prototype school design, 100% of the negotiated percentage fee will be applied to the cost of the site preparation and improvements required to adapt the site to accommodate a prototypical design school, for bidding and negotiations and for construction administration services. The design service fee for the reuse of an original design may not be greater than 40% of the design service phases of the original school designs. A&E fees for projects where substantial portions of the design are duplicated from previously designed projects will be adjusted based on the percentage of design duplication. For prototypical school projects, the total fee shall never exceed the maximum allowable fee percentage for the project had the prototypical design not been used.~~

~~H. A&E Fees Relating to Change Orders~~

~~Fee adjustments for owner requested or added value change orders will be considered. Compensation will be based on the amount of design, coordination and/or construction administration required to effectuate the change. Fee adjustments must be approved by the SBA. A&E fees for change orders not requiring design changes should be negotiated as an additional service and reimbursed on an hourly basis.~~

~~A&E fee modifications for change orders for new construction that requires construction document amendments due to design deficiencies will be reviewed on an individual basis by the owner and the SBA and fee adjustments considered if construction has not taken place in the affected area. The owner will pay for the required labor and material cost to effectuate the change. The A&E fee will only be adjusted based on A&E services required to effectuate the change in the scope of work.~~

~~A&E fee modifications for change orders on new construction that requires construction document amendments due to items of work inadvertently omitted from construction documents where the construction has taken place in the affected area and demolition is required will be reviewed on an individual basis by the owner and the SBA. If it is determined that the problem should have been resolved by the A&E firm within the building design, the owner will pay for the required change order and the A&E firm will be back-charged for the change including any demolition and replacement costs plus contractor overhead and profit. The owner will deduct any added value construction received as a result of the change from the amount the A&E firm is being back-charged.~~

~~A&E fee modifications for change orders on renovation and addition projects will be addressed on an individual project basis. If construction changes are required due to owner requested changes, incorrect as-built information or if it is determined by the owner and the SBA that a condition has occurred that could not have been foreseen by the A&E firm, the A&E firm will be compensated for the design modification based on the additional services required to effectuate the change in work.~~

~~I. Reimbursable Expenses~~

~~All design and construction service costs for the project shall be included in the basic service agreement including the cost of design, redesign (with exception of owner requested design changes after approval is granted to proceed into the construction document phase), construction administration and other project development costs. The county board will reimburse the A&E firm for the cost of review and bidding document printing and distribution to perspective bidders and approval agencies.~~

~~J. Additional Services~~

~~Special consultants required by the A&E firm for complex projects will be paid as an additional service by the grant recipient. Special consultants must be approved by the owner and the SBA prior to their use. HVAC Testing, Adjusting and Balancing services shall be contracted directly to the county board. Geotechnical services shall also be contracted directly to the county board (or other grant recipients) unless SBA approval is granted to contract this service to the A & E firm.~~

~~K. Building Component Requirements~~

~~Every effort must be made to plan and design schools with quality HVAC systems and low maintenance hard surface finishes. With this in mind, design architects and engineers must consider various prioritized options within the building design that address the following:~~

1. ~~Quality HVAC systems must be installed in all schools. These systems must be capable of providing efficient, long term climate control, complying with the minimum standards established by the SBA performance criteria. Buildings must also be designed with durable, low maintenance building finishes;~~
2. ~~The HVAC Testing, Adjusting and Balancing (TAB) agent shall be certified according to the~~

~~procedures contained in the associated air balance council (AABC) national standards, the national environmental balancing bureau (NEBB) procedural standards and the environmental engineering consultants (EEC) standards for testing, adjusting and balancing. The TAB agent shall directly represent and is under direct contract with the building owner and shall coordinate scheduling of TAB start up and completion work with the mechanical contractor, mechanical engineer, SBA, architect and construction manager, where applicable and paid from available project funds;~~

3. ~~SBA or local funds will not be used to construct building square footage that will result in the inefficient use of the facility in sacrifice of a quality HVAC system or building finishes;~~
4. ~~Once the square footage of the building academic and support spaces has been approved by the SBA, first consideration must be given to quality HVAC systems and building finishes. If local funds are proposed at any time throughout the project development, these funds and their intended use must be identified and approved by the SBA; and~~
5. ~~Additional SBA funding for project overruns will only be considered if Items D 1-4 are satisfied and additional funds are required in order to award the basic bid to the lowest qualified bidder(s).~~

~~Building Component Requirements – Safe School Design~~

~~The SBA recognizes the need to incorporate safe school design into West Virginia's new schools. Wherever possible, designers should incorporate safe schools through environmental design philosophies into the new school designs. Crime Prevention through Environmental Design (CPTED) concepts should be included in the school design and a CPTED Analysis should be incorporated into the school planning process. Additionally, educational agencies shall consider security within the facility and work with local law enforcement agencies during the building design process to incorporate local school access safety plan concepts into the new school design. Minimally, the following should be considered:~~

1. ~~Limit the number of buildings within the design to one building, if possible.~~
2. ~~Minimize unsupervised entrances into the building. Unsupervised entrances should be locked and equipped with emergency exiting hardware.~~
3. ~~Limit site access and if possible, provide a security person at the site entrance.~~
4. ~~Provide drop-off and pick-up lanes for school bus use only.~~
5. ~~Minimize the number of driveways and parking areas students cross to enter or leave the school campus.~~
6. ~~Provide interior building security that would allow classroom areas to be closed and locked off from gym areas and other areas of the facility being used during off school hours.~~
7. ~~Minimize areas of the building and campus that cannot be easily supervised by administration and staff (i.e., alcoves, recesses in walls, short perpendicular corridors into classrooms).~~
8. ~~Place elementary student lockers in classroom, where feasible, so that access can be monitored by staff. Locker locations should always be placed close to supervision and designed for easy surveillance.~~
9. ~~Provide for two-way communication within student occupied areas of the building. Include the ability to communicate outside the school should telephone service be interrupted.~~
10. ~~Install basic security systems throughout the facility and appropriate video surveillance in non-supervised and high student concentration areas.~~
11. ~~Provide adequate exterior lighting including parking lot lighting.~~
12. ~~Landscaping should consist of small shrubs below three feet and large trees that keep the visual zone between three feet and six feet unimpaired.~~

~~L. Disqualification of Contractors~~

~~Construction contractors or subcontractors on probationary status or who have had a contract terminated for just cause as described in the AIA Document A201 or A201/CMa General Conditions Article 14, Section 4.2 will be prohibited from bidding projects funded by the School Building Authority for a minimum of one year and pending review of the SBA thereafter.~~

~~M. Construction Project Development~~

~~Renovation and addition projects typically evolve from conceptual ideas derived from county curriculum and facilities personnel. Programmatic information is provided through the educational specifications to the architect/engineer who develops graphic illustrations that show general space relationships and curricular areas. The architect develops these ideas into a complete construction project documents by utilizing the following phases:~~

- ~~Site Feasibility Study~~
- ~~Educational Specifications~~
- ~~Schematic Design Phase~~
- ~~Design Development Phase~~
- ~~Construction Document Phase~~
- ~~Bidding and Negotiation Phase~~
- ~~Construction Phase~~

~~It is extremely important that all requirements of each project development phase be met before proceeding to the next phase. To avoid cost overruns and possible redesign cost, project costs must be monitored during the schematic design, design development and construction document phases. All contractual agreements with architects/engineers or construction managers must include language that requires the architect/engineers or construction managers to submit all planning and project design information and estimates of probable cost to the School Building Authority and the county board of education for approval. The School Building Authority, the county board of education, the curriculum and facilities planning team and the architect should be in agreement before proceeding from one phase to the next.~~

- ~~The design includes all curricular and facilities requirements proposed by the planning team and the School Building Authority or an explanation as to why these requirements are not being provided;~~
- ~~The project as designed can be constructed within the budget provided by the county board;~~
- ~~And the project is being constructed on an approved site for which a clear and free deed is held by the grantee. The use of leased properties must receive prior approval of the SBA.~~

~~N. Construction Project Submission and School Building Authority Review~~

~~All construction projects funded by the School Building Authority are required to be submitted for review to the School Building Authority staff. A 30 day review period shall be included in each phase of the project development schedule for SBA review of schematic, design development and construction documents. Project documentation as required by the "Handbook on Planning School Facilities" (latest edition of State Board Policy 6200) and in accordance with all requirements of the School Building Authority must be submitted. Minimally, the School Building Authority must review and approve the site feasibility study, educational specifications, schematic drawings, design development documents and final construction documents as they are developed. Estimates of probable cost must be submitted with each phase of the project approval process. Educational specifications must be submitted with schematic designs for SBA review. Specific requirements regarding the project educational specification can be found in Appendix I. A formal site feasibility study must be prepared by the project architect/engineer before~~

~~proceeding with the purchase of any site for construction. Consideration must be given to all factors identified in State Board Policy 6200, Chapter 2. The site feasibility study must include all site development costs for each site being considered. The site feasibility study along with the recommendation for the preferred site must be submitted to the SBA for approval before proceeding with the acquisition of any site. The schematic design must include but is not limited to the following:~~

- ~~Schematic Drawings~~
- ~~Programmatic Information~~
- ~~Preliminary Estimate of Probable Cost~~
- ~~Educational Specification or Program Modifications~~

~~The design development submission for review must include but is not limited to the following:~~

- ~~Design Development Drawings~~
- ~~Outline Construction Specifications~~
- ~~Technology Plan~~
- ~~Updated Estimate of Probable Construction Cost~~

~~Final construction documents submitted for review must include:~~

- ~~Detailed Drawings of the Facility~~
- ~~Written Specification with Appropriate Bidding Information~~
- ~~Project Approval Form (P-1)~~
- ~~Final Estimate of Probable Construction Cost~~

~~Applicable submission requirements can be found in Chapter 12 of the "Handbook on Planning School Facilities." Projects shall not be advertised for bid or construction started until after the School Building Authority staff has reviewed the submitted documents and the School Building Authority review comments have been satisfactorily addressed. A revised set of bidding documents must be submitted to the SBA office along with assurances that review comments have been addressed within the final documents. Additionally, SBA submission requirements are included on the school construction project development flow chart.~~

~~O. Real Estate Acquisitions Using School Building Authority Funds~~

~~In order to maximize the limited amount of School Building Authority funding for the construction of educational facilities, the School Building Authority has taken the following action:~~

- ~~The Authority will not approve any Grants which include the funding of real estate acquisitions with grant proceeds.~~
- ~~The Authority will not approve amendments to any Grants which include the funding of real estate acquisitions with grant proceeds.~~

~~P. Clerk-of-the-Works Requirements~~

~~The educational agency shall be required to employ a clerk-of-the-works to monitor all construction projects in excess of $100,000 unless waived by the SBA, or an SBA approved construction management method is being utilized. Candidates for construction mangers and clerk-of-the-works shall be submitted for SBA review prior to final selection by the educational agency. A clerk-of-the-works employed by the county through contracted services shall minimally be paid an amount equal to the basic hourly prevailing wage rate of a Journeyman Carpenter as determined by the West Virginia Department of Labor for the project location. The~~

~~actual time the clerk-of-the-works begins to perform the duties may vary according to the project and the timing of the award of the construction contract. However, the clerk-of-the-works must be given sufficient time to acquaint themselves with the total scope of the project in order to be an effective part of the construction team.~~

~~The School Building Authority requires that the clerk-of-the-works be hired at the same time the project is let for bids. If delays are anticipated in the award of the bid or actual construction/renovation is not scheduled to begin immediately, the clerk-of-the-works must be hired prior to beginning construction and be provided with adequate time to become familiar with the project scope and to be prepared to assist with the project as soon as bids are received and the construction contract is executed. During the bidding process it is conceivable that the clerk-of-the-works may not be required to perform his duties full time.~~

~~Realizing that there are various types of projects requiring the appropriate construction review documentation, the responsibilities of the clerk-of-the-works will vary with the scope of each project. The clerk-of-the-works shall not circumvent or eliminate the normal construction responsibilities of the architect/engineer or contractor. However, when applicable, the clerk-of-the-works can be a vital member of the project team and can assist in the project observation and documentation process. A construction analyst, if required by the SBA, shall be utilized during the design phases of a project.~~

~~Q. Construction Project Bid Coordination and Reporting~~

~~Construction bid dates must be coordinated through the SBA office. Project architects/engineers must contact the SBA office and identify the proposed bid date desired. The SBA office will coordinate the most appropriate bid date after considering other construction project bidding schedules. Every effort must be made to prevent similar construction projects from being bid in the same week and within the same region of the state to allow for maximum participation of bidders. Once released for bid by the SBA, bids shall be advertised in accordance with Chapter 59-3-1 of W. Va. Code as a legal advertisement in a qualified newspaper occurring within a period of 14 consecutive days with at least an interval of 6 full days between the date of the first and second publications. However, unless waived by the SBA. **NO** bid opening date shall be scheduled less than 21 days after the first publication date.~~

~~The School Building Authority is tracking construction square footage costs for total projects and various building components. Project bid tabulation documents are required to be faxed immediately to the School Building Authority office within 2 hours after construction bid openings are concluded. The tabulation sheet should be self-explanatory and include explanations of base bid pricing and all alternates being requested. The normal bid tabulation sheet prepared at the conclusion of the bid for county staff is acceptable. The bid tabulation must accompany the list of subcontractors and major equipment and material suppliers list (SBA Form 123) from the apparent low bidder(s) also required to be forwarded to the School Building Authority Office within two (2) hours of the conclusion of the bid opening. **Bid openings shall not be scheduled after 2:00 p.m.**, so that bidding information can be transmitted to the School Building Authority office the same business day. No construction contract shall be awarded without the School Building Authority review and approval of the construction bid and the contractor being recommended for the award.~~

~~R. Contractor Evaluation (SBA 124)~~

~~The School Building Authority requires the Owner to do evaluations of all contractors performing work on School Building Authority projects. This information must be submitted during the construction phase at 25%, 50%, and 75% of project completion and submitted with the request~~

~~for payments for the corresponding periods. This information must also be submitted to the SBA at 100% completion with the final BP-13-A project closeout document. Our goal is to have each contractor's overall work performance evaluated and document a history of excellent, average or poor performance on several projects. This information will also be made available upon request to all grant recipients.~~

~~S. Architect Evaluation (SBA 138)~~

~~The School Building Authority requires the Owner to do evaluations of all architects performing work on School Building Authority projects. This information must be submitted at the completion of the bidding phase and during the construction phase at 25%, 50% and 75% of project completion and submitted with the request for payments for the corresponding pay periods. This information must also be submitted to the SBA with the BP-13-A or SBA 139 project closeout documents. The goal is to have each architect's overall work performance evaluated and document a history of excellent, average or poor performance on several projects. This information will also be made available upon request to all grant recipients.~~

~~T. Construction Observation Report (SBA 113)~~

~~Construction Observation Reports are required to be completed by the clerk-of-the-works or the project administrator to record the current status of construction projects. This report may also be used by project architect/engineers, if desirable. The timelines of the Project Observation Reports can be established by the project administrator and must be sent to the SBA office for review and approval.~~

~~U. Certificate of Project Completion (WVDE BP-13-A, Rev. 10/94)~~

~~A Certificate of Project Completion is submitted to the West Virginia Department of Education and the School Building Authority upon completion of each contract in order to effectuate a close-out. The BP-13-A or SBA Form 139 for Multiple Prime Project reports must be submitted to the SBA prior to the request for final payment. The grant recipient shall arrange an inspection tour with the appropriate officials including the School Building Authority field representative. No occupation of a new facility or renovated facility shall occur until a Certificate of Occupancy is provided by the fire marshal and the SBA provides notification approving the date the building is to be occupied. The county board of education (or building owner) must provide the SBA a copy of the Certificate of Substantial Completion indicating the building has been declared substantially complete and suitable for the owner to occupy along with a request for a SBA walk-thru for permission to occupy the facility. The School Building Authority will retain five percent (5%) of the project cost until the completion report is executed including final inspection by the School Building Authority. The School Building Authority will provide the county board (or building owner) a list of required project closeout requirements when the project is 95% complete.~~

~~archconstregulations~~

~~PROFESSIONAL SERVICES OF THE CONSTRUCTION ANALYST~~

~~The following is a description of the professional services of the Construction Analyst. The Construction Analyst should be hired once the project architect has been hired and before the project proceeds into the conceptual stage of the building design. The Construction Analyst will be an extension of the project architect's contract and reimbursed through the architect by the SBA for this service.~~

~~Generally, the Construction Analyst advised the owner and architect through all building design phases if it appears the construction cost may exceed the project budget and make recommendations for design alternatives to insure the design is within the approved budget.~~

~~The Construction Analyst does not assume responsibilities for the design or methods and means for the construction of the facility and does not assume responsibilities assigned to the architect/engineer or contractors performing work on the project.~~

~~PRECONSTRUCTION SERVICES OF THE CONSTRUCTION ANALYST~~

~~1. Conceptional Services~~
- ~~a. Site Visit~~
- ~~b. Initial Cost Opinion of Building Program and Conceptional Plan~~
- ~~c. Reviews Proposed Construction Methods and Project Schedule Established by the Architect and the School Building Authority~~

~~2. Schematic Documents Phase~~
- ~~a. Prepares Initial Estimate Based on Building Square Footage and Building Systems Identified in Initial Outline Specifications~~
- ~~b. Reviews Construction Methods and Project Schedule~~
- ~~c. Reviews Building Systems and Recommends Cost Effective Alternative Construction Methods and/or Systems~~

~~3. Design Development Phase~~
- ~~a. Prepares First Detailed Cost Estimate at 90% of Design/Development and Reports Results to Owner, Architect and SBA~~
- ~~b. Updates Project Schedule Including a Preliminary Construction Schedule~~
- ~~c. Recommends Alternate Proposals when Applicable~~

~~4. Contract Documents Phase~~
- ~~a. Prepares Additional Estimates at 65% and 100% Completion of Contract Documents~~
- ~~b. Finalizes Construction Schedule and Prepares Construction Schedule to be Placed in Final Bid Documents~~
- ~~c. Assist Architect with the Coordination of Contractor Responsibilities within Bid Packages~~
- ~~d. Reviews Construction Contracts for Form and Identifies any Overlap of Contractor Responsibility within Contract~~

~~5. Bidding Phase~~

~~a. Confirms Construction Schedule with Owner/Architect/SBA/Contractors at Pre-Bid Meeting~~

~~b. Review Perspective Bidder Qualifications~~

~~c. Assist the Architect with the Pre-Bid Meetings~~

~~d. Should the Lowest Qualified Bids Received Exceed the Construction Budget, the Construction Analyst or Construction Manager will be Responsible to Make Recommendations to Bring the Project Within the Approved Budget~~

~~6. General~~

~~Provisions Shall be Made Within the Contract Documents for the General Trades Contractor to be Responsible for the Updating of the Construction Schedule on Projects not Involving a Construction Manager. The General Trades Contractor will have the Responsibility of Updating the Schedule, Documenting Specific Contracts that are behind Schedule and Notify the Contractor Responsible for the Delay in Writing as soon as the Delay Occurs.~~

~~PROFESSIONAL SERVICES OF THE CONSTRUCTION MANAGER~~

~~The following is a description of the professional services of the Construction Manager. The Construction Manager should be hired in accordance with the procedures in Chapter 5G of the W. Va. Code once the project architect has been hired and before the project proceeds into the conceptual stage of the building design. The Construction Manager will be contracted directly to the owner and represents the owner as described below. Unless an alternative agreement is approved by the SBA, the AIA Standard Form of Agreement Between the Owner and Construction Manager shall be used.~~

~~Generally, the Construction Manger advises the owner and architect through all bidding design phases if it appears the construction cost may exceed the project budget and make recommendations for design alternatives to insure the design is within the approved budget. During the construction phase, the Construction Manager will perform the services described below.~~

~~The Construction Manager does not assume responsibilities for the design or methods and means for the construction of the facility and does not assume responsibilities assigned to the architect/engineer or contractors performing work on the project.~~

~~A. PRECONSTRUCTION SERVICES OF THE CONSTRUCTION MANAGER~~

~~1. Conceptional Services~~

~~a. Site Visit~~
~~b. Initial Cost Opinion of Building Program and Conceptional Plan~~
~~c. Reviews Proposed Construction Methods and Project Schedule Established by the Architect and the School Building Authority~~

~~2. Schematic Documents Phase~~

~~a. Prepares Initial Estimate Based on Building Square Footage and Building Systems Identified in Initial Outline Specifications~~
~~b. Reviews Construction Methods and Project Schedule~~
~~c. Reviews Building Systems and Recommends Cost Effective Alternative Construction Methods and/or Systems~~

~~3. Design Development Phase~~

~~a. Prepares First Detailed Cost Estimate at 90% of Design/Development and Reports Results to Owner, Architect and SBA~~
~~b. Updates Project Schedule Including a Preliminary Construction Schedule~~
~~c. Performs Constructability Reviews and Recommends Alternate Proposals that will reduce the project cost~~

~~4. Contract Documents Phase~~

a. ~~Prepares Additional Estimates at 65% and 100% Completion of Contract Documents~~
b. ~~Finalizes Construction Schedule and Prepares Construction Schedule to be Placed in Final Bid Documents (when applicable)~~
c. ~~Assist Architect with the Coordination of Contractor Responsibilities within Bid Packages~~
d. ~~Reviews Construction Contracts for Form and Identifies any Overlap of Contractor Responsibility within Contract~~

5. ~~Bidding Phase~~

a. ~~Confirms Construction Schedule with Owner/Architect/SBA/Contractors at Pre-Bid Meeting~~
b. ~~Review Perspective Bidder Qualifications~~
c. ~~Assist the Architect with the Pre-Bid Meeting~~
d. ~~Should the Lowest Qualified Bids Received Exceed the Construction Budget, the Construction Manager will be Responsible for Making Recommendations to Bring the Project Within the Approved Budget~~

~~B. CONSTRUCTION SERVICES – CONSTRUCTION MANAGER~~

1. ~~Performs On-Site Representation and Construction Observation Duties forthe Owner~~
2. ~~Maintains On-Site Project Office, Manager and Phone/Fax~~
3. ~~Reviews Construction Contracts~~
4. ~~Prepares and Maintains Construction Schedule~~
5. ~~Reviews Applications for Payment~~
6. ~~Coordinates Shop Drawing Submittal Schedule with Contractors and Architect~~
7. ~~Reviews Change Directives and Change Orders and Recommends Disposition to Owner, Architect and SBA~~
8. ~~Assists in the Preparation of the Final Punch List in Conjunction with Contractor and Architect/Engineer~~
9. ~~Documents Construction Delays Immediately and Reports to Owner, Architect/Engineer and Contractors, Complies with SBA Requirements and Communicates all Design and Construction Activities Associated with the Construction Managers Responsibilities Described to the SBA~~
10. ~~Administers Contract Provisions for Identifying Causes for Delays and Notifying all Parties~~

~~C. GENERAL~~

~~Construction Manager Contract Shall be Provided Using AIA Standard Form of Agreement 801 CM and Modified as Amended by the above.~~

~~DUTIES AND RESPONSIBILITIES OF THE CLERK OF THE WORKS~~

~~a. Observe the quality and progress of the construction to determine in general that it is proceeding in accordance with the Contract Documents. Notify the Owner, Architect/Engineer and School Building Authority project representative immediately if, in the Clerk-of-the-Works opinion, work does not conform with the Contract Documents or requires special investigation by the Owner, Architect/Engineer or Contractor.~~

~~b. Monitor the construction progress and assist in the preparation of progress reports required by the Owner or School Building Authority.~~

~~c. Review Contract Documents with the Contractor's superintendent so as to have a complete understanding of the scope of the project.~~

~~d. Consider the Contractor's suggestions and recommendations, evaluate them, discuss them with the Architect/Engineer, Owner and the School Building Authority's representative and assist the Architect/Engineer when applicable in making a final decision.~~

~~e. Attend project meetings as the Owner's representative and report to the Owner in writing on the proceedings.~~

~~f. Observe tests required by the Contract Documents. Review testing invoices, if any, to be paid by the Owner.~~

~~g. Maintain records at the construction site or as directed by the Owner in an orderly manner in accordance with the Owner's and School Building Authority's procedures. Include correspondence where applicable, such as Contract Documents, Change Orders, Construction Change Authorizations, Architect's/Engineer's Supplemental Instructions, reports of site conferences, Shop Drawings, Product Data, Samples, supplementary drawings, color schedules, requests for payment, names and addresses of contractors, subcontractors and principal material suppliers.~~

~~h. Keep a log book containing project progress and reports and submit reports on the progress of the Contractor's work to the Owner, and the School Building Authority's project representative. The log must contain activities related to the project, weather conditions, nature and location of work being performed. The Project Architect/Engineer will provide Observation Construction Reports documenting his site visits.~~

~~i. When applicable, provide assistance to the Architect/Engineer upon request in reviewing Shop Drawings, Product Data and Samples.~~

~~j. When applicable, observe the Contractor's Record Drawings at intervals appropriate to the stage of construction and notify the Owner and Architect/Engineer of any apparent failure by the Contractor to maintain up-to-date records.~~

~~k. Review Applications for Payment submitted by the Contractor with the Architect/Engineer and assist in making recommendations for disposition.~~

~~l. When applicable, assist the Architect/Engineer in reviewing the list of items to be completed or corrected with is submitted by the Contractor with a request for issuance of a Certificate of Substantial Completion. When applicable, assist the Architect/Engineer in reviewing the documentation and record documents to be furnished to the Owner by the Contractor at Substantial Completion, and verify that the Contractor has met the requirements of the Contract Documents for training the Owner's personnel in the operation and maintenance of all building equipment and systems.~~

~~m. When applicable, assist the Architect/Engineer in final inspection of the work. Assist the Architect/Engineer in reviewing the documentation and record documents to be furnished to the Owner by the Contractor upon completion of the work.~~

~~n. Assist the Owner on small projects by observing the construction and reporting progress and quality of work being performed by the Contractor. At no time shall the Clerk of the Works assume responsibilities of the Architect/Engineer, Architect/Engineers representative or the Contractor in charge of the construction.~~

~~SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA~~

~~EDUCATIONAL SPECIFICATIONS~~

~~By constructing educational specifications, the learning activities, the number, groupings and nature of the people involved, the spatial relationships between sections of the facility, the interrelationships of instructional programs with each other as well as non-instructional spaces and the major furniture/equipment needs or the new facility can be defined and more easily understood. Each Ed Spec Committee must consist of representatives from the educational profession, individuals from the community and the architectural design staff selected by the board of education.~~

~~When specifications are agreed upon and committed to a written document, the architect is provided the greatest opportunity to design a school that more nearly meets the needs of the educational program and facilitates the activities that will be occurring in the spaces. To that end, and to more readily value the scope of the project, it is essential that an educational specifications document accompany the schematic drawings submitted to the SBA for review prior to approval by the local board of education.*~~

~~To be consistent and assist in understanding the issues to be included in the educational specifications, the following outline is provided but should not be considered in inclusive should other issues be of concern to you and your planning committees.~~

~~I. Introduction~~

~~A short synopsis describing the configuration of the educational structure, the projected number of students, site location, availability of site utilities, existing availability of ancillary facilities and spaces (i.e., athletic, etc.) and proposed statistics for the new construction.~~

~~II. The Community~~

~~A brief description of the community, its history, specific cultural distinctions and maps showing geographic characteristics, attendance areas (present and proposed) and the site location.~~

~~III. The Educational Plan~~

~~The educational plan can be subdivided into two general areas:~~

~~A. Curriculum Plan – States the schools philosophy, educational goals and objectives of the program. This should clarify important issues and priorities for consideration in the planning of the new facility.~~

~~B. Support Plan – Provides staffing information including teachers, instructional aides, food service personnel, counselors, custodial staff, and administrative staff including principals, assistant principals, department heads, etc.~~

~~IV. Building Space Requirements~~

~~The utilization of space is extremely important. The SBA requires a minimum 85% utilization of newly constructed schools or schools where building additions are being proposed. In order to assist in developing Section IV, Worksheet #1, which compiles data~~

~~from the calculation of spaces for the new facility, must be completed and incorporated into Section IV.~~

~~The final number of allowable classrooms and the square footage for any facility that incorporates SBA funds will be determined by the SBA staff upon consideration of the program needs, building utilization rates, maximization of multi-use spaces in the design and the potential construction of the project within the allocated funds available.~~

~~In order to assure appropriate spaces and utilizations for the projected enrollment, room numbers and labels should be assigned to instructional areas on the schematic drawings and a model student schedule developed using Worksheet #2 to locate students and staff within the facility during each of the instructional periods of the day.~~

~~The following formula is to be utilized to determine the maximum number of classrooms that may be considered in each curricular area:~~

~~***FORMULA FOR DETERMING TEACHING STATIONS PER SUBJECT AREA*****~~

~~***Number of students Enrolled in subject x Number of periods per week in subject***~~

~~***= Number of teaching stations for this subject area***~~

~~***Maximum class size (see reference sheet) x Maximum number of periods per week (every period, every day)***~~

~~V. Space Allocations~~

~~This section describes the instructional areas (general classrooms, PE areas, tech. ed. labs, science areas, consumer and homemaking areas, special education spaces, administrative offices, etc.). Middle/Junior and High School departmentalization, specialization of spaces, electives and scheduling are factors to be considered in determining then number of teaching stations. The maximum number of teaching stations may be determined by applying the formula provided in Section IV to each subject area. The following description of each subject area is needed and should include:~~

~~A. Goals – What are the objectives to be accomplished in the area.~~

~~B. Space Required – Submit the calculations from the formula in Section IV to identify the number of spaces needed in this subject area and complete Worksheet #1, attached. Teacher planning areas must be provided in building design allowing maximum use of teaching stations.~~

~~C. Planned Activities – Include specific actions to be performed in an area such as paint, read, science experiments, audio visual presentation, telecommunications, robotics lab, multiple use areas, etc.~~

~~D. Number of Users – Determine the number of administrators, teachers, aides and pupils to use the area at any one time.~~

~~E. Group Usages – Identify if the area is to be used for large or small group instruction, individual student work, team teaching, multiple usage, etc.~~

~~F. Spatial Requirements – Identify the spatial relationships of any one space to other areas of the facility whether inside or outside – near to or away from, convenient to media center (as with language arts areas), capability for combining or subdividing areas, the frequency of such adjustments andthe square footage needed to do so, etc. Bubble diagrams should be used to show interrelationships of spaces.~~

~~G. Support Facilities – Spaces that allow the area to meet its goal: shared storage areas, teacher preparation areas, student work/storage areas, conference rooms, etc.~~

~~H. Environmental Considerations – Acoustical, Visual, Thermal, Climatic and Aesthetic considerations that enhance the practical usage of the specific space.~~

~~I. Utility Needs – Utilities needed in the specific area including: water, electrical, toilets, 3-phase power, gas, vacuum capability, telephone, technology wiring, etc.~~

~~J. Storage – More specific direction as to the cubic feet of storage needed in the specific area. Generally, this denotes built-in storage areas and closets.~~

~~K. Display Areas – Chalkboards, bulleting boards, display cases (linear feet).~~

~~L. Furniture and Equipment – Quantities and types of items to be used in each area.~~

~~M. Technology – Specific needs of each space to accommodate the technological delivery system/network incorporated into the facility.~~

~~N. Other – Identify any other specific information essential to each specific area.~~

~~VI. Technology Plan~~

~~A technical plan for delivery of media, voice, data, graphics, text and telecommunications throughout the school includes a description of the instructional and administrative objectives, the technical structure needed to facilitate the system, the equipment needed to implement the system and the physical/design requirements for incorporating the system into the construction of the facility. The technology plan will be developed according to the Department of Education's Office of Technology & Information Systems' guidelines and submitted to them and the SBA for approval with design development documents.~~

~~VII. Design Criteria and General Architectural Considerations~~

~~This section should regard the total school complex but may be specified in distinct areas or regard special concerns. Following are some suggested considerations:~~

~~A. Health and safety~~

~~B. Quality of building systems and components~~

~~C. Economies to be attained – instructional, operational, maintenance~~

~~D. Flexibility and multi-use of spaces~~
~~E. Efficient circulation patterns~~
~~F. Community use considerations~~
~~G. Communication systems – may be incorporated into the Technology Plan~~
~~H. Accessibility~~
~~I. Building Security and School Access Safety~~
~~J. Student Supervision~~

~~VIII. Educational Specifications Committee Page~~

~~A signature page for members comprising the Ed. Spec. committee will be included. Names will be organized by the group each individual represents, i.e., teachers, administrators, parents, community leaders, design professional, etc.~~

~~***Architects** – Please be advised that an SBA review will not occur without submittal of educational specifications with schematic drawings. Continued development of the building design beyond schematics without written approval of the SBA is at the fiscal risk of the designer and the board of education.~~

~~**Bibliography:~~

~~A. Conrad, MJ., *A Manual for Determining the Operating Capacity of Secondary Schools*. Bureau of Educational Research and Service, OSU.~~
~~B. Castaldi, Basil, *The Castaldi Nomogram*. The New England School Development Council.~~
~~C. CEFPI, Phoenix, AZ, *A Guide for Planning Educational Facilities*.~~

~~archconstruattachments~~

~~WORKSHEET #1~~

~~SUMMARY OF SPACES FROM CALCULATIONS IN SECTION IV~~

~~CURRICULAR AREA~~	~~NO. OF CLASSROOMS (According to formula)*~~	~~# STUDENTS~~	~~SBA USE~~
~~SUBTOTAL/TOTAL~~			

~~*Classroom numbers from the formula are not to be rounded to the nearest whole number, insert the actual answer from the formula. Example: Language Arts -- 3.4 classrooms~~

~~edspecs#1 SBA 142~~

~~**SBA SUBJECT AREA SPACE ALLOCATION DATA**~~
~~***WORKSHEET #2***~~

~~**Project Name**~~______________________ ~~**Prepared by**~~ ________________

~~**Date**~~ ______________ ~~**Design Enrollment**~~ __________ ~~**Periods Per Day**~~ ____________

~~Room #~~	~~Teacher~~	~~Course~~	~~Number of Students Per Period~~								
			~~1~~	~~2~~	~~3~~	~~4~~	~~5~~	~~6~~	~~7~~	~~8~~	
~~SUBTOTALS/TOTALS~~											

~~BUILDING PROGRAM UTILIZATION WORKSHEET~~
~~Worksheet #3~~

~~**County: _____ School: _____ Current Enrollment: _____**~~

~~Number Classrooms Types~~	~~x~~	~~Maximum Pupils/Class Type~~	~~=~~	~~Total Program Capacity~~
_____		_____		_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
~~Totals~~ _____		_____		_____

~~**Program Utilization = _____ divided by _____ =**~~
~~**Current Enrollment Total Program Capacity**~~

~~**PROGRAM UTILIZATION = _____% Desirable Program Capacity = 85%**~~

~~Instructions for Calculating Building Program Utilization~~

~~Elementary School – Calculate the number and type of classrooms using the maximum program capacity for each regular or special classroom. Assume for example – that all students are seated in a first period block without pullout programs. Do not include library/media, cafeteria, itinerant spaces, resource rooms, or optional academic classrooms such as art, music and computer labs that act as pullout programs to support the core curriculum.~~

~~Secondary School – Middle/Junior High School programs where various schedules exist, calculate the number and type of classrooms using the maximum program capacity for each regular or special classroom. Assume for example, that all students are seated in a first period block and exclude library/media, commons or any space that cannot be used for other course offerings in the daily capacity of each facility. The maximum capacity for instructional spaces for specialty classrooms is counted once. A specialty classroom may be available throughout the school day but due to its specialized design or equipment it is rendered impractical to use for other instructional purposes.~~

~~SBA 156~~

~~SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA~~ ~~Maximum Class Sizes~~			
~~Classroom Type~~	~~EL~~	~~MS~~	~~HS~~
~~Kindergarten and Pre-Kindergarten~~	~~20~~		
~~General Instruction Areas~~	~~25~~	~~25~~	~~25~~
~~Corrective or Remedial Education~~	~~15~~	~~15~~	~~15~~
~~Art Rooms (Optional/EL)~~	~~25~~	~~25~~	~~25~~
~~Driver Education Facilities~~			~~25~~
~~Consumer/Homemaking Classroom (Optional)~~		~~25~~	~~25~~
~~Consumer/Homemaking Lab~~		~~25~~	~~25~~
~~Foreign Language Facilities~~		~~25~~	~~25~~
~~Foreign Language Lab (Optional)~~		~~25~~	~~25~~
~~Technology Education~~		~~20~~	
~~Music Facilities (Optional/EL)~~	~~25~~	~~25~~	~~40~~
~~Ensemble Room (Optional)~~			~~12~~
~~Physical Education~~	~~25~~	~~70~~	~~70~~
~~Science Facilities~~		~~25~~	~~20~~
~~Micro-Computer Lab~~	~~25~~	~~20~~	~~20~~
~~Electronic Technology Lab (Optional)~~		~~75~~	
~~Auditorium (33% of total student body~~			
~~Behavior Disorders~~	~~8~~	~~8~~	~~8~~
~~Communication Disorders (Self Contained)~~	~~12~~	~~12~~	~~12~~
~~Deaf/Blind (Self Contained)~~	~~3~~	~~3~~	~~3~~
~~Mildly Mentally Impaired (Self Contained)~~	~~12~~	~~12~~	~~12~~
~~Moderately Mentally Impaired (Self Contained)~~	~~12~~	~~12~~	~~12~~
~~**Autism**~~	~~10~~	~~10~~	~~10~~
~~Severely/Profoundly Mentally Impaired (Self Contained~~	~~9~~	~~9~~	~~9~~
~~**Deaf and Hard of Hearing**~~	~~10~~	~~10~~	~~10~~
~~**Blind and Partially Sighted**~~	~~10~~	~~10~~	~~10~~
~~Specific Learning Disabilities (Self Contained)~~	~~12~~	~~12~~	~~12~~
~~Pre-School Handicapped (Self Contained)~~	~~10~~		
~~Gifted Education (Self Contained)~~	~~15~~	~~15~~	~~15~~
~~Resource Services (Regular Program Support)~~	~~15~~	~~15~~	~~15~~
~~Agricultural Education~~			~~20~~
~~Agricultural Mechanics Lab~~			~~20~~
~~Marketing Education~~			~~25~~
~~Diversified Cooperative Training~~			~~25~~
~~Vocational Health Occupations~~			~~25~~
~~Health Occupations Lab~~			~~25~~
~~**Family and Consumer Science (FACS)**~~			~~25~~
~~Food Management, Production & Services (Occup)~~			~~20~~
~~**Child Care Specialist (Occup)**~~			~~20~~

~~**SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA**~~
~~**Maximum Class Sizes**~~

~~**Classroom Type**~~	~~**EL**~~	~~**MS**~~	~~**HS**~~
~~Vocational/Industrial & Technical Classrooms~~			~~20~~
~~Industrial and Technical Lab~~			~~20~~
~~Business Education Classroom~~			~~20~~
~~Computer/Keyboarding Lab~~			~~30~~
~~Office Technology~~			~~20~~
~~Tech Ed. Production Lab~~			~~20~~
~~Tech Ed. Systems Lab~~			~~20~~

~~SCHOOL CONSTRUCTION PROJECT DEVELOPMENT~~

O-S
Execute Grant Contract with the SBA for approved project

↓
↓

O
Conducts School Closure Hearings (WV Code §18 - 5- 13a) and requests WV Board of Education (WVBOE) approval if closures are involved in the proposed New Facility

~~Approved by the WVBOE~~

↓
↓
↓

OS
Anticipates specific school building needs and initiates preparation of educational specifications

↓
↓
↓

OS
Seeks Design Professional Services

↓
↓
↓

O
Submits list of Design Professionals responding to the advertisement to the SBA for review and comment

↓
↓
↓

O-A
Seeks Construction Management or Construction Analyst services. (See Professional Services of the Construction Manager or the Construction Analyst)

↓
↓
↓

~~Approved by SBA~~

Submits List of Construction Analyst or Construction Manager responding to the advertisement to the SBA for review and comment

O -A-S-CM
Sets Allowable Project Development Time Limits for the Board of Education Design Professional and Construction Manager

~~Approved by SBA~~

~~Approved by~~ ~~SBA~~

O
Seeks services of the Educational Specification Specialist and Technology Planner

O -A
Prepares Educational Specification and Technology Plan

O -A-S-CM/CA
Analyzes Educational Specifications and Develops Building Program

O -A
Submits Educational Specification and Building Program to the SBA and WVDE for review and comment

~~Approved by the SBA~~

A
Prepares Schematic Design from Educational Specifications

A - CM/CA
Prepares Preliminary Cost Estimates from Schematic Design and Educational Specifications

O -A-CM/CA
Submits Educational Specifications, Building Program, Schematic Drawings, and Initial Cost Estimate to the

O -A-CM/CA
Prepares Design Development Drawings, Outline Specifications, First Detailed Cost Estimates, and Technology Plan

O -A-CM/CA
Submits one set of Design Development Drawings, Final Educational Specifications, Building Program, Outline Specifications, Technology Plan, and Cost Estimate to the SBA and WVDE for review and comment

~~Approved by the SBA~~

O
Local Board of Education reviews and approves Educational Specifications, Building Programs, Design Development Documents, Outline Specifications, and Initial Cost Estimate

O
Submits one set of Design Development Drawings, Outline Specifications, First Detailed Cost Estimates and Preliminary Project Approval Form (P -1) to appropriate Regulatory Agencies for approval (See Handbook on Planning School Facilities Section 1401.04)

0 -E
Submits copy of Regulatory Agencies Review Comments to the SBA and WVDE

A -CM/CA
Prepares Bidding and Construction Documents and Final Cost Estimate

~~Approved by~~ ~~SBA~~

O -A-E-CM/CA
Submits Final Bidding and Construction Documents and Final Cost Estimate to the SBA and W)E for review and comment

O
Local Board of Education reviews and approves Final Bidding and Construction Documents and Final Cost Estimate

O -A-CM/CA
Submits one set of Final Contract Documents (Drawings and Written Specifications) and latest P -1 Form to appropriate Regulatory Agencies for approval (See Handbook on Planning School Facilities Section 1401.04 & 1402.2)

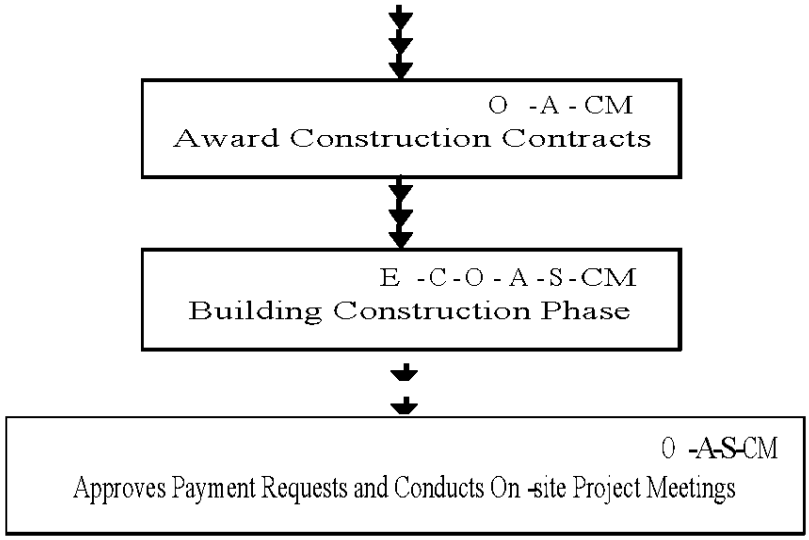
O -A
Submits copy of Regulatory Agencies Review Comments to the SBA and WVDE

~~Approved~~ O -A-CM ~~by SBA~~
Secures Fire Marshal's and SBA's approval of Contract Documents before advertising for Construction Bids

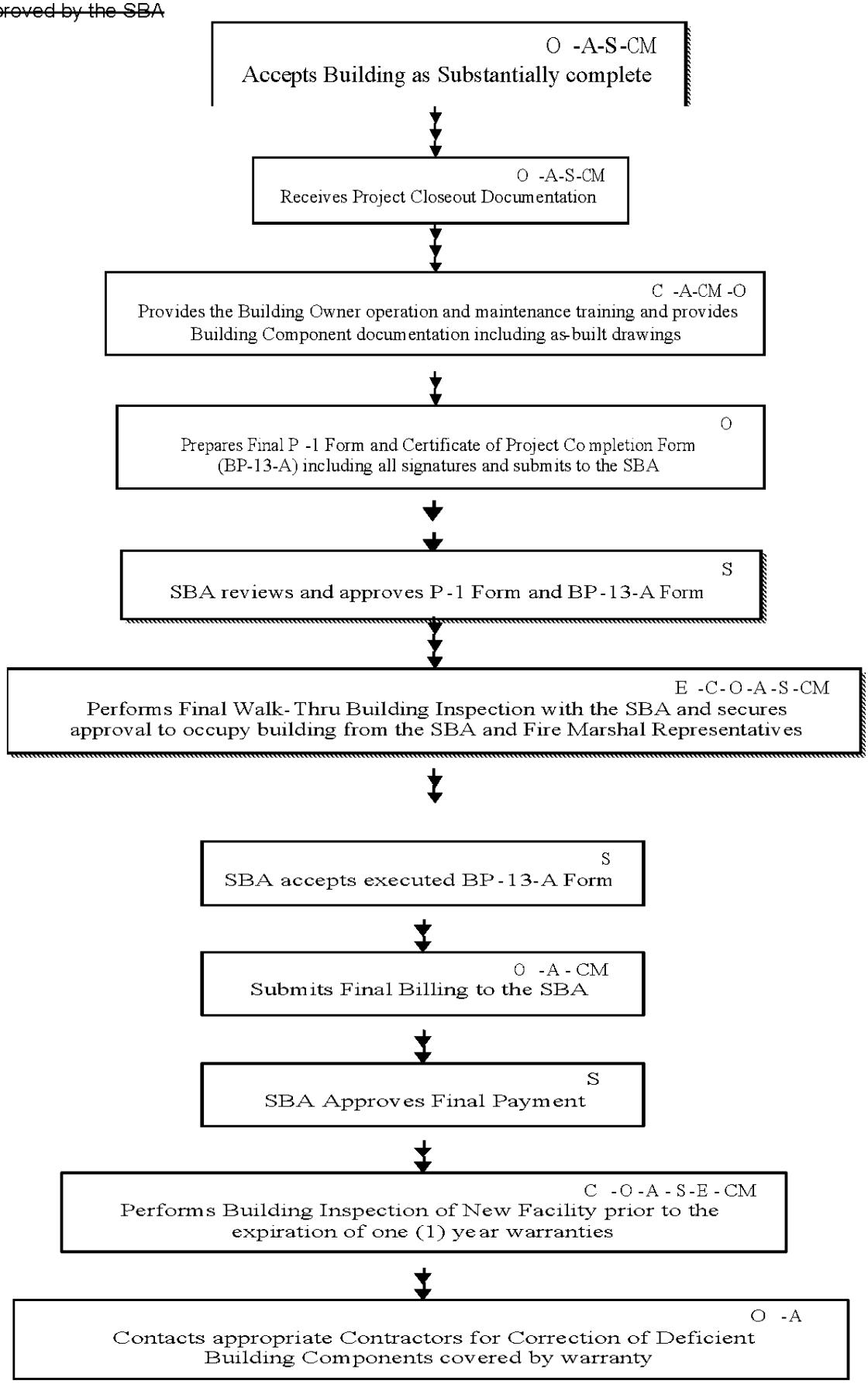
A -CM
Advertises for Construction Bids/Issue Bid Documents to prospective bidders

O -A-CM
Bid Opening– Submit Bid Tabulations and List of Subcontractors/Major Equipment Suppliers to the SBA within two (2) hours of Bid Opening time

S
SBA reviews and approves Bid information


O -A - CM
Award Construction Contracts
E -C - O - A - S - CM
Building Construction Phase
O -A-S-CM
Approves Payment Requests and Conducts On -site Project Meetings

~~Approved by the SBA~~



****

EXPLANATION OF ABBREVIATIONS THAT INDICATES WHO WILL PERFORM TASK:

A = Architect
C = Contractor
CA = Construction Analyst (When Applicable)
CM = Construction Manager (When Applicable)
E = WVDE (WV Department of Education)
FP = Facilities Planner
0 = Owner
S = School Building Authority
WBOE = State Board of Education
schoolconstprojdev