

Form #2

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OFFICE WEST VIRGINIA
CLOSED RULE OF STATE

NOTICE OF A COMMENT PERIOD ON A PROPOSED RULE

TITLE OF RULE BEING PROPOSED: _____

David A. Freed

Authorized Signature

ATTACH A **BRIEF** SUMMARY OF YOUR PROPOSAL

APPENDIX B

FISCAL NOTE FOR PROPOSED RULES

SCHOOL BUILDING AUTHORITY POLICY AND PROCEDURAL MANUAL

Rule Title:

Type of Rule:

☐ Legislative ☐ Interpretive ☒ Procedural

Agency:

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

Address:

2300 KANAWHA BOULEVARD, EAST
CHARLESTON, WEST VIRGINIA 25311-2306

Phone Number:

304-558-2541

Email: TAMELA.A.BREWER@WV.GOV

Fiscal Note Summary

Summarize in a clear and concise manner what impact this measure will have on costs and revenues of state government.

THESE CHANGES TO THE POLICY AND PROCEDURES WILL INHANCE THE INVOLVEMENT THAT THE SBA HAS ON PROJECTS FROM THE CONCEPTUAL STAGES OF PROJECT DEVELOPMENT TO THE COMPLETION OF THESE PROJECTS. THESE CHANGES WILL EFFECT THE PROJECT DELIVERY, PLANNING, DESIGN AND CONSTRUCTION ADMINISTRATION PROCEDURES TO ADDRESS THE SBA's INABILITY TO CONTROL PROJECT SCOPE CREEP COSTS AND CONSTRUCTION SCHEDULE ISSUES.

Fiscal Note Detail

Show over-all effect in Item 1 and 2 and, in Item 3, give an explanation of Breakdown by fiscal year, including long-range effect.

FISCAL YEAR			
Effect of Proposal	Current Increase/Decrease (use "-")	Next 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 & 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

SCHOOL BUILDING AUTHORITY PROCEDURAL MANUAL

Rule Title:

Rule Title: _____

3. Explanation of above estimates (including long-range effect):

Please include any increase or decrease in fees in your estimated total revenues.

N/A

MEMORANDUM

Please identify any areas of vagueness, technical defects, reasons the proposed rule **would not** have a fiscal impact, and/or any special issues **not** captured elsewhere on this form.

N/A

Date: June 25, 2015

Signature of Agency Head or Authorized Representative

David A. Arund

School Building Authority of West Virginia
POLICIES & PROCEDURES HANDBOOK
SUMMARY OF REVISIONS

Appendix F

1. a-c

Project Development – These changes formalize the process currently in place and assures SBA involvement in project development, and requires counties to meet with the SBA staff during the conceptual stages of project development.

2. b

Project review criteria – These changes reflect the legislative language currently in place and formalizes the 9th criteria used in project evaluations relating to the effective and efficient use of state funding for the projects being considered.

3.d

SBA staff involvement in the project presentation – This new language requires the county boards to work with the SBA staff as they prepare for their interviews to ensure they provide the Authority a thorough understanding of each project's scope of work and costs.

Appendix I

Architectural/Engineering and construction regulations project design services – These changes simply separates the procedures for hiring architects/engineers from the construction manager service.

I.B.

SBA Supplemental Conditions to the Owner/Architect Agreement – This new language provides a schedule for the introduction of Building Information Modeling (BIM) into school designs.

I.D.

Require Architects/Engineers to release building design CAD files to trades contractors and construction managers for their use in coordination of all work.

I.G.

Prototypical School Design – Requires County Boards of Education to consider prototypical schools previously designed as their new schools are planned.

I.H.

New supplemental language to the Owner/Architect agreement – This new language requires Architect/Engineer to pay for change orders relating to Construction Analyst (CA)/Construction Manager (CM) or SBA review comments not incorporated into the bidding documents that result in a construction change order. This new language also limits the use of owner contingency funding for change orders relating to Architect/Engineer errors and omissions.

II.A.

New supplemental language regarding Safe School Design – This supplemental language applied to the Owner/Architect agreement eliminates current design requirements relating to crime prevention and inserts new language that requires Architects/Engineers to review and incorporate school access safety design elements into the project that reflects the schools vulnerability and risk assessment study performed during the SBA School Access Safety Program.

II.D.

This new policy requires County Boards of Education to perform more stringent site feasibility studies prior to purchasing property for school constructions.

II.R.

Project Closeout Requirements – This new language strengthens the current requirements for the evaluation of Contractors and Architects/Engineers, by requiring SBA staff involvement in the evaluation process.

PROFESSIONAL SERVICES OF THE CONSTRUCTION MANAGER

Revises current language regarding Construction Managers and creates a Construction Manager(s) as an agent of the SBA.

EDUCATIONAL SPECIFICATIONS

Establishes new requirements for County Boards of Education that inserts an SBA representative into the educational planning process in lieu of the Architects acting as the Educational Facilities Planner.

Appendix J.

6.1.4 Penalties for Noncompliant Performance – These changes strengthen current policy regarding penalties for poor or noncompliant work and adds failure to comply with the project schedule or phasing plan as an offense that will place the contractor on the probationary list and subject to a minimum of 1 year suspension from bidding on SBA projects.

6.3.2.8-9 Project Schedule Confirmation – Changes in these articles require all prime contractors to take creative action on their subcontractors requiring them to comply with the construction schedule.

SBA FORMS

189

Contract service responsibilities summary for County, Architect and Construction Manager - This new form creates a matrix of responsibilities for all contracting parties.

190

Building Information Modeling (BIM) Guidelines and Standards – This new form creates requirements for Building Information Modeling (BIM) and describes deliverables for design firms.

191

Building Information Modeling Proficiency Matrix – The Building Information Modeling experience level of the design team and contractors prior to beginning the projects.

192

Building Information Modeling Implementation Plan – This new form establishes requirements for the design firm to follow based on the level of development required for the design model.

TITLE 164
LEGISLATIVE RULE
SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

SERIES 1
SBA REQUIREMENTS FOR COMPREHENSIVE EDUCATIONAL
FACILITY PLANS

§164-1-1 General

- 1.1. Scope – This legislative rule establishes the guidelines and procedures related to requirements for Comprehensive Educational Facility Plans.
- 1.2. Authority - §18-9D-20.
- 1.3. Filing Date – ~~April 2, 2008~~
- 1.4. Effective Date – ~~April 2, 2008~~

§164-1-2 Incorporation by Reference

- 2.1. A copy of Appendix A, B, and C 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.

§164-1-3 SBA REQUIREMENTS FOR COMPREHENSIVE EDUCATIONAL
FACILITY PLANS

- 3.1 Educational Agency Comprehensive Educational Facility Plans (CEFP) shall be developed in accordance with State Board Policy 6200, the “Handbook on Planning School Facilities,” and approved by the SBE prior to any consideration by the SBA.
- 3.2 Each educational agency plan will identify specific projects that are being presented for competitive SBA funds. These plans will include how the project will effectively address the following issues:
 - 3.2.A Student Health and Safety
 - 3.2.B Economics of Scale (Appendix A) economies of scale based on minimum allowable enrollments are as follows:

1. Elementary schools with an enrollment of 300 students in grades 1-6, 200 in grades 1-4, or a minimum of 2 classes (25 each) per grade level, are recommended to achieve the economy of scale. Early childhood, kindergarten and exceptional students may increase this minimum standard.
2. Middle and junior high schools with an enrollment of 450 students in grades 7-9 or 6-8, 5-8 schools with 600 students, or schools with 150 students per grade level minimum are recommended to achieve the economy of scale at the intermediate level.
3. High schools with an enrollment of 600 students in grades 10-12, 800 students in grades 9-12 or 200 students at each grade level are recommended to achieve the economy of scale.
4. These enrollments will be considered in determining eligibility for all SBA funding for early childhood, intermediate and adolescent facilities.
5. Geographic or other considerations may require exceptions to be considered. Regional planning across county lines should also be considered to achieve these minimum enrollment standards where population centers warrant.

3.2.C Reasonable Travel Time and other Demographics

3.2.D Multi-County and Regional Planning

3.2.E Curricular Improvement and Diversifications

3.2.F Innovations in Education

3.2.G Adequate Space for Projected Student Enrollment

3.2.H A history of the county's efforts to propose and/or adopt local school bond issues or special levies for capital improvements.

3.3 A ten-year time line for the implementation of the total plan indicating when each proposed facility action is to be taken and each project is to begin.

3.4 A completed Facility Classification Report that classifies each facility in the county. (SBA/WVDE Form 116)

- 3.5 Narratives on each existing school facility describing future use and scheduled improvements.
- 3.6 Completed building evaluation forms on each facility in the county using the SBA School Facilities Evaluation and Inventory Instrument including cost summaries indicating the cost to upgrade to meet current standards. (SBA 134)
- 3.7 An assurance that the county is in compliance with the SBE order regarding housing of Special Education programs in segregated facilities.
- 3.8 A Major Improvement Plan (MIP) which addresses the requirements established by the SBA. (Appendix B)

§164-1-4 Inter-County Feasibility Studies

- 4.1 Each county shall submit to the SBA/SBE a list of grouped, inter-county attendance areas where potential exists for cooperative utilization of a facility between or among adjacent counties. (May include multi-county facilities, i.e., magnet school, area vocational centers, etc.)
- 4.2 A planning study is to be completed to assure that an efficient and effective instructional delivery system will be utilized addressing each of the items indicated in SBE Policy 6200, "Handbook on Planning School Facilities," 100.01 (A-J) as well as the issues 1 thru 8 in 1.1 B of the SBA Policy and Procedures Handbook.
- 4.3. A detailed analysis of the results of this study and a facility recommendation based on its conclusion shall be included.

§164-1-5 Synopsis of Public Comment

- 5.1 Prior to submitting the CEFPP to the SBE and the SBA, one or more public hearing(s) must be held to provide broad-based community input into the plan. Notice of such hearings shall be published as a Class I legal advertisement in compliance with the provisions of 59-3-1 et seq. of the Code of West Virginia. As an addendum to the CEFPP, sufficient documentation, including verification of public notices from the local newspapers and a synopsis of all comments received during the hearings must be included.

§164-1-6 Objective Evaluation of Implementation

As part of the total CEFPP, the county shall include an objective means to be utilized in evaluating implementation of the overall plan and each project included therein (SBA 150). The evaluation shall measure:

- 6.1 How each project further the quality educational goals of the SBA as defined in WV Code 18-9D-16. This shall include: student health and safety, economies of scale, travel time and other demographics, achievement of effective and efficient instructional delivery system, curricular improvements, and innovations in education, adequate space for projected student enrollments and local effort in funding school facility improvements.
- 6.2. How the overall success of any project has related to the facilities plan of the county and the overall goals of the SBA.
- 6.3. Prior to submission of a new ten year CEFP, an evaluation report shall be completed and submitted to the SBA and the SBE. (In addition to the evaluation criteria included in your plan the report shall include the issues designated in SBA Form 134 of the SBA Policy and Procedures Handbook).
- 6.4 Amendments that initiate major revisions of the CEFP within the ten year planning cycle shall include how the existing plan no longer meets the goals and needs of the county and the goals of the SBA.

§164-1-7 Additional Requirements and Administrative Assurances

A statement of assurance by the county superintendent that the county's plan includes all requirements in Section 1 of the SBA Policy and Procedures Handbook.

§164-1-8 CEFP Management – Amendments

- 8.1 Amending the County CEFP Plan - Because the CEFP is a living document that may be updated periodically based on approved amendments and the continually changing needs of the county, it is necessary to formally update the plan annually. (Appendix C)
 - 8.1.A Major revisions to the CEFP including the MIP, are to be submitted to the SBE and the SBA by December 1 each year.
 - 8.1.B A major revisions would include the addition of new schools, school closures that have been approved by the SBE, a reclassification of all existing schools or the addition of a capital improvement project with a value greater than \$25,000.
 - 8.1.C Final approval of all closures remains the responsibility of the SBE. The CEFP will be amended by the SBA to reflect school closures only after SBE action.

- 8.1.D The county CEFPP is to be maintained as a working document and is to be updated as amendments or actions to implement the plan are completed.
- 8.1.E Amendment requests that make major revisions prior to the end of the ten year planning period shall be submitted with an evaluation of the current approved plan in accordance with §164-1-6.
- 8.2 Budget Amendments to CEFPP
 - 8.2.A Routine amendments on projects using partial or full SBA funding or any state or federal funds must be amended through the SBE and the SBA.
 - 8.2.B SBA/SBE Form 106 must be completed fully and submitted to the SBE and SBA for approval in order to institute an SBA budget amendment. SBA Needs and MIP funds cannot be transferred from one project to another.
 - 8.2.C SBA/SBE Form 106 must also be used to initiate budget amendments to both the SBE and SBA for all projects regardless of the funding source if the instructional square footage is altered, or the work exceeds \$50,000.

SBA Policy and Procedures
RULE 1

SBA REQUIREMENTS FOR COMPREHENSIVE EDUCATIONAL FACILITY PLANS

- 1.1** A. Educational Agency Comprehensive Educational Facility Plans (CEFP) shall be developed in accordance with State Board Policy 6200, the "Handbook on Planning School Facilities," and approved by the SBE prior to any consideration by the SBA.
- B. Each educational agency plan will identify specific projects that are being presented for competitive SBA funds. These plans will include how the project will effectively address the following issues:
1. Student Health and Safety
 2. Economics of Scale (Appendix A) economies of scale based on minimum allowable enrollments are as follows:
 - a. Elementary schools with an enrollment of 300 students in grades 1-6, 200 in grades 1-4, or a minimum of 2 classes (25 each) per grade level, are recommended to achieve the economy of scale. Early childhood, kindergarten and exceptional students may increase this minimum standard.
 - b. Middle and junior high schools with an enrollment of 450 students in grades 7-9 or 6-8, 5-8 schools with 600 students, or schools with 150 students per grade level minimum are recommended to achieve the economy of scale at the intermediate level.
 - c. High schools with an enrollment of 600 students in grades 10-12, 800 students in grades 9-12 or 200 students at each grade level are recommended to achieve the economy of scale.
 - d. These enrollments will be considered in determining eligibility for all SBA funding for early childhood, intermediate and adolescent facilities.
 - e. Geographic or other considerations may require exceptions to be considered. Regional planning across county lines should also be considered to achieve these minimum enrollment standards where population centers warrant.
 3. Reasonable Travel Time and other Demographics
 4. Multi-County and Regional Planning
 5. Curricular Improvement and Diversifications
 6. Innovations in Education
 7. Adequate Space for Projected Student Enrollment
 8. A history of the county's efforts to propose and/or adopt local school bond issues or special levies for capital improvements.

- C. A ten-year time line for the implementation of the total plan indicating when each proposed facility action is to be taken and each project is to begin.
- D. A completed Facility Classification Report that classifies each facility in the county. (SBA/WVDE Form 116)
- E. Narratives on each existing school facility describing future use and scheduled improvements.
- F. Completed building evaluation forms on each facility in the county using the SBA School Facilities Evaluation and Inventory Instrument including cost summaries indicating the cost to upgrade to meet current standards. (SBA 134)
- G. An assurance that the county is in compliance with the SBE order regarding housing of Special Education programs in segregated facilities.
- H. A Major Improvement Plan (MIP) which addresses the requirements established by the SBA. (Appendix B)

1.2 Inter-County Feasibility Studies

- A. Each county shall submit to the SBA/SBE a list of grouped, inter-county attendance areas where potential exists for cooperative utilization of a facility between or among adjacent counties. (May include multi-county facilities, i.e., magnet school, area vocational centers, etc.)
- B. A planning study is to be completed to assure that an efficient and effective instructional delivery system will be utilized addressing each of the items indicated in SBE Policy 6200, "Handbook on Planning School Facilities," 100.01 (A-J) as well as the issues 1 thru 8 in 1.1 B of the SBA Policy and Procedures Handbook.
- C. A detailed analysis of the results of this study and a facility recommendation based on its conclusion shall be included.

1.3 Synopsis of Public Comment

Prior to submitting the CEFPP to the SBE and the SBA, one or more public hearing(s) must be held to provide broad-based community input into the plan. Notice of such hearings shall be published as a Class I legal advertisement in compliance with the provisions of 59-3-1 et seq. of the Code of West Virginia. As an addendum to the CEFPP, sufficient documentation, including verification of public notices from the local newspapers and a synopsis of all comments received during the hearings must be included.

1.4 Objective Evaluation of Implementation

As part of the total CEFPP, the county shall include an objective means to be utilized in evaluating implementation of the overall plan and each project included therein (SBA 150). The evaluation shall measure:

- A. How each project further the quality educational goals of the SBA as defined in WV Code 18-9D-16. This shall include: student health and safety, economies of scale, travel time and other demographics, achievement of effective and efficient instructional delivery system, curricular improvements, and innovations in education, adequate space for projected student enrollments and local effort in funding school facility improvements.
- B. How the overall success of any project has related to the facilities plan of the county and the overall goals of the SBA.
- C. Prior to submission of a new ten year CEFPP, an evaluation report shall be completed and submitted to the SBA and the SBE. (In addition to the evaluation criteria included in your plan the report shall include the issues designated in SBA Form 134 of the SBA Policy and Procedures Handbook).
- D. Amendments that initiate major revisions of the CEFPP within the ten year planning cycle shall include how the existing plan no longer meets the goals and needs of the county and the goals of the SBA.

1.5 Additional Requirements and Administrative Assurances

A statement of assurance by the county superintendent that the county's plan includes all requirements in Section 1 of the SBA Policy and Procedures Handbook.

1.6 CEFPP Management – Amendments

- A. Amending the County CEFPP Plan – Because the CEFPP is a living document that may be updated periodically based on approved amendments and the continually changing needs of the county, it is necessary to formally update the plan annually. (Appendix C)
 - 1. Major revisions to the CEFPP including the MIP, are to be submitted to the SBE and the SBA by December 1 each year.
 - 2. Major revisions include the addition of new schools, school closures that have been approved by the SBE and reclassification of all existing schools.
 - 3. Final approval of all closures remains the responsibility of the SBE. The CEFPP will be amended by the SBA to reflect school closures only after SBE action.

4. The county CEFP is to be maintained as a working document and is to be updated as amendments or actions to implement the plan are completed.
 5. Amendment requests that make major revisions prior to the end of the ten year planning period shall be submitted with an evaluation of the current approved plan in accordance with Section 1.6.
- B. Budget Amendments to CEFP
1. Routine amendments on projects using partial or full SBA funding or any state or federal funds must be amended through the SBE and the SBA.
 2. SBA/SBE Form 106 must be completed fully and submitted to the SBE and SBA for approval in order to institute an SBA budget amendment. SBA Needs and MIP funds cannot be transferred from one project to another.
 3. SBA/SBE Form 106 must also be used to initiate budget amendments to both the SBE and SBA for all projects regardless of the funding source if the instructional square footage is altered, or the work exceeds \$50,000.

SBA Policy and Procedures
RULE 2

2 FUNDING SCHOOL BUILDING AUTHORITY PROJECTS

2.1 Matching Funds

With exception of School Access Safety Funds, no matching local funds shall be required to obtain SBA funds, however, each facility plan shall address the history of efforts taken by the county board of education to propose or adopt local school bond and/or special levies for capital improvements.

2.2 Federal Funds

Expenditure of any federal funds designated for construction and/or capital improvements of school facilities shall be approved by the SBA. SBA/SBE Form 106 and/or SBA Exhibit C is/are to be utilized for approval request if funds are to be approved initially for use on a new project or if federal funds are to be amended into an existing project budget.

2.3 Eligibility and Distribution of Funds

It is the intent of the legislature that the SBA fund the improvement and construction of school facilities to meet the needs of the people of West Virginia in an efficient and economical manner. To be eligible for funding, educational agencies must have on file in the SBA office an approved CERP and all required pre-qualification data for any particular funding category from which funding is being requested. Failure to provide this information or project proposals by the deadlines established by the Authority will eliminate the submitted project from consideration. These funds shall be distributed as follows:

- A. Three Percent (3%) Statewide Grants – Three percent (3%) of the total funds available to the Authority for distribution from the school construction fund during any funding cycle may be utilized for projects. Facilities eligible for three percent (3%) funding:
 - 1. Must serve the statewide educational community,
 - 2. House educational programs under the jurisdiction of the SBE, or
 - 3. House vocational programs at comprehensive high schools and/or vocational schools cooperating with community and technical college programs.Any project funded, must be included in an approved ten-year facilities plan submitted by the State Board or Administrative Board of the facility. Projects submitted must include any and all other funding sources potentially available for the project. Grant funds shall expire based on a three year contractual agreement between the SBA and the grantee.
- B. Emergency Grants – Funds amounting to no more than two percent (2%) of the total funds available for distribution from school construction funds shall be set aside as an emergency fund to be distributed in emergency situations as defined by the Authority. Application for such funds shall be in accordance with SBA procedures. (Appendix D) Grant funds shall

expire based on a three year contractual agreement between the SBA and the grantee.

- C. Planning Grants – Effective and efficient use of resources can best be assured through appropriate development of the ten-year Comprehensive Educational Facilities Plan required in SBE Policy 6200. Therefore, if funds are deemed available, the SBA may provide grants to assist counties with the development of their CEFP for the successive ten-year planning period. These grants will be made available only during the final two years of each ten-year planning period. Planning grants will be used to assist the county boards and area vocational centers with a portion of the cost for professional services associated with the research and development of the ten year CEFP. The SBA will establish the amount available for distribution prior to each ten year planning cycle.
- D. School Construction Grant “Need” – The remaining monies determined by the Authority to be available for distribution from school construction funds shall be allocated and expended on the basis of needs and efficient use of resources. The SBA shall make funding determinations in accordance with the provisions of the Code of West Virginia and shall assess existing school facilities and each facilities plan in relation to the needs of the individual student, general school population, the communities served by the facilities and facility needs statewide. Grant funds shall expire based on a three year contractual agreement between the SBA and the grantee and may be extended up to two years at the discretion of the SBA.
- E. Major Improvement Program Grants – Funds appropriated by the legislature to the school major improvement fund shall be distributed by the SBA on the basis of need. These funds are for major renovation or rehabilitation of existing facilities and for additions to existing schools. Grants to counties from the major improvement fund are for projects of at least \$50,000 but not exceeding \$1,000,000. A county may be eligible for major improvement funds provided:
 - 1. The county has an approved Major Improvement Plan (MIP). (Appendix B)
 - 2. The county is ready to expend the funds in the fiscal year monies are distributed to them.
 - 3. The county has spent, in the previous year, an amount in maintenance of their schools equal to the average of the lowest three of the past five years maintenance budget.
 - 4. The county has budgeted in their current maintenance budget an amount equal to or greater than the average determined in item three above.
- F. School Access Safety Grant – Funds appropriated by the legislature to the School Access Safety Fund shall be distributed by the SBA based on the availability of funding. These funds are for improvements of school access safety and will be distributed in accordance with SBA Policy

provided the county board is in compliance with all requirements in Appendix K of the SBA Policy and Procedures Manual.

2.31 HVAC Engineering Studies

Needs and MIP projects involving heating, ventilating and air-conditioning renovations must be accompanied by an engineering study and complete estimate of probable cost to be considered for funding. The engineer performing the study must be licensed in the State of West Virginia and must be registered in the discipline for which the proposed renovation relates. Projects involving the redesign of HVAC systems must be accompanied by an engineering study outlining the scope of work proposed and cost estimate for completion.

2.4 Awarding of Funds

Any project for which funds are being requested from the SBA must be part of an approved CEFPP identified either as a major need or major improvement.

A. Three Percent (3%) Statewide Grants

1. Projects eligible for three percent (3%) statewide funds include any facility that serves the educational community statewide or houses educational programs that are under the jurisdiction of the SBE, regional vocational-technical centers, as well as county vocational centers.
2. Projects submitted for competitive funding from the three percent (3%) designation must include information regarding the following areas as described in the "Handbook on Planning School Facilities" wherein applicable:
 - a. An analysis of the community being served.
 - b. A study of the population and enrollment.
 - c. The education plan.
 - d. An evaluation of the existing facility.
 - e. The financing plan for the project.
 - f. Translation of educational needs into facility needs.
 - g. A School Construction Fund Project ("Needs") Executive Summary (SBA 120)
 - h. An explanation of how the project relates to the major items presented in 1.1 B (1 thru 8) of the SBA Policy and Procedures Handbook.
3. All projects submitted for three percent (3%) funding shall be submitted directly to the SBA which shall be solely responsible for the evaluation and selection of all projects.
4. Projects submitted that are under the jurisdiction of the State Board of Education will be forwarded by the SBA to

the State Board of Education for review and recommendation.

B. Five Percent (5) Multi-Use Vocational-Technical Education Facilities Funds

An amount up to 5% of available funds from the school construction funds may be made available by the Authority during any funding cycle for projects at Multi-Use Vocational-Technical Education Facilities. Projects eligible for five percent (5%) statewide funds include:

1. Any facility that serves the vocational-technical educational community and,
2. Is under the jurisdiction of the SBE, a county board of education, a Regional Administrative Council, or joint Administrative Board that may include post-secondary programs as a first priority.

Projects funded from the five percent (5%) vocational fund may include expenditures for equipment and equipment updates. Project applications shall be submitted to the Authority in accordance with the Needs Grant Fund process described in 2.4 E. Prior to distribution of funds in any given funding cycle, the Authority shall consider the amount, up to 5% of the total available for distribution that shall be set aside for this purpose.

C. "Emergency Funds

1. The Emergency Fund is available at the discretion of the Authority to assist where emergency situations endanger a safe and healthful environment for students.
2. To qualify for a grant from the emergency fund:
 - a. Need must have been generated by an unforeseeable catastrophic event (i.e., fire, wind, earthquake, flood, storm, etc.), general disaster or Act of War.
 - b. Funds from federal, state and local sources for emergency repairs and replacements must have been identified and included in the project budget.
 - c. All insurance claims must have been filed and amount of settlement determined. Insurance coverage of a facility should be equal to the cost of replacement.
3. State School Improvement funds including Emergency Grants will only be considered for buildings covered by flood insurance or buildings effected by flooding that are outside the established 100 year flood plain and therefore not eligible for flood insurance. Buildings eligible for

flood insurance but not insured by the county will not be eligible for SBA funding.

4. Because of limited resources in the Emergency Fund, and to encourage local boards of education to appropriately insure their facilities, grants from the Emergency Fund shall be limited to an amount not to exceed two million dollars for any and all damage to schools incurred during any given catastrophic event.
5. Application shall be made within ten days after said emergency to the SBA and in accordance with adopted SBA procedures. (Appendix D)

D. CEFPP Planning Grants

1. It is the responsibility of each county to develop and implement a ten-year Comprehensive Educational Facilities Plan (CEFP) in accordance with SBE Policy 6200 beginning with the year 1990 and for each successive ten-year planning period thereafter.
2. The SBA may provide a one-time grant during the allotted planning period to attain professional consultation in the development of said county-wide CEFP. (Appendix E)
3. The planning/grant period shall include the final two years of the existing ten-year planning period and shall be available during each successive ten-year planning period as funds are determined available for distribution by the Authority.
4. The effective date for new CEFPs shall be established by the Authority. Therefore, the current grant period shall incorporate both the year before the end of the ten year planning cycle and the year of the expiration of the ten year planning cycle. Availability of funds shall begin on July 1, twenty-four months prior to the deadline for submission of the ten year plan and expire in 24 months or June 30, of the year the plan is required to be completed. However, a county will not be eligible for SBA funding after the CEFP expiration date without an approved CEFP. Any monies remaining in the fund shall be expired to the construction fund.
5. Grants shall not exceed 50% of a county's cost for said consulting services and limits of the grant amount shall be established by the Authority for each ten year planning period.
6. Professional consultants shall be selected in a manner approved by the SBA. To achieve consistency among all county plans, the SBA may provide educational facilities planners and architectural/engineering consulting

professionals to assist with the preparation of each county plan. (Appendix E)

7. The SBA and SBE may monitor the planning process and set submission deadlines for portions of the CEFP.

E. School Construction Funds “Needs” Grants

1. Each county in West Virginia who has an approved CEFP is eligible for capital improvement funds from the SBA based on the needs of the facilities in their district.
2. Each county is responsible for determining in their facilities plan the specific project(s) for which SBA School Construction Fund (“Needs”) will be requested. This individual project will be fully developed in regard to the issues indicated in 1.1 in the SBA Policy and Procedures Handbook and have a SBA School Construction Funds Project (“Needs”) – Executive Summary completed. (SBA 120)
3. Proposals for School Construction Fund projects must be part of an approved CEFP, and submitted at the request of the Authority based upon the availability of funds for distribution.
4. The SBA will appoint a plan review advisory team that will assist the SBA staff in an advisory role during the review of each project submitted by the counties. The Authority reserves the right to request review of any or all projects submitted to them that they feel has special merit or extenuating circumstances. (Appendix F)
5. The Authority will review and evaluate the projects based upon criteria set forth in WV Code 18-9D-16(d) and 1.1 of the SBA Policy and Procedures Handbook. The SBA staff will provide on-site information and project evaluations for all projects to the Authority for final review and funding consideration along with a prioritized list of potential projects based on staff and advisory team evaluations. At the conclusion of each funding cycle, each county shall receive an explanation of the evaluating factors underlining the decision of the Authority to fund or not to fund the project. Additionally, prior to final action on approving projects for funding, the Authority shall submit a certified list of the projects to the Joint Committee on Government and Finance.

F. Major Improvement Funds

1. Each county or educational agency that has an approved Major Improvement Plan (MIP) as part of an approved CEFP and meets the criteria in Section 2.3 of the SBA

Policy and Procedures Handbook is eligible for capital improvement funds from the SBA's Major Improvement Fund.

2. Major Improvement Plan (MIPs) are developed by each county or educational agency in accordance with the guidelines in Appendix B and approved by the SBA. The MIP shall address how the proposed plan, and any project in it, meets the following goals and objectives as established by the SBA in Appendix B.
3. Each county shall submit as part of their annual CEFP Update a prioritized list of MIP projects for SBA review. The most needed project shall be further developed to address the criteria of the SBA as indicated in Appendix B and submitted for funding consideration.
4. The SBA shall review and rate the projects for funding each year in the manner prescribed in Appendix B.
5. MIP Funds shall expire based on a two year contractual agreement between the SBA and the grantee. An extension of funds will not be granted.

G. School Access Safety Grants

1. Each county board with an approved School Access Safety Plan who meets the eligibility requirements of the School Access Safety Act (Rule 7 and Appendix K of this Handbook) will qualify for school access funds.

H. Reserve Funds – Needs Projects

SBA Reserve Grant funding may be provided by the Authority at its' discretion in an amount not to exceed \$500,000 for meritorious projects determined to be eligible under the "Needs" based school construction fund. These funds shall be set aside and not expended awaiting final approval of the project budget by the SBA. The purpose of these funds is to establish SBA support for a project and to acknowledge the intent of the Authority to fund the appropriate balance of the project as funds become available and the county finalizes an SBA approved finance plan for the project. These funds will be held by the Authority for a period established in the grant agreement between the county board and the SBA not to exceed eighteen months. Upon approval of the actual needs grant to develop the project an additional three (3) years will be provided to complete the design and construction of the facilities established in WV Code 18-9D-15(f). Should the grant recipient fail to secure the remaining project funds to complete the entire finance plan for the project these funds will automatically revert to the school construction fund and be made available for distribution to other projects.

2.5 Utilization of Funds – Authorized Expenditures

- A. Bond Retirement
 - 1. With approval of the funding agency, SBA funds may be dedicated to the payment of local bonds that were used for the purposes defined in an approved facility plan.
 - 2. With SBA approval, state funds may be used for the repayment of local bonds issued by the Authority for the benefit of the county, but are in addition to bond monies made available by the Authority.
- B. Construction Costs – SBA funds may be used for capital improvement projects including new construction, additions or renovations to existing facilities, provided, such project meet the SBA guidelines and are approved by the SBA. Allowable costs of construction will be reviewed and approved annually by the Authority on or before the June Quarterly meeting. SBA funds cannot be transferred from one project to another.
- C. Major Improvement Funds – MIP Grants awarded to an agency for projects from their MIP must be for projects of at least \$50,000 but not exceeding \$1,000,000. It is intended that each county's routine maintenance budget be responsible for general repairs and upkeep of school facilities. Projects designed to supplant these county funds will not be considered as fundable from the major improvement fund.

2.6 SBA Funds Accounting

- A. Treasurer's Report
 - 1. A separate account shall be set up within the fiscal records of the individual county to account for all SBA funds. All records shall be maintained pending a final project audit.
 - 2. Funds expended for a multi-county project shall be distributed to the county designated as the fiscal agent for the project.
- B. Budget Coding
 - 1. County budgets must be supplemented when a grant transfer letter is received from the SBA. This letter will accompany the Grant Agreement and will inform the county that monies will be transferred from the state account to the county's account at the custodial bank at the time the signed contract is received by the SBA.
 - 2. Monies must be supplemented into the general current expenditure funds (Fund 1).
 - 3. All funds to be utilized for capital improvement, regardless of the source, are to be coded in project 25 utilizing the following code numbers:

25X1X – All SBA Funds
25X3X – Local Funds
25X4X – Federal Funds
25X5X – Better School Amendment Funds
25X9X – Other Funds

2.7 Reimbursement Procedures

- A. Funds will be distributed through a requisition process wherein:
1. Original invoices are submitted to the SBA offices and to the trustee of the account (bank) before the fifth (5th) day of each month. Submission to both entities is required to transact payment to the county.
 2. Invoices for each project code will be grouped together with one requisition cover sheet for each project code. (SBA 104)
 3. Each requisition sheet must be signed by the superintendent of schools with certification that the previous month's invoices were paid to the vendors (Item C on Exhibit B)
 4. Invoices are reviewed in the SBA Office between the fifth (5th) and the tenth (10th) of each month.
 5. Checks are written to reimburse the counties for approved expenditures on the fifteenth (15th) of the invoice month unless additional data is requested by the SBA.
 6. Should clarification of a specific invoice or the status of a specific project be required, payment may be delayed until support data to verify the expenditure is provided to the SBA.
 7. A BP-13-A or SBA Certificate of Contract Completion for Multiple Prime Projects (SBA 139) form to verify completion of a contract must be submitted prior to the request for final payment on every contract. A retainage equal to five percent (5%) of the total contract construction cost will be held by the SBA until the contract is officially closed by submission of the completed BP-13-A and signed by a representative of the SBA. (WVDE BP-13A & SBA 139)
 8. No educational facility shall be occupied without prior approval from the Authority and the appropriate state and county regulatory agencies.

SBA Policy and Procedures
RULE 3

3 FUNDING SPECIFIC FACILITY PLANS

3.1 Building Gross Areas

- A. Allowable gross square foot building areas shall be reflective of the student population and the educational program. The building design shall maintain a minimum program utilization of 85% unless this requirement is waived by the SBA due to extenuating circumstances (i.e., specialized classrooms in comprehensive high schools, declining or increasing student populations, middle school grade configurations and elementary school restrictive classroom enrollments). The actual maximum square footage approved for construction may or may not be equal to the maximums established by the SBA.
- B. In order to encourage efficiency, yet continue to provide funding for small rural community schools that may be geographically isolated from other schools, those schools funded with enrollments below the SBA enrollment ranges (See Appendix A) shall be planned on an individual school basis. The actual square footage shall be dictated by prior agreed upon design enrollments and space required to house the number of students and curricular offerings.
- C. With exception of the small school design procedure, all other schools maximum gross building area allowances shall be computed as the product of the design enrollment times the SBA approved square foot allowance per pupil. The SBA will annually publish on or before the June Quarterly meeting the maximum allowable square footages for elementary, middle/junior and high schools based on the latest requirements of State Board Policy 6200 and SBA Policy and Procedures Handbook.

3.2 Prototypical School Design

- A. To encourage efficiency in school design, SBA standardized building performance criteria will be used and where possible, proto-type designs for common academic spaces will be incorporated into new school designs. Local boards shall consider complete building design proto-typing for each project. The SBA will, in cooperation with the local board, determine if and when existing building designs may be duplicated for other projects within the county. The maximum amount of architectural and engineering (A&E) design fees that will be paid from project funds will be determined by the SBA and will be based on the size and complexity of the project. Additional fees above the SBA maximum are allowable. However, these fees must be paid by the local board as a separate project cost. A&E fees will be adjusted in new school designs where extensive proto-typing is incorporated into the design by the SBA or county board of education.
- B. Prototypical school designs must be used when educational and design conditions exist that allow the reuse of a previous building design. The

local board in cooperation with the SBA staff will review this option and determine if the proposed school design may be prototyped from other school designs immediately following SBA approval of a new school project.

- C. Prototypical school design considerations include but are not limited to:
- School enrollment similarities
 - Educational Planning requirement similarities
 - Site and climatological conditions

3.3 Design Capacity

- A. Design capacity shall be defined as the 8th year projected enrollment of students expected to attend a school facility as indicated by historical enrollment trends and the ten year CEFPP enrollment projection.
- B. Vocational space for new comprehensive high schools will be reviewed for each individual project and shall be included as part of the total design capacity.

3.4 Allowable Construction Costs for New Construction

- A. SBA funded allocations for the construction of each facility will be limited through use of the maximum gross area allowance times (X) the most current SBA approved square foot cost for elementary, junior/middle and senior high schools.
- B. Construction cost per square foot may be adjusted by the SBA to reflect regional cost factors. Statewide construction costs will be reviewed annually and may be adjusted upwardly or downwardly for inflation based on actual and projected costs of projects constructed. This information will be reviewed and the construction cost allowances published by July each year.
- C. The construction costs allowance shall include site work, building construction cost, building furnishings and equipment, architectural and engineering fees, construction manager or clerk-of-the-works, survey work, geotechnical studies, radon testing, utility connections from the building to the property line and advertisements.
- D. New elementary schools with design enrollments less than 400 students will be provided a combined art and music classroom. New elementary schools with design enrollments greater than 400 students will be provided separate art and music classrooms. All new elementary schools shall be designed with a physical education space separate from the cafeteria. The size of the physical education spaces will be based on the student enrollment of the school and will comply with State Board Policy 6200 Guidelines.

- E. In compliance with WV Code 18-9D-19(c), auxiliary gyms are to be included as allowable construction costs in high schools that meet the minimum SBA efficiency enrollments of 800 students in grades 9-12.
 - 1. Auxiliary gym spaces shall be a maximum total of 6,000 square feet and 144,000 cubic feet.
 - 2. Spectator seating within the allowable 6,000 square feet may be up to 1,000 square feet.
 - 3. Approved costs for auxiliary gyms do not include spaces for additional locker, restroom, dressing room or office spaces.
 - 4. SBA funds for auxiliary gyms may not be used in conjunction with local funds to increase the size and/or spectator capacity of an auxiliary gym to create a second spectator gym.
- F. In compliance with WV Code 18-9D-19(b), comprehensive vocational facilities may be constructed in new high schools or existing high schools that meet the minimum SBA efficiency enrollments. The following criteria will be considered to determine the feasibility of construction of these spaces:
 - 1. The distance of existing vocational facilities from the new or existing high school location.
 - 2. The current demand of secondary students for vocational programs and/or the condition of the existing facilities must justify the need for additional/replacement spaces or the renovation of existing spaces.
 - 3. The construction of a vocational component at a new comprehensive high school or at an existing high school must not create an adverse effect on other county vocational students or vocational students from other counties. The SBA does not deem the construction of any additional vocational spaces feasible:
 - a. If it could result in the reduction of available vocational programs at the existing school.
 - b. If it results in the inefficient use of existing or new vocational space.
 - c. If it adversely reduces existing vocational center operational budgets.
 - d. If it could result in the closure of any existing county or multi-county vocational center currently serving the student population of two or more feeder schools.
- G. SBA Grant Funds may not be used for:
 - 1. Cost of issuance for local bonds or other indebtedness.
 - 2. Site acquisition, unusual utility extensions, unusual site preparation cost, access highways, repaving of existing parking lots or construction of athletic facilities.
 - a. Grant recipients are required to coordinate site selection for construction of new schools with the SBA prior to negotiations with seller or provider.

- b. If it is determined by the SBA that extensive utility costs, special footings or foundations or other site preparation costs will consume a disproportionate amount of the building construction cost, an alternate site must be used. However, the Authority may consider approval of the proposed site if the grant recipient elects to provide additional local funding to pay the cost of developing the proposed site. At the conclusion of the site selection process, the SBA will provide a site acceptance letter to the local board that will allow the site acquisition process to begin.
- 3. Construction or renovation of athletic facilities, computer equipment, instructional supplies and equipment.
- 4. Reimbursement of salaries for county employees. (County employees should not be utilized to work on SBA funded construction projects).
- 5. Legal fees associated with any court proceeding or property acquisition cost.
- 6. Costs associated with defense or award of an arbitration action.
- H. Contingency allowance for each new construction project shall be established as two percent (2%) of the construction budget.

3.5 Renovations

- A. For renovation work within an existing building, the computation is the product of the approved gross square footage of the project times (X) the percentage of the state building construction cost per square foot.
- B. The percentage is defined as the percentage of the cost of replacement of the facility. The percentage criteria is based upon the age of the existing building in which renovation work is scheduled. An older facility that has specific value to the community cannot be funded for more than the percentage indicated. Restoration or renovation beyond these funding levels must be addressed by local initiative.

40 years or more	60%
25 to 39 years	50%
16 to 24 years	40%
0 to 15 years	10%
- C. For a project with renovation work and an addition, the computation is the product of the approved square footage using the percentage of the building cost per square foot for renovation work added to the cost for the addition whose combined total must not exceed 65% of the cost of a new replacement building to qualify for SBA funding.
- D. Contingency allowance for each renovation project shall be established as four percent (4%) of the renovation budget.

SBA Policy and Procedures
RULE 4

4 PROJECT ADMINISTRATION AND REVIEW

- 4.1** Each educational agency receiving funding from the SBA shall appoint an administrator for the construction/funding program. This administrator shall be responsible for acting as the liaison to the SBA and for submitting the financial and project reports required by the SBA.
- 4.2** The educational agency shall be required to employ architectural/ engineering firms in compliance with WV Code 5G-1-3. The list of architect/engineers responding to the county's Request for Proposal shall be submitted to the SBA for review and evaluation prior to selection of the finalists by the educational agency. Services shall be rendered under standard AIA contracts approved by the SBA staff.
- 4.3** Unless a lump sum fee arrangement is used, design fees shall be calculated based on a percentage of the construction cost. Construction costs are calculated based on the lowest acceptable qualified bid for constructing the building. Design fees for alternative designs requested by the grant recipient that are not constructed shall be borne by the grant recipient unless approved by the SBA prior to bidding. Construction cost does not include fees for the construction manager, clerk-of-the-works, construction analyst (paid for under additional services), legal fees, site acquisition cost and B&O taxes or other project costs not directly associated with the construction of the building. Architectural and engineering fees may also be applied to the cost of furniture and equipment only if the architect prepared the bid packages and/or has direct administration over the contract for the installation of the furniture and equipment. Without approval of the SBA, architectural and engineering fees shall not exceed the SBA fee schedule established for new or renovated school construction. Reimbursable expenses for agency review document printing and distribution may be paid from grant funds as a reimbursable cost for printing and distributing.
- 4.4** 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. Candidates for professional services or clerks-of-the-works shall be submitted for SBA review, evaluation and approval prior to final selection by the educational agency. (Appendix I)

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.

4.5 Construction Management

The SBA will assign the project management strategy for all projects based on the scope of work and the county's ability to manage the project. Each project will be reviewed by the Authority following the approval of funding and requirements for

project design and construction administration will be identified by the Authority prior to executing the grant contract. If a construction manager is required, the grant recipient will be required to follow SBA Policy regarding the procurement of professional construction management services and West Virginia Code 5G-1-3. The construction management contract must be reviewed by the SBA staff and must be compatible with the design professional contract for the project.

4.6 Design-Build Project Delivery

Should a county board of education desire to use the design-build method of project delivery, the SBA and the requirements of the Design-Build Board of West Virginia must be followed. Appendix G provides the methodology to be used to procure a performance criteria developer, educational planner and the design-build team as well as the procedures that must be followed to request approval from the Design-Build Board and the SBA to use the design-build project delivery method. County boards considering using the design-build method of project delivery must review the process for selection of projects as described in the West Virginia Design-Build Procurement Act, Title 148CSR11 and must begin this process prior to submission of the project to the SBA for funding consideration. The project must also be submitted to the Design-Build Board for review and approval before soliciting the Invitation for Qualifications from qualified firms.

- 4.7** The SBA reserves the right to review any SBA funded project at intervals deemed necessary before, during or after construction begins. The architects, engineers and county administrators are responsible for including the SBA in the decision-making process during all phases of planning, design and construction beginning with the development of educational specifications. The SBA must be notified by the county of any meetings related to the planning of the project.

4.8 Geotechnical

For projects funded by the SBA, the educational agency shall be required to perform a geo-technical survey on any potential school construction site prior to the purchase of the site. The survey shall include a complete soil and substrata report to determine the suitability of the site for the construction. A copy of the report must be provided to the SBA office for review and approval of the cost impact on each site being considered prior to the purchase of the site. The report shall provide site preparation and building footings and foundation design information for the proposed site(s) specific to each site being considered for the project.

- 4.9** The SBA reserves the right to review all applications for payment or other invoices submitted against any SBA project. Completion of proper documentation by the educational agency and/or the company requesting payment shall be a prerequisite to any invoice being honored by the SBA.

4.10 The SBA reserves the right to review all county, clerk-of-the-works, project architect/engineer, and construction manager files related to an SBA funded project.

4.11 Occupancy of New Educational Facilities

4.110 Teachers and other employees shall be informed of the operation of the building, particularly fire escape routes, heating, ventilating and air conditioning systems and communications systems.

4.111 No educational facility shall be occupied without prior approval from the School Building Authority and the State Fire Marshal. (SBA 146)

4.112 Training of Custodians and County Maintenance Staff

At the conclusion of all construction projects, the contractor shall be responsible for providing pertinent product information including warranty and maintenance instruction to county officials, as well as provide training for county staff regarding the operation and maintenance of the building systems and materials. It is the responsibility of the county board of education to assure that staff is present during the training and has sufficient in-service instruction on all equipment in order to properly maintain the new or renovated facility. At the conclusion of the training, the local board shall provide assurances to the SBA that the training has been provided.

4.113 Within the first year of occupancy of any new SBA funded school facility the county is responsible for testing for the presence of radon in accordance with the guidelines and procedures of the West Virginia Bureau of Public Health in the facility. A follow-up radon test is mandatory every successive five years. Test results shall be filed at the school and with the West Virginia Bureau for Public Health.

SBA Policy and Procedures
RULE 5

5 SCHOOL BUILDING AUTHORITY CONTRACTS AND AGREEMENTS

5.1 Grant Agreement

- A. In order for SBA funds to be utilized for any project, a grant agreement between the educational agency and the SBA must be enacted. (Appendix H)
- B. New school designs in West Virginia shall comply with codes and standards as adopted by the State of West Virginia in accordance with 18-9E-3.
- C. Qualified contractors bidding on SBA projects will present acceptable liability insurance levels and a completed "Contractor's Qualification Statement" to the SBA for review prior to the award of the construction contracts. These documents are to be treated in highest confidentiality and are to be reviewed only by those involved with the selection of the contractor. A financial statement shall be required of the lowest qualified bidder(s) being considered for award of the contract. The "Contractor Qualification Statements" including subcontractors shall be submitted to the School Building Authority office by low bid contractors within 72 hours of the completion of the bid opening. (SBA 105)
- D. All bid documents prepared shall require that the lowest qualified bidder(s) submit a completed form SBA 123, List of Subcontractors and Major Equipment and Material Suppliers. This information must be submitted by the lowest qualified bidder(s) to the SBA office within two hours after the completion of the bid opening. Bid openings shall not occur after 2:00 p.m. local prevailing time. Failure to submit the list of subcontractors and major material suppliers within the two hour limit will result in the rejection of the bid.
- E. Work Based Learning Opportunities – To the extent practical, the constructing contractor on projects involving the new construction and renovations of Vocational, Technical and Adult Education facilities should work cooperatively with the county board of education or Administrative Council to establish work based learning experienced to introduce county vocational students to construction work practices as outlined in Appendix J.

SBA Policy and Procedures
RULE 6

6 SCHOOL BUILDING AUTHORITY REPORTING PROCEDURES

6.1 Financial, Planning and Construction Reports

- 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 G)
- 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.
- 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.
- 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.
- 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)

- 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 WV 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.

SBA Policy and Procedures
RULE 7

7 SCHOOL ACCESS SAFETY ACT GUIDELINES AND PROCEDURES

7.1 School Access Safety Funds –

Funds appropriated by the legislature to the School Access Safety Fund shall be distributed by the School Building Authority on the basis of net enrollment. These funds are for improvements of school access safety and will be distributed in accordance with SBA policy and in accordance with all requirements in Attachment K of the SBA Policy and Procedures Handbook.

7.2 Awarding of Funds

School Access Safety Grants

- A. Each county board who has an approved School Access Safety Plan and meets all the eligibility requirements of the School Access Safety Act established in WV Code §18-9F, will qualify for School Access funds.
- B. The School Building Authority will initially review the list of projects within the plan for compliance with the School Access Safety Act and based upon the availability of funding will annually review projects from within the plan for funding consideration.
- C. School Access Safety Grant projects must be included in the county's School Access Safety Plan (Appendix K) and must be a part of an approved comprehensive educational facilities plan (CEFP) or must be amended into the CEFP to be eligible for funding.
- D. School Access Safety funding provided by the School Building Authority must be expended within one year. The School Building Authority may grant a six month extension of funding if it is determined by the Authority that extenuating circumstances prevented the county from expending the funds within the one year period. Once expired by the School Building Authority, remaining funds shall be added to the total funds available to all counties in the School Access Safety Fund and distributed in future funding cycles.
- E. A local contribution in an amount equal to or exceeding 15% of the funding available to the county is required in order to secure School Access Safety funds. If a county board feels that it cannot fulfill the 15% local match as required, the county board of education may submit a financial hardship waiver request to the Department of Education for review and consideration.

SBA Policy and Procedures
APPENDIX A

Student Enrollment Requirements to Meet School Building Authority of West Virginia Guidelines for ECONOMIES OF SCALE

The following table indicates the enrollment needed for a school to be eligible for SBA funding without the need for an economies of scale waiver. This size is based upon their grade structure. The recommended school sizes to effectively meet economies of scale are as follows:

Kindergarten & Pre-kindergarten Elementary Schools	Two classes – 20 students per class
	Grade levels 1-8 – two classes per grade level – 25 students per class
Middle/Junior High Schools	Grade levels 5-9 – 150 students per grade level Grade levels 10-12 – 200 students per grade level

<u>Grades</u>	<u>100% Enrollment Required</u>	<u>Grades</u>	<u>100% Enrollment Required</u>
ELEMENTARY			
K only	40	K-9	590
K-1	90	K-12	1,590
K-2	140	1-3	150
K-3	190	1-4	200
K-4	240	1-5	250
K-5	290	1-6	300
K-6	340	1-7	350
K-7	390	2-5	200
K-8	440	2-6	250
		3-5	150
MIDDLE/JUNIOR HIGH			
3-6	400	5-8	600
3-8	700	5-9	750
4-5	200	6-8	450
4-6	350	7-8	300
4-9	800	7-9	450
5-6	300		
HIGH SCHOOL			
7-12	1,050		
8-12	900		
9-12	800		
10-12	600		
11-12	400		

- (1) Funding consideration will be given to enrollments that meet 85% of these EOS Guidelines.
- (2) Often there are factors such as distance, geographic barriers or financial limitations that will affect the ability of the school system to meet the economies of scale in regard to the enrollment of a school. Therefore, the Authority could waive this requirement in extraordinary circumstances.
- (3) If a pre-kindergarten program is located at the school, these additional students shall be included in the student enrollment counts and the economies of scale calculation will be adjusted based on the number of Pre-K students and a maximum of 20 students per classroom.

School Building Authority of West Virginia
PROVISION OF WAIVER
For Expenditure of Grants on
Schools With Enrollment Under The Economies of Scale Guidelines

A waiver to the expenditure of SBA Funds may be requested for projects in schools where the enrollment is less than the Economies of Scale Guidelines as designated by the Authority and the State Board of Education. Information concerning the facility and the proposed project must be provided on SBA Form 131 Economy of Scale Waiver Request by the county board of education and the project must be in agreement with the county's ten year Comprehensive Educational Facilities Plan. Additionally, the request must be in accordance with one or more of the following:

1. A waiver may be granted to address specific fire, safety or health violations or conditions when the health and/or safety of students who must continue to be housed in the facility are jeopardized.
2. A waiver may be granted for a school project when the facility will, in accordance with the ten year Comprehensive Educational Facilities Plan, be receiving additional enrollments from other attendance areas in the near future.
3. A waiver may be granted for a school project when the specific school is determined to be geographically isolated from other school populations and eliminates the potential for attaining enrollment economies.
4. A waiver may be granted when a school is the only facility in the county that provides service to students in the particular grade levels included in the school. For example – Is this the only middle school/high school or elementary school in the county?

A waiver for projects other than the correction of health and safety problems should not be granted to a school that is functional or scheduled for closure in the Comprehensive Educational Facilities Plan.

SBA Policy and Procedures
APPENDIX B

School Major Improvement Plan

The West Virginia Legislature amended 18-9D of the West Virginia Code in 1994 creating guidelines pertaining to quality educational facilities and creating a School Major Improvement Fund to be administered by the School Building Authority of West Virginia. The purpose of the major improvement program is to provide needs based grants to county boards of education, the State Board of Education for certain statewide educational facilities and/or administrative councils of area vocational centers for facility renovations, maintenance and construction projects with a cost greater than fifty thousand dollars but may not exceed \$1,000,000 dollars or based on West Virginia code limitations. Projects selected for funding by the SBA must be included in an approved Major Improvement Plan (MIP) and must meet the following goals:

1. Student health and safety, including, but not limited to, critical health and safety needs; and
2. Economies of scale, including scheduled preventive maintenance: Provided that each county board's school maintenance plan shall address scheduled maintenance for all facilities within the county.

The Major Improvement Plan shall include a prioritized list of all the major improvement projects within the county. Such prioritized list shall be one of the criteria to be considered by the authority in determining how available funds shall be expended. In prioritizing the projects, the agency submitting a plan shall make determinations in accordance with objective criteria provided in their MIP. The MIP shall include a repair and replacement schedule for all school facilities and the manner and timeline for all activities within the plan.

All MIP facility needs must be identified in the county's current Comprehensive Educational Facilities Plan. Expenditures for all facility improvements other than normal routine maintenance shall be documented and included in the annual update provided to the SBA. Routine maintenance remains the responsibility of local educational agencies and these costs will be reported through the annual financial reporting process provided to the State Department of Education.

Major Improvement Plan (MIP)

General

Each county board of education, State Board of Education, when applicable, or administrative council of an area vocational center shall develop a ten year school Major Improvement Plan (MIP) as a section of their CEFP before seeking funds from the School Building Authority (SBA) for major improvement projects. An approved school Major Improvement Plan (MIP) is required prior to the distribution of state funds for a project pursuant to the requirements of West Virginia Code Chapter 18-9D-15. Initially, the MIP shall be submitted to the school Building Authority for approval by April 1, 1995 to qualify for MIP funding available in 1995 and shall be amended annually to summarize activities and to identify progress being made on school improvements. The MIP shall be part and parcel of the county Comprehensive Educational Facilities Plan (Section E of the CEFP) and together address the renovation, repair and safety upgrading of existing facilities, and equipment, building systems, utilities, and other similar items in connection with renovations, repair and upgrading of facilities. Major Improvement Projects may not include such items as books, computers, equipment used for instructional purposes, fuel, supplies, routine utility service fees, routine maintenance costs, ordinary course of business improvements and other items which are customarily deemed to result in current or ordinary course of business operating expenses.

Major Improvement funding shall be provided by the Authority on the basis of need and efficient use of state funds for construction and renovation projects. In so doing, both short and long term effects of building repairs and maintenance will be considered. All projects submitted to the Authority for funding consideration must be compatible with the county CEFP goals and objectives as well as the overall goals of the Authority.

Funding will not be distributed to any county board that does not have an approved school Major Improvement Plan and is not prepared to commence expenditures of such funds during the fiscal year in which the moneys are distributed: grant funds allocated to a county board and not distributed to that county board shall be available to the county board for a period of two years. Any funds which are unexpended after a two-year period shall be redistributed by the SBA on the basis of need from the school major improvement fund in that fiscal year.

I. KEY ELEMENTS OF THE PLAN

The following key elements of the major improvement plan must be included:

- A. Goals and Objectives of the Major Improvement Plan
- B. Historical Data Regarding Previous Building Improvement Activities
- C. Maintenance Plan
- D. Financing Plan
- E. Objective Evaluation of the Effectiveness of the Plan
- F. Summary of Project Submitted for Competitive Funding
- G. Annual Update
- H. Public Input Assurances

A. Goals and Objectives of the Major Improvement Plan

Each county board of education or other administrative unit qualifying for major improvement funds shall formulate goals and objectives to be accomplished by the MIP. The goals and objectives shall reflect an objective means to resolve deficiencies in educational facilities identified within the plan. The following aspects must be addressed within the plan:

1. Improving Health and Safety
 - a. Improving facilities to meet all applicable codes and federal and State Mandates (examples – EPA, Asbestos, ADA, Fire Marshal, Board of Risk, Health Department – Radon, Lead, Underground Tanks, and other applicable codes)
 - b. Improving Indoor Air Quality (i.e., ASHRAE)
 1. Temperature
 2. Humidity
 3. Filtration
 4. Ventilation
 5. VOC (Volatile Organic Compounds)
2. Improving the Facilities Ability to Deliver the Instruction Program
3. Increasing the Life Expectancy of Building Components by:
 - a. Establishing or improving a Routine Maintenance Schedule
 - b. Establishing or improving a Preventive Maintenance Schedule
4. Assuring the Prudent and Resourceful Expenditure of Local and State Funds by:
 - a. Establishing Short and Long Range Cost Effective Maintenance Planning
 - b. Effectively and Efficiently Managing Energy Sources
 - c. Performing Life Cycle Cost Analysis When Purchasing Building Components
 - d. Establishing Cost Effective Purchasing Practices
 - e. Establishing Staff Training Programs for Effective and Current Maintenance and Custodial Methods

B. Historical Data Regarding Previous Building Improvement Activities

1. A survey of the previous five year building improvement activities must be performed to provide a historical baseline of expenditures and improvements. Previous maintenance budgets and records of building improvements can be used to identify where funding has been concentrated, where the greatest needs may exist and the scope of future countywide improvements.
2. A five year history of maintenance expenditures must be performed to qualify for funding. County boards of education must have budgeted in the current fiscal year, an amount equal to the average of the lowest three years expenditures out of the past five years. This information must be included with the annual CEFP update.
3. County maintenance expenditures should be comparable to the average regional and national square footage costs and reflects sufficient funding to adequately support the number of facilities being maintained. When insufficient funding is discovered, a plan of action should be implemented to address the shortfall. Areas of consideration should be:
 - a. An increase in local building improvement funding
 - b. More efficient use of funds
 - c. Increased performance of the in-house staff (i.e., staff development)
 - d. Additional staff or assistance through contracted maintenance
 - e. A reduction in the number of buildings to be maintained
 - f. Life cycle cost analysis is recommended to help identify the most cost effective means to improve maintenance activities

C. The Maintenance Plan

Included as a component of the Major Improvement Plan shall be a facility maintenance plan. The Maintenance Plan shall further the goals and objectives of the overall Major Improvement Plan and address specific needs of each facility by identifying building maintenance and improvement strategies that will improve the health and safety of the facility and extend the building's useful life. Major components of the Maintenance Plan are:

- Facility Evaluations
- Building Components
- Priorities List of Deficiencies
- Preventive and Routine Maintenance Plan
- Methods for Performing Maintenance
- Maintenance Plan Cost Summary
- Timeline for Implementing the Plan

1. Facility Evaluation (SBA Form 134)

Determining the present condition of building components as well as the overall condition of each facility is a vital part of school improvement. Anevaluation of the building envelope and major components must occur and a detailed assessment performed in order to determine prioritized needs. Local and state funding should be directed toward improving those areas of the facility that address the goals and objectives of the CEFPP, Major Improvement Plan and those of the Authority.

2. Building Component Inventory (SBA Form 135)

The success of the MIP will be contingent upon accurate information compiled on building components and an effective plan to maintain these components in a well-organized cost effective manner. An inventory of types and quantities of equipment and materials including descriptive data must be recorded and placed in a maintenance inventory plan for reference. The identified building component within the inventory can then be maintained based on a prioritized schedule for optimum use.

3. A List of Priorities Deficiencies (SBA Form 136)

The maintenance plan shall include a list of site specific building deficiencies prioritized by need as reflected in the goals and objectives of the major improvement plan. Such priority list shall be one of the criteria to be considered by the Authority in determining how available funds shall be expended. Prioritized maintenance projects may qualify for MIP funding.

4. Preventive and Routine Maintenance Plans

The ultimate goal of any maintenance program is to maintain building components in a manner that reduces emergency repairs and extends their useful life. The maintenance plan should begin with a program to perform maintenance on building components that may fail if not properly maintained and in so doing may adversely affect the health and safety of the building occupants and the operational budget of the county. The preventative and routine maintenance program that is to be established must include long and short range objectives, identify the specific programs for each building and a detailed list of scheduled maintenance to be performed. The maintenance plan shall be developed in cooperation with the State Department of Education Office of School Facilities.

5. Methods for Performing Maintenance

Various approaches will be taken to performing building maintenance. In-house and contracted maintenance staff or a combination of the two are currently being used. The program should identify the most cost effective manner of performing

the vital maintenance program. Special emphasis must be given to staff development for in-house maintenance staff and the development of experience and qualification requirements for contracted maintenance services. A copy of the staff development program and staff experience for persons performing maintenance duties shall be made available for SBA review upon request.

6. Maintenance Plan Budget Cost Summary

The annual and long range cost of implementing the maintenance plan as well as the anticipated expenditures should the program not be implemented must be included in the plan. Identified cost should include but may not be limited to the following:

- a. Maintenance Plan Program Development
- b. Staff Development
- c. Preventive Maintenance Initiative
- d. Routine Maintenance
- e. Equipment Replacement Cost
- f. Materials and Equipment Associated with the Program
- g. Show on separate form Avoided Expenditures (should the program be implemented)

7. Timeline for Implementing the Plan

The full implementation of the maintenance plan will occur over the ten year period covered by the initial plan. However, milestone dates must be established that coincide with the prioritized list of maintenance to be performed. Specific objectives must be indicated in the plan and progress toward the completion of projects reported in the annual update submitted to the SBA. Also, included in the timeline for the replacement of facilities should be directly related to the costs required for its maintenance and its ability to facilitate the delivery of the desired educational program.

D. Major Improvement Finance Plan

Financing for the Major Improvement Plan may come from a number of sources, the major contributor being local funds. The intent of the School Building Authority's Major Improvement Program is to provide state funds on an annual basis to assist the counties in doing major improvements for projects exceeding \$50,000 and less than \$1,000,000. These funds shall not supplant local funding for school improvements and will be distributed on a school construction fund "needs" basis. However, county boards of education must comply with the provisions of 18-9D as well as the SBA guidelines described herein to qualify for funding. Projects that do not comply with the funding criteria established by the SBA must be addressed using other funding sources. Consideration should be given to the local maintenance budget, local bond proceeds or federal and state grants (Energy, Asbestos, ADA, and Special Education Grants, etc.). Consideration should also be given to approved lease purchase programs, performance

based contracting or reinvestment of saving derived from capital improvement projects funded from local or state dollars.

The Major Improvement Plan must identify the funding source for each project identified in the ten year plan regardless of the immediate availability of the proposed funding. Additionally, the following criteria should be considered when preparing the financial strategy to implement the plan:

1. Major Improvement Funds shall be used in conjunction with local funds to effectively and efficiently meet the needs of educational facilities. Major Improvement Plan funds will not be used to supplant local maintenance funds.
2. Major Improvement Plan funding should not be used for projects in schools/facilities targeted to close within the Comprehensive Educational Facilities Plan.
3. Student occupied facilities shall be given first priority for improvements.
4. Funding for schools that do not meet Economies of Scale will be based on:
 - a. A waiver being granted for a school project when the specific school is determined to be geographically isolated from other school populations and eliminates the potential for attaining enrollment economies.
 - b. A waiver being granted when a school is the only facility in the county that provides service to students in the particular grade levels included in the school. For example – Is this the only middle/high school or elementary school in the county?
5. Projects within the Maintenance Plan that are eligible for Major Improvement Plan funding will be awarded on their ability to further the overall goals of the Agency's CEF, Major Improvement Plan and the overall goals of the SBA.
6. Funding will not be distributed to any agency that does not have an approved school major improvement plan or to any agency that is not prepared to commence expenditures of such funds during the fiscal year in which the monies are distributed. Funding shall be deposited in an SBA account to the credit of that agency, such funds will remain to the credit of and available to the agency for a period of two years. Any monies which are unexpended after a two-year period shall be redistributed by the SBA on the basis of need from the school major improvement fund in that fiscal year.
7. Agencies may use monies provided by the authority in conjunction with local funds derived from bonding, special levy or other sources. Distribution to a county board or to the state board or the administrative council of an area vocational educational center will be in accordance with a payment method approved by the authority.

E. Objective Evaluation of the Effectiveness of the Plan

Evaluating the success or failure of building improvement strategies must be quantified and adjustments made when the effects of a particular project or series of projects is known. Each project submitted to the SBA for funding consideration must be accompanied by a specific objective to be accomplished and thereby creating a means to evaluate how the project succeeded or failed to further the goals and objectives of the project and the overall plan. The evaluation shall be submitted upon request to the SBA at intervals appropriate to measure the short and long range effects of a project or improvement plan.

F. Project Submission Requirements (SBA Form 165 – Executive Summary)

Supportive data for projects submitted for funding consideration by the SBA shall meet the requirements of the Major Improvement Plan indicated herein. Sufficient data must be included to address how the current facilities do not meet and how the proposed project does meet the following goals:

1. Student health and safety;
2. Curriculum improvement and diversification, including computerization and technology and advanced senior courses in science, mathematics, language arts and social studies;
3. Adequate space for projected student enrollments;
4. Economies of scale, including compatibility with similar schools that have achieved the most economical organization, facility utilization and pupil-teacher ratios;
5. Reasonable travel time and practical means of addressing other demographic considerations (see State Board of Education Policy regarding travel time limitations);
6. Multi-county and regional planning to achieve the most effective and efficient instructional delivery system – If a project is to benefit more than one county in the region, the submission data shall state the manner in which the cost and funding of the project shall be apportioned among the counties;
7. Innovations in education;
8. To what extent does the project demonstrate an effective and efficient use of funding;

9. To what extent does the project impact the agency's preventive maintenance plan; and
10. To what extent does the project further the overall goals and objectives of the SBA and the MIP.

G. Annual Update (SBA Form 145 A & B)

The Major Improvement Plan shall be updated annually to reflect projects completed and new or continued needs remaining to be addressed. Also, building improvement activities in the previous year shall be documented and a detailed summary of the accomplishments provided to SBA for review. This information shall be provided to the SBA with the CEFPP Annual Update on or before December 1, 1996, and continue each subsequent year. The SBA may require that a county, the state board or the administration council of an area vocational center modify, update, supplement or otherwise submit changes or additions to an approved Major Improvement Plan pursuant to the requirements of 18-9D-16(J).

H. Public Input Assurances

Pursuant to Section 18-9D-16c of the West Virginia Code, the Major Improvement Plan shall include assurances of broad based public input in the planning process. The submission of each plan shall be accompanied by a synopsis of all comments received and a formal comment by the county board, the State Board or the administrative council of an area vocational educational center submitting the plan. A committee made up of the administrative staff having expertise in school construction and maintenance, and other staff members as determined by the superintendent as well as lay persons from the community shall cooperatively develop the plan. Once developed, the proposed plan shall then be made available for public comment for a period of 30 days prior to public hearing and submission to agency's board for approval. The approved plan shall then be submitted to the SBA for final review and approval.

I. Amending the Plan

The Major Improvement Plan may require amendments in response to changing facility conditions. SBA Form 106 must be used to amend the scope of a project. Budget Amendments relating to the plan or a specific project within the plan must also be requested using SBA Form 106. Refer to Section 1.6 of the SBA Policy and Procedures Handbook for additional amendment requirements.

J. Project Selection Process

MIP Grant requests shall be submitted as a part of the annual CEFPP and MIP update in accordance with 2.4 F of the SBA Policy and Procedure Handbook. MIP Projects will be reviewed and evaluated by the SBA staff using the Project Evaluation Instrument (SBA

Form 134). Meritorious projects will be selected on the basis of their compliance with the following review criteria:

1. Health and safety
2. Curriculum and improvements
3. Adequate space for project enrollment
4. Economies of scale
5. Travel time and demographics
6. Multi-county and regional cooperation
7. Educational innovations
8. Effective and efficient use of funds
9. Preventive maintenance
10. Furtherance of local and SBA goals and objectives

Projects shall be submitted annually for SBA consideration. The authority will provide submission dates annually to eligible agencies requesting SBA consideration for MIP funding. Projects not received by the deadline established will not be considered. Each project submitted will be evaluated by the SBA staff and on-site visits will be performed as necessary to familiarize the staff with all aspects of the project and to verify the submitted data. Interviews will be held with the superintendents or project representatives for statewide or area vocational projects when additional information regarding the specifics of the proposal is needed. After the staff review process is complete, the project data will be provided to the School Building Authority for final consideration. The staff review will include a recommended priorities list of statewide projects for SBA consideration. The Authority will determine the number of projects to be considered in each funding cycle and award meritorious projects to the extent funds are available.

SBA Policy and Procedures
APPENDIX C

CEFP Amendment ANNUAL UPDATE

Comprehensive Educational Facilities Plan

COUNTY UPDATE – Data to be completed and submitted to SBA and SDE by December 1, of each year.

1. County-wide Facilities Classification Report (SBA/WVDE 116)
2. High School Attendance Areas Facilities Chart – for each high school in the county (SBA #132)
3. Feeder School Summary Report – narrative (SBA 132)
4. MIP Annual Update – (1) List of completed or on-going projects (SBA 145a) and (2) Prioritized list of proposed projects (SBA 145b)
5. School Access Safety Repair and Renovation Schedule (SBA 160)
6. Updated CEFP Executive Summary (SBA 162)
7. Provide annual report of utility costs for all new SBA funded schools or SBA funded total HVAC system replacements to the SBA and SDE (SBA 179)

The annual update is to be compiled and submitted to the State Department of Education (1 copy) and the School Building Authority (1 copy) with each section tabbed, and three-hole punched. Tabs should reference the above listed categories. This information may also be transmitted to the SBA office via electronic PDF file.

SBA Policy and Procedures
APPENDIX D

School Building Authority of West Virginia
EMERGENCY FUND

I. Eligibility Criteria

- A. The emergency situation must have been generated by an Act of God, i.e., fire, wind, flood, storm, earthquake, etc.
- B. Federal, state and local funds for emergency repair/replacement must have been identified and exhausted.
- C. All insurance claims must have been filed and amount of settlements determined. Insurance should be at the cost of replacement level.

II. Application Process

A. Immediate Notification

- 1. If it is anticipated that SBA funds will be requested, immediate notification and involvement of the SBA staff is required.
- 2. Within 10 days of the emergency, the county must submit to the SBA a detailed report to describe:
 - a. the extent of the damages,
 - b. the effect of the damages on the educational program, and
 - c. the temporary measures taken to provide services to students.

B. Formal Application Process

- 1. The county must submit to the SBA documentation to verify the eligibility of the project based on the eligibility criteria above.
- 2. A facility plan designed to repair or replace the damaged properties must be submitted to the SBA. The facility plan must include data regarding:
 - a. enrollments, present and 8th year projection,
 - b. economies to be implemented by the project,
 - c. effect of the project on the educational plan, and
 - d. detailed description of work to be completed.

3. A Finance Plan for the project must be submitted to the SBA. The plan is to include:
 - a. Amount and description of local funds committed to the project,
 - b. Amount and description of federal funds available for the project,
 - c. Amount of any insurance settlement from the damages,
 - d. Amount of funds available from all other sources, and
 - e. Amount requested from the SBA. Support data must be provided to verify estimates of costs.
4. All data must be submitted at least one month prior to the quarterly SBA meeting at which the request will be made. This will provide time for staff review and visitation.
5. Any grant from the SBA Emergency Fund is subject to the approval of the Authority and shall not exceed two million dollars (\$2,000,000). The county superintendent must appear before the SBA with a formal proposal presentation regarding the request for funds. Presentation is to be limited to ten minutes.
6. Emergency Fund Grants are subject to the usual guidelines and regulations of the SBA regarding the expenditure of funds, including the economies of scale. Any project proposed for funding from the SBA Emergency Fund must be included in the county and regional CEF.

SBA Policy and Procedures
APPENDIX E

PLANNING GRANTS

The SBA may make available funds to assist each county in contracting for the services of a professional planner to develop the ten year CEFP that is to be completed and approved based on the schedule provided by the SBA. These funds shall not exceed 50% of the actual planning contract amount. The SBA will determine the amount of available funding to be provided prior to each ten year planning cycle. The CEFP shall be developed in accordance with State Board Policy 6200 and the attached SBA procedural flow chart.

In order to receive these funds, the county must utilize the following procedures:

1. Appropriate application shall be made to the SBA for the funds in advance of advertising for consulting firms to assist with the development of the CEFP.
2. The county will utilize an SBA approved Request for Proposal (RFP) for selection of Professional Services and select a team in accordance with the procedures defined in WV Code 5G-1-3. The team shall consist of qualified educational planners (REFP) as well as a qualified architect-licensed in the State of West Virginia. To encourage consistency in demographics and enrollment projections throughout each plan, the SBA may provide a demographer to perform demographics and school enrollment projections.

The RFP shall define the scope of work to be performed in the development of the CEFP. The SBA will monitor the progress of the plan development at various stages and upon request the county will adjust the process to comply with SBA requirements.

3. A list of all firms responding to the RFP will be submitted to the SBA for review and approval of each firm's qualifications.
4. Upon completion of the selection process and successful negotiations with the highest qualified professional firm, a copy of the contractual agreement shall be provided to and approved by the SBA. Any changes in the scope of work or change order to the contracted amount must be approved by the SBA to attain state reimbursement for the expenditure.
5. Upon completion of CEFP Progress Reports #1 (SBA Form 163) and #2 (SBA Form 164) and the submission of a draft copy of the completed data with Progress Report #2, the county may submit a request for payment to the SBA for review and consideration. If all expenses are deemed appropriate, a payment shall be made to the county equivalent to 50% of the total planning grant contracted fee or an amount not to exceed 50% of the SBA Planning Grant amount. The SBA will remit the balance of the planning grant upon completion of the CEFP and its approval by the SBE and the SBA.

School Building Authority of West Virginia
POLICIES & PROCEDURES HANDBOOK
SUMMARY OF REVISIONS

Appendix F

1. a-c

Project Development – These changes formalize the process currently in place and assures SBA involvement in project development, and requires counties to meet with the SBA staff during the conceptual stages of project development.

2. b

Project review criteria – These changes reflect the legislative language currently in place and formalizes the 9th criteria used in project evaluations relating to the effective and efficient use of state funding for the projects being considered.

3.d

SBA staff involvement in the project presentation – This new language requires the county boards to work with the SBA staff as they prepare for their interviews to ensure they provide the Authority a thorough understanding of each project's scope of work and costs.

Appendix I

Architectural/Engineering and construction regulations project design services – These changes simply separates the procedures for hiring architects/engineers from the construction manager service.

I.B.

SBA Supplemental Conditions to the Owner/Architect Agreement – This new language provides a schedule for the introduction of Building Information Modeling (BIM) into school designs.

I.D.

Require Architects/Engineers to release building design CAD files to trades contractors and construction managers for their use in coordination of all work.

I.G.

Prototypical School Design – Requires County Boards of Education to consider prototypical schools previously designed as their new schools are planned.

I.H.

New supplemental language to the Owner/Architect agreement – This new language requires Architect/Engineer to pay for change orders relating to Construction Analyst (CA)/Construction Manager (CM) or SBA review comments not incorporated into the bidding documents that result in a construction change order. This new language also limits the use of owner contingency funding for change orders relating to Architect/Engineer errors and omissions.

II.A.

New supplemental language regarding Safe School Design – This supplemental language applied to the Owner/Architect agreement eliminates current design requirements relating to crime prevention and inserts new language that requires Architects/Engineers to review and incorporate school access safety design elements into the project that reflects the schools vulnerability and risk assessment study performed during the SBA School Access Safety Program.

II.D.

This new policy requires County Boards of Education to perform more stringent site feasibility studies prior to purchasing property for school constructions.

II.R.

Project Closeout Requirements – This new language strengthens the current requirements for the evaluation of Contractors and Architects/Engineers, by requiring SBA staff involvement in the evaluation process.

PROFESSIONAL SERVICES OF THE CONSTRUCTION MANAGER

Revises current language regarding Construction Managers and creates a Construction Manager(s) as an agent of the SBA.

EDUCATIONAL SPECIFICATIONS

Establishes new requirements for County Boards of Education that inserts an SBA representative into the educational planning process in lieu of the Architects acting as the Educational Facilities Planner.

Appendix J.

6.1.4 Penalties for Noncompliant Performance – These changes strengthen current policy regarding penalties for poor or noncompliant work and adds failure to comply with the project schedule or phasing plan as an offense that will place the contractor on the probationary list and subject to a minimum of 1 year suspension from bidding on SBA projects.

6.3.2.8-9 Project Schedule Confirmation – Changes in these articles require all prime contractors to take creative action on their subcontractors requiring them to comply with the construction schedule.

SBA FORMS

189

Contract service responsibilities summary for County, Architect and Constructions Manager - This new form creates a matrix of responsibilities for all contracting parties.

190

Building Information Modeling (BIM) Guidelines and Standards – This new form creates requirements for Building Information Modeling (BIM) and describes deliverables for design firms.

191

Building Information Modeling Proficiency Matrix – The Building Information Modeling experience level of the design team and contractors prior to beginning the projects.

192

Building Information Modeling Implementation Plan – This new form establishes requirements for the design firm to follow based on the level of development required for the design model.

SBA Policy and Procedures
APPENDIX F

School Building Authority of West Virginia
**PROCEDURES FOR DEVELOPMENT AND REVIEW OF
CONSTRUCTION FUND PROJECTS**
(Needs Funding)

The SBA staff will utilize the following approach to review the projects submitted by each county for competitive school construction funding.

Each county in West Virginia who has an approved CEFP is eligible for capital improvement funds from the SBA based on the needs of the facilities in their district.

Each county shall work with the SBA staff to evaluate the needs of the facilities as indicated in the CEFP.

Each county is responsible for determining in their facilities plan the specific project(s) for which SBA school construction funds will be requested. This individual project will be fully developed by the county working with the SBA staff, in regard to the issues indicated in Section 1.1 of the SBA Policy and Procedures Handbook and have a SBA School Construction Fund Project Summary Report completed.

Proposals for school construction fund projects must be part of an approved CEFP, and submitted at the request of the Authority based upon the availability of funds for distribution. Provide two (2) hard bound copies and one (1) electronic PDF file.

The Authority will review and evaluate the projects based upon criteria set forth in 1.1 of the SBA Policy and Procedures Handbook. A prioritized list of projects to be funded equal to the amount of the funds available during the specific funding cycle will be developed by the Authority.

The Authority reserves the right to request review of any or all projects submitted to them that they feel has special merit or extenuating circumstances.

1. Development of the Competitive School Construction Fund Project.

- a. Each county shall work with the SBA staff to evaluate the needs of the county's facilities based on the conditions described in the CEFP. Discussions should focus on the projects impact on the county's preventative maintenance plan, as well as, the impact on county's efforts to operate more efficiently.
- b. The proposed project, whether it is a new facility or an addition/renovation, should focus on improving efficiencies within the school district and shall be developed with integral involvement of the SBA staff.

- (1) If the proposed project is to be the construction of a new facility, SBA funding will be determined on the SBA funding formula. Should the county desire additional square footage above the SBA funding formula or to utilize property with abnormal site conditions, additional local funds may be needed to complete the desired increase in project scope. Should design professionals and/or cost estimating professionals be needed to assist in determining the additional scope of work or potential additional funds needed to complete the desired project, the SBA staff will assist in the advertisement and hiring process for the necessary services.
 - (2) Should the proposed project be an addition, renovations or mechanical/electrical system upgrade to an existing facility, the SBA staff shall assist in developing an understanding of the desired scope of work prior to the involvement of design professionals. Once the scope of work is defined, the SBA staff will assist in the advertisement and hiring process of the appropriate professional services and together the final scope of work will be determined.
- c. Once an understanding of the proposed project scope has been developed, the SBA staff will assist with the completion of the required documentation to ensure an accurate representation of the proposed project is submitted for SBA funding consideration.

4. 2. Review of the competitive school construction fund projects

- a. The SBA staff will evaluate the school construction fund projects in accordance with WV Code 18-9D-16 as well as the mission and goals of the Authority as in 18-9D-15.
- b. This review will utilize the following criteria to evaluate and make recommendations concerning merit for school construction funding.
 - (1) Health and safety
 - (2) Economies of Scale
 - (3) Travel Time and Demographics
 - (4) Multi-county/Regional Aspects
 - (5) Curriculum ~~and Instruction~~ Improvement
 - (6) Educational Innovations
 - (7) Adequate Space for Projected Enrollment
 - (8) History of local funding efforts
(to the extent constitutionally permissible)
 - (9) Effective and Efficient Use of Funding

2. 3. Verification of Evaluations of Existing Facilities – School Construction Fund Projects

c. An on-site evaluation report will be prepared by the SBA staff for all school construction fund projects throughout the state as identified by the Authority. This report will:

- (1) Verify the scope of the project
- (2) Assess cost estimates of proposed facilities
- (3) Evaluate the feasibility of the project
- (4) Consider the option of new vs. renovation
- (5) Address transportation and demographic issues

d. During the on-site review and prior to the Superintendent interview, the SBA staff will assist in developing the presentation to be used in an effort to provide the Authority Members a thorough understanding of the proposed project.

~~3.~~ 4. The on-site evaluation report will be provided to the Authority for consideration in their deliberation and final selection of projects to be funded from the construction funds account.

~~4.~~ 5. Administrative Interview

Before the Authority determines the statewide prioritized list, members will identify projects where specific questions or clarifications are needed in order to consider the project for funding. Superintendents and county board presidents will be asked to appear before the Authority to make presentations regarding their individual projects and to answer questions of the Authority members.

Upon a majority affirmative vote of the members present, the interviews may be held in Executive Session in accordance with WV Code 6-9A-4 (9) which provides that such session may be held for: "matters involving or affecting the purchase, sale or lease of property, advance construction planning, the investment of public funds or other matters involving competition which, if made public, might adversely affect the financial or other interest of the state or any political subdivision."

a. Purpose of the Interviews

- (1) To provide an opportunity for the local board of education to express the importance of the project to the school system and its impact on the students who will attend the school;
- (2) To clarify any issue or question regarding the project;
- (3) To familiarize the SBA Members with individual projects and provide opportunity for questions prior to funding deliberations.

b. Interview Format

- (1) A short presentation by the county administration emphasizing both cost savings to be gained as well as educational opportunities

to be achieved should the project be funded. A strict limitation of 5 minutes for oral presentations by each county will be enforced by the Authority.

- (2) Questions will be asked by the SBA Members concerning the project. A 10 minute limitation will be used for this phase of the interview component.

c. Content of the Superintendent's Comments

- (1) The presentation should address the specific costs and savings as can best be estimated from the data available to the administration. This should include such items as transportation, personnel, O & M and administrative costs.
- (2) Projected timelines should be provided on the completion of design, bidding and construction components. Status of the project including architectural designs, site selection, and/or other work that has been completed prior to the interview date should be emphasized.
- (3) Any handouts and/or photos that will help clearly address the need of this project, its impact on the quality of education, and the efficiency of administering the county school system may be utilized during the interview process.
- (4) Be prepared to work with the SBA to develop a project budget for the construction of the proposed facility during this session.

~~5.~~ 6. After these steps are completed, the Authority will have gathered and compiled sufficient data to make judgmental decisions as to which projects will be funded through school construction fund grants.

~~6.~~ 7. Prior to final action on approving projects for funding, the Authority shall submit a certified list of the projects to the Joint Committee of Government and Finance.

SBA Policy and Procedures
APPENDIX G

School Building Authority of West Virginia
PROCESS FOR DEVELOPMENT OF A DESIGN-BUILD PROJECT

SBA grant recipients may use the Design-Build project delivery method. Grant recipients desiring to use the Design-Build method of project delivery must first familiarize themselves with the Design-Build Procurement Act, Article 22A, and Section 5-22A-1 through 16 of the West Virginia Code, Legislative Rules Title 148-CSR-11, and the submission requirements of the Design-Build Board of West Virginia and the School Building Authority (SBA) Process for Development of a Design-Build project. This process will involve significant pre-project submission planning and coordination with the SBA office and should begin six-eight months prior to the annual "Needs" project submission deadline established by the SBA. The following represents the general process for developing a Design-Build project, procurement of design and construction professionals to assist with the project and the submission requirements of the Design-Build Board of West Virginia.

1. Before projects are brought to the SBA for preliminary review, the county board must first determine if the project is appropriate as a Design-Build project. The Design-Build Board and SBA have established the following as the basis for determining if Design-Build is the appropriate project delivery method for projects.

The county must have the appropriate legal authority to enter into a Design Build contract (the Design-Build Procurement Act allows local boards of education to enter into Design-Build contracts). Additionally the State of West Virginia Design Building Board and the SBA must approve the project as a Design-Build project. The following criteria will be considered:

- a. The county requires a project design and construction time-line that is faster than the traditional Design-Bid-Build process would allow;
 - b. The project requires close coordination of design and construction expertise or an extreme amount of coordination;
 - c. The county requires early cost commitments;
 - d. The county provides a written plan for funding the project including, but not limited to, the funding necessary to pay for design services and construction costs; and,
 - e. The county has performed sufficient site studies and has selected an appropriate site for the construction of the school.
2. County Superintendent consults with the SBA staff regarding their intent to submit a project for funding consideration using the Design-Build project delivery method.
 3. SBA staff and county review the Design-Build criteria and discuss project with the coordinator of the Design-Build Board to determine if the project qualifies as a Design-Build project and to solicit interim approval. Final approval will be provided by the Design-Build Board based on the project submission information provided by the county board during the formal submission phase of the project.

4. Assuming the project meets the Design-Build criteria, the local board submits the project for SBA funding consideration requesting the project use of the Design-Build project delivery method.
5. SBA approves projects and designates those projects where the Design-Build process may be considered. At this time, the SBA Board will provide a contractual commitment for the SBA portion of the finance plan to the completion of the project. The SBA may consider providing a reserve grant in order to proceed with conceptual planning, project criteria development and Design-Build Board approval process. The finance plan would then be completed as funding is required.
6. The county submits an application for project approval to the Design-Build Board, including a finance plan and timeline. The application for project consideration must be completed and all supporting documentation attached in accordance with West Virginia Code 5-22A-2 and Legislature Rules, 148-CSR-11.
7. Design-Build Board reviews and approves project and notifies county to proceed with the project based on the requirements of the Design-Build Board and West Virginia Code.
8. SBA/county develops procedure(s) to hire a performance criteria developer. The county board will solicit proposals from qualified performance criteria developers based on the requirements of West Virginia Code and Legislative Rule 148-CSR-11.
9. County solicits proposals from, and evaluates qualifications of, qualified performance criteria developers (licensed architects or engineers). The performance criteria developer will provide technical assistance to the local board and prepare the performance criteria document.
10. The county solicits proposals from, evaluates qualifications of, and contracts with an educational facilities planner who will prepare educational specifications for the specific project. Based on SBA requirements and the SBE Policy 6200, Handbook on Planning School Facilities, the county will coordinate the hiring of the educational facilities planner with the SBA office and obtain approval of the SBA before contracting with the educational facilities planner. The educational facilities planner must be qualified to assist the county in the preparation of the plan. The educational facilities planner will work cooperatively with the performance criteria developer to combine the educational specifications and the building component criteria into the performance criteria specification used to obtain Design-Build proposals. The educational specifications and the performance criteria must be submitted to the SBA for approval.
11. In cooperation with the SBA, the county hires the performance criteria developer and the educational planner to assist the county in the development of the project.
12. The county and the performance criteria developer prepare an advertisement and Invitation for Qualification (IFQ) along with the evaluation criteria for Design-Build

teams. The IFQ and evaluation criteria must be compatible to assure a fair evaluation of each design builder's qualification.

13. The performance criteria developer and educational planner complete the educational specification, performance criteria and concept drawing building footprint. Pertinent SBA Supplemental General Conditions must be included in the performance criteria along with the selection evaluation criteria for selecting the Design-Build team. This information is incorporated into the IFQ and the Request for Proposal and provided to Design-Build teams.
14. The county board establishes a selection committee in accordance with Legislative Rule 148-11-4 to review and evaluate the Design-Build teams' qualifications and proceeds with a formal advertisement of the IFQ for Design-Build teams. Design-Build teams submit qualifications using Design-Build Board and SBA approved submission requirements. The IFQ will be issued to all qualified design builders.
15. The Selection Committee reviews the qualifications and interviews the Design-Build teams. Based on the submitted information and interview scores and the evaluation of each team, a short list of not fewer than three nor greater than five Design-Build teams will then be requested to respond to an Invitation for Proposal (IFP). If fewer than three proposals are received, the county will contact the Design-Build Board to determine whether the county may proceed with the Design-Build process.
16. The short listed Design-Build teams are sent IFP including educational specifications and the project performance criteria and are allowed sufficient time to provide a qualitative proposal and a separate guaranteed maximum cost proposal for the project based on the project criteria provided to each team.
17. The county board receives the technical and cost proposals from each Design-Build team and segments all cost proposals. A "technical review" committee evaluates and scores the proposals submitted for the project. The committee will have, at a minimum, a technical representative of the county, the performance criteria developer as a non-voting member, a representative of the school, the Secretary of Administration and a member of the SBA staff. The performance criteria developer will provide technical assistance to the local board with regard to the development of the process for evaluating the qualitative proposal and the cost proposals submitted by the perspective Design-Builders.
18. The scores of each proposal are made public and a cost proposal opening date is established. The cost proposals are publicly opened, evaluated and scored. The scores of the cost proposals shall also be made public. See Leg. Rules 148-11-10 through 12.
19. The technical review committee selects a Design-Build team in accordance with West Virginia Code 5-22A-6, Legislative Rule 148-CSR-11 and the SBA requirements for the selection of a Design-Build team.

20. The Design-Build Board will determine if the technical submissions comply with the requirements of the Design-Build Procurement Act prior to the execution of a contract and, if so, will notify the SBA/county of their approval.
21. The county board and the SBA staff will approve the budget, finance plan and contractual agreement based on the proposals from the Design-Build team prior to execution of a contract for services.
22. The final schematic design will be prepared by the Design-Build team that incorporates the program of spaces and building performance criteria. The final schematic shall be approved by the county board of education and the SBA prior to proceeding to the final design and/or construction.
23. Contractual agreements are executed using the standard AIA form of agreement between the county board and Design-Build team. If an optional contract is used, SBA approval must be provided prior to its execution.
24. At intervals determined by the SBA, the Design-Builder submits project development documents for review and approval to the owner and SBA for performance criteria development, review and approval.
25. The county board hires an SBA approved clerk-of-the-works in accordance with SBA policy to represent the county and SBA during the construction of the project.
26. The county clerk-of-the-works, the SBA and the Design-Build team will cooperate throughout the construction phase in order to construct the project in accordance with county and SBA requirements.
27. SBA contractual obligations must be met and the SBA project close-out requirements must be incorporated into the performance criteria document. The Design-Builder shall comply with SBA requirements incorporated into the performance criteria.

SBA Policy and Procedures
APPENDIX H

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

GRANT CONTRACT UP TO

THE AMOUNT OF \$

WITH THE BOARD OF EDUCATION OF THE COUNTY OF _____

This Grant Contract (the "Contract") is entered into by and between the School Building Authority of West Virginia (the "Authority") and The Board of Education of the County of _____ (the "County Board") this _____ day of _____, 20____.

RECITALS

A. The Authority was established pursuant to the Constitution and laws of the State of West Virginia, including, particularly, Chapter 18, Article 9D of the Code of West Virginia, 1931, as amended (the "Code") (the "Act") to provide available funds (as described in Section 18-9D-6 of the Act) to finance the costs of acquisition, construction, renovation, repair and safety upgrading of facilities for public school purposes in the State of West Virginia (the "State").

B. In accordance with the Act and the Program Guidelines of the Authority, and at the request of the County Board, the Authority has determined to grant funds to the County Board for the purpose of financing the costs of the projects described in Exhibit A-1 attached hereto.

C. This Contract provides the terms and conditions upon which the Authority agrees to make and the County Board agrees to accept such grant.

Section 1. Subject to the terms and conditions described herein, the Authority hereby grants to the County Board, funds up to \$ _____ (the "Grant"). The expiration date of this funding grant shall be _____, 20____.

Section 2. The Authority shall be granted the privilege to act as co-owner of properties during construction or renovation of the facility without the liability of ownership.

Section 3. Upon receipt of evidence satisfactory to the Authority that the County Board is prepared to commence expenditures of the proceeds of the Grant during the then current fiscal year, the proceeds of the Grant shall be transferred from the Authority's School Construction Fund held by the West Virginia State Treasurer to United National Bank (the "Depository") and deposited in a fund to be known as the "School Building

Authority of West Virginia Project Fund" (the "Project Fund"). The proceeds of the Grant shall be held in a separate subaccount of the Project Fund in the name of the County Board (the "County Account"). The County Board hereby authorizes the Depository to invest amounts on deposit in the County Account in investment securities at the direction of the Authority. All interest earned on such will inure to the benefit of the Authority and will not be available for withdrawal by the County Board.

Section 4. Amounts in the County Account (not including investment earnings therein), may be withdrawn by the County Board at any time upon submitting a Requisition in the form attached hereto as Exhibit B to the Depository, with a copy submitted at the same time to the Authority. The Authority shall have the right to request additional information and/or documentation from the County Board with respect to any such Requisition. Disbursement shall not be made until the Authority approves such Requisition.

Section 5. The County Board hereby covenants and agrees to use the proceeds of the Grant only for approved expenditures with respect to the specific projects described on Exhibit A-1 unless it receives the prior written consent of the Authority. The County Board agrees not to submit a requisition for expenditures which will not be incurred with respect to the project. The County Board agrees to cause said project to be constructed within the total sums available to it, including said grant, in accordance with the plan submitted by the county to the Authority for funding as described in Exhibit A-1 and in accordance with the regulations, guidelines and direction of the Authority.

Section 6. The County Board agrees that the funds it receives as a Grant will not be used by the maintenance department of the County Board for the purpose of purchasing materials and equipment needed to improve and maintain existing facilities.

Section 7. In accordance with the mandates of the Act and regulations promulgated thereunder (the "Code"), the County Board covenants and agrees to expend all of the proceeds of the Grant by its designated expiration date as set forth in Paragraph C., Section 1., and in accordance with Exhibit A-2 Project Development Schedule of this Contract. If the County Board fails to expend the entire Grant by such date, the County Board hereby authorizes and directs the Authority to withdraw and the Depository to pay to the Authority any amounts remaining on deposit in the County Account five business days after the above referenced expiration dates.

Section 8. The County Board hereby covenants and agrees that it shall not proceed with the building design for the school without first securing a clear and free title to the property where the SBA funded facility is to be constructed, or without securing a right-of-entry as result of a condemnation proceeding initiated to secure the site where the SBA funded school is to be constructed.

Section 9. The County Board hereby covenants and agrees that it will submit the educational specifications, as well as design plans and specifications as per School Building Authority's Policy and Procedures Handbook for the erection and/or renovation

of school buildings to the Authority for approval. Such plans and specifications shall comply with all requirements set forth in the Program Guidelines. Approval of plans and specifications for final construction will be subject to evaluation of the plan and the proposed site by the Authority.

Section 10. The County Board agrees to cooperate with the SBA with regards to issuing contracts for services of Construction Analyst (CA) or Construction Managers (CM) assigned to the project by the SBA. The County Board further agrees to include language within the Standard Form of Agreement between the Owner and Architect that requires the Architect to cooperate with the Construction Analyst (CA) or Construction Manager (CM) with regards to their services in accordance with the AIA Construction Manager contracts and the SBA Task Order Agreement for Construction Analyst (CA) services.

Section 11. The County Board agrees to include the SBA Project Development Schedule (PDS) in the Architect/Engineer professional services contract and to require the Architect/Engineer to comply with the timelines established in the PDS. The County Board further agrees should the Authority deem sufficient progress is not being made on the planning and design of the project in relation to the PDS, the Authority may revoke the grant and the County Board shall reimburse the Authority in full, any expended funds from the grant proceeds.—Furthermore, the County Board agrees to establish and enforce the construction contract completion date established in the AIA “General Conditions of the Contract for Construction.” The County Board shall provide the SBA a copy of the proposed AIA contract for construction for review and comment prior to the execution of the agreement. The number of calendar days for the completion of the project shall be delineated within the agreement. Any revisions to the completion days established shall be approved by the SBA and a construction change order issued for the additional days that are agreed upon. Additionally, the SBA will establish delay cost for the project based on the scope of the construction contract. To the extent the construction contract allows, the County Board shall require the project to be completed within the schedule established in the SBA grant contract and/or the approved completion date established in the AIA Agreement Between the Owner and Contractor. Should the County Board fail to comply with these provisions during the construction phase of the project, this action may result in penalties paid to the SBA by the County board, based on the SBA established delay costs calculations for this project.

Section 12. The County Board shall award bids only to properly licensed contractors as per the state Tax Department regulations. The County Board of Education shall require written evidence from all prime contractors that all sub-contractors and all sub-sub-contractors performing work on the approved project shall be covered by all required bonding.

Section 13. The County Board agrees to comply with SBA Policy and Procedure Manual requirements contained in Section I and to require this language in the Architect and Engineer contracts relating to projects receiving funds from the Authority as well as items set forth in Appendix J of the School Building Authority Policy and Procedure

Manual. The County Board further agrees to provide assurances to the SBA that no undocumented workers or registered sex offenders will be employed by subcontractors or prime contractors on this project. The County Board shall include language in the bidding documents (SBA supplemental conditions to the AIA General Conditions) addressing these issues. SBA Forms 181 & 182 shall be completed by the project contractors and SBA Form 180 shall be completed by the County Board and forwarded to the SBA office that provides assurance that all contractors have complied with this policy.

Section 14. Should the desired building design costs exceed the total construction funds available, the county must reduce the scope of the project and/or value engineer the facility to the satisfaction of the Authority prior to proceeding to the next project development phase. Failure to do so may be interpreted by the SBA as a Breach of Contract resulting in negation of the grant agreement between the local board and the SBA.

Section 15. The County Board shall employ a "Clerk-of-the-Works" to monitor all construction projects, unless otherwise waived by the Authority. The "Clerk-of-the-Works" shall not be a regular employee of the county board. The County Board shall use its best efforts to provide funds for the payment of such "Clerk-of-the-Works" by negotiating a reduction in architectural fees relating to such project. The grant recipient may, at the discretion of the Authority's Construction Committee, be required to proceed with the construction project using an Authority approved design, construction schedule and construction management method. Requirement of a Clerk-of-the-Works will be waived for counties using construction management.

Section 16. The County Board shall retain an architect for renovations, additions and/or new construction projects as required by Chapter 5G of the WV Code or as required by the School Building Authority.

(i) The County Board agrees to retain architectural services using the latest Edition AIA Standard Form of Contract between Owner and Architect approved School Building Authority Architectural/ Engineering Service Agreement. The County Board agrees that any percentage architectural fees shall be based upon the bid cost of the project, excluding cost overruns and change orders in accordance with Section I of the SBA Guidelines.

(ii) The County Board agrees to provide language within the Architect's design contract that requires the Architect to design the project within the funding available. If the desired educational programming exceeds the SBA programming standards, the Owner and Architect shall agree to resolve the programming differences prior to submission of the educational program or design to the SBA. Additionally, should the bids received exceed the established project budget, the architect shall be required to revise the contract documents and re-bid the project at no additional cost or fee to the County Board.

(iii) The County Board agrees to contractually require the architectural firm to revise plans without additional cost to the County Board when the preliminary plans provided for review do not meet the requirements of the Authority, State Fire Marshal or any other regulatory agency.

(iv) All construction change proposal requests, change directives or construction change orders shall be submitted to the Authority for review and approval. Changes shall be submitted to the Authority in an AIA document format. Any project change that is not approved by the Authority which results in an encumbrance of additional project funds regardless of the source, may at the option of the Authority, cause termination of this grant. The County Board, at the demand of the Authority, will assume responsibility of existing contracts, forfeit the remaining grant funds and repay the Authority the full amount of grant funds expended at the time of termination with interest accruing from the date of termination at the rate of six percent per annum.

(v) The project budget shall be amended to reflect any and all increases or decreases in the project finance plan. Funds from any and all sources shall be submitted in the form attached hereto as Exhibit C for review and approval by the Authority. No construction contract or change order may be executed by the Grantee until all sources of financing are identified and an updated Exhibit C is submitted and approved by the Authority.

Section 17. No educational facility shall be occupied without prior approval from the Authority and the appropriate state and county regulatory agencies. Because construction completion dates do not always coincide with educational schedules, the county agrees to complete and submit to the SBA with design development drawings, a viable contingency plan addressing how all affected students and staff will be housed should the new, additional or renovated facility not be available for occupation within the proposed time schedule.

Section 18. Should the possibility exist that the scheduled construction completion date negatively impact the county's ability to occupy the facility for the start of school, the county board agrees to develop and implement a contingency plan. This plan must address how all affected students and staff will be housed should the new or renovated facility be unavailable at the beginning of the school term. Upon request by the SBA, the contingency plan must be submitted for review and approval along with the design development submission requirements.

Section 19. The County Board hereby covenants and agrees to have county maintenance and custodial staff trained on-site by the State Department of Education HVAC technicians on all new HVAC equipment and controls. The county board shall contact the Department of Education Office of School Facilities immediately following the installation of new HVAC equipment for training and for follow-up training six months after the initial training to insure proper maintenance and operation of the new HVAC equipment and controls during heating and cooling seasons in the first year of

operation. This training shall be in addition to the contractor training provided at the conclusion of the project. The SBA shall be notified of the training schedule and the county agrees to schedule additional training, if in the opinion of the SBA, additional training is required in order for all key maintenance and custodial personnel to become efficient in the maintenance and operation of the new HVAC equipment and controls.

Section 20. The County Board agrees to keep the project in good repair and working order after completion and execution of this grant and accepts the terms and conditions identified in Exhibit D of this agreement. The County Board acknowledges that the Authority may inspect any project from time to time after completion, and if the Authority determines that a project is not being maintained in such condition, the State Board of Education may require that state aid monies be used to provide improvements or repairs to such Project.

Section 21. Any funds designated in this contract are provided in accordance with the details of the project as presented in the Comprehensive Educational Facilities Plan approved by the State Board of Education and the School Building Authority for the County Board. Failure to develop the project in accordance with the approved plan entails a misrepresentation that may, at the discretion of the Authority, void this contract. These details include designated utilization of the facility, instructional improvements, cost savings measures, health and safety improvements, and the initiation of any student/teacher services so indicated in the plan.

Section 22. The County Board of Education understands that it must conduct any school closure hearings that may be required by this project and obtain State Board of Education approval of such closures prior to submitting any invoice to the SBA for consideration of payment and that the SBA will not recognize any invoice prior to such action by the County and State Boards of Education.

Section 23. The County Board agrees that the Authority will maintain a 5% retainage based on the total construction cost of the project until all construction contracts are complete and an approved Certificate of Project Completion is executed. To avoid placing the County at risk, it is recommended that the County withhold final payment on this project until such time.

Section 24. The County Board agrees that funds for payment of all requisitions shall be made available from this grant in the proportion of state to local or other funds dedicated to this project. Initial payments shall be made based on the following schedule based on the estimated percentage of State to local funds shown on Exhibit A-1:

<u>Responsible Party</u>	<u>Percentage of Funds Submitted for Payment</u>

Authority	00.00%
County Board	00.00%
	100.00%

Section 25. In order to utilize state funds expeditiously in accordance with The Code and to avoid extraneous costs associated with inflation that occurs in extraordinary design and/or finance planning and construction delays, this grant is conditioned upon the representation of the County Board, by the affixed signature of their President, that they will meet the planning and construction schedule outlined in Exhibit A-2 of this contract. Upon failure to comply with such schedule made in Exhibit A-2 of this agreement, the County Board shall be in default of this agreement and subject to the default provision set forth in this instrument.

Section 26. Upon any default under its representations of the agreements set forth in this instrument, or in the instruments incident to the awarding of the grant, Grantee, at the option and demand of Grantor, will repay to grantor forthwith the original amount of the grant received with the interest accruing thereon from the date of default at yield rate of the bonds from which the grant was made or at the current prime interest rate for grants made from Pay-As-You-Go funds. Default by the Grantee will constitute termination of the grant thereby causing cancellation of financial assistance by the School Building Authority under the grant. The provisions of this Grant Agreement may be enforced by Grantor, at its option and without regard to prior waivers by it of previous defaults of Grantee, by judicial proceedings to require specific performance of the terms of this Grant Agreement or by such other proceedings in law or equity, in either Federal or State courts, as may be deemed necessary by Grantor to assure compliance with the provisions of this Grant Agreement and the laws and regulation under which this grant is made.

Section 27. This Grant Contract shall become effective as of the date first written and upon your mutual acceptance thereof.

FOR THE SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

By _____
Executive Director

Accepted and agreed to as of the date first above written:
THE BOARD OF EDUCATION OF THE COUNTY OF

By _____ By _____
Superintendent President, County Board of Education

**BUILDING MAINTENANCE AND UPKEEP AGREEMENT
BETWEEN THE**

**_____ AND THE SCHOOL BUILDING AUTHORITY
OF WEST VIRGINIA FOR**

SCHOOL

_____ EXHIBIT D

West Virginia Code §18-9D-16 requires all county boards of education to implement a plan of regularly scheduled maintenance and preventive maintenance for all facilities within the county. School Building Authority (SBA) "Needs" based and "Major Improvement Plan" funding is contingent upon the implementation of this countywide plan. As a condition of this grant _____ County Board of Education (the County Board) must agree to the following in regards to this SBA funded project.

- The County Board will assign sufficient custodial personnel to this facility in order to provide a clean and healthful environment for students and staff.
- Custodial staff members will be provided sufficient training required to perform tasks assigned.
- Building maintenance staff members whose job responsibilities require them to perform maintenance on this facility will have sufficient training to allow them to successfully complete their duties assigned regarding building maintenance. The State Board of Education Office of Facilities (SDEOF) will provide technical training and support for the Heating/Ventilating and Air Conditioning (HVAC) Maintenance Plan.
- Annual funding will be provided from the county budget to support the maintenance and preventive maintenance plan for this facility. The SDEOF technical support staff will be utilized to assist with the creation of the HVAC preventive maintenance plan and its implementation.

Acceptance of SBA funding for this project represents a commitment by the county board of education to perform or cause to be performed the above maintenance and custodial duties for this project. An on-site inspection of this facility will be conducted annually by the SDEOF in accordance with West Virginia Code §18-9D-16h. Compliant and non-compliant standards will be identified and reported to the county and the SBA. The SBA will conduct follow-up visits and in cooperation with the county board of education initiate a plan of improvement. Failure to implement the maintenance and custodial care plan of improvement required to keep this facility clean and in good repair may cause a redirection of state aid funding by the SDEOF in an amount sufficient to cause this work to be contractually performed until such time as the county board staff has been properly trained to successfully perform the work.

SBA Policy and Procedures
APPENDIX I

ARCHITECTURAL/ENGINEERING & CONSTRUCTION REGULATIONS

THE FOLLOWING INFORMATION PROVIDES INSTRUCTION AND DIRECTION WITH REGARDS TO PROJECT DEVELOPMENT THROUGH CLOSEOUT. DEVIATION FROM REQUIREMENTS MUST BE APPROVED BY THE SBA.

I. PROJECT AND DESIGN SERVICES

- 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 West Virginia 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.
- 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. However, the SBA may require supplemental languages be amended into these documents.

**Add the following to ALA B101, Article 3.6.2.1 and Article 4.3.3*:*

The architectural firm may utilize a Construction Administrator for project oversight and to attend all construction progress meetings, however, the Project Architect and Engineer responsible for the design shall be present at the project site to attend a minimum of one project meeting per month. This person must have authority to render decisions on the project in order to avoid unnecessary delays.

Add the following to AIA B101, Article 12:

~~Construction projects funded by the School Building Authority, beginning in April 2015, will be designed and constructed using the Building Information Modeling (BIM) delivery method.~~

The School Building Authority intends to implement Building Information Modeling (BIM) for design and construction of SBA funded projects as follows:

- New School Construction Projects beginning in December 2015
- All New School Construction and Major Addition and Renovation Projects beginning in December 2016
- Implementation of BIM on all projects beginning December 2017.
- BIM modeling information data provided to the owners for use in their preventative maintenance data bases state wide by 2019.

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. Basic design fees shall include all services necessary to complete the project including, but not limited to architectural, plumbing, electrical, mechanical and civil engineering, as well as construction administration through project completion. Additional services must be approved by the SBA. The cost for alternative designs that are not constructed shall be borne 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 (SBA Form 175). 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~~ unless SBA approval to use alternative agreements, is

granted. 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. A&E fees relating to construction change orders shall be calculated at the same percentage established for the project based on the approved construction budget once established 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.

A&E fees paid to the Design Team, in accordance with the SBA Fee Schedule, shall include reasonable use of CADD files by the Contractors for trade coordination purposes through completion of the project. Release documentation for the CADD files may be required by the Design Team. However, no additional fee shall be charged to the contractor or subcontractor for the use of the CADD files..

Revise AIA, B101, Article 6.1 to read as follows:

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 must consider prototypical school designs. Should the County Board feel that a prototypical school design does not adequately address the educational needs of a facility, the County Board must submit a written justification to the SBA Director of Architectural Services explaining their reasons for not considering prototypical designs that may be available. Approval must be granted by the SBA prior to proceeding without a prototypical design. 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. To the extent possible, design firms shall prototype academic areas of all facilities.

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 school design, 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

Add the following to AIA B 101, Article 11.3, Items 1-4:

Fee adjustments for owner requested change orders, or change orders intended to improve overall quality of the facility 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.

Add the following to AIA B 101, Article 12:

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.

If the SBA or owner assigns a construction manager (CM) or construction analyst (CA) to a project, CM and/or CA review comments relative to the clarity of the design intent shall be incorporated into the documents by the A/E unless the A/E determines that the clarifications conflict with applicable codes or standards. The A/E will notify the owner and SBA of comments not being incorporated into the documents. However, should clarification comments not being incorporated into the document result in construction change orders, the SBA will not provide funding for the change orders required to incorporate work into project relating to the review comments.

Contingency allowances shall be established at two percent (2%) and four percent (4%) for each renovation project. Fifty percent (50%) of those contingencies shall be established for Owner requested changes. The remaining fifty percent

(50%) shall be established for errors and omissions of the design team. Should the errors and omissions exceed the fifty percent (50%) allocated in the contingency allowance, all additional funds necessary to correct the errors and/or omissions will be the responsibility of the design professional.

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.

Add the following to ALA B101, Article 12:

- 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.

Specialty consultants used by the A & E Firm for the development of project drawings and/or specifications shall not bid on any portion of the construction project. Consultants found to be submitting bids on such projects will be disqualified.

II. PROJECT REQUIREMENTS

A. Building Component Requirements

Every effort must be made to plan and design schools with quality HVAC systems and low maintenance hard surface finishes. The SBA Quality and Performance Standards must also be incorporated, where applicable, into building design criteria for all projects approved after June 2008. Deviations from these standards must be approved by the SBA. 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 or 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 These services shall be 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. HVAC control systems shall be bid on a performance based specification, identifying at least three acceptable manufacturers, who are capable of meeting the specification. HVAC contractors shall solicit proposals from these manufacturers as the basis for their bid. Should the local Board of Education desire a specific control system, manufacturer or integration of other building systems with the HVAC controls, these systems shall be bid as alternates and any additional costs associated shall be borne by the County local Board of Education.
 6. Additional SBA funding for project overruns will only be considered if Items D 1-5 are satisfied and additional funds are required in order to award the basic bid to the lowest qualified bidder(s).

Add the following to AIA B101, Article 12:

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.~~ Consideration should also be given to the vulnerability and risk assessment study performed in each county of all schools and cited review comments incorporated into the school design. 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 only.
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~~ utilized 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 monitoring 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 in height and large trees that keep the visual zone between three feet and six feet in height unimpaired.

Note: Grant recipients and school planners shall work cooperatively with the State Office of Homeland Security (OHS) and other public safety agencies during the planning and design phases of all projects. At the conclusion of all new school projects and projects that alter the building square footage or layout, the grant recipient/architect shall provide the OHS an electronic copy of the building design that complies with the requirements of the SBA school access safety provision and the most current OHS school access safety submission requirements.

B. Disqualification of Contractors/ Probationary 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 14.2 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. The architect/engineer shall

secure a list of probationary contractors from the SBA prior to issuing bidding documents and contractors on SBA probation shall not be issued bidding documents.

C. 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 developed by the County and the SBA to the architect/engineer who develops graphic illustrations that show general space relationships and curricular areas. The architect develops these ideas into a complete set of construction project documents by utilizing the following phases:

- Site Feasibility Study
- Planning/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.

D. Construction Project Submission, Delays and SBA Review

All construction projects funded by the School Building Authority are required to be submitted for review to the School Building Authority staff. A 14 day review

period shall be included in each phase of the project development schedule for SBA review of planning, schematic, design development and construction documents. Project documentation as required by Form SBA 176 A-E of the School Building Authority Policy and Procedure Handbook 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.~~ Site feasibility studies shall be performed on all sites being considered for new school construction. Feasibility studies shall include, but not be limited to, utility availability, subsurface soil conditions, as well as an estimate to prepare the site for building construction. Should the local board of education desire to construct the new facility on a site where construction costs are estimated higher than those deemed reasonable and customary by the SBA for a school of similar size, all additional cost to prepare the site for construction of the school shall be the responsibility of the local Board of Education. Consideration must be given to all factors identified in State Board Policy 6200 "Handbook on Planning School Facilities", 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.

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.

E. 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.

F. 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 \$250,000 unless waived by the SBA, or an SBA approved construction management method is being utilized. Candidates for ~~construction managers 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.~~

G. Mandatory Pre-Bid Conference

So that bidding information is properly conveyed to all bidders and to clarify questions and the intent of the bidding requirement, contractors shall be required to attend mandatory pre-bid conferences. Bidding documents shall notice all bidders of this requirement and include language making this requirement a prerequisite to bidding the project. The requirements for having the pre-bid meeting may be waived by the SBA for special circumstances conditioned upon a written request to the SBA by the design professional. All substantive pre-bid

questions shall be addressed at the pre-bid meeting and if the bidding documents do not clarify the questions, a project addendum will be circulated to all bidders.

H. 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.

No bid dates shall be scheduled until confirmation that any and all permits required have been obtained by the Owner. These permits include, but are not limited to, environmental and utility connection permits (both temporary and permanent). Additionally, no building construction bid packages shall be scheduled until all permits are obtained and site preparation work is substantially complete.

Once released for bid by the SBA, bids shall be advertised in accordance with Chapter 59-3-1 of WV Code as a legal advertisement in a qualified statewide 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 1:30 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. The School Building Authority will review the required post-bid documentation of the apparent low bidder(s) during the 72 hours immediately following the bid opening. During this timeframe the School Building Authority will not discuss bid results with bidding contractors until all documentation has been reviewed.

I. Contractor Evaluation (SBA 124)

The School Building Authority requires and the Owner to shall, at the conclusion of the project, perform an ~~do~~ evaluations of all prime contractors performing work on School Building Authority projects. This information must be submitted to the SBA at the completion of each project as a part of the project closeout information and accompany the final contractor pay application. 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.

J. Architect/Engineer Evaluation (SBA 138)

The School Building Authority requires and the Owner to shall, at the conclusion of the project, perform an ~~do~~ evaluations of all architects performing work on School Building Authority projects. This information must be submitted with the project closeout information provided to the SBA when final payment is requested by the grant recipient. 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.

K. 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.

L. 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.

M. Reference to West Virginia Jobs Act and Employment Reporting

1. Any plan, specification and invitation to bid prepared by any architect or engineer shall make reference to the West Virginia Contractor Licensing Act informing any prospective bidder that contractor's license number must be included on any bid submission.
2. Grant recipients shall require their project architect to include language within all bidding documents that require all prime contractors and subcontractors that have employees on school property to provide assurances that all employees are in compliance with WV Code, Chapter 21, Article 1B and SBA Policy with regards to verifying legal employment status of all workers and with regards to registration of sexual offenders. (See SBA Forms 180,181, 182)

N. Semi-Proprietary Specifications

1. To encourage competitive bidding, the project specifications shall specify not less than three products, materials or equipment that meets the requirements of the specifications. The product, material or equipment used shall comply with the contract requirements.
2. In certain instances, a single product may be the only one that will comply with the specific design/function requirement.

O. Project Job Signs and Building Plaques

All SBA funded projects and major improvement funded projects shall have project job signs erected at the construction site. Project signs must be visible and readable from highways where possible. Specific information will be provided by the SBA to be included on the sign. Additional project information may be required or desirable. A sample of a typical project sign is provided within this document for both "Needs" (SBA 168) and "MIP" (SBA 169) funded projects. Construction details are provided within the contract documents.

Upon completion of any major SBA funded project of \$1 million or more, the architect shall design a building plaque for display in a prominent public area of the school. See the typical SBA project plaque design:

- (1) The name of the Governor;
- (2) The names of the President of the Senate and the Speaker of the House;

- (3) The members of the SBA;
- (4) The superintendent of schools, and
- (5) The members of the local board.

The SBA will be contacted for appropriate information to be included and final approval of the plaque design before its production. An example of a typical project plaque is included within this document. (SBA 170)

P. Heat, Ventilating and Air-Conditioning Test, Adjusting and Balancing Requirement

- 1. The HVAC Testing, Adjusting and Balancing (TAB) agent shall be certified according to the procedures contained in the Associated Air Balance Council National Standards, the National Environmental Balancing Bureau procedural standards or the Environmental Engineering Consultants standards for testing, adjusting and balancing. The TAB agent shall be under direct contract with and directly represent the building owner. The TAB contractor shall coordinate the earliest start date as well as partial and final completion schedule for each area of the building with the mechanical contractor and provide this information to the owner, architect and SBA. The TAB contractor shall complete the testing, adjusting and balancing in each area of the building within 30 days of the earliest start date. The owner will consider the start and completion dates prior to the award of the contract and award the contract based on the cost proposal and completion schedule. The successful TAB contractor shall provide two weeks advance notice to the mechanical contractor, owner, architect and SBA prior to each area being tested.

Q. Asbestos Abatement Requirements (If Required)

- 1. Contractor/vendors must show proof of having successfully completed an EPA approved training course. All certification must be current.
- 2. Contractor/workers must be licensed by the State of West Virginia to perform any or all types of asbestos inspection, project designing, management planning, contracting, abatement, supervision of abatement and air monitoring.
- 3. All contractors/vendors performing work using School Building Authority funding shall comply with all applicable codes and standards including but not limited to the requirement of:

Environmental Protection Agency (EPA)
Occupational Safety and Health Administration (OSHA)
Environmental Protection Agency Worker Protection Laws
National Emission Standards for Hazardous Air Pollutants (NESHAP)

Asbestos Hazard Emergency Response Act (AHERA)
West Virginia Department of Health
West Virginia Department of Natural Resources
West Virginia Air Pollution Control Commission

4. At the completion of all asbestos abatement projects and before final payment will be processed by the SBA, the local board of education, the abatement designer and abatement contractor must provide written assurances that all abatement work has been performed in accordance with all applicable codes. All AHERA required close-out documentation must be on file at the owner's office and must be made available to the SBA for review.

R. Project Close-out

1. The SBA shall be notified of the dates and time of substantial and final completion walk-through inspections by the grant recipient. An SBA representative will participate in the walk-thru and will accept or reject the contract as completed. A completed WVDE BP-13-A or when required and SBA Form 139 will be forwarded to the State Department of Education and the SBA when all punch list items have been satisfactorily addressed and the contract is complete. The local board project representative shall also submit a completed Contractor and Architect Evaluation Forms (SBA Form 124). Final payment for the contract will then be processed.
2. Provide at Project Close-out the following documentation, but not limited to:
 - (a) Confirmation of Receiving Operation and Maintenance Manuals and As-Built Drawings and Specifications
 - (b) SBA Certificate of Project Completion – For lump sum projects use “WVDE BP-13-A” and for multiple prime contract projects use “SBA 139.” Both of these forms are found in the SBA Guidelines and Procedures Handbook (Appendix L). These Forms should be filled out and signed by the local board of education then forwarded to the contractor and the architect and engineer for signing
 - (c) Contractor Evaluation Form (SBA 124) (to be completed with SBA staff)
 - (d) Architect/Engineer Evaluation form (SBA 138) (to be completed with SBA staff)
 - (e) SBA Certificate of Occupancy
 - (f) Notification of 11th month walkthrough date
 - (g) Electronic & Hard copy of diagrammatic floor plan of new or renovated schools.
Provide the following items:
 1. One line drawing of floor plans including only diagrammatic walls, exiting, doors and windows, existing school
 2. One line drawing with all school access safety data (submit electronic file to Office of Homeland Security)

3. One line drawing including only walls, doors, windows, room number/names and color coded HVAC zones with multi-zone equipment located in the HVAC zone
- (h) Provide a Final TAB report
- (i) Provide Final Commissioning Report when applicable

III. CONTRACT DOCUMENT FORM REQUIREMENTS

The following information shall be included in the project manual for all projects funded in whole or in part by the SBA. The SBA also requires all referenced documents to be bound within the contract documents project manual and revised or updated documents must be approved by the SBA. The SBA encourages the use of standard AIA forms when possible including but not limited to the following:

A. CONTRACT DOCUMENT REQUIREMENTS GENERAL REQUIREMENTS

- Construction Drawings
- Project Manual
- General and Special Conditions
- Invitation to Bid
- Instructions to Bidders
- Bid Proposal Form
- Bid Bond (AIA A310)
- Insurance Requirements
- Performance Bond and Payment Bond
- Contractor's Qualification Statement (SBA 105)

B. CONTRACT FORMS

- General Conditions of the Contract for Construction (AIA A201)
- Standard Form of Agreement Between Owner and Contractor Where Basis of Payment is a Stipulated Sum (AIA A101)
- General Conditions of the Contract for Construction Manager – Adviser Edition (AIA A201/CMa)
- Standard Form of Agreement Between Owner and Contractor – Stipulated Sum, Construction Manager – Adviser Edition (AIA A101/CMa)
- General Conditions of the Contract for Construction, Construction Manager as Adviser Edition, where applicable (AIA A232)
- Performance Bond and Payment Bond (AIA A312)
- Instructions to Bidders (AIA A701)
- Change Order (AIA G701)
- Change Order, Construction Manager – Adviser Edition, where applicable (AIA G701/CMa)
- Application and Certificate for Payment (AIA G702)

Application and Certificate for Payment, Construction Management –
 Adviser Edition, where applicable (AIA G702/CMA)
 Continuation Sheet (AIA G703)
 Certificate of Substantial Completion (AIA G704)
 Certificate of Substantial Completion, Construction Manager – Adviser
 Edition, where applicable (AIA G704/CMA)
 Builders Risk Insurance Certificate, where applicable (Acord Form 24)
 Certificate of Insurance (G715) (Acord Form 25)
 SBA Policy and Procedures
 Part 1 – Supplemental Instructions to Bidders
 Part 2 – Supplemental General Conditions
 Contractor's Affidavit of Payment of Debts and Claims (AIA G706)
 Contractor's Affidavit of Release of Liens (AIA G706A)
 Consent of Surety to Final Payment (AIA G707)
 Consent of Surety to Reduction in or Partial Release of Retainage (AIA
 G707A)
 Proposal Request (AIA G709)
 Architect's Supplemental Instructions (AIA G710)
 Construction Change Authorization (AIA G714)
 Construction Change Directive, Construction Manager-Adviser Edition,
 where applicable (AIA G714/CMA)
 Certificate for In-State Contractor Preference (if preference given)
 Contractor's Qualification Statement and Contractor Financial Statement
 (SBA 105 and 105A)
 List of Subcontractors and Major Equipment/Materials Suppliers (SBA
 123) Verification of HVAC Training (SBA 159)
 Certificate of Project Completion (BP-13A)
 Certificate of Project Completion – Multiple Prime Projects (SBA 139)
 Affidavit of Debt Paid (SBA 177)
 Prime Contractor's Certification of Worker Compliance with WV Code
 and SBA Policy (SBA 181)
 Subcontractor's Certification of Worker Compliance with WV Code and
 SBA Policy (SBA 182)
 SBA Bid Checklist (SBA 183)
 Certification of Receipt of Addenda (SBA 184)
 State of West Virginia Purchasing Affidavit (SBA 185)
 Monthly Anticipated Adverse Weather Delays (SBA 186)
 School Building Authority Construction (CPM) Schedule (SBA 187)
 Drug Free Workplace Conformance Affidavit (SBA 188)

PROFESSIONAL SERVICES OF THE CONSTRUCTION ANALYST

The following is a description of the professional services of the Construction Analyst. The Construction Analyst (CA) will be assigned to select projects by the SBA as projects are approved. The Construction Analyst will act as the owner and SBA representative and provide services as described in the SBA/CA task order agreement .

Generally, the Construction Analyst advises the owner, SBA, and architect at the beginning of the design development phases and these services continue through the construction document phase of the project. The CA will provide constructability and document coordination review comments as they relate to the clarity of the documents and estimates of probable cost.

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. However, the Construction Analyst review comments shall be incorporated in the documents by the A/E unless the A/E determines the clarification will change the design intent or conflict with applicable codes or standards. Should owner, SBA and CA clarification comments not incorporated into the documents result in a construction change order, the SBA will not provide funding for the change order.

The Construction Analyst will provide an estimate of the cost of their service at the schematic design phase of the project. The architect/engineer shall provide the Construction Analyst a copy of the schematic design document information and include all SBA submission requirements (SBA Form 176b). The CA will base the cost of services on the scope of work shown on the schematic design. The grant recipient and SBA will approve the cost of the CA services and the grant recipient will issue a purchase order for services described in the task order agreement.

The CA will then review and provide services for the design development and bidding document phase of the project. The architect, grant recipient and the SBA will work cooperatively to design the school within the funding available. The process will be as follows:

- Construction Analyst assigned to an approved project
- Architect/Engineer provides CA with schematic design for cost of services quotation
- Cost for services negotiated and grant recipient issues purchase order to the assigned CA for services (SBA will reimburse for cost of services based on the project percentage breakdown in grant contract)
- CA provides design development documents for review comments
- Grant recipient, SBA, A/E and CA review and reconcile design development comments
- A/E provides CA construction documents for review comments
- Grant recipient, SBA, A/E and CA review and reconcile construction document comments. Reconciliation is achieved when all parties agree that the estimate is within 2% of each parties estimate or agreement is reached that no further scope of work can be reasonably accomplished and additional funding will be committed to the project if the

deficit becomes a reality after the bids are received. Projects with budget differences greater than 2% may only move forward with owner and SBA approval.

- Project proceed to the bidding stage based on agreements reached by all parties regarding design and project cost

Once bids are received and a construction contract is awarded, the construction analyst contract for services on the specific project is terminated. Please review the SBA Quality and Performance Standards for additional construction analyst information and requirements.

PROFESSIONAL SERVICES OF THE CONSTRUCTION MANAGER

The SBA will review each approved project and determine the project management team for each project. This process will be concluded when each project is approved by the Authority. The Construction Manager (CMa) shall be hired by the SBA in accordance with the procedures in Chapter 5G of the West Virginia Code. The CMa will be a professional service, assigned to projects where multiple prime contracting is required and must be in place prior to the conceptual stage of the building design. The Construction Manager ~~will~~ shall be contracted directly to the owner and represents the owner and SBA interests on the project in accordance with the SBA CMa task order agreement. The AIA Standard Form of Agreement Between the Owner and Construction Manager shall be used. The SBA may require supplemental conditions to the standard agreement and any modifications to the CMa or architects contract will be communicated to all parties prior to the execution of the contract.

Generally, the Construction Manager advises the owner and architect through all design phases with regard to site suitability, design constructability, document coordination and cost estimating. During the bidding and construction phase, the CMa provides professional services with regards to bid package configuration, construction scheduling, construction phasing and construction administration.

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.

The Construction Manager will provide preconstruction and construction services as per the AIA C132-2009, or latest approved edition, as well as the SBA task order agreement as negotiated for the individual project conditions indicated on SBA Form 189. The contract shall include provisions for preconstruction document review that will provide, but not limited to, constructability comments, document coordination and estimates of probable cost for all phases of the building design. Any and all documentation or comments provided by the Construction Manager relating to constructability reviews, document coordination and estimates of probable cost for all phases of the building design shall be directed to the Owner by the Construction Manager.

The architect/engineer (A/E) shall submit the design documents to the CMa, the owner and the SBA for review comments as required in SBA policy and the design contract. All CMa and owner/SBA comments must be satisfactorily addressed by the A/E to assure the project is moving forward with all parties clearly understanding the project scope and cost. All parties will work cooperatively to reconcile the estimate of probable cost. Reconciliation will have been achieved when all parties agree that the estimate is within 2% of each parties estimate or agreement is reached that no further scope of work can be reasonably accomplished and additional funding will be committed to the project if the deficit becomes a reality after bids are received. Projects with budget differences greater than 2% may only move forward with owner and SBA approval. CMa review comments relative to the **clarity of the design intent** shall be incorporated into the documents by the A/E unless the A/E determines that the clarifications will change the design intent of the project or conflict with applicable codes or standards. The A/E

will notify the owner and SBA of comments not being incorporated into the documents. However, should clarification comments not incorporated into the document result in construction change orders, the SBA will not provide funding for the change order.

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.
- o. Clerk-of-the-works will not be required for projects requiring Construction Managers.

School Building Authority of West Virginia EDUCATIONAL SPECIFICATIONS

Each Local Board of Education, funded by the SBA for the construction of a new school facility or major renovation to an existing facility where educational curricular offerings will be altered, shall assign an Educational Specification (Ed. Spec.) Committee to work with the SBA to develop educational specifications for the facility.

By ~~constructing~~ developing 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 of 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. Upon completion, the Educational Specification will be provided to the Design Team for development of the building design.

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 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.
- C. Technology Component (where applicable) – If technology is used to support the curriculum delivery, provide specific details regarding how the technology will be used for each curricular area and/or administrative area in the new school. The technology plan shall comply with state and county adopted standards.

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: The following example assumes a middle school math program for 300 students, a six period academic day (excludes planning periods), a maximum of 25 students, and calculated as a semester class where full credit is achievable for the class:

FORMULA FOR DETERMINING TEACHING STATIONS PER SUBJECT AREA**

<i>Number of students Enrolled in subject</i>	<i>x</i>	<i>Number of periods per week in subject</i>		
<u>(300)</u>		<u>(5)</u>	<u>= 1500</u>	
			<u> </u>	<i>Number of teaching = 2</i>
<u>(25)</u>		<u>(30)</u>	<u>= 750</u>	<i>= stations for this</i>
<i>Maximum class size (see reference sheet)</i>	<i>x</i>	<i>Maximum number of periods per week (every period, every day)</i>		<i>subject area</i>

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 and the 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, bulletin 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 including communications, security, special ventilation requirements and any county adopted design standards..

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 school technology delivery plan shall be based on the technology standards developed for the administration and instructional delivery in new schools. A detailed technology plan shall be developed specific to the project as a part of the educational specifications. The technology plan will identify how technology will be used and how it will support the curriculum delivery model. The plan shall be developed in conjunction with the WV Department of Education Office of Technology and shall:

- A. Identify current and proposed technology needs
- B. Establish technology integration strategies
- C. Identify ideal implementation strategies for every academic and administrative space
- D. Establish a process for tracking, servicing and updating technology equipment
- E. Identify security protocol and permissions strategies
- F. Outline staff development relating to the use of technology
- G. Identify the infrastructure needs based on the curriculum and instruction programming and match the technology with the skill sets the students are supposed to obtain from the instruction
- H. Provide the design engineer specific technology needs including backbone requirements that will allow the design of the power and support infrastructure for the schools technology equipment

The technology plan will be developed in accordance with SBA Policy and WV Department of Education Curriculum and Technology guidelines. The plan shall be submitted to the SBA for approval with design development documents. SBA funding to

support the technology infrastructure will be conditioned upon SBA approval of the technology plan.

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 the program of spaces and the preliminary educational specifications with schematic drawings and the final educational specification and technology plan submission with the design development submission. Continued development of the building design beyond without written approval of the SBA is at the fiscal risk of the designer and the grant recipient.***

****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*.

SBA Policy and Procedures
APPENDIX J

(PART 1 – SBA SUPPLEMENTAL INSTRUCTIONS TO BIDDERS)

THE FOLLOWING SBA SUPPLEMENTAL CONDITIONS CHANGE, DELETE FROM OR ADD TO THE AIA A701-1997 INSTRUCTIONS TO BIDDERS AND SHALL BE INCORPORATED INTO THE PROJECT MANUAL UNDER THE INSTRUCTION TO BIDDERS. THIS DOCUMENT SHALL BE PRINTED ON NON-WHITE PAPER TO BE DISTINGUISHED FROM OTHER SPECIFICATION PAGES.

ARTICLE 2 – BIDDER’S REPRESENTATIONS:

Add the following to Article 2 Bidder’s Representation.

Add the following section:

- 2.1.5** Failure to have official representation and official registration of attendance at the pre-bid meeting will disqualify contractors from bidding the project. The representative shall be an employee of the company being represented. Should it be determined that the representative is not employed by the company being represented, that company’s bid proposal shall be rejected.

ARTICLE 3 – BIDDING DOCUMENTS:

Add the following to Article 3 – Bidding Documents

3.3 Substitutions

- 3.3.2** Delete the first sentence and add the following: “No substitutions will be considered prior to the receipt of Bids unless a written request for approval has been received by the Architect at least twenty-one days prior to the date for receipt of Bids.

3.4 Addenda

- 3.4.5** Failure to submit SBA Form 184 Certification of Receipt of Addenda shall result in disqualification of the bid.

ARTICLE 4 – BIDDING PROCEDURES:

Add the following to Article 4 Bidding Procedures.

4.1 Preparation of Bids

- 4.1.5** *Add the following sentence:*
If no Alternate Bid is proposed by the Bidder, write “no bid”

Add the following section:

- 4.1.8** All requested Bid Proposals shall be bid. If Bidder elects not to provide such Bid, write “no bid”

4.2 Bid Security

Add the following section:

- 4.2.4**

- .1 Each Bid shall be accompanied by a Bid Bond payable to the Owner for five percent (5%) of the total Bid issued by a solvent surety company with a rating of A.M. Best, A- or better rated and listed on the most current Federal Register, Circular 570, and authorized to do business in the State of West Virginia. Should the Bidder refuse to enter into a contract with the Owner on the terms stated in the Bidding Document or fail to furnish bonds covering faithful performance of the Contract and all obligations arising there under, the full amount of the Bid Security shall be forfeited to the Owner as liquidated damages, not as a penalty. No Bid Bond is required for projects of \$25,000 or less.
- .2 Irrevocable Letter of Credit is not acceptable as a Bid Bond.
- .3 A certified cashiers' check is not acceptable as a Bid Bond.
- .4 Personal securities are not acceptable as a Bid Bond.

4.3 Submission of Bids

4.3.1 *Delete Paragraph 4.3.1 in its entirety and replace with the following:*

Bids shall be submitted using the three envelope system. Valid bid bond, certification of receipt of addenda (SBA 184), Bid Certification Form (SBA157) and a copy of the bidder's valid WV Contractor's License, a copy of the WV Drug Free Work Place Affidavit (SBA 188) and the State of WV Purchasing Affidavit (SBA 185), shall be sealed in an opaque envelope labeled "Envelope #1". The completed and signed bid form shall be sealed in an opaque envelope labeled "Envelope #2 Bid Form". Envelopes #1 and #2 and the SBA bid checklist (SBA Form 183) shall be sealed inside of an opaque envelope addressed to the party receiving the bids and shall be identified with the project name, the bidder's name and address and the designated portion of the work for which the bid is submitted. If the bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "Sealed Bid Enclosed" on the face thereof. Failure to provide any the required documentation will result in disqualification of the bid being submitted.

4.3.2 *Delete this section in its entirety and replace with the following:*

In accordance with WV Code Section 5-22-2 (a), the public entity accepting bids shall designate the time and place the bids will be received. No public entity may accept or take any bid, including receiving a hand delivered bid, after the time advertised to take bids.

4.4 Modification or Withdrawal of Bid

Add the following section:

- 4.4.5** Bids may not be withdrawn for a minimum period of thirty (30) days following the date of receipt of Bids without forfeiture of bid security as liquidated damages, not as a penalty. Should the actual bid documents indicate additional time for bid withdrawal, the bid documents shall prevail.

ARTICLE 5 – CONSIDERATION OF BIDS:

Add the following to Article 5 – Consideration of Bids.

5.2 Rejection of Bids. Delete paragraph 5.2 in its entirety and replace with the following:

- 5.2** The Owner shall have the right to reject any or all Bids or to reject a Bid which has been deemed incomplete or irregular, in accordance with Section 5-22-2 (b) of the WV Code.

5.3 Acceptance of Bid – (Award of Contract)

Revise 5.3.1 to read as follows:

It is the intent of the Owner to award a Contract to the lowest responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Owner shall have the right to accept the Bid or Bids which, in his judgment, is in his own best interest.

Revise 5.3.2 to read as follows:

The Bidder will note that Bids consist of the Base Bid and several related add or deduct Alternate items, all comprising items entering into the project and forming the contract as a whole.

These several parts of the Proposal furnish the basis of arriving at the awarding of the contract. The Owner may award the contract on the basis of the Base Bid alone, or if and when conditions warrant, accept any such Alternate items appearing on the proposal, in no prioritized order, thereby reducing or increasing the amount of the Base Bid.

Revise 5.3.3 to read as follows:

The contract shall be deemed as having been awarded when formal notice of award has been duly served upon the intended awardee (i.e., the bidder to whom the Owner contemplates awarding the contract) by an authorized individual representing the agency receiving bids. Terms of the contract shall not be deemed to have been perfected until a satisfactory surety bond equal to 100% of the contract sum has been furnished to the owner by the successful bidder, at his own expense as a guarantee of contract performance.

Add the following:

- 5.3.4** Pursuant to the laws of the State of West Virginia, the School Building Authority of West Virginia must award bids only to the lowest qualified bidder. Therefore,

when utilizing any portion of state funds for a project, county boards of education must consider the factors in SBA Criteria for Selection of Lowest Qualified Bidders, and the information from the Contractors Qualification Statement, when making a determination as to whether a contractor's bid is not only the lowest, but the most qualified.

- 5.3.5** Any bidder adversely affected by the intended decision of the Owner to award a contract or to reject all bids shall file a notice of protest and bond with the Owner within seventy-two (72) hours after the issuance of the intent to award. A formal written protest shall be filed with the Owner with ten (10) days after filing the notice of protest with the Owner, stating with particularity the facts and law upon which the protest is based.
- 5.3.6** All notices of protest and formal protest shall be filed with the Owner.
- 5.3.7** A protest is not timely filed unless both the notice of protest and the formal protest are received by the Owner within the required time limits. A written notice of protest which is filed by 4:00 p.m. on the date on which the seventy- two (72) hours expires is timely. If such a date is Saturday, Sunday or a legal holiday, the period shall run until 4:00 p.m. of the next day that is not a Saturday, Sunday or a legal holiday.
- 5.3.8** The Owner has the sole authority to review the protest and render a decision. The Director of the County, or his/her designee, shall review the protest and issue a written decision. A hearing may be conducted at the option of the Director or assigned designee.
- 5.3.9** If the bidder is not satisfied with the Owner's decision, they may take appropriate legal action through the West Virginia court system. Any bidder who files a notice of protest with the West Virginia Court System in a bid rejection or an award pursuant to this section shall post with the Owner, at the time of filing the notice of protest, a bond payable to the Owner in an amount equal to one percent (1%) of the lowest bid submitted, or \$5,000, whichever is greater.
- 5.3.10** All protest bonds shall be made payable to the Owner and shall be signed and sealed by the protestor and surety. The bonds shall bind the protestor and surety and be conditioned upon the satisfaction of any cost and charges included in any final order of judgment of appellate proceedings, in the event that the Owner prevails. In lieu of a bond, the protestor may submit a cashier's check or bank money order made payable to the Owner, the monies shall be held in trust by the Owner.
- 5.3.11** If the protesting party prevails after completion of the protest and any appellate court proceedings, it shall be entitled to recover from the Owner all costs and charges included in the final order or judgment, excluding attorney's fees. If the Owner prevails it shall recover all costs and charges included in the final order or

judgment excluding attorney's fees. Upon payment of such costs and charges by the protestor, the bond shall be returned. The entire amount of the bond shall be forfeited if the hearing officer determines that a protest was filed for a frivolous or improper purpose including, but not limited to, the purpose of harassing, causing unnecessary delay or causing needless expense for the Owner or successful bidder.

- 5.3.12** The Owner shall be considered the prevailing party if the protestor withdraws the protest at any time before the entry of the final order.

ARTICLE 6 – POST BID INFORMATION

Add the following to Article 6 Post Bid Information

6.1 Contractor Qualification Statement. Delete paragraph 6.1 in its entirety and replace with the following:

- 6.1.1** A completed Contractor Qualification Statement (SBA 105) will be required of any Contractor and/or subcontractor to be submitted to the School Building Authority for review. This confidential information will be used by the SBA for evaluation of the low bid contractors on the project. Therefore, the SBA shall determine whether or not the provided information satisfies the intent of the required form. The contractor qualification statement will only be required once annually and updated documents will be required from low bid contractors once the current contractor qualification statement has expired. The Qualification Statement must be submitted 72 hours after the close of the bid opening and prior to the award of bids and will be used in the bid review process by the owner and SBA.
- 6.1.2** The confidential reviewed financial statement section of this document shall be submitted to the SBA by the lowest qualified bidder (s) within 72 hours of the close of the bid opening and prior to the execution of contracts or agreements between the local board of education and the contractor(s). Review financial statements shall not be required of any subcontractor covered by the Prime Contractor's surety. The latest available financial information must be used. Minimum requirements for financial statements provided by lowest qualified bidder are:
- a. Accountants compilation report;
 - b. Balance sheet;
 - c. Income statement;
 - d. Statement of changes in retained earnings;
 - e. Statement of cash flows; and
 - f. Notes to the financial statement.

- 6.1.3** In addition to the financial statement, the successful low bid contractor(s) shall submit a completed Affidavit of Debt Paid (SBA Form 177) to the owner and SBA within 72 hours of the close of the bid.
- 6.1.4** Construction contractors or subcontractors or equipment/material suppliers ~~whose who have demonstrated a pattern of poor and/or non-compliant work performance, has been~~ failure to comply with the construction schedule and phasing plan established in the bidding documents which has been documented by the SBA, project administrators and/or designers, or whose infractions of the State Prevailing Wage Rate codes has been documented by multiple citations from the West Virginia Department of Labor or whose contract has been terminated for just cause as described in the latest SBA approved AIA Contract Document General Conditions, will be placed on for a minimum period of one year beginning at the time of probationary status. Such contractor may be removed from probationary status pending review of their continued work history performance by the SBA at the conclusion of their probationary period.
- 6.1.5** In order to provide opportunity for any contracting, subcontracting or equipment/material firm cited for poor or non-compliant work to appreciably improve the quality of their performance prior to being placed on probation, the SBA staff will utilize the following procedure:
- a. The cited firm shall be noticed in writing of the SBA's concern, with appropriate documentation to illustrate the poor or non-compliant work, and ~~advise the firm as to the possibility of being placed on probation. Upon continued poor/non-compliant work performance,~~ the firm cited shall appear before the Executive Director of the SBA to present his reasons for failure to respond positively with improved performance after the initial notice.
 - b. Continued failure to improve poor or non-compliant performance will result in the probation. The contractor will be invited to appear at the SBA meeting to discuss the citations and justify his uninterrupted participation.
 - c. Probationary status of a firm may be revoked or continued by the SBA's Construction Committee upon review and deliberation of any SBA staff recommendation at the conclusion of the probationary period.

6.3 Submittals: Delete paragraph 6.3.1 thru 6.3.4 in their entirety and replace with the following:

6.3.1 Submittal of Subcontractors and Major Equipment and Materials Suppliers

- .1 The bidder(s) submitting the lowest qualified bid(s) as determined by the results of the bid opening shall submit a listing of all subcontractors and all major equipment and material suppliers proposed for each major branch of work itemized and described in the contract documents for the project. This information shall be provided to the SBA office on SBA Form #123 within two

hours after the completion of the bid opening. If the apparent low bidder is not evident at the close of bidding, all prime contractors must submit the completed SBA Form 123 to the SBA office within two hours of the completion of bids if they feel under any bidding combination their bid may be considered as the low bid. Bidding contractors are required to be present at the bid opening or obtain bid results from the owner in order to determine the bid results and the apparent low bidder(s).

- .2 Each bidder is required to establish the reliability and responsibility of all subcontracts and equipment/material suppliers being proposed to perform the work. Contractors, Subcontractors and/or equipment/material suppliers on SBA Probationary Status are prohibited from bidding any SBA project for a period of at least one year from the date the contractor is notified. It is the responsibility of any contractor soliciting bids or quotes from subcontractors to verify the eligibility of all proposed subcontractors and equipment/material suppliers being proposed to perform the work. Additionally, the list of SBA probationary contractors will be provided to the owner by the SBA and this information will be communicated by the owner to the contractors, when applicable. A review of the proposed subcontractors and equipment/material suppliers shall be conducted by the Architect/Engineer, Owner and representatives of the School Building Authority. The bidder may be requested to change an unsatisfactory subcontractor or equipment/material supplier. Proposed subcontractors or equipment/material suppliers found to be unsatisfactory jointly by the Owner, Architect/Engineer or School Building Authority and the contractor, shall be changed to an acceptable subcontractor or equipment/material supplier at no additional cost to the Owner, as the contractor has full responsibility for execution of the work.
- .3 Failure to submit a list of subcontractors and major equipment and material suppliers to the SBA office as described on the SBA Form #123 within two hours after the completion of the bid shall result in disqualification of the bid.
- .4 A copy of all contractors and subcontractors licensing certificate must be submitted to the agency receiving bids for review prior to the award of construction contracts.
- .5 Prior to the award of the contract, the Architect/Engineer will make a preliminary review of the major equipment and materials lists submitted and advise the bidder through the Owner, of the acceptance thereof, and of such other actions as may be necessary in order to meet the requirements of the contract documents. Should it develop that any of the materials or equipment named in the list do not meet the requirements and intent of the specifications, the contractor shall be required to furnish to the Owner other materials or equipment acceptable and fully complying with the specifications at no change in contract price. Preliminary review and acceptance of the listing provided

shall not relieve the Contractor from furnishing equipment and materials in complete accordance with the specifications.

6. Written approval shall be obtained from the Architect/Engineer covering any substitution of equipment or materials. Substitutions are permitted in the following instances:
 - a. Failure to meet quality and intent of specification and/or
 - b. Failure of the supplier or manufacturer to meet delivery schedules or other conditions of the contract.
7. During the 72 hours immediately following the bid opening, the SBA shall review the information provided on the required SBA Form 123 to determine if the provided information satisfies the intent of the form. The Owner/SBA reserves the right to reject the proposal of any bidder who fails to furnish all required equipment and material information necessary to meet the intent of the form.
8. The SBA recommends that all ~~general~~ prime contractors receiving quotations for bids require a scope of work letter from all subcontractors be sent to the general contractor receiving the quotation at least 24 hours before submission of the bid. The letter should identify the items being quoted ~~and, most importantly,~~ the scope of work included or not included in the price quotation that will be provided and most importantly, receive confirmation from the subcontractor that they understand the requirements and constraints of the project schedule. The SBA will not allow a prime contractor or a subcontractor to change or alter the bid after the bid opening as a result of miscommunication between the general contractor and subcontractors or supplier quoting the project.
9. Each bidder acknowledges responsibilities for each of its subcontractors, thus accepts responsibility of those subcontractors ability to meet the project timelines established. Therefore, failure of the prime bidder to take all available actions with regards to requiring the subcontractor to meet the project schedule may result in disciplinary action on the prime bidder and the subcontractor by the SBA.

6.3.2 Bid Certification

1. In accordance with West Virginia Code 5-22-1, Article 22, the lowest qualified responsible bidder submitting bid on SBA funded projects must certify that all provisions within this code and SBA provisions that supersede this code have or will be met prior to execution of the construction contract. Failure to comply with these provisions will result in the disqualification of the bidder.

6.3.3 Payroll Certification and Employment Reporting

1. In preparation of bids, contractors are reminded that all SBA projects are subject to state laws regarding payment of prevailing wage rates as in Chapter 21 of the West Virginia Code.

6.3.4 Taxes: (Contractor Registration Certificate and Tax Releases)

1. Each Bidder must be registered with the West Virginia Department of Tax and Revenue prior to the time and date for Receipt of Bids in order for his Bid to be considered.
- .1 If any Bidder is not registered with the Tax and Revenue Department, application should be made to West Virginia Department of Tax and Revenue, Capitol Complex, Charleston, WV 25305, and complete Form 801, so that a registration number may be assigned prior to the time and date for receipt of Bids.

6.3.6 Contractor Licensing:

- .1 All contractors doing business in West Virginia must be licensed to perform work in the state as required by the West Virginia Contractor Licensing Act. The ACT requires but is not limited to the following:
 - a. A contractor's license number shall be included in all contracting advertisements and all fully executed and binding contracts.
 - b. All approved subcontractors must be licensed and a copy of their current license number must be submitted with all quotations to the general contractor. Pursuant to the ACT, general contractors are required to only accept quotations from subcontractors licensed to perform work in West Virginia. Additionally, the SBA Form 123 requires the subcontractor's name, address and license number to be submitted to the SBA office within two hours of the close of bids and a copy of all general and subcontractors licensing certificates must be submitted to the agency receiving bids for review prior to the award of construction contracts.

SBA Criteria for Selection of Lowest Qualified Bidders

AWARD OF BIDS

Pursuant to the laws of the State of West Virginia, the School Building Authority of West Virginia must award bids only to the lowest qualified bidder. Therefore, when utilizing any portion of state funds for a project, county boards of education must consider the following factors, and the information from the Contractors Qualification Statement, when making a determination as to whether a contractor's bid is not only the lowest, but the most qualified.

1. The years of experience the bidder has in the construction, renovation or building repair business.
2. The bidder's participation in a drug program that meets the objectives, applicable laws and regulations for a drug free workplace including the use of tobacco and alcohol on school properties.
3. The continuity, experience and skill of the bidder's work force and that of the bidder's designated subcontractors.
4. The bidder's performance on similar construction projects.
5. The bidder's ability to successfully complete projects within the proposed schedules and deadlines.
6. The bidder's participation in a bonafide joint apprenticeship program that is approved by the US Department of Labor, US Bureau of Apprenticeship Training and is administered in compliance with the rules and regulations of the WV Department of Labor. [See DOL 42-7-3.1(i)]
7. The bidder's history of compliance with Worker's Compensation and Unemployment Compensation laws.
8. The bidder's history of compliance with OSHA requirements.
9. The bidder's history of compliance with Federal and State Prevailing Wage as well as Fair Labor Standards and Wage Payment laws.
10. The bidder's subcontractors compliance with state regulatory agencies.
11. The bidder's history of compliance with fringe benefit contributions, i.e., health insurance and pension benefits.
12. The bidder's local hiring plan and history of compliance with the WV Jobs Act, (WV Code, Chapter 21, Article 1C) regarding use of the local labor market.
13. The bonding record of the bidder.

14. The bidder's participation as a party in any legal action where an awarded liability could negatively impact the ability of the bidder to complete this project.
15. The bidder's financial stability and its impact on the company's ability to complete the project.
16. The bidder can demonstrate it is not in default on a debt to the State or its political subdivision in aggregate more than \$1,000.
17. The bidder's history of change order requests.
18. Response from bidder's references and recommendations of other owners for whom the bidder has worked.

All of the above factors, as supported by the accompanying Contractors Qualification Statement, will be considered by the county board of education in determining the "best" most qualified bid. No single criteria will be considered the controlling factor in determining whether a bid is, or is not the "best" bid.

awardofbids
Revised 4/2014

**SBA Policy and Procedures
APPENDIX J**

(PART 2 –SUPPLEMENTAL GENERAL CONDITIONS)

THE FOLLOWING SBA SUPPLEMENTAL CONDITIONS CHANGE, DELETE FROM OR ADD TO THE “GENERAL CONDITIONS” OF THE CONTRACT AIA DOCUMENT A201 AND SHALL BE INCORPORATED INTO THE PROJECT MANUAL. THIS DOCUMENT SHALL BE PRINTED ON NON-WHITE PAPER TO BE DISTINGUISHED FROM OTHER SPECIFICATION PAGES.

ARTICLE 1 – GENERAL PROVISIONS

1.1 Basic Definitions

1.1.1 The Contract Documents

Delete the last sentence and add the following:

The Contract Documents also include Bidding Requirements, (Advertisement to Bid, Instructions to Bidders, Supplemental Instructions to Bidders, sample forms, and the portions of the addenda relating to bidding requirements), the Contractor's Bid, Bid Bond, Contractor's Qualification Statement, List of Subcontractors, Equipment/Material Suppliers, and other documents listed in the Agreement.

Add the following Section:

1.1.9 Litigation

Litigation refers to a civil action instituted in the Circuit Court in the County in which the Project is located.

ARTICLE 3 – CONTRACTOR

3.7 Permits, Fees, Notices and Compliances with Laws

Add the following Section:

3.7.6 For the Owner's records, Contractor shall submit copies of permits, licenses, certifications, inspection reports, releases, notices, receipt for fee payments, correspondence and records established in conjunction with compliance with standards and regulations bearing upon performance of the work.

3.9 Superintendent

Add the following Section:

3.9.4 The General Trades Contractor's on site project Superintendent is to provide full-time project supervision and is not to perform work with tools.

3.10 Contractor's Construction Schedules

Delete Section 3.10.1 in its entirety and substitute the following:

3.10.1 The Contractor, prior to submission of the second pay application, shall prepare and submit for the owner's and architect's information, a contractor's construction schedule for the work in accordance with the requirements of SBA Form 187. The schedule shall not exceed the time limits as defined in the contract documents and shall update or revise every 30 days. Thereafter, all Prime Contractors shall review and provide written approval of the construction

schedule and each subsequent revision thereof. The schedule shall be related to the entire project to the extent required by the contract documents, and shall provide for expeditious and practicable execution of the work.

3.18 Indemnification

Delete Section 3.18.1 in its entirety and substitute the following:

3.18.1 The Contractor agrees to indemnify and hold harmless the Owner, the Architect, the Architect's consultants, and the officers, principals, shareholders, agents and employees, of any of them from and against all claims, demands, actions, causes of action, damages, losses, fines, civil penalties, and expenses, including but not limited to attorney's fees, arising or resulting (or alleged to arise or result), in whole or in part, from the performance of the Work or from any act or omission of the Contractor, a Subcontractor, a Sub-subcontractor, or any other person furnishing labor, services, materials or equipment with respect to the Work as well as anyone employed directly or indirectly by them or anyone for whose acts or omissions they may be liable, regardless of whether such claim, demand, action, cause of action, damage, loss, fine, civil penalty or expense may have or is alleged to have arisen or resulted from an act or omission of any party indemnified hereunder; provided, however, Contractor's obligations hereunder shall not be construed to apply to any claim, demand, action, cause of action, damage, loss, fine, civil penalty or expense arising solely from the negligence of any person indemnified hereunder. Contractor's indemnity obligation set forth above shall extend to the claim of any employee of the Contractor, of a Subcontractor, a Sub-subcontractor, or any other person furnishing labor, services, materials, or equipment with respect to the Work, of anyone employed directly or indirectly by them or of anyone for whose acts they may be liable. Contractor's indemnity obligations shall survive termination of this Agreement.

Delete Section 3.18.2 in its entirety and substitute the following:

3.18.2 In claims against any person or entity indemnified under this Section 3.18 made by an employee of the Contractor, a Subcontractor, a Sub-subcontractor, or any other person furnishing labor, services, materials, or equipment with respect to the Work, or anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this section 3.18 shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers compensation acts, disability benefit acts or other employee benefit acts.

ARTICLE 4 – ADMINISTRATION OF THE CONTRACT

4.2 Administration of the Contract

Revise the first sentence of Section 4.2.2 to read as follows:

- 4.2.2** The project Architect/Engineer responsible for the design of the facility shall attend a minimum of one (1) construction progress meeting each month, to become generally familiar with the progress and quality of the portion of the work completed, to aide and assist with questions or issues that have arisen during construction, and to determine, in general, if the work observed is being performed in a manner indicating that the work, when fully completed, will be in accordance with the contract documents. This person must have authority to render decisions on the project in order to avoid unnecessary delays.

Delete Section 4.2.4 in its entirety and substitute the following:

- 4.2.4** Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall communicate through the Architect. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors, Sub-subcontractors and material suppliers shall be through the Contractor. Communications by and with separate Contractors shall be through the Owner.

Add the following Section:

- 4.2.15** The School Building Authority (SBA) of West Virginia reserves the right to visit projects at intervals deemed necessary to observe the progress of construction. The SBA field representative shall have such responsibilities as the SBA may delegate.

ARTICLE 6 – CONSTRUCTION BY OWNER OR BY OTHER CONTRACTORS (Only Applicable in Multiple Prime Contractor Situations)

6.1 Owner's Right to Perform Construction and To Award Separate Contracts

Delete Sections 6.1.1. through 6.1.3. in their entirety and add the following Sections:

- 6.1.1. Multiple Prime Contracts.** The Contractor acknowledges that the Owner will contract with other Prime Contractors for other parts of the Project under conditions of the Contract identical or substantially similar to these. The term Contractor in the Contract documents shall in each case mean the Contractor who executes each separate Owner-Contractor Agreement. In preparing its Bid, the Contractor has carefully reviewed those documents made available to it by the Owner or Architect relating to the scheduling and nature of other contracts which may be awarded and has submitted a proposal which takes into account the need to coordinate its Work with that of other Prime Contractors. The Contractor further agrees that time is of the essence in completion of the Work and that the Work will be completed promptly and according to the Project Schedule. It is the express obligation and duty of the Contractor under this Contract to coordinate its Work with the Work of other Prime Contractors to achieve such completion.

- 6.1.2. Contractor's Duty to Coordinate.** The Contractor shall not impede, hinder or delay any other Prime Contractor in the performance of its work. It is the

Contractor's duty to communicate with any other Prime Contractor who will be performing work which may connect, compliment, interfere with or otherwise be dependent upon the Contractor's Work and to resolve any disputes or scheduling or coordination issues with such other Prime Contractor. All Prime Contractors are responsible, jointly and severally, for coordinating their various sections of work as to scheduling, installation procedures, Shop Drawings and installation of related materials. Provided that the Contractor does not thereby assume responsibility for acts or omissions of the other contractors, if required to do so by the Construction Manager, the Contractor shall review the actual progress of other Prime Contractors work on a monthly basis and advise the Owner as to whether the Request for Payment submitted by any other Prime Contractor is in accordance with the actual progress of the corresponding work.

- 6.1.3. Owner's Coordination Duties.** Neither the Owner nor the Architect has any obligation express or implied to coordinate or schedule the Work of Contractor with that of other Prime Contractors.
- 6.1.4. Third Party-Beneficiary.** Each other Prime Contractor has a right to performance of Contractor's obligations under this Article 6. Contractor agrees that such other Prime Contractors are third-party beneficiaries of its obligations under this Article 6 and that Contractor will be a third-party beneficiary of all other Prime Contractors' obligations under the same provisions appearing in their respective Contract Documents.
- 6.1.5. Contractors' Liability to Each Other.** In the event that any other Prime Contractor performing work should hinder, delay or damage the Contractor's Work or should otherwise cause loss (including acceleration costs) or injury to the Contractor, Contractor agrees that it shall look solely to such other Prime Contractor for relief therefore. Neither the Owner nor the Architect shall be responsible for any such hindrance, delay, damage, loss, or injury, and the Contractor will, in no event, attempt to hold the Owner or Architect liable for the costs thereof. The Contractor shall not make: (a) any claim for adjustment of Contract Sum or Contract Time, equitable or otherwise, against the Owner based on any of the foregoing; (b) a claim of any type against the Architect arising from such hindrance, delay, damage, loss or injury. Similarly, the Contractor agrees that it will be legally responsible to any other Prime Contractor performing work related to the Project and will indemnify the Owner and Architect against any claim, suit loss, injury, damage or delay including, but not limited to, acceleration costs incurred as a result of delay, caused, in whole or part, by the Contractor. The Contractor and its Performance Bond surety shall indemnify and hold harmless the Owner, and the Architect from and against any claim brought against any of them by another Prime Contractor including costs, expenses and attorneys' fees incurred by any of them as a result of the Contractors alleged acts or omissions.

6.2 Mutual Responsibility

Delete Section 6.2.3 in its entirety.

ARTICLE 8 – TIME

Add the following Section:

8.4 Acceleration

- .1 If the Contractor is behind the construction schedule to such an extent that the Owner or Architect reasonably determines that the Contractor will be unable to meet any milestone completion date established by the Contract Documents or to substantially complete the Work in the Contract Time, the Owner may direct the Contractor to accelerate its work. Such acceleration may include employing such additional forces or paying such additional overtime wages as may be required to place the progress of the Work to allow contractor to meet future milestone completion dates and achieve substantial completion within the Contract Time. Such acceleration shall be accomplished at the Contractor's own cost. Contractor shall also pay any additional sums which may become due to the Architect as a result of such acceleration. If the Contractor voluntarily accelerates its work to maintain the construction schedule, it shall likewise do so at its own cost. Under Multiple Prime Contracts if the cause of Contractor being behind schedule is another Prime Contractor(s)'s failure to fulfill its obligations under Article 6, Contractor shall make its claim for acceleration costs solely against such Prime Contractor(s) and not against the Owner or Architect.

ARTICLE 9 – PAYMENTS AND COMPLETION

Add the following to Article 9 Payments and Completion.

9.2 Schedule of Values. *Delete this Section in its' entirety and replace with the following:*

- 9.2.1 Provide a complete, itemized breakdown of the "Schedule of Values" for the work of this Contract. This "Schedule of Values" must be submitted by each prime Contractor prior to the first Application for Payment by the Contractor, and approved by Architect, County and SBA, prior to the first payment. Unless otherwise required, each line item must include its allocable share of the Contractor's overhead and profit. The Prime Contractor is to follow the following guidelines in development of the "Schedule of Values":
 - a) The "Schedule of Value" shall be prepared in such detail and must be supported by such data to substantiate its accuracy as required by Architect, County and SBA.
 - b) The "Schedule of Values" shall be broken down by Specification Section, then Phase, Section and/or Floor, then product, then Material & Labor, as appropriate for the Project, and as required by Architect, County and SBA. See the below example.

- c) The "Schedule of Values" shall be broken down in such detail where no single activity exceeds \$100,000. In the event a single activity exceeds \$100,000 (i.e. – equipment, pre-assembled unit, etc.) the Contractor must notify the Architect in writing and obtain approval from the Architect, County and SBA.
- d) The "Schedule of Values" shall utilize action words for description of an activity, i.e. install, place, rough-in, etc.
- e) The "Schedule of Values" shall provide a breakdown for labor, material and equipment, as appropriate and as required Architect, County and SBA.

Section 0000 1

Phase/Section/Area/Floor "A"
Product X
Material Cost
Labor Cost
Product Y
Material Cost
Labor Cost
Phase/Section/Area/Floor "B"
Product X
Material Cost
Labor Cost
Product Y
Material Cost
Labor Cost

Section 0000 2

Phase/Section/Area/Floor "A"
Product S
Material Cost
Labor Cost

Section 0000 3

Etc.

- 9.2.2** At the Owner's discretion, and approved in advance in writing, the Contractor may invoice for off-site stored materials. The off-site stored materials must be verified by a representative of the County prior the approval for payment. All off-site stored material for which payment is being sought shall be scheduled for three (3) months prior to installation. Off-site stored materials shall be stored within the State of West Virginia, unless otherwise approved. Also, the Contractors must provide the Owner with a proof of cost (i.e.– sales receipt) and certificate of

insurance from an approved insurance carrier for the value of full replacement of materials stored off-site; also naming the County and SBA as additionally insured.

9.3 Applications for Payment. *Add the following:*

9.3.1.3 A 5% retainage will be maintained throughout the construction period. The Owner will pay 95% of the portion of the Contract Sum properly allocable to labor, material and equipment incorporated in the work, and of materials and equipment suitably stored at the site or at some other location agreed upon in writing, for the period covered by the most current submitted Application for Payment, less the aggregate of previous payments.

Add the following Section:

9.3.4 The School Building Authority (SBA) of West Virginia reserves the right to review all contractors' applications for payment and request additional documentation to substantiate the request and in cooperation with the Owner make adjustments as deemed appropriate.

Add the following Section:

9.3.5 Applications for payments from the SBA must be accompanied by an SBA Exhibit B Requisition Form, SBA 104A and a copy of the invoice and a description of work completed including materials/equipment used for the project. Requisitions must be received by the depository and the SBA by the 5th day of the month in which payment is being requested. Payments will be processed and mailed to the grant recipient on the 15th day of the same month. The SBA reserves the right to review requests for payment and make adjustments when they deem necessary. **Note: An approved construction schedule must be in place prior to the second pay application being requested. All Prime Contractors shall review and provide written approval of construction schedule and each subsequent revision thereof. Failure to comply with this provision will result in delayed processing of this and all future pay applications until the owner and SBA approved schedule is in place.**

9.8.5 Substantial Completion

In the second sentence, change the phrase "make payment of retainage" to read "make partial payment of retainage."

Add the following to the end of Section 9.8.5

The Owner will pay upon Substantial Completion of the Contracted Work, a sum sufficient to increase the total payments to 95% of the Contract Sum, less such amounts as the Architect and the Owner shall determine for all incomplete work, rejected work and unsettled claims as provided in the contract documents. The final 5% retainage shall not be released until the Grant Recipient, Architect/Engineer and the School Building Authority have received satisfactory evidence of the completion of all work required by the contract documents, including all rejected work and the resolution of all unsettled claims.

Add the following Section:

9.10 Final Completion and Final Payment

9.10.2

- .1 A State tax release form will be filed with the West Virginia Department of Tax and Revenue by the local board of education upon receipt of the final payment request from the contractor. Final payment will only be processed after the local board of education has received evidence from the Department of Tax and Revenue indicating appropriate state taxes has been paid on completed construction projects in West Virginia.
- .2 Affidavit of Debt Paid – In accordance with West Virginia Code 5A-3-10a, contractors are required to submit an Affidavit of Debt Paid SBA Form 177. This form shall be submitted to the county board of education or contracting agency along with other closeout documents.
- .3 **Should the Architect determine during the final inspection that the remaining work is not completed in accordance with the terms and conditions of the contract documents, the Contractor shall be responsible for all costs associated with the Architect's return visits. Costs shall include, but are not limited to, hourly wage, mileage reimbursement, accommodations, and miscellaneous reimbursables.**

Add the following Section:

9.11 Liquidated Damages

- 9.11.1** It is acknowledged that the Contractor's failure to achieve substantial completion of the Work within the Contract Time provided by the Contract Documents will cause the Owner to incur substantial economic damages and losses of types and in amounts which are impossible to compute and ascertain with certainty as a basis for recovery by the Owner of actual damages, and that liquidated damages represent a fair, reasonable and appropriate estimate thereof. Accordingly, in lieu of actual damages for such delay, the Contractor agrees that liquidated damages may be assessed and recovered by the Owner as against Contractor and its Surety, in the event of delayed completion and without the Owner being required to present any evidence of the amount or character of actual damages sustained by reason thereof; therefore Contractor shall be liable to the owner for payment of liquidated damages in the amount indicated below for each day (Sundays and Holidays included) that Substantial Completion is delayed beyond the Contract Time as adjusted for time extensions provided by the Contract Documents. Such liquidated damages are intended to represent estimated actual damages and are

not intended as a penalty, and Contractor shall pay them to Owner without limiting Owner's right to terminate this agreement for default as provided elsewhere herein.

Liquidated damages will be assessed as follows:

<u>Project Cost</u>	<u>Liquidated Damage</u>
Up to \$1,000,000	\$750.00/per day
\$1,000,000 to \$5,000,000	\$1,000.00/per day
Over \$5,000,000	\$2,000.00/per day

ARTICLE 11 – INSURANCE AND BONDS

11.3 Property Insurance

Add the following Section:

11.3.11

- .1 The General Contractor for Multiple Prime Contracts is responsible for providing Builder's Risk Insurance meeting the requirements of this Section 11.3 for all Prime Contractors. See Section 11.5.1 for values and named insured. Payment of deductibles shall be the responsibility of the Prime Contractors' prorated by percentage among the claimants based on value of claim. General Contractor shall act as the fiduciary for distribution of insurance proceeds to the insured in the manner described in Section 11.3.8.
- .2 The Single Prime Contractor (Including Site Prep) is responsible for providing Builder's Risk Insurance meeting the requirements of this Section 11.3. See Section 11.5.1 for values and named insured. Payment of deductibles shall be the responsibility of the Contractor. Contractor shall act as the fiduciary for distribution of insurance proceeds to the insured in the manner described in Section 11.3.8.

11.4 Performance Bond and Payment Bond

Add the following Section:

11.4.3

- .1 The contractor to whom any contract is awarded, shall pay for, execute and deliver to the Owner via the Architect, within ten (10) days after award of contract by Owner and before signing the contract a corporate surety Performance and Labor and Material Payment Bond on AIA Document A311 (or equivalent form), to be executed by an A.M. Best, A- or better rated surety company listed on the most current Federal Register, Circular 570, and which is authorized to do business in the State of West Virginia and which is satisfactory to and approved by the Owner and the SBA in the sum of one hundred percent (100%) of the amount of the contract, insuring the full and faithful performance of the work and payment in full for all materials, machinery, equipment and labor, and covering all the guarantees called for in the specifications and all other obligations arising there under. The Labor and Material Payment Bond shall be in the sum of one hundred percent (100%) of the contract amount. All contractors performing work on SBA projects must

be covered by a performance bond and must be included on the list of subcontractors submitted to the SBA (Form 123). The Owner will not accept responsibility for direct payments to subcontractors performing work on projects by way of consignment. No Performance Bond is required for projects of \$25,000 or less.

- .2 Should the successful Bidder fail or refuse to deliver the required bond and all other Contract Documents, properly executed within ten (10) days after receipt of the Owner's letter of intent to award a Contract, the successful Bidder shall forfeit the security deposited with his Bid as liquidated damages, not as a penalty.
- .3 Irrevocable Letter of Credit is not acceptable as a Performance Bond.
- .4 A certified cashiers' check is not acceptable as a Performance Bond.
- .5 Personal securities are not acceptable as a Performance Bond.
- .6 Failure of a construction firm or its subcontractor to satisfactorily perform the work specified in the contract documents will result in the owner executing their rights, pursuant to the conditions of the contract documents, to declare a construction contract default under the provisions of the AIA General Conditions of the Contract for Construction established for this project. If the construction firm's surety company is notified of their responsibility for the completion or remediation of incomplete or non-compliant work, said firm will no longer be eligible to bid future projects funded by the School Building Authority of West Virginia.

Add the following Section:

11.4.4 Workers Compensation Coverage shall be provided on the project by all Contractors. Proof of continued Workers Compensation coverage throughout the duration of the project shall be provided on the certificate of coverage.

Add the following Section:

11.5 Insurance

11.5.1 In furtherance of Article 11 of General Conditions, each contractor furnishing labor and materials shall provide insurance in the following categories and for the stated minimum amounts. All insurance shall be written to show evidence of the following: The Architect and the Owner shall be ADDITIONALLY INSURED on the contractor's policy. The Contractor shall be the NAMED INSURED.

Part One - Worker's Compensation

Contractors shall purchase and maintain workers' compensation insurance from a licensed carrier authorized to provide such coverage in the State of West Virginia.

Part Two - Employer's Liability – Limits Required:

\$1,000,000 – bodily injury by accident/each accident

\$1,000,000 – bodily injury by disease/per policy

\$1,000,000 – bodily injury disease/each employee

Coverage must include broad form employer's liability and a waiver of subrogation from workers' compensation carrier.

Contractor's Public Liability Insurance - Limits Required:

\$2,000,000 – General Aggregate

\$1,000,000 – Products Complete Operations Aggregate

\$1,000,000 – Personal & Advertising Injury Limit

\$1,000,000 – Each Occurrence Limit

Commercial General Liability must include:

Explosion, Collapse and Underground Property Damage. Coverage required if contractor's operations warrant such coverage.

If blasting operations, separate blasting coverage is required.

Contractual Liability Coverage covering claims involving Contractor's contractual liability including Contractor's indemnity obligations set forth in Section 3.18

Automobile Liability Insurance

Limits Required:

\$1,000,000 – Per Accident

Provide "Any Auto" Coverage

Excess Liability Insurance

Limits Required:

\$2,000,000 – Combined Single Limit Occurrence

\$2,000,000 – Aggregate

Builders Risk and Property Insurance

100% Completed Value Form (refer to Division 1 Section "Allowances" for Multiple Prime Contracts)

Coverage Format:

All Risk including flood, earthquake and theft

Coverage shall include transit and off-site storage/secondary location limit amount that exceeds any shipment or off-site storage material value before payments to contractor for off-site stored materials are approved. Proof of coverage limits exceeding accumulated value of materials stored is required.

Name Insured shall be Owner, Contractor, and all Subcontractors ATIMA.

Single Prime Contractor (Including Site Prep) is responsible for providing Builder's Risk Insurance. Deductibles shall be stated in the Certificate of Insurance. Payment of Deductibles shall be the responsibility of the Contractor.

The General Contractor for Multiple Prime Contracts is responsible for providing Builder's Risk Insurance for all Prime Contractors. Deductibles are to be a maximum of \$2500 per occurrence and shall be stated in the Certificate of Insurance. Payment of deductibles shall be the responsibility of the Prime Contractors' prorated by percentage among the claimants based upon value of claim.

Names Insured shall be Owner, CM or CA, Architect, Contractor and all Subcontractors ATIMA.

Deductibles shall be stated in the Certificate of Insurance. Payment of deductible shall be the responsibility of the contractor.

The Owner will provide Builders Risk and Property Insurance coverage for renovation projects during construction by adding the contractor and all subcontractors, ATIMA to the permanent property policy unless otherwise stated in the bidding documents.

Certificate of Insurance

The Certificate of Insurance and copy of endorsement of the policy stating that the Owner and Architect are additionally insured shall be provided by the Contractor to the Owner and Architect at the current address of said parties with a transmittal cover indicating the project name, location of project, type of work to be performed and the nature of the documents transmitted.

The Certificate of Insurance shall contain a provision that coverage afforded will not be canceled until at least thirty (30) days prior written notice has been given to the Owner and Architect.

The Owner shall be the Certificate Holder.

The Certificate shall be prepared on "Acord" Form 25-5 (7/90) or an equivalent form.

The Certificate shall indicate that the Owner, Construction Analyst or Construction Manager and Architect are ADDITIONAL INSURED under the Contractor's policy.

The Certificate of Insurance shall indicate the carrier's financial rating. The rating must be an A.M. Best, A- or better rated surety company listed on the most current Federal Register, Circular 570 and is authorized to do business in the State of West Virginia and approved by the owner and the SBA.

ARTICLE 15 – CLAIMS AND DISPUTES

15.1.5 Claims for Additional Time

Add the following to Section 15.1.5.2:

15.1.5.2.1 Contractor shall supply climatological data from either an onsite weather station or from a National Oceanic and Atmospheric Administration (NOAA) or other approved nearby weather reporting station, to substantiate any claim for lost days due to weather. All documentation, including SBA Form 186, shall be submitted to the Architect prior to the 15th day of the month following the proposed claim for review and consideration. Failure to submit these claims monthly basis shall result in forfeiture of the claim.

15.1.5.2.2 Weather delays shall be substantiation for a cost increase claim for site supervision labor and general site operations costs including direct rental costs (i.e. construction trailer, toilet facilities, fencing, dumpsters). Overhead and profit shall not be applied to the rental costs.

15.1.5.2.3 Claims for days lost due to weather delays, on days which have historically been non-work days on the project (i.e. weekends, holidays, and Fridays when four day work weeks are implemented), shall not be granted, unless work has occurred on these days for two consecutive work weeks immediately prior to the days being claimed.

ARTICLE 16 – SPECIAL CONDITIONS

Add the following Article 16 Special Conditions as follows:

16.1 All contractors and subcontractors shall pay West Virginia Department of Labor fair minimum rate of wages for the county in which the work of this contract is performed. The SBA requires that a certified payroll be submitted with each contractor's pay-application using the U.S. Department of Labor Form WH-347 or other SBA approved document. Certified payrolls must include names, addresses and social security numbers of all workers, including those of any subcontractors, in order to assure compliance with West Virginia's Prevailing Wage laws and the SBA's Supplemental, General and Special Conditions. Upon request, counties will be required to submit the certified payroll report to the SBA for review. Each contractor shall be responsible to obtain correct and fair minimum rate of wages as established by the West Virginia Department of Labor.

16.2 For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, notices, receipt for fee payments, correspondence and records

established in conjunction with compliance with standards and regulations bearing upon performance of the work.

16.3 Compliance with Codes and Governmental Requirements

- 16.3.2** All work, labor, materials and equipment specified, constructed and installed are to be of first-class quality. To help insure this occurs, all work and equipment designed and specified shall conform to the latest applicable codes and standards including but not limited to the following:
- a. West Virginia State Building Code
 - b. American Society for Testing Materials (ASTM)
 - c. American National Standards Institute (ANSI) to the extent adopted by authorities having jurisdiction at the job site.
 - d. West Virginia State Fire Code
 - e. National Electrical Code (NEC)
 - f. American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE)

- 16.3.3** All work must also have the approval of all West Virginia governmental authorities and agencies having jurisdiction over the project including but not limited to the following:
- a. West Virginia State Fire Marshal
 - b. West Virginia Department of Health
 - c. West Virginia Department of Natural Resources
 - d. West Virginia Department of Highways
 - e. West Virginia Department of Education
 - f. West Virginia Division of Labor
 - g. School Building Authority of West Virginia
 - h. West Virginia Division of Environmental Protection

16.4 Payroll Certification and Employment Reporting

- 16.4.1** All contractors and subcontractors shall pay West Virginia Department of Labor fair minimum rate of wages as established in Section 21-5A of the WV Code, for the county in which the work of this contract is performed. The term "fair minimum rate of wages" shall be set forth in 21-5A-3 of the West Virginia Code. The SBA's requirement for submission of certified payrolls, supersedes the requirements of current state law. The SBA requires that a certified payroll be submitted with each contractor's pay application using U.S. Department of Labor Form WH-347 (formerly DOL 184). Contractors may provide this information in an alternative format provided all required information on the WH-347 is included on the alternative document. Each certified payroll must include names, addresses and social security numbers of all workers, including those of any subcontractors, in order to assure compliance with West Virginia's prevailing

wage laws and the SBA's Supplemental, General and Special Conditions. Upon request, counties will be required to submit the certified payroll report to the SBA for review.

16.4.2 All contractors and subcontractors must comply with the "West Virginia Jobs Act" requirements found in Chapter 21, Article 1C of the West Virginia Code and all Department of Labor regulations.

16.4.3 County school boards and other grant recipients shall require all contractors and service providers to verify the criminal records of their employees before granting access to the construction site. All prime contractors and their subcontractors that will be present on the construction site or other board property shall provide the County Board or other grant recipient (owner) assurances of compliance with pertinent WV Code and SBA Policy by verifying the eligibility of all workers by providing a completed SBA Forms 181 and 182 to the County Board of Education or other grant recipient (owner). These forms shall be submitted along with the contract for construction and the contract will not be fully executed until this provision has been satisfied.

16.4.4 The successful low bid prime contractor and all subcontractors performing work on the project shall verify the legal status of all workers and shall comply with the latest West Virginia Code chapter 21 article 1B. All prime contractors and their subcontractors shall provide assurances to the county boards of education or other grant recipients (owner) by submitting a completed SBA Form 181. This document acknowledges the prime contractor has received assurances from subcontractors (SBA Form 182) that they are in compliance with applicable WV Code and SBA Policy. Contractors shall maintain records verifying the legal status of workers and shall, upon request by the Commissioner of Labor, surrender all employee records, including all records relating to the payment of State and Federal taxes, for verification of their legal status. If upon examination of records, the Commissioner determines that a contractor is in violation of the provisions of this code, the Commissioner may enter and order that imposes disciplinary action as provided for in article 21-1B- 1 thru 7 of the West Virginia Code.

16.4.5 Provide at Project Close-out the following documentation, but not limited to:

- a. Contractor's Affidavit of Payment of Debts and Claims (AIA G706)
- b. Contractor's Affidavit of Release of Liens (AIA G706A)
- c. Consent of Surety Company to Final Payment (AIA G707)
- d. Certificate of Insurance (Acord Form and AIA G715) Covering required/specified products and completed operation
- e. Certificate of Release from the Department of Tax and Revenue stating all appropriate taxes have been paid
- f. Verification from the Owner (county superintendent) that all Owner training required by the contract documents has been conducted (SBA 159)
- g. Fire Marshall's Certificate of Occupancy

- h. Affidavit of Debt Paid (SBA 177)
- i. Prepare quality training videos

16.5 SBA Project Observation

16.5.1 The School Building Authority reserves the right to visit projects at intervals deemed necessary to observe the progress of the construction. The SBA field representative shall have such responsibilities as the SBA may delegate.

16.5.2 The School Building Authority reserves the right to review all Contractors Applications for Payment and request additional documentation to substantiate the request and in cooperation with the owner make adjustments as deemed appropriate.

16.5.3 The responsible contractor shall notify the SBA office two weeks in advance of:

- .1 The Testing, Adjusting & Balancing of the HVAC system.
- .2 The training of the county maintenance and custodial personnel on new building components.
- .3 The scheduled punch list walk-thru of the new or renovated school.

16.5.2 County boards of education, before accepting the HVAC contractor's work, shall receive complete training regarding the operation and maintenance of the mechanical equipment and building controls. Training shall be completed prior to occupying the building. There shall also be a one (1) day follow-up training in six months or during the succeeding heating/cooling season after the facility has been occupied to insure training on both heating and cooling operations of the system. Where specified, the installation contractor shall provide two-year maintenance and operations for HVAC equipment and other components as described in the bidding documents. The State Department of Education's HVAC Technicians shall be notified of the date and location of any and all training sessions in order to assure its ability to fulfill their responsibilities as delineated in WV Code 18-9E-3(F) & (G). At the conclusion of the training, the grant recipient shall submit the verification of HVAC Training Form (SBA Form 159) to the SBA office.

SBA Policy and Procedures
APPENDIX K

SCHOOL ACCESS SAFETY PLAN

General

The Governor has introduced legislation that will create a School Access Safety Fund that will be managed by the School Building Authority of West Virginia. This new legislation will provide funding for School Access Safety Improvements for schools in West Virginia. To qualify for School Access Safety Funding, each county board of education shall develop a School Access Safety Plan. The plan must be incorporated into the county CEF. An approved School Access Safety Plan is required prior to the distribution of state funds for a project pursuant to the requirement of West Virginia Code Chapter 18-9F.

The School Access Safety Plan shall be prepared in consultation with the Countywide Council on Productive and Safe Schools. Once completed, the School Access Safety Plan shall be submitted to the School Building Authority for review and approval in order to qualify for School Access Safety funding. The plan shall be amended annually to summarize activities and to identify progress being made on projects in the plan. The School Access Safety Plan shall become part of the county comprehensive educational facilities plan and together address the safety upgrading of existing facilities and equipment, building systems, utilities and other similar items in connection with improving the overall access safety and security of the facility. Projects must directly address planning, deterrence, detection, delay and communication issues associated with the ingress and egress of pupils, school employees, parents, visitors and emergency personnel at the schools.

A School Access Safety Audit will be performed and become an integral part of the plan. The SBA approved audit format must be used. The audit must be performed prior to formulating the School Access Safety Plan to establish a basis for current conditions and formulation of the plan. In so doing, both short and long term effects of building access safety improvements will be considered.

School Access Safety funding shall be provided by the Authority on the basis of net enrollment and the efficient use of state funds for school access safety improvement projects. In order to secure School Access Safety funding, an amount equal to or exceeding 15% of the funding available to the county as a local match will be required. Should a county board feel it cannot fulfill the 15% local match requirement, the county board of education may submit a financial hardship waiver request to the Department of Education for review and consideration. Upon review and approval of the request by the State Board of Education, the Authority shall waive the local match requirement and distribute the funding upon approval of the School Access Safety project by the Authority.

Each county board will be notified on or before May 1 of each year as to the availability of School Access Safety funds. With this notification, the amount of funding and timeline for project submission will be provided. A county board of education may use up to twenty percent (20%) of the allotted Safe and Drug Free Schools (Title IV) funds as part of the 15% required local matching funds. Additional Title IV funding may be used to provide training for staff and students as outlined in the Title IV Section of the County Five Year Strategic Plan and approved by the West Virginia Department of Education.

All projects submitted to the Authority for funding consideration must be compatible with the county Comprehensive Educational Facilities Plan goals and objectives as well as the overall goals of the Authority and the School Access Safety Plan.

Funding will **NOT** be distributed to any county board that does not have an approved School Access Safety Plan, does not have the 15% matching funds available and is not prepared to commence expenditure of funds during the fiscal year in which the moneys are distributed. If a hardship waiver is approved, the 15% matching funds will not be required.

Grant funds allocated to a county board and not distributed shall be available for a period of one year. To encourage county boards to proceed promptly with School Access Safety Planning and the expenditure of School Access Safety funding, the SBA will require that approved grant funds be expended within one year of the allocation. Should extenuating circumstances exist, as determined by the SBA, that would prevent the county board from expending the funding within the one year, the SBA may authorize an extension beyond the one year for a period not to exceed six months. Any funds forfeited shall be added to the total funds available for all counties in the School Access Safety Fund of the Authority for future allocation and distribution.

I. SCHOOL ACCESS SAFETY PLAN

The School Access Safety Plan shall include the recommendations and guidelines developed by the Countywide Council along with the county board's assessment of the improvements necessary to improve school access safety. The plan shall address the access safety needs of all school facilities and include a projected school access safety repair and renovation schedule. The plan must be approved by the SBA prior to the distribution of state funds. The plan shall minimally include the key elements referenced in Item I, A-J. Initially, the School Access Safety Plan must be submitted to the SBA for review and approval prior to submitting projects.

Key elements of the School Access Safety Plan include:

- A. Goals and Objectives of the School Access Safety Plan
- B. School Access Safety Audit
- C. Countywide Inventory of Each Facility and Associated Reporting
- D. Identification of a School Safety and Security Committee
- E. Training/Drills for Staff and Students
- F. Summary of Projects within the Plan
- G. Finance Plan
- H. Annual Update
- I. Objective Evaluation of the Implementation of the School Access Safety Plan
- J. New School Design Recommendations

The SBA will require the School Access Safety Audit be addressed first, and once completed, the audit will be required to be submitted to the SBA for review and approval prior to

proceeding with the remainder of the plan. A preliminary plan and plan outline must then be submitted to the SBA office for review and comment to insure the plan contains all key elements identified in the plan outline. This process is a prerequisite to qualifying for School Access Safety funding. The preliminary plan shall also include the name and contact information for the Countywide Council on Safe and Productive Schools and the contact information for the members of the School Safety and Security Committee. Each preliminary plan must include a uniform emergency management policy that describes the county's notification procedures to be followed in the event of an emergency at each school. It will also include an example of signage to be prominently displayed at each school giving the procedures to follow in the event of an emergency as well as contact numbers for emergency assistance. The preliminary plan will be reviewed by the SBA and comments will be provided that will direct the county to continue on the basis of the approval of the preliminary plan or to address additional SBA comments and resubmit the preliminary plan for a second review.

The School Building Authority staff will evaluate the final School Access Safety Plan and recommend approval to the members of the Authority. Once the plans are approved, the county board will submit the list of projects anticipated each funding cycle to the Authority for funding consideration. The Authority will consider whether the proposed projects are in furtherance of the School Access Safety Plan and in compliance with the guidelines established by the Authority. Consideration will also be given by the Authority as to whether the project will assure the prudent and resourceful expenditure of state funds, whether the project advances student health and safety, if the project addresses regularly scheduled preventive maintenance or updates of existing access safety equipment or building components. Each county board receiving funds pursuant to this article shall conduct an annual on-site inspection and submit an audit review to the State Board of Education. The inspection shall be conducted in accordance with the provisions of the Department of Education's Handbook on Planning School Facilities.

II. DETAILED REQUIREMENTS FOR EACH SECTION OF THE SCHOOL ACCESS SAFETY PLAN

A. Goals and Objectives of the School Access Safety Plan

Each county board of education qualifying for School Access Safety funding shall formulate goals and objectives to be accomplished by the School Access Safety plan. The goals and objectives shall reflect an objective means to resolve deficiencies cited within the School Access Safety Audit. While it may be impossible to prevent intruders in schools, it is incumbent upon school administrators to implement policies and procedures that will deter, detect, and delay unauthorized persons attempting to enter school property. Should an intruder gain access, an effective means of communicating to students, staff, the West Virginia State Police, local law enforcement officials and the community must be developed. Based on these basic assumptions, the following must be addressed within the plan:

1. Site Security

- a. Limiting, where possible, access to school sites
- b. Elimination of visual barriers blocking views to entrance driveways and pedestrian walkways
- c. Signage
- d. Structural barriers to control vehicle access to student gathering areas and building entrances
- e. Preparation of diagrammatic school plans that illustrate site utility locations, play areas, parking, bus loading areas, building locations with entrances labeled
- f. Sharing informational strategies with law enforcement
- g. Implementing, where possible, a closed campus program to help protect students and staff at the school

2. Building Security

- a. Controlling access from pre-assigned entrances to the remainder of the school
- b. Establishing a controlled point of entrance at pre-assigned doors
- c. Establishing visitor monitoring and identification process
- d. Provide security for primary and secondary entrances
- e. Monitoring entrances and controlling visitor entrances
- f. Identification of all door entrances (numbering inside & outside)
- g. Upgrading doors and hardware
- h. Installation of alarm systems
- i. Installation of two-way communication capability
- j. Providing diagrammatic layouts of the building that indicate all rooms with room numbers, interior and exterior doors with door numbers and the direction of the door swing, main utility shut-offs and other pertinent information that would be provided to emergency management personnel should they be needed at the school. Additionally, the building common areas should be color coded to allow quick identification and all school safety signage should match the color code of the common area.

3. Communication

- a. Establish two-way communication between administrative areas and classrooms
- b. Establish notification procedures between school and local law enforcement
- c. Establish protocol for shelter in place and building lockdown should an intruder enter the building
- d. Consent from the Countywide Council and advise council on productive and safe schools

- e. Establish an evacuation plan for each facility and communicate the plan to school staff and parents.

B. School Access Safety Audit

- 1. Each county will be responsible for conducting an audit to review the current state of access safety in all schools prior to preparing the School Access Safety Plan. The School Access Safety Audit shall be performed using the SBA approved audit format. The audit will help identify school access safety deficiencies and help the school access safety committee begin to formulate the basis of the School Access Safety Plan. Based on this information and the goals and objectives of the plan, a list of priority projects that will improve and control access to schools can be formulated.

This audit, at a minimum will:

- a. Establish procedures for identifying problems and recommending solutions for school access safety deficiencies
- b. Evaluate current deterrents that discourage, hinder or impede intruders from entering school buildings and grounds
- c. Inventory existing detection and control devices and alarm systems
- d. Evaluate current physical barriers that slow and impede unauthorized acts once detected
- e. Identify improvements necessary to existing communication equipment
- f. Establish a chain of command at the school and county level for effective communications with the local school, county and emergency management and law enforcement agencies.

C. Countywide Inventory of Each Facility and Associated Reporting

- 1. Each county board shall provide an estimate of probable cost to correct identified deficiencies using the School Access Safety Repair and Renovation Schedule. The individual school costs shall be amended into the current CEFPP Finance Plan and recorded as a separate total dollar amount for each school. These deficiencies and costs will be reviewed annually and updated as a part of the local board annual update report provided to the SBA and the State Department of Education. The audit must also be included in the plan and performed in cooperation with local law enforcement and emergency services. Copies of the audit including building name, address and number of students and staff must be provided. A building diagram must be provided to the West Virginia State Police, local law enforcement, the Department of Military Affairs and Public Safety, Division of Homeland Security and Emergency Management, West Virginia Department of Education, Office of School Facilities and the State Fire Marshal's Office in an electronic format. Include a chain of command list of individuals at the school and county level along with phone numbers. The diagrams must include the current room layouts, location of windows, doors (with swing direction) and all utility entrances and shutoffs. All new school (and existing schools, if available)

as-built drawings must be secured in a central location identified in the School Access Safety Plan and must be available to emergency responders upon request. The Department of Education will verify the location and condition of the as-built drawings for all new schools during their annual maintenance and custodial reviews and report their findings to the SBA office.

2. A countywide inventory of each school facility's interior and exterior classroom and administrative doors shall be performed. The inventory shall include:
 - a. The number of controlled points of ingress to the school.
 - b. The number and placement of exterior doors and windows.
 - c. The inventory and condition of all monitoring systems on exterior doors.
 - d. The location and condition of automated locking devices.
 - e. The availability of two way communication between points of ingress to the school.
 - f. The availability of alarm hardware and/or remote visitor access systems on points of ingress.
3. The following reports must be included within the plan:
 - a. A copy of the current statute of school crime committed on school grounds.
 - b. A projected school access safety repair and renovation schedule for all schools.
 - c. A prioritization process for all projects in the plan.
 - d. An itemized cost summary for recommended improvements.
 - e. A regularly scheduled preventive maintenance plan for safety and security equipment.

D. Identification of a School Safety and Security Committee

Each school shall have a School Safety Committee that will meet at least annually to review matters of school safety and make recommendations for the improvements of school access safety at the school and community level. The committee shall be made up of members of the school administration, teaching staff, school counseling staff, if available, student representation (at the secondary level, only), a Local School Improvement Council representative, a parent representative, the West Virginia State Police, local law enforcement, local emergency services and the community at large. The local School Safety Committee will prepare a baseline audit and provide an annual report based on their inspection of the facility to the superintendent regarding school safety and security on or before October 1 of each school year. The report will include a summary of the school access safety projects completed or in progress and the committee's assessment of the project's effectiveness. The committee will review the school safety needs as they relate to the existing School Access Safety Plan and make recommendations for amendments to the plan. The superintendent and staff will review the committee recommendations and recommend amendments to the plan, if required. The annual update to the plan provided to the SBA and the State Board of Education will reflect proposed new projects, completed projects and/or amended projects in the plan.

E. Training/Drills for Staff and Students

The School Access Safety Plan for each school and the School Safety Committee recommendations shall be reviewed during the local school improvement council meetings at least annually or as items for discussion occurs. Schools are encouraged to cooperate with other schools to provide staff training regarding school access safety. All teachers and administrators should be aware of the county policies regarding school safety. Students should be provided with age appropriate training regarding the procedure they should follow in the event of an emergency. Additionally, the student code of conduct established by the county should be reviewed by the school staff and the school safety committee. Student and parental responsibilities regarding the prevention of harassment, intimidation and bullying in schools should be reviewed and updated annually. To assist with this process, county boards must comply with State Board of Education Policy 4373. The Anti-Bullying Audit (SBA 174) must be completed and included in the School Access Safety Plan. Local boards should solicit the West Virginia State Police, local law enforcement and emergency service trainers to advise teacher and students regarding their participation in the overall improvement of school access safety. Scheduled lockdown drills and communication capabilities in cooperation with local law enforcement are also encouraged to prepare students and staff for unauthorized intrusion on school property, should measures fail. Existing school safety training may be used to fulfill these requirements; however, school access training derived from input of the School Access Safety Audit must be incorporated into the training.

F. Summary of Projects within the Plan

The School Access Safety Audit will identify deficiencies at each facility with regards to school access safety. Projects proposed in the plan will be identified for each facility and the estimate of probable cost will be provided. Initially, the project costs will be listed on a separate document and placed in the School Access Safety Plan section incorporated into the countywide comprehensive educational facilities plan (CEFP). Approved expenditures include the cost of equipment, machinery, installation of utilities, necessary renovation and attention to existing facilities, design fees and associated costs for building improvement packages directly related to the project. Alterations to ingress and egress must meet all building codes including West Virginia Fire Code and Life Safety Code 101 and must be approved by the State Fire Marshal. Professional architectural and engineering services may also be required when substantial building alterations are planned to improve the school access safety. All projects identified in the plan will be prioritized using the prioritization process within the existing county CEFP. The SBA School Access Safety Repair and Renovation Schedule will be used to identify projects at each school. The project cost summary sheet must also identify all funding sources proposed for each project.

At the conclusion of the 2000-2010 planning cycle, the School Access Safety Plan projects will be incorporated into the 2010-2020 CEFP and will then be included along with other improvement projects in the plan on the School Improvement Cost Summary sheets. School Access Safety projects will be identified on the Cost Summary Sheet.

Each project within the plan must further the overall goals of the School Access Safety Plan and the goals and objectives of the School Building Authority.

G. Finance Plan

Initially, the finance plan for the School Access Safety Plan will be included in a separate chapter of the countywide CEF. This information will be incorporated into the finance plan for the new ten-year CEF beginning with the 2010-2020 planning cycle and thereafter. The SBA School Access Safety Repair and Renovation Schedule will be used to identify projects, priorities, completion dates, costs and funding sources in the finance plan. A cost summary of each implemented project along with the identified funding source(s) must be provided, including the required local matching funds. The summary of the School Access Safety Plan cost should total the individual project cost totals including all soft costs, where applicable.

H. Annual Update

Each county board shall provide the SBA an annual update of the progress on the plan. The update shall be incorporated into the county's CEF Annual Update and shall include a list of completed School Access Safety Plan projects and a list of proposed projects. School Access Safety diagrams must also be updated annually if there are structural changes made in the school. This will require annual reviews by the county facility personnel to insure accurate building information is always available to emergency responders. Should there be new projects and the plan requires amendments, the SBA/SDE amendment procedures must be followed. Additionally, the annual update should include amendment information that relates to the new projects. The SBA School Access Repair and Renovation Schedule must be used to record the projects initially and updated annually as required.

I. Objective Evaluation of the Implementation of the School Access Safety Plan

The School Access Safety Plan shall include an objective means to be utilized in evaluating the implementation and effectiveness of the plan and each project included in the plan. The evaluation shall measure how:

1. Each project furthers the goals and objectives established for the plan,
2. Completed projects within the plan contribute to improving school access safety, and
3. The School Access Safety training and drills help prepare students and staff for emergency response to intruders in the school.

J. New School Design Recommendations

Where SBA funding is provided for the design and construction, all new schools shall be designed and constructed using Crime Prevention Through Environmental Design (CPTED) concepts that also address School Access Safety. Additionally, when major additions and renovations occur at existing schools these same design concepts must be

incorporated into the project scope of work. The School Access Safety design issues identified in the School Access Safety Audit must also be incorporated into new school designs. Local law enforcement and emergency services officials should be consulted during the planning phase of the new school design to provide input regarding emergency services. All school designs must be submitted to the SBA for review and comment as provided for in the SBA Guidelines and Procedures Manual.

K. School Design Updates

The State Office of Homeland Security maintains digital mapping and vulnerability and risk assessments for all schools. As a result, all West Virginia schools are being evaluated and mapped in accordance with provision of the Division of Military Affairs and Public Safety (DMAPS) and the State Office of Homeland Security. Funding has been provided for the initial survey and mapping. However, this program will only be effective if the building design characteristics are kept current. Therefore, it will be the county board of education's responsibility to update the building designs when they are altered from the design in place when the initial survey occurred. As a part of the CEFPP annual update, counties are required to provide assurances that building design alterations that materially affect the building area, layout or change the initial data collected by the digital mapping is changed. This information shall be forwarded to the State Office of Homeland Security upon completion of the project and provided annually for all other school remodeling.

III. SBA REVIEW OF SCHOOL ACCESS SAFETY PROJECTS

As funding becomes available, the SBA will notify county boards of the submission schedule for projects. The amount of funding for each county will be provided to allow counties to match their project scope of work with the funding available. The SBA will review each project based on the following:

1. How the School Access Safety Project advances student health and safety needs;
2. How the School Access Safety Project will assure prudent and resourceful expenditure of state funds, and
3. How the project furthers the overall goals and objectives of the School Access Safety Plan, the county board's comprehensive educational facilities plan and the overall goals and objectives of the SBA.

SBA Policy and Procedures
APPENDIX L

SBA 104

EXHIBIT A-1

EXHIBIT A-2

EXHIBIT B

EXHIBIT C

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA
PROJECT DESCRIPTION AND FINANCE PLAN
EXHIBIT A-1

COUNTY _____

DATE OF GRANT _____

PROJECT NUMBER
SCHOOL FACILITY AND
ESTIMATED COST:

XX-XXX-XXX

\$0.00

DESCRIPTION OF PROJECT:

REVENUE SOURCES:

	<u>Amount</u>	<u>Percentage</u>
School Construction Fund Allocations – FY _____	0.00	0.00%
<u>School Construction Fund Allocation – FY _____</u>	<u>0.00</u>	<u>0.00%</u>
Local Funds	<u>0.00</u>	<u>0.00%</u>
TOTAL FINANCE PLAN	<u>\$0.00</u>	<u>0.00%</u>

PROJECT DEVELOPMENT SCHEDULE EXHIBIT A-2

High School /Design Build Schedule

Milestone	Timeframe (months)
1. Planning (1)	3
2. Schematic design	2.5
3. Design development & technology plan	5
4. Bidding documents	3.5
5. Bidding and contract award	1
6. Construction (2)	21
Total Time	36

Middle School/Design Build Schedule

Milestone	Timeframe (months)
1. Planning (1)	3
2. Schematic design	2.5
3. Design development & technology plan	5
4. Bidding documents	3.5
5. Bidding and contract award	1
6. Construction (2)	18
Total Time	33

Elementary School/Design Build Schedule

Milestone	Timeframe (months)
1. Planning (1)	3
2. Schematic design	2
3. Design development & technology plan	4
4. Bidding documents	3
5. Bidding and contract award	1
6. Construction (2)	14
Total Time	27

Note (1) The project development schedule begins with the SBA notice of grant award. It is imperative that the project move forward based on the schedule provided. To meet the critical timelines, you will be required to have all planning, design, and when applicable, construction management professionals under contract and the educational program of space completed within 90 days of the grant award notice. The scope and complexity of each project will be considered and the development schedule will be adjusted to reflect greater or less planning and design time as determined by the SBA. Submission requirements for items 1-4 are provided on SBA Form 176 A-E in the SBA Policy and Procedure Manual. If the project is delayed at any phase at the county level as a result of timelines not being met, the SBA will require the grant recipients to pay the delay costs based on the current annual construction inflation rate, prorated over the number of months the project is delayed. Design Build project schedules will be adjusted to comply with the requirements of code and SBA Design/Build Policy. Major addition and renovation project schedules will be established jointly with the grant recipient, project architect or design builder and the SBA based on the size and complexity of the project.

Note (2) Unless approved by the SBA, the construction timeline for a lump sum contract will be dictated by the completion days provided by the contractors within the bid. The construction timeframes indicated above are approximate.

exhibit a-2 Revised 4/2014

**SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA
EXHIBIT B
REQUISITION FORM**

COUNTY: _____ DATE: _____

SUBMIT TO:

United National Bank
P.O. Box 393
Charleston, WV 25392
Attention: Kathy Smith

SUBMIT TO:

School Building Authority of West Virginia
2300 Kanawha Boulevard, East
Charleston, WV 25311-2306
Attention: Garry Stewart

You are authorized to make the following disbursement from the School Building Authority of West Virginia Project Fund (the AFund®) maintained under that certain Depository Agreement dated February 15, 1990 by and between the School Building Authority of West Virginia and United National Bank, as Depository.

- (1) County Account: _____
- (2) Requisition Number: _____
- (3) Name of School: _____
- (4) SBA Project Number: _____
- (5) Name and Address of Payee:
(Co. Bd. Of Ed. Or RESA) _____

- (6) Amount:
(Total all invoices) _____

- A. The expense listed above has been incurred as a cost of a project identified in the Grant Contract, dated _____ by and between the School Building Authority of West Virginia and the undersigned county board.
- B. A copy of the invoice relating to this payment and a description of the work, materials or equipment is attached. Such materials are not subject to any lien or security interest and such funds will not be used to satisfy such lien or security interest.
- C. By affixing my signature, I certify that all requisitions from which payment was received the prior month have been paid to the vendor(s).

Dated this _____ day of _____, 20____.

THE BOARD OF EDUCATION OF
THE COUNTY OF _____

By _____
County Superintendent

Note: Requisitions must be received by United National Bank and the Authority on or prior to the 5th day of the month in which payment is required. No facsimile requisitions will be accepted for issue of payment.
SBA104A (Revised 4/2014)

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA
PROJECT FINANCE PLAN AMENDMENT FORM
EXHIBIT C

COUNTY: _____

DATE: _____

PROJECT DESCRIPTION: _____

Amended Project Finance Plan ☐

Final Project Finance Plan ☐

<u>Description of Funding Sources:</u>	<u>Date of Availability</u>	<u>Construction Budget As Previously Approved by SBA</u>	<u>Increase (Decrease) in Project Funds</u>	<u>Current Construction Budget As Proposed By County BOE</u>	<u>Percentage of Total Funding</u>
Original SBA Construction Fund Grant					
Supplemental SBA Grants Awarded					
<u>Local Funding (Indicate Source):</u>					
1.					
2.					
3.					
4.					
5.					
6.					
<u>Other Funding (Indicate Source):</u>					
1. DOH Reimbursement					
2. Federal Government Grant					
3.					
4.					
5.					
TOTAL PROJECT FINANCE PLAN		<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00%</u>

- A. We certify to the best of our knowledge and belief that the above information is correct. A copy of the Board of Education minutes approving this project finance plan change is attached for your reference.

County Board of Education President

County Superintendent

THIS FORM MUST BE UPDATED EACH TIME THE PROJECT FINANCE PLAN IS ALTERED AND THE FINAL PROJECT COST MUST BE RECORDED ON THIS FORM AND ACCOMPANY THE FINAL REQUEST FOR PROJECT CLOSEOUT FUNDS.

Exhibit C/Revised 4/2014

SBA 105
CONTRACTOR'S QUALIFICATION STATEMENT

School Building Authority of West Virginia
CONTRACTOR'S QUALIFICATION STATEMENT

The undersigned certified under oath that the information provided herein is true and sufficiently complete so as not to be misleading. This document must be submitted by the apparent low bidder(s) within three (3) days after the bid opening and will be used in the bid evaluation process.

SUBMITTED TO: School Building Authority of West Virginia
2300 Kanawha Boulevard, East
Charleston, WV 25311

SUBMITTED BY: Firm Name: _____
Address: _____
Phone: _____
Fax: _____
Email: _____
Principal Office Location: _____
Valid WV Contractor License Number _____

**QUALIFICATION STATEMENT SUBMITTED FOR
(INSERT PROJECT NAME):**

TYPE OF WORK:

Site Preparation	_____	General Construction	_____
Roofing	_____	Plumbing	_____
HVAC	_____	Sprinkler	_____
Electrical	_____	Other	_____

(File separate form for each classification of work)

ORGANIZATION:

Please provide the following information concerning your organization:

TYPE OF ENTITY:

Corporation	_____	Individual	_____
Partnership	_____	Other	_____

NAME OF PRINCIPAL, OWNERS OR PARTNERS:

Name	Position	Years of Service with Organization
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Number of years this organization has been in business? _____

Have members of this organization operated under former names/businesses? If "yes," list name, type of entity and names of principal, owners or partners.

Yes ____ No ____

Provide a brief description of the general type of construction the firm performs.

Please indicate the work you intend to subcontract or perform for this project.

	Perform	Subcontract		Perform	Subcontract
Earthwork	_____	_____	Plumbing	_____	_____
Concrete	_____	_____	HVAC	_____	_____
Masonry	_____	_____	Electrical	_____	_____
Structural	_____	_____	Other _____	_____	_____
Roofing	_____	_____	Other _____	_____	_____
Sprinkler	_____	_____		_____	_____

Please provide information regarding your company's participation in a drug program that meets the objectives, applicable laws and regulations for a drug free workplace including the use of tobacco and alcohol on school properties.

Please provide information regarding the experience and skill of the bidder's work force and that of the bidder's designated subcontractors. Attach additional information, if required. (Marked as Attachment __.)

_____	_____
_____	_____
_____	_____
_____	_____

EXPERIENCE:

If you have completed school construction work or similar construction, or completed work on SBA projects, provide a list of projects with individual references that can verify the quality of your work, your ability to construct within budget and your ability to work within the proposed schedule. Attach additional information, if required. (Marked as Attachment __.)

Project

Reference

_____	_____
_____	_____
_____	_____

Please list (marked as Attachment __) all major construction projects (schools or other projects) your organization has in progress providing the name of project, owner, architect, contract amount, bonding company, insurance carrier, percentage complete and scheduled completion date.

Please list (marked as Attachment __) major projects (schools or other projects) your organization has completed in the past five years, giving the name of project, owner, architect, contract amount, bonding company, date of completion and percentage of the cost of the work performed with your own forces. Note whether or not each project was completed on schedule.

APPRENTICESHIP PROGRAM:

Please provide information regarding your company's and subcontractor's participation in a bonafide apprenticeship program that is approved by the U.S. Department of Labor, U.S. Bureau of Apprenticeship Training and is administered in compliance with the rules and regulations of the WV Department of Labor. [See DOL 42-7-3.1(i)] (Marked as Attachment __)

REGULATORY COMPLIANCE:

At any time during the past five years, has your firm, or any of its owners or officers been found in violation or in default in any of the following categories: (Attach detailed explanation for all Yes answers.)

Worker's Compensation Laws	Yes _____	No _____
Unemployment Compensation Laws	Yes _____	No _____
Federal and State Prevailing Wage Laws	Yes _____	No _____
Fair Labor Standards Act	Yes _____	No _____
Compliance with fringe benefit contributions (i.e., health insurance and pension benefits)	Yes _____	No _____
Immigration Reform and Control Act (IRCA)	Yes _____	No _____

INSURANCE AND BONDS:

Please list name of current insurance carrier and number of projects insured by carrier:

Insurance Carrier

Number of Projects

(Marked as Attachment __, if required)

Please list name of bonding company(s)/agent(s) utilized for projects constructed during the last five years:

Bonding Company

Bonding Company/Agent

CLAIMS AND SUITS: (Attach detailed explanation for all Yes answers)

Has your organization ever failed to complete any Construction work it has been awarded? Yes _____ No _____

Within the last five years, has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a construction contract? (If the answer is yes, please describe in full) Yes _____ No _____

Has there been in the last ten (10) years, or is there now pending or threatened, any litigation, arbitration, investigation, or governmental or regulatory proceeding involving claims in excess of \$100,000 or requesting a declaratory judgment or injunctive relief with respect to the construction or operation of any building which your firm, its principals, predecessors or affiliates constructed?

Yes _____ No _____

Is there any potential claim, demand, litigation arbitration, investigation, governmental proceeding or regulatory proceeding involving your firm, or its principals, predecessors or affiliates? If the answer to either of the preceding questions is "yes," please describe in full in an attachment.

Yes _____ No _____

In addition to the litigation, arbitration, investigation or governmental or regulatory proceeding referred to in the preceding paragraphs, is there any litigation, arbitration, investigation or governmental or regulatory proceeding now pending or threatened to which your firm is or may be a party, or are you aware of any potential claim or demand, which might otherwise affect the capacity of your firm to perform with respect to your involvement with the School Building Authority of West Virginia, whether or not it concerns other work which you have undertaken? If so, please describe in full.

Yes _____ No _____

Is your company currently in default on any departments to the state or political subdivisions that in aggregate exceeds \$1,000? See WV Code 5A-3-10a.

Yes _____ No _____

At any time during the past five (5) years has your firm, or any of its owners or officers, been debarred or otherwise deemed ineligible to bid on or be awarded a public works contract or perform work as a subcontractor on a public works contract, under the laws of the federal government, state, county or municipal authority?

Yes _____ No _____

At any time during the last five (5) years has your firm, or any of its owners or officers, been convicted of a crime relating to the awarding of a contract for a public works construction project,

Yes _____ No _____

or the bidding or performance of a public works project?

Is there any person owing ten (10) percent or more of this company, or officer of the company, that is currently, or at the time of the bid, on the Worker's Compensation Employer Violator System? If yes, provide name of individual.

Yes _____ No _____

BANKRUPTCY:

Has your firm, its principals, predecessors, or affiliates been the subject of any proceeding under the federal bankruptcy laws or any other proceeding under state or federal law in which a court or government agency has assumed jurisdiction over any of the assets or business of your firm, its principals, predecessors or affiliates? If so, please identify the proceedings, the court or governmental body and the date such jurisdiction was assumed in an attachment.

Yes _____ No _____

FINANCIAL CONDITION:

Financial Statements are required for every contractor and subcontractor working on an SBA funded project. This confidential statement is kept on file in the SBA office and is valid for one calendar year. Once expired, a new statement will be required as a condition of future bid awards. *The Contractor Qualification Statement is considered incomplete unless this financial information is provided.

Please attach your organization's last two (2) years financial statements including your latest balance sheet and income statement showing the following:

Current Assets (e.g., cash, joint venture accounts, accounts receivable, accrued income, deposits, materials inventory and prepaid expenses);

Net Fixed Assets;

Other Assets;

Current Liabilities (e.g., accounts payable, notes payable, accrued expenses, provision for income taxes, advances, accrued salaries and accrued payroll taxes);

Other Liabilities (e.g., capital, capital stock, authorized and outstanding shares par values, earned surplus and retained earnings).

Name and address of firms attached financial statement and date thereof.

CHANGE ORDER HISTORY:

Describe each instance within the last five (5) years where change orders applied for during construction amounted in the aggregate to more than five percent (5%) of the
(Revised 6/09)

contract price for any building which your firm constructed, or in which actual construction costs exceeded the contract price by more than five percent (5%). (Exclude owner requested change orders). (Marked as Attachment __, if required)

Project	Change Order/Construction Cost Overrun Amounts

REFERENCES:

Please list below trade references:

Please list below bank references:

Please list below completed project owner references:

SIGNATURE AND NOTARY:

Dates at _____ this _____ day of _____, 20__.

Name of Organization: _____

By: _____

Title: _____

State of _____, County of _____

Subscribed and sworn before me this _____ day of _____, 20__.

Notary Public: _____

My Commission Expires: _____

Notary Seal

SBA 106
APPLICATION FOR AMENDMENT

COMPREHENSIVE EDUCATIONAL FACILITIES PLAN APPLICATION FOR AMENDMENT

To be submitted to the SBA and the WVDE

COUNTY: _____
AMENDMENT #: _____

DATE: _____
AMENDMENT TYPE(s):
A. Budget___ B. Project___ C. Overall Plan___

Date Amendment Approved by LEA: _____ Signature-County Superintendent: _____

Briefly describe the nature of the amendment and/or scope of work to be completed:

A. BUDGET AMENDMENTS FOR PREVIOUSLY APPROVED PROJECT WITHIN THE CURRENT CEF

Include a revised CEF finance plan summary sheet and any other altered CEF pages with revision date as per Section E to specifically reflect the project expenditures requested in this amendment. Briefly describe the need to adjust the present budget.

		Budget Amount
1. Total project budget previously approved in CEF		\$ _____
a. SBA Grant	\$ _____	
b. Other (describe)	\$ _____	
2. Amendment to this project budget (+/-)		\$ _____
a. SBA Grant	\$ _____	
b. Other (describe)	\$ _____	
3. Total amount of this project if amendment is approved		\$ _____

B. AMENDMENT TO EXISTING OR NEW PROJECT (Complete information on reverse side of form if 2, 3, or 4 are checked below)

1. ___ Revise the scope of an existing project	2. ___ Add a new project not currently in CEF
3. ___ New addition or renovation project	4. ___ Technology and/or bldg. infrastructure improvements

Provide a revised budget in Part A for the project(s) affected by this amendment. Also, provide replacement sheets for the current approved plan on file in the SBA and WVDE offices for all chapters of the plan affected by the amendment. Include revision dates on all replacement sheets as per Section E.

C. OVERALL PLAN AMENDMENT (Complete Information on Reverse Side of Form)

Amendments to the overall plan are defined as those changes that alter the educational delivery models (grade configuration, delivery system, etc.) or dramatically affect the major elements of the CEF identified in State Board Policy 6200, Chapter 1, Handbook on Planning Schools or Goals and Objectives of the SBA (West Virginia Code 18-9D-15). Provide replacement sheets for the current approved plan on file in the SBA and WVDE offices for all chapters of the plan affected by the amendment include revisions dates on all replacement sheets as per Section E.

D. AMENDMENT JUSTIFICATION AS REQUIRED IN WEST VIRGINIA CODE 18-9D-15
(Attachment additional backup information, if required)

1. Describe how the amendment alters the current ten-year comprehensive educational facilities plan, project, finance plan and changes in the scope of the project. (Narrative)
2. Provide the impact of this amendment upon the educational opportunities of students and the budget of the LEA. (Narrative)
3. Describe how the existing facility plan does not and the proposed amendment does meet the following goals of the SBA:
 - a. Student Health and Safety
 - b. Economy of Scale
 - c. Travel Time
 - d. Multi-County Project
 - e. Curricular Improvements
 - f. Educational Innovations
 - g. Adequate Space

E. SUBMISSION OF REVISED CEFP PAGES

List the page numbers changed in the CEFP by this amendment, attach the altered pages to this form, place the revision date (revised [date]) on the bottom right hand corner of each revised page and submit one copy to both the SBA and the WVDE. If additional pages are required, use the page number from the preceding page in the CEFP and add successive letters, i.e., 47, 47a, 47b, 48.

FOR SBA AND SDE USE ONLY

Project Number: _____ Previous Budget Approved: \$ _____ Amended Budget Approved: \$ _____

SBA APPROVAL DATE: _____ **SDE APPROVAL DATE:** _____

SBA/WVDE 106
sba106appforamendment

SBA 113
CONSTRUCTION OBSERVATION REPORT

School Building Authority of West Virginia Construction Observation Report # _____

County: _____
Project: _____
Architect/Engineer: _____
Phone #: _____

Dates: _____ to _____
Prepared By: _____
Clerk of the Works: _____
Job Phone #: _____

Number of Personnel Present

Contractors	M	T	W	T	F	Sat
GC name (S, A, O, J)	0, 0, 0, 0	0, 0, 0, 0	0, 0, 0, 0	0, 0, 0, 0	0, 0, 0, 0	0
Plumb Contr. name (F, J, A)	0, 0, 0	0, 0, 0	0, 0, 0	0, 0, 0	0, 0, 0	0
Electrical Contr. name (F, J, A)	0, 0, 0	0, 2, 0	0, 2, 0	0, 2, 0	0, 1, 0	0
Mech. Contr. name (F, L, A, J)	0, 0, 0, 0	0, 0, 0, 0	0, 0, 0, 0	0, 0, 0, 0	0, 0, 0, 0	0
Misc. Subcontr. name (J)	0	0	0	0	0	0
Misc. Subcontr. name (F, J, A)	0, 0, 0	0, 0, 0	0, 0, 0	0, 0, 0	0, 0, 0	0
Misc. Subcontr. name (J, A, L)	0, 0, 0	0, 0, 0	0, 0, 0	0, 0, 0	0, 0, 0	0
Misc. Subcontr. name (J, A)	0, 0	0, 0	0, 0	0, 0	0, 0	0
Misc. Subcontr. name (J)	0	0	0	0	0	0
Misc. Subcontr. name (J, A)	0, 0	0, 0	0, 0	0, 0	0, 0	0
Weather (AM[7:00]/PM[4:30])	Cl, Lo61/ Cl, Hi83	Ov, Lo61/ C, Hi77	Ov, Lo60/ Cl, Hi76	Fg, Lo60/ Cl, Hi80	Fg, Lo60/ Cl, Hi81	-

Job Titles: S=Supervisor, J=Journeyman, A=Apprentice, L=Laborer, F=Foreman, O=Operator
Weather: Fg=fog, Oc=overcast, Ra=rain, Sn=snow, C=clear, Cl=Cloudy Pc=partly cloudy Lo=low, Hi=high

Remarks:

Monday, _____
Daily Activity: _____

Issues: _____

Tuesday, _____
Daily Activity: _____

Issues: _____

Wednesday, _____
Daily Activity: _____

Issues: _____

Thursday, _____
Daily Activity: _____

Issues: _____

Friday, _____
Daily Activity: _____

Issues: _____

Saturday, _____
Daily Activity: _____

Issues: _____

School Building Authority of West Virginia
Construction Observation Report # _____

<u>Division of Work</u>	<u>% Complete</u>	<u>Division of Work</u>	<u>% Complete</u>
General Requirements	_____	Roofing	_____
Site Work	_____	Sealers	_____
Demolition	_____	Finishes	_____
Subsurface	_____	Floors	_____
Clearing/Grading	_____	Walls	_____
Concrete	_____	Ceilings	_____
Ftg./Foundations	_____	Specialties	_____
Slabs/Deck	_____	Chalk/Tackboard	_____
Walks	_____	Fire Extinguishers	_____
Masonry	_____	Others	_____
Foundations	_____	Equipment	_____
Exterior Walls	_____	Furnishings	_____
Interior Walls	_____	Special Construction	_____
Metal	_____	Conveying Systems	_____
Structural Steel	_____	Elevator	_____
Steel Joists	_____	Mechanical	_____
Floor Decking	_____	Insulation	_____
Roof Decking	_____	Plumbing/Piping/Drain	_____
Fabricated Metals	_____	Sprinkler System	_____
Carpentry	_____	HVAC	_____
Moisture Protection	_____	Electrical	_____
Waterproofing	_____	Service & Distribution	_____
Building Insulation	_____	Lighting	_____
Metal Flashing/Trim	_____	Communications/FA	_____
 Others	 _____		
_____	_____		
_____	_____		
_____	_____		
 Total Project Complete	 _____ %		

Remarks:

SBA/WVDE 116
FACILITY CLASSIFICATION FORM

COUNTY: _____

DATE: _____

School Classification Categories:	
P= Permanent	A school facility that is to be utilized throughout the 10 year planning period without a change in its present use or grade configuration.
T= Transitional	A school facility that is projected to be utilized throughout the 10 year planning period but will experience a change in its grade configuration or use.
F= Functional	A school facility that is projected for closure between the 5th and 10th year during the 10 year planning period.
C= Closure	A school facility that is projected for closure before the 5th year of the 10 year planning period.

SBA\WVDE 116

SBA 120
NEEDS EXECUTIVE SUMMARY

NEEDS

School Building Authority of West Virginia Construction Fund Project "Needs" – Executive Summary

PROJECT _____
COUNTY _____ **PROJECT COST** \$ _____

IMPLEMENTING TOTAL CEFP

SBA NEEDS \$ _____
SBA MIP \$ _____
LOCAL \$ _____
FEDERAL \$ _____
OTHER \$ _____
TOTAL \$ _____

FUNDING SOURCE – THIS PROJECT

SBA \$ _____
LOCAL \$ _____
FEDERAL \$ _____
OTHER \$ _____
TOTAL \$ _____

Bonding Capacity \$ _____
Excess Levy Capacity \$ _____

Available Bonding Capacity \$ _____
Remaining Levy Capacity \$ _____

If you have an excess levy:

What percentage are you currently collecting? _____%

What amount of the excess levy is dedicated to capital improvements annually? \$ _____

What is the expiration date of your levy? _____

PROJECT DESCRIPTION:

PROJECT STATUS

Site Selected Yes _____ No _____ New Site _____

Geotechnical Yes _____ No _____

Existing Board Owned Property Yes _____ No _____

Survey Performed _____

Programming/Preliminary Design Completed – Describe: _____

SCHOOL CLOSURE STATUS

School Closure Required Yes _____ No _____

County Hearing Done Yes _____ No _____

County BOE Approved Yes _____ No _____

WV BOE Approved Yes _____ No _____

PROTO-TYPE SCHOOL

Has the county board considered using a proto-typical building design for this project?

Yes _____ No _____

To the extent possible, will the county board be using A proto-typical design for this project?

Yes _____ No _____

COMPLIANCE WITH SBA REQUIREMENTS – PROPOSED NEW PROJECT

HEALTH AND SAFETY

ECONOMIES OF SCALE

Annual Savings \$ _____
Cost Avoidance \$ _____

Proposed facility will _____ will not _____
meet the SBA economies of scale.
Students required _____ Students enrolled _____

IF IMPLEMENTED, WHAT IS THE EFFECT OF THIS PROJECT ON PERSONNEL

• Teacher	Present No. _____	Projected No. _____	Difference _____
• Service Personnel	Present No. _____	Projected No. _____	Difference _____
• Administrators	Present No. _____	Projected No. _____	Difference _____

MULTICOUNTY PROJECT

EDUCATIONAL INNOVATIONS AND IMPROVEMENTS

ADEQUATE SPACE FOR PROJECTED STUDENT ENROLLMENT

TRAVEL TIME

LOCAL BOND HISTORY EFFORTS

COMMENTS

#1 DESCRIPTION OF EXISTING FACILITIES

- _____ School currently houses grades _____
- Constructed on a _____ acre site in 20__ which is adequate _____ inadequate _____
- _____ major addition(s) in 20__
- Existing _____ story facility contains _____ sq.ft.
- Current enrollment is _____
- 8th Year Projected Enrollment _____
- Building utilization is _____ %
- Utilities: Public Water _____ On-Site Well _____ Public Sewage _____
- Package Plant _____ Other _____
- HVAC: Gas _____ Electric _____ Coal _____ Other _____
- Cost to upgrade to current standard is \$ _____
- Existing facility contains _____ major structural problems
- Health, safety and building accessibility, comments: _____

#2 DESCRIPTION OF EXISTING FACILITIES

- _____ School currently houses grades _____
- Constructed on a _____ acre site in 20__ which is adequate _____ inadequate _____
- _____ major addition(s) in 20__
- Existing _____ story facility contains _____ sq.ft.
- Current enrollment is _____
- 8th Year Projected Enrollment _____
- Building utilization is _____ %
- Utilities: Public Water _____ On-Site Well _____ Public Sewage _____
- Package Plant _____ Other _____
- HVAC: Gas _____ Electric _____ Coal _____ Other _____
- Cost to upgrade to current standards is \$ _____
- Existing facility contains _____ major structural problems
- Health, safety and building accessibility, comments: _____

Complete one of the above descriptions for each school affected.

SBA 120

SBA 123
LIST OF SUBCONTRACTORS
EQUIPMENT/MATERIAL SUPPLIERS

LIST OF PROPOSED SUBCONTRACTORS EQUIPMENT/MATERIAL SUPPLIERS

**(This form must be submitted to the SBA
within two hours of the close of bid)**

*Failure to comply with the two hour submission requirement
will result in disqualification of the bid.*

Phone: 558-2541

Fax: 558-2539

The intent of this form is to establish a list of proposed contractors to be performing work on the project site. Additionally, the list shall be used to ensure that all proposed contractors listed are currently in compliance with the SBA and that those listed are performing work on the project site as indicated on this form.

CLEARLY AND LEGIBLY list below, the Prime Contractor's complete name and WV Contractor's license number for this proposal as required by the "West Virginia Contractor Licensing Act" (WV Code Section 21-11) Additionally, clearly and legibly list each category of work and equipment/material for this proposal and the subcontractor or supplier selected for that category of work, also provide each contractor's complete name and WV Contractor's license number for each subcontractor as required by the "West Virginia Contractor Licensing Act." If the branch of work is to be completed solely by an equipment/material supplier, indicate by notation below in the contractor license number column. If the branch of work is to be completed by the general (or prime) contractor submitting the bid, indicate on each division where this occurs provide the name and contractor license number of the contractor that will be performing the work. If no subcontractors will be used to complete the project indicate on the SBA Form 123 that all work will be self-performed and provide the name and contractor license number of the contractor that will be performing the work. **DO NOT** list multiple contractors for the same category of work. If this occurs, it must be corrected within the two hour submission time frame or the bid will be rejected. The contractor is responsible for selecting subcontractor(s) and/or equipment/material suppliers/contractors. However, the Owner, Architect/Engineer and/or School Building Authority may indicate their concerns about any entity listed which they have reason to believe past experience indicates poor performance may be expected. Therefore, the bidder may be requested to change an unsatisfactory subcontractor or equipment/material supplier should the owner, Architect/Engineer or SBA determine an unsatisfactory subcontractor is listed. The SBA shall be the sole interpreter of this document to ensure that the information provided by the prime contractor meets the intent of the form. Should the SBA determine that the intent of the form has not been met, the forms **SHALL BE RENDERED NULL AND VOID AND WILL RESULT IN REJECTION OF THE PROPOSAL.**

It is the responsibility of any contractor soliciting bids or quotes from the subcontractors to verify the eligibility of all proposed subcontractors and equipment/material suppliers being proposed to perform the work and to verify in writing the scope of work proposed by a subcontractor or supplier. The Contractor has full responsibility for satisfactory execution of all work in accordance with the contract documents. Any proposed change of subcontractors or material suppliers must have prior written approval from the SBA and shall be at no additional cost to the Owner, as the Contractor has full responsibility for execution of the work. Contractors, subcontractors and equipment/material suppliers that are on SBA Probation are prohibited from bidding any school project. List all subcontractors along with their WV contractor license number and each category of work each will perform. Additionally, list the Prime Contractor and their WV contractor license number for each category of work they will perform.

I, _____ representing _____
(Signature of Responsible Company) **(Company Name)**
 on this date _____ submit the following list of subcontractors and major material
 suppliers for your review and comment. This is the final and complete list of companies who will
 be performing work or supplying materials for _____.

(Project Name)

*I agree that once the subcontractors and material suppliers listed are submitted to the SBA, no
 other subcontractors or substitute for any subcontractors listed below, will be used in the
 performance of the contract without written approval of the Owner and SBA. I further agree
 that if non-approved subcontractors or suppliers are used my company shall be placed on
 probation, unless in its reasonable discretion, the SBA determines otherwise. I understand that,
 as a result of being placed on probation by the SBA, my company shall be prohibited from
 bidding SBA projects for a minimum of one year.*

**Complete Name
 of Prime Contractor**

**Contractor
 License Number**

**Category of
 Work/Material**

**Complete Name
 Subcontractor/Supplier**

**Contractor
 License Number**

1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____
9. _____	_____	_____
10. _____	_____	_____
11. _____	_____	_____

12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____
16.	_____	_____	_____
17.	_____	_____	_____
18.	_____	_____	_____
19.	_____	_____	_____
20.	_____	_____	_____
21.	_____	_____	_____
22.	_____	_____	_____
23.	_____	_____	_____
24.	_____	_____	_____
25.	_____	_____	_____
26.	_____	_____	_____
27.	_____	_____	_____
28.	_____	_____	_____
29.	_____	_____	_____
30.	_____	_____	_____

(Use additional pages, if required)

SBA 123
Revised 04/14

SBA 124
CONTRACTOR EVALUATION FORM

School Building Authority of West Virginia
CONTRACTOR EVALUATION FORM
 (Submit For Each Prime Contractor)

PROJECT: _____ DATE: _____

CONTRACTOR: _____ PERFORMING: _____

ITEM	EVALUATION CRITERIA	EVALUATION SCORE
1	Contractor communications with the A/E in accordance with the contract documents	
2	Quality and timeliness of the submittals acceptable	
3	Contractor timely submission, follow, and update a construction schedule in accordance with the contract requirements	
4	Material deliveries in accordance with the contractor's schedule	
5	Contractor compliance with the master project schedule	
6	Contractor adequate staffing of the project	
7	Contractor representation at pay/progress meetings by a person with decision-making authority	
8	Contractor submission of certified payrolls as required by the construction documents	
9	Materials and workmanship in compliance with the contract documents	
10	Contractors coordination and cooperation with regards to disruption of facility operations with the user (where applicable)	
11	Delays to the project caused by the contractor	
12	Contractors willingness to actively resolve problems	
13	Contractor ability to coordinate and cooperate with other contractors and suppliers	
14	Supervision of the work in accordance with the contract documents	
15	Contractor provision of timely and complete closeout documentation	

WERE THE FOLLOWING ITEMS SUBMITTED AND/OR COMPLETED BY THE DATE INDICATED ON THE SUBSTANTIAL COMPLETION FORM?

16	Accurate and complete record documents (as-builts)	
17	Punch list items	
18	Certificate of operating and training instruction	
19	Complete O&M Manuals	
20	Testing & balancing reports	

EVALUATION SCORING:

Rate the contractors performance based on the following scale:

5 = Excellent; 4 = Good; 3 = Satisfactory; 2 = Less than Satisfactory; 1 = Unacceptable; N/A = Not Applicable

Comments are required if any score is less than 3

EVALUATOR: _____ DATE: _____

SBA REPRESENTATIVE: _____ DATE: _____

COMMENTS: (Required for any score less than 3) - continued

[illegible]

SBA 131
ECONOMY OF SCALE WAIVER REQUEST

School Building Authority of West Virginia
ECONOMY OF SCALE WAIVER REQUEST

County _____ Facility Name _____ Date _____
Classification of Facility _____ Current Grade Configuration _____
Current Enrollment _____ Proposed Grade Configuration as per CEFP _____

A. Describe Proposed Construction/Renovation to occur at this facility. Is there emergency health or safety issues involved in this improvement? Elaborate fully.

B. Will this facility be a receiving school for other future consolidation facilities? If so, identify school(s) that are proposed to be closed, the number of students to be transferred to this facility and the school year projected:

School(s)	_____	Enrollment	_____
	_____	to be	_____
	_____	Transferred	_____

C. Describe specific geographical barriers that would require this facility to remain in operation even though it does not meet Economies of Scale.

D. Is this the only school in the county that serves students at this grade level?

_____ Yes _____ No

Has a Multi-county/Regional project been considered to improve the educational opportunities of students and the Economies of Scale? Provide supporting data describing this alternative.

If this facility were closed and consolidated with the nearest compatible school, what would the maximum travel time be, the name of the receiving school and the number of students that would be required to travel on a school bus beyond the State Department of Education recommended travel times?

Receiving School(s) Name _____

Maximum travel time for students from closed school _____

Number of students that would be required to travel by a school bus that would exceed the State Department of Education recommended travel time _____

Additional supporting documentation may be attached, if desirable.

SBA 131

SBA 132
HIGH SCHOOL ATTENDANCE AREA
FEEDER SCHOOL SUMMARY

Instructions For SBA Form 132

(To Be Submitted With The Annual Update)

1. The purpose of this form is to track all schools and their usage throughout the ten year planning cycle. One form should be completed for each high school attendance area.
2. All facilities that were in operation during the first year of the current planning cycle must be shown in the dashed box. Second month enrollments for these facilities must be shown in the brackets []. Only facilities that will be in operation during the entire ten year planning cycle will be in solid boxes. The 8th year projected enrollments must be within parenthesis ().
3. If the facility is to be built during the current ten year planning cycle, list “NEW” in the brackets. If the facility is to be redesignated from its current usage, list “REDSG” in the brackets.
4. **CLOSURES** – In the Closure column, list schools that are scheduled for closure during the current ten year planning cycle and will not be used by the county board of education for other purposes.

FACILITY REDESIGNATION – In the Facility Redesignation column, list schools that are scheduled to change their current usage during the current ten year planning. Designate what type of facility it will become.

ELEMENTARY – In the Elementary column, list only those schools that will still be operational at the end of the current ten year planning cycle.

JHS/MIDDLE – In the JHS/Middle column, list only those schools that will still be operational at the end of the current ten year planning cycle.

HIGH SCHOOL – In the High School column, list only the high school for this attendance area that will be in effect at the end of the current ten year funding cycle.

EXAMPLE

FEEDER SCHOOL SUMMARY REPORT

YOUR COUNTY – BRANDON HIGH SCHOOL ATTENDANCE AREA

Brandon High School

Becomes 9-12 facility; Sept., 2007

Stewart Middle School

Feeder to Brandon High School

Opens as 6-8 Middle School; Sept., 2007

Raines Junior High School

Currently feeds Brandon High School

Closes June, 2007

9th graders transfer to Brandon HS; Sept., 2007

7th and 8th graders transfer to Stewart MS; Sept., 2007

Tyler Elementary

Currently feeds Raines JHS

Changes to K-5 facility; Sept., 2007

6th graders transfer to Stewart MS; Sept., 2007

Painter Elementary

Currently feeds Raines JHS

To become feeder to Stewart MS; Sept., 2007

6th graders transfer to Stewart MS; Sept., 2007

Barron Elementary

Currently feeds Raines JHS

To become feeder to Stewart MS; Sept., 2007

6th graders transfer to Stewart MS; Sept., 2007

Withrow Elementary

Currently Feeds Raines JHS

Students transferred to Painter Elementary; Sept., 2007

Becomes Bus Garage; Sept., 2007

Ragland Elementary

Closes June 2007

Currently feeds Raines JHS

Students transferred to Tyler EL; Sept., 2007

Lovejoy Elementary

Closes June 2007

Currently feeds Raines JHS

120 students transferred to Painter EL; Sept., 2007

30 students transferred to Tyler EL; Sept., 2007

Drew Middle School

Scheduled to become 6-8 Middle School; Sept., 2007

Feeder to Brandon High School

9th graders transfer to Brandon HS; Sept., 2007

Gordon Junior High School

Currently feeds Brandon High School

Scheduled to become EL Center; Sept., 2007

9th graders transfer to Brandon HS; Sept., 2007

7th and 8th graders transfer to Drew MS; Sept., 2007

Gordon Elementary Center

Feeder to Drew MS

Ervin Elementary

Currently feeds Gordon JHS

6th graders to be transferred to Drew MS; Sept., 2007
Students to be transferred to new EL Center; Sept. 2007
Midkif Elementary
Currently feeds Gordon JHS
6th graders to be transferred to Drew MS; Sept., 2007
Students to be transferred to new EL Center; Sept. 2007
Smarr Elementary
Currently feeds Gordon JHS
6th graders transferred to Drew MS; Sept., 2007
Students to be transferred to new EL Center; Sept. 2007
House Elementary
Currently feeds Gordon JHS
To become feeder to Drew MS; Sept., 2007
6th graders transfer to Drew MS; Sept., 2007

This feeder school summary is an example of facilities for a 2000-2010 CEFP
UNDERLINED schools are operational facilities in 2009-2010

SBA 132

COUNTY _____

BRANDON HIGH SCHOOL ATTENDANCE AREA

High School

JHS/Middle

Elementary

Facility Re-designation

Closures

[228] (212)

Tyler EL/K-6
K-5

[657]

Raines JHS/7-9
Closes - 6/2007

[New] (758)

Stewart MS/6-8

[245] (222)

Painter EL/ K-6
K-5

[54]

Withdraw EL/ K-6
Becomes Garage

Changes - 9/2002

[]

[265] (202)

Barron EL/K6
K5

Changes

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COUNTY _____

HIGH SCHOOL ATTENDANCE AREA

High School

JHS/Middle

Elementary

Facility
Re-designation

Closures

[]	()

[]	()

[]	()

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Closes

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1st Year Current Cycle – Facility Name

[]

2nd Month Enrollment

[]

Name of school in operation at the end of current planning cycle and classification

[]

8th Year Project Enrollment

()

SBA 134
FACILITY EVALUATION FORM

School Building Authority of West Virginia
Facility General Information Worksheet
 (Complete one form for each facility or homogeneous area of the building)

Facility ID#: _____ County: _____
 Facility Name: _____ Date: _____

	Year of Construction
Original Square Feet: _____	_____
Addition One: _____	_____
Addition Two: _____	_____
Addition Three: _____	_____
Addition Four: _____	_____
Addition Five: _____	_____
Addition Six: _____	_____
Addition Seven: _____	_____

Total Sq. Feet: _____

ENERGY INDEXES:

(List below the total amount of each fuel source used by this facility for one year)

Electric _____	Kilowatts
Natural Gas _____	MCF (List only mcf or decotherms)
Natural Gas _____	Decotherms (List only mcf or decotherms)
Coal _____	Tons
#2 Fuel Oil _____	Gallons
Propane _____	Pounds
Used Oil _____	Gallons
Wood Chips _____	Tons
Other(specify) _____	Amount: _____ Units: _____

School Building Authority of West Virginia
Site Evaluation Worksheet
(Complete just one form for each site)

Facility ID#: _____ County: _____
Facility Name: _____

SITE:

_____ City _____ Rural Actual Acres _____ Useable Acres _____
Site adequate for expansion: _____ Yes _____ No
Are public parks/areas adjacent: _____ Yes _____ No
_____ % site out of flood plain _____ % site in flood plain
Site Remarks: (use additional sheets if needed)

Overall Site Condition: 1 2 3 4 5

DRAINAGE:

Drainage Remarks: (use additional sheets if needed)

Overall Drainage Condition: 1 2 3 4 5

PARKING:

Paved Parking _____ square feet Unpaved Parking _____ square feet
Parking adequately lit: _____ Yes _____ No
Adequacy of Parking: 1 2 3 4 5
Parking Remarks: (use additional sheets if needed)

Overall Parking Condition: 1 2 3 4 5

BUS LOADING:

Bus Loading Adequate: _____ Yes _____ No
Bus Loading Remarks: (use additional sheets if needed)

Overall Bus Loading Condition: 1 2 3 4 5

ACCESS ROADS:

Adequacy of On-Site Access Roads: 1 2 3 4 5
Adequacy of Off-Site Access Roads: 1 2 3 4 5
Access Roads Remarks: (use additional sheets if necessary)

Overall Access Road Condition: 1 2 3 4 5

FOR CONDITIONS:

1-Inadequate; 2-Below Average; 3-Average; 4-Above Average; 5-Excellent

PLAYFIELDS/PLAYCOURTS:

Adequacy of Playfields: 1 2 3 4 5

Adequacy of Playcourts: 1 2 3 4 5

Playfields/Playcourts Remarks: (use additional sheets if needed)

Overall Playfield/Playcourts Condition: 1 2 3 4 5

SITE UTILITIES:**Electrical Services:**

_____ Phase _____ Voltage _____ Amps

Electric Utility Company: _____

Main Service Feed into Building: _____ Underground _____ Overhead

Electrical Service Remarks: (use additional sheets if needed)

Overall Electrical Service Condition: 1 2 3 4 5

Fuel Sources:

_____ Natural Gas _____ Coal

_____ Fuel Oils _____ Propane

Other (Specify): _____

Fuel Utility Company: _____

Fuel Line Size: _____ inches

Fuel Sources Remarks: (use additional sheets if needed)

Overall Fuel Sources Condition: 1 2 3 4 5

Water Sources:

_____ Public _____ Well Water Line Size: _____ inches

Water Utility Company: _____

Water Sources Remarks: (use additional sheets if needed)

Overall Water Sources Condition: 1 2 3 4 5

Sewage Systems:

_____ Public _____ Septic Other (specify): _____

PSD: _____

Sewage System Remarks: (use additional sheets if needed)

Overall Sewage System Condition: 1 2 3 4 5

FOR CONDITIONS:*1-Inadequate; 2-Below Average; 3-Average; 4-Above Average; 5-Excellent*

School Building Authority of West Virginia
Building Component Evaluation Worksheet
 (Complete an individual form for each building addition
 or homogeneous area of the building)

Facility ID#: _____ County: _____
 Facility Name: _____ Date: _____
 Square Feet of Building: _____ Year Constructed: _____

BUILDING STRUCTURES:

_____ Load Bearing Masonry _____ Steel Frame
 _____ Wood Frame Other (specify): _____
 Building Structures Remarks: (use additional sheets if needed)
 Overall Building Structure Condition: 1 2 3 4 5

FLOOR STRUCTURES:

_____ Steel Joist/Concrete Floor Area Square Feet: _____
 _____ Wood Joists Floor Area Square Feet: _____
 _____ Slab on Grade Floor Area Square Feet: _____
 Other (specify): _____ Floor Area Square Feet: _____
 Floor Structures Remarks: (use additional sheets if needed)
 Overall Floor Structure Condition: 1 2 3 4 5

ROOF:

Roof Structure:

_____ Steel Joists _____ Wood Joists Other (specify): _____
 Roof Structure Remarks: (use additional sheets if needed)
 Overall Roof Structure Condition: 1 2 3 4 5

Roof Coverings:

	Sq. Feet	Yr. Installed	Condition
_____ Built-up Roofing	_____	_____	_____
_____ Modified Bituminous	_____	_____	_____
_____ Shingles, Asphalt	_____	_____	_____
_____ Shingles, Fiberglass	_____	_____	_____
_____ Membrane, Ballasted	_____	_____	_____
_____ Membrane, Mech. Fast	_____	_____	_____
_____ Membrane, Direct Glue	_____	_____	_____
_____ Metal Roofing	_____	_____	_____
Other (specify): _____	_____	_____	_____

Roof Coverings Remarks: (use additional sheets if needed)

FOR CONDITIONS:

1-Inadequate; 2-Below Average; 3-Average; 4-Above Average; 5-Excellent

WALL FINISHES:

Square Feet Condition

_____ Plaster	_____	_____
_____ Drywall	_____	_____
_____ Masonry	_____	_____
_____ Ceramic Tile	_____	_____
Other (specify): _____	_____	_____

Wall Finishes Remarks: (use additional sheets if needed)

Overall Wall Finishes Condition: 1 2 3 4 5

CEILING FINISHES:

	Square Feet	Condition
_____ Plaster	_____	_____
_____ Drywall	_____	_____
_____ Acoustical Tile	_____	_____
_____ Exposed	_____	_____
Other (specify): _____	_____	_____

Ceiling Finishes Remarks: (use additional sheets if needed)

Overall Ceiling Finishes Condition: 1 2 3 4 5

FLOOR FINISHES:

	Square Feet	Condition
_____ Asbestos Tile	_____	_____
_____ Vinyl Composition Tile	_____	_____
_____ Ceramic Tile	_____	_____
_____ Terrazzo	_____	_____
_____ Exposed Concrete	_____	_____
_____ Exposed Wood	_____	_____
Other (specify): _____	_____	_____

Floor Finishes Remarks: (use additional sheets if needed)

Overall Floor Finishes Condition: 1 2 3 4 5

DOORS:

Exterior Doors:

	Number	Condition
_____ Aluminum, Exterior	_____	_____
_____ Steel, Exterior	_____	_____
_____ Wood, Exterior	_____	_____
Other, (specify): _____	_____	_____

Exterior Doors Remarks: (use additional sheets if needed)

Overall Exterior Doors Condition: 1 2 3 4 5

FOR CONDITIONS:

1-Inadequate; 2-Below Average; 3-Average; 4-Above Average; 5-Excellent

Interior Doors:	Number	Condition

_____ Aluminum, Interior	_____	_____
_____ Steel, Interior	_____	_____
_____ Hollow Core Wood	_____	_____
_____ Solid Core Wood	_____	_____
_____ Fire Rated Wood	_____	_____
Other (specify): _____	_____	_____

Interior Doors Remarks: (use additional sheets if necessary)

Overall Interior Doors Condition: 1 2 3 4 5

WINDOWS:

Operating Windows:

	Number	Energy Efficient	Year Installed
_____ Aluminum Frame, Oper.	_____	_____	_____
_____ Steel Frame, Oper.	_____	_____	_____
_____ Wood Frame, Oper.	_____	_____	_____
_____ Vinyl Frame, Oper.	_____	_____	_____
_____ Rescue/Ventilation	_____	_____	_____
Other (specify): _____	_____	_____	_____

Operating Windows Remarks: (use additional sheets if needed)

Overall Operating Windows Condition: 1 2 3 4 5

Fixed Windows:

	Number	Energy Efficient	Year Installed
_____ Aluminum, Frame, Fixed	_____	_____	_____
_____ Steel Frame, Fixed	_____	_____	_____
_____ Wood Frame, Fixed	_____	_____	_____
_____ Vinyl Frame, Fixed	_____	_____	_____
Other (specify): _____	_____	_____	_____

Fixed Windows Remarks: (use additional sheets if needed)

Overall Fixed Windows Condition: 1 2 3 4 5

BOILERS:

	Number	Average mbh	Manufacturer
_____ Boilers, Gas Fired	_____	_____	_____
_____ Boilers, Coal Fired	_____	_____	_____
_____ Boilers, Oil Fired	_____	_____	_____
_____ Boilers, Wood Fired	_____	_____	_____
_____ Boilers, Propane Fired	_____	_____	_____

FOR CONDITIONS:

1-Inadequate; 2-Below Average; 3-Average; 4-Above Average; 5-Excellent

BOILERS (cont'd):

	Number	Average mbh	Manufacturer

Other (specify): _____
Boilers Remarks: (use additional sheets if needed)

Overall Boilers Condition: 1 2 3 4 5

FURNACES:	Number	Average mbh	Manufacturer
_____ Furnace, Gas Fired	_____	_____	_____
_____ Furnace, Coal Fired	_____	_____	_____
_____ Furnace, Oil Fired	_____	_____	_____
_____ Furnace, Propane Fired	_____	_____	_____
Other (specify): _____	_____	_____	_____
Furnace Remarks: (use additional sheets if needed)			

Overall Furnaces Condition: 1 2 3 4 5

AIR HANDLING UNITS:	Number
_____ Roof Type	_____
_____ Interior Units	_____
Other (specify): _____	
Air Handling Units Remarks: (use additional sheets if needed)	

Overall Air Handling Condition: 1 2 3 4 5

INTERIOR VENTILATION TYPE:
_____ Central
_____ Individual
Other (specify): _____
Interior Ventilation Remarks: (use additional sheets if needed)

Overall Interior Ventilation Condition: 1 2 3 4 5

AIR HANDLING HEAT SYSTEMS:	Number
_____ Cabinet, Fan Coil	_____
_____ Cabinet, Unit Heater	_____
_____ Individual Furnaces	_____
_____ Fin Coil	_____
_____ Radiator	_____

*FOR CONDITIONS:
1-Inadequate; 2-Below Average; 3-Average; 4-Above Average; 5-Excellent*

AIR HANDLING HEAT SYSTEMS (cont'd): Number

_____ Baseboard _____

_____ Hot Water _____

_____ Steam _____

Other (specify): _____

Air Handling Heat Systems Remarks: (use additional sheets if needed)

Overall Air Handling Heat Systems Condition: 1 2 3 4 5

HEATING/COOLING UNITS:

Number

_____ Unit Ventilators _____

_____ Incremental Units _____

_____ Heat Pumps, Standard _____

_____ Heat Pumps, Water Source _____

_____ Multi-Zone Units _____

_____ Single Zone Units _____

_____ Duct Heaters _____

Other (specify): _____

Heating/Cooling Units Remarks: (use additional sheets if needed)

Overall Heating/Cooling Condition: 1 2 3 4 5

ELECTRICAL:

Lighting Fixtures:

Number

_____ Florescent Fixtures _____

_____ Incandescent Fixtures _____

_____ Mercury Vapor Fixtures _____

_____ High Pressure Sodium Fixtures _____

Other (specify): _____

Lighting Fixtures Remarks: (use additional sheets if needed)

Overall Lighting Fixtures Condition: 1 2 3 4 5

FOR CONDITIONS:

1-Inadequate; 2-Below Average; 3-Average; 4-Above Average; 5-Excellent

Fire Alarm System:

Manufacturer: _____

	Number
_____ Smoke Detectors	_____
_____ Heat Detectors	_____
_____ Pull Stations	_____

Fire Alarm System Remarks: (use additional sheets if needed)

Overall Fire Alarm System Condition: 1 2 3 4 5

Power/Receptacle System:

Power/Receptacle System Remarks: (use additional sheets if needed)

Overall Power/Receptacle
System Condition: 1 2 3 4 5**TECHNOLOGY INFRASTRUCTURE:**

	Condition
_____ Sufficient Electrical Capacity	_____
_____ Power Receptacles Availability	_____
_____ Technology Electrical Wiring	_____
_____ Technology Delivery Systems	_____
_____ ID Network Type (if available) _____	_____
_____ Inventory Records of Hardware	_____
Other (specify): _____	_____
Deficiencies _____	_____

Technology Remarks: (use additional sheets if needed)

Overall Technology Infrastructure
Condition: 1 2 3 4 5**FOR CONDITIONS:***1-Inadequate; 2-Below Average; 3-Average; 4-Above Average; 5-Excellent*

TECHNOLOGY ASSESSMENT:

	Condition
____ Teacher Training	_____
____ Software Use	_____
____ Purchasing Practices	_____
____ Network Administration	_____
____ Certified Network Engineer	_____
Eng	_____
____ Inventory Records	_____
Other (specify): _____	_____
Deficiencies _____	_____

Technology Remarks: (use additional sheets if needed)

Overall Technology Assessment

Condition: 1 2 3 4 5

SCHOOL ACCESS SAFETY AUDIT

Evaluate the effectiveness of the following School Access Safety Plan components

	Condition
____ Planning	_____
____ Deterrence	_____
____ Detection	_____
____ Delay	_____
____ Communication _____	_____
____ Evacuation _____	_____
____ Bullying _____	_____

Safety Remarks: (use additional sheets if needed)

Overall Safety Access Audit

Condition: 1 2 3 4 5

FOR CONDITIONS:

1-Inadequate; 2-Below Average; 3-Average; 4-Above Average; 5-Excellent

School Building Authority of West Virginia
Facilities Spaces Evaluation – Early Childhood/Primary

School ID#: _____ County: _____
School Name: _____

NOTE: Difference = No. of existing rooms – (minus) No. of Required spaces. No. rooms are evaluated as the same types

1. ADMINISTRATION: Exist spaces _____ Reqd. spaces _____ Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

2. STUDENTS SERVICES: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

3. PreKINDERGARTEN: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

4. KINDERGARTEN: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

5. PRIMARY: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent

6. ITINERANT SPACES: Exist spaces_____Reqd spaces_____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

7. MEDIA CENTER: Exist spaces_____Reqd spaces_____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

8. SPECIAL EDUCATION: Exist spaces_____Reqd spaces_____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

9. MUSIC: Exist spaces_____Reqd spaces_____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

10. ART: Exist spaces_____Reqd spaces_____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

11. COMPUTER LAB: Exist spaces_____Reqd spaces_____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent

12. MULTI-PURPOSE: Exist spaces _____ Reqd spaces _____ Difference+/- _____

A. Activities

Size: 1 2 3 4 5

Condition: 1 2 2 4 5

Remarks:

B. Dining

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

13. SEPARATE DINING: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

14. KITCHEN: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Adequate Storage: 1 2 3 4 5

Remarks:

15. STAFF/FACULTY: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

16. TOILETS: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Size: 1 2 3 4 5

FIXTURES: Exist fixtrs _____ Reqd fixtrs _____ Difference+/- _____

Condition: 1 2 3 4 5

Remarks:

1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent

17. STORAGE GENERAL: Exist spaces_____Reqd spaces_____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

18. STORAGE INSTR.: Exist spaces_____Reqd spaces_____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

19. CUSTODIAL: Exist spaces_____Reqd spaces_____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

20. TECHNOLOGY CLOSETS: Exist spaces Reqd spaces Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

21. OTHER SPACES: Exist spaces_____Reqd spaces_____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

22. ADEQUACY/CONDITION OF FURNISHINGS AND EQUIPMENT:

Condition: 1 2 3 4 5

Remarks:

23. ECONOMIES OF SCALE: 1 2 3 4 5
(Refer to Handbook – 100.0142 G)

24. BLDG UTILIZATION, (U): _____% 1 2 3 4 5
Current Enrollment

Building Utilization = _____ %

*Below 60	61-70	71-80	81-85	Greater than 85
1 = Inadequate	2 = Below Average	3 = Average	4 = Above Average	5 = Excellent

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School Improvement Cost Summary

(Based on deficiencies identified during the evaluation of existing facilities)

Early Childhood/Primary

SCHOOL NAME/USE _____

COUNTY _____

DESIGN CAPACITY ENROLLMENT _____

IMPROVEMENT ITEM	UNIT	QUANTITY	UNIT COST	ITEM COST	REMARKS
1. SITE WORK					
Land Acquisition	ACRES	_____	_____	_____	_____
Excavation/Grade	CUB FT	_____	_____	_____	_____
Drainage	LIN FT	_____	_____	_____	_____
Walks (6 ft wide)	SQ FT	_____	_____	_____	_____
Parking	SQ FT	_____	_____	_____	_____
Bus Loading	SQ FT	_____	_____	_____	_____
Roads	SQ FT	_____	_____	_____	_____
Playing Fields	SQ FT	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____
2. RENOVATIONS, EXTERIOR:					
Wall Structure	SQ FT	_____	_____	_____	_____
Floor Structure	SQ FT	_____	_____	_____	_____
Roof Structure	SQ FT	_____	_____	_____	_____
Wall Facing	SQ FT	_____	_____	_____	_____
Windows	EACH	_____	_____	_____	_____
Doors/Frames	EACH	_____	_____	_____	_____
Roofing	SQ FT	_____	_____	_____	_____
Coping/Parapet	LIN FT	_____	_____	_____	_____
Painting	SQ FT	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____

3. RENOVATIONS, INTERIOR:

Floor Covering	SQ FT				
Patch & Painting	SQ FT				
Ceiling Finish	SQ FT				
Plumbing	SQ FT				
Heating/Ventilating	SQ FT				
Air Conditioning	SQ FT				
Lighting	SQ FT				
Wiring	SQ FT				
Fire Alarm	SQ FT				
Communication System	SQ FT				
Technology					
Interior Doors	EACH				
Other _____					
Other _____					
Other _____					
Sub-Total					

4. BUILDING ADDITIONS INCLUDING FURNITURE, FURNISHINGS & EQUIPMENT:

Administration	SQ FT				
Student Services	SQ FT				
Kindergarten	SQ FT				
Primary	SQ FT				
Media Center	SQ FT				
Special Education	SQ FT				
Music	SQ FT				
Art	SQ FT				
Computer Lab	SQ FT				
Multi-Purpose	SQ FT				
Kitchen	SQ FT				
Staff/Faculty	SQ FT				
Toilets/Fixtures	SQ FT				
Storage General	SQ FT				
Storage Instructional	SQ FT				
Custodial	SQ FT				
Other _____					
Other _____					
Other _____					
Circulation	@30%				
Sub-Total					

5. SPECIAL CONSTRUCTION:

Elevator	EACH	_____	_____	_____	_____
Sprinkler System	SQ FT	_____	_____	_____	_____
Kitchen Equipment	ALL	_____	_____	_____	_____
Waste Treatment	EACH	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____

6. OTHER SPECIAL COSTS:

_____	_____
_____	_____
_____	_____
Sub-Total	_____

7. ARCHITECTURAL/ENGINEERING FEES:

New Construction	_____ %	_____	_____	_____	_____
Renovations	_____ %	_____	_____	_____	_____
Sub-Total	_____	_____	_____	_____	_____

8. MISCELLANEOUS:

Survey	EACH	_____	_____	_____	_____
Soil Inv.	EACH	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____

9. CONTINGENCIES:

New Construction	_____ %	_____	_____	_____	_____
Renovations	_____ %	_____	_____	_____	_____
Sub-Total	_____	_____	_____	_____	_____

10. GRAND TOTAL PROJECT COST: _____

Additional Land	_____	_____	_____	_____
Improved to Bring to	ACRES	_____	_____	_____
State Standard		_____	_____	_____

	Design/Capacity	\$/Student	Amount
Cost to Build a New			
School/No Land	_____	_____	_____
Ratio – Cost to Improve			
The Building/Cost of			
New Building	_____	_____	_____

School Building Authority of West Virginia
Facilities Spaces Evaluation – Middle/Junior High School

SCHOOL ID#: _____ COUNTY: _____
 SCHOOL NAME: _____ DATE: _____

NOTE: Difference = No. of existing rooms – (minus) No. of required spaces

1. ADMINISTRATION: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Size: 1 2 3 4 5
 Condition: 1 2 3 4 5
 Remarks:

2. STUDENT SERVICES: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Size: 1 2 3 4 5
 Condition: 1 2 3 4 5
 Remarks:

3. BASIC: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Language Arts

Size: 1 2 3 4 5
 Condition: 1 2 3 4 5
 Remarks:

4. BASIC: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Mathematics

Size: 1 2 3 4 5
 Condition: 1 2 3 4 5
 Remarks:

5. BASIC: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Social Studies

Size: 1 2 3 4 5
 Condition: 1 2 3 4 5
 Remarks:

1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent

6. BASIC: Exist spaces____Reqd spaces____Difference+/- ____

Science

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

7. CORRECTIVE/REMEDIAL:Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

8. HEALTH EDUCATION: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

9. COMPUTER LAB: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

10. LIBRARY/MEDIA CTR.: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

11. ELECTRONIC TECH: Exist spaces____Reqd spaces____Difference+/- ____
(LAB)

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

12. HOME ECONOMICS: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent

13. ART: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

14. BUSINESS ED: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

15. TECHNOLOGY: Exist spaces____Reqd spaces____Difference+/- ____
EDUCATION

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

16. MUSIC: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

17. PHYSICAL ED: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

18. AUDITORIUM: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

19. KITCHEN: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

1 = Inadequate 2 = Below Average 3 = Average 4 = Below Average 5 = Excellent

20. DINING: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

21. EXCEPTIONAL: Exist spaces____Reqd spaces____Difference+/- ____
STUDENTS INSTRUCTION

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

22. STAFF/FACULTY: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

23. TOILETS: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

FIXTURES: Exist fixtrs____Reqd fixtrs____Difference+/- ____

Condition: 1 2 3 4 5

Remarks:

24. CUSTODIAL: No. of spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

25. MECHANICAL: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

26. STORAGE GENERAL: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent

27. STORAGE INSTR: Exist spaces_____Reqd spaces_____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

28. OTHER SPACES: No. of spaces_____Reqd spaces_____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

29. ADEQUACY/CONDITION OF FURNISHINGS AND EQUIPMENT:

Condition: 1 2 3 4 5

Remarks:

30. ECONOMIES OF SCALE: 1 2 3 4 5
(Refer to Handbook – 100.0142 G)

31. BLDG UTILIZATION (U): _____% 1 2 3 4 5

$$\text{Building Utilization} = 100 \times \frac{\text{Current Enrollment}}{\text{Number of Existing Classrooms} \times 25}$$

Building Utilization = _____%

Number of classrooms used for exceptionality education _____

*Below 60	61-70	71-80	81-85	Greater than 85
1 = Inadequate	2 = Below Average	3 = Average	4 = Above Average	5 = Excellent

*Building utilizations in the range of 80-90% are recommended. However, programmatic offerings must be considered and the building capacity may be reduced as programmatic offerings are factored into the utilization calculation.

School Improvement Cost Summary

(Based on deficiencies identified during the evaluation of existing facilities)

Middle/Junior High School

SCHOOL NAME/USE _____
 COUNTY _____
 DESIGN CAPACITY ENROLLMENT _____

IMPROVEMENT ITEM	UNIT	QUANTITY	UNIT COST	ITEM COST	REMARKS
1. SITE WORK					
Land Acquisition	ACRES	_____	_____	_____	_____
Excavation/Grade	CUB FT	_____	_____	_____	_____
Drainage	LIN FT	_____	_____	_____	_____
Walks (6 ft wide)	SQ FT	_____	_____	_____	_____
Parking	SQ FT	_____	_____	_____	_____
Bus Loading	SQ FT	_____	_____	_____	_____
Roads	SQ FT	_____	_____	_____	_____
Playing Fields	SQ FT	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____
2. RENOVATIONS, EXTERIOR:					
Wall Structure	SQ FT	_____	_____	_____	_____
Floor Structure	SQ FT	_____	_____	_____	_____
Roof Structure	SQ FT	_____	_____	_____	_____
Wall Facing	SQ FT	_____	_____	_____	_____
Windows	EACH	_____	_____	_____	_____
Doors/Frames	EACH	_____	_____	_____	_____
Roofing	SQ FT	_____	_____	_____	_____
Coping/Parapet	LIN FT	_____	_____	_____	_____
Painting	SQ FT	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____

3. RENOVATIONS, INTERIOR:

Floor Covering	SQ FT				
Patch & Painting	SQ FT				
Ceiling Finish	SQ FT				
Plumbing	SQ FT				
Heating/Ventilating	SQ FT				
Air Conditioning	SQ FT				
Lighting	SQ FT				
Wiring	SQ FT				
Fire Alarm	SQ FT				
Communication System	SQ FT				
Technology					
Interior Doors	EACH				
Other _____	_____				
Other _____	_____				
Other _____	_____				
Sub-Total					

4. BUILDING ADDITIONS including Furniture, Furnishings and Equipment:

Administration	SQ FT				
Student Services	SQ FT				
Basic	SQ FT				
Reading	SQ FT				
Health Education	SQ FT				
Computer Lab	SQ FT				
Inst. Mat. Center	SQ FT				
Home Economics	SQ FT				
Art	SQ FT				
Ind. Technology	SQ FT				
Music	SQ FT				
Physical Education	SQ FT				
Auditorium	SQ FT				
Kitchen	SQ FT				
Dining	SQ FT				
Business Education	SQ FT				
Co-Op Education	SQ FT				
Special Education	SQ FT				
Drivers Education	SQ FT				
Staff/Faculty	SQ FT				
Toilets/Fixtures	SQ FT				
Custodial	SQ FT				
Mechanical	SQ FT				
Storage – General	SQ FT				
Storage – Instr.	SQ FT				
Other _____	_____				

Other _____		_____	_____	_____	_____
Circulation _____	@30%	_____	_____	_____	_____

Sub-Total		_____	_____	_____	_____

5. SPECIAL CONSTRUCTION:

Elevator	EACH	_____	_____	_____	_____
Sprinkler System	SQ FT	_____	_____	_____	_____
Kitchen Equipment	ALL	_____	_____	_____	_____
Waste Treatment	EACH	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____

Sub-Total		_____	_____	_____	_____

6. OTHER SPECIAL COSTS:

_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Sub-Total		_____	_____	_____	_____

7. ARCHITECTURAL/ENGINEERING FEES:

New Construction	_____ %	_____	_____	_____	_____
Renovations	_____ %	_____	_____	_____	_____

Sub-Total		_____	_____	_____	_____

8. MISCELLANEOUS:

Survey	EACH	_____	_____	_____	_____
Soil Inv.	EACH	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Sub-Total		_____	_____	_____	_____

9. CONTINGENCIES:

New Construction	_____ %	_____	_____	_____	_____
Renovations	_____ %	_____	_____	_____	_____

Sub-Total		_____	_____	_____	_____

10. GRAND TOTAL PROJECT COST	_____	_____	_____	_____

ADDITIONAL LAND IMPROVED TO BRING TO STATE STANDARD	ACRES	_____	_____	_____	_____

	Design/Capacity	\$/Student	Amount
COST TO BUILD A NEW SCHOOL/ NO LAND	_____	_____	_____

RATIO – COST TO IMPROVE THE BLDG/ COST OF NEW BLDG	_____	_____	_____

School Building Authority of West Virginia
Facilities Spaces Evaluation – High School

School ID# _____ County: _____
School Name: _____ DATE: _____

NOTE: Difference = No. of existing spaces – (minus) No. of required spaces

1. ADMINISTRATION: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

2. STUDENT SERVICES: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

3. BASIC: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Language Arts

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

4. BASIC: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Mathematics

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

5. BASIC: Exist spaces _____ Reqd spaces _____ Difference+/- _____

Social Studies

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent

6. BASIC: Exist spaces____Reqd spaces____Difference+/- _____

Science – General Science

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

7. BASIC: Exist spaces____Reqd spaces____Difference+/- _____

Science – Chemistry/Physics

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

8. BASIC: Exist spaces____Reqd spaces____Difference+/- _____

Science – Lecture Lab

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

9. BASIC: Exist spaces____Reqd spaces____Difference+/- _____

Science – Biology

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

10. CORRECTIVE/ REMEDIAL Exist spaces____Reqd spaces____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

11. HEALTH EDUCATION: Exist spaces____Reqd spaces____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent

12. COMPUTER LAB: Exist spaces____Reqd spaces____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

13. LIBRARY/MEDIA: Exist spaces____Reqd spaces____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

14. FAMILY & Exist spaces____Reqd spaces____Difference+/- _____
CONSUMER SCIENCE

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

15. ART: Exist spaces____Reqd spaces____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

16. TECHNOLOGY Exist spaces____Reqd spaces____Difference+/- _____
EDUCATION

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

17. MUSIC: Exist spaces____Reqd spaces____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

18. PHYSICAL ED: Exist spaces____Reqd spaces____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent

19. AUDITORIUM: Exist spaces____ Reqd spaces____ Difference+/- ____

Size: 1 2 3 4 5
Condition: 1 2 3 4 5
Remarks:

20. KITCHEN: Exist spaces____ Reqd spaces____ Difference+/- ____

Size: 1 2 3 4 5
Condition: 1 2 3 4 5
Remarks:

21. DINING: Exist spaces____ Reqd spaces____ Difference+/- ____

Size: 1 2 3 4 5
Condition: 1 2 3 4 5
Remarks:

22. BUSINESS ED: Exist spaces____ Reqd spaces____ Difference+/- ____

Size: 1 2 3 4 5
Condition: 1 2 3 4 5
Remarks:

23. CO-OP EDUCATION: Exist spaces____ Reqd spaces____ Difference+/- ____

Size: 1 2 3 4 5
Condition: 1 2 3 4 5
Remarks:

24. EXCEPTIONAL STUDENT INSTRUCTION Exist spaces____ Reqd spaces____ Difference+/- ____

Size: 1 2 3 4 5
Condition: 1 2 3 4 5
Remarks:

25. DRIVERS ED: Exist spaces____ Reqd spaces____ Difference+/- ____

Size: 1 2 3 4 5
Condition: 1 2 3 4 5
Remarks:

1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent

26. VOCATIONAL ED: Exist spaces_____Reqd spaces_____Difference+/- _____
Agricultural Ed

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

27. VOCATIONAL ED: Exist spaces_____Reqd spaces_____Difference+/- _____
Marketing Ed

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

28. VOCATIONAL ED: Exist spaces_____Reqd spaces_____Difference+/- _____
Diversified/Cooperative Training

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

29. VOCATIONAL ED: Exist spaces_____Reqd spaces_____Difference+/- _____
Vocational Health Occupations

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

30. VOCATIONAL ED: Exist spaces_____Reqd spaces_____Difference+/- _____
Family and Consumer Science

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

31. VOCATIONAL ED: Exist spaces_____Reqd spaces_____Difference+/- _____
Child Care Specialist

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent

32. VOCATIONAL ED: Exist spaces____Reqd spaces____Difference+/- ____
Vocational/Industrial Technical

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

33. VOCATIONAL ED: Exist spaces____Reqd spaces____Difference+/- ____
Business Ed

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

34. VOCATIONAL ED: Exist spaces____Reqd spaces____Difference+/- ____
Tech Ed

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

35. STAFF/FACULTY: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

36. TOILETS: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

FIXTURES: Exist fixtrs____Reqd fixtrs____Difference+/- ____

Condition: 1 2 3 4 5

Remarks:

37. CUSTODIAL: Exist spaces____Reqd spaces____Difference+/- ____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent

38. MECHANICAL: Exist spaces____Reqd spaces____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

39. STORAGE GENERAL: Exist spaces____Reqd spaces____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

40. STORAGE INSTR: Exist spaces____Reqd spaces____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

41. OTHER SPACES: No. of spaces____Reqd spaces____Difference+/- _____

Size: 1 2 3 4 5

Condition: 1 2 3 4 5

Remarks:

42. ADEQUACY/CONDITION OF FURNISHINGS AND EQUIPMENT:

Condition: 1 2 3 4 5

Remarks:

43. ECONOMIES OF SCALE: 1 2 3 4 5
(Refer to Handbook – 100.0142 G)

1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent

44. BLDG UTILIZATION (U): _____% 1 2 3 4 5

$$\text{Building Utilization} = 100 \times \frac{\text{Current Enrollment}}{\text{Number of Existing Classrooms} \times 25}$$

Building Utilization = _____%

Number of classrooms used for exceptionality education _____

*Below 60	61-70	71-80	81-85	Greater than 85
1 = Inadequate 2 = Below Average 3 = Average 4 = Above Average 5 = Excellent				

*Building utilizations in the range of 80-90% are recommended. However, programmatic offerings must be considered and the building capacity may be reduced as programmatic offerings are factored into the utilization calculation.

School Improvement Cost Summary

(Based on deficiencies identified during the evaluation of existing facilities)

High School

SCHOOL NAME/USE _____
 COUNTY _____
 DESIGN CAPACITY ENROLLMENT _____

IMPROVEMENT ITEM	UNIT	QUANTITY	UNIT COST	ITEM COST	REMARKS
1. SITE WORK					
Land Acquisition	ACRES	_____	_____	_____	_____
Excavation/Grade	CUB FT	_____	_____	_____	_____
Drainage	LIN FT	_____	_____	_____	_____
Walks (6 ft wide)	SQ FT	_____	_____	_____	_____
Parking	SQ FT	_____	_____	_____	_____
Bus Loading	SQ FT	_____	_____	_____	_____
Roads	SQ FT	_____	_____	_____	_____
Playing Fields	SQ FT	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____
2. RENOVATIONS, EXTERIOR:					
Wall Structure	SQ FT	_____	_____	_____	_____
Floor Structure	SQ FT	_____	_____	_____	_____
Roof Structure	SQ FT	_____	_____	_____	_____
Wall Facing	SQ FT	_____	_____	_____	_____
Windows	EACH	_____	_____	_____	_____
Doors/Frames	EACH	_____	_____	_____	_____
Roofing	SQ FT	_____	_____	_____	_____
Coping/Parapet	LIN FT	_____	_____	_____	_____
Painting	SQ FT	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____

3. RENOVATIONS, INTERIOR:

Floor Covering	SQ FT				
Patch & Painting	SQ FT				
Ceiling Finish	SQ FT				
Plumbing	SQ FT				
Heating/Ventilating	SQ FT				
Air Conditioning	SQ FT				
Lighting	SQ FT				
Wiring	SQ FT				
Fire Alarm	SQ FT				
Communication System	SQ FT				
Technology					
Interior Doors	EACH				
Other _____					
Other _____					
Other _____					
Sub-Total					

4. BUILDING ADDITIONS including Furniture, Furnishings and Equipment:

Administration	SQ FT				
Student Services	SQ FT				
Basic	SQ FT				
Reading	SQ FT				
Health Education	SQ FT				
Computer Lab	SQ FT				
Inst. Mat. Center	SQ FT				
Home Economics	SQ FT				
Art	SQ FT				
Ind. Technology	SQ FT				
Music	SQ FT				
Physical Education	SQ FT				
Auditorium	SQ FT				
Kitchen	SQ FT				
Dining	SQ FT				
Special Education	SQ FT				
Staff/Faculty	SQ FT				
Toilets/Fixtures	SQ FT				
Custodial	SQ FT				
Mechanical	SQ FT				
Storage General	SQ FT				
Storage Instructional	SQ FT				
Other _____					
Other _____					
Other _____					

Circulation	@30%	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____
5. SPECIAL CONSTRUCTION:					
Elevator	EACH	_____	_____	_____	_____
Sprinkler System	SQ FT	_____	_____	_____	_____
Kitchen Equipment	ALL	_____	_____	_____	_____
Waste Treatment	EACH	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Other _____	_____	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____
6. OTHER SPECIAL COSTS:					
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____
7. ARCHITECTURAL/ENGINEERING FEES:					
New Construction	_____ %	_____	_____	_____	_____
Renovations	_____ %	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____
8. MISCELLANEOUS:					
Survey	EACH	_____	_____	_____	_____
Soil Inv.	EACH	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____
9. CONTINGENCIES:					
New Construction	_____ %	_____	_____	_____	_____
Renovations	_____ %	_____	_____	_____	_____
Sub-Total		_____	_____	_____	_____

10. GRAND TOTAL PROJECT COST	_____	_____	_____	_____	_____

ADDITIONAL LAND IMPROVED TO BRING TO STATE STANDARDS ACRES	_____	_____	_____	_____

COST TO BUILD A NEW SCHOOL/ NO LAND	_____	_____	_____	_____

RATIO – COST TO IMPROVE THE BLDG/COST OF NEW BLDG	_____	_____	_____	_____

SBA 138
ARCHITECT/ENGINEER EVALUATION
FORM

School Building Authority of West Virginia
ARCHITECT/ENGINEER EVALUATION FORM
 (Submit For Each Architect/Engineer at the Conclusion of the Project)

PROJECT: _____ DATE: _____

ARCHITECT/ENGINEER: _____

ITEM	EVALUATION CRITERIA	EVALUATION SCORE
1	Ability to work cooperatively and successfully with the educational facilities planning committee	
2	Cooperation with the project review team (owner, SBA, CM, CA, etc.)	
3	Ability to produce the building design and construction documents within the established time schedule	
4	Quality of adequate on-site project observations during the construction phase of the project	
5	Attention to timely responses on project submission documents and construction questions presented by the contractor during construction	
6	Ability to minimize construction change orders required due to a lack of design coordination or incomplete construction documents	
7	Ability to work cooperatively with the SBA planning and design review process	
8	Ability to manage the construction contracts and work cooperatively with all contractors	
9	Ability to provide clear and concise construction documents	
10	Ability to produce school design within the established budget	
11	Number of project change orders _____ that increased the cost of the project \$ _____. Of these change orders, how many were required due to design coordination or incomplete construction documents by the architect or engineer _____	
12	Did the final design meet the educational goals Yes _____ No _____	
13	Would you consider using this architect/engineer in the future Yes _____ No _____	
14	Overall evaluation of the architect/engineer's performance on this project	

EVALUATION SCORING:
 Rate the contractors performance based on the following scale:
 5 = Excellent; 4 = Good; 3 = Satisfactory; 2 = Less than Satisfactory; 1 = Unacceptable; N/A = Not Applicable
 Comments are required if any score is less than 3

EVALUATOR: _____ DATE: _____

SBA REPRESENTATIVE: _____ DATE: _____

COMMENTS: (Required for any score less than 3) - continued

[illegible]

SBA 139
MULTIPLE PRIME PROJECT
COMPLETION FORM

School Building Authority of West Virginia
**CERTIFICATE OF CONTRACT COMPLETION FOR
MULTIPLE PRIME PROJECT**

Upon completion of each prime contractor's contract the agency receiving SBA funding shall be responsible for submitting this completed original form to the SBA, with each prime contractor's final request for payment.

To the best of our knowledge, all required project close-out procedures have been followed and all project close-out documents have been submitted to initiate the release of final payment to this contractor.

ARCHITECTURAL FIRM NAME: _____

PROJECT ARCHITECT: _____ **DATE:** _____

PROJECT CONSTRUCTION COST:

LOCAL: _____
SBA: _____
OTHER: _____

PROJECT CONSTRUCTION COST TOTAL: _____

PRIME CONTRACT COST TOTAL: _____

PRIME CONTRACTOR NAME: _____

PRESIDENT/CEO: _____

SUBSTANTIAL COMPLETION DATE: _____

FINAL COMPLETION DATE: _____

COUNTY/AGENCY: _____

COUNTY/AGENCY PROJECT ADMINISTRATOR: _____ **DATE:** _____

PROJECT SCHOOL NAME: _____

Inspected this date by a representative of the School Building Authority. SBA funded projects must have a final inspection by a SBA representative.

Signature

SBA 139
Revised 4/2014

Date

SBA 141
AREA SPACE ALLOCATION
(WORKSHEET #2)

SBA 142
SUMMARY OF SPACES
(WORKSHEET #1)

SUMMARY OF SPACES FROM CALCULATIONS IN SECTION IV

*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

SBA 143
MAINTENANCE AND CUSTODIAL CARE
SITE VISIT REPORT

School Building Authority of West Virginia
Maintenance and Custodial Care Site Visit Report

School: _____ County: _____
SBA Representative: _____ WVDE Evaluation Date: _____
Inspection Reviewed with: _____ Title: _____ Date: _____

A. Problems cited by the West Virginia Department of Education (WVDE):

1. _____
2. _____
3. _____

B. Corrections made since the WVDE Site Visit:

1. _____
2. _____
3. _____

C. Problems cited during the SBA visit:

1. _____
2. _____

D. Conclusions of the SBA Evaluation Visit

- ☐ 1. The County has sufficiently addressed the problems and no additional improvements are required to assure good maintenance and custodial care of the facility.
- ☐ 2. The Plan of Improvement shown on this form has been jointly developed by the SBA representative and the County Superintendent or his/her designee to correct the deficiencies indicated at this facility.

Signature of this form indicates that: (1) The LEA is in agreement that the needed improvements have been made and no further action is necessary or, (2) The county is committed to implementing the jointly developed improvement plan to adequately provide the maintenance and custodial care of this school funded or partially funded with state funds from the School Building Authority (SBA) and (3) The LEA understands that improvements must occur within one year of the SBA site visit date above. Failure to comply will result in a recommendation to the State Board of Education and the West Virginia State Legislature to protect the investment of the State of West Virginia by withholding funds from the county's state aid formula to be used by the SBA to contract for such improvements.

SBA Representative (Date)

Superintendent of Schools (Date)

Board of Education President (Date)

**School Building Authority of West Virginia
School Facility Improvement Plan**

E. Plan of Improvement

Problem	Action to be Implemented	SBA F/U
1. _____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____
2. _____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____
3. _____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____
4. _____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____
5. _____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____
6. _____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____

The SBA Representative has reviewed:

- ☐ 1. The previous year's county maintenance records for this facility.
- ☐ 2. The previous year's Requests for Maintenance made by the School Administration.
- ☐ 3. Any additions, modifications or repairs made to the facility.
- ☐ 4. Custodial or Related Staff Performance Policies.
- ☐ 5. The appropriateness of custodial and maintenance staff for this facility.
Custodial-FT__ PT__ FTE__ Maintenance-FT__ PT__ FTE__

Notes:

SBA143

SBA 145
MIP ANNUAL UPDATE

Major Improvement Program Annual Update (Completed or On-Going Projects)

COUNTY _____

DATE _____

Listed below are proposed capital improvement projects completed since January 1 of the previous calendar year. These projects are currently in the county Major Improvement Plan or are being amended into the plan with this action.

SCHOOL	PROJECT	COST	PROJECT CURRENTLY IN PLAN? Y OR N	PROJECT STATUS N/C/CO*
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

*N – New
SBA 145a

C – Completed

CO – Continuous

Major Improvement Program Annual Update (Prioritized List of Proposed Projects)

COUNTY _____

DATE _____

Listed below are proposed capital improvement projects in order of priority. These projects are currently in the county Major Improvement Plan or are being amended into the plan with this action. (Use additional forms as needed)

SCHOOL	PROJECT	COST	PROJECT IS CURRENTLY IN PLAN? YES OR NO
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

SBA 146
SBA OCCUPANCY REPORT

School Building Authority of West Virginia
OCCUPANCY REPORT

PROJECT NAME: _____

Dear _____:

On _____ (date), a SBA representative conducted an on-site review of the above referenced project for the purpose of determining the suitability of the facility for occupancy by students and staff. Based on our observations, the SBA hereby releases the building for occupancy effective _____.

This SBA release to occupy the facility does not relieve the building owner, members of the design and construction team or any contractors from their responsibilities within the contract documents or SBA grant contract requirements regarding final completion of all work. Prior to occupying the facility, an Occupancy Permit must also be attained from the State Fire Marshal's Office.

Sincerely,

SBA Representative

SBA 147
TRANSLATING EDUCATIONAL NEEDS
INTO FACILITY NEEDS
AND
BUILDING IMPROVEMENT COST
SUMMARY

Translating Educational Needs Into Facility Needs

Review and Recommendations

School Name & Address			Phone	Date	
School Number	Grades Served	Building Program Capacity	Program % Utilization	Date of Original Construction	Additions

Ten Year Enrollment Projections

Previous Ten Year Enrollments:

2001 Enrollment _____ 2006 Enrollment _____

2002 Enrollment _____ 2007 Enrollment _____

2003 Enrollment _____ 2008 Enrollment _____

2004 Enrollment _____ 2009 Enrollment _____

2005 Enrollment _____ 2010 Enrollment _____

Future Ten Year Enrollments:

2011 Enrollment _____ 2016 Enrollment _____

2012 Enrollment _____ 2017 Enrollment _____

2013 Enrollment _____ 2018 Enrollment _____

2014 Enrollment _____ 2019 Enrollment _____

2015 Enrollment _____ 2020 Enrollment _____

Existing Facility Data

Describe Existing Facility:

Describe Existing Facility Site:

Recommendations:

Building Improvement Cost Summary

SCHOOL: _____

Description	Priority	Anticipated Completion Date	Total Cost	Anticipated Funding Source
Site Improvements:				
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____
New Construction:				
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____
Renovations/Additions (List each separate):				
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____
Technology:				
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____
Others (Describe):				
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____
Contingency @ _____ % addition/renovation			\$ _____	_____
A & E Fees at _____ % on \$ _____			\$ _____	_____
Project Management at _____ % on \$ _____			\$ _____	_____
Survey, geotechnical, contingency and other			\$ _____	_____
Total Improvement Cost			\$ _____	

SUMMARY OF FUNDING SOURCES:

Local	\$ _____	_____
Local Bond	\$ _____	_____
Local Levy	\$ _____	_____
SBA Needs	\$ _____	_____
SBA MIP	\$ _____	_____
Other (Describe)	\$ _____	_____
SBA 147		

SBA 148
HIGH SCHOOL SUMMARY OF
BUILDING IMPROVEMENTS

HIGH SCHOOL ATTENDANCE AREA FACILITIES SUMMARY

PROPOSED BUILDING USE AND CAPITAL IMPROVEMENTS

[illegible]

(SBA/WVDE 148)

Date:

TOTAL ESTIMATED EXPENDITURE \$_____ IN THIS ATTENDANCE AREA

SBA 149
EVALUATION INSTRUMENT
PREVIOUS TEN YEAR CFP

Evaluation Instrument

Previous Ten Year Comprehensive Educational Facility

From _____

To _____

West Virginia Code 18-9D-16(g) and State Board Policy 6200, Article 100.19 requires all county boards of education to submit an objective evaluation of the ten year Comprehensive Educational Facilities Plan (CEFP). This evaluation shall be completed by the CEFP committee established by the local board to plan the upcoming ten-year plan consisting of community members and professional staff from each high school attendance area. The committee will familiarize themselves with the state board requirements of the plan and the current county CEFP prior to completing this evaluation form. All amendments to the plan since the inception of the previous ten year plan will be objectively evaluated for its effectiveness and completeness of projects within that plan. The following should be used to effectuate this evaluation of the 2000 ten year plan and also be used as a means to improve future plans. Goals to be evaluated include WV Code 18-9D-16(g):

1. Student Health and Safety	5. Curricular Improvements
2. Economies of Scale	6. Educational Innovations
3. Demographic Circumstances and Travel	7. Adequacy of Space for Projected
4. Multi-County Projects	Enrollments

(1 – Poor Rating; 3 – Adequately met the need or requirement; 5 – Excellent Rating)

1. Did the CEFP contain all data required in State Board Policy 6200?

1 2 3 4 5

2. Was the data sufficient to allow prudent long-range planning decisions to be made regarding the educational direction and facility needs necessary to accomplish the desired goals of the ten-year plan?

1 2 3 4 5

3. Was the original plan significantly amended during the ten-year cycle?

Yes _____ No _____

If the original plan was altered:

 - (a) Did alternations in the plan generally prove to be positive changes?

1 2 3 4 5

 - (b) Did the amended plan effectively improve the county's ability to deliver the curriculum?

1 2 3 4 5

 - (c) Were the amendments generally politically initiated rather than educationally motivated?

1 2 3 4 5

4. Were local and SBA funds used effectively for individual school projects that further the overall goals of the county plan and the goals of the SBA as defined in 18-9D-16(d)?

1 2 3 4 5

5. To what degree has/will the projects identified in the ten year plan be effectively completed during this planning period?

25% 50% 70% 80% 85% 90% 95% 100%

Comments relative to the major issues (positive and negative) that led to the conclusion of the evaluation committee in Items 1 thru 5. (Additional comments may be attached)

Comments relative to improving the plan to be developed for the upcoming ten year planning cycle.

List Committee Members below:

Committee Chairperson

Date

SBA 150
CEFP EVALUATION OF
COMPLETED PROJECTS

County _____

Projects Completed From _____ to Report Date _____

Report Date _____

[illegible]

* 1. Did not achieve the objectives of the SBA - 3. Adequately met the SBA objectives or requirements - 5. Exceeded the expectations of the SBA objectives

SBA 150

COPY FOR ADDITIONAL

SBA 152
ABANDONED SCHOOLS REPORT

ABANDONED SCHOOLS REPORT

(List only abandoned schools still in the ownership of the county board of education)

[illegible]

SBA 156
BUILDING PROGRAM UTILIZATION
WORKSHEET #3

School Building Authority of West Virginia
BUILDING PROGRAM UTILIZATION WORKSHEET
 Worksheet #3

County: _____ School: _____ Current Enrollment: _____

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

Program Utilization = $\frac{\text{Current Enrollment}}{\text{Total Program Capacity}}$ = _____

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 self-contained regular 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 157
BID CERTIFICATION FORM

School Building Authority of West Virginia
BID CERTIFICATION FORM

I, hereby certify that the bid requirement found in Article 22, Section 5-22-1 of the West Virginia State Code have or will be met should I be awarded the construction contract for the project referenced below. I further certify that all requirements found in the School Building Authority, Supplemental General Conditions applicable to this project and bound within the bidding documents for this project will be complied with prior to the execution of the construction contract. I understand that if the SBA requirements exceed those of West Virginia Code, the more stringent requirements will apply to this project.

Project Name: _____ Date: _____

Name of Contractor's Company: _____

Signature of Responsible Contractor: _____

Notary's Signature: _____

Notary Seal

SBA 158
TECHNOLOGY INFRASTRUCTURE REVIEW

SCHOOL BUILDING AUTHORITY OF WV
TECHNOLOGY INFRASTRUCTURE REVIEW

Standard	Met	Not Met	Rational for Improvement	Cost to Meet Standard
General Network/Communications				
1. Cabling complies with all applicable IEEE, EIA/TIA Standards				\$
2. Cabling complies with applicable state and local fire and building codes				\$
3. Cabling documents on hand includes schematics, cable lengths, equipment locations and certifications				\$
4. Cable trays, wire guides and supports provided and properly installed				\$
5. Cabling enclosed and protected where accessible				\$
6. Cabling is uniform and clearly labeled at distribution frames, electronics and work stations				\$
7. Adequate electrical circuits with isolated ground provided for all electronic equipment				\$
8. All exterior, non-fiber cable includes shielding and lightening arresters at building penetrations				\$
Network Subtotal				\$
Distance Learning Is distance learning utilized in this facility? 9. Yes 10. If no, equipment needed and cost				\$
Distance Learning Subtotal				\$
GRAND TOTAL ALL TECHNOLOGY				\$

(Use back of Form or Additional Sheets, if necessary)
sba158

SBA 159
VERIFICATION OF HVAC TRAINING

Verification of HVAC Training

(Required closeout document to be submitted by the county board of education)

Project Name: _____

Architect/Engineer: _____

Responsible Contractor(s): _____

Date(s) of Training: _____

HVAC training was provided by the responsible contractor for the above referenced project. This training was performed in accordance with the contract documents. All owner's manuals and operating instructions for the HVAC system(s) were provided to the owner for future use. The following individuals were present for the training:

<u>NAME</u>	<u>REPRESENTING</u>	<u>NAME</u>	<u>REPRESENTING</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

The following have verified that the required HVAC training has been satisfactorily completed:

(Responsible Contractor's signature)

(Date)

(Responsible Contractor's signature)

(Date)

(County Superintendent's signature)

(Date)

(DOE HVAC technician's signature)

(Date)

SBA 160
SCHOOL ACCESS SAFETY REPAIR AND
RENOVATION SCHEDULE
ANNUAL UPDATE

**SCHOOL ACCESS SAFETY REPAIR AND RENOVATION
SCHEDULE**

_____ COUNTY _____ DATE

SCHOOL	REPAIR/ RENOVATIONS	PRIORITY	ANTICIPATED COMPLETION	COST	FUNDING SOURCE

SCHOOL	REPAIR/ RENOVATIONS	PRIORITY	ANTICIPATED COMPLETION	COST	FUNDING SOURCE

sba160

SBA 161
SCHOOL ACCESS SAFETY PLAN
AUDIT

SCHOOL: _____

Access Control Audit - Planning

A Safety Committee's primary function is to monitor school safety needs for the purpose of identifying problems and recommending solutions for school safety. These stakeholders serve as the steering committee for self-assessment and planning. Written policies communicate responsibilities for preventing, managing and responding to violence or crises.

Indicate the extent to which each of the following is in place.

not at all	partial	effective

COMMENTS:

- 1 A functional school Safety Committee (i.e. administrator, teacher, secretary, custodian, student, parent, 911 responders) is in place.

COMMENTS:

- 2 There is a system-wide, documented "Closed Campus" policy to ensure authorized access to the school by staff, students and visitors.

COMMENTS:

- 3 There are system-wide, documented "Lock Down" procedures for staff.

COMMENTS:

- 4 "Lock Down" procedures are drilled and evaluated on a regular basis to ensure timely response for staff and students.

COMMENTS:

- 5 All visitors are required to produce photo ID and be authorized by a staff member at the main entrance before access to the building is permitted.

COMMENTS:

- 6 All visitors are issued a temporary badge that hangs on a lanyard around the neck before access to the building is permitted.

COMMENTS:

- 7 Has a current and comprehensive crisis plan in place, known by staff and rehearsed through periodic drills (i.e. evacuation, shelter-in-place).

COMMENTS:

- 8 Accurate evacuation maps are posted in every room (i.e. classrooms, offices, restrooms) in the school.

COMMENTS:

- 9 Has a documented chain-of-command structure in place to manage crises.

SCHOOL: _____

Access Control Audit - Deterrence

Deterrence is any preemptive action, reaction, administrative capability, or design, which moderates a threat or act. It reduces the motivation of adversaries (i.e., discourages, hinders, impedes, restrains).

Indicate the extent to which each of the following is in place.

not at all	partial	effective

- 1 Signs at campus entries (i.e. parking lot) and perimeter prohibit contraband (i.e. weapons, drugs) and trespassing on school property.

COMMENTS:

- 2 Signs on all school exterior doors, inside and outside, state each door's usage (i.e. main entrance, alternate entrance, emergency exit).

COMMENTS:

- 3 Numbers are clearly posted on all school exterior doors, inside and outside, for emergency responders.

COMMENTS:

- 4 Room numbers are clearly posted on all interior doors (i.e. offices, classrooms) for emergency responders.

COMMENTS:

- 5 Fixed or moveable barriers are positioned to prevent vehicular access to areas where people gather (i.e. main entrance, grounds).

COMMENTS:

- 6 Shrubby near entries, windows and pathways has been trimmed to a maximum height of 24 inches to provide clear lines of sight and prevent concealment.

COMMENTS:

- 7 Trees limbs near entries, windows and pathways have been trimmed to a minimum height of six feet to provide clear lines of sight and prevent concealment.

COMMENTS:

- 8 Measures have been implemented to prevent unauthorized access onto the school roof.

COMMENTS:

- 9 Exterior lighting at entries, along pathways, and in parking areas is bright and allows for viewing of unauthorized activities.

COMMENTS:

SCHOOL: _____

Access Control Audit - Detection

Detection is sensing and assessing unauthorized acts in a timely manner. Unauthorized acts may use either force or deceit tactics. Detection may be accomplished by personnel or hardware (alarm sensors, access control devices, and assessment).

Indicate the extent to which each of the following is in place.

not at all	partial	effective

COMMENTS:

- 1 All adults in the school (i.e. staff, visitors, contractors) are required to wear ID badges on a lanyard around the neck.

COMMENTS:

- 2 Staff are continuously trained and drilled to ensure knowledge of security procedures, means and roles in responding to a crisis.

COMMENTS:

- 3 The school has a closed circuit television system that includes a camera at the main entrance and digital recording capabilities.

COMMENTS:

- 4 The school has an intrusion alarm system that includes central station monitoring.

COMMENTS:

- 5 The school utilizes equipment (hand-held or portal), K-9s and procedures to detect contraband (i.e. metal, drugs, explosives).

COMMENTS:

- 6 Entries approved for authorized access by staff and students are monitored to ensure proper use and prevent unauthorized access by visitors.

COMMENTS:

- 7 The school makes use of entry control devices (i.e. cards, fobs, keys) to prevent unauthorized access to the building.

SCHOOL: _____

Access Control Audit - Delay

Delay is a physical barrier that slows and impedes an unauthorized act after it has been detected.

Indicate the extent to which each of the following is in place.

not at all	partial	effective

COMMENTS:

- 1 All classrooms and offices are equipped with functional locking mechanisms and all staff are trained in their use.

COMMENTS:

- 2 Existing locking mechanisms on classroom and office doors lock from the inside.

COMMENTS:

- 3 Windows in classroom and office doors are reinforced (i.e. wire mesh, plastic laminate) to prevent forced access.

COMMENTS:

- 4 Windows adjacent to classroom and office doors are reinforced (i.e. wire mesh, plastic laminate) to prevent forced access.

COMMENTS:

- 5 The main entrance to the building has a locked vestibule (man trap) for visitor authorization purposes.

COMMENTS:

- 6 All school entrances are monitored and controlled through locking, supervision or electronic surveillance.

COMMENTS:

- 7 Access to sensitive areas (i.e. computer labs) is restricted through the use of access control systems.

COMMENTS:

- 8 The school possesses and implements written key control practices for interior and exterior doors.

SCHOOL: _____

Access Control Audit - Communications

Communication systems consist of the equipment and procedures used by school personnel for sending and receiving messages, both internally and externally.

Indicate the extent to which each of the following is in place.

not at all	partial	effective

COMMENTS:

- 1 Intercom systems to reach school response personnel in an emergency are available throughout the school.

COMMENTS:

- 2 Public Address (PA) systems to reach school response personnel in an emergency are available throughout the school and campus.

COMMENTS:

- 3 Telephone systems to reach school response personnel and 911 responders in an emergency are available throughout the school.

COMMENTS:

- 4 The school has a dedicated outside line to reach emergency responders during a crisis.

COMMENTS:

- 5 Two-way radios to reach school response personnel in an emergency are available throughout the school and campus.

COMMENTS:

- 6 Duress (panic) devices are available throughout the school and campus.

COMMENTS:

- 7 Public Address (PA) systems are equipped with back-up power supplies (i.e. battery, generator).

SBA 162
CEFP EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Comprehensive Educational Facilities Plan

ANNUAL REPORT YEAR _____ COUNTY _____

1. Number of existing schools currently within the county
(Include vocational, special education, adult education) _____
2. Number of schools that will be closed during the ten year
planning period. _____
3. Number of schools that will exist in the county at the close
of the ten year planning period if the CEFPP is completed. _____
4. Total estimated cost remaining to implement the entire CEFPP. \$ _____
5. Total estimated cost of anticipated SBA funded "Needs" and
"MIP" projects in the CEFPP. \$ _____
6. Total cost for all other projects within the CEFPP to be funded
from county or other sources excluding SBA funds. \$ _____
7. Has regionalization of school facilities been considered within
the CEFPP? If so, please give a brief description. Yes _____
No _____

8. *Approximate annual cost savings as a result of school closures
anticipated in the CEFPP? \$ _____
Annual Cost Savings
\$ _____
Avoided Costs

Include approximate savings such as: annual utilities, annual
maintenance & reduced staff also, subtract any related costs
associated with additional transportation, one time cost for
moving of student and staff from a closed facility, etc.
9. Has educational innovation been addressed with the ten year
CEFPP? If so, please give a brief description. Yes _____
No _____

*Please indicate annual cost savings per county as indicated. Also, please indicate any cost avoided per county such as anticipated expenditures on schools scheduled to be closed for major renovations that may be required should the facility remain open.

Date
SBA162

County Superintendent

SBA 163
CEFP PROGRESS REPORT #1

Comprehensive Educational Facilities Plan

PROGRESS REPORT #1

Please complete the following questions. *Additional sheets may be needed.*

1. Briefly describe the sub-committees of the planning committee appointed to develop the CEFPP and describe their responsibilities.

2. List the chairperson and members, both professional and citizen of the planning committee and each sub-committee. Please include addresses and phone numbers.

3. Indicate preliminary goals and objectives developed by the committees and presented to the county board of education for review. *(See State Board Policy 6200, Chapter 1, Section 100.01)*

Superintendent

Submitted by

SBA 164
CEFP PROGRESS REPORT #2

Comprehensive Educational Facilities Plan PROGRESS REPORT #2

This progress report is verification that the planning team and committee has completed the data collection portion of the CEFPP. This, along with a draft copy of the completed draft sections of the plan, must be submitted to the State Department of Education and the SBA as soon as this portion of the plan is complete or as directed by the SBA. Listed below are the key elementary for which data has been compiled.

	Date Completed
A. Final Goals and Objectives – Adopted by the Board of Education	_____
B. Community Analysis	_____
C. Population and Enrollment Study	_____
D. Educational Plan	_____
E. Evaluation and Inventory	_____
F. Major Improvement Plan	_____
G. Inter-County Facility Feasibility Study	_____

What is your projected completion date for the plan? _____

Superintendent

Submitted by

SBA 165
MAJOR IMPROVEMENT PLAN
EXECUTIVE SUMMARY

School Building Authority of West Virginia
PROJECT EXECUTIVE SUMMARY
MAJOR IMPROVEMENT PLAN

PROJECT _____

COUNTY _____ **COUNTY PRIORITY** _____

PROJECT COST _____ **DATE** _____ **SBA FUNDING CYCLE** _____

PROJECT DESCRIPTION:

FUNDING SOURCE:

TO IMPLEMENT TOTAL MIP

FUNDING FOR THIS PROJECT

SBA \$ _____ TYPE _____
LOCAL _____ TYPE _____
OTHER _____
TOTAL _____

SBA \$ _____ TYPE _____
LOCAL _____ TYPE _____
OTHER _____
TOTAL _____

Bonding Capacity \$ _____ Available Bonding Capacity \$ _____
Excess Levy Capacity \$ _____ Available Levy Capacity \$ _____

COUNTYWIDE BUDGET INFORMATION

- Are Excess Levy Funds Dedicated Annually to Maintenance? Yes ___ No ___
Amount \$ _____
- Are Excess Levy Funds Dedicated Annually to Building Improvements? Yes ___ No ___
Amount \$ _____
- Percent of Total Building Improvement or Maintenance Budget supported by Levy
_____%. (Based on data provided above)
- Percent of Total County Budget dedicated to Facility Maintenance _____%
- Maintenance Budget this Year \$ _____
- Maintenance Expenditures Last Year Total \$ _____
\$/Square Foot _____
- Average Maintenance Budget for lowest three of the past five years \$ _____

Compliance With SBA Requirements Proposed New Project

Briefly describe how this project affects the following:

- **HEALTH AND SAFETY**

- **ECONOMIES OF SCALE**

Number of students enrolled in the affected facilities _____

Economies of scale will ____ will not ____ be achieved or will not be altered ____ as a result of the completion of this project.

ANNUAL SAVINGS \$ _____ COST AVOIDANCES \$ _____
(Achieved on this project) (Achieved on this project)

IF IMPLEMENTED, WHAT IS THE AFFECT OF THIS PROJECT ON PERSONNEL?

• TEACHER	Present # _____	Projected # _____	Difference _____
• SERVICE PERSONNEL	_____	_____	_____
• ADMINISTRATORS	_____	_____	_____

- **MULTICOUNTY PROJECT**

- **EDUCATIONAL INNOVATIONS AND IMPROVEMENTS**

- **ADEQUATE SPACE FOR PROJECTED STUDENT ENROLLMENT**
- **TRAVEL TIME**
- **EFFECTIVE AND EFFICIENT USE OF PROPOSED FUNDING**
- **PROVIDING OR IMPROVING A PREVENTIVE MAINTENANCE PLAN**
- **FURTHERANCE OF THE OVERALL GOALS OF THE SBA AND THE COUNTY/AGENCY MAJOR IMPROVEMENT PLAN**

SBA 166
SBA MAXIMUM GROSS BUILDING SQUARE
FOOTAGE ALLOWANCE

SBA MAXIMUM GROSS BUILDING SQUARE FOOTAGE ALLOWANCE
(Revised April 2009)

<u>Number of Students</u>	<u>Square Feet Per Student</u> (NEW)

ELEMENTARY

Up to 240 students	168
241-265	158
266-290	150
291-315	141
316-340	135
341-399	128
400-440	118
441-490	112
491-540	106
541-590	100
591-640	100
Over 641 students	99

MIDDLE/JUNIOR HIGH

Up to 500 students	154
501-550	149
551-600	144
601-650	138
651-700	133
701-750	128
751-800	123
801-850	118
851-925	113
926-1000	107
Over 1000 students	102

HIGH SCHOOLS

Up to 500 students	234
501-550	224
551-600	219
601-650	213
651-700	198
701-750	188
751-799	181
800-900	175
901-1000	168
1001-1150	163
1151-1300	157
1301-1500	152
Over 1500 students	146

Maximum allowable square footages are used to provide equity for funding of school with various design enrollments. Actual building design square footage will be dictated by the number of square feet allowed per student and the building program utilization calculation prepared for each project. If a full or partial inclusion Model No. 1 for special education is used, the maximum square footage may be reduced.

SBA 167
SBA MAXIMUM CLASS SIZES

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	
Technology Education Lab/Classroom		25	
Music Facilities (Optional/EL)	25	25	40
Ensemble Room (Optional)			12
Physical Education	25	70	70
Science Facilities		25	25
Micro-Computer Lab (Optional)	25	20	20
Electronic Technology Lab (Optional)		75	
Auditorium (33% of total student body - min. 250)			
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			25
Agricultural Mechanics Lab			20
Marketing Education			25
Diversified Cooperative Training			25
Vocational Health Occupations			25
Health Occupations Lab			25

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA			
Maximum Class Sizes			
Classroom Type	EL	MS	HS
Family and Consumer Science (FACS)			20
Food Management, Production & Services (Occup)			20
Child Care Specialist (Occup)			20
Vocational/Industrial & Technical Classrooms			20
Industrial and Technical Lab			20
Business Education Classroom			20 25
Computer/Keyboarding Lab			30 25
Office Technology			20
Tech Ed. Production Lab		20	20
Tech Ed. Systems Lab			20

Bold type spaces are instructional areas for students with exceptionalities. Most students with exceptionalities are served in general education classrooms designed to accommodate students with exceptionalities. Maximum class sizes are shown to provide design data where self-contained rooms are provided. Exceptions to these class sizes may occur with approval of the State Department of Education. See also Chapter 7 of the "Handbook on Planning School Facilities" (State Board of Education Policy 6200) for Level I, II and III services where applicable.

clasize

SBA 167

Revised 4/2014

SBA 168
SBA JOB SIGN & PLAQUE
(NEEDS)

SBA 169
SBA JOB SIGN
(MIP)

8'-0"

1 1/2" (Brief Project Description)

5" (SCHOOL or)
(FACILITY NAME)

(Superintendent's Name)
State Superintendent of Schools

(Local) County
Board of Education

(Superintendent's Name)
Superintendent

(Architect's Name)
(City, State)

2" (\$X,XXX,000) Funding by (County Name)

2" (\$X,XXX,000) Funding by:

3" School Building Authority

3" of West Virginia

4" (Governor's Name)

2" Governor

2" (Speaker of the House Name) 2" (Senate President's Name)

1 1/2" Speaker of the House

1 1/2" Senate President

3" "Investing in West Virginia's Future"

West Virginia
School Building Authority
(Executive Director's Name)
Executive Director
(SBA Member), Vice President
(SBA Member), Secretary
(SBA Member)
(SBA Member)
(SBA Member)
(SBA Member)
(SBA Member)
(SBA Member)
(SBA Member)

1 1/2"
1 1/2"
1 1/4"
1"
1 1/4"
1 1/4"
1 1/4"

NOTE:

1. THE PROJECT SIGN MUST BE VISIBLE AND LEGIBLE FROM HIGHWAYS.
2. IF THE PROJECT SIGN IS LOCATED ON DEPARTMENT OF HIGHWAYS RIGHT OF WAY, COORDINATE PLACEMENT WITH THE REGIONAL OFFICE.
3. THE PROJECT SIGN SHOULD BE PLACED IN A LOCATION SO AS TO NOT CREATE A SAFETY HAZARD FOR MOTORISTS OR PEDESTRIANS.
4. COORDINATE THE QUANTITY AND NAMES OF CONTRACTORS FOR EACH PROJECT. (SINGLE-PRIME OR MULTIPLE-PRIME).
5. FUNDING BY LOCAL COUNTY IS OPTIONAL IF ADDITIONAL LOCAL FUNDING IS INCLUDED IN PROJECT.

SBA 170
SBA JOB PLAQUE

DRAFT

INVITATION FOR QUALIFICATIONS (IFQ)

_____, 20__

**Design-Build Services
For**

A proposal in response to this IFQ must be submitted to the _____ **no later than**
_____ **on** _____, 20__. It must be plainly marked:

Proposal for IFQ Design-Build Services for

The responsibility for submitting a response to this IFQ at the _____ County Board of Education office located at _____ on or before the stipulated time and date will be solely and strictly the responsibility of the proposer. The _____ Board of Education will in no way be responsible for delays caused by the United States Postal Service or caused by any other occurrence. Any proposals received after the stipulated time and date will not be accepted, nor opened, and will be returned. A bid bond equivalent to 5% of the construction cost must be provided with the cost proposal. Specific project information can be obtained by contacting _____ at _____. Questions concerning the specifics of the project(s) should be directed to _____ at _____.

_____ **COUNTY BOARD OF EDUCATION**

Office of _____

INVITATION FOR QUALIFICATIONS

**Design-Build Services
For**

_____ **(School)**

_____ **(Date)**

TABLE OF CONTENTS

Section	Title
1	Invitation for Qualifications
2	Project Description
3	Instructions to Submitting Firms/Teams
4	Qualification Process
5	Selection Process

SECTION 1 – INVITATION FOR QUALIFICATIONS (IFQ)

Pursuant to West Virginia Code 5-22A-1 and Legislative Rules 148-CSR-11 the _____ County Board of Education intends to contract with a Design-Build firm/team to provide professional services for:

Selection of the Design-Builder shall conform to the State of West Virginia's Consultants Competitive Negotiations Act and shall satisfy qualification requirements as defined by West Virginia Code 5-22A-1 and et. seq. and Title 148, Legislative Rules for selecting Design-Builders under the Design-Build Procurement Act. _____ County Board of Education reserves the right to reject any or all IFQ proposals if it is determined to be in the best interest of the county board of education.

The successful Design-Builder will be expected to enter into a single point of responsibility agreement with _____ County Board of Education to provide complete professional architectural and engineering design services, permitting and construction services including all labor and materials for the completion of the project.

Firms/teams interested in providing design/build services to _____ County are hereby notified that Proposals for providing the requested services in response to this IFQ will be accepted until _____ and must be received by mail or delivered in hand to the following location. Proposals received after this deadline will be disqualified.

_____ County Board of Education

The proposal is limited to 25 pages (excluding the required SBA forms) and shall be presented in a binder format, tabbed according to the Evaluation Criteria. Proposals will not be reviewed until expiration of the time established for making proposals as set forth in the IFQ. One (1) original and ten (10) copies of the proposal shall be submitted which are clearly labeled with the project name and the name of the submitting firm/team.

The format of the proposal shall be in strict conformance with the stipulated criteria in Instructions to Submitting Firms/Teams (Section 3) and the Selection Process (Section 4).

A Selection Team will review the proposals and evaluate the qualifications of each Design-Build firm/team. Interviews will be scheduled and the selection committee will evaluate and score each firm/team based on the proposal information and the interview. A minimum of three-five firms/teams will be selected to submit a Request for Proposal to complete the design and construction of the project based on Performance Criteria provided by the Owner.

SECTION 2 – PROJECT DESCRIPTION

A. Scope of Work

In general, the work consists of the following: (insert project description and timeline)

B. Budget

The budget for the Design-Build project will be based on the pre-design/construction cost and the design/construction cost together with all other soft costs associated with the project. A preliminary budget has been established by the owner and the SBA for performance criteria development purposes. However, the final budget will be established based on the acceptance of the Design-Build team's proposal together with the pre-design/construction cost. The final budget will be subject to the approval of the owner and SBA.

C. Owners Anticipated Pre-Construction Schedule

1.	Advertisement/IFQ	_____
2.	Design-Build Qualifications Due	_____
3.	Oral Presentations by Firms/Teams	_____
4.	Evaluation of IFQ	_____
5.	Recommendation of Selected Short-List Firms/Teams	_____
6.	Notification of Short List Firms/Teams	_____
7.	Invitation for Proposals Mailed	_____
8.	Response to IFP Due	_____
9.	Award of Design-Build Contract	_____
10.	Anticipated Substantial Completion	_____

SECTION 3 – INSTRUCTIONS TO SUBMITTING FIRMS/TEAMS

A. General

This Invitation for Qualifications (IFQ) is the first in a two-stage selection process in Design-Build services. The selection process will be conducted as follows:

- Stage 1: The responses to this IFQ will be reviewed by a Selection Team in accordance with the process and evaluation criteria contained in Section 4. The Selection Team reviews the proposals and schedules interviews with firms/teams to discuss the IFQ submission information. The Selection Team will then score each firm/team submission based on the IFQ and interview. The Selection Team then will short list no fewer than three firms but no greater than five firms to continue on to Stage 2 of the selection process.
- Stage 2: Each of the three to five firms/teams short listed will be given the Request for Proposals (RFP) including the project performance criteria, educational specifications and the submission schedule for the RFP.

B. Mandatory Pre-Presentation Meeting

The short listed firms/teams will be required to attend a Mandatory Pre-Presentation Meeting. The meeting will be scheduled by _____ County Board of Education a minimum of five (5) days prior to the presentation date. The time and date of the meeting will be announced a minimum of 48 hours in advance. The short listed firms/teams are required to visit the project site prior to the Mandatory Pre-Presentation Meeting.

C. Questions

Questions regarding the completion and submission of the proposal should be directed to _____. Any communication, written or verbal, with other county or SBA representatives may be grounds for disqualification. Technical questions by the short listed firms/teams regarding the Design Criteria Package or the presentation must be received in writing via facsimile and directed to the attention of _____. The deadline for technical questions is _____(time) on _____(date). A written response will be provided to all questions received no later than _____(date). Responses will be in writing to all short-listed firms/teams.

D. Expenses Incurred in Preparing Responses

_____ County accepts no responsibility for any expenses incurred by those firms/teams offering their services to the Board either in the preparation of a response to this IFQ or subsequent presentation. All expenses shall be borne by the offering firms/teams exclusively.

E. Design-Build Qualifications

Firms/teams submitting a response to this IFQ must qualify under the Design-Build Board of West Virginia. Corporations must be a registered vendor in the State of West Virginia prior to submission of their proposal. Joint ventures, if selected, will be expected to sign a form of contract making each venture jointly and severally liable for its actions and its co-venture's actions under this contract, or alternatively to provide a copy of an executed, formal joint-venture agreement that so binds each to the other. All contractors and subcontractors must have a contractor license in the State of West Virginia. Standard AIA Documents will be used for this project unless otherwise waived by the SBA. In addition, the bidder(s) must provide pertinent financial information within the IFQ response including the SBA Qualification Statement.

F. Bonding and Insurance Requirements

The Design-Builder ultimately selected will be required to obtain a Performance Bond and a Labor and Materials Payment Bond. Errors and Omissions Professional Liabilities Insurance will be required for the Design Professional(s). If selected, insurance in the form of General Liability, Automobile, Worker's Compensation and Employees Liability will be required of the construction contracting entity with minimum coverage's defined below:

Insurance Description and Minimum Required Coverage

1. Worker's Compensation/Employers' Liability
Statutory – State of West Virginia – Compensation through State Fund.
Employer's Liability – Limits Required:

\$500,000 – each employee

\$500,000 – each accident

\$500,000 – aggregate

Coverage must include legal liability brought under West Virginia Code Annot. (1978) Section 23-4-2.

2. Contractor's Public Liability Insurance Limits Required:

\$2,000,000 – General Aggregate

\$1,000,000 – Products Complete Operations Aggregate

\$1,000,000 – Personal & Advertising Injury Limit

\$1,000,000 – Each Occurrence Limit

Commercial General Liability must include:

Explosion, Collapse and Underground Property Damage. Coverage required, if contractor's operations warrant such coverage. Also, if blasting operations, separate blasting coverage is required.

3. Automobile Liability Insurance

Limits Required:

\$1,000,000 – Per Accident

Provide "Any Auto" Coverage

4. Excess Liability Insurance

Limits Required:

\$2,000,000 – Combined Single Limit Occurrence

\$2,000,000 – Aggregate

5. Builders Risk and Property Insurance

100% Completed Value Form

Coverage Format:

All Risk including theft

Coverage shall include transit and off-site storage/secondary location limit amount that exceeds any shipment or off-site storage material value before payments to contractor for off-site stored materials are approved. Proof of coverage limits exceeding accumulated value of materials stored is required.

Names Insured shall be Owner, Contractor and all Subcontractors ATIMA.

Deductibles shall be stated in the Certificate of Insurance. Payment of deductible shall be the responsibility of the contractor.

If a renovation to an existing building, the Owner will provide coverage while under Construction by adding the contractor and all subcontractors, ATIMA to the permanent property policy.

SECTION 4 – QUALIFICATION PROCESS

Selection Team

The Proposals received in response to this IFQ will be evaluated and ranked by a Selection Team. This process will also include an oral presentation by qualified Design-Build firms/teams. Once the interviews are completed, the Selection Team will rank each Design-Build firm/team using the rating system established within the IFQ. The Selection Team will select (short list) no fewer than three (3) but not greater than five (five) firms/teams to be invited to submit response to a Request for Proposal (RFP). The members of the Selection Team are:

Name	Affiliation and Title
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Evaluation Criteria

The following Criteria are intended to provide the Selection Team with information regarding the qualifications of each proposing Design-Build firm/team. Proposals shall address each of the Criteria in the same order listed in Attachment _____.

A. Proposal Letter

Firms must provide an original letter stating their intent to qualify for this project under the Design-Build Act of West Virginia and their acceptance of the terms and conditions contained in this IFQ. The letter must be signed by an officer(s) of the proposing firm(s) or the prime team member(s).

B. Project Understanding

Clearly demonstrate your firm/team's understanding of the scope of the project. Present a concise outline of specific services your firm/team is qualified and prepared to provide for the project. Identify and discuss any of the services, or method of approach to the

services, which your firm/team believes to be either “unique” or “outstanding,” or which may be recognized as giving your firm/team a competitive edge or advantage.

C. Team Organization and Personnel Resumes

Provide information describing the Design-Build team being proposed and the experience of the individual firms comprising the team. If your team is a joint venture or a team consisting of a prime firm with a consultant and sub-consultant relationship, describe your organizational basis. Describe the number and type of projects your team has completed together and the number of years of working experience together. Identify each entity discipline and responsibilities of the team. Indicate key personnel and their relationship to this project and other team members. Provide an organization chart identifying design and construction personnel proposed for the project. Provide resumes of key personnel, their disciplines, respective roles, education, licenses and their experience in Design-Build. Identify their experience as related to educational facilities. Explain the status of the current workload of your design entity and construction entity, addressing the availability of the lead personnel proposed for this project.

D. Architect Team Member Project Experience

Submit the design experience of the West Virginia Registered Architect member (minimum of five years), documenting the most recent evidence of school design experience and SBA school design experience. Provide qualifications and experience of key management and professional staff and other staffing proposed to complete this project. Identify projects of comparable size, complexity and cost to this project, defining specific services provided. Provide information regarding experience on SBA projects. Include renderings or photographs, if feasible. Include appropriate information describing the scope and nature of the projects. Identify the lead personnel on each project, their respective responsibilities and if they are proposed for this project. Comment on the commitment to involve lead design personnel assigned to the project through the design and construction phase. For each of the projects listed, identify the client's name and contact person, address, phone numbers, dates of services performed and references. Submit current Standard Forms 254 and 255. Submit current West Virginia Architectural License for the firm.

E. Contractor Team Member Project Experience

Submit the construction experience of the West Virginia Licensed General Contractor entity, documenting evidence of the successful construction of recent school construction. Provide information regarding experience on SBA projects. Identify projects of comparable size, complexity and cost of this project, defining specific services provided (General Contracting or Design-Build). Comment on project schedules and budgets and the adherence to those items. Identify the lead personnel on each project, their respective responsibilities and if they are proposed for this project. For each of the projects listed, identify the client's name and contact person, address, phone numbers, dates of services performed and references. Also, provide the name and telephone number of the

architectural firm and project architect responsible for the projects. Submit an SBA Contractor's Qualification Statement and a copy of your current West Virginia General Contractor License

F. Proximity to Project/Availability

Provide the business address of the prime or lead firm's office from which any part of the work will be administered and the distance of the office (in hours) from the project site. (Do not list a job site trailer address). If submitting a joint venture, list the address of both firms and the distance (in hours) from the site of the managing office from where work will be administered. Provide the distance (in hours) between the business address of the construction entity and the office of the design entity performing the design work.

G. Project Approach

Comment on your approach toward accomplishing the design and construction phases necessary to achieve Substantial Completion in a timely manner. Describe the management approach and communication procedures you will employ throughout the design and construction of the project. Describe your reporting procedures, frequency and process for obtaining design/program input from the county board and SBA. Describe your plan to establish and maintain clear lines of communication with the county project manager and the SBA staff. Provide examples of Management Information Reporting Systems, Quality Control, Partnering, etc. Describe and provide examples of how you propose to resolve conflicts and negotiate changes. Additionally, describe how safety and drug testing will be addressed during the project.

H. Schedule/Cost Control

Describe your cost and scheduling methodology and the project management method you will use for effectively managing and executing the work on time and within budget. Include a disclosure of the present work load for your design and construction team. Provide information about operational timelines for accomplishing work requested by this proposal and samples of schedules and cost estimate formats. Provide a comparative chart showing your recent schedule and cost control successes on similar educational projects. Provide examples of how you propose to control quality and your quality assurance programs. Also, include your Value Engineering, Life Cycle Cost Analysis, Constructability Review strategies.

I. Local Labor Participation

Projects receiving SBA or other state funding must comply with the West Virginia Department of Labor and Workers Compensation requirements and other pertinent codes. Indicate the efforts your firm/team has made regarding local labor force being used on project(s). Additionally, indicate what efforts your firm/team has made, or intends to make, to comply with West Virginia Code 21-1C, (West Virginia Jobs Act) on this project.

J. Financial Strength and Bonding Capacity

Provide a statement indicating the financial capability of the firm/team to provide the resources required including:

1. A letter of intent from a surety company indicating the applicant's bonding ability for this project (performance and payment bond) for an amount in excess of the budget shown in Section 2 of this IFQ. The performance and payment bond will be a sum of 100% of the amount of the construction contract. To be acceptable to the Owner as Surety for performance and payment bonds, a Surety Company shall comply with the following provisions:
 - a. The Surety Company must be licensed to do business in the West Virginia.
 - b. The Surety Company shall have been in business and have a record of successful continuous operations for at least five years.
 - c. The Surety Company shall have at least A.M. Best Company, A or better rating listed on the most current federal register, circulation 570, which is authorized to do business in the State of West Virginia and which is satisfactory to and approved by the Owner and the SBA.
2. Provide audited financial statements for the most recent two years, including income statement, balance sheet, statements of change in financial position and notes to financial statements. This information may also be included in the contractor qualification information provided.
3. Provide all material changes in the business operations of the firm, including without limitation any bankruptcy proceedings, mergers, acquisitions, or spin-offs and any material pending or threatened litigation, which have occurred within the last five (5) years. Discuss the impact of these changes on the firm's financial or managerial ability to perform the task under the proposed capital plan.
4. Provide the name, title, address and phone number of the financial officer of the firm responsible for providing the information in response to this requirement.

The financial information requested above, and copies of any rating reports, are not included in the IFQ's 25 page limitation. Proposers wishing to preserve the confidentiality of this information may do so by providing one (1) original of the information in a separate envelop labeled "Confidential – proprietary financial information."

K. Litigation

Identify all litigation in which your firm/team has been a party to legal action (including arbitration, administrative proceedings, etc.) or lawsuits during the last five (5) years

involving a single client for claims in excess of \$50,000. Include a brief legal description of the dispute and its current status and whether the action or lawsuit has involved a Design-Build contract. Also, describe the particular circumstances giving rise to the dispute and the actions which your firm took to attempt to settle the matter prior to and after the suit being filed. Describe in detail any projects within the last five (5) years where liquidated damages, penalties, liens (in excess of \$50,000), defaults, cancellations of contract or termination of contract were imposed, sought to be imposed, or filed against your organization.

L. References

Provide a list of client references for project completed by the architectural and construction team members. Each referenced project must have construction cost, year completed and client contact information.

SECTION 5 – SELECTION PROCESS

Proposal Evaluation

The Selection Team will evaluate the Design-Build Team qualifications received in response to this IFQ based on the Evaluation Criteria in this Section and the oral interview, which will be weighted in accordance with the Selection Team Rating Sheet contained at the end of Section 5. The Selection Team will select (short list) no fewer than three (3) firms/teams with the highest total points (the sum of the scores given to each firms/teams by all voting members of the Selection Team). The short listed firms/teams will be notified and will be given the Design Criteria Package to prepare their proposals.

Oral Presentations

Qualified firms/teams will make oral presentations to the Selection Team to review their qualifications. The short listed firms/teams will be given ____ minutes for an oral presentation. The format of the presentation should be structured to clearly address the Evaluation Criteria contained in Section 4 of the IFQ. Presentation boards and handouts are acceptable. A projection screen will be available for use by the short listed firms/teams if prior notice is given to the Owner. The Selection Team will have ____ minutes for questions, but under no circumstances will the total time of _____ be exceeded.

Final Selection

The Selection Team will evaluate the qualifications of the firms/teams after the oral presentations based on the Selection Team Rating Sheet contained in these instructions. The Selection Team will notify a minimum of three (3) but no greater than five (5) firms/teams selected (short listed) to provide a Request for Proposal (RFP) for the project. The timeline for responses to the RFP will be provided to each of the short listed

firms/teams. The short listed firms will be provided all project information and provided the schedule for submission of the RFP. The RFP will provide specific submission requirements and evaluation procedures in accordance with the Design-Build Procurement Act and Legislative Rule 148-CSR11.

SELECTION TEAM RATING SHEET
Invitation for Qualifications
Design Build Services

(Project Name)

Company _____ Proposal Letter _____ Y _____ N

Team Members _____ Date _____

Evaluation Criteria	Criteria Value Potential	Score	Remarks
Project Understanding	10	_____	_____
Project Team	10	_____	_____
Architect Project Experience	5	_____	_____
Contractor Project Exp.	5	_____	_____
SBA Experience	10	_____	_____
Proximity/Availability	5	_____	_____
Project Approach	10	_____	_____
Project Schedule	15	_____	_____
Cost Control/VE	10	_____	_____
Local Participation Jobs Act/Local Contractors	5	_____	_____
Financial Strength Bonding	5	_____	_____
Litigation	5	_____	_____
Client References	5	_____	_____
GRAND TOTAL	100%	_____ % (must score minimum of 70 pts to be considered)	

Comments: _____

Signature _____ Date _____

SBA 172
DESIGN BUILD – EDUCATIONAL
FACILITIES PLANNER

**REQUIREMENT FOR THE
SUBMISSION AND EVALUATION
OF
EDUCATIONAL FACILITIES PLANNING SERVICES
TO THE**

_____ **COUNTY BOARD OF EDUCATION**

INVITATION FOR QUALIFICATIONS

**Educational Facilities Planner
For**

_____ **(Project)**

_____ **(Date)**

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Section	Title
1	Invitation for Qualifications
2	Project Description
3	Instructions to Submitting Individuals/Firms
4	Qualification Process
5	Selection Process

SECTION 1 – INVITATION FOR QUALIFICATIONS (IFQ)

Pursuant to Section 5G,1-4 of West Virginia Code, the _____ County Board of Education intends to contract with a Recognized Educational Facilities Professional (REFP) to provide professional services for:

Selection of the REFP shall conform to West Virginia Code 5G, 1-4 regarding the selection and fee negotiation process.

The successful REFP will be expected to enter into a single point of responsibility agreement with _____ County Board of Education to provide professional school planning services for the preparation of educational specifications for the referenced project.

Individuals/firms interested in providing educational planning services to _____ County are hereby notified that a Proposal for providing the requested services in response to this IFQ will be accepted until _____ p.m. (day and date). (Proposals received after this deadline will be disqualified). Proposals may be mailed or hand delivered to the following location:

_____ County Board of Education

The proposal is limited to 20 pages (excluding the required SBA forms) and shall be presented in a binder format, tabbed according to the Evaluation Criteria. Proposals shall be clearly identified in a sealed package and include all technical submission requirements. Proposals will not be opened until the expiration time established for submitted proposals has expired. One (1) original and ten (10) copies of the proposals shall be submitted and must be clearly labeled with the project name and the name of the submitting individual/firm affixed.

The format of the proposal shall be in strict conformance with the stipulated criteria in the Instructions to Submitting Individual/Firms (Section 3).

SECTION 2 – PROJECT DESCRIPTION

A. Scope of Work

In general, the work consists of the following: (insert project description)

B. Owners Anticipated Advertisement and Award

Advertisement/IFQ

Proposals Due

Notification of Short List Individual/Firms

Presentations by Short listed Individual/Firms

Recommendation of Selected Individual/Firms

Deadline for Contract Negotiations

Board Approval of Selected Individual/Firms

Executed Contract and Notice to Proceed

SECTION 3 – INSTRUCTIONS TO SUBMITTING INDIVIDUALS/FIRMS

A. General

The selection process for the REFP will be conducted as follows:

- Stage 1: The proposals received in response to this IFQ will be evaluated and ranked by a Selection Team in accordance with the process and evaluation criteria contained in Section 4. The proposal must be written and submitted with tabbed sections in the order of the evaluation criteria. The Selection Team will select (short list) no fewer than three (3)

individuals/firms to give a presentation at a later date to the Selection Team.

Stage 2: The short listed individuals/firms will meet with the Selection Team and the team will evaluate and rank each individual/firm based on the proposal information and the presentations in accordance with the process and evaluation criteria contained in Section 5.

Stage 3: The Selection Team will select the individual/firm they feel is most qualified to perform the services and will negotiate the fee for the completion of the educational specification for the project.

B. Questions

Questions regarding the completion and submission of the Proposal should be directed to _____ County will respond to all questions received regarding the general requirements of the educational planning process to be used for the project prior to the presentation date.

C. Expenses Incurred in Preparing Responses

_____ County accepts no responsibility for any expenses incurred by those individuals/firms offering their services to the county in the preparation of a response to this IFQ. All expenses incurred in the preparation of the response to the IFQ and the cost for the interview process shall be borne by the offering individual/firm exclusively.

D. Educational Facility Professional Qualifications

Individuals/Firms submitting a response to this IFQ must possess the Recognized Educational Facilities Professional certification provided by the Council of Educational Facilities Planners International. A copy of the certification must be provided in the response to the IFQ.

SECTION 4 – QUALIFICATION PROCESS

Selection Team

The Proposals received in response to this IFQ will be initially evaluated based on the qualifications of the individual/firm and the Selection Team will select (short list) individuals/firms that will be requested to give a presentation at a later date to the Selection Team. The information provided in the Proposal along with the oral presentation will provide the Selection Team a basis for determining the most qualified individual/firm. The members of the Selection Team are:

Name

Affiliation and Title

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Evaluation Criteria

The following Criteria are intended to provide the Selection Team with information regarding the qualifications of each educational planner. Proposals shall address each of the Criteria in the same order listed below.

A. Proposal Letter

Educational planners must provide an original letter stating their intent to provide planning services and identifying their willingness to proceed should they be selected to perform the planning services. The letter must be signed by an officer of the proposing firm or the prime team member.

B. Project Understanding

Planners must clearly demonstrate their understanding of the scope of the project and present a concise outline of specific services they are prepared to provide for the project. The proposal must also identify and discuss any of the services, or method of approach to the services, which are believed to be either “unique” or “outstanding,” or which may be recognized as giving a competitive edge or advantage.

C. Educational Planner and Personnel Resumes

Provide information describing the educational planner’s experience and qualifications. Indicate key personnel and their relationship to this project. Provide resumes of key personnel, their disciplines, respective roles, education, certifications, licenses and their experience in educational facilities planning.

D. Educational Planners Experience and Knowledge

Submit the educational planner’s experience regarding educational specifications and knowledge of the SBA requirements and West Virginia State Board of Education Policy 6200 Guidelines. Identify the lead personnel anticipated on this project and their respective responsibilities proposed for this project. Comment on the commitment to involve the lead personnel assigned to the project through all phases of the project.

E. Project Approach

Comment on your approach toward the formulation of the educational specification. Describe the process and communication procedures that will be employed throughout the development of the educational specification. Describe procedures, frequency and methods for obtaining educational input from _____ County and a plan to establish and maintain clear lines of communication with the _____ County and the school staff.

F. References

Please provide three (3) letters of references from individuals who have worked with you professionally or can provide professional character references.

G. Completion Schedule

Describe the general schedule and timeline anticipated for the completion of the educational specification.

SECTION 5 – SELECTION PROCESS

Proposal Evaluation

Based on the proposals received and the oral presentations, the Selection Team will use the process described in West Virginia Code 5G-1-4 to evaluate and select the educational facilities planner. The short listed individuals/firms will be notified on the date shown in Section 2 of this IFQ and will be given the opportunity to interview with the selection committee and present project information. The Selection Committee will evaluate and rate each individual/firm and based on the final team score begin negotiations with the highest rated individual/firm.

Oral Presentations

The short listed Educational Planner will make oral presentations to the Selection Team to review their proposal. The oral presentation will be limited to ____ minutes. The format of the presentation should be structured to clearly address the Evaluation Criteria contained in Section 4 of the IFQ. Presentation boards and handouts are acceptable. A projection screen will be made available for use if prior notice is given to the Selection Team. The Selection Team will have ____ minutes for questions.

Final Selection

The Selection Team will evaluate and rate the proposals and oral presentations on the Selection Team Rating Sheet contained in these instructions. The Selection Team will recommend to the local board that an agreement for educational specification services be awarded to the Educational Planner with the highest total points (the sum of scores given to each REFP by all voting members of the Selection Team) at the fee schedule negotiated. All short listed Educational Planners will be rated and ranked in order of their score on the Selection Team Rating Sheet and the team will reach a consensus as to which individual/firm is the most qualified. The team or a representative member of the team will then negotiate the fee for the educational planning services. Should the fee negotiations reach an impasse and the fee agreement not be reached, negotiations will continue with the next highest rated Educational Planner until an agreement is reached. The Selection Team will not return to the previous team once the impasse is reached on the fee and the next individual/firm is contacted for fee negotiations commence.

ADVERTISEMENT FOR

INVITATION FOR EDUCATIONAL FACILITIES PLANNING SERVICES

For

Project Name

Date

The _____ County Board of Education is soliciting a proposal to perform educational facilities planning including building programming from qualified educational facilities planners. The individual/firm must possess certification from the Council of Educational Facilities Planners International and must have the Recognized Educational Facilities Professional Certification (REFP) to be considered. The individual/firm must be knowledgeable of School Building Authority requirements regarding educational specifications and also State Board Policy 6200, Handbook on Planning School Facilities requirements.

Specific project information can be obtained from _____ at _____ regarding the project requirements. The requirements of West Virginia Code 5G, Article 1-4 will be used as the basis for review and evaluation of all proposals. All proposals must be submitted to the _____ County Board Office at _____, West Virginia, no later than _____ p.m. local prevailing time on _____, _____. Proposals must be clearly marked IFQ for Educational Facilities Planner for _____ (project name). All proposals must include the experience and qualifications of the Educational Facilities Planner and must address the criteria for proposal evaluation. The individual/firm will be selected on the basis of qualifications and the cost to perform the services will be negotiated based on the most qualified firm. To request further information regarding the specifics of the proposal contact _____ at _____. Questions should be directed to _____ at (304) _____.

SELECTION TEAM RATING SHEET

Educational Facilities Planner

(Project Name)

Individual/Firm _____

Proposal Letter _____ Y _____ N Date _____

Evaluation Criteria	Criteria Value Potential	Score	Remarks
Project Understanding	10	_____	_____
Educational Planner & Personnel Resume	15	_____	_____
Educational Planners Experience & Knowledge Regarding:			
SBA Requirements	20	_____	_____
State Board Policy 6200	20	_____	_____
Project Approach	15	_____	_____
References	10	_____	_____
Completion Schedule	10	_____	_____
GRAND TOTAL	100	_____ (must score minimum of 70 pts to be considered)	

Comments: _____

Signature _____ **Date** _____

**SBA 173
DESIGN BUILD
PERFORMANCE CRITERIA DEVELOPER**

ADVERTISEMENT FOR

Performance Criteria Developer

The _____ County Board of Education is soliciting proposals from qualified Performance Criteria Developers to work in cooperation with _____ to develop Design-Build performance criteria for _____. The firm/individual must be a registered architect or engineer licensed under the laws of West Virginia and licensed to do business in West Virginia. The firm/individual must have experience in the Design-Build project delivery method, the preparation of educational facilities performance criteria and must be capable of preparing building performance specifications, pre-schematic building footprints based on the educational specifications for the school and must have experience in site evaluation and design. The Performance Criteria Developer will assist the county board and the school planning team with the development of detailed building component specifications, site evaluation and preliminary building citing based on the chosen site and preparation of schematic diagrams of the school based on the county's educational specifications. Additional services will be provided to the county for assisting in the evaluation of the Design-Build proposals and assisting the county board during the design development review, construction document review and construction phase of the project. The services provided will be based on a negotiated fee for actual time and services rendered beyond the basic services provided through pre-schematic building footprint.

Invitations for Qualifications (IFQ) will be provided upon request to qualified individuals/firms. Responses to IFQs must be returned to _____ County Board Office to the attention of _____ by _____ local prevailing time (LPT). Proposals received after this deadline will not be accepted, nor opened and will be returned. Questions concerning the specifics of this project should be directed to _____ at (304) _____.

DRAFT

INVITATION FOR QUALIFICATIONS (IFQ)

_____. 20__

Performance Criteria Developer For

A proposal in response to this IFQ must be submitted to the _____ **no later than** _____ local prevailing time (LPT) on _____, 20__. It must be plainly marked:

Proposal for IFQ Performance Criteria Developer for

The _____ County Board of Education is soliciting proposals from qualified Performance Criteria Developers to work in cooperation with _____ to develop Design-Build performance criteria for _____. The firm/individual must be a registered architect (*or engineer*) licensed under the laws of West Virginia and licensed to do business in West Virginia. The firm/individual must have experience in the preparation of educational facilities performance criteria and must be capable of preparing building performance specifications, pre-schematic building footprints based on the educational facilities specifications for the school and must have experience in site evaluation and design. The Performance Criteria Developer will assist the county board and the school planning team with the development of detailed building component specifications, site evaluation and preliminary building citing based on the chosen site and preparation of schematic diagrams of the school based on the county's educational specifications. Additional services will be provided to the county for assisting in the evaluation of the Design-Build proposals and assisting the county board during the design development review, construction document review and construction phase of the project. The services provided will be based on a negotiated fee for actual time and services rendered beyond the basic services provided through pre-schematic building footprint.

Submitted proposals must address the evaluation criteria and must be organized in the same order as the IFQ. Copies of the IFQ and other projects received after the stipulated time and date will not be accepted, nor opened, and will be returned. Specific information can be obtained by contacting _____ at _____. Questions concerning the specifics of the project(s) should be directed to _____ at (304) _____.

**REQUIREMENT FOR THE
SUBMISSION AND EVALUATION
OF
PERFORMANCE CRITERIA DEVELOPER
SERVICES
TO THE**

_____ **COUNTY BOARD OF EDUCATION**

INVITATION FOR QUALIFICATIONS

PERFORMANCE CRITERIA DEVELOPER

For

_____ **(Project)**

_____ **(Date)**

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SECTION 1 – INVITATION FOR QUALIFICATIONS (IFQ)

Pursuant to Section 5G,1-4 of West Virginia Code, the _____ County Board of Education intends to contract with a registered architect (*or engineer*) to act as the Performance Criteria Developer (PCD) for a Design-Build project that will

Selection of the PCD shall conform to West Virginia Code 5G, 1-4 regarding the selection and fee negotiation process.

The successful PCD will be expected to enter into a single point of responsibility agreement with _____ County Board of Education to provide professional services for the preparation of performance criteria, pre-construction review of Design-Build and construction services as required by the Design-Build Procurement Act (Title 148, Series II) for the referenced project.

Individuals/firms interested in providing this service to _____ County are hereby notified that proposals for providing the requested services in response to this IFQ will be accepted until _____ p.m. (day and date) local prevailing time (LPT). (Proposals received after this deadline will be disqualified). Proposals may be mailed or hand delivered to the following location:

_____ County Board of Education

The proposal is limited to 20 pages and shall be presented in a binder format, tabbed according to the Evaluation Criteria. Proposals shall be clearly identified in a sealed package and include all technical submission requirements. Proposals will not be opened until expiration time established for submitted proposals has expired. One (1) original and ten (10) copies of the proposals shall be submitted and must be clearly labeled with the project name and the name of the submitting individual/firm affixed.

The format of the proposal shall be in strict conformance with the stipulated criteria in the Instructions to Submitting Individual/Firms (Section 3).

SECTION 2 – PROJECT DESCRIPTION

A. Scope of Work

In general, the work consists of the following: (insert project description)

B. Owners Anticipated Advertisement and Award

Advertisement/IFQ

Proposals Due

Notification of Short List Individual/Firms

Presentations by Short listed Individual/Firms

Recommendation of Selected Individual/Firms

Deadline for Contract Negotiations

Board Approval of Selected Individual/Firms

Executed Contract and Notice to Proceed

SECTION 3 – INSTRUCTIONS TO SUBMITTING INDIVIDUALS/FIRMS

A. General

The selection process for the PCD will be conducted as follows:

- Stage 1: The proposals received in response to this IFQ will be evaluated and ranked by a Selection Team in accordance with the process and evaluation criteria contained in Section 4. The proposal must be written and submitted with tabbed sections in the order of the evaluation criteria. The Selection Team will select (short list) no fewer than three (3)

individuals/firms to give a presentation at a later date to the Selection Team.

Stage 2: The short listed individuals/firms will meet with the Selection Team present their qualifications and address questions from the Selection Team about their proposal. The team will evaluate and rank each individual/firm based on the proposal information and the presentations in accordance with the process and evaluation criteria contained in Section 5.

Stage 3: The Selection Team will select the individual/firm they feel is most qualified to perform the services and will negotiate the fee for the completion of the performance criteria for the project.

B. Questions

Questions regarding the completion and submission of the proposal should be directed to _____. _____ County will respond to all questions received regarding the general requirements of the performance criteria development to be used for the project prior to the presentation date.

C. Expenses Incurred in Preparing Responses

_____ County accepts no responsibility for any expenses incurred by those individuals/firms offering their services to the county in the preparation of a response to this IFQ. All expenses incurred in the preparation of the response to the IFQ and the cost for the interview process shall be borne by the offering individual/firm exclusively.

D. Performance Criteria Developer

Individuals/Firms submitting a response to this IFQ must be a registered architect or registered engineer (where applicable) in the State of West Virginia. Experience in school design and experience with SBA policies and procedures and knowledge of West Virginia State Board of Education Policy 6200, Handbook on Planning School Facilities is required.

SECTION 4 – QUALIFICATION PROCESS

Selection Team

The proposals received in response to this IFQ will be evaluated by the Selection Team. The Selection Team will select (short list) no fewer than three (3) individuals/firms to give a presentation at a later date to the Selection Team. The proposals and information interview process will be used to select and rank in order of qualifications of the most qualified individual or firm. Once completed, the county will negotiate the fee for providing services in accordance with WV Code 5G _____. The members of the Selection Team are:

Name	Affiliation and Title
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

The following Criteria are intended to provide the Selection Team with information regarding the qualifications of each Performance Criteria Developer (PCD). Proposals shall address each of the Criteria in the same order listed below.

A. Proposal Letter

PCD must provide an original letter stating their intent to provide professional services and identifying their willingness to proceed should they be selected to perform the planning services. The letter must be signed by an officer of the proposing firm.

B. Project Understanding

PCD must clearly demonstrate their understanding of the scope of the project and present a concise outline of specific services they are prepared to provide for the project. The proposal must also identify and discuss any of the services, or method of approach to the services, which are believed to be either “unique” or “outstanding,” or which may be recognized as giving a competitive edge or advantage.

C. Performance Criteria Developer and Consultant Personnel Resumes

Provide information describing the PCD’s experience and qualifications. Indicate key personnel and their relationship to this project. Provide resumes of all consultants, key personnel, their disciplines, respective roles, education, certifications, licenses and their experience in educational facilities design.

D. Performance Criteria Developer’s Experience and Knowledge

Submit the PCD experience regarding the preparation of performance specification writing and knowledge of the SBA requirements and West Virginia State Board of Education Policy 6200 Guidelines. Identify the lead personnel anticipated on this project and their respective responsibilities proposed for this project. Comment on the commitment to involve the lead personnel assigned to the project through all phases of the project.

E. Project Approach

Comment on your approach toward the formulation of the performance specifications. Describe the process and communication procedures that will be employed throughout the development of the performance criteria and during the final design review and construction phases of the project. Describe procedures, frequency and methods for obtaining project input from the County representative and a plan to establish and maintain clear lines of communication with the designated representative.

F. References

Please provide three (3) letters of references from individuals who have worked with you professionally and can provide first-hand knowledge of your previous work experience.

G. Completion Schedule

Describe the general schedule and timeline anticipated for the completion of the project performance criteria.

SECTION 5 – SELECTION PROCESS

Proposal Evaluation

Based on the proposals received, the Selection Team will use the process described in West Virginia Code 5G-1-4 to evaluate and select the Performance Criteria Developer. The Selection Team will select (short list) no fewer than three (3) individuals/firms to provide oral presentations. The short listed individuals/firms will be notified on the date shown in Section 2 of this IFQ and will be given the opportunity to interview with the Selection Team and present project information. The Selection Team will evaluate and score the qualifications of each individual/firm being interviewed using the Selection Team Rating system established for this project.

Oral Presentations

The short listed PCD will make an oral presentation to the Selection Team to further explain their proposal. The short listed PCD will be given ____ minutes for an oral presentation. The format of the presentation should be structured to clearly address the Evaluation Criteria contained in Section 4 of the IFQ. Presentation boards and handouts are acceptable. A projection screen will be available for use by the short listed PCD if prior notice is given. The Selection Team will have ____ minutes for questions.

Final Selection

The Selection Team will recommend to the _____ School Board that an agreement for professional services to prepare performance criteria specifications and additional services described in Section 2a – Scope of work be awarded to the PCD with the highest total points (the sum of scores given to each PCD by all voting members of the Selection Team) at the fee schedule negotiated. The Selection Team will rate and rank the short listed PCDs in order of their score based on the proposal information and interview process and the team will reach a consensus as to which individual/firm is the most qualified. The team or a representative member of the team will then negotiate the fee for the performance criteria development services. Should the fee negotiations reach an impasse and the fee agreement not be reached, negotiations will continue with the next highest rated PCD until an agreement is reached. The Selection Team will not return to the previous team once the impasse is reached on the fee and the next individual/firm is contacted for fee negotiations commence.

SELECTION TEAM RATING SHEET

Performance Criteria Developer

(Project Name)

Company/Individual _____

Proposal Letter ____Y ____N Date _____

Evaluation Criteria	Criteria Value Potential	Score	Remarks
Project Understanding	5	_____	_____
Similar Project Experience	15	_____	_____
Familiarity with Design-Build	20	_____	_____
Performance Criteria Developer	20	_____	_____
Familiarity with State Bd Policy 6200	10	_____	_____
Familiarity with SBA Requirements	10	_____	_____
Schedule	10	_____	_____
References	10	_____	_____
GRAND TOTAL	100	_____ (must score minimum of 70 pts to be considered)	

Comments: _____

Signature _____ Date _____

SBA 174
ANTI-BULLYING AUDIT

School Building Authority of West Virginia
ANTI-BULLYING AUDIT

County: _____ Date _____

Indicate the extent to which each of the following is in place.

	Not at all	Partial	Effective
1. The county has an implementation plan for State Board Policy 4373.			
2. The county's disciplinary policies address all forms of Student Code of Conduct violations.			
3. The county has an education program about Policy 4373 for each grade level.			
4. The county has an education/professional development program about Policy 4373 for faculty and staff.			
5. The county has established procedures "to assure that any person who believes s/he has been the victim of bullying has an identified mechanism to report the alleged acts immediately to an appropriate official."			
6. The county submits the required disciplinary data into the WVEIS.			
7. The county has disseminated Policy 4373 to all students, faculty, staff, and parents.			

SBA 175
ARCHITECTURAL/ENGINEERING
FEE SCHEDULE

School Building Authority of West Virginia
ARCHITECTURAL/ENGINEER FEE SCHEDULE

CONSTRUCTION COST (NEW)	Max Fee (%)	Additional Fee (%) for Multiple Prime Contracts
\$ 3,000,000 and under \$ 4,000,000	7.00	1.0
\$ 4,000,000 and under \$ 5,000,000	6.50	.80
\$ 5,000,000 and under \$12,000,000	6.00	.70
\$12,000,000 and under \$16,000,000	5.75	.60
\$16,000,000 and under \$20,000,000	5.50	.50
\$20,000,000 and under \$25,000,000	5.25	.40
Over \$25,000,000 negotiate		

NOTE:

1. Fees for projects with construction costs less than \$3 million or greater than \$25 million will be negotiated based on complexity of the project.
2. Projects with construction costs greater than \$30 million will be considered for construction management.
3. If multiple prime contracting is required by the SBA, A&E fees will be adjusted for additional bidding and construction administration services. The additional fee adjustment will be project specific and must be approved by the SBA before executing the contract for A & E services.
4. Additional fees will not be paid by the SBA for bidding site preparation packages separate from construction packages.

CONSTRUCTION COST (Addition/Renovation)	MAX FEE (%)
\$3,000,000 and under \$4,000,000	8.00
Over \$4,000,000 and under \$10,000,000	7.75
Over \$10,000,000 and under \$16,000,000	7.50
Over \$16,000,000 and under \$20,000,000	7.25
Over \$20,000,000 negotiate	

NOTE:

1. Fee schedule is based on 50% of construction cost involving renovations. Projects where renovation costs are less 50% and/or demolitions greater than 50% of the total project cost will be negotiated based on the complexity of the project. However, the fee shall not exceed the maximum fee for the addition/renovation construction cost identified.
2. Fees for projects with construction costs less than \$3 million will be negotiated based on the scope of work.

Adopted June 2007 Revised 4/2014
acfeeschedule (SBA 175)

SBA 176

**A: SBA PROJECT SUBMISSION FORM:
PLANNING PHASE**

**B: SBA PROJECT SUBMISSION FORM:
SCHEMATIC DESIGN PHASE**

**C: SBA PROJECT SUBMISSION FORM: DESIGN
DEVELOPMENT PHASE**

**D: SBA PROJECT SUBMISSION FORM:
BIDDING DOCUMENT SUBMISSION**

**E: FEDERAL AMERICAN RECOVERY AND
REINVESTMENT ACT CHECKLIST**

SBA Project Submission Form PLANNING PHASE

SBA County/Architect

- ☐ ☐ Request For A/E Expression of Interest in Qualification Newspaper Advertisement
- ☐ ☐ List of Responding Architectural/Engineering Firms
- ☐ ☐ Short List of Architects to be formally interviewed
- ☐ ☐ Draft copy of the AIA B101 Agreement between the Owner and Architect
- ☐ ☐ Copy of the Project Development Schedule from Grant Contract (Exhibit A-2)
- ☐ ☐ Preliminary list of Green School components (when applicable)

Site Feasibility Study

Written assurances that the following site feasibility information has begun, shall be provided with the Planning Phase submission. The final site feasibility study along with the recommendation for the preferred site shall be completed and approved prior to the Schematic Design submission.

- ☐ ☐ A study shall be completed on site feasibility. The 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.
- ☐ ☐ A complete site feasibility study must be prepared by the project architect/engineer before proceeding with the purchase of the proposed site for construction. Consideration must be given to all factors identified in State Board Policy 6200, Chapter 2. The site evaluation study must include but is not limited to:
 - ☐ ☐ Geotechnical Evaluation
 - ☐ ☐ Boundary and Topographic Data
 - ☐ ☐ Geological Evaluation (where applicable)
 - ☐ ☐ WVDEP and US Army Corps of Engineers Evaluation and archaeological evaluation (where applicable)

SBA County/Architect

- ☐ ☐ Archaeological Survey - West Virginia State Historical Preservation Office Review (where applicable)
- ☐ ☐ Department of Highways Evaluation (where applicable)
- ☐ ☐ Other Agencies Reviews (Identify)

Educational Programming Information

- ☐ ☐ Conrad Formula Space Calculation Worksheet
(M.S. & H.S. only) See SBA Policy & Procedure Handbook (Section I)
- ☐ ☐ Summary of Spaces Worksheet #1 (SBA 142)
- ☐ ☐ Subject Area Space Allocation Worksheet #2 (SBA 141)
- ☐ ☐ Building Program Utilization Worksheet #3 (SBA 156)
- ☐ ☐ Preliminary Program of Spaces
- ☐ ☐ Preliminary Estimate of Probable Square Footage Construction Cost
(square footage cost analysis).

Submitted By

Date

SBA Approval By

Date

SBA Form 176a

SBA Project Submission Form SCHEMATIC DESIGN PHASE

The Schematic Design Documents shall consist of drawings and other documents including a site plan, if appropriate, and preliminary building plans, and elevations; and may include some combination of study models, perspective sketches, or digital modeling. Preliminary selections of major building systems and construction materials shall be noted on the drawings or described in writing.

SBA County/Architect

☐	☐	Cover Sheet
	☐	☐ List of all drawings included within this submission
	☐	☐ List of abbreviations and project specific typical notes
	☐	☐ Map of general project location with north arrow
	☐	☐ Breakdown of building square footage by floor
☐	☐	Final Program of Spaces
		This document shall include revised Conrad Formula Space Calculation (MS, HS), SBA 142, SBA 141 and SBA 156 if program changes occur from the planning phase to the schematic design phase.
☐	☐	Preliminary Educational Specification refer to SBA Policy and Procedures Manual, Attachment I
☐	☐	Written assurance from the design professional that the building square footage depicted on the drawings is consistent with that shown in the program of spaces. If there is a discrepancy between these documents, an explanation of the discrepancy shall be provided.
☐	☐	Schematic Design Drawings, including room square footage (If original drawings are larger than 24"x36"; half size drawings must be submitted)
	☐	☐ Site Plan with Boundary and Topographic Survey Data, Preliminary Grading Plan, Utility Plan showing anticipated proposed tie-in locations, Floor Plan showing room descriptions and square footages of each space, plumbing fixtures and major fixed equipment and exterior elevation drawings sufficient to describe the general layout and character of the building design. Major construction materials and building square footage per floor shall be indicated on the drawings.
	☐	☐ Designers shall provide a list of optional mechanical systems being considered for the project.

1 OF 2 (Schematic Phase)

SBA County/Architect

- ☐ ☐ Architect's preliminary estimate of probable square footage construction cost. If a deficit exists in the cost estimate; the grant recipient must include written assurances of how they intend to solidify the deficit, by either reducing the scope of work or committing additional local funding.
- ☐ ☐ List of Green School components being considered on the project (where applicable). A separate LEED for schools matrix may be attached.
- ☐ ☐ Provide the construction analyst or construction manager an electronic copy of the Schematic Design Submission document.

Submitted By

Date

SBA Approval By

Date

SBA Form 176b
Revised 4/2014

SBA Project Submission Form DESIGN DEVELOPMENT PHASE

The Design Development Documents shall illustrate and describe the development of the approved Schematic Design Documents and it shall consist of documents including plans, sections, elevations, typical construction details, and diagrammatic layouts of building systems to fix and describe the size and character of the project as to the architectural, structural, mechanical and electrical systems, and such other information as may be appropriate. The Design Development Documents shall also include outline specifications that identify major materials and systems and establish in general their quality levels.

SBA County/Architect

- ☐ ☐ Please check this box if all previous review comments have been addressed.
- ☐ ☐ Revised Educational Specification if changes are required from the Schematic Phase submission.
- ☐ ☐ Written assurance from the design professional that the building square footage depicted on the drawings is consistent with that shown in the program of spaces. If there is a discrepancy between these documents, an explanation of the discrepancy shall be provided.
- ☐ ☐ A narrative of the school's proposed technology plan that describes how the technology is to be integrated into the daily lesson plan by the instructors. How the technology will be utilized and where major technology components will be located. Please refer to the SBA Quality and Performance Standards Section for further assistance.
- ☐ ☐ Provide verification that the available utility services are adequate to support the proposed building requirements.
- ☐ ☐ Outline specification that identifies the major materials and systems and establishes in general their quality levels. This document should include but is not limited to a detailed overview of all major building components and systems per division of work specific to the project. Please refer to the current SBA Quality and Performance Standards in order to establish minimum requirements. Include request for deviations from the SBA Standards with the submission information.
- ☐ ☐ Provide the project construction analyst or construction manager, an electronic copy of the Design Development document.

1 OF 6 (Design Phase)

SBA County/Architect

- ☐ ☐ The designers shall submit a written narrative confirming the design intent from the schematic phase, which will provide the logic and background for the mechanical system chosen. The design intent shall take into consideration the county maintenance personnel's ability to operate and maintain specific HVAC systems including the building automation system (BAS). If this system has changed from the list of systems described in the schematic design phase, please provide reasoning for this change.
- ☐ ☐ Provide life cycle cost analysis (if required by of the SBA Quality and Performance Manual)
- ☐ ☐ Final List of Green School components (where applicable). A separate LEED for Schools Matrix may be attached.

The Design Development drawings shall include but are not limited to the following:

- ☐ ☐ **Cover Sheet:**
 - ☐ ☐ List of all drawings included with the submission
 - ☐ ☐ List of abbreviations and project specific typical notes
 - ☐ ☐ Map of general project location with north arrow
 - ☐ ☐ Breakdown of building square footage by floor
- ☐ ☐ **Site Design drawings shall include:**
 - ☐ ☐ Key Plan
 - ☐ ☐ Property lines
 - ☐ ☐ Buildings (existing and proposed)
 - ☐ ☐ Parking and paving including exterior steps and handicapped ramps, indicate locations of asphalt and concrete pavements, including curbs and sidewalks
 - ☐ ☐ Fencing
 - ☐ ☐ Storm Water Management
 - ☐ ☐ Spot Grades at all entrances and new building corners
 - ☐ ☐ Grades at drives and parking
 - ☐ ☐ Locations of power, water, communications, sewer and/or other necessary utilities

SBA County/Architect

- ☐ ☐ **Structural Drawings with key plan shall include:**
- ☐ ☐ Key plan
 - ☐ ☐ Overall dimensions around the building
 - ☐ ☐ Diagrammatic layout of floor and roof framing plans showing major structural components including sizes/weights
 - ☐ ☐ Descriptions of all floor deck and concrete systems
 - ☐ ☐ Proposed locations of retaining walls or non-standard foundation or framing systems (if any)
 - ☐ ☐ Location of columns and bearing walls with dimensions needed to locate them
 - ☐ ☐ Bearing height of structural elements
 - ☐ ☐ Finish floor elevations
 - ☐ ☐ Designers shall include a narrative describing structural systems for all footings, foundations, floors and roof areas including proposed bottom of footing elevations.
- ☐ ☐ **Architectural Drawings shall include:**
- ☐ ☐ Key plan
 - ☐ ☐ Show all columns, exterior walls, interior partitions doors, door swing, windows, stairs, handrail, guard rails, elevators, interior frames and openings, casework counter tops and built in items in plan.
 - ☐ ☐ Seating capacities of gymnasiums and auditoriums.
 - ☐ ☐ Room names and numbers.
 - ☐ ☐ Door numbers
 - ☐ ☐ Overall building dimensions around the building
 - ☐ ☐ Column line dimensions tied to exterior wall dimensions.
 - ☐ ☐ A minimum of two continuous string of dimensions (longitudinally and laterally) through the building that equals the overall dimensions shown including the exterior wall thickness.
 - ☐ ☐ Dimensions at stairs and ramps
 - ☐ ☐ Building section marks
 - ☐ ☐ Building elevation marks
 - ☐ ☐ Location of roof drains, gutters and downspouts.

SBA County/Architect

☐	☐	Parapets, ridge lines, valleys, and hips with arrows to indicate the direction of slope.
☐	☐	Roof plan (showing preliminary roof/overflow drain locations)
☐	☐	Roof access, hatches, doors etc.
☐	☐	Include a preliminary finish schedule of all floor, wall and ceiling finishes.
-
☐	☐	Building Elevation Drawings:
☐	☐	Show outline of building walls and roofs
☐	☐	Finish grade line
☐	☐	Windows and doors
☐	☐	Vertical dimensions with finish floor & roof bearing heights.
☐	☐	Roof pitch
☐	☐	Note materials and indicate extents.
☐	☐	Show building section marks.
-
☐	☐	Building and Wall Section Drawings:
☐	☐	Show the outline of building items that the section plane cuts through, including roofs, exterior walls, foundations, footings, floors, beams, joist, windows and door openings ceilings, bulkheads, insulation and finish grade lines.
☐	☐	Vertical dimensions with finish floor heights and roof bearing heights.
☐	☐	Note direction and percentage and/or pitch of roof slopes.
☐	☐	Note all materials
-
☐	☐	Reflected Ceiling Plan:
☐	☐	Key plan
☐	☐	Show grid, bulkheads, changes in elevations, materials, and ceiling mounted signage, HVAC equipment and lighting locations.

SBA County/Architect

- ☐ ☐ **Plumbing Drawings:**
- ☐ ☐ Key plan with legend
 - ☐ ☐ Provide preliminary plumbing fixture schedule and equipment schedules for all plumbing equipment (Makes and model, if available)
 - ☐ ☐ Show Plumbing fixture and equipment locations
 - ☐ ☐ Locate main water line, include sizing
 - ☐ ☐ Locate main sewer and vent lines, include sizing
 - ☐ ☐ Locate roof drain lines, include sizing
 - ☐ ☐ Identify where water, sewer and storm enter and exit the facility.
- ☐ ☐ **Fire Protection Drawings (when applicable):**
- ☐ ☐ Key Plan with legend
 - ☐ ☐ Locate main water line, include sizing. Locate main equipment and risers.
- ☐ ☐ **HVAC Drawings (Provide life cycle cost analysis, where applicable):**
- ☐ ☐ Key plan with legend
 - ☐ ☐ Provide preliminary equipment schedules with sizes and quantities from design basis shown. (Manufacturer make and model, if known)
 - ☐ ☐ Locate all major HVAC equipment
 - ☐ ☐ Single line diagram of ducts and pipes sufficient to show zone locations, including preliminary sizing for all ductwork mains and piping system main lines on plan view.
 - ☐ ☐ Location of roof top equipment, fans, HVAC, etc. Ensure all roof top equipment locations allow for proper clearances in relation to parapet walls, exhaust vents & intake louvers.
- ☐ ☐ **Electrical Drawings:**
- ☐ ☐ Key plan
 - ☐ ☐ Power plan with legend showing locations of main and distribution panel boards and outlets, as well as service entrance and transformer locations.
 - ☐ ☐ Emergency power system (generators, ATS and misc. systems)

5 OF 6 (Design Phase)

SBA County/Architect

- ☐ ☐ Lighting plan with legend showing the location of lighting, include fixture type, controls, dimming systems, exit lighting and emergency egress lighting. Preliminary fixture schedule showing all fixture types from the design basis. (Manufacturer make and model, if known)
- ☐ ☐ Communications plan with legend showing location of fire alarm pull stations, hardwired computer outlets, phone outlets, CCTV locations and TV monitors. (where applicable)
- ☐ ☐ **Power, lighting and communication layouts in classroom areas can be shown in a typical classroom layout. All other remaining areas should be shown as designed:**
- ☐ ☐ Site Utility service connections and details
- ☐ ☐ Technology documents showing cable tray, outlet locations, main technology closets and outlet details.
- ☐ ☐ Technology documents showing video, clock, sound, paging, security, cctv and wireless outlets and outlet details. (where applicable)
- ☐ ☐ **Construction Cost Estimate by Division of Work:**
- ☐ ☐ Architect's cost estimate. Include all proposed off- site utility extension access roads, soft costs and contingency.
- ☐ ☐ If a deficit exists in the detailed cost estimate, a letter from the grant recipient committing additional local funding needed to solidify the deficit, if the additional funds were not previously committed at the Schematic Design Phase.
- ☐ ☐ AIA Forms – Provide original AIA forms with the project name and architect filled in. The use of paper or electronic forms may be used, but if the project is to be distributed electronically, an electronic version must be provided and architect/engineer must obtain the special license from AIA to distribute them electronically.

NOTE: The School Building Authority reserves the right to request an electronic copy of the Design Development drawings.

Submitted By _____

Date _____

SBA Approval By _____

Date _____

SBA Form 176c
Revised 4/2014

6 OF 6 (Design Phase)

SBA Project Submission Form

BIDDING DOCUMENT SUBMISSION

The Bidding Documents shall illustrate and describe the further development of the approved Design Development Documents and shall consist of drawings and specifications setting forth in detail the quality levels of materials and systems and other requirements for the construction of the work.

SBA County/Architect

- ☐ ☐ Please check this box if all previous review comments have been addressed.

- ☐ ☐ The construction documents submitted shall reflect the entire proposed scope of work including all alternate construction bid packages. Any additional scope changes or alternate bid packages added after bidding document approval must be agreed upon by the SBA prior to bidding of the project. If additional scope changes are included without SBA approval, this work and all associated fees shall become the fiscal responsibility of the grant recipient.

- ☐ ☐ The construction specifications shall include bidding and procurement information that describes the place and conditions of bidding, including bidding or proposal forms, the Form of Agreement between the Owner and Contractor and the conditions of the contract for construction (General, Supplemental and Special Conditions).

- ☐ ☐ Include in the specifications, an original unaltered copy of the latest version of the SBA Supplemental Instructions to Bidders, General Conditions and all associated forms referred to in that section

- ☐ ☐ A comprehensive detailed specification that thoroughly describes all building components and systems per division of work and specific to the project. The quality of materials and systems set forth in the specifications should minimally meet or exceed the standards outlined in the SBA Quality and Procedures Standards.

- ☐ ☐ A detailed sequence of operation which will describe the functionality of all HVAC systems and all related components that work in conjunction with one another as an integrated system including the Direct Digital Controls (DDC) system. In the event that a full building automation system (BAS) is incorporated into the facility, this sequence of operation shall accurately detail the operation of all monitored equipment.

1 OF 8 (Bidding Phase)

SBA County/Architect

- ☐ ☐ Provide the project construction analyst or construction manager an electronic copy of the bidding document.

In addition to the Design Development information, the Bidding Documents shall include: Cover Sheet with the following information:

- ☐ ☐ Gross Building Area: by floor, existing (square footage), new (square footage), and total square footage
- ☐ ☐ Gross area per student, design enrollment
- ☐ ☐ List current governing codes and standards as adopted by the state and incorporated into the project design.

Life Safety Plan:

- ☐ ☐ Identify all exits; show actual load and capacity. Verify minimum exits per floor
- ☐ ☐ Show egress paths. Verify within code lengths.
- ☐ ☐ Review for dead-end corridors
- ☐ ☐ Stairs – verify handrail locations and lengths.
- ☐ ☐ Confirm wall ratings for storage, utility rooms, trash rooms, corridors and stairwells.
- ☐ ☐ Handicapped access – (i.e., ramps, disabled areas of refuge)

Site and Civil Drawings:

- ☐ ☐ Boundary and Topographical survey by licensed surveyor
- ☐ ☐ Grading plan; sediment and erosion control plan and details
- ☐ ☐ Address all WVDEP, US Army Corps of Engineers and other regulatory agency concerns and comments
- ☐ ☐ Utility plans and details; locations of existing utilities to be relocated.

Landscaping (when applicable):

- ☐ ☐ Overall plan showing plantings, irrigation and drainage systems, site lighting, signage and features
- ☐ ☐ Details and sections of all site features, special pavements, bollards, etc.
- ☐ ☐ Symbol glossary or legend
- ☐ ☐ Planting and seeding schedules
- ☐ ☐ Planting standard details, modified as required for specific conditions

SBA County/Architect

ARCHITECTURAL:

Plan Sheets:

- ☐ ☐ Key plan cross referenced to the building area shown.
- ☐ ☐ All floor plans with column line grid with all dimensions; show all core areas, floor openings; note all partitions and partition types; show all door and other openings
- ☐ ☐ Label all windows and doors on plan and identify in the corresponding schedules
- ☐ ☐ Building section elevations, wall section and interior elevation marks on plans
- ☐ ☐ Detail references with the detail number/nomenclature
- ☐ ☐ Show all accurately completed schedules.
- ☐ ☐ Show all dimensions both interior and exterior to locate windows, doors and interior wall locations.

Roof Plan:

- ☐ ☐ Roof plan showing all dimensions and noting all materials, openings, keyed details and sections
- ☐ ☐ Note the roof slope and minimum insulation thickness at low points
- ☐ ☐ Details and sections noting all roof perimeter, parapet and internal conditions

Reflected Ceiling Plan:

- ☐ ☐ Indicate all ceiling and bulkhead heights
- ☐ ☐ Coordinate and show location of mechanical and electrical equipment including ceiling diffusers, lighting fixtures and access panels

Elevations, Sections and Exterior Details: (Keyed onto Plans)

- ☐ ☐ Exterior elevations noting all materials, line of proposed footings and foundation walls, keyed sections and vertical dimensions to locate door and window heights, finished floor joist bearing and parapet wall elevations.
- ☐ ☐ Elevations to note all door and window openings, all louvers and other wall systems and locations

SBA County/Architect

- ☐ ☐ Building sections, at least two, in both directions
- ☐ ☐ Exterior wall sections showing all elements and materials in design; note all fixed equipment; show vertical and pertinent horizontal dimensions and floor elevations. Indicate room names and numbers where the cut plane passes through the space.
- ☐ ☐ Sections to show clearly special conditions, typical stairs, instructional spaces and corridors, equipment and fixtures, floor construction, levels and thickness, wall and ceiling construction, typical windows, interior and exterior doors, finish material, roof construction, fire barriers and smoke partitions.

Building Sections, Interior Elevations:

- ☐ ☐ Show as many building sections as necessary to accurately depict all variations in the building construction. A minimum of one transverse and two longitudinal building section per building shall be included. Select areas that show key floor-to-floor relationships. Dimension vertically, show column grid, reference large scale sections and details.
- ☐ ☐ Materials – Note and indicate all finish materials. Show all wall-mounted equipment, including switches, receptacles, diffusers and thermostats at critical areas.
- ☐ ☐ Details (larger scale) showing but not limited to typical exterior wall sections, footings, foundations, floors, windows, cornice and roof, all vertical dimensions, each type and size of door with glazing and paneling, frame and trim, each type of window, together with distances to floor and ceiling, stairs, including risers, treads, handrails, newels and landing lines, instructional display board, bulletin board, trim, built-in equipment, counters, cupboards and drawers, and wardrobes, expansion joints, entry mats, casework, wood trim, shelving, display case mounting, locker base (if not standard), handrails, grab bars, catwalks, pass windows.
- ☐ ☐ Identify necessary back-up blocking for wall-mounted equipment, shown in sections.
- ☐ ☐ Detail bulkheads and other changes in ceiling heights.
- ☐ ☐ Rated shafts/chases. Unless of standard manufacture.

Windows in Plans, Schedule and Detail Coordination:

- ☐ ☐ Window sizes and types. Window mark, material height, width, head height, additional information and remarks. Indicate whether dimension is “rough opening” or actual size. Indicate swing direction of operable units. Show glass type.
- ☐ ☐ Window detail including head, jamb and sill conditions

SBA County/Architect

- ☐ ☐ Consider the following: structural support for large units, blocking for shades, dark shades in classrooms and auditoriums, window operators for high windows, etc. Still, stool, apron, casing, jamb extensions.
- ☐ ☐ Roto operators and window limiters to be shown in window schedules and detail coordination drawings, where applicable.

Door Schedule:

- ☐ ☐ Door Schedule: size, type, opening, location, material, frame, glazing, louvers, transoms, panels, undercuts, fire ratings, special features including thresholds, hardware set reference.
- ☐ ☐ Included in door schedule:
 - ☐ ☐ Code compliant width of exit doors
 - ☐ ☐ Compatibility with hardware types
 - ☐ ☐ Code compliant sizes and types of glass
 - ☐ ☐ Weather-stripping for sound rated doors
 - ☐ ☐ Transoms above doors
 - ☐ ☐ Check door numbers and all items in schedules against door numbers on plans.
 - ☐ ☐ Louvered and/or undercut doors indicated per mechanical
 - ☐ ☐ Proper labeling of fire doors
 - ☐ ☐ Coordinate hardware with electric strikes, operators, monitors, hold-opens, etc.

Finish Schedule with Legend Describing Finish Abbreviations:

- ☐ ☐ Room number, name, ceiling type, ceiling height, wall finish, floor finish, base, wainscot, wall trim and additional information and remarks. Room numbers shall be final numbering system for this school.
- ☐ ☐ Complete entire schedule in addition to basic finish types
- ☐ ☐ Indicate the following: Clear description of location for split finishes (above and below chair rails, etc.), locations of and reference details for borders and patterns, extent (brackets, grilles, etc.) ceramic tile heights. Finish for exposed existing construction. Additional finish requirements shall be indicated in the specifications.
- ☐ ☐ Check the finish schedule for coordination with room names and numbers indicated on plans, interior elevations, and specifications.

SBA County/Architect

- ☐ ☐ Note surfaces where multi-color paints and trims are proposed.

Structural:

- ☐ ☐ Structural comments sheet with all code and design basis information; note all design parameters, etc., abbreviations glossary and legends. Additional information shall be provided in the specifications.
- ☐ ☐ Dimensioned foundation plan with slab on grade noted; with keyed sections and details.
- ☐ ☐ Dimensioned floor and roof plans showing all members with sizes and weights; note all openings; jointing and edge conditions; keyed details and sections.
- ☐ ☐ Detail and section drawings as required to completely detail all foundation and framing conditions.
- ☐ ☐ Building sections and details.
- ☐ ☐ Completed foundation, column, beam and lintel schedules, as appropriate.

Plumbing:

- ☐ ☐ Plumbing plans showing completed systems, including foundation drain lines, storm, acid, and sanitary sewer and vent lines, complete water supply system and location of all plumbing fixtures, including hose cabinets and sewage disposal system. All piping sized including valves, on plan view. Include riser diagrams and details for all systems and complete specifications with acceptable manufactures.
- ☐ ☐ Completed fixture and equipment schedules including makes and models for all systems to adequately show the basis of design.
- ☐ ☐ For areas of concentrated equipment, provide enlarged plans in 1/4"=1' scale for both plan and section views.
- ☐ ☐ Indicate the design intent for fire protection system desired and special equipment (i.e., fire pumps, holding tanks) necessary for the project.

HVAC:

- ☐ ☐ HVAC plans showing completed systems, the size and type of heating and cooling unit. The plans shall also include all connections; pumps; supply and return lines with sizes, valves and slopes; motors; air-handling equipment; fans, including types, locations, sizes and capacity of all ducts, grilles and ventilator.
- ☐ ☐ Floor plans indicating ductwork, piping and mechanical devices all sized.

SBA County/Architect

- ☐ ☐ Testing and balancing requirements
- ☐ ☐ Sound/vibration attenuation measures
- ☐ ☐ Fire dampers, balance dampers, access panels and housekeeping pads sized and located on plan view
- ☐ ☐ Completed equipment schedules including makes, models fan RPM speed, etc., for all systems
- ☐ ☐ For areas of concentrated equipment, provide enlarged plans in 1/4"=1' scale for both plan and section views
- ☐ ☐ All piping sized including valves, items on plan view. Include riser diagrams and details for all systems and complete specifications with acceptable manufactures.
- ☐ ☐ Complete control schematic diagram with terminations which correlate with the sequence of operation in the specification.

Electrical:

- ☐ ☐ Electrical plans using standard symbols to show all connections, inside and outside, location of wall, floor and ceiling outlets or receptacles, location and size of all conduits, capacity of outlets, network drops, location and details of switch panels, circuit breakers and fusing, location and connections for all bells, alarms, clocks, and special outlets, and types and designs of lighting fixtures.
- ☐ ☐ Electrical light fixture schedule with makes and models to adequately show the basis of design.
- ☐ ☐ Lighting control details and risers
- ☐ ☐ One line diagrams showing all panel sizes, conduit requirements and wire sizes
- ☐ ☐ Panel schedules for all new, renovated and existing panels.
- ☐ ☐ Floor plans showing locations of all panels, outlets, light fixtures, receptacles, switches, fire alarm devices and equipment, emergency power systems.
- ☐ ☐ Mechanical equipment connection schedule, complete technical specifications with acceptable manufacturers
- ☐ ☐ For areas of concentrated equipment, provide enlarged plans in 1/4"-1' scale for both plan and section views

SBA County/Architect

- ☐ ☐ Technology documents showing detailed racks systems for T/D, video/TV, clock, sound, paging, security, intercom, cctv and wireless outlets systems. Completed equipment schedules including makes and models for all systems
- ☐ ☐ Riser diagrams for all systems, complete technical specifications with acceptable manufacturers
- ☐ ☐ Incoming service connection details
- ☐ ☐ Completed site utility service connections and details
- ☐ ☐ Power Plan with legend, show locations of main and distribution panel boards and outlets.
- ☐ ☐ Lighting Plan with legend, show location of lighting, controls, exit lighting and emergency egress lighting.
- ☐ ☐ Communications Plan – show location of fire alarm pull stations, hardwired computer outlets, phone outlets, CCTV locations, TV Monitors, electronic building directory, sprinkler system monitor board.
- ☐ ☐ Power, lighting and communication equipment schedules.

Misc. Documentation to be Submitted:

- ☐ ☐ Complete specifications augmenting the information shown on the drawing, giving details on construction materials and methods, mechanical equipment and installations and tests. In general, specify all window shades, restroom accessories and lockers and all other permanent equipment forming an integral part of the building.
- ☐ ☐ Final Technology Plan
- ☐ ☐ Final estimate of probable cost, including total project cost. This requirement will **not** be waived if an SBA Construction Analyst is used.
- ☐ ☐ AIA documents specific to the project shall be part of the bidding document submissions. Draft or sample copies are not acceptable.

NOTE: The School Building Authority reserves the right to request an electronic copy of the Design Development drawings.

Submitted By

Date

SBA Approval By

Date

SBA Form 176d
Revised 4/2014

SBA Project Submission Form

AMERICAN RECOVERY & REINVESTMENT ACT FUNDING

Where Federal American Recovery and Reinvestment Act funding is being used, provide the following:

- ☐ ☐ A notice to proceed letter from WV State Historic Preservation Office (WVSHPO) (where applicable)
- ☐ ☐ Language in specifications that requires all contractors to complete the American Recovery and Reinvestment Act (ARRA) Verification Form as a condition of the bid award prior to the award of the construction contract.
- ☐ ☐ Language in specifications that assures Federal Davis-Bacon Act will be complied with (State Prevailing Wages used where rate is higher than Davis-Bacon).
- ☐ ☐ Language in the specifications that explains "Buy American" requirements.
- ☐ ☐ Insure Requirements of Section 1605 of the ARRA of 2009 is attached in the specifications.
- ☐ ☐ Assurances from the architect/engineer that the materials and equipment specified in the project complies with the "Buy American" provisions of the ARRA.
- ☐ ☐ Bid document language requiring contractors to provide "Bill of Materials" data indicating the Buy American provisions have been complied with within their pay applications.
- ☐ ☐ Standard Federal form 1413, Statement and Acknowledgement for general and all subcontractors. Also list intermediate subcontractors (sub of subcontractors) if they exist under item 14 on this form.

☐ ☐ In order for the SBA to process payments in a timely manner, the grant recipient shall submit the following documentation to the SBA office with each pay requisition. This information shall also be included in the specifications to inform the contractor of the necessary information that shall be supplied with each pay application.

- a. Bill of Materials as described herein
- b. Application for Payment or Invoice
- c. Certified Payroll
- d. SBA Requisition Form with Project Number

Submitted By

Date

SBA Approval By

Date

SBA Form 176e

SBA 177
AFFIDAVIT OF DEBT PAID

School Building Authority of West Virginia
AFFIDAVIT OF DEBT PAID

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

DEFINITIONS:

“Debt” means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers’ compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

“Debtor” means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. “Political subdivision” means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. “Related party” means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers’ compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (**West Virginia Code §61-5-3**), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE

Vendor’s Name: _____

Authorized Signature: _____ Date: _____

State of _____

County of _____ to wit:

Taken, subscribed, and sworn to before me this _____ day of _____, 20____.

My Commission expires _____, 20____.

AFFIX SEAL HERE

NOTARY PUBLIC _____

SBA 178
PROJECT CLOSEOUT PROCEDURES

School Building Authority of West Virginia PROJECT CLOSEOUT PROCEDURES

Below is a list of required documentation that shall be turned over to the owner upon final completion and prior to the release of final payment. Each prime contractor, the architect and the owner shall sign and date this form and forward it to the SBA office prior to the release of the final payment.

Provide at Project Close-out the following documentation, but not limited to:

- Contractor's Affidavit of Payment of Debts and Claims (AIA G706)
- Contractor's Affidavit of Release of Liens (AIA G706A)
- Consent of Surety Company to Final Payment (AIA G707)
- Confirmation of Receiving Operation and Maintenance Manuals and As-Built Drawings and Specifications
- Certificate of Insurance (Acord Form and AIA G715) Covering required/specified products and completed operation
- Certificate of Release from the Department of Tax and Revenue stating all appropriate taxes have been paid
- SBA Certificate of Project Completion – For lump sum projects use “WVDE BP-13-A” and for multiple prime contract projects use “SBA 139.” Both of these forms are found in the SBA Guidelines and Procedures Handbook (Appendix J). These forms should be filled out and signed by the local board of education then forwarded to the contractor and the architect and engineer for signing
- Verification from the Owner (county superintendent) that all Owner training required by the contract documents has been conducted (SBA159)
- Contractor Evaluation Form (SBA 124)
- Architect/Engineer Evaluation form (SBA 135)
- Fire Marshall's Certificate of Occupancy
- SBA Certificate of Occupancy (SBA 146)
- Affidavit of Debt Paid (SBA 177)
- Notification of 11th month walkthrough date
- Electronic & Hard copy of diagrammatic floor plan of new or renovated schools. Provide the following items:
 - One line drawing of floor plans including only diagrammatic walls, exiting, doors and windows, existing school
 - One line drawing with all school access safety data (submit electronic file to Office of Homeland Security)
 - One line drawing including only walls, doors, windows, room number/names and color coded HVAC zones with multi-zone equipment located in the HVAC zone
- Provide a Final TAB report
- Provide Final Commissioning Report when applicable
- Prepare Quality Training Videos

Contractor: _____ Date: _____

Architect: _____ Date: _____

Owner: _____ Date: _____

SBA 179
ANNUAL ENERGY USAGE

School Building Authority of West Virginia
ANNUAL ENERGY USE

Please complete this form and send to SBA and SDE _____

County _____ Date _____

Project _____ Occupied _____
(Year)

Type of School _____ Square Footage _____
(Grade Configuration)

Architect _____ Engineer _____

Does this school currently have an HVAC maintenance contract? Y N
(Circle One)

Briefly describe the equipment covered under the maintenance contract:

Annual cost of maintenance contract \$ _____ (N/A if not applicable)

Briefly describe the HVAC type: _____

Annual fuel usage _____ (MCF) Annual electric usage _____ (KWH)

Annual fuel cost \$ _____

Annual electricity cost \$ _____

Does your building incorporate any energy conservation strategies? Y N
(Circle One)

Describe any current or proposed energy conservation projects for this school:

Information Prepared By _____ Date _____

Superintendent _____ Date _____

WVDE – P-1
APPLICATION FOR PROJECT APPROVAL

**WEST VIRGINIA DEPARTMENT OF EDUCATION
AND
SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA
APPLICATION FOR PROJECT APPROVAL**

West Virginia Department of Education
1900 Kanawha Blvd., E., Bldg. #6, Room B215
Charleston, WV 25305

School Building Authority of WV
2300 Kanawha Blvd., East
Charleston, WV 25311

County _____ Estimated Starting Date _____
School Name _____ Sq. Ft. Affected by this Project _____
Location _____ Grades Housed _____ Enrollment _____
Project Description: _____

Site Acres _____ Useable Acres _____ Gross Building Area New Construction _____
Energy Efficiency (BTU/Sq.Ft/Yr) _____ Sq.Ft. Affected by this Project _____
Water Source _____ Sewage Disposal Type _____

Line Item	Preliminary Estimate	Final Cost	Final Unit Cost (Per Sq. Ft.)
General Requirements (A/E, Legal, etc.)			
Site Acquisition			
Site Work (Geotech, Grading, Paving, etc.)			
Concrete (Ftg/Foundations, Slabs, etc.)			
Masonry			
Metals (Str. Stl., Jt., Deck)			
Carpentry			
Thermal & Moisture Protection			
Doors and Windows			
Finishes (Floors, Walls, Ceilings, Painting)			
Specialties (Chalkbd., Tbd., Locker, Toile Acc.)			
Equipment (Food Service, etc.)			
Furnishings (Seating, Casework, etc.)			
Special Construction			
Conveying Systems (Elevators, etc.)			
Mechanical (HVAC, Plumbing, etc.)			
Electrical			
Others (Describe)			
Grand Total			
Funding			
County Source			
SBA Needs MIP			
Federal Source			
GRAND TOTAL			

Signature of Architect or Engineer
WVDE P-1

Signature of County Superintendent

WVDE BP-13-A
CERTIFICATE OF PROJECT COMPLETION

**WEST VIRGINIA DEPARTMENT OF EDUCATION
AND
SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA
CERTIFICATE OF PROJECT COMPLETION**

Upon completion of a facilities project, submit duplicate copies to the State Department of Education and the School Building Authority to initiate close-out procedures.

County _____	Substantial Completion Date _____
Project/School Name _____	Final Inspection Date _____
Project Number _____	Fire Marshal – Date _____
Enrollment _____	of Occupancy Permit _____
# Teaching Stations _____	(If Required) _____

<u>Sources of Funds:</u> State Funds SBA "MIP" \$ _____ SBA "Needs" \$ _____ Local Funds (Bond) \$ _____ Local Funds (Other) \$ _____ Vocational (State) \$ _____ Vocational (Federal) \$ _____ Federal (Other) \$ _____ Other Funds (List) \$ _____ _____ _____ _____ Total Funds \$ _____	<u>Summary of Project Data:</u> Sq.Ft. in Building _____ <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Site Acquisition</td> <td style="width: 50%;">\$ _____</td> </tr> <tr> <td>Site Preparation</td> <td>\$ _____</td> </tr> <tr> <td>Building Construction</td> <td></td> </tr> <tr> <td> Costs – Total</td> <td>\$ _____</td> </tr> <tr> <td>*Renovation Costs</td> <td>\$ _____</td> </tr> <tr> <td>Building Construction</td> <td></td> </tr> <tr> <td> Costs – per sq.ft.</td> <td>\$ _____</td> </tr> <tr> <td>Building Renovation</td> <td></td> </tr> <tr> <td> Costs – per sq.ft.</td> <td>\$ _____</td> </tr> <tr> <td>Moveable Eq. Cost</td> <td>\$ _____</td> </tr> <tr> <td>A&E Fees</td> <td>\$ _____</td> </tr> <tr> <td>**Misc. Costs</td> <td>\$ _____</td> </tr> <tr> <td>Total Project Cost</td> <td>\$ _____</td> </tr> </table>	Site Acquisition	\$ _____	Site Preparation	\$ _____	Building Construction		Costs – Total	\$ _____	*Renovation Costs	\$ _____	Building Construction		Costs – per sq.ft.	\$ _____	Building Renovation		Costs – per sq.ft.	\$ _____	Moveable Eq. Cost	\$ _____	A&E Fees	\$ _____	**Misc. Costs	\$ _____	Total Project Cost	\$ _____
Site Acquisition	\$ _____																										
Site Preparation	\$ _____																										
Building Construction																											
Costs – Total	\$ _____																										
*Renovation Costs	\$ _____																										
Building Construction																											
Costs – per sq.ft.	\$ _____																										
Building Renovation																											
Costs – per sq.ft.	\$ _____																										
Moveable Eq. Cost	\$ _____																										
A&E Fees	\$ _____																										
**Misc. Costs	\$ _____																										
Total Project Cost	\$ _____																										

*A project may include both new construction/addition and renovation costs.

**Geotech, Site Survey, Deed Search, Technology Equipment (Explain on Back)

_____ Architect	_____ Date
_____ Contractor	_____ Date
_____ Clerk-of-the-Works/Construction Manager	_____ Date
_____ Superintendent	_____ Date

***Inspected this date by a representative of the School Building Authority or the West Virginia Department of Education.

SBA 180

**CERTIFICATION OF RECEIPT
OF WORKER VERIFICATION
(COUNTY BOARD OF EDUCATION/OTHER GRANT RECIPIENT)**

School Building Authority of West Virginia
CERTIFICATION OF RECEIPT OF WORKER VERIFICATION
(County Board of Education/Other Grant Recipient)

County/Grant Recipient _____ Date _____

Project/School Name _____ Location _____

The undersigned, for and on behalf of the above referenced county/grant recipient, or Board of Education, does hereby certify that it has in its possession and filed certification from the Prime Contractor in the above project on SBA Form No. 181 with regard to the requirements of West Virginia Code 21-1B-4 regarding the verification of the legal employment status of all workers that will be employed for this project.

The county/grant recipient further certifies that it has received and has filed Prime Contractor certifications that none of the employees on this project have been required to register as a sex offender under these provisions.

Further, that each employee of the Prime Contractor, Subcontractor that may have access to students or the school grounds has been required to produce one valid picture I.D. to substantiate their name and current address.

(Superintendent Signature)

For the Board of Education of the
County of _____,
West Virginia

SBA 181

**PRIME CONTRACTOR'S CERTIFICATION
OF WORKER COMPLIANCE
WITH WV CODE**

School Building Authority of West Virginia
**PRIME CONTRACTOR'S CERTIFICATION
OF WORKER COMPLIANCE WITH WV CODE & SBA POLICY**

COUNTY _____ DATE _____

PROJECT/SCHOOL NAME

The undersigned, Prime Contractor for the above referenced project, does hereby certify that it has fully complied with the requirements of West Virginia Code 21- 1B with regard to verifying the legal status and authorization to work of all its employees that will be present on the construction site. Additionally, the undersigned for the above referenced project, does hereby certify that it has verified the criminal records of all its employees who will work on this project and that none of such employees have been required to register as a sex offender under West Virginia Code 15-12-2.

The undersigned has required each employee to produce one valid picture I.D. to substantiate their name and address. The undersigned further certifies that it will require each of its sub-contractors to execute a certificate (SBA Form 182) containing all of the above matters prior to such sub-contractor beginning work on the above referenced project and that it will retain each of these certificates on file and make them available for inspection by the proper authority .

PRIME CONTRACTOR SIGNATURE

REPRESENTING _____
COMPANY NAME

STATE OF WEST VIRGINIA,

COUNTY OF _____ TO-WIT:

I, the undersigned Notary Public, within and for the County and State as aforesaid, do hereby certify that _____ for the above listed project, has
(CONTRACTOR NAME)
this day personally acknowledged the same before me in my said County and State.

Taken, subscribed and sworn to before me on this the _____ day of _____.

My commission expires:

NOTARY PUBLIC

SBA FORM 182

**SUB-CONTRACTOR'S/VENDOR
CERTIFICATION
OF WORKER COMPLIANCE
WITH WV CODE**

School Building Authority of West Virginia
SUB-CONTRACTOR'S CERTIFICATION
OF WORKER COMPLIANCE WITH WV CODE & SBA POLICY

County _____ Date _____

Project/School Name _____

The undersigned, Sub-Contractor for the above referenced project, does hereby certify to the Prime Contractor that it has fully complied with the requirements of West Virginia Code 21-1B with regard to verifying the legal status and authorization to work of all its employees that will be present on this construction site. Additionally, the undersigned, for the above referenced project, does hereby certify that it has verified the criminal records of all its employees who will work on this project and that none of such employees have been required to register as a sex offender under West Virginia Code 15-12-2.

The undersigned has required each employee to produce at least one valid picture I.D. to substantiate their name and address.

SUB-CONTRACTOR

Company Name

STATE OF WEST VIRGINIA,

COUNTY OF _____ TO-WIT:

I, the undersigned Notary Public, within and for the County and State as aforesaid, do hereby certify that _____, Sub-Contractor in the above listed
Subcontractor Name
project, has this day personally acknowledged the same before me in my said County and State.

Taken, subscribed and sworn to before me on this the _____
Day of _____.

My commission expires: _____

NOTARY PUBLIC

SBA FORM 182

(Submit this form to the prime contractor)

SBA FORM 183
BID CHECKLIST

School Building Authority of West Virginia

BID CHECKLIST

Envelope #1

Initial

Valid Bid Bond

Certification Receipt of Addendum (SBA 184)

Bid Certification Form (SBA 157)

Valid Contractor License

Drug Free Work Place Affidavit (SBA 188)

State of WV Purchasing Affidavit (SBA 185)

Envelope #2

Bid Form

The proposer shall complete this form in its entirety verifying that the above listed documentation has been provided and enclosed in the proper envelope. Furthermore, this completed form shall be submitted with the proposal in accordance with Section 4.3.1 of the SBA supplemental instructions to bidders. Failure to complete or submit this form shall result in rejection of the proposal.

Contractor Name

Signature

SBA FORM 184

CERTIFICATION OF RECEIPT OF ADDENDA

School Building Authority of West Virginia
CERTIFICATION OF RECEIPT OF ADDENDA

(Complete this form and enclose in Bid Envelope #1)

By submitting this Proposal, the Proposer represents, as more full set forth in the Agreement, that the Proposer has examined copies of all the Contract Documents and hereby acknowledges they have verified that the Proposer is in receipt of the Addenda listed below and that the proposed price reflects the inclusion of these Addenda. The proposer further acknowledges that should it be determined at the time of the bid opening that the proposer has failed to acknowledge receipt of **ALL** of the issued addenda; the proposers bid submission shall be rejected.

Addenda Number	Addenda Date

Signature

Date

Name and Title of Signer (Please Print)

SBA FORM 185

PURCHASING AFFIDAVIT

STATE OF WEST VIRGINIA
Purchasing Division
PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: _____

Authorized Signature: _____ Date: _____

State of _____

County of _____, to-wit:

Taken, subscribed, and sworn to before me this ____ day of _____, 20__.

My Commission expires _____, 20__.

AFFIX SEAL HERE

NOTARY PUBLIC _____

SBA FORM 186

**MONTHLY ANTICIPATED ADVERSE
WEATHER DELAYS**

School Building Authority of West Virginia
MONTHLY ANTICIPATED ADVERSE WEATHER DELAYS

Monthly Adverse Weather Delay Days (State Average)									
	Maximum Temp ≤ 32 degrees F			Precipitation > 0.10 inches			Snowfall > 1.0 inches		
	Observed	Historic	Diff.	Observed	Historic	Diff.	Observed	Historic	Diff.
January		9			7			4	
February		5			7			3	
March		1			8			2	
April		0			8			0	
May		0			9			0	
June		0			8			0	
July		0			8			0	
August		0			7			0	
September		0			6			0	
October		0			6			0	
November		1			7			1	
December		6			7			3	
Total									
(Observed - Historic) + (Observed - Historic) = Total [Use the greatest value of Rain or Snow]									

*The Contractor's progress schedule must reflect the anticipated adverse weather delays that are provided on this form

SBA FORM 187

CONSTRUCTION (CPM) SCHEDULE

School Building Authority of West Virginia
CONSTRUCTION (CPM) SCHEDULE

I. INTRODUCTION

For the purpose of planning, developing and executing a school construction project each project shall be accompanied by a progress construction schedule. The construction progress schedule shall be developed in the Critical Path Method (CPM). Not only shall the progress construction schedule be used as a resource by the Prime Contractors in the execution the Work, but also so the Owner and its assigned representatives are able to monitor progress and be reasonably assured the project is progressing toward its completion within the timeline requirements.

II. DEFINITIONS

- a. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of the project. This method calculates the minimum completion time for a project along with the possible start and finish time for the project activities.
- b. Notice to Proceed: A written notice from the Owner or Owner's representative to the Contractor(s) in which the Contractor(s) is authorized to proceed with the work on a specified date. The Notice to Proceed date shall be considered the basis of commencement of the contract construction duration as specified in the Contract Documents, unless otherwise indicated.
- c. Contract Construction Duration: The amount of time specified by the Contract Documents for the completion of the Project.
- d. Contract Completion: The Contract Completion date is the projected project completion date based on the commencement of work on Notice to Proceed date and Contract Construction Duration; as may also be specified in the Owner's published Notice to Proceed (NTP). The Contractor's Completion date obligations and the Owner's Claims for Delay obligation are based on the Contract Completion Date.
- e. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
 - i. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
 - ii. Predecessor Activity: An activity that precedes another activity in the network.
 - iii. Successor Activity: An activity that follows another activity in the network.
- f. Event: The starting or ending point of an activity.
- g. Duration: The amount of time estimated to complete an activity in the time scale used in the schedule (work days). Planned production rates and available resources will define the

duration used in a given schedule. A defined activity duration shall be no longer than 15 work days, unless otherwise approve by the Owner or Owner's representative in advance.

- h. Early Start: The first day of a project on which work on an activity can start if all proceeding activities are completed as early as possible.
- i. Early Finish: The first day of a project on which work on an activity is complete, assuming work began on its early start.
- j. Late Start: The last day or deadline for the start of an activity before it will delay the completion of the project.
- k. Late Finish: The last day or deadline for the completion of an activity before it will delay the completion of the project.
- l. Actual Start: The date that an activity actually began.
- m. Actual Finish: The date that an activity finished.
- n. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall project duration and contains no float.
- o. Float: The measure of leeway in starting and completing an activity. The difference (in days) between the early start / finish and late start / finish.
 - i. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
 - ii. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned project completion date.
 - iii. Float shall not be for the exclusive use or benefit of either Owner or Contractor(s), but is a jointly owned, expiring project resource available to both parties as needed to meet schedule milestones and contract completion date.
- p. Milestone: Zero duration activities that call attention to noteworthy events in the project schedule. They can represent a variety of significant events and may indicate either the start or completion of a significant series of events (i.e. – “topped-out”, “dry-in”, equipment delivery, etc.)
- q. Constraint: A limitation placed on a project schedule activity that affects the start or end date of an activity or series of activities. Constraints have been used to fix imposed dated for a work activity.
 - i. As Soon As Possible is the default constraint type. This constraint schedules the work item to the earliest possible time that the work activity can start, based on the existing project logic.
 - ii. Start No Earlier Than is used to restrict an activity to start on or after a specified constraint date. A constraint date must be specified before which the task must not start.
 - iii. Finish No Later Than is used to restrict an activity to complete on or before a specified constraint date. A constraint date must be specified after which the task must not start.
- r. Fragnet: A sequence of new activities that are proposed to be added to the existing schedule. The fragnet shall identify the predecessors to the new activities and demonstrate the impact to the successor activities
- s. Baseline Schedule: A fixed project schedule that is the standard which project performance is measured. The current schedule is copied into the baseline schedule that remains frozen

until it is reset. Resetting the baseline is done when the scope of the project has been changed significantly. At that point, the original or current baseline become invalid and should not be compared with the current schedule.

- t. As-Built Schedule: The record of the history of the construction project in the form of a schedule, and is comprised of a bar-chart record of the start and end dates of every activity that actually took place, without necessarily having any logic links.
- u. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.
- v. Approval of Schedule: The general and unanimous executed agreement by the Contractor(s), Owner, Architect, Consultant, and/or Construction Manager of the CPM schedule. *The Owner or Owner Representative's approval of the submitted schedule in no way established an obligation on the Owner for Claims for Delay by the Contractor based on the Contractor early completion. Any Claims for Delay by the Contractor shall be based on the provision of this specification which only contemplates impact to the proposed contract completion date.*
- w. Schedule Consultant: An independent third party responsible for the planning, development, update, maintenance, monitoring and reporting of the CPM schedule. The schedule consultant may be contracted by either the Contractor or Owner.
- x. Early Completion: Early completion of the project is permitted, however, neither the Contractor(s) nor the Owner are bound to an early completion, even if projected by and approved in the final version of the CPM schedule. The Contractor's completion date obligation and the Owner's Claims for Delay obligations under this agreement are associated with the proposed contract completion date as defined by the Contract Documents, not an approved Contractor proposed early completion date. Notwithstanding the preceding, the Owner reserves the right to reject a proposed CPM Schedule that shows an early completion date if the schedule appear to be unreasonable or unrealistic.
- y. Delay Claims: A period of time for which the project has been extended or work has not been performed which are excusable in accordance with the Contract Documents. A delay must be excusable in order to be the basis for an extension of time or additional compensations.
- z. Excusable Delay: An excusable delay shall be defined by the Contract Documents and typically involve matters beyond the Contractor(s) control. Examples of excusable delay include design errors and omissions, owners initiated changes, weather impact, or acts of God.
- aa. Non-Excusable Delay: A non-excusable delay is a delay for which the Contractor(s) has assumed the risk in accordance with the Contract Documents. It is the responsibility of the Contractor to prevent acts, or negligence, by the Contractor(s) which may be cause for delay.
- bb. Concurrent Delay: A concurrent delay is a second independent delay occurring during the same time period as the delay for which recover is sought. A Contractor seeking increased compensation is ultimately responsible for the concurrent delay and may not be able to recover any compensation for the initial delay.

III. EXECUTION

- a. Outline Schedule and Sequence Plan

- i. An outline schedule and sequence plan shall be provided to the Prime Contractor(s) in the Bid Documents.
 - ii. The outline schedule and sequence has been developed to coordinate Prime Contractors in a Multiple Prime Contract, and shall be the basis for the CPM construction schedule. In the event a project is selected by the Owner as a Single Prime Contract, the Prime Contractor shall be responsible for development and distribution of an outline schedule and sequence plan to subcontractor, vendors, etc.
 - iii. The Prime Contractors have the right to make changes to the outline schedule and sequence plan; however any changes shall require the unanimous approval and sign-off by all Prime Contractors, Architect and Owner. In the event of modifications by the Prime Contractors the project duration shall remain in effect (i.e. - 424 calendar days).
 - iv. If the Prime Contractor(s) has sufficient reason to modify the outline schedule they shall provide in writing to the Owner and/or Owner's representative:
 - 1. Reason for modification to the outline schedule and sequence plan
 - 2. Unanimous approval by all Prime Contractors of modified outline schedule and plan.
- b. Scheduling Requirements
- i. At the Pre Construction Meeting, the Owner's representative shall review the CPM schedule requirements as indicated in the Contract Documents with the Prime Contractor(s).
 - ii. Responsibilities:
 - 1. Means and Methods: AIA A201,3.3.1 - *"The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequence and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters."*
 - 2. General Trades Contractor:
 - a. Unless otherwise specified, the General Trades Contractor shall be responsible for the construction progress schedule development, maintenance, monitoring and reporting, and shall schedule meetings to facilitate / coordinate / maintain a CPM schedule for the duration of the project.
 - b. The General Trades Contractors shall demonstrate to the Owner specialized experience in the development, maintenance, monitoring and

reporting of CPM scheduling. A minimum of three (3) years full-time (exclusive) or five (5) years part-time (with other responsibilities) experiences with CPM schedules of similar size and complexity shall be required. The name and experiences shall be submitted to the Owner and/or Owner's representative, along with examples of the individual's past schedules.

i. In the event the Owner and /or Owner's representative determines the General Trades Contractor does not possess the capability in-house to perform the requirements of the CPM Schedule, the Owner may elect, at no additional cost to the Owner, to require the General Trades Contractor to hire a Schedule Consultant that possess the specialized experience in performing the requirements as stated herein.

c. Receive input from each Prime Contractor for the development, maintenance, monitoring and reporting of the progress construction schedule.

3. Prime Contractors:

a. Provide General Trades Contractor with sufficient information / feedback regarding activities, duration and logic associated with the development, maintenance, monitoring, reporting, and overall information required to properly maintain the construction progress schedule.

c. Schedule Development

i. The construction progress schedule development shall be conducted in a meeting, or series of meetings, for the purpose of generating a feasible plan to execute the construction project.

1. The General Trades Contractor shall chair / conduct the meeting(s) related to the construction progress schedule. The General Trades Contractor shall be responsible for setting the meeting agenda, regulating and ensuring the meeting is productive in the development of the construction progress schedule. The meeting agenda shall be submitted in advance to the Owner for review.

2. The schedule development meeting(s) should be held no later than 2 weeks after the preconstruction meeting. This will allow the Prime Contractors (and subcontractors) to assign staff, procure subcontracts, review documents and develop a plan to execute the work. It is critical the personnel responsible for directing the Work in the field be in attendance. These individual shall also be familiar with the project requirements and be prepared to participate in the meeting(s).

3. Prime Contractor(s) shall attend with major subcontractor ready to discuss the plan to execute the Work. The construction progress schedule shall be developed and phased according to the order the work will occur (i.e. – site, concrete, masonry, steel, roof, MEP, finishes).
4. For the purpose of the CPM schedule development, the General Trades Contractor shall solicit from the other Prime Contractors a list of activities included with activity durations and at least one (1) predecessor and successor activity (i.e. – activity - block fill paint / duration – 3 days / predecessor – rub masonry walls / successor – first finish coat paint). These activities shall be provided to the General Trades' Contractor prior to meeting. The General Trades Contractor shall incorporate the activities, durations and initial logic from the other Prime Contractors into the schedule software. *It may be recommended the General Trades Contractor schedule an individual and separate meeting with each of the Prime Contractor prior to scheduling a meeting with all Prime Contractors together.*
5. From the information provided by the Prime Contractor(s), the General Trades Contractor shall prepare the CPM schedule. The CPM schedule will be distributed to the Prime Contractor(s) for their review and feedback. If needed, additional meetings may be held to review the CPM schedule with the Prime Contractor(s). The additional meetings shall be at the General Trades Contractors and/or Owner's discretion, or as may be requested by a Prime Contractor.
6. Once the CPM schedule has been reviewed with feedback from the Prime Contractors, the General Trades Contractor shall make the necessary final adjustment and distribute the proposed Baseline CPM Schedule to the Prime Contractors for execution / signatures. The General Trades Contractor shall provide a signature line for each Prime Contractor on the Baseline CPM Schedule. **The executed Baseline CPM Schedule, as defined above under Approval of the Schedule, shall be considered the Approved Construction Progress Schedule only after review and agreement by the Owner.**
7. The Baseline Schedule (and updates) shall then be submitted to the Owner and/or Owner's representatives for review.
 - a. When submitting a CPM schedule to the Owner it shall be in the Gantt Chart View with the following columns in display.
 - i. Task Name
 - ii. Percentage Complete
 - iii. Original Duration
 - iv. Remaining Duration

- v. Early Start
 - vi. Early Finish
 - vii. Actual Start
 - viii. Actual Finish
 - ix. Total Float / Slack
 - x. Resource Group (assigned to each Prime Contractor)
8. The Approved Construction Progress Schedule shall be submitted for use not later than 45 calendar days after the date establish for the Notice to Proceed; otherwise, in accordance with the Contract Documents (SBA Supplemental Conditions, General Conditions, Section II), "*... an approved construction schedule must be in place prior to the second pay application being requested. Failure to comply with this provision will result in delayed processing of this and all future pay applications until the owner and SBA approved schedule is in place.*"
9. The construction progress schedule shall be developed and consist of activity categories as follows, but not limited to, milestones, critical submittals, civil / site, structural systems, building envelope, systems rough-ins, mechanical / electrical / telecom rooms, interior finishes and close-out; each category consists of furthermore individual activities.

The below table of activities provides a list of typical minimal individual activities that should be included in the CPM schedule. The activities in this table are intended to represent activities that are typical of school construction projects, and it is understood depending on the specific design of individual projects these activities may somewhat vary.

The CPM schedule shall be further arranged by Phase / Sequence / Area. The activity categories and representative individual activity should be duplicated within each Phase / Sequence / Area. The following is a representative example of how this shall occur.

Example

Area A

Structural Systems

Foundations
U/G Plumbing
U/G Electrical
Masonry to Finish Floor
Concrete Slab on Grade
Etc.

Building Envelope

Roof Blocking
Roof Mechanical Curbs
Roof Insulation & Membrane
Etc.

Etc.

Area B

Structural Systems

Foundations

U/G Plumbing

U/G Electrical

Masonry to Finish Floor

Concrete Slab on Grade

Etc.

Building Envelope

Roof Blocking

Roof Mechanical Curbs

Roof Insulation & Membrane

Etc.

Area C

Etc.

Table of Activities:

MILESTONES	CRITICAL SUBMITTALS	CIVIL / SITE	STRUCTURAL SYSTEMS	BUILDING ENVELOPE
Notice to Proceed	Site Utility Structures	Excavation	Foundation / Footers	Roof Blocking
Building Utility Connections (each type)	Concrete Reinforcing Steel	Storm Sewer	U/G Plumbing	Roof Mechanical Curbs
Major Equipment Delivery	Doors, Frames and Hardware	Sanitary Sewer	U/G Electrical	Roofing System
Building Dry-in (Each Phase / Area)	Steel Lintels	Water Service	Masonry to Finish Floor Elevation	Roofing System Soffits, Coping & Flashing
Building Conditioned Air (Temporary / Permanent) (Each Phase / Area)	Structural Steel	Gas Service	Concrete Slab on Grade / Deck	Exterior Veneer System
Substantial Completion	Steel Joist & Deck	Electrical / Telecom Service	Door Frames	Exterior Window Frames / Glazing
Final Completion	Kitchen Equipment	Site Concrete Paving	Masonry (Bearing)	Exterior Doors
	Mechanical Equipment	Site Asphalt Paving	Steel Joists & Bridging	
	Electrical Switchgear & Panel Boards	Site Finishes	Metal Deck	

Continued from above table...

SYSTEMS ROUGH-IN	MECHANICAL / ELECTRICAL / TELECOM ROOMS	INTERIOR FINISHES	CLOSE OUT	
Electrical Panelboards	Equipment Pads	Paint Block Fill / Prime Coat	Testing, Adjustment & Balance	
Electrical / Fire Raceways Alarm Rough-in	Electrical Panelboards	Paint First Finish Coat	Commissioning	
Electrical Conductors / Wire	Electrical Transformers	Paint Second Finish Coat	Training & Demonstration	
Fire Alarm Annunciator Panel	Electrical Raceway Rough-in	Paint Exposed Ceiling	A/E Prepare Punchlist	
Fire Alarm Wire	Electrical Conductors/Wire	Above Ceiling Inspection	Fire Marshall Inspection / Occupancy Permit	
Cable Tray	Data Racks & Switches	Ceiling Grid	Substantial Completion	
Telecom / Security Cable	Fire Sprinkler Value / Riser Assembly	Electrical Light Fixtures	Contractor Perform Punchlist	
Storm Pipe Rough-in	Fire Sprinkler Pipe Rough-in	HVAC Registers & Grills	Final Completion	
Storm Pipe Insulation	Domestic Water Rough-in	Fire Sprinkler Drops & Heads		
Sanitary Rough-in	Domestic Water Insulation	Plumbing Fixtures		
Domestic Water Rough-in	Plumbing Backflow Preventer	Floor Finishes & Base (each type)		
Domestic Water Insulation	Plumbing Equipment (i.e. – hot water tank, etc.)	Metal Lockers		
Fire Sprinkler Rough-in	Gas Piping Rough-in	Casework		
HVAC Duct Rough- in	HVAC Duct Rough- in	GWB Bulkheads		
HVAC Duct Insulation	HVAC Duct Insulation	ACT Ceilings		
HVAC Pipe Rough-	HVAC Pipe Rough-	Doors & Hardware		

in	in			
HVAC Pipe Insulation	HVAC Pipe Insulation	Electrical / Fire Alarm / Telecom / Security / HVAC Controls Devices & Trim		
HVAC Equipment (i.e. – fan coils, UV, VAV, RTU, heater, etc.)	HVAC Equipment (i.e. – chiller, boilers, pumps, AHU DOA, etc.)	Signage		
HVAC Controls & Wire	HVAC Controls & Wire	Toilet Partitions & Accessories		
	HVAC Equipment Start-up	Display Boards & Accessories		

d. Schedule Update

- i. The General Trades Contractor shall schedule a monthly meeting, of which they shall chair / conduct, to facilitate / coordinate the construction progress schedule update with the Prime Contractor(s).
 1. The schedule update shall be conducted in coordination with the application for payment timelines established by the Contract Administrator. It is recommended the construction progress schedule update meetings be performed on-site and coincide with the Owner's Progress Meetings. The schedule update meeting will be scheduled in advance by the General Trades Contractor, with input from the Owner and/or Owner's representative.
 2. Prime Contractors shall provide the General Trades Contractor with activity actual start and finish dates. If an activity has started, and is in progress, the estimated remaining days to complete the activity shall be provided in lieu of a finish date. The General Trades Contractor shall solicit progress update information from Prime Contractors a minimum of seven (7) work days prior to the progress update meeting. *The update information shall be provided to the General Trades Contractor a minimum of three (3) work days prior to the update meeting.*
 3. Upon receipt of the update information, the General Trades Contractor shall include the actual start and finish dates, and remaining days into the schedule software and run a project update. The progress update / status date shall be consistent from month to month (i.e. – 15th of each month). The General Trades shall then provide the other Prime Contractors with a copy of the progress update a minimum of one (1) day prior to the update meeting.

4. Prime Contractor(s) shall advise the General Trades Contractor of any sequence and/or logic and/or coordination changes that need to be made to conform to the progress of the Work. *These changes to the construction progress schedule shall be performed during the progress update meeting.*
 5. From the information provided by the Prime Contractors, the General Trades Contractor shall complete the update to the CPM schedule. The construction progress schedule update will be distributed to the Prime Contractors for their review, feedback and acceptance.
 6. Once the updated CPM schedule has been reviewed with feedback from the Prime Contractor(s), the General Trades Contractor shall make the final adjustment necessary and distribute the approved updated construction progress schedule to the Prime Contractors, Owner and Owner's representative.
- ii. The construction progress schedule shall be able to be sort by each Prime Contractor and distributed accordingly. Distribution of the construction progress schedule shall be sorted and provided to the Prime Contractors, Owner and Owner's representative as follows:
 - a. Incomplete Activities
 - b. Critical Activities
 - c. By Each Prime Contractor's Activities
 - d. Otherwise requested by the Owner and/or Owner's representative
 - iii. Each month's progress schedule update shall be submitted with each Prime Contractors application for payment. Failure to provide a progress schedule update with the *application for payment may be reason for Owner to withholding one or all Prime Contractor's progress payments for said month.*
- e. Two –Week Look Ahead
 - i. The General Trades Contractor shall distribute each Prime Contractors two-week look ahead schedules for the Owner's Progress Meetings, which shall be provided to the Prime Contractors a minimum of one (1) day prior to the update meeting.
 - ii. A copy of each Prime Contractor's two-week look ahead shall also be provided to the Owner and Owner's representative at the meeting; along with a progress update sort by Critical Activities.
 - f. Baseline Schedule Changes
 - i. In the event significant modifications are required, which may cause changes to the overall sequence / phasing of Work, the progress construction schedule

baseline will need to be re-established. Upon these modifications being made to the CPM schedule, the General Trades Contractor shall establish a new construction progress schedule baseline.

- ii. Whenever a new schedule baseline is established it shall require the unanimous approval and sign-off by all Prime Contractor(s), Architect and Owner.
- iii. The General Trades Contractor shall make the necessary adjustment and distribute the proposed new Baseline CPM Schedule to the Prime Contractors for review and feedback. Once feedback is provided by the Prime Contractors the newly established Baseline CPM Schedule shall be prepared for execution / signatures by the Prime Contractors. The General Trades Contractor shall provide a signature line for each Prime Contractor on the newly established Baseline CPM Schedule. **The executed newly established Baseline CPM Schedule, as defined above under Approval of the Schedule, shall be considered the revised Approved Construction Progress Schedule only after the review and agreement by the Owner.**
- iv. A revised Baseline Schedule shall then be submitted to the Owner and/or Owner's representatives for review. *Once an Approved Schedule is in place, the Owner and/or Owner's representative have to the authority to reject any submission where it revises the approved schedule's baseline if it is not deemed to be in the express interest of the Owner.*

g. Schedule Recovery

- i. In the event the schedule update indicates the project progress is more than 10 days behind a separate recovery schedule shall be required showing the means by which the Prime Contractor(s) responsible for the delay intend to regain compliance.
- ii. The Prime Contractor(s) identified in delay shall provide the General Trades Contractor, the Architect and Owner with a written plan of recovery. This recovery plan shall be incorporated into the recovery schedule (by the General Trades Contractor), which will be submitted to the Architect and Owner for approval.
- iii. In addition to the written plan of recovery, the General Trades Contractor shall schedule a meeting with the Prime Contractor(s) identified in the delay. The CPM schedule shall reflect the Prime Contractor(s) plan to bring the project back in compliance.
- iv. The recovery schedule shall be completed and submitted prior to final submission of the application for payment to the Owner. Application for payment shall not be approved without an attached recovery schedule.

h. Claims of Delay

- i. Delays and related claims shall be governed by the Contract Documents; specifically, but not limited to, the AIA 201 – General Conditions of the Construction Contract, Articles 8 & 15, and the SBA Supplemental Conditions – Appendix J, Part II . In the event of a conflict, the requirements of these conditions shall take precedence over the stipulations provided in this section.
- ii. In addition to the requirements of the Contract Documents, the Prime Contractor(s) bringing claim for delay must provide / substantiate said claim to the Owner and/or Owner's representative.
- iii. The premise of all delay claims shall be based on the approved construction progress schedule. Delays related to non-critical activities shall not be considered a legitimate delay as they do not extend the project completion date. The basis of delays shall be associated with critical activities, also known as Critical Path Activities. The delay to the Critical Path shall be established by the insertion of a fragnet into the CPM schedule.
- iv. All claims for extensions of time shall be accompanied by the following documentation:
 1. written notice no more than seven (7) calendar days after the beginning of the delay,
 2. complete detailed report of the delay, including all support documentation for the delay event,
 3. a fragnet to the approved construction progress schedule. When submitting a fragnet, the Contract shall compute two finish dates. The first finish date shall be computed without consideration of any impact by the fragnet. The second finish date shall be computed with consideration of any impact by the fragnet,
- i. Any / all delay claims, including support documentation, must be submitted to the Owner and/or Owner's representative by no later than 15th of the month following the conclusion of the delay. In the event a delay last more than two (2) consecutive months, the available delay support documentation must be submitted to the Owner / Owner's representative starting on the 15th of the month (and every month thereafter) at the conclusion of the second consecutive month of the delay event.

j. Schedule As-Built

- i. At the conclusion of the project an as-built schedule showing actual start and finish dates for all work activities shall be provided to the Owner by the General Trades Contractor. The Prime Contractor(s) shall provide the required information necessary to complete this task.

- ii. The as-built schedule shall be considered a project close out requirement and shall be included with, along with the Baseline(s) / Approved Schedule(s), in the General Trades Contractor's O&M manual.

SBA 187
4/2014

SBA FORM 188

DRUG FREE WORKPLACE AFFIDAVIT



**State of West Virginia
DRUG FREE WORKPLACE CONFORMANCE AFFIDAVIT
West Virginia Code §21-1D-5**

STATE OF WEST VIRGINIA,

COUNTY OF _____, TO-WIT:

I, _____, after being first duly sworn, depose and state as follows:

1. I am an employee of _____; and,
(Company Name)
2. I do hereby attest that _____
(Company Name)

maintains a valid written drug free workplace policy and that such policy is in compliance with **West Virginia Code §21-1D**.

The above statements are sworn to under the penalty of perjury.

By: _____

Title: _____

Company Name: _____

Date: _____

Taken, subscribed and sworn to before me this _____ day of _____, _____.

By Commission expires _____

(Seal)

(Notary Public)

THIS AFFIDAVIT MUST BE SUBMITTED WITH THE BID IN ORDER TO COMPLY WITH WV CODE PROVISIONS. FAILURE TO INCLUDE THE AFFIDAVIT WITH THE BID SHALL RESULT IN DISQUALIFICATION OF THE BID.

Rev. August 2013

SBA FORM 189

CONTRACT SERVICES RESPONSIBILITIES
SUMMARY

For County, Architect, and Construction Manager

School Building Authority of West Virginia
CONTRACT SERVICES RESPONSIBILITIES
For Owner, Architect, and Construction Manager

	<u>SERVICE TASKS</u>	<u>COUNTY</u>	<u>ARCHITECT</u>	<u>CONSTRUCTION MANAGER</u>
<u>SITE EVALUATION / SELECTION</u>				
1	<u>Archeological Survey Services (WV Dept of Culture & History)</u>	<u>request & PO</u>	<u>assists</u>	<u>assists</u>
2	<u>Geotechnical Survey Services</u>	<u>request & PO</u>	<u>provide building layout</u>	<u>RFP, review and comment</u>
3	<u>Boundary Survey Services</u>	<u>request & PO</u>	<u>assist</u>	<u>RFP, review and comment</u>
4	<u>Topographical Survey Services</u>	<u>request & PO</u>	<u>assist</u>	<u>RFP, review and comment</u>
5	<u>Utility Survey Services</u>	<u>participants</u>	<u>originate, coordinate</u>	<u>review and comment</u>
6	<u>Site Accessibility Study (including DOH Review)</u>	<u>participants</u>	<u>originate, coordinate</u>	<u>review and comment</u>
7	<u>Property Acquisition</u>	<u>acquires</u>	<u>recommends for program</u>	<u>recommends for cost</u>
<u>PLANNING</u>				
8	<u>SBA CERP Amendments</u>	<u>reviews & approves</u>	<u>originates</u>	<u>assist</u>
9	<u>SD, DD & CD Design Schedule (Coordinate with SBA)</u>	<u>reviews & approves</u>	<u>reviews, comments</u>	<u>originates & updates</u>
10	<u>Master Project Schedule</u>	<u>reviews & approves</u>	<u>reviews, comments</u>	<u>originates & updates</u>
11	<u>Verify Existing Building Layout & Dimensions</u>	<u>assists</u>	<u>originates</u>	<u>assists</u>
12	<u>Project Budget / Building Cost Assessment</u>	<u>reviews & approves</u>	<u>reviews & implements</u>	<u>originates & updates</u>
13	<u>Monthly Project Reports</u>	<u>reviews & approves</u>	<u>review</u>	<u>originates</u>
14	<u>Monthly Team Meetings</u>	<u>participants</u>	<u>participants</u>	<u>conducts & records</u>
15	<u>Project Website (if applicable)</u>	<u>maintains</u>	<u>provides info</u>	<u>provides info & photos</u>
16	<u>Program of Requirements (to be developed with the SBA Staff)</u>	<u>originates</u>	<u>implements</u>	<u>reviews & comments</u>
17	<u>Testing & Inspection Services</u>	<u>request & PO</u>	<u>review</u>	<u>RFP and review</u>
18	<u>Asbestos Consultant (if applicable)</u>	<u>request & PO</u>	<u>tech direction</u>	<u>coordinates & arranges</u>
19	<u>Commissioning Agent (if applicable)</u>	<u>request & PO</u>	<u>RFP & Tech direction</u>	<u>assists in selection</u>
20	<u>Printing Services</u>	<u>reimbursement</u>	<u>performs & distributes</u>	<u>monitors</u>
<u>DESIGN</u>				
21	<u>SD, DD & CD Design Drawings (Reference SBA Project Submission Requirements - SBA 176)</u>	<u>reviews & approves</u>	<u>originates</u>	<u>reviews & comments</u>

22	Document Coordination	authorizes	originates	reviews & comments
23	Technical Specifications Div. 2 - 17 (Reference SBA Project Submission Requirements)	reviews & approves	originates	reviews & comments
24	Life Cycle Cost Analysis	reviews & approves	originates & advises	review, comments & cost
25	Conceptual Furnishing & Equip Layouts	reviews & approves	originates	reviews & comments
26	Furnishing & Equipment Bidding Documents	reviews & approves	originates	bids & coordinates
27	Technology Plan (Included with DD Phase Submission)	originates	incorporates	reviews & comments
28	Safe School Design Review (Reference SBA Appendix I)	review and comments	originates	review and comments
29	Monthly Team Meetings	participants	participants	conducts & records
30	SD, DD & CD Cost Estimates	reviews & approves	reviews & comments	originates
31	Set DD & CD Bid Packaging	reviews & approves	reviews & comments	originates & recommends
32	Value Engineering Analysis (Cost Savings)	reviews & approves	reviews & implements	originates & advises
33	Agency Review Submissions (Fire Marshall, DEP, Health Dept., etc.)	reviews	originates	assists
34	Building Permit Submissions (if applicable)	approves & pays	originates	assists
35	Cost & Schedule Document Constructability Review	reviews	reviews & implements	originates
36	Develop Bid Alternates	reviews & approves	reviews & implements	advises & recommends
37	Set Bidding Schedules (Coordinate with SBA)	reviews & approves	reviews & comments	advises & originates
38	General Requirements Specifications - Div. 01	reviews & approves	reviews & assists	originates
BIDDING / AWARD				
39	Develop Bidders Lists	reviews	reviews	originates
40	Bidding Advertisement	publishes	assists & reviews	originates
41	Pre-Bid Meeting (Including SBA pre-bid reminders)	attends	conducts & records	assists & attends
42	Bid Opening	conducts	assists & attends	attend, assist & records
43	Bid Tabulations & Post Bid Forms (including submission to SBA)	reviews & approves	reviews & comments	originates
44	Post Bid Evaluation Meeting	participates & approves	advises & recommends	conducts & recommends
45	Bid Recommendation for Award	reviews & approves	reviews & concurs	originates
46	Construction Contracts	reviews & approves	reviews & comments	originates
CONSTRUCTION				
47	Pre-Construction Conference	attends	attends & assists	conducts & records
48	Construction Schedules	reviews & approves	reviews & comments	originates

50	<u>Construction Phasing</u>	<u>reviews & approves</u>	<u>reviews & comments</u>	<u>originates</u>
51	<u>Daily On-Site Observations</u>	<u>No applicable service</u>	<u>No applicable service</u>	<u>conducts & records</u>
52	<u>Monthly On-Site Observations by Architect / Engineer (SBA Requirements)</u>	<u>No applicable service</u>	<u>performs & reports</u>	<u>assists & participates</u>
53	<u>Weekly Trade Coordination Meetings</u>	<u>No applicable service</u>	<u>No applicable service</u>	<u>conducts & records</u>
54	<u>Bi-Weekly Progress Meetings</u>	<u>attends</u>	<u>attends</u>	<u>conducts & records</u>
55	<u>Pre-Installation Meetings</u>	<u>No applicable service</u>	<u>attends & participates</u>	<u>conducts & records</u>
56	<u>Contractor Payment Applications</u>	<u>approves & pays</u>	<u>reviews & certifies</u>	<u>receives & recommends</u>
57	<u>Contractor Certified Payrolls</u>	<u>reviews & files</u>	<u>No applicable service</u>	<u>receives & transmits to Owner</u>
58	<u>Shop Drawings & Product Data</u>	<u>No applicable service</u>	<u>reviews & approves</u>	<u>receives & reviews</u>
59	<u>Contractor Requests for Information</u>	<u>No applicable service</u>	<u>reviews & responds</u>	<u>prepares & transmits to Architect</u>
60	<u>Decisions on Contractor Claims</u>	<u>approves</u>	<u>reviews, approves & recommends</u>	<u>advises Architect</u>
61	<u>Contractor Change Requests</u>	<u>approves</u>	<u>reviews & recommends</u>	<u>prepares & recommends</u>
62	<u>Contractor Time Extensions</u>	<u>approves & accepts</u>	<u>reviews & recommends</u>	<u>prepares & recommends</u>
63	<u>Construction Defects</u>	<u>participates</u>	<u>identifies & recommends</u>	<u>assists & recommends</u>
<u>CLOSE-OUT</u>				
64	<u>Final Completion Checklist / Punch list</u>	<u>reviews & accepts</u>	<u>identifies & recommends</u>	<u>assists & recommends</u>
65	<u>Project Closeout Procedures (including SBA 178)</u>	<u>receives & executes documents</u>	<u>receives & transmits to Owner</u>	<u>schedules & transmits to Architect & SBA</u>
<u>POST OCCUPANCY</u>				
66	<u>11-month Warranty Follow-up</u>	<u>participates & approve</u>	<u>conducts</u>	<u>participates</u>
67	<u>Maintenance and Energy Report (SBA 179)</u>	<u>compile and submit</u>	<u>No applicable service</u>	<u>No applicable service</u>

SBA 189

6/2015

SBA FORM 190

BUILDING INFORMATION MODELING (BIM)
GUIDELINES AND STANDARDS FOR
ARCHITECTS, ENGINEERS, AND
CONTRACTORS

School Building Authority of West Virginia
BUILDING INFORMATION MODELING (BIM) GUIDELINES AND
STANDARDS FOR ARCHITECTS, ENGINEERS, AND CONTRACTORS

This BIM Guideline and Standard applies to School Building Authority projects funded beginning December 2015 based on the following criteria:

- Required on all new construction with a total project funding of \$10 million or greater, and on any project that has already been delivered with a BIM requirement.
- The School Building Authority goal is to implement BIM for design and construction of future SBA Funded projects as follows:
 - New School Construction Projects beginning in December 2015.
 - All New School Construction and Major Addition and Renovation Projects beginning in December 2016.
 - Implementation of BIM on all projects beginning December 2017.
 - BIM modeling information data provided to the owners for use in their preventative maintenance data bases state wide by 2019.

For more information and updates on SBA BIM guidelines and standards, please visit our website:
<http://www.wvs.state.wv.us/wvsba/>

1. General Requirements

1.1. Design Team Software

Building information models shall be created to include all geometry (civil, structural, mechanical, electrical and plumbing systems), physical characteristics and product data (make, model numbers and serial numbers) needed to describe the design and construction work of a project. All drawings, schedules, simulations, and services required for assessment, review, bidding, and construction shall be extractions from this model. The Design Team shall follow the guidelines and requirements detailed in this document for BIM related services. Deliverable requirements are as specified in the SBA Policy and Procedures Handbook and this document.

1.2. Civil Engineering Software

Models shall be created that include all geometry, physical characteristics, and product data needed to describe the design and construction work to within 5' of building envelope. Drawings and schedules required for assessment, review, bidding, and construction shall be extractions from this model. Software shall be capable of interfacing with the Design Team's BIM authored software. In all cases, model building and infrastructure systems to a level that allows the team to verify clearances, analyze conflicts/clashes and properly coordinate the work with all other aspects of this project. The Design Team shall follow the guidelines and requirements detailed in this document for BIM related services. Deliverable requirements are as specified in the SBA Policy and Procedures Handbook and this document.

1.3. BIM Authoring Software

The Design Team is required to use parametric BIM Authoring software for SBA projects. The deliverable file format for all BIM project Models shall be of open standards similar to IFC, COBie, structured data as well as the native file format, such as Revit.)

1.4. Open Architecture for Interoperability

The School Building Authority has adopted open architecture for data exchange. The Design Team is encouraged to use products based on or using open architecture for greatest interoperability between consultants.

1.5. Project Collaboration Tools

The Design and Construction Team is required to use an internet “cloud” based electronic project collaboration environment capable of managing various versions of the project documents and models for document management and file sharing. The owner must be provided access to the tools for the purposes of collecting data for facility management and preventative maintenance both during and post project. The project collaboration environment shall be accessible by both computer and tablet. (examples: ProjectDox, Buzzsaw)

2. Process

2.1. BIM Proficiency Matrix

The Design Team shall submit to the School Building Authority upon request and ahead of contract award, an SBA BIM Proficiency Matrix. The SBA BIM Proficiency Matrix template is located on the web for download at: <http://www.wvs.state.wv.us/wvsba/>. The BIM Proficiency Matrix will be reviewed by the SBA to give an overview of the Consultant(s) BIM expertise and experience. The BIM Proficiency Matrix is scored by the Consultant (1 point per credit area) and should include examples of actual projects where BIM was applied.

2.2. BIM Execution Plan

The Design Team shall submit to the SBA within thirty (30) days of contract award, a BIM Execution Plan. The BIM Execution Plan’s template is located on the web for download at: <http://www.wvs.state.wv.us/wvsba/>. The BIM Execution Plan will be reviewed and approved by the SBA within fourteen (14) days of submission. The BIM Execution Plan shall identify the entire Design Team including all consulting engineers and specialty consultants. The BIM Execution Plan also should include roles and responsibilities of the contractor(s) even if that party has not yet been identified. The BIM Execution Plan will be a part of the final bid documents.

2.3. IPD (Integrated Project Delivery) Methodology Plan

The Design Team shall submit to the SBA within thirty (30) days of contract award, an IPD Methodology Plan. The IPD Methodology Plan’s template is located on the web for download at: <http://www.wvs.state.wv.us/wvsba/>. The IPD Methodology Plan will be reviewed and approved by the SBA within fourteen (14) days of submission. The IPD Methodology Plan shall demonstrate a high level of integrated design while identifying project team members and how they will interact with each other during the project. This plan will include a critical path methodology on modeling procedures and model information validation. Examples of IPD Methodology plans are, but are not limited to: Reverse Phase Scheduling and Critical Path Modeling. The IPD Methodology Plan will be a part of the final bid documents.

2.4. Model Quality

The Design Team shall establish and use in-house modeling quality control guidelines and exchange protocols. Good BIM practices may include, but are not limited to:

- Use of element and component objects that embed the best practices of the firm.
- Maintenance of parametric linkages within the model at all times.

- The building envelope needs to be "air-tight" and correct to help support energy modeling activities and simulations.
- Use industry standard defined nomenclature for objects and spaces. (IFC, COBie)
- Use appropriate and interoperable viewing, checking, and output file formats

3. Design Team Deliverable Schedule and Milestones

The submittal schedule along with the milestones for any given project is listed below:

<u>Milestone</u>	<u>Deliverable</u>
<u>Conceptualization Phase</u>	<u>Architectural Massing Model</u>
<u>Schematic Design Phase</u>	<u>Architectural Model</u>
	<u>Initial Collision Report</u>
	<u>Square Foot Cost Analysis (Upon Request)</u>
<u>Design Development</u>	<u>Architectural Model</u>
	<u>MEP Model or Models</u>
	<u>Structural Model</u>
	<u>Discipline Collision Report</u>
	<u>System Cost Estimate</u>
	<u>Program Validation</u>
<u>Construction Documents</u>	<u>Architectural Model</u>
	<u>MEP Model or Models</u>
	<u>Structural Model</u>
	<u>Pre-Bid Collision Report</u>

The rest of the deliverables and milestones for the Design Team are shown later in the document.

4. Objectives and Application – Architecture and Engineering Design Professionals

Note: The Design Professionals are responsible for the development of all design models to Level 300 as outlined in the most current "BIMFORUM Level of Document Specification."

4.1. Pre-Design Phase (Conceptualization)

4.1.1. General

The Design Team is encouraged to use electronic programming and planning tools that integrate into their BIM Authoring software to capture early cost, schedule and program information during this phase.

4.1.2. Topographic and Property Line Surveying

Detailed requirements of what is to be included in surveying deliverables is managed by the Construction Manager in consultation with the Design Team on a project-by-project basis. Surveys shall be provided in electronic format and should include at minimum: 3D topographic information, paving and retaining walls. The file(s) shall be in a format that allows for importing into the Design Team's BIM authoring software.

4.1.3. Existing Conditions

The Design Team shall model all existing conditions needed to explain the extent of the construction work for alterations and additions projects. The extent of modeling beyond the affected areas and the level information to be included will be determined based on project needs. These requirements may be stated in the project program or discussed during the project kickoff meeting. The BIM Execution Plan should define the agreed upon scope of the modeling effort.

4.2. Schematic Design Phase (Criteria Design)

4.2.1. General

The Design Team may use any method to begin the design process but shall be using a BIM authored model(s) by completion of this phase. All information needed to describe the schematic design shall be graphically or alphanumerically included in and derived from these models. The SBA expects the Design Team to use analysis tools, static images and interactive 3D to describe the design concepts. Deliverables are required as stated in Section 2.3.

4.2.2. Square Foot Cost Analysis

The Design Team shall extract square foot information using BIM Authoring Software and other BIM integrated tools to support comparative costs analysis of options studied. Outputs shall be converted to spreadsheets and submitted as part of the design solution justification at end of this phase.

4.2.3. Program and Space Validation

The Design Team shall use the BIM Authoring software or other analysis tools to compare and validate stated program requirements (normally provided by the SBA and the County Board of Education) with the actual design solution. The following shall be developed automatically from the building information model:

- Assignable Areas (ASF) and Non-assignable Areas (NaSF) measured to inside face of wall objects and designated boundaries of areas.
- Gross Area (GSF) measured to the outside face of wall objects.

4.2.4. Initial Collision Report

4.2.4.1. General

The Design Team is to use automated conflict checking software for this phase of the work and shall be outlined in the BIM Execution Plan. The collision report should show any outstanding coordination issues between the Design Team members.

4.2.4.2. Level One Collisions

Level One Collisions are reported collisions that are considered critical to the design and construction process. These collisions have been assigned the highest priority and should be rectified within the model as soon as possible:

- Mechanical Ductwork and Piping vs. Ceilings
- Mechanical Ductwork and Piping vs. Rated Walls (For coordination of Dampers and other mechanical equipment needs)
- Mechanical Ductwork and Piping vs. Structure (Columns, Beams, Framing, etc.)
- All Equipment and their applicable Clearances vs. Walls
- All Equipment and their applicable Clearances vs. Structure

- Mechanical Equipment and Fixtures vs. Electrical Equipment and Fixtures
- Mechanical Ductwork and Piping vs. Plumbing Piping

4.2.4.3. Level Two Collisions

Level Two Collisions are reported collisions that are considered important to the design and construction process. These collisions have been assigned a greater priority and should be rectified during project meetings during design:

- Structure (Columns, Beams, Framing, etc.) vs. Specialty Equipment
- Structure (Columns, Beams, Framing, etc.) vs. Electrical Equipment, Fixtures and Devices
- Ductwork and Piping vs. Electrical Equipment, Fixtures, and Devices
- Ductwork vs. Floors

4.2.4.4. Level Three Collisions

Level Three Collision are reported collisions that while considered important to the correctness of the model will generally be changing on a regular basis throughout the design and construction process. These collisions have been assigned a lower level of priority and should be rectified before the phase submission of the models:

- Plumbing Piping vs. Electrical Equipment, Fixtures, and Devices
- Plumbing Piping vs. Mechanical Equipment, Fixtures, and Devices

4.2.4.5. All Other Collisions

While the above collisions have been assigned priorities other collisions will exist within the models. The collisions are not all ignorable nor should they be discarded. Some collisions will exist because the software available is not yet mature enough to support the modeling efforts. The intention should be to have a model that is as error and collision free as possible at each submission phase with documented proof that the design team addressed the prior collisions above.

4.2.5. Planning Tools

The Design Team is encouraged to use electronic programming and planning tools that integrate into BIM Authoring software to continue project development at this phase.

4.3. Design Development Phase (Detailed Design)

4.3.1. General

The Design Team shall continue development of their Building Information Model. Parametric links shall be maintained within the models to enable automatic generation of plans, sections, elevations, custom details and schedules as well as 3D views. All information needed to describe the “detailed design” shall be graphically or alphanumerically included in and derived from these models only, except for the Specifications. All documentation of the models happening outside of the BIM Authoring software, must be linked to all other documentation created creating one cohesive model from all sources of information. The quality of the models shall be as stated in Section 2.3.

4.3.2. Architectural Systems

The model should include the following architectural elements to a level that defines the design intent and accurately represents the design solution:

- Architectural Site plan (also see Civil Engineering section below)

- Paving, grades, sidewalks, curbs, gutters, site amenities and other elements typically included on enlarged scale site drawings in building vicinity.
- Existing conditions to the extent required by 3.1.4.
- Demolished items to the extent required by 3.1.4.
- New interior and exterior walls including but not limited to:
 - Doors, windows, openings
 - Interior and exterior soffits, overhangs, sun control elements
 - Parapets, screening elements
 - Architectural precast

All finishes need to be included within the wall type regardless of the thickness of the finish
- Floor, ceiling and roof systems including but not limited to:
 - Appropriate structural items listed below if not provided by the structural engineer and integrated into the architectural model for coordination and document generation.
 - Insulation, ceiling systems, and floor are to be included.
 - Roof, floor and ceiling slopes, if needed, shall be modeled.
 - Soffits, openings, and accessories will also be modeled.
- Elevators, stairs, and ramps (including railing systems)
- Fixtures, and equipment (if not provided by others and integrated into the architectural model for coordination and document generation.)
 - Specialty equipment (food service, medical, etc)
 - Model mechanical, electrical and plumbing items that require architectural space (toilets/sinks/etc), require color/finish selection (louvers, diffusers, etc.) or affect 3D visualization (lighting fixtures) unless provided by engineers.
- Clearance zones for access, door swings, service space requirements, gauge reading, and other operational clearance must be modeled as part of all equipment and checked for conflicts with other elements. These clearance zones should be modeled as invisible solids within the object.

The detail and responsibility to fulfill the above modeling requirements should be addressed fully within the BIM Execution Plan.

4.3.3. Structural Engineering

The model should include the following structural elements:

- Foundations such as:
 - Spread Foundations
 - Caisson Foundations
 - Pile Foundations
 - Mat Foundations
 - Load-bearing Wall Foundations
- Framing such as:
 - Steel Columns (with correct shape and size)
 - Steel Floor C-Joists
 - Open Web Joists
 - Joist Girders
 - Steel Beams (with correct shape and size)

- Precast Concrete Elements (Hollow Core Plank may be modeled as a slab unless the hollow core is being used for mechanical systems and coordination with those systems needs to occur)
- Cast-In-Place Concrete Elements
- Floors including overall extents and openings
- Model overall thickness of wood floor systems
- Wood Posts/Column
- All other Joists
- Wood Trusses
- Solid Wood or Laminated Beams
- Wall Types including openings
 - Load Bearing Walls – for calculations only (Masonry, Concrete, Cold-Formed Steel, and Wood)
 - Model overall thickness of Cold-Formed Steel and Wood Stud walls (individual members may be modeled at the Design Team's option)
 - Structural Foundation Walls including brick ledges
- These items may be modeled at the Design Team's option:
 - Steel reinforcing in concrete
 - Embeds in concrete
- Miscellaneous Steel
 - Angles for openings, deck bearing, etc.
 - Channels for mechanical units needed for coordination reviews between structural and mechanical
 - Lintels (unless considered a major member)

The detail and responsibility to fulfill the above modeling requirements should be addressed fully within the BIM Execution Plan.

4.3.4. HVAC Systems

The model should include the following HVAC elements at a minimum:

- Equipment
 - Fans, VAV's, compressors, chillers, cooling towers, air handlers etc.
- Distribution
 - Supply, return, exhaust, relief and outside air ductwork modeled to outside face dimension or duct insulation (whichever is greater)
 - Diffusers, grilles, louvers, hoods, radiant panels, perimeter units, wall units
- Pipes larger than 3/4" diameter, include any insulation in model. Unless otherwise noted and approved by the BIM Execution Plan.
- Clearance zones for access, door swings, service space requirements, gauge reading, and other operational clearance must be modeled as part of the HVAC equipment and checked for conflicts with other elements. These clearance zones should be modeled as invisible solids within the object.

The detail and responsibility to fulfill the above modeling requirements should be addressed fully within the BIM Execution Plan.

4.3.5. Electrical Systems

The model should include the following electrical elements at a minimum:

- Power and Telecommunications

- Interior and exterior transformers, emergency generators, and other equipment
- Main and distribution panels and switchgear including access clearances
- Main IDF's
- Feeders and conduit larger than 3/4" diameter. Unless otherwise noted and approved by the BIM Execution Plan.
- Outlets, switches, junction boxes
- Lighting
 - Permanently mounted lighting fixtures (moveable, plug-in fixtures need not be modeled as part of the electrical package unless needed for plug load calculations or for estimating purposes within a loose furnishings package. Should be discussed and agreed upon within the BIM Execution Plan)
 - Lighting Controls
 - Switches
 - Junction Boxes
- Fire Alarm and Security Systems
 - Input devices
 - Notification devices
 - Associated equipment and access clearances
 - Permanently mounted fixtures
- Building Controls
- Clearance zones for access, door swings, service space requirements, gauge reading, valve clearances and other operational clearance must be modeled as part of the electrical equipment for collision checking. These clearance zones should be modeled as invisible solids within the object.

The detail and responsibility to fulfill the above modeling requirements should be addressed fully within the BIM Execution Plan.

4.3.6. Plumbing and Fire Protection

The model should include the following plumbing and fire protection elements at a minimum:

- Waste and Vent Piping sized at and over 3/4" diameter, includes any insulation in model. Unless otherwise noted by the BIM Execution Plan.
 - Roof and floor drains, leaders, sumps, grease interceptors, tanks, water treatments and other major items.
- Supply Piping larger than 3/4" diameter, includes any insulation in model. Unless otherwise noted and approved by the BIM Execution Plan.
 - Domestic Booster Pumps
- Fixtures: sinks, toilet fixtures, water tanks, floor sinks
- Fire protection
 - Sprinkler lines larger than 3/4" diameter
 - Sprinkler heads, Fire Protection Pumps
 - Stand pipes, wall hydrants, fire department connections, risers, including valve clearances
- Clearance zones for access, service space requirements, gauge reading, valve clearances and other operational clearance must be modeled as part of the plumbing and fire protections system and checked for conflicts with other elements. These clearance zones should be modeled as invisible solids within the object.

The detail and responsibility to fulfill the above modeling requirements should be addressed fully within the BIM Execution Plan.

4.3.7. Civil Engineering

If a Civil BIM model is used it should include the following civil engineering elements at a minimum:

- Topography – 3D terrain of all site work as designed, including retaining walls. This model should include the site and surrounding areas that contribute to the site's drainage system or otherwise impact on the site. In most cases this will require that adjacent roadways be modeled.
- Landscaping elements: planting areas, such as raised planting beds and berms, parking islands, pools/ponds/other water features, terraces and other items not included elsewhere in the model.
- Stormwater management structures, pump stations, fueling systems, manholes and other major items that impact on the overall project understanding or which may become project design constraints. All items must be geo-referenced such that all elements can be viewed as an overlay in the building information model.

4.3.8. Discipline Collision Reports

See Section 4.2.4.

4.3.9. Program Space and Validation

The Design Team shall use the methodology described in section 4.2.3 to reconfirm that program requirements are met.

4.3.10. Other analysis and Checking Tools

The Design Team is encouraged to analyze the design using software that interacts with the model in order to refine load calculations, daylight, natural ventilation, acoustics, code issues, and design issues.

4.3.11. Systems Cost Estimating

The Design Team shall extract square foot and system information using BIM Authoring software and other BIM integrated tools to support comparative costs analysis of options studied. Outputs shall be converted to spreadsheets and submitted as part of the deliverable at the end of this phase.

4.4. Construction Documents Phase

4.4.1. General

The Design Team shall continue development of the models created in the Design Development Phase. Parametric links should be maintained within the respective models to enable automatic generation of all plans, sections, elevations, custom details, schedules and 3D views. All information needed to describe the "Execution documents" shall be graphically or alphanumerically included in and derived from these models only. Specifications are not required to be linked within the models. Model quality shall be as stated in Section 2.3.

4.4.2. Pre-Bid Collision Reports

See section 4.2.6.

Submit at 95% Construction Document Submittals

4.4.3. Program and Space Validation

The Design Team shall use the methodology described in section 4.2.4 to reconfirm that program requirements are met.

4.4.4. Other Analysis and Checking Tools

The Design Team is encouraged to analyze the design using software that interacts with the model in order to refine load calculations, daylighting, natural ventilation, acoustics, code issues and design issues.

4.4.5. Quantity Cost Estimating

The Design Team shall extract square quantity takeoff information using BIM Authoring Software and other BIM integrated tools to support comparative costs analysis of options studied. Outputs shall be converted to spreadsheets and submitted as part of the design solution justification at end of this phase.

4.5. Bidding Phase

4.5.1. General

The Design Team shall update the models with all addendum, accepted alternates and/or value enhancement proposals.

4.5.2. Contractor Bidding

Contractors who are bidding on this project are to review the BIM Execution Plan, the IPD Methodology Plan, and the SBA Building Information Modeling (BIM) Guidelines and Standards for Architects, Engineers, and Contractors before bidding. Contractor will follow the guidelines and requirements as set forth by the BIM Execution Plan and the IPD Methodology Plan.

4.5.3. SBA BIM Proficiency Matrix

Interested Contractors shall submit to the SBA prior to bid submittal, a SBA BIM Proficiency Matrix. The SBA BIM Proficiency Matrix template is located on the web for download at: <http://www.wvs.state.wv.us/wvsba/>. The SBA BIM Proficiency Matrix will be reviewed by the SBA to give an overview of the Contractor(s) BIM expertise and experience. The BIM Proficiency Matrix is scored by the Contractor (1 point per credit area) and should include examples of actual projects where BIM was applied. 3D CAD and SketchUp are not to be counted as BIM examples/expertise.

4.5.4. Construction Documents Deliverable

Ten days after the project is awarded for construction, the Design Team shall submit to the Construction Manager's/Contractor's Office one set of the Construction Document Deliverables. This deliverable shall consist of CAD files representing every sheet in the Bid Documents. Each sheet is to have its own unique file. Native word processing files (Word or WordPerfect) for all specifications shall also be included. Any addenda files in their native format shall also be included. Final payment for services rendered during the bidding phase is contingent upon approved acceptance of these documents.

5. Objectives and Application – Construction Team Members

Note: All Prime Contractors are responsible for the development of all construction models to Level 400 as outlined in the “BIMFORUM Level of Development Specification.” When applicable, models shall be forwarded to the construction manager for coordination and incorporation in to As-Built Drawings.

5.1. Construction Phase

5.1.1. General

The Design Team and/or Construction Manager is expected to continuously maintain and update the design intent model(s) with changes made from official Construction Change Directives and as-built mark-ups maintained on site by the Contractor(s) during construction. At an interval that is decided within the BIM Execution plan or at minimum once a month during construction the updated design intent model will be published and posted to the “cloud” based project collaboration site for each project.

Milestone	Deliverable
Construction Phase (Contractor)	Discipline Specific Coordination Models
	Shop Drawing Models (If Applicable)
	Fabrication Models
	As-Built Markups (3D dwf/pdf or 2D dwf/pdf format)
	Scheduling and Phasing Models
Construction Phase (Design Team)	Current As-Built Models for Each Discipline

5.1.2. BIM Execution Plan Review

The Contractor shall review the BIM Execution Plan with the Design Team/Construction Manager and submit any Addendums within thirty (30) days of contract award. The Design Team/Construction Manager will review and approve of any Addendum within fourteen (14) days of submittal.

5.1.3. Construction Models

5.1.3.1. General

These models could include fabrication models, coordination models, or shop drawing models. These models will now be referred to as the Construction Models.

5.1.3.2. Modeling Requirements

The Construction Models should reflect the exact geometric properties of the materials and/or systems being submitted. These models should reflect the exact material properties and performance data.

5.1.3.3. Deliverables

All Prime Contractors shall submit all models to the Construction Manager/Contractor in both a Navisworks format and a 3D DWF format. These models should be updated after each project coordination meeting or as changes occur in the field during construction.

5.1.4. Coordination Meetings

5.1.4.1. General

The contractor shall submit a plan to the Owner for review, prior to the start of construction that outlines the process for concurrent as-built documentation. Concurrency is mandated. Methods for recording as-built information are left to the discretion of the contractor. Potential options include traditional methods, and/or periodic laser scanning of completed or partially completed primary systems coordinated with the sequence of construction. Primary systems fall into two categories:

Primary Architectural Systems include, but may not be limited to: Partition systems with structure, flooring systems, major HVAC, piping, sewerage and /or conduit systems, partition systems with bulkheads, partition systems with expansion control, vertical transportation systems with primary engineering systems, horizontal ceiling systems with window openings, bulkheads, partitions, lighting, fire protection and HVAC outlet locations, exterior skin systems with window openings, structure, roof edge conditions, parapets, roof penetrations, and equipment locations.

Primary Engineering Systems include, but may not be limited to: structural framing, primary HVAC duct runs, primary fire protection main runs, primary electrical conduits (larger than 3/4" diameter), ceiling grid layouts, primary data, audio/visual, security and communication distribution systems (cable trays, etc.).

5.1.4.2. Projects With Active BIM Models at the Start of Construction

If BIM models are provided by the A/E at the start of construction, the contractor shall use those models in support of the objectives noted in 4.6.4.2.

5.1.4.3. Coordination With The Design Team and Owner

On no less than a biweekly basis the contractor shall include the project model manager, (architect's or other) in a coordination established for the purpose of assessing and / or executing FM/PM data transfers from the construction process into the model. The data transfer shall be coordinated with the Owner representative and the architect's model manager (when feasible) and be based on the FM/PM objectives as defined in the BIM Execution Plan and project program.

5.1.4.4. Deliverables

Coordination files should be created at all critical coordination milestones. This record format will document a coordinated section of the model, either by area of the building or between specific critical trades. The Collision report showing all applicable collisions as either Approved or Resolved along with the coordination file shall be uploaded together to "cloud" based project collaboration environment. A text document shall also be uploaded which describes and references the approved coordination file with respect to what has and has not been coordinated.

5.1.5. Collision Reports

The Contractor is to utilize software designed to provided collision reporting. Collision reports from the software should be published weekly in a standard XML, HTML, or Text format. These reports shall include the following information at a minimum:

- Description of Collision Report
- Date of Collision Report Run
- List of all Collisions detected, their status, and their proposed solution.

5.1.6. Concurrent As-Builts

5.1.6.1. General

The contractor shall submit a plan to the Owner for review, prior to the start of construction that outlines the process for concurrent as-built documentation. Concurrency is mandated. Methods for recording as-built information are left to the discretion of the contractor. Potential options include traditional methods, and/or periodic laser scanning of completed or partially completed primary systems coordinated with the sequence of construction. Primary systems include, but may not be limited to: structural framing, primary HVAC duct runs, primary fire protection main runs, primary electrical conduits (larger than 3/4" diameter), ceiling grids layouts.

5.1.6.2. Scheduling

The sequence of concurrent as-builts shall be recorded in the contractor's project schedule as a line item event.

5.2. Project Close-Out

<u>Milestone</u>	<u>Deliverable</u>
<u>Project Close-Out (Design Team)</u>	<u>As-Built Models</u>
	<u>Record Document Project Drawings (.pdf format)</u>
	<u>Record Document Drawings (3 sets on paper)</u>
<u>Project Close-Out (Contractor)</u>	<u>Scanned Field Set Drawings – As BUILTs (.tif format)</u>
	<u>O&M Manuals (paper/.pdf/excel format)</u>
	<u>Coordination Models in their native file format</u>

5.2.1. Design Team As-Built

The Design Team/Construction Manager shall update their respective models with contractor recorded changes (Record Documents). Republish record documents in paper, .dwg and .pdf formats.

5.2.2. Contractor Record Documents

The contractor shall submit one set of scanned field set drawings (Record Documents) in .tif format (at substantial completion).

5.2.3. O&M (Operations & Maintenance) Manuals

The Construction Manager/Contractor shall submit the following information to the _____ County Board of Education – two paper copies in binders of the O&M Manuals: (1) the make, model and serial number of each piece of installed equipment, (2) the location of any equipment installed in the building, and (3) manufacturer's documents including cut sheets, installation instructions, and recommend maintenance tasks, testing or other reports. An electronic format of the O&M manuals shall also be submitted along with the paper copies, the format shall be color PDF and native Excel files (at substantial completion).

5.2.4. Project As-Built and Record Document Deliverable Matrix

The following matrix outlines the various As-Built and Record Documents deliverables that are required on four different project categories with the associated responsible parties that will be in place as of April, 2015.

<u>Deliverable</u>	<u>Responsible Party</u>	<u>Quantity</u>	<u>Format</u>	<u>Due Date</u>
SBA BIM Proficiency Matrix	A/E, C	1 set	.xls/.pdf	Prior to Bid Submittal
SBA BIM Execution Plan	A/E, CM, C	1 set	.doc/.pdf	30 Days after contract award
Owner's Architectural Floor Plan – Interim As-Built Drawing	CM, C	1 set	.dwg	3 months prior to Substantial Completion
Owner's Architectural Floor Plan – Interim Record Drawing	A/E	1 set	.dwg	3 months prior to Substantial Completion
Telecommunications Drawings – Interim As-Built Drawings	CM, C	1 set	.dwg/.pdf	3 months prior to Substantial Completion
Telecommunications Drawings – Interim Record Drawing	A/E	1 set	.dwg/.pdf	3 months prior to Substantial Completion
Operations & Maintenance Manuals (O&M)	CM, C	2 sets	binders	At Substantial Completion
	CM, C	1 set	.pdf	At Substantial Completion
As-Built CAD Drawings – By Contractor	CM, C	1 set	.dwg	Prior to Final Payment
	CM, C	1 set	.pdf	Prior to Final Payment
	CM, C	3 sets	paper	Prior to Final Payment
As-Built BIM Model(s) – By Contractor, Construction Manager	CM, C	1 set	.rvt	Prior to Final Payment
As-Built BIM Model(s) – By A/E	A/E	1 set	.rvt	Prior to Final Payment
Record Document CAD Drawings – By A/E	A/E	3 sets	Paper	Prior to Final Payment
	A/E	1 set	.dwg	Prior to Final Payment
	A/E	1 set	.pdf	Prior to Final Payment

Responsible Parties

A/E = Owner's Representative (Owner's Representatives Architect/Engineers)

C = Contractor

CM = Construction Manager (On multiple-prime projects where a CM is used, the CM shall be responsible for the above listed items)

6. Ownership and Rights of Data

The Architect has ownership of all CAD files, BIM Models, and Facility Data developed for the Project through the completion of Construction. At the end of Construction, The SBA and/or the County Board of Education has ownership of all CAD files, BIM Models, and Facility Data developed for the Project. The SBA and/or County Board of Education may make use of this data following any deliverable.

7. Terminology

A

As-Built Documents

As-built documents are the collection of paper drawings or electronic drawings that typically reside in the contractor's onsite trailer that contain mark-ups, annotations, and comments about changes that have been made to the contract documents during the construction phase.

As-Built Model

Design Intent Models that have been updated throughout the construction process. These changes and updates have been communicated from the Contractor to the Design Team through the comments, annotations, and mark-ups from the As-Built Documents. These typically, but not always, are discipline specific models.

B

BIM Execution Plan (BEP)

A plan that is created from the School Building Authority's BIM Execution Plan Template that is to be submitted thirty (30) days after contract award. The BEP helps to define roles and responsibilities within a project team.

BIM Proficiency Matrix (BPM)

A matrix that was designed to measure the expertise of a firm as it relates to using a BIM process on projects. It will be used as one of the many selection criteria during the selection process.

C

Critical Path Modeling

Critical Path Modeling Is a method of demonstrating Integrated Project Delivery. It sets a plan within the design and construction teams that account for the activities of each discipline and how they interact with each other. It builds upon a critical path method for those activities, and allows the project team to schedule a complete project.

D

Design Team

The Design Team is considered to be the Architect and all of the consultants that provide design services for a project. These design services can be rendered at any time during the project.

.DWF

.DWF is a file type that was developed by Autodesk to be locked file for drawing sheets and model data. It can be used as a file transfer for estimating data, markups, and other third party software. It can be a combination of 3D and 2D information within the same file.

.DWG

.DWG is a native AutoCAD file format. It is a widely used file format for exchanging drawing information and 3D information to different programs. While not a database file type, it still has lots of uses for exchanging information.

I

IPD – Integrated Project Delivery

IPD describes a contractual relationship between Owner, Architect, and Contractor. It is a project delivery method that integrates people, systems, business structure and practices into a process that collaboratively harness the talents and insights of all participants to optimize project results, increase value to the owner, reduce waste, and maximize efficiency through all phases of design, fabrication, and construction.

IPD Methodology

IPD Methodology is a concept that uses methods from the IPD contracts, but does not have the contracts actually in place. It idealizes the concepts of integration of all team members to try and benefit the entire project.

IPD Methodology Plan

The IPD Methodology Plan is a declaration of how the project team will achieve the goals of an IPD Methodology. The plan can have several components. Two examples of an IPD Methodology Plan are: The completion of a Reverse Phase Schedule and Critical Path Modeling.

L

LEED

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System is a suite of standards for environmentally sustainable construction. Based on a point system, a building can achieve different ratings based on the performance of the design, construction, and operation of the building.

N

Navisworks

Navisworks is software that allows for the viewing of multiple model formats. This ability to “view” these files also allows for Navisworks to simulate the interaction between model files. That includes collision reporting, time lining, and coordination.

.NWC

An .NWC file is a Navisworks Cache File that is used by Navisworks to quickly read many other file types. All linked files in Navisworks have an .NWC file created automatically. In addition, Revit will export directly to the very small file type of .NWC for quick access by Navisworks.

.NWD

A much larger file than the .NWC, the .NWD file shows a snapshot in time of a Navisworks file. No linked files exist but all geometry is included.

.NWF

The .NWF file is a native Navisworks file which has all linked files, clashes, markups, animations, schedules, etc.

O

Open Architecture

Open Architecture is a concept of creating a framework that helps to describe a common set of rules for how a project is created. This includes what types of software, the interoperability of the information, and how the participants interact with each other. This is different than open standards because it promotes progress without anchoring forward thinkers to a rigid standard.

Owner's Architectural Floor Plans – Interim Record Documents

A complete current electronic CAD set of Owner's Architectural floor plan drawings with room names, room numbers, and room square footages indicated. The Owner's Representative shall not be relieved of responsibility when files are delivered if the files do not meet established requirements or are defective. These are to be submitted 3 months prior to Substantial Completion.

P

Phases

The phases of a project can be describe in two different ways as the adoption of IPD terminology starts to penetrate the BIM Execution Plan and the IPD Methodology Plan. Below is a list of the traditional names followed by the IPD name:

Pre-Design/Conceptualization Phase

Schematic Design/Criteria Design Phase

Design Development/Detailed Design Phase

Construction Documents/Implementation Phase

R

Record Drawing

The production of Record Drawings is the capturing of the As-Built Document's annotation, comments, and mark-ups in a drawing format only. This does not typically include the updating of any models.

Reverse Phase Scheduling

Reverse Phase Scheduling Is a method of demonstrating Integrated Project Delivery. It sets a plan within the design team that accounts for the activities of each discipline and how they interact with each other. It uses the completion date as a point to work backward from to schedule all of the project's activities.

.RVT

An .RVT file is a native REVIT file type. It is also the deliverable file format for all projects. This includes all of the Design Team's models.

S

SBIM – Simple Building Information Modeling

SBIM is a concept of producing a “light” model that can be used for simulating the building’s performance very early within the design process. SBIM is the process of modeling only the exterior envelope, and the interior volumes to produce a lean model that energy modeling software can use easily.

T

Telecommunications Drawings – Interim As-Built Documents

A complete current electronic CAD and PDF set of as-built Telecommunication drawing for Owner use in coordinating selection and procurement of telecommunications/data equipment.

SBA FORM 191

BUILDING INFORMATION MODELING (BIM)
PROFICIENCY MATRIX

School Building Authority of West Virginia

BUILDING INFORMATION MODELING (BIM) PROFICIENCY MATRIX

Category Number	A - Physical Accuracy of Model	B - IPD Methodology	C - Calculation Mentality	D - Location Awareness	E - Content Creation	F - Construction Data	G - As-Built Modeling	H - FM Data Richness
1	Basic Model Geometry A.1 Points Achieved: 0	Creation of A BIM Execution Plan B.1 Points Achieved: 0	Basic Model Information Export C.1 Points Achieved: 0	Site Orientation D.1 Points Achieved: 0	Geometrically Correct Content E.1 Points Achieved: 0	Quantity Takeoffs F.1 Points Achieved: 0	Post Bid Model Documentation G.1 Points Achieved: 0	Space Management Data H.1 Points Achieved: 0
2	Design Requirements A.2 Points Achieved: 0	Introduction of Structural and MEP Model B.2 Points Achieved: 0	IPD Integration C.2 Points Achieved: 0	Existing Environment Awareness D.2 Points Achieved: 0	Manufacturer's Specific E.2 Points Achieved: 0	Object Scheduling F.2 Points Achieved: 0	Coordination Modeling G.2 Points Achieved: 0	Asset Management H.2 Points Achieved: 0
3	Design Side Collision Detection A.3 Points Achieved: 0	Model Managers Role Defined B.3 Points Achieved: 0	Interdisciplinary Calculations C.3 Points Achieved: 0	Global Accuracy D.3 Points Achieved: 0	Design Intent E.3 Points Achieved: 0	Material Procurement F.3 Points Achieved: 0	Recapturing Design Intent G.3 Points Achieved: 0	Manufacturer Specific Information H.3 Points Achieved: 0
4	Model Accuracy Innovation A.4 Points Achieved: 0	IPD Methodology Innovation B.4 Points Achieved: 0	Calculations Innovation C.4 Points Achieved: 0	Location Innovation D.4 Points Achieved: 0	Content Innovation E.4 Points Achieved: 0	Construction Innovation F.4 Points Achieved: 0	As-Built Innovation G.4 Points Achieved: 0	FM Data Innovation H.4 Points Achieved: 0

BIM Maturity		BIM Maturity Score		BIM Standard	
Category	Points Achieved	0		BIM Score Between 0-12	Working Towards BIM
A - Physical Accuracy of Model	0			BIM Score Between 13-18	Certified BIM
B - IPD Methodology	0			BIM Score Between 19-24	Silver
C - Calculation Mentality	0			BIM Score Between 25-28	Gold
D - Location Awareness	0			BIM Score Between 29-32	Ideal
E - Content Creation	0				
F - Construction Data	0				
G - As Built Modeling	0				
H - FM Data Richness	0				

A-Physical Accuracy of Model			Examples	Illustration
A.1	Basic Model Geometry		Project "A" was completed using BIM software. The Architectural model was created with all of the walls, roofs, floors, windows, and doors as model components. The majority of the components used were out of the box, default components.	
	Pt Earned 0	Project Name: Size: Cost: Description:		
A.2	Design Requirements		Project "C" used doors that had invisible solids that were based on the building codes that returned collisions when objects touched the invisible solids within the door.	
	Pt Earned 0	Project Name: Size: Cost: Description:		
A.3	Design Side Collision Detection		Project "A" had scheduled collision reports run against the architectural, structural, and MEP models. These collision reports were then addressed at the next project meeting and removed or fixed within the model.	
	Pt Earned 0	Project Name: Size: Cost: Description:		
A.4	Model Accuracy Innovation			
	Pt Earned 0	Project Name: Size: Cost: Description:		

B-IPD Methodology			Examples	Illustration
B.1 Pt Earned 0	Creation of A BIM Execution Plan		Project "A" used a plan that was developed by the project team that showed how information was being shared and at what time of the project it was to be shared. It also defined the level of development for each of the objects within the different models.	
	Project Name:			
	Size:			
	Cost:			
	Description:			
B.2 Pt Earned 0	Introduction of Structural and MEP Model		Project "A" included a Structural and MEP model that allowed for the integrated design of the project. The models were used to coordinate information between disciplines.	
	Project Name:			
	Size:			
	Cost:			
	Description:			
B.3 Pt Earned 0	Model Managers Role Defined		Project "A" has all members of the design team assigning a model manager to the project. This role is the single point of contact for all model issues, whether validation of information, transfer of information, or support.	
	Project Name:			
	Size:			
	Cost:			
	Description:			
B.4 Pt Earned 0	IPD Methodology Innovation			
	Project Name:			
	Size:			
	Cost:			
	Description:			

C-Calculations Mentality			Examples	Illustration
C.1	Basic Model Information Export (Discipline)		Project "A" has program calculations intended to verify the Program of Requirements as it pertains to square footage. There is calculation methodologies built in to the schedule to return a plus or minus for total program square footage.	
	Pt Earned 0	Project Name: Size: Cost: Description:		
C.2	IPD Integration		Project "B" has an architectural model that helps to dictate the sizing of mechanical systems within the MEP model. These two models are also used to run energy simulation without the duplication of information from either model.	
	Pt Earned 0	Project Name: Size: Cost: Description:		
C.3	Interdisciplinary Calculations		Project "B" also has a MEP model that responds to changes within the architectural model. As interior walls are moved within the architectural model, the MEP model will resize the rooms requirements for energy.	
	Pt Earned 0	Project Name: Size: Cost: Description:		
C.4	Calculations Innovation			
	Pt Earned 0	Project Name: Size: Cost: Description:		

D-Location Awareness			Examples	Illustration
D.1	Site Orientation		Project "A"'s model was generated on top of a civil survey that conveyed the proper location of the site. It also had defined project north and actual north layouts within the project.	
	Project Name:			
	Size:			
	Cost:			
D.2	Existing Environment		Project "A" had all of the existing topographical information modeled.	
	Project Name:			
	Size:			
	Cost:			
D.3	Global Accuracy		Project "A" had the proper latitude, longitude, and altitude defined within the architectural model. The coordinates of the model were then shared within all other models that were created from it. The coordinates of the model are also able to be shared outside of the design software with software such as energy modeling software.	
	Project Name:			
	Size:			
	Cost:			
D.4	Location Innovation			
	Project Name:			
	Size:			
	Cost:			

E-Content Creation			Examples	Illustration
E.1 Pt Earned 0	Geometrically Correct Content Project Name: Size: Cost: Description:		Project "A" had content created for it that was three dimensions and contained the proper size and shape of the component.	
	E.2 Manufacturer's Specific Project Name: Size: Cost: Description:		Project "B" had content that was created specifically for this project based on manufacture's cut sheets. It contained for the most part the manufacture's model number, serial number, and size.	
	E.3 Design Intent Project Name: Size: Cost: Description:		Project "B" had engineering content that changed size as the rooms and spaces changed during design. The components were also smart enough to return errors when industry norms were not being address when the content resized.	
	E.4 Content Innovation Project Name: Size: Cost: Description:			

F-Construction Data			Examples	Illustration
F.1	Quantity Takeoffs		Project "A"'s model was used to provide accurate model data for quantity takeoff. The numbers were used to produce estimates at different phases of the project. The final cost estimate was proven after bid to be within .2% accurate of the quantities.	
	Project Name:			
	Size:			
	Cost:			
F.2	Object Scheduling		Project "B" has schedules directly within the model that show quantities of objects and materials. Those schedules were exported using IFC standards and brought into construction estimating software for inclusion with the construction estimate.	
	Project Name:			
	Size:			
	Cost:			
F.3	Material Procurement		Project "C" had structural steel that was directly ordered from the structural model in conjunction with the architectural model. Mechanical ductwork was also ordered directly from the model using a 3D CAD format as a transfer medium.	
	Project Name:			
	Size:			
	Cost:			
F.4	Construction Innovation			
	Project Name:			
	Size:			
	Cost:			

G-As Built Modeling			Examples	Illustration
G.1 Post Bid Model Documentation Pt Earned 0	Project Name: Size: Cost: Description:		Project "A" has all of the post bid documentation existing within the model file itself. All RFI's and addenda were generated from the model.	
	G.2 Coordination Modeling Project Name: Pt Earned 0		Project "B" was used to generate the coordination models for the different trades. The coordination models along with the design models were used in the field for coordination and job meetings.	
	G.3 Recapturing Design Intent Project Name: Pt Earned 0		Project "B" from the above example then had the changes from the coordination models placed back into the design models for the architectural, structural, and MEP models. The design models were then checked for accuracy in calculations and sizing.	
	G.4 As-Built Innovation Project Name: Pt Earned 0			

H-FM Data Richness			Examples	Illustration
H.1 Pt Earned 0	Space Management Data Project Name: Size: Cost: Description:		Project "A" contained space objects that contained information on the occupants of each room, what department they worked for, the technology requirements, and the square footage for that space. It also contained engineering information regarding sizing of equipment and code requirements.	
	Asset Management Project Name: Size: Cost: Description:		Project "B" included schedules for all assets over \$5,000 and had a tagging system in place for all of those assets. Those assets were all made as components within the model.	
	Manufacturer Specific Information Project Name: Size: Cost: Description:		Project "C" had content that was created directly from the manufacturer's cut sheets along with including name, serial number, and were accurately model to represent the actual installed equipment or furnishings. All content was replaced after bid to reflect the content that was actually purchased.	
	FM Data Innovation Project Name: Size: Cost: Description:			

SBA FORM 192

BUILDING INFORMATION MODELING (BIM)
EXECUTION PLAN

School Building Authority of West Virginia
BUILDING INFORMATION MODELING (BIM) EXECUTION PLAN

By signature below, this BIM Execution Plan is herewith adopted and incorporated into the Agreement, dated _____, for Professional Design Services between _____ and the _____ County Board of Education.

County Board of Education	Date
Construction Manager	Date
Architect	Date
Civil Engineer	Date
Structural Engineer	Date
Mechanical Engineer	Date
Electrical Engineer	Date
Plumbing Engineer	Date
Additional Party as Needed	Date
Additional Party as Needed	Date

1. Overview

The intent of this BIM Execution Plan is to provide a framework that will let the owner, architect, engineers, and construction manager deploy building information modeling (BIM) technology and best practices on this project faster and more cost-effectively. This plan delineates roles and responsibilities of each party, the detail and scope of information to be shared, relevant business processes and supporting software. All text that is italicized is for illustrative purposes only and should not be construed as a formalized response to this execution plan.

2. Project Initiation

This section defines the Core Collaboration Team, the project objectives, project phases, and overall communication plan throughout the project's phases.

A. Project Information

B. Core Collaborative Team

C. Project Goals and Objectives

D. Collaborative Process Mapping (Coordination Plan)

	<u>Owner</u>	<u>Architect</u>	<u>Consulting Engineers</u>	<u>Construction Manager/ Contractor</u>	<u>Commissioning Agent</u>
<u>Conceptualization/ Program of Requirements</u>	<u>Provide requirements related to form, function, cost and schedule</u>	<u>Begin design intent model with massing concepts and site considerations</u>	<u>Provide feedback on initial building performance goals and requirements</u>	<u>Provide feedback on initial building cost, schedule, and constructability</u>	<u>Provide feedback on advanced commissioning requirements</u>
<u>Criteria Design/ Schematic Design</u>	<u>Provide design review and to further refine design requirements</u>	<u>Refine Design Model with new input from Owner, Consulting Engineers, and Construction Manager. Conduct Reverse Phase Scheduling Activity</u>	<u>Provide schematic energy modeling and system iterations as Design Model continues to develop</u>	<u>Provide design review and continued feedback on cost, schedule, and constructability</u>	<u>Refine advanced commissioning requirements</u>
<u>Detailed Design/Design Development</u>	<u>Department design reviews. Final approval of project design and metrics</u>	<u>Continue to refine Design Model. Introduce consultants models and perform model coordination</u>	<u>Create Discipline specific Design Models. Create detailed energy model.</u>	<u>Create Construction Model for simulation, coordination, estimates, and schedule</u>	<u>Review design model for all disciplines</u>
<u>Implementation Documents/ Construction Documents</u>		<u>Finalize Design Model, Construction Documents, and Specifications</u>	<u>Finalize Discipline specific Design Models and Final Energy Model</u>	<u>Enhance Construction Model and perform final estimate and final construction schedule</u>	<u>Review design model for all disciplines</u>
<u>Agency Coordination/ Final Buyout</u>	<u>Assist with code compliance negotiations and permitting</u>	<u>Work with agencies on code compliances, plan acceptance and respond to construction RFI's</u>	<u>Work with agencies on code compliances, plan acceptance and respond to construction RFI's</u>	<u>Manage bid process, project buyout, and preconstruction RFI's</u>	
<u>Construction</u>	<u>Monitor construction and give input to construction changes and issues</u>	<u>Perform contract administration, update Design Model with changes</u>	<u>Assist with RFI's and update Discipline specific Design Models, field conditions, and commissioning</u>	<u>Manage construction with subcontractors and suppliers, inform changes to Design Model</u>	<u>Observe construction and perform advanced commissioning.</u>

E. Project Phases / Milestones

<u>Conceptualization/ Program of Requirements Phase</u>			<u>Owner, Architect, Consulting Engineers, CM</u>
<u>Criteria Design/Schematic Design Phase</u>			<u>Owner, Architect, Consulting Engineers, CM, Commission Agent</u>
<u>Detailed Design/ Design Development Phase</u>			<u>Owner, Architect, Consulting Engineers, CM, Commission Agent</u>
<u>Implementation Documents/ Construction Documents Phase</u>			<u>Owner, Architect, Consulting Engineers, CM</u>
<u>Agency Coordination/Final Buyout Phase</u>			<u>Owner, Architect, Consulting Engineers, CM</u>
<u>Construction Phase</u>			<u>Owner, Architect, Consulting Engineers, CM, Commission Agent</u>

3. Modeling Plan

Advance planning around which models will need to be created during the different phases of the project, who will be responsible for updating models and distributing them, and predetermining the content and format of models as much as possible will help your project run more efficiently and cost-effectively during every phase.

A. Model Managers

Each party—such as the owner, architect, contractor, or sub-consultants—that is responsible for contributing modeling content should assign a model manager to the project. The model manager from each party has a number of responsibilities. They include, but are not limited to:

- Transferring modeling content from one party to another
- Validating the level of detail and controls as defined for each project phase
- Validating modeling content during each phase
- Combining or linking multiple models
- Participating in design review and model coordination sessions
- Communicating issues back to the internal and cross-company teams
- Keeping file naming accurate
- Managing version control
- Properly storing the models in the collaborative project management system

B. Planned Models

In the table below, outline the models that will be created for the project. List the model name, model content, project phase when the model will be delivered, the model's authoring company, and the model authoring tool that will be used. For models that will not be used or created in your project, just leave the row blank, and add rows for model types you anticipate needing that are not already listed. The first line offers an example.

<u>Architectural Model</u>	<u>Architectural objects, code information</u>	<u>Conceptualization / Program of Requirements Phase</u>		<u>Autodesk Revit Architecture</u>
<u>Civil Model</u>	<u>Topography, site utilities to within 5 feet of perimeter, hard and soft surfaces, other site objects</u>	<u>Criteria Design / Schematic Design Phase</u>		<u>Autodesk Civil 3D</u>
<u>Structural Model</u>	<u>Structural steel members, bearing and shear walls, analytical structural model, lintels</u>	<u>Criteria Design / Schematic Design Phase</u>		<u>Autodesk Revit Structure</u>
<u>Mechanical Model</u>	<u>Mechanical systems, equipment, load information, utilities within 5 feet of building perimeter</u>	<u>Criteria Design / Schematic Design Phase</u>		<u>Autodesk Revit MEP</u>
<u>Electrical Model</u>	<u>Electrical systems, equipment, load information, utilities within 5 feet of building</u>	<u>Criteria Design / Schematic Design Phase</u>		<u>Autodesk Revit MEP</u>

	<u>perimeter</u>			
<u>Plumbing Model</u>	<u>Plumbing systems, equipment, load information, utilities within 5 feet of building perimeter</u>	<u>Criteria Design / Schematic Design Phase</u>		<u>Autodesk Revit MEP</u>
<u>Construction Model</u>	<u>Scheduling information, sequencing information</u>	<u>Criteria Design / Schematic Design Phase</u>		<u>Autodesk Navisworks Manage</u>
<u>Estimate Model</u>	<u>Costing data, quantity takeoffs</u>	<u>Criteria Design / Schematic Design Phase</u>		<u>Autodesk Navisworks Manage</u>
<u>Coordination Model</u>	<u>Design Intent Models and Fabrication information</u>	<u>Construction</u>		<u>Autodesk Navisworks Manage</u>

C. Model Components

As an aid to usability during later phases of your project, specify what the content, level of detail, and file naming structure of your models should look like.

1. File Naming Structure

Determine and list the structure for model file names. The first line offers an example.

<u>File Names for Models Should Be Formatted as:</u>	
<u>DISCIPLINE-Project Number-Building Number.rvt (example: ARCH-20090001-BL001.rvt)</u>	
<u>Architectural Model</u>	<u>ARCH-</u>
<u>Civil Model</u>	<u>CIVIL-</u>
<u>Mechanical Model</u>	<u>MECH-</u>
<u>Electrical Model</u>	<u>ELECT-</u>
<u>Plumbing Model</u>	<u>PLUMB-</u>
<u>Food Service Model</u>	<u>KITCHEN-</u>
<u>Structural Model</u>	<u>STRUCT-</u>
<u>Construction Model</u>	<u>CONST-</u>
<u>Estimate Model</u>	<u>COST-</u>
<u>Coordination Model</u>	<u>COORD-</u>

2. Precision and Dimensioning

Models should include all appropriate dimensioning as needed for design intent, analysis, and construction. With the exception of the exclusions listed below, the model will be considered accurate and complete. In the table below, enter which items' placement will not be considered entirely accurate and should not be relied on for placement or assembly.

<u>Architectural –</u>
<u>MEP –</u>
<u>Civil –</u>
<u>Construction –</u>
<u>Food Service –</u>
<u>Structural –</u>

3. Modeling Object Properties

The level of property information in the modeling objects and assemblies depends on the types of analysis that will be performed on the model. See Section IV-A (Analysis Models) for the types of analysis that will be performed.

4. Modeling Level of Detail

Specify the level of detail in your models below. The level of detail can be defined by exclusions and/or by object size.

1. Exclusions: List the objects that will be excluded from the model in the table below.

<u>Architectural –</u>
<u>MEP –</u>
<u>Civil –</u>
<u>Construction –</u>
<u>Food Service –</u>
<u>Structural –</u>

2. Size: Any object smaller than [TBD] will not be included in the model.

D. Detailed Modeling Plan

For each phase of the project, the project team should create a detailed modeling plan, which should include the modeling objectives, models included, and the roles and responsibilities of model contributors. Model objectives and model manager roles and responsibilities by phase are outlined below.

1. Conceptualization / Program of Requirements Phase

1. Objectives: Provide initial design based on conceptual parameters established by the owner, ensure that code and zoning requirements meet project objectives, and establish a 3D reference point of model coordination. Provide Program of Requirements and all space considerations for reference in the model.
2. Model Roles: A model may or may not take shape during the Conceptualization / Program of Requirements phase. If a model is created, its role will be to depict the visual concept and general layout of the project along with space requirements.
3. Responsibilities: The architect's designated model manager will establish a baseline model to be used as the basis for other models. During the Conceptualization / Program of Requirement phase, the model managers from all parties will establish modeling standards and guidelines.

2. Criteria Design / Schematic Design Phase

1. Objectives: Provide spatial design based on input from the Conceptualization / Program of Requirement phase; provide initial design for building system and attributes including architectural, structural, and MEP; identify initial coordination issues between building systems; receive input from suppliers and fabricators regarding system cost, placement, fabrication and scheduling.
2. Model Roles: The Architectural model will show the general design and layout of the building structure and act as the baseline for all other subsystem designs, such as MEP and Structural models. The subsystem designs will be used to show the initial selection and layout of building components. The Architectural model and Consulting Engineers' model will be used to inform the Energy Models.
3. Responsibilities: Once the baseline conceptual structure has been created, the architect's model manager will send the model to the sub-consultants so they can develop their designs. The consulting engineers' designated model managers will audit and deliver the completed models to the architect's model manager. The architect's model manager will review the models to ensure compliance with the phase requirements. Once the models meet the requirements, the architect's model manager will link or combine cross-disciplinary models. The architect's model manager should coordinate with the consulting engineers' model managers to eliminate duplicate or redundant objects.

3. Detailed Design / Design Development Phase

1. Objectives: Provide final design of building and building systems; resolve coordination issues between building systems; provide a Construction model capable of analyzing schedule, cost, and constructability.
2. Model Roles: The Architectural model will continue to act as the baseline for all other subsystem designs. The subsystem designs will be modified accordingly to represent the enhanced design.
3. Responsibilities: The consulting engineers' model managers will use the Architectural model to revise and complete their designs. Once the models are complete, the consulting engineers' model managers will deliver their models to the architect's model manager. The architect's model manager will review the models to ensure compliance with the phase requirements. The architect's model manager will provide the construction manager's model manager with the Architectural model and the Consulting Engineers' models.
4. Implementation Documents / Construction Documents Phase
 1. Objectives: Finalize design of the building and all building systems, prepare documentation for agency review, and provide construction modeling that highlights constructability, trade coordination, and fabrication.
 2. Model Roles: All design models will be used to reflect the design. The models will then be used to generate the contract documents. The Construction model will be used primarily for estimating, scheduling, and constructability analysis.
 3. Responsibilities: The architect's and engineers' model managers will prepare contract documents for agency review based on the Design Intent models.
5. Agency Coordination / Bidding Phase
 1. Objective: Revise Design Intent models based on agency feedback on all models.
 2. Model Roles: The design models will be adjusted to reflect agency feedback. The Construction model will be enhanced and further used for estimating, scheduling, construction sequencing, trade coordination, and constructability analysis.
 3. Responsibilities: The architect's model manager will communicate agency comments back to the design team. The consulting engineers' model managers will revise their design models accordingly and submit them back to the architect. The architect's model manager will provide the construction manager's model manager with the Architectural model and the Consulting Engineers' models.
6. Construction

1. Objectives: Update Architectural and Consulting Engineers' models based on submittals, RFIs, or owner-directed changes; maintain the Construction model based on construction activities. The construction team will submit RFIs and submittals through the collaborative project management system.
2. Model Roles: The Architectural and Consulting Engineers' models will be revised throughout construction, based on owner directives and As Built comments. The models will always reflect the revised contract documents. The Construction model will be used for scheduling analysis, construction sequencing, and trade coordination.
3. Responsibilities: The architect's model manager will work with their consulting engineers to answer the RFIs and submittals and adjust the models accordingly. The construction manager's model manager will update the Construction model and will work with the architect to develop the Architectural and Consulting Engineers' models.

7. Facility Management

1. Objective: Use the Architectural and Consulting Engineers' models for facility management, with the possibility of use in ongoing operations.
2. Model Roles: The Architectural and Consulting Engineers' models will be used to represent the actual assembly of the building from construction.
3. Responsibilities: The architect will deliver the models at the end of the project to the owner.

4. Analysis Plan

By listing and specifying what types of analysis your project will likely require at the beginning of your project, you can ensure that your key models will include the relevant information, making the analysis easier and more efficient.

A. Analysis Models

Your project's scope of work may require performing certain kinds of analysis, such as the ones listed below, based on existing or specially created model(s). In most cases the quality of the analysis depends on the quality of the original model that the analysis is derived from. Therefore the project team member performing the analysis should clearly communicate the analysis requirements to the original model authoring team member.

1. Quantity Takeoff Analysis

The objective of quantity takeoff analysis is to use modeling property data to automate or simplify the quantity takeoff process. This information from the quantity takeoff tool can then be imported or tied to cost-estimating software. In order for the quantity takeoff process to work seamlessly, the original modeling author will need

to include the relevant property information in the design and an agreement of modeled content communities to estimate.

2. Scheduling Analysis

Scheduling analysis lets the project team use the project model to analyze the timeline and sequencing for construction. This information can then be used to modify or adjust the construction schedule. Tools currently exist that allow project team members to visualize the construction over time, but no systems exist yet that interact automatically with scheduling tools.

3. Visualization Analysis

Visualization tools let the project team view the design or construction of the project in 3D, giving them a more accurate perspective of the end product.

4. LEED Rating/Energy Analysis

LEED (leadership in energy and environmental design) Rating/Energy Analysis tools help the project team evaluate the impact of design decisions on sustainability and energy consumption. This analysis model is usually based on the main Architectural model, after which material and building system inputs can be used to evaluate the project's sustainability and energy consumption.

5. Structural Analysis

Structural analysis tools use the model to analyze the building's structural properties. Structural analysis programs typically use the finite element method (FEM) to measure the stresses on all structural elements of the design. For structural analysis to work seamlessly, the original structural modeling tool needs to be compatible with the structural analysis tool, and the original structural model property data must include information about the structural elements.

B. Detailed Analysis Plan

For each type of analysis that may be performed for your project, list the models used for the analysis, which company will perform the analysis, the file format required for the analysis, the estimated project phase, and the analysis tool that will be used. If there are other special instructions associated with the analysis, mark the Special Instructions column and list the details in the Special Instructions table in the next section.

<u>Analysis Type</u>	<u>Model</u>	<u>Company</u>	<u>File Format</u>	<u>Special Instructions</u>
<u>Visualization</u>	<u>Architectural Model</u>			<u>.rvt/.nwf</u>
<u>Structural</u>	<u>Structural Model</u>			<u>.rvt/?</u>
<u>Quantity Takeoff</u>	<u>All Models</u>			<u>.rvt</u>
<u>Scheduling /4D</u>	<u>All Models</u>			<u>.rvt/.nwf/?</u>
<u>Cost Analysis /5D</u>	<u>All Models</u>			<u>.rvt/.nwf</u>
<u>Energy/LEED</u>	<u>Architectural Model</u>			<u>.rvt/.GBXml</u>
<u>Daylight/Lighting</u>	<u>Architectural Model</u>			<u>.rvt/.FBX</u>

C. Clash Detection Process

Clash detection analysis is done to check for interferences between the designs of one or many models. To reduce change orders during construction, clash detection should be performed early and continue throughout the design process. For clash detection to work properly your project's models need to have a common reference point and they must be compatible with the clash detection tool.

5. Concurrent As-Built Modeling Plan

As-built modeling will be a collaborative effort between the Architect and consultants and the construction team. During the construction process, the design team will incorporate changes triggered by requests for information (RFIs), architect's supplemental instructions (ASIs) and change orders in into the Architectural and Consultant models. At specified dates during the construction process, the construction team will provide the design team with necessary changes due to shop drawings, coordination drawings and change orders. As required, the completed form of the construction will also be verified at these specified dates using laser scanning. The design team will then incorporate the changes reported by the construction team into the Architectural and Consultant models. At the end of construction, it will be the updated Architectural and Consultant models that are used for facility management.

A. Construction Capture Schedule

<u>Construction Capture 1</u>		<u>Construction team, Design Team, [Laser Scanning]</u>
<u>Construction Capture 2</u>		<u>Construction Team, Design Team, [Laser Scanning]</u>
<u>Construction Capture 3</u>		<u>Construction Team, Design Team, [Laser Scanning]</u>
<u>Construction Capture 4</u>		<u>Construction Team, Design Team, [Laser Scanning]</u>

6. Collaboration Plan

Creating a collaboration plan early on—including defining permissions and file structures—will help team members efficiently communicate, share, and retrieve information throughout the project. It lets you get the most out of your collaborative project management system, saving time and increasing your ROI.

A. Document Management

A Collaborative Project Management system will have to be researched and agreed upon prior to start of project. The requirements of the Collaborative Project Management system are:

- Be web-based or web-enabled—so all relevant, authorized project team members can remotely access it.
- Accommodate different permissions profiles for different project team members.
- Allow communication through either internal messaging or system-generated email.

- Include document management capability that lets the project team create a customized and permission-based folder structure which offers upload, download, and version control capabilities.
- Include a viewer that allows the project team to view .dwg, .dgn, .plt, .dwf, .pdf, .tif, .jpg, .doc, and .xls files.
- Include construction management capabilities for the tracking of requests for information (RFIs), submittals, design review, meeting minutes, daily reports, issues, correspondence, and transmittals.
- Able to interact with the file folder structure in the document management section.
- Able to automatically accept raw data from the clash detection tool.
- Include bid management capability, and this bid management solution should allow the project team to post the contract drawings and specifications for viewing in the form of a Plan Room.
- Allow for cost management controls, and this cost management capability should include budgeting, contracting, change orders processing, and payments applications tracking.
- Allow the project team to run reports based on the information in the system.
- Allow for the workflow and routing throughout the document, construction and cost management components of the solution.

B. Document Management Solution

A document management solution will be provided by the owner. The document management solution that will be used is called [TBD]. The architect will setup the site and set up all permissions for the site. The architect will lead a training session for the entire project team on how to use the site. The site will be maintained from the signing of this document until the occupation of the building.