WEST VIRGINIA
SECRETARY OF STATE
KEN HECHLER
ADMINISTRATIVE LAW DIVISION

Form #5

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Sep 28 | 14 PM '95

OFFICE OF WEST VIRGINIA SECRETARY OF STATE

NOTICE OF AGENCY ADOPTION OF A PROCEDURAL OR INTERPRETIVE RULE OR A LEGISLATIVE RULE EXEMPT FROM LEGISLATIVE REVIEW

AGENCY: School Building Authority of WV TITLE NUMBER: 164

CITE AUTHORITY: §18-9D-1-16

RULE TYPE: PROCEDURAL x INTERPRETIVE _____

EXEMPT LEGISLATIVE RULE _____
CITE STATUTE(s) GRANTING EXEMPTION FROM LEGISLATIVE REVIEW

_____

AMENDMENT TO AN EXISTING RULE: YES x , NO ____

IF YES, SERIES NUMBER OF RULE BEING AMENDED: Series 1

TITLE OF RULE BEING AMENDED: Guidelines and Procedures Handbook for the School Building Authority of West Virginia

IF NO, SERIES NUMBER OF NEW RULE BEING ADOPTED: _____

TITLE OF RULE BEING ADOPTED: _____

_____

THE ABOVE RULE IS HEREBY ADOPTED AND FILED WITH THE SECRETARY OF STATE. THE EFFECTIVE DATE OF THIS RULE IS October 29, 1995

Mary Lou Thomas

TITLE 164
PROCEDURAL RULES
SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

SERIES 1
GUIDELINES AND PROCEDURES HANDBOOK
FOR THE SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

§164-1-1. General.

1.1. Scope. - This legislative rule establishes the procedures related to the operations of the School Building Authority of West Virginia.

1.2 Authority. - WV Code §18-9D-1-16.

1.3. Filing Date. - September 28, 1995.

1.4. Effective Date. - October 29, 1995

§164-1-2. Incorporation of School Building Authority of West Virginia Revised Policy and Procedures Handbook.

2.1. The Revised Guidelines and Procedures Handbook for the School Building Authority of West Virginia is hereby incorporated into this rule by reference.

ED. NOTE: A COPY OF THE HANDBOOK MAY BE REVIEWED OR OBTAINED FROM THE SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA OR THE SECRETARY OF STATE'S OFFICE.

School Building Authority of West Virginia
Clacy E. Williams, Executive Director

2300 Kanawha Boulevard, East • Charleston, West Virgina 25311-2306 • Office Number (304)558-2541 • FAX Number (304)558-2539

MEMORANDUM

TO: Judy Cooper, Director of Administrative Law Division
Secretary of State's Office

FROM: Clacy Williams, Executive Director

SUBJECT: Revised Guidelines and Procedures Handbook for the School Building Authority of West Virginia

DATE: September 28, 1995

Enclosed you will find a completed Notice of Agency Adoption of a Procedural Rule form and also the General Section.

No comments were received during the 30-day public comment period and no revisions were made to the handbook that was delivered to your office on August 22, 1995.

If additional information is needed, please call me at 558-2541.

CW:

Enclosure

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5A 6A a: c:

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OCT 23 11 11 AM '95

OFFICE OF WEST VIRGINIA SECRETARY OF STATE

(Plus all the volunteer help we can get)

STATE OF WEST VIRGINIA
SECRETARY OF STATE

Building 1, Suite 157-K
1900 Kanawha Blvd., East
Charleston, WV 25305-0770

SBA
OCT 19 1995
RECEIVED

TO: Dr. Clacy Williams

AGENCY: School Bldg. Authority of WV

FROM: JUDY COOPER, DIRECTOR, ADMINISTRATIVE LAW DIVISION

DATE: October 17, 1995

THE ATTACHED RULE FILED BY YOUR AGENCY HAS BEEN ENTERED INTO OUR COMPUTER SYSTEM. PLEASE REVIEW, PROOF AND RETURN IT WITH ANY CORRECTIONS. IF THERE ARE NO CORRECTIONS, PLEASE SIGN THIS MEMO AND RETURN IT TO THIS OFFICE. YOU WILL BE SENT A FINAL VERSION OF THE RULE FOR YOUR RECORDS.

PLEASE RETURN EITHER THE CORRECTED RULE OR THIS FORM WITHIN TEN (10) WORKING DAYS OF THE DATE YOU RECEIVED THIS REQUEST. CALL IF YOU HAVE ANY QUESTIONS.

SERIES: 1 TITLE: 164 School Bldg. Authority of WV

* THE ATTACHED RULE HAS BEEN REVIEWED AND IS CORRECT.

SIGNED: Clacy Williams

TITLE OF PERSON SIGNING: Executive Director

DATE: 10/19/95

****

* THE ATTACHED RULE HAS BEEN REVIEWED AND NEEDS CORRECTING. THE CORRECTIONS HAVE BEEN MARKED.

SIGNED: _____

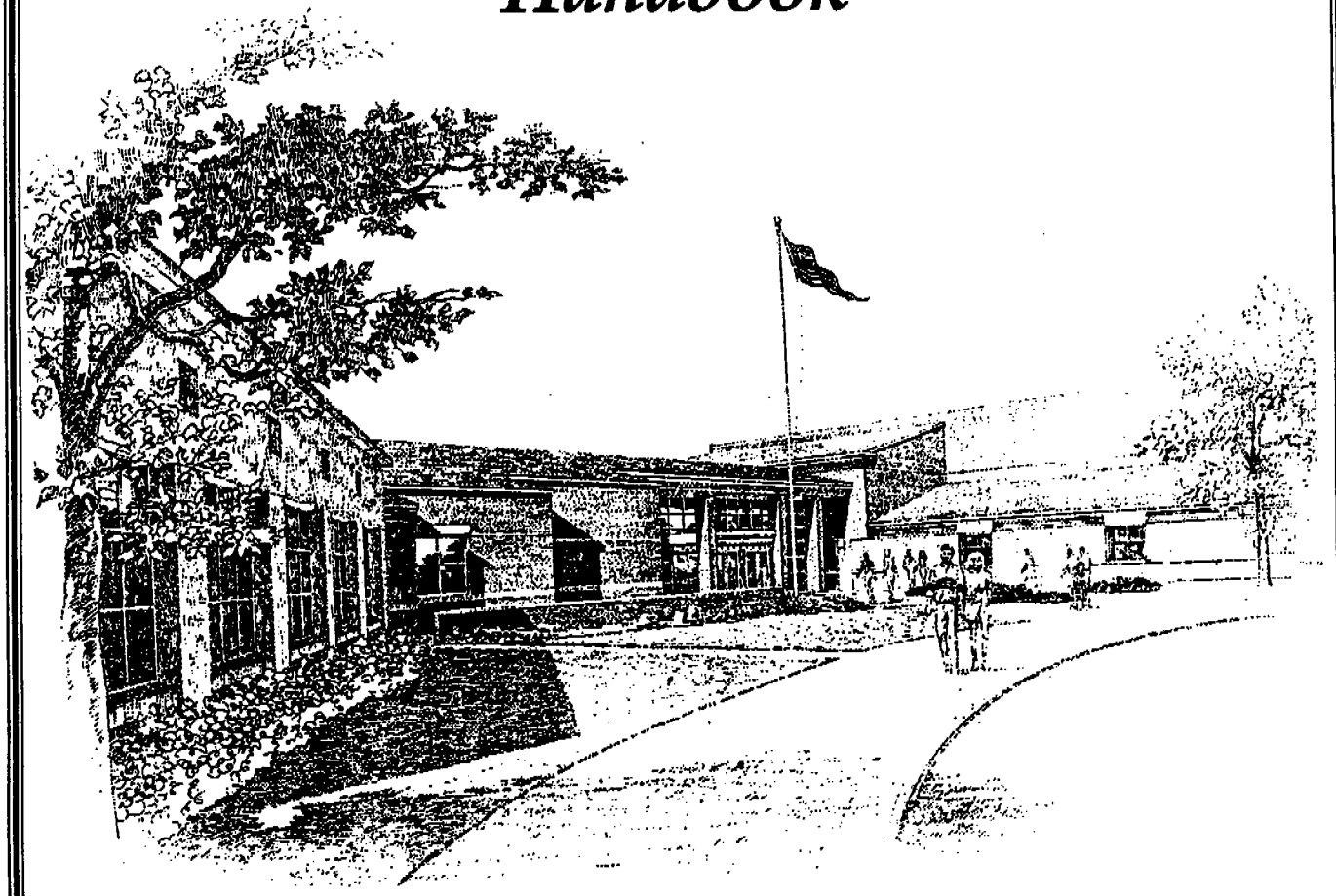
TITLE OF PERSON SIGNING: _____

DATE: _____

NOTE: IF YOU ARE NOT THE PERSON WHO HANDLES THIS RULE, PLEASE FORWARD TO THE CORRECT PERSON.

Guidelines & Procedures

Handbook



School Building Authority
March 1995

Printed by the West Virginia Department of Education

Clacy Williams, Executive Director

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F. SBA 104 - Requisition for Payment - (Rev. 10/94)

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H. SBA Procedure for Review of "Needs" Projects - (Rev. 10/94)

I. Grant Agreement and Contracts Booklet

J. Architectural and Construction Regulations

K. SBA Supplemental, General and Special Conditions

L. WVDE 103B - Semi-Annual Financial Report Cumulative Expenditure Breakdown

M. Major Improvement Plan Projects

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P. WVDE BP-13-A Completion Report - (Rev. 10/94)

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GUIDELINES AND PROCEDURES OF THE
SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

The West Virginia Legislature passed Article §18-9D of the West Virginia Code in 1988 which created the School Building Authority of West Virginia (SBA). A major revision was completed in 1989 that redefined the objectives and membership of the Authority and in 1994 redefining funding sources and programs. During the August 31, 1989 SBA organizational meeting, the Authority adopted the following mission and goals statement:

MISSION

It is the mission of the School Building Authority of West Virginia to facilitate and provide state funds for the construction and maintenance of school facilities to meet the needs of the people of West Virginia in an efficient and economical manner.

GOALS

1. To make all funding determinations in accordance with the provisions of law in Article §18-9D of the West Virginia Code.

2. To assess existing school facilities and each facility plan in relation to the needs of the individual student, the general school population, the communities served by the facilities and statewide facility needs.

3. To adopt guidelines that will assure the prudent and resourceful expenditure of state funds. These guidelines shall state the manner, time line, and process for submission of plans to the Authority, project specifications, and indicators relating how the specific project furthers the overall goals of the Authority.

4. To expeditiously implement the programs of the School Building Authority of West Virginia by making funds available to counties for the purpose stated in the mission of the Authority.

Each county board of education has the responsibility to maintain a sufficient number of suitable school facilities to provide a thorough and efficient system of education and equal educational opportunities for its public school students. Each county's ten year Comprehensive Educational Facility Plan (CEFP) was submitted to the State Board of Education (SBE) for review and approval in April 1990 and must be updated annually. A new CEFP will be developed and submitted to the SBA and the SBE in the year 2000. The schedule for submission of projects to be considered for available state funding will be determined by the SBA. Projects chosen for funding by the SBA will be part of a plan approved by the SBE.

In order to facilitate the approval process for state funded projects, the SBA requires that all county plans be approved by the SBE, and meet the guidelines of SBE Policy 6200 prior to submission to the SBA. These guidelines are reflected in the West Virginia Department of Education's "Handbook on Planning School Facilities, Chapter 1" (Appendix A). State Board of Education approval of a county's plan does not assure the plan's approval by the SBA for funding purposes. The following guidelines and procedures of the SBA were initially adopted November 4, 1991, revised and adopted by the SBA on November 9, 1994.

100.00 SBA REQUIREMENTS FOR COMPREHENSIVE EDUCATIONAL FACILITY PLANS

100.10

A. County plans will have been developed in accordance with SBE Policy 6200, the "Handbook on Planning School Facilities", and approved by the SBE prior to any consideration by the SBA.

B. Each county 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. Economies of Scale--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 (Appendix D).
   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. (Appendix D)
3. Reasonable Travel Time and other Demographics.
4. Multi-County and Regional Planning.
5. Curricular Improvements 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 (SBA/WVDE Form 116) that classifies each facility in the county. (Appendix B)

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 Instrument and including cost summaries indicating the cost to upgrade to meet current standards. (Appendix C)

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 M)

100.20 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 schools, 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 100.10-B of this handbook.

C. A detailed analysis of the results of this study and a facility recommendation based on its conclusions shall be included.

100.30 Synopsis of Public Comment

Prior to submitting the CEFP 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 CEFP, sufficient documentation, including verification of public notices from the local newspapers and a synopsis of all comments received during the hearings must be included.

100.40 Objective Evaluation of Implementation

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

A. How each project furthers 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, 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 CEFP, an evaluation report shall be completed in the 8th year of the statewide planning cycle 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 Appendix C of this handbook.

D. 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.

100.50 Additional Requirements and Administrative Assurances

A statement of assurance by the county superintendent that the county plan includes all requirements in Section 100 of this handbook.

100.60 CEFP Management

A. 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 T)

1. Major revisions to the CEFP are to be submitted to the SBE and the SBA by December 1 each year, beginning December 1, 1994.
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 CEFP 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 100.40.

B. Budget Amendments to CEFPs

1. Routine amendments on projects using partial or full SBA funding must be amended through the SBE and the SBA.
2. SBA/SDE Form 106 must be completed fully and submitted to both the SBE and SBA for approval in order to institute an SBA budget amendment. SBA Needs and MIP Funds can not be transferred from one project to another. (Appendix E)

3. SBA/SDE 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 $25,000.
4. Any net enrollment monies distributed prior to January 1, 1994 will continue being administered by SBA Guidelines adopted by the SBA in June 1992.

200.00 FUNDING SCHOOL BUILDING AUTHORITY PROJECTS

201.00 Matching 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.

202.00 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. These funds shall be distributed as follows:

A. 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:
   1. That serve the statewide educational community, or
   2. That are applied for and utilized to operate educational programs under the jurisdiction of the SBE.

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

B. 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 procedures outlined in Appendix R. Grant funds shall expire based on a three year contractual agreement between the SBA and the grantee.

C. 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.

D. Funds appropriated by the legislature to the school major improvement fund shall be distributed by the School Building Authority on the basis of need. These funds are for major renovation or rehabilitation of existing facilities and for additions to existing schools. A county may be eligible for major improvement funds provided:

1. The county has an approved Major Improvement Plan (MIP). (Appendix M)
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.

Grants to counties from the major improvement fund are for projects exceeding $50,000 but can not exceed $500,000.

203.00 Awarding of Funds

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, including regional vocational-technical 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 educational 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 "Needs" Project Summary Report (Appendix G).
   h. An explanation of how the project relates to the major items presented in 100.10 B (1 thru 8) of this guidelines handbook.
3. Schools or programs under the jurisdiction of the SBE will submit project applications to the SBE for review, evaluation, prioritization and recommendation to the SBA for potential funding.
4. The SBA reserves the right to consider projects they deem meritorious for 3% funding as well as final approval of all projects recommended for funding.

B. "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. Application shall be made within ten days after said emergency to the SBA and in accordance with adopted SBA procedures (Appendix R).

C. "Needs" Funds

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 "needs" funds will be requested. This individual project will be fully developed in regard to the issues indicated in 100.10 in this guidelines handbook and have an SBA "Needs" Project Summary Report completed (Appendix G).
3. Proposals for "needs" 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 Authority will review and evaluate the projects based upon criteria set forth in 100.10 of this guidelines handbook. A priority list of projects to be funded equal to the amount of the funds available during the specific funding phase will be developed by the Authority.
5. The SBA will appoint a plan review team that will utilize the "Procedure for Review of Needs Projects" to assist in the rating 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 H).

D. Major Improvement Funds

1. Each county or educational agency that has an approved Major Improvement Plan and meets the criteria in Section 202-D of this handbook is eligible for capital improvement funds from the SBA's major improvement fund.
2. Major Improvement Plans (MIPs) are developed by each county or educational agency in accordance with the guidelines in Appendix M and approved by the SBA. The MIP shall address how the proposed plan, and any project in it, meet the following goals and objectives as established by the SBA in Appendix M.
3. Each county shall submit as part of their annual CEFP Update a prioritized list of MIP projects for SBA approval. The most needed project shall be further developed to address the criteria of the SBA as indicated in Appendix M.
4. The SBA shall review and rate the projects for funding each year in the manner prescribed in Appendix M.
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.

204.00 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 projects meet the SBA guidelines and are approved by the SBA. Allowable costs of construction are included in Section 300 of this guidelines manual.

C. Major Improvement Funds
MIP Grants awarded to an agency from their MIP are for projects exceeding $50,000 but can not exceed $500,000. 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.

205.00 SBA Funds Accounting

A. Treasurers' Reports
   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. (Appendix U)
   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 fund (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

206.00 Reimbursement Procedures

A. Funds will be distributed through a requisition process wherein:
   1. 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 (Appendix F).
   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 SBA Form 104).
   4. Invoices are reviewed in the SBA offices 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-13A 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-13A, and signed by a representative of the SBA. (Appendix P)

300.00 FUNDING SPECIFIC FACILITY PLANS

300.10 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%. The actual maximum square footage approved for construction may or may not be equal to the maximums indicated in the schedule below.

B. Maximum gross area allowances shall be computed as the product of the design capacity times the square foot allowance per pupil as hereinafter scheduled.

1. Elementary Schools

Up to 240 students	125 Sq. Ft.
241 to 265 students	120 Sq. Ft.
266 to 290 students	115 Sq. Ft.
291 to 315 students	110 Sq. Ft.
316 to 340 students	105 Sq. Ft.
341 to 389 students	100 Sq. Ft.
390 to 440 students	95 Sq. Ft.
441 to 490 students	90 Sq. Ft.
491 to 540 students	85 Sq. Ft.
541 to 590 students	80 Sq. Ft.
591 to 640 students	80 Sq. Ft.
Over 641 students	80 Sq. Ft.

2. Junior High/Middle Schools

Up to 500 students	150 Sq. Ft.
501 to 550 students	145 Sq. Ft.
551 to 600 students	140 Sq. Ft.
601 to 650 students	135 Sq. Ft.
651 to 700 students	130 Sq. Ft.
701 to 750 students	125 Sq. Ft.
751 to 800 students	120 Sq. Ft.
801 to 850 students	115 Sq. Ft.
851 to 925 students	110 Sq. Ft.
926 to 1000 students	105 Sq. Ft.
Over 1000 students	100 Sq. Ft.

3. Senior High Schools

Up to 500 students	230 Sq. Ft.
501 to 550 students	220 Sq. Ft.
551 to 600 students	215 Sq. Ft.
601 to 650 students	210 Sq. Ft.
651 to 700 students	195 Sq. Ft.
701 to 750 students	185 Sq. Ft.
751 to 825 students	175 Sq. Ft.
826 to 900 students	165 Sq. Ft.
901 to 1000 students	160 Sq. Ft.
1001 to 1150 students	155 Sq. Ft.
1151 to 1300 students	150 Sq. Ft.
1301 to 1500 students	145 Sq. Ft.
Over 1500 students	140 Sq. Ft.

300.20 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 the ten year enrollment projection.

B. Where facility enrollment has fallen below 85% of the design capacity in existing facilities, consideration of consolidation is recommended.

300.30 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 Sq. Ft. cost:

1. Elementary and Primary Schools	$72.00/ Sq. Ft.
2. Junior High and Middle Schools	$76.00/ Sq. Ft.
3. Senior High Schools	$80.00/ Sq. Ft.

B. Construction costs allowance may include site work, building furnishings and equipment, architectural and engineering fees, construction manager or clerk-of-the-works, survey work, geotechnical studies and advertisements.

C. Construction costs allowance does NOT include:
   1. Site acquisition, unusual utility extensions, unusual site preparation cost, access highways, repaving of existing parking lots or athletic facilities.
   2. SBA funds can not be used for the purchase of properties, the construction or renovation of athletic facilities, computer equipment, instructional supplies and equipment.
   3. County employees should not be utilized to work on SBA funded construction projects. SBA funds be used for the reimbursement of salaries for county employees.

D. Construction cost per square foot may be adjusted by the SBA to reflect regional cost factors. State construction cost will be reviewed annually and may be adjusted upwardly or downwardly for inflation or actual cost of projects constructed.

E. Contingency allowance for each new construction project shall be established as two percent (2%) of the construction budget.

300.40 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 can not 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.

400.00 PROJECT ADMINISTRATION AND REVIEW

400.10 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.

400.20 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 or the SBA Architectural/Engineering Services Agreement in Appendix S of this handbook.

400.30 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 and evaluation prior to final selection by the educational agency. (Appendix J)

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.

400.40 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. (Appendices I, J and K)

400.50 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.

400.60 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.

400.70 Occupancy of New Educational Facilities

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

400.72 No educational facility shall be occupied without prior approval from the State Department of Education, School Building Authority of West Virginia, state and county regulatory agencies.

400.73 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 and has sufficient in-service training to properly maintain the new or renovated facility.

500.00 SCHOOL BUILDING AUTHORITY CONTRACTS AND AGREEMENTS

500.10 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 I).

B. This agreement sets forth the maximum amount and conditions of the grant and, in Exhibit A of the contract, specifies the facility or facilities where the work is to be done, the scope of the work to be done and the estimated cost at each site location.

C. The grant agreement must be signed by the Executive Director of the SBA, the superintendent or chief administrator of the agency receiving the grant and the chief elected official of the governing board of the agency in order to engage the agreement.

500.20 Bid Documents

A. Bid documents for any SBA construction project shall be prepared by qualified architectural or engineering firms in accordance with the "Supplemental, General and Special Conditions" of the Authority (Appendix K).

B. Qualified contractors bidding on SBA projects will present acceptable liability insurance levels and a completed "Contractor's Qualification Statement" to the county 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 agency receiving bids or the SBA may request "Contractor Qualification Statements" including financial statements on subcontractors (Appendix K).

C. 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 (Appendix Q). This information must be submitted to the agency receiving the bids within two hours after the completion of the bid opening. The agency receiving the bids shall fax the completed form SBA 123 to the SBA Office within two hours after the completion of the bid opening. Bid openings shall not occur after 1:00 p.m. local prevailing time.

600.00 SCHOOL BUILDING AUTHORITY REPORT PROCEDURES

600.10 Financial Reports

A. SBA 103 B - Semi-Annual Finance Reports
SBA Form 103B has become WVDE 103B, a semi-annual financial report due on January 31 and July 31. It is a cumulative report beginning January 1990 and includes every facility in the county where capital improvements have been made regardless of the funding source. (Appendix L).

B. SBA 101A & 101B - Exhibit A Supplement to the Grant Agreement
These forms are 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. An Exhibit A must accompany a CEFP amendment in order to amend the grant contract to coincide with the CEFP (Appendix U).

C. SBA 104 - Exhibit B-Requisition Form (Rev. 10/94)
This form is the cover for invoices sent to the SBA offices and the trustee to transact payment to the county. One form is used for each project code. Several invoices from various vendors may be combined as long as they relate to the same school project code. Requisitions must be submitted to the SBA for review. Failure to submit invoices to the SBA will result in delay of payment until appropriate submittals have occurred (Appendix F).

600.20 Project/Construction Related Reports

A. SBA 105 - Contractor's Qualification Statement
The lowest qualified bidder(s) on construction or renovation projects must complete a qualification statement. This form is to be used in the screening and selection of contractors to assure the stability and reputability of the company. A copy of each of these reports is to be retained in the project file at the county board office and is to be regarded as highly confidential (Appendix K) (500.20 B of this guidelines manual regarding bid documents).

B. SBA/SBE 106 - Application for Amendment (Rev. 10/94)
This form is to amend the CEFP. It is used to alter the budgets or scope of approved projects for SBA funding once the plan has been submitted. The revised version of this form must be used and the signature of the superintendent must be affixed (Appendix E).

C. 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 (Appendix N).

D. WVDE P-1 - Application for Project Approval (Rev. 2-28-92)
This report is to be submitted twice by the county, initially with the preliminary drawings when they are submitted to the SBE and the SBA for review. Preliminary review documents required with the P-1 form are: (1) education specification or education program; (2) preliminary drawings (design development drawings are preferred) and (3) outline specifications. A final P-1 is to be submitted to both agencies at the completion of the project with a BP-13-A 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 SDE and the SBA (Appendix O).

E. 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-13A 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 BP-13-A (MP) to designate completion of each contractors 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 (Appendix P).

F. 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-13A project completion form. (Appendix P)

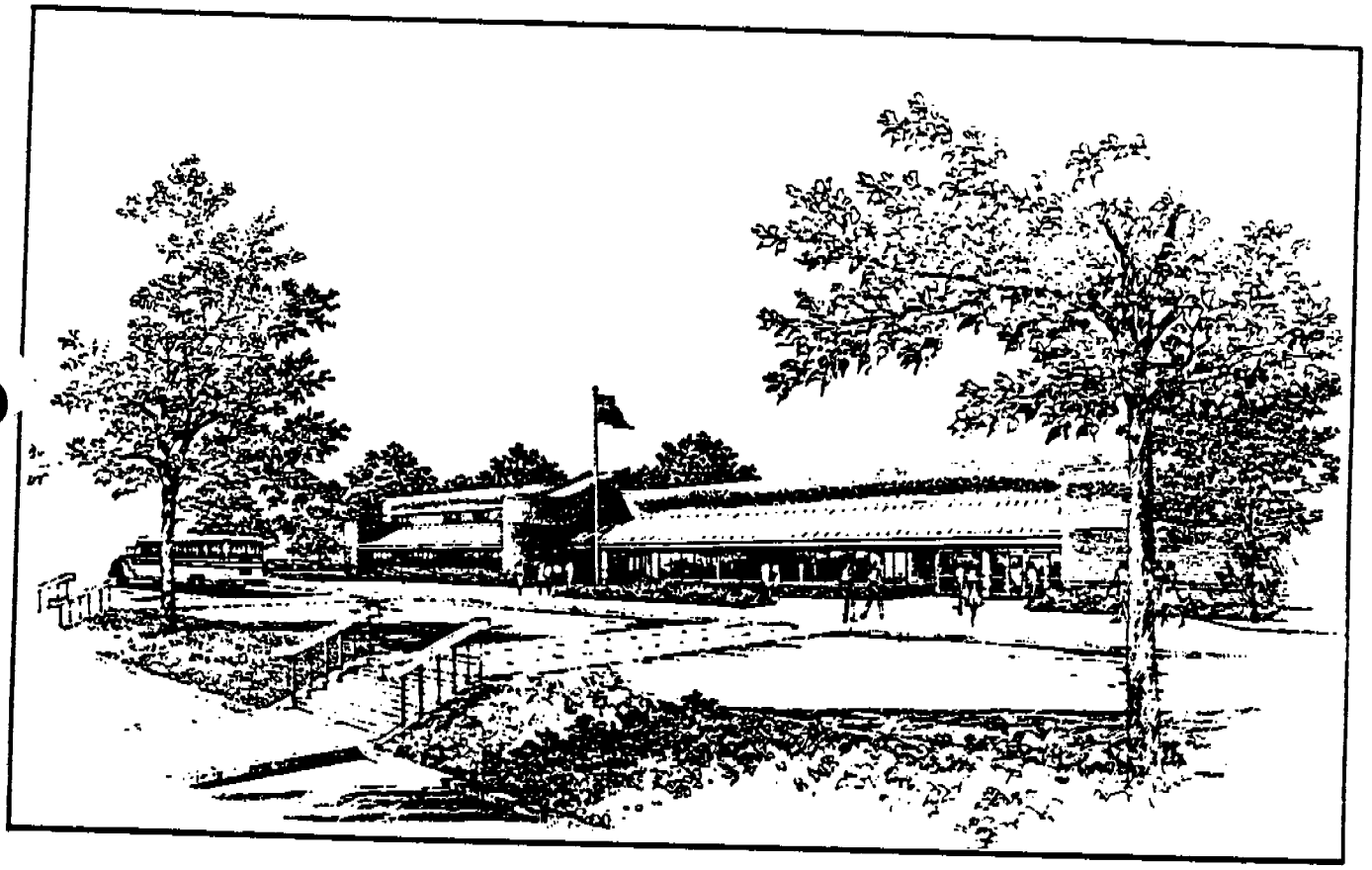
1. Contractor Evaluation Report (SBA 124)
2. Architect/Engineering Evaluation Report (SBA 125)

1488b/80&81a 11/4/91 SBA Adopted
1972b/81&82b Revised 10/94

APPENDIX A

(Insert "Handbook on Planning School Facilities")

HANDBOOK ON PLANNING SCHOOL FACILITIES



West Virginia Department of Education



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HANDBOOK ON PLANNING SCHOOL FACILITIES

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WEST VIRGINIA DEPARTMENT OF EDUCATION

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Policy Number 6200

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Reprinted October 1993

Carolyn Arrington, Assistant Superintendent
Division of Administrative Services

Henry Marockie, State Superintendent of Schools

FOREWORD

The West Virginia Board of Education has adopted this Handbook on Planning School Facilities to provide comprehensive guidelines which address the details of evaluating and renovating existing public education facilities and the construction of new school facilities. Periodic revisions may be necessary in order to meet the demands of evolving educational programs.

The creation of the School Building Authority of West Virginia by the West Virginia Legislature has resulted in one of the most ambitious school construction programs in the United States. The School Building Authority has granted funds for construction throughout the state resulting in modern, state-of-the-art public school facilities with quality educational programs for students in West Virginia.

The West Virginia Department of Education has the responsibility to provide assistance to county school districts through the Office of School Transportation and Facilities. The handbook offers additional assistance with regulations and guidelines when public school officials are planning renovations, construction of new school facilities, and developing or amending their Comprehensive Educational Facilities Plan.

This handbook is a working document and should be used as such during all planning stages of evaluation and construction.

Henry Marockie
State Superintendent of Schools

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Planning School Facilities
Regulations for Policy 6200

Chapter 1

SCHOOL FACILITIES PLANNING

100 COMPREHENSIVE EDUCATIONAL FACILITIES PLAN (CEFP)

References:

1. A Master Plan for Public Education
2. Guide for Planning Educational Facilities
3. West Virginia Board of Education - Policy 2510
4. School Laws of West Virginia - §18-9D-1 through 16

Each county shall develop a Comprehensive Educational Facilities Plan (CEFP) as described in the following sections. The CEFP shall be submitted to the appropriate Regional Education Service Agency (RESA) for review and inclusion in the Regional CEFP, and to the state Board of Education. This plan is to be amended annually, and rewritten every ten years thereafter. Approval of the county CEFP must be granted by the state Board of Education and approval of the regional CEFP must be granted by the School Building Authority of West Virginia (SBA) prior to funding any project through the SBA. The CEFP must include all projects that alter the instructional square footage of the facility or exceed $25,000 regardless of the funding source. Routine maintenance projects may not be included in the CEFP unless SBA funding will be requested or utilized to implement them. Required amendments to the plan and/or the plan budget must be submitted to the state Board of Education, RESA, and SBA, when applicable, for approval prior to the initiation of any construction or renovation project.

100.01

Key elements for analysis and consideration in the county plan must include the following components.

A. The community analysis
B. Population and enrollment study

C. The educational plan
D. Evaluation of existing facilities for compliance with state requirements
E. Financing plan--includes a prioritized list of all projects within the county. The regional plan will include a prioritized list of all projects among the counties identifying the utilization priority of state SBA funds.
F. Translating educational needs into facility needs (including form SBA/WVDE 116)

In addition to the individual county plans, the RESA shall be responsible for including the following components for analysis and consideration in the Regional CEFP.

G. Table of contents of the regional plan
H. Inter-county facility feasibility study
I. Synopsis of comments from the public hearing(s)
J. Formal comments from each county board of education in the RESA
K. Objective evaluation of implementation

100.011 The Community Analysis

References:
2. C - 3 & 4

100.0111

A survey of a community's history provides a background against which present conditions acquire meaning. The following aspects of a community's development should be studied carefully:

A. Population characteristics and density patterns
B. Population changes due to in- and out-migration patterns and to fluctuations in the birth rate
C. Changes in land usage (residential, commercial and industrial)
D. Major highway and street networks and their probable future development
E. Changes in socio-economic patterns resulting in population shifts within the community
F. Condition and value of housing in residential areas and of commercial buildings in industrial areas
G. Availability of community services - libraries, recreational areas, health services, public assembly space
H. Employment opportunities
I. Parental expectations of the school
J. Citizen attitudes and aspirations in general
K. Possible shifts in housing patterns
L. Changes in school attendance zones

100.012 Population and Enrollment Study

References:
2. C - 4 & 5

100.0121

In general, the following statistics are essential components of the Plan:

A. Population trends of the total school community
B. Birth rates and the number of births
C. Public school enrollment figures
D. Non-public school enrollment figures
E. Drop outs
F. Enrollment projections per school

100.013 The Educational Plan

References:

2. C - 9 & 10

100.0131

The Educational Plan provides a standard against which existing facilities can be measured ie., how well do the facilities support the goals defined in the plan. This includes an analysis of the current educational program and projections of the planned educational program. The educational plan shall include the following areas:

A. The curriculum plan - What knowledge, understanding, attitudes, skills, and habits of life should be developed through the experiences provided for children?
   1. What are the general characteristics of a high quality school program? (Refer to state guides and basic county philosophy and goals)
   2. Are there any groups of youngsters whose needs are not now adequately accommodated? (ie., handicapped, gifted, etc.)

B. The operations plan - Design and conduct of the teaching and learning environment
   1. Will the environment encourage openness in education or structure or both?
   2. Will the educational environment go beyond the classroom? (ie., into the community)
   3. What, if any, major changes in the teaching-learning environment are anticipated to more fully achieve the county's educational goals?

C. The instruction plan - Program description and methods of instruction
   1. What will be the major components of the instructional program? (ie., general course of study; vocational, adult or community education; special education; driver education; physical education; co-curricular activities; computerization and technology; or advanced courses in science, math, language arts, and social studies, etc.)
   2. Will the instructional program be organized into semester subject matter units, mini-courses, core programs, experimental learning units, or some other basis?

D. The organization plan - The pattern or system adopted to promote instructional missions
   1. Will the school system be predominately organized on a K-4, 5-8, 9-12, or some other pattern?
   2. Will the typical one-teacher-per-class pattern be followed, or are teaching teams to be involved all or part of the time?
   3. Generally, will there be self-contained or departmentalized classroom instruction?
   4. Generally, will there be typical grade patterns or will there be an ungraded or flexible grouping of pupils?
   5. What should be the maximum or minimum enrollment and total number of instructional areas in each building?
   6. What is the plan for providing vocational education?

E. The personnel plan
   1. What allocation of staff will be made (to each building) to implement the educational plan?
   2. Describe how professional staff efficiency will be addressed in this plan.

F. The support plan
   1. What kinds of support services are essential to carry out the instructional plan? (ie., cafeteria, health, instructional media centers, transportation, guidance, television)
   2. Describe how support staff efficiency will be addressed in this plan.
   3. How will these services be more operationally efficient?

100.014 Evaluation of Existing Facilities for Compliance with State Requirements

References:
2. C - 11

100.0141

The evaluation of existing facilities shall include a survey of each plant in the county using the SBA approved School Facility Evaluation Instrument. This evaluation will provide objective data on the condition of the existing building, its appropriateness for delivery of the instructional program, and its ability to support the present and projected enrollments in an effective and efficient manner. This data can help determine if the facility can be economically modified to house the projected educational program and at what cost. The services of a qualified facilities planner are necessary.

100.0142 Criteria for Evaluating Existing Buildings

A. Health and safety considerations. These will be identified as required by the regulatory agencies and

will be used as a criteria for determining prioritization of projects for SBA funding. Regulatory agencies include the offices of the West Virginia Fire Marshal, West Virginia Department of Health, West Virginia Department of Highways, school facilities planning division of the West Virginia Department of Education, SBA, etc.

B. Facilities improvements and new facilities must accommodate the educational programs by design. The building design will be dictated by the curriculum. Existing and new facilities must meet regulations of the state Handbook.

C. Facilities must comply with state policies, federal and state laws, and, when applicable, guidelines of the SBA.

D. Economies of scale include compatibility with similar schools that have achieved the most economical organization, facility utilization and pupil-teacher ratios.

E. County boards of education will be required to justify the closure of facilities or the continued use of facilities that do not comply with the criteria for evaluating school facilities.

F. Economies of scale based on enrollment are as follows:
   1. Elementary schools with a minimum enrollment of 300 students in grades 1-6, 200 in grades 1-4, or a minimum of 2 classes (22 each) per grade level, are recommended to achieve economies of scale. Early childhood, kindergarten and exceptional students may increase this minimum standard.
   2. Middle and junior high schools with a minimum enrollment of 450 students 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 economies of scale at the intermediate level.
   3. High schools with a minimum enrollment of 600 students grades 10-12, 800 students grades 9-12 or 200 students at each grade level are recommended to achieve economies of scale.
   4. Geographic or other considerations may require exceptions to be considered; regional planning should also be considered to achieve these minimum enrollment standards.
   5. A minimum of 85% of the building design capacity should be considered for early childhood, intermediate, and adolescent facilities.

G. Energy efficiency

H. Program support appraisal

I. Building utilization

J. Site analysis

K. Standards for accreditation

100.015 Financing Plan

Identify the source of funding to be utilized in the financing plan.

A. Sources of funds
   1. Local bonding potential - unencumbered
   2. Excess levy funds
   3. Federal aid funds
   4. Sale of abandoned school sites and buildings
   5. State funds (including SBA)
   6. Permanent improvement funds

B. Cost of needed improvements as determined by an architect, professional engineer, or other professional project estimator

C. If a project benefits more than one county in the region, include in the plan the manner in which the cost and funding of the project shall be apportioned among the counties.

100.016 Translating Educational Needs into Facility Needs

The CEFP shall be based upon the community analysis, the population and enrollment study, the education plan, the evaluation of existing facilities for compliance with state requirements, the regional feasibility study and the financing plan.

The CEFP is an illustrated document which describes existing and future buildings, area and population of students to be served, site topography, building orientation, climate, vehicular and pedestrian circulation, location of utilities, site development, financial capability and neighboring land use - both current and projected.

Master planning is a way of identifying the best route to the future through a workable plan for handling priority rated, predictable situations and anticipated changes. A master plan defines ultimate goals for the institution and accounts for the facilities required to help achieve these goals. The capacities and capabilities thus defined are realized, if necessary, through several phases of construction and expansion or reduction and modification. These activities are viewed in terms of their relationship to the total program. A summary of the county's master plan should be represented by a projected ten year time line (See Appendices), and should include Facility Classification Form SBA/WVDE 116 (See Appendices). This form is to serve as a cover page for a narrative report on each facility. The narrative is to describe in detail the future action to be taken in the school and the proposed date for the change. For example:

A. A school scheduled to close should indicate receiving school(s) and number of students to be transferred to each; a school scheduled for improvements should indicate what capital improvements are to be made and estimated cost.

B. A school scheduled as a receiving school should indicate the improvements needed to accept additional students, the number of students projected to enter the school and the school(s) from which students are to be transferred.

C. A school scheduled for grade reconfiguration should indicate all schools involved (closed or others reconfigured), the number of students affected and the projected number of students in the school after the reconfiguration is completed.

Pertinent information regarding any change in school usage or facility improvement should be included. School(s) scheduled to remain the same throughout the plan period should be addressed with a brief narrative to describe its present activity and condition.

New facilities shall not be constructed for student populations that are projected to fall below 85% of the required economies of scale guidelines for minimum school enrollments within 10 years of the completion date of the construction. See Chapter 1, Section 100.0142 (F). Consideration may be given to extraneous factors that may alter their requirement provided the project is approved by the state Board of Education at the time of construction.

100.017 Inter-County Facility Feasibility Study

A. Each county shall submit to the RESA a list of grouped, inter-county attendance areas where potential exists for cooperative utilization of a facility between or among counties within the RESA or between counties of adjacent RESA's. (May include multi-county and inter-regional facilities, ie., magnet schools, 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 Chapter 1, Section 100.01 (A-K).

C. Describe the results of the study.

100.018 Synopsis of Comments From the Public Hearing(s)

Prior to submitting the Regional CEFP to SBA for approval, one or more public hearings must be held regionally to provide broad-based community input into the plan. As an addendum to the CEFP, sufficient documentation, including verification of public notices from the local newspapers and a synopsis of all comments received during the hearings must be included. A formal comment from each county board of education in the RESA shall be submitted to SBA for consideration in their approval process.

100.019 Objective Evaluation of Implementation

As part of the total Regional CEFP unit, the RESA shall include the objective means to be utilized in evaluating implementation of the overall plan and each project included therein. The evaluation shall measure how:

A. Each project furthers each of the quality educational goals of SBA as defined in §18-9D-16 of the WV Code. This shall include: Student health and safety, economies of scale, travel time and other demographics, achievements of effective and efficient instructional delivery system, curricular improvements, innovations in education, and adequate space for projected student enrollments;
B. Prioritization of projects both within county and among counties serves as a basis for determining expenditure of available funds; and,
C. The overall success of any project relates to the facilities plan of the region and the overall goals of the state Board of Education and SBA.

101 EDUCATIONAL SPECIFICATIONS

References:
2. E - 2 & 3

101.01

The development of educational specifications for each new school facility is a team, rather than an individual, activity which is accomplished by school administrative unit personnel with or without the assistance of an outside consultant. The chief school administrator, or the RESA director in cooperative projects, recommends persons for committee appointment. The (school) appropriate board then acts on these recommendations. The committee chairperson is usually the principal of the proposed facility. If that official has not been identified, then the principal of another administrative unit facility can serve. The working committee should be small and selective. It should be balanced in composition, with diversified interests, knowledge, and skills represented. Members should understand their role in relation to both the immediate task and the entire project. They should also understand the necessity for cooperation. Ordinarily members of the teaching staff and others who will be immediately involved in the use of the proposed facility are most able to provide the type of information required in educational specifications. Some important considerations in the selection of committee members are:

A. Time available to spend on the project
B. Knowledge about the project
C. Imagination and creativity
D. Ability to work with people
E. Interest in the improvement of the school

101.02

Educational specifications should describe the learning activities that will be housed in the proposed facility; the number, grouping and nature of the people involved; the spatial relationship between the facility and site; the interrelationships of instructional programs with each other and with non-instructional activities; the major items of furniture and equipment to be used; and any special environmental provisions which would improve the learning environment and promote staff efficiency. Educational specifications should avoid rigid architectural prescriptions, confining its remarks to educational matters.

101.03

Educational specifications describe the educational activities which a proposed facility must support and the types of spaces which will best accommodate program requirements. They are not a precise delineation of the instructional program; nor are they technical specifications of the type that the architect or engineer directs to the contractor. They are, however, in a temporal and developmental sense, a connecting link between the program and technical statements.

The educational specifications document is a vehicle of communication between the educator and the architect: the educator identifies the educational objectives and suggests general facility needs; the architect bases his facility design on this information. Five copies of educational specifications for any new facility shall be submitted to the state Board of Education for review at the time they are submitted to the architect for design consideration.

102 SELECTION OF FURNITURE AND EQUIPMENT

References:
2. J

102.01

Classroom furniture and equipment should be considered during the initial planning stage and should be selected on the basis of its contribution to, and compatibility with, the total educational program.

102.02

Criteria for selection should include the following:

A. Appearance
B. Maintenance
C. Safety
D. Comfort
E. Durability
F. Building codes
G. Guarantees
H. Flexibility
I. Availability
J. Cost

103 OCCUPANCY OF NEW EDUCATIONAL FACILITIES

References:
2. O

103.01

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

103.02

No educational facility shall be occupied without prior approval from the state Department of Education and state and county Regulatory Agencies, and School Building Authority when appropriate.

104 FACILITIES PROGRAM CONTROL

104.01

On single county projects, the county board of education maintains complete control of the entire construction program. On new cooperative inter-county projects, the RESA board of directors is responsible for appointing a joint building council of individuals from the cooperating counties to control the construction project. This council shall include, but not be limited to: the respective county superintendents, one member from each Board of Education, the principal of the new facility, if known, one classroom teacher from each county, and the RESA director or designee. The council shall control each project by:

A. Authorizing a study of the educational program and subsequently adopting educational policies for implementation;
B. Authorizing the survey and adopting a building program on the basis of the results thereof;
C. Establishing site criteria, inaugurating steps to select and purchase sites and authorizing the purchase of sites;
D. Authorizing the preparation of and approving educational specifications for each building;
E. Selecting the architect, educational consultant, legal advisor and other specialists;
F. Authorizing the preparation of architectural drawings and specifications, approval of preliminary plans, working drawings and specifications and any subsequent change;
G. Deciding when to proceed with construction, soliciting bids, awarding contracts and inspecting and accepting the completed building;
H. Authorizing the expenditure of necessary funds at each stage of the program;
I. Designating one county as the fiscal agent to handle the business functions of the building council on inter-county projects.

105 RULES AND REGULATIONS FOR COUNTY BOARDS OF EDUCATION TO FOLLOW REGARDING SCHOOL CLOSINGS OR CONSOLIDATIONS

Section 13a of Article 5, Chapter 18, of the Code of West Virginia provides that:

> . . . the state board shall promulgate rules and regulations which shall prescribe in detail the type of supporting data a county board of education shall include as part of its written statement of reasons required by this section for school closing or consolidation, and which shall include any data required by the state board of education to amend a county's comprehensive educational facilities plan.

Pursuant to this statute, all county boards of education, except in cases in which a construction bond issue was passed by the voters and which bond issue included the schools to be closed or consolidated and included in an approved CEFP, must prepare and reduce to writing reasons and supporting data concerning proposed

school closings or consolidations to be submitted to the state board of education for approval in accordance with state Board of Education Policy 6200 and the West Virginia Code.

105.01 Enrollment

A. Population changes - trends in population growth or decline in the county, the attendance area of the school targeted for closure or consolidation and the school or schools which will receive the students affected
B. Population characteristics, such as birth rates and age composition (including the number of pre-school and school-age children)
C. Maps showing growth or shifts in distribution of population within the county and affected schools
D. Projections of enrollment, by grade in respective attendance area, for the next ten years
E. Explanation of the projection method utilized

105.02 Facilities

A. Maps showing the schools, by grade configuration and student enrollment, targeted for closure or consolidation and the schools that will receive the students
B. Physical appraisal of the school targeted for closure or consolidation and the school or schools which will receive the students. This appraisal should include age, number of buildings, general condition, adequacy related to structural, electrical and mechanical systems to provide a safe and healthful environment. Refer to SBA facility evaluation form.
C. Evaluation of the school targeted for closure or consolidation and the school or schools which will receive the students in regard to their adaptability to the present and proposed educational programs and the provision of related services
D. Measure of the utilization of the school targeted for consolidation or closure and the school which will receive the students in regard to the following:
    1. What is the operating capacity of each facility?
    2. What is the utilization factor of each school?
    3. What will be the effect of this proposed school closure or consolidation as to utilization and operating capacity?
    4. What is the projected enrollment of receiving schools?
E. Comparison of the accessibility (barrier-free environment) for the handicapped of the school targeted for closure or consolidation and the school or schools which will receive the students.
F. Elaboration of the effect the proposed school closing or consolidation will have on the school system's future plans regarding grade configuration, educational programs and facility requirements.

105.03 Finance

A. Itemization of the anticipated cost or savings the county will experience in all areas as a result of the proposed school closure or consolidation

B. Cost of any renovation or addition resulting from the proposed school closure or consolidation

105.04 Personnel

An analysis of the effect the proposed school closure or consolidation will have on professional and service personnel

105.05 Transportation

An analysis of the effect the proposed school closure or consolidation will have on the county pupil transportation system, including present and proposed transportation times of the affected students.

105.06 Educational Program

Complete a projected educational program improvement analysis which includes a statement of assurance that the following have been considered:

A. 2510 - Assuring the Quality of Education: Regulations for General, Vocational and Special Educational Programs
B. The Criteria of Excellence
C. Policy 6200 - Handbook on Planning School Facilities

105.07

Pursuant to West Virginia Code 18-5-13 and 18-5-13a, county boards of education must do the following by the first Monday in April:

A. Shall hold a public hearing, notice of which shall be advertised by publication in a newspaper in general circulation in the locality of the affected school at least once per week for four successive weeks prior to the date of hearing. The notice shall contain:
   1. Time and place of the hearing
   2. Proposed action of the board of education
B. Must have written reasons and supporting data regarding the proposed school closings or consolidations in the office of the county superintendent during the four consecutive weeks prior to the public hearing.
C. Copies of the notice of public hearing must also be posted in the school targeted for closure or consolidation in conspicuous working places for all professional and service personnel to observe and shall remain posted for four successive weeks.
D. At least a quorum of the school board members and the county superintendent from the county wherein the affected school is located shall attend and be present at the public hearing.
E. During the public hearing, members of the public shall have the right to be present, submit statements and testimony in their behalf and question county school officials.
F. After provisions A through E above have been completed, county boards of education must take a formal vote on the school closure or consolidation issue.

105.08

Once the statutory provisions have been complied with, and prior to implementation of any school closure or consolidation, the county's

CEFP must be amended. The county must file this amendment with the state Board of Education for its approval and this amendment must:

A. Be signed by the county superintendent and give the date the action was taken by the local board.
B. Contain assurances that applicable sections of the West Virginia Code 18-5-13, (3), (4), (5), 18-5-13a, and Policy 6200 have been addressed.
C. Contain justification for the proposed consolidation or school closing. This justification must be supported by supplemental data and information pertinent to the following subjects: enrollment, facilities, finance, personnel, transportation and educational programs, as described above.
D. Contain documentation of all hearings, motions and other actions concerning the proposed school closings or consolidations.

105.09 Emergency School Closure Consideration

Should the need for an emergency school closure exist, West Virginia Code 18-5-13, Section 4, provides that the State Superintendent of Schools may make such a declaration. However, this would not waive the statutory requirements of 18-5-13a.

In order to merit consideration for emergency status by the State Superintendent, the following assurances must be met:

A. Educational program - educational opportunities are equal to or greater for students at the receiving school
B. Transportation - proposed routing schedule does not result in undue time in transit for students according to recommended age appropriate travel times
C. Exceptional students - programmatic offerings and educational spaces are appropriately accessible to handicapped students
D. Health/safety - transfer of students would not result in any health/safety concerns which would adversely affect students and staff
E. Capacity - receiving school has the capacity to adequately house projected enrollment

Chapter 2

SCHOOL SITE PLANNING

200 SCHOOL SITE

All school sites provide sufficient space for the school building, future expansion, educational program activities and support facilities.

References:

5. American National Standards Institute A - 117.1 - 1980
6. National Flood Insurance Program

201 SELECTION

201.01

Intelligent and imaginative school site selection and development are significant aspects of educational facility planning. Because the design and use of the land on which a school is built is fully as important as the design and use of the facility itself, the site's potential as an educational and community resource must be considered.

201.02

The selection of a site requires the cooperative effort of the Board, school staff, planning committee, architect and legal consultants. Since the educational program is of primary concern to the community, consideration should be given to lay membership on a site selection team.

201.03

Resources to be utilized when selecting sites may include: land-use maps, aerial photographs, soil maps, topographic maps, highway maps, flood control maps, neighborhood or school service area maps, pre-school and pupil spot maps, dwelling unit maps, utility service plans and realtors and developers intentions.

201.04

Factors to be considered in selecting a site may include: number and grade level of students, nature of educational program, initial cost, development cost, transportation systems, availability of activities, provision for a safe and healthful environment and the protection of the investment in the building.

202 LOCATION

202.01

School sites shall be located in proper relationship with existing and proposed physical facilities in the community, including: student population centers, parks, recreation centers, libraries, health centers, streets, highways, residential housing and other schools.

202.02

The following one-way bus transportation time levels are considered the reasonable guidelines for pupils transported to school:

A. Early childhood levels - thirty minutes
B. Middle childhood/junior high levels - forty-five minutes
C. Adolescent/high school education levels - sixty minutes
D. These guidelines apply as follows:
    1. To normal weather and operating conditions
    2. Provided there is an appropriate school within the designated travel time - Counties may meet this need cooperatively
    3. To abide by West Virginia Board of Education Resolution, of March 9, 1990 (See Appendices)

202.03

For the safety of students, the site shall be located away from hazards and undesirable environments, such as:

A. Railroads, arterial highways, heavily traveled streets, traffic and congestion
B. Noise, toxic gas escapes from railroads, airports and odoriferous plants or industries
C. Natural barriers limiting accessibility and expansibility, such as rivers, lakes, swamps and protruding ridges
D. High voltage transmission lines, booster or reduction stations, high pressure gas lines and transformer stations
E. Taverns, fire stations, bulk storage plants for flammable liquid and property zoned as industrial
F. Situations where a combination of factors such as those presented above could contribute to the possibility of human entrapment

NOTE: Building sites must be located above the 100 year floodplain as determined by the U.S. Corp of Engineers and the National Flood Insurance Program.

202.04

Public service facilities which must be available for a school site include: water, gas, telephone, electricity, sewage disposal, fire protection and transportation.

203 SIZE

203.01

The size of any school site should provide sufficient and appropriate space for all of the in-school and evening activities.

203.02

With the assistance of an architect, trial layouts of the area required for a site should be made and include, but not necessarily be limited to, the following items:

A. The school building
B. Reserve for expansion of building
C. Set back from streets, sidewalks, approaches and driveways
D. Parking areas, access and buffer
E. Bicycle entrances and storage racks, with proper buffer areas
F. Landscaping and buffer areas at the side and back of the site

G. Paved game areas, including space for outdoor basketball and tennis courts
H. Field game areas for physical education and recreation
I. Areas for interscholastic athletics (which may overlap with field game areas)
J. Possible athletic stadium with parking area, access and buffer
K. Outdoor area (educational) for nature study, biology, art
L. Possible driver instruction areas (auto)
M. Outdoor area adjacent to shops
N. Unassigned areas held in reserve for future use

203.03

School sites of the following minimum sizes shall be provided:

A. Early Childhood/Primary Education Programs (K-4)
5 usable acres + 1 additional acre for every 100 pupils over 240 students
B. Middle Childhood/Junior High Education Programs (5-8)
11 usable acres + 1 additional acre for every 100 pupils over 600 students
C. Adolescent/High School Education (9-12)
15 usable acres + 1 additional acre for every 100 pupils over 800 students
D. Area Vocational Schools
10-40 acres

NOTE: If sewage treatment plants and retention ponds are required, acreage would have to be increased.

203.04

Site acreages are national norms and apply to traditional suburban schools. Where the nature of the neighborhood is urban, the school site shall also be urban in scale. Where the terrain limits the land available, this factor shall be considered. One remedial measure would be to locate schools adjacent to parks or recreation facilities. However, all sites not meeting the minimum standards must be approved by the West Virginia Board of Education.

203.05

For modern schools, a portion of the site should be set aside to meet needs that are bound to arise in the future. Many schools constructed in the past have become obsolete because they lacked sufficient size to warrant economical rehabilitation or enlargement. Buying an adequate site is insurance against such educational obsolescence.

204 PHYSICAL FEATURES

204.01

Ordinarily, a school site should not enhance the cost of construction and should permit the architect to place the building in an appropriate place in relation to other facilities to be developed on the site. The services of an architect, other related specialists and consultants from the School Planning office of the State Department of Education are necessary to judge a site on this criterion.

204.02

A natural elevation with satisfactory approaches avoiding long or difficult climbs makes a desirable setting. The site should be free from drainage from contiguous land and should permit proper drainage throughout at a reasonable cost. Rapid drainage and quick drying should characterize the parts of the site which are expected to serve as recreational and physical education areas. The soil, preferably a sandy loam, should be fertile enough to produce good lawns and vigorous landscaping growth.

204.03

There are many site factors which affect cost apart from the purchase price of the land. The following conditions are to be determined in advance and considered along with the purchase price.

A. The need for extensive hauling of dirt due to a surplus or shortage on the site
B. The presence of quicksand, deep mines, unsatisfactory fill, pyrites or other undesirable subsoil conditions which require special footings or pilings to support the building
C. The presence of rock or other conditions affecting the cost of necessary excavation or ditches
D. The need for the removal of obstructions, such as large boulders or trees; the need for fillings or capping of old wells, clay holes, pits or mines
E. An unduly expensive drainage need
F. The need for constructing and maintaining long access drives and special installations due to distance from service utilities

204.04

Approval will not be granted for construction of a facility on a site lacking municipal water, adequate fire protection and sewage services without the approval of local or state health agencies. No water supply can be considered acceptable unless it provides an ample quantity of safe and potable water for the school.

204.05

Local or state health agencies will also provide information regarding the required type and location of a sewage disposal system.

204.06

The subsoil of a site must provide good drainage and a proper base for economical and substantial foundations for the building. No building shall be designed until the subsoil conditions have been determined for the entire area of the building by adequate test borings or core drilling made under the direction of an experienced soils engineer. Soil tests are particularly important for schools that require extensive grading. Underground investigation shall also include the ownership and presence of mineral rights, mines and wells and the effect they have on the site development. The recommendation is made that mineral rights be controlled for long term protection of surface usage.

204.07

Some adverse site conditions can be overcome by modern construction methods, but they should be accepted only when the costs of such improvements are reasonable. Many of these conditions are not readily seen at the surface. Before the land is purchased, test borings should be made to accurately determine subsoil conditions and the results should be analyzed and interpreted for the board by a competent soils engineer.

NOTE: Boards of education and county superintendents may secure soil information from the United States Department of Agriculture, Soil Conservation Service, Morgantown, West Virginia. This service is provided without cost and could save thousands of dollars by assisting in properly locating schools. Soils are rated by various degrees of limitations such as slight, medium, severe and very severe. Through use of this information, the contracting organization can require certain specifications that prevent problems due to soil limitations.

204.08

Sites should be of such shape and contour as to yield reasonable space for the setting of the building and for drives, walks, play and athletic fields. The contour for a site is a slightly convex surface with the high point at the position of the building. This situation is rarely, if ever found and some reshaping and grading will be necessary on almost every site.

204.09

Cost for excavating and foundation walls can be reduced by fitting the building to the contours of the land. Extra expense for special footings and special drainage can be eliminated by placing the building on high ground and where subsoil conditions are known to be favorable. Proper placement of the building will reduce the length of utility and drainage lines, drives and walks, thus reducing costs.

205 RECREATIONAL AREAS

All schools housing early childhood education programs contain an adequate blacktopped play area and a field game area large enough to accommodate physical education activities. All centers housing kindergarten programs contain a segregated blacktopped area and a large grassy area with climbing equipment and swings. The playground may be segregated by either time or space allocation. All middle, junior high and high school sites contain a blacktopped play area with a minimum size of four thousand, eight hundred square feet and a field game area, space and/or facilities large enough to accommodate physical education activities such as soccer, touch football, softball, tennis and track.

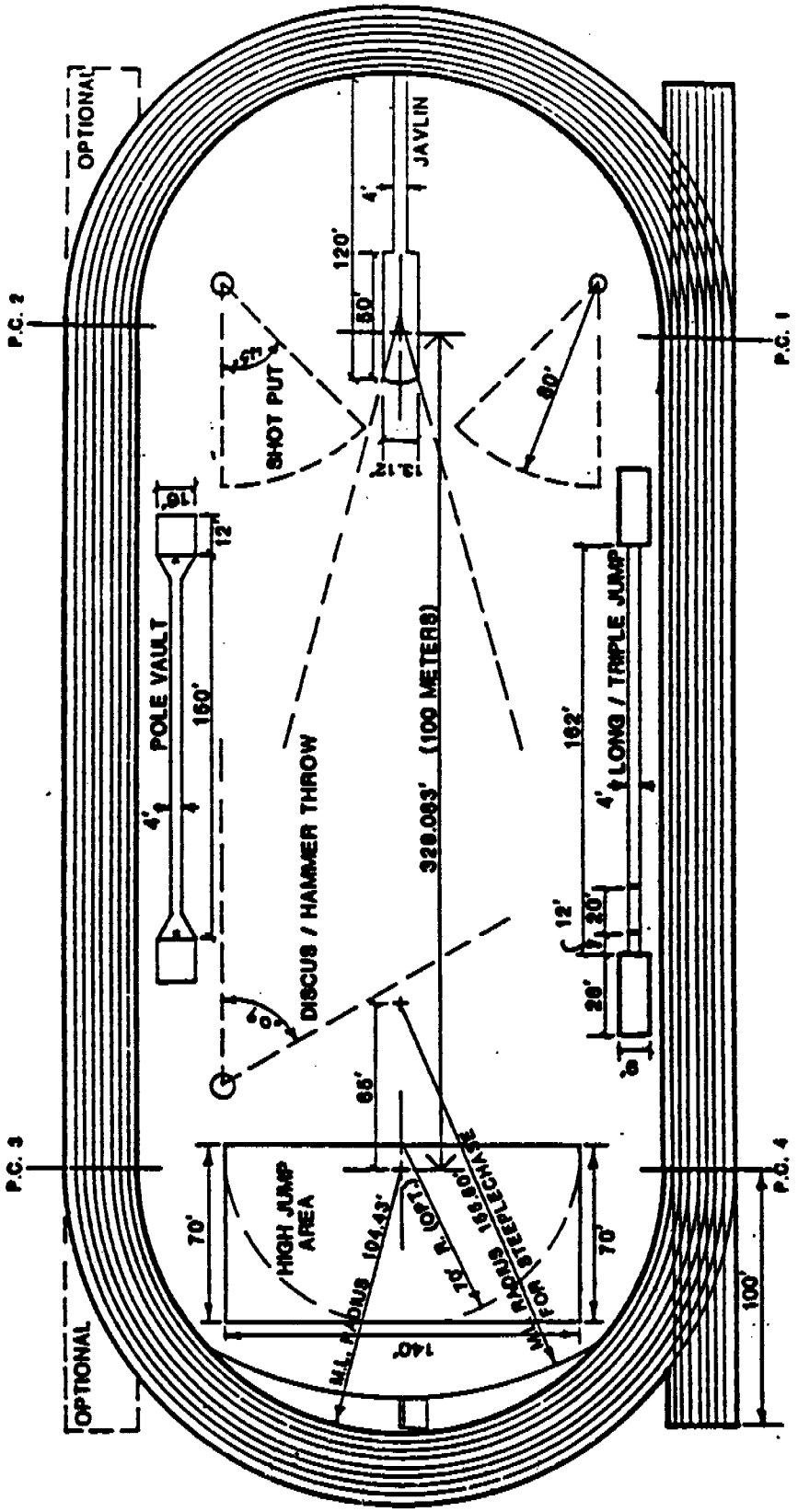
NOTE: Dimension given refers to actual field or court dimension; additional space should be provided for spectators.

FIELD AND COURT DIMENSIONS

School

Activity	Early Childhood/ Primary	Middle Childhood/ Junior High	Adolescent/ High School
Baseball			350' x 350'
Basketball	40' x 60'	50' x 84'	50' x 94'
Football & Track(1)			300' x 600'
Football, Six-man			120' x 300'
Football, Touch		120' x 300'	160' x 360'
Hockey, Field			180' x 300'
Hockey, Ice			85' x 200'
Softball(2)	150' x 150'	200' x 200'	250' x 250'
Soccer			165' x 300'
Swimming			60' x 100'
Volleyball	25' x 50'	25' x 50'	30' x 60'
Archery		50' x 150'	50' x 300'
Badminton			20' x 44'
Handball	18' x 26'	18' x 26'	20' x 40'
Horseshoes		10' x 40'	10' x 50'
Shuffleboard			6' x 52'
Tennis		36' x 78'	36' x 78'
Tennis, Deck			18' x 40'
Tennis, Paddle			20' x 44'
Tetherball	10' circle	12' circle	12' circle

(1) Assumes Metric Track
(2) Varies according to ball size



8 LANE METRIC TRACK LAYOUT

206 WALKS, DRIVES AND PARKING

All walks, drives and parking areas are paved. Parking space is adequate to accommodate school visitors, employees, pupils who must drive, school buses, and school activities. Parking space is provided for the handicapped, and the site is accessible to the handicapped. The bus loading zone is designed to accommodate safely all buses anticipated at one time and is separated from all traffic using school parking and driveway areas. The exterior area is appropriately lighted.

206.01

Walks should be direct, convenient and natural to encourage people to stay on them. They should connect the building with streets or highways, the bus loading zone, parking areas and auxiliary school facilities. Limiting points of access is desirable for control of traffic. Main walks, such as loading areas, and main entrances should be constructed with initial building program. Additional walks should be constructed after traffic patterns have been established.

206.02

Walks should be paved in lanes at least 22 inches (24 inches desirable) wide, with a minimum of three lanes for a total width of at least 66 inches (72 inches desirable).

206.03

Walks should be far enough from building to permit ample space for shrubbery, crowned or sloped high enough for proper drainage and illuminated for night use. Wide paved areas at entrances will help keep the building clean by catching dirt from shoes and overshoes before it gets inside; and a good slope will make this area easier to keep clean. They shall have a gradient of not more than five percent. Walks should be of a continuing common surface where practical and should not be interrupted by steps or abrupt changes in level. Walks, driveways or parking lots should blend to a common level.

206.04

Safety is a primary consideration in locating vehicular circulation on the school site. Secondary considerations are economy, convenience and directness. Driveways should be:

A. One way with clear views. Two lanes should be provided to main loading entrance and parking areas.
B. Hard surfaced, properly drained and illuminated for night use.
C. Planned to provide access and control traffic to loading areas and building service entrances. Wherever practical, driveways for buses should be separate.
D. Located so as not to connect to a heavily traveled highway if a lightly traveled street is accessible. Points of access to the site should be limited.
E. Of adequate space to insure that carbon monoxide does not accumulate in idling vehicles or school buses.

F. Every educational facility not readily accessible from public roads shall be provided with suitable gates, access roads and fire lanes so that all buildings are accessible to fire apparatus. Fire lanes shall be at least 20 feet in width, with the road edge closest to the building at least 10 feet from the buildings. Any dead end road shall be provided with a turn-around at the closed end at least 90 feet in diameter.

206.05

Parking needs of the following should be met:

A. Teachers, pupils and other school employees
B. Parents, school visitors and salesmen
C. Spectator groups attending school or public activities
D. The handicapped

206.06

Parking spaces can be provided at the rate of about 125 cars per acre. The following quantities are suggested as reasonable:

A. For staff and incidental school time parking: 2 parking spaces per teaching station.
B. For pupils: A survey should be conducted for pupil parking needs at the adolescent/high school level and space provided as necessary.
C. For spectators:
   1. Rural areas - One parking space per 3 seats for spectators.
   2. Urban areas - One parking space for each 6 to 8 seats, or to suit local codes and conditions.

206.07

Consideration should be given to the following parking arrangements:

A. Car parking should be arranged to minimize backing. Parking areas should be hard surfaced, well drained and illuminated for night use. Traffic control signs are necessary.
B. Car parking should not be permitted on streets with street traffic, on pedestrian lanes, or on driveways or loading areas. It should be away from playgrounds but near spectator areas when practical.
C. Parking for wheelchair and other handicapped persons must be provided near entrances if possible.

206.08

A designated bus loading zone should be provided to accommodate all buses anticipated at one time. This should be based on:

A. A transportation survey covering bus schedules, partial unloading or transfer of pupils, provision for handicapped children and parking.
B. Number of pupils transported, based on the average number of pupils per bus or rated capacity of the bus.
C. Future growth or possible changes in the transportation pattern.

206.09
The bus parking area should be designed in connection with the bus loading zone, independent of driveways, so that backing the vehicle is unnecessary. It should be permanently surfaced and well drained, with designated spaces and traffic control signs.

206.10
Bicycle racks near the building are desirable for some schools. A survey to determine the need should indicate the rack space necessary.

207 FIRE PROTECTION

207.01
All school facilities shall have, whenever economically feasible, fire hydrants at recommended locations to achieve the best fire insurance assessment. Coordinate the type of hydrant required with the local fire department.

208 SAFETY AND CLEANLINESS

208.01
All school buildings and grounds shall be kept clean and free from debris. All school buildings, grounds, and equipment are free from safety hazards.

209 BEAUTIFICATION

Site development and beautification plan must be implemented.

209.01
The site should lend itself readily to landscaping and provide a pleasant natural environment. It should permit the location of the building an adequate distance from the street line, both for aesthetic setting and for the safety of children.

209.02
The site plan presented by the architect should encompass the total site and show future developments. The same general procedures used for planning the building are appropriate for outdoor facilities. The process of educational planning, writing educational specifications and architectural designing are as applicable to sites as to buildings.

209.03
Well planned site plantings for individual schools should be prepared with the assistance of qualified personnel, such as landscape architects and nurserymen. (There are personnel at West Virginia University and the U.S. Soil Conservation Service who will assist in planning for site beautification.)

209.04
No school site plan should be considered adequate without an accompanying planting plan. The site design should consider the harmonious visual integration of the varied plantings with the mass of buildings from all points of view.

209.05

The classes of plants usually used on school grounds are: shade trees, evergreens, evergreen shrubs, deciduous flowering shrubs and ground covers such as grasses. In general, a school ground planting scheme will consist of foundation planting, intersection planting of shrubs at angles and curves of drives and walks, tall trees to frame the building and trees planted in groves for shade.

209.06

The choice of plants should be limited to the following varieties.

A. Require minimum maintenance
B. Known to be sturdy
C. Thrive in recreational areas
D. Tolerate normal amounts of dry weather

209.07

Save all usable existing topsoil on the site. It can be replaced only at great expense. An analysis of the topsoil should be made to determine plant food requirements for the plantings provided.

209.08

Retain and protect as many existing trees as it is possible to absorb in the total plan. If all the planting cannot be done at once, plant shade or larger trees first. Locate trees in relation to the building so as to shield classrooms from brightness of the sky, reflected snow glare and glare from adjacent buildings and to provide shade.

209.09

Each school site should have a master plan for plantings approved by the Board of Education. Plantings provided by citizens and/or pupils should be in accordance with the approved plan and should be sanctioned by the Board of Education prior to the expenditure of money for such plantings.

COMMON FACILITIES

300 FACILITIES NECESSARY FOR THE OPERATION OF ALL SCHOOLS

All schools contain the instructional and auxiliary facilities which are necessary to maintain the educational program and accommodate the out-of-classroom needs of both students and staff. The design possibilities for such spaces have increased with the emergence of diverse concepts in school design, increased use of non-printed media, expanded awareness of student/teacher human needs, recognition of the school as a community resource and improved technology. The planning of auxiliary spaces must involve careful consideration of the future adequacy of the spaces for, while additional classrooms can be appended with some ease, the expansion of auxiliary spaces can seldom be accomplished easily after completion of initial construction. Thus, when auxiliary facilities become obsolete and inefficient, the usefulness of the entire facility may be diminished.

In the planning and design of new school facilities, designers should always strive to attain maximum efficiencies by looking at multi-use spaces and shared facilities in both the instructional and auxiliary areas.

301 ADMINISTRATIVE AND SERVICE FACILITIES

References:

2. H - 9 & 10

All schools provide the administrative offices necessary for the operation of the school. The school contains a guidance area designed and located to allow privacy, with an entrance separate from the administrative suite. The guidance office is of adequate size to allow for group discussions and is convenient to student records. The guidance office contains adequate secured storage facilities, outside telephone service and an information display area. The school also contains a health service area which includes an examination room, toilet facilities and an area for the ill. The health area is equipped to facilitate the operation of its users and contains outside telephone service. Appropriately equipped areas are available for supplies and book storage, duplicating and/or other activities, conferences and/or small group discussions, staff lounge and student and teacher toilets. A control room, within or adjacent to the administrative suite, is provided to house the communication and fire alarm systems. Factors influencing the location of administrative facilities include: Proximity to the main entrance of the school, convenient access to the instructional areas of the building, insulation from outside noises and convenient access to the special service facilities. These facilities may be used during the summer months; therefore, air-conditioning should be considered.

301.01 General Office and Reception/Waiting Area

301.011 Size

Dependent upon initial enrollment, type of school and ultimate

enrollment of the school; 200 to 800 square feet will likely be needed for secretarial and reception areas.

301.012 Location

A. At the hub of the administrative suite
B. Direct access to a building corridor and to work room
C. Direct or convenient access to offices of the principal and assistant principal and other rooms in the administrative suite
D. Location should provide convenient access to the special service facilities
E. Near main entrance to facility

301.013 Activities

Reception of school visitors, pupils and staff; general secretarial activities required in the operation of the school.

301.014 Equipment Space and Facilities

A. Counter separating reception-waiting room or area from the secretarial work area
B. Comfortable chairs in reception area
C. Small table for magazines and other literature
D. Display space and bulletin board
E. Mail boxes for faculty members, located for easy access without interference with main office traffic
F. Secretarial furniture
G. Fire-safe record file or vault
H. Master telephone station or other communications to all locations in the administrative and special service areas
I. Carpeting or resilient floor covering

301.02 Principal's Office

301.021 Size - 125 to 200 Square Feet

301.022 Location

A. Direct or convenient access to general office
B. Convenient access to the corridor without going through the general office
C. Convenient access to other areas in the administrative suite

301.023 Activities

Planning, research and administrative activities conducted individually or in small groups.

301.024 Equipment Space and Facilities

A. Room design should permit the principal to confer without being overheard in adjacent areas
B. Conference desk and chair
C. Work table convenient to desk for layout work
D. Conference chairs
E. Bookshelving - ten to 15 linear feet
F. Storage for personal belongings

G. Telephone service and intercom to secretary in general office

301.03 Assistant Principal's Office - Optional

Depending upon enrollment.

301.031 Size - 125 to 200 Square Feet

301.032 Location
Convenient access to general office and principal's office.

301.033 Activities
Planning, research and administrative activities conducted individually or in small groups.

301.034 Equipment Space and Facilities

A. Room design should permit the assistant principal to confer without being overheard in adjacent areas
B. Conference desk and chair
C. Work table convenient to desk for layout work
D. Conference chairs
E. Bookshelving: Ten to 15 linear feet
F. Storage for personal belongings
G. Telephone service and intercom to secretary in general office

301.04 General Office - Teacher's Work Room

301.041 Size - 150 to 250 Square Feet

301.042 Location
Direct access to the general office and waiting room.

301.043 Activities
Preparation of testing materials, reports and layouts of instructional materials by both secretarial and teaching personnel.

301.044 Equipment Space and Facilities

A. Combination of open shelving and closed cabinets for storage of a variety of supplies and equipment
B. Duplicating machine
C. Typewriters
D. Calculator
E. Work table or counter
F. Lavatory
G. Microcomputer work station
H. Forced ventilation

301.05 Teacher Planning Space - Optional
Teacher planning spaces are provided to increase classroom space utilization and should reduce the number of classrooms required.

301.051 Size - 50 to 75 Square Feet Per Planning Area

301.052 Location
Convenient access to the instructional spaces for departmentalized program offerings.

301.053 Activities
Planning and maintaining of records for teachers. Individualized or shared study/work space.

301.054 Equipment
A. Desk - 1
B. Lockable filing cabinets - 2
C. Other equipment as selected

301.06 Supply and Book Storage Room

301.061 Size - 100 to 400 Square Feet

301.062 Location
A. Convenient access to the general office
B. Direct opening to corridor through "dutch door" or window to permit distribution of books and supplies

301.063 Activities
Storage and distribution of instructional materials and supplies, including books, paper, notebooks, erasers and pencils.

301.064 Equipment Space and Facilities
A. Cabinets and shelving for books and other school supplies and materials
B. Desk and chair
C. Work counter or table space
D. Filing space
E. Small wall safe for temporary storage of small sums of money and other valuables (optional)

301.07 Record Vault - Optional

NOTE: Vault may be eliminated by providing fire-resistant filing cabinets in the general office or other storage area.

301.071 Size - 50 to 75 Square Feet

301.072 Location
Direct or convenient access from the general office and to guidance and health areas.

301.073 Activities
Storage of current and inactive pupil records.

301.074 Equipment Space and Facilities
A. General construction should be fire-resistant
B. Cart storage units are preferable for current pupil records

301.08 Conference Room

301.081 Size - 150 to 300 Square Feet

301.082 Location

A. Convenient access to general office, principal's office, counselors' offices and the public-address system control room
B. Design and location should permit groups to confer without being overheard in adjacent rooms

301.083 Activities

Conference room will be used for conferences involving 5 to 12 people and for program broadcasts to instructional areas.

301.084 Equipment Space and Facilities

A. Conference table and chairs
B. Chalkboard - 6 to 8 linear feet
C. Bulletin board - 4 to 6 linear feet
D. Glazed panel between conference area and public address system control room
E. Forced ventilation

301.09 Public-Address System Control Room

301.091 Size - 50 to 75 Square Feet

301.092 Location

A. Adjacent to conference room
B. Convenient access to general office and principal's office

301.093 Activities

Distribution of information and educational programs within the school.

301.094 Equipment Space and Facilities:

A. Common partition between this room and the conference room should be glazed. Equip with draperies for isolation of conference room when used for other purposes.
B. Adequate sound and electrical outlets in conferences and control room
C. Public-address control system panel with orientation toward conference rooms
D. Storage facilities for audio supplies and equipment such as records, tape recordings, sound effects, microphone stands and similar equipment

NOTE: The following facilities should be closely related to the administrative facilities for internal communication purposes, such as sharing pupil records and using conference room facilities; however, separate entrances and waiting areas may be provided.

301.10 Counselors' Office

301.101 Size - 100 to 125 Square Feet Per Counselor

301.102 Location

A. Direct access from reception area and convenient access to conference room and general office in the administrative suite
B. Design and location should permit conferences without voices being overheard in the adjacent areas
C. Easy access to student records

301.103 Activities

Individual and group guidance, counseling and conferences with pupils, parents and teachers.

301.104 Equipment Space and Facilities

A. Desk and chair
B. Conference chairs
C. Shelving - 10 to 15 linear feet
D. Bulletin board - 4 to 6 linear feet
E. Storage for personal belongings
F. Telephone communications with general office and intercom to secretary; require private telephone line or lines to the counselor's office
G. One four drawer file cabinet with lock for each counselor

NOTE: Separate waiting and storage rooms are desirable.

301.105 Professional Support Staff

See Chapter 7, Section 715.

301.11 Health Service Unit

301.111 Size

250 to 400 square feet. At least 20 linear feet in one dimension for vision screen.

301.112 Location

Direct access from waiting area and from building corridor to permit traffic to pass through the area for various screening tests. Adjacent to general office for access to student records.

301.113 Activities

Examinations by nurses, doctors, dental hygienists, administration of first aid and conferences with students, parents and teachers.

301.114 Equipment Space and Facilities

A. Small room or curtained area with cots for each sex, to permit rest and isolation in case of illness
B. Bulletin board
C. Toilet, lavatory and water closet conforming to requirements for the physically handicapped
D. Scales, medicine chest, refrigerator with locked storage area, mirror, clock and first aid kit

E. Storage for bed linens
F. Storage closet for nurses' personal belongings (locked)
G. Work counter with sink
H. Locked file cabinet
I. Desk and chair
J. Conference chairs
K. Locked medication box

301.12 Reception Room - For Larger Facilities

301.121 Size - 100 to 150 Square Feet

301.122 Location
Direct access to counselor offices, health unit and professional support staff.

301.123 Activities
Reception of and browsing by pupils and parents.

301.124 Equipment Space and Facilities
A. Secretarial desk and chair
B. Typewriter and stand
C. Comfortable chairs
D. Shelving for books, magazines, and variety of occupational information and college bulletins
E. Filing cabinet for occupational information not displayed on racks
F. Telephone to general office and outside

301.13 Teachers' Lounge

301.131 Size - According to Faculty Number

301.132 Location
A. Direct access from a building corridor
B. Location avoiding major pupil traffic, yet reasonably close to the administrative area
C. Toilets should not have direct opening into the lounge area

301.133 Equipment Space and Facilities
A. Comfortable lounge furniture
B. Kitchenette to prepare light refreshments (optional)
C. Adequate ventilation
D. Toilets - facilities must conform to U.S.A. Standard Specifications or similar provisions as stated in Chapter 18, Article 10F of the Code of West Virginia for making buildings accessible to and usable by the physically handicapped.

302 FOOD SERVICE FACILITIES

References:
2. H - 5 & 6

All schools contain a food service area which provides for receiving, storage, cooking, serving, dining and dishwashing. Space for lockers, toilet facilities, and an office is provided. The facility is designed to promote cleanliness and easy maintenance. The dining area is separated from the food serving and preparation areas and provides space sufficient to allow for the student body to be fed within a 90 minute time period or to seat one-third of the student body in elementary schools and three-eighths of the student body in middle and adolescent/high schools. Area is to be located convenient to service drive for deliveries or removal of wastes. Food preparation at a central or satellite kitchen and delivery to each school is an acceptable alternative; however, if this method is utilized, warming and serving facilities must be provided at each school.

302.01 Dining Rooms

302.011 Size

Base preliminary determination of allotment on 12 to 15 square feet per student seated at any one time. Provisions for subdividing large areas should be considered.

302.012 Location

A. First floor location
B. Adjacent to kitchen
C. Direct access from the building corridor
D. Maximum utilization of natural beauty in the vicinity
E. Complete separation from both food preparation and serving areas

302.013 Equipment Space and Facilities

A. Drinking water facility accessible to students
B. Seating suitable for dining and study purposes
C. Chalkboard - 8 to 10 linear feet
D. Bulletin board - 4 linear feet
E. Glazed panel between this area and the dining room to permit ease of supervision; should be equipped with draperies to permit isolation when supervision is not necessary

302.02 Teachers' Dining and Student Conference Room (Optional)

302.021 Size - 250 to 350 Square Feet

302.022 Location

Convenient access to serving area, building corridor and general dining area.

302.023 Activities

Dining and meetings of teachers and staff members; committee work by pupils.

302.03 Kitchen

302.031 Size

Dependent upon number of meals served during the school day, approximately 2 square feet per meal served, a minimum of 500 square feet. 25 to 30 percent of total foods area should be used for kitchen.

302.032 Location

A. Easy access to pupils in the serving line
B. Direct access from the outside of building for delivery of supplies and equipment and disposal of wastes
C. To facilitate the serving of large community gatherings in this space or in the physical education area

302.033 Equipment Space and Facilities

A. Small bulletin board near entrance and adjacent to serving line to promote quick and efficient service
B. Floor covering qualities: utility, durability and resiliency. Floors should be impervious to moisture, grease and food stains. They should be non-slippery and resistant to scratches, acid, alkali or organic solvents. Maintenance and upkeep relatively low. Install drains.
C. Wall and ceiling surfaces should be readily maintained and not affected by steam or heat. Tile wainscot at least 5 feet high. Sound absorbent material for ceilings.
D. Adequate ventilation is essential for workers and to reduce food odor penetrations into dining area.
E. Adequate built-in and movable equipment for efficient, sanitary preparation and serving of food. Where possible, equipment should be movable for efficiency and ease of cleaning walls and floors. Select equipment for its use and specific needs.
F. Lavatory in kitchen; workers' rest room adjacent to kitchen, but with no direct opening into the kitchen, dishwashing area or food storage area.
G. All kitchen equipment and facilities shall comply with state regulatory agency requirements.

302.04 Food Storage

302.041 Size

Minimum of 1/2 square foot per meal served; 1 1/2 to 2 cubic feet per meal served for small operation; and 1 cubic foot for long time storage such as walk-in cooler. Include dry storage area.

302.042 Location

A. Immediate access to receiving area
B. Convenient access to food preparation area

302.043 Equipment Space and Facilities

A. Areas must be dry, cool and insect and rodent proof throughout; therefore, heating pipes, water heaters and compressors should not be located in this area.

B. Adequate ventilation from outdoors
C. Adequate shelving - limit height to 7 feet 6 inches
D. Storage at floor level for large sacks of commodities on portable platforms or in covered containers on dollies

302.05 Non-Food Storage

302.051 Size -- 40 to 60 Square Feet

302.052 Location
Immediate access from food preparation and storage area.

302.053 Function
Provide storage of soaps, detergents, wetting agents and other cleaning supplies and equipment required in the daily operation and maintenance of the food service center. A separate, locked cabinet for insecticides, rodenticides and other toxic compounds should be available.

302.054 Equipment Space and Facilities
Service sink, washer, dryer and variety of shelving.

302.06 Locker/Dressing Room

302.061 Size - 75 to 100 Square Feet

302.062 Location - Adjacent to Kitchen Area

302.063 Equipment Space and Facilities
A. Lockers - full length
B. Mirror
C. Chairs or benches - 2 or 3
D. Toilet

302.07 Serving Area

302.071 Size
Dependent upon the number of meals to be served at any one time and method of serving. Use 200 square feet for preliminary planning. For floor covering qualities, see Chapter 3, Section 302.033 (B.).

302.08 Dishwashing Area

302.081 Size
Dependent upon method of cleaning and sanitizing dishes and number of meals served. Use 200 square feet for preliminary planning. For floor covering qualities, see Chapter 3, Section 302.033 (B.).

302.09 Receiving/Maintenance Area

302.091 Size
Provide approximately 75 square feet for can wash and waste holding. Provide exterior concrete pad with easy access if a dumpster unit is used.

303 LIBRARY/LEARNING RESOURCE OR MEDIA CENTER

References:
2. G - 26

All schools contain a center which is located, designed and equipped to facilitate the instructional program. This center is a space for the organization, storage, lending and on-site use of learning aids for all school educational programs. It should house not only conventional library materials, (books, newspapers, periodicals, and pamphlets), but also recordings, tapes, filmstrips, slides and microfilm, as well as equipment necessary for their use. The center should be comfortable and attractive. The environment should be pleasant, and the space should be organized to permit quiet, solitary study, group interaction, easy location, inspection and use of materials, and convenient flow of traffic between areas. The success of the center will depend, to a large degree, on the organization of space and materials, the furniture and the manner in which the center is operated. The center should be centrally located to insure easy access. A main floor location is usually preferable. The center should be located away from noisy areas like the gymnasium and should be placed so that physical expansion will be possible if necessary. Another consideration in locating the center is access from outside when other parts of the school building are closed. The size of the facility should be appropriate for school enrollment and should accommodate the current collection of printed and other materials as well as anticipated acquisitions. The nature of the facility will depend on the educational level of the students although there are some common requirements which are unaffected by the age of the users. For instance, carpeting of floors will insure a low noise level; walls should be treated too so that maintenance requirements are not excessive; ceilings should provide desired acoustical level; heating and ventilating outlets should be installed so that they do not interfere with shelving and so that heat flow will not damage books; and electrical outlets should be accessible where audiovisual and other equipment will be used.

303.01 Circulation Area

303.011 Space Allocation - 150 to 200 Square Feet

303.012 Activities
Exhibits, copying equipment, card catalogs, periodical indexes and charging. Provisions for microcomputer work station.

303.02 Reading/Browsing Area

303.021 Size - 30 Square Feet Per Reader

303.022 Capacity
8 to 12 percent of the total student body. Provision should be made to include a story telling area at the elementary level.

303.023 Location

See factors mentioned in comment about this center in Chapter 3, Section 303.

303.024 Activities

General reading, reference and research work with encyclopedias, books, dictionaries, maps, pamphlets, charts, globes and pictures; browsing; viewing displays; magazines; charge-out of materials; previewing non-book materials; and class instruction in the use of the library.

303.025 Equipment Space and Facilities

A. Provisions for microcomputer work stations
B. Tables of various sizes, shapes and chairs. All furniture should be sized to the students using it.
C. Vertical files
D. Reference stands for dictionaries
E. Map stand
F. Storytelling area
G. Informal reading area - periodicals and books; lounge-type furniture
H. Book trucks
I. Wet and dry carrels
J. Movable shelving - 5 feet, not to exceed 6 feet, high and 12 inches deep
K. Electrical outlets available. Duplex service receptacles should be installed on all walls. Sufficient branch electrical circuits service should be in each room.
L. Where there are to be specialized facilities such as language labs, study carrels, micro-teaching and television, provision should be made for electrical service in the floor.
M. Conduits should be provided to permit future installation of computer terminals, television and other electronic instructional devices.
N. System conduits should be at least 1 1/2 inches in diameter in order to provide for installation of television and other teaching devices as indicated above.
O. Acoustical treatment in this area is essential. Use of audio devices mandates acoustical treatment of walls, ceilings and floors in media centers and other such areas.
P. Carpeting
Q. Light control. Adequate provision for controlling the light level in instructional areas is essential. For efficient use of projection-type materials, the light in the room, particularly in the area of the projection surface, should not exceed one-tenth foot candle.
R. For preservation of book and non-book materials and equipment, temperature and humidity control are essential. Air conditioning of media center and production area is recommended.

303.03 Director's Office

303.031 Size

Space, depending upon size of staff, approximately 150 square feet.

303.032 Location

Should be located adjacent to, and connected with, the circulation area. A glass partition should be placed in the wall between this area and the office.

303.04 Maintenance, Repair and Distribution Area

303.041 Size - 300 to 400 Square Feet

303.042 Location

Readily accessible to the administration and reading/browsing areas.

303.043 Activities

Processing, maintenance and minor repairs of book and non-book materials and equipment.

303.044 Equipment Space and Facilities:

A. Counter tops
B. Storage cabinets
C. Typewriters
D. Sink
E. Electrical outlets
F. Shelving

303.05 Media Production Lab - Optional

303.051 Size - 300 to 400 Square Feet

303.052 Location

Accessible to administration area and main building corridor.

303.053 Activities

Production of photographic, graphic and audio materials.

303.054 Equipment Space and Facilities

A. Refrigerator
B. Sink with running water
C. Electrical outlets
D. Exhaust fans
E. Standard darkroom with equipment
F. Light control
G. Floor drains
H. Air conditioning
I. Basic graphic production equipment
J. Basic audio production equipment
K. Duplicating equipment

303.06 Viewing/Listening/Conference Area

303.061 Size
150-200 square feet with provision for subdivision into viewing/listening or conference areas by movable walls. Provide multi-spaces for larger facilities.

303.062 Location
Accessible to reading/browsing area.

303.063 Activities
Seminars and small group seminars; previewing; listening to recordings.

303.064 Equipment Space and Facilities
A. Adequate electrical outlets
B. Acoustical treatment
C. Light control of each small area

303.07 Equipment Storage Area - Instructional Materials, Supplies and Equipment

303.071 Size - 300 to 400 Square Feet

303.072 Design Capacity
Storage of all audiovisual equipment during vacation period.

303.073 Location
Adjacent to work room. Limited access with provision for maximum security.

303.074 Activities - Storage and Circulation

303.075 Equipment Space and Facilities
A. Temperature, humidity and dust control
B. Locking storage cabinets
C. Door with lock without threshold strip - minimum 3 feet
D. Fire protection
E. 18 inch shelving

303.08 Periodical, Book and Newspaper Storage Area

303.081 Size - 150 to 200 Square Feet

303.082 Location
Adjacent to reading/browsing area.

303.083 Activities
Storage of periodicals, newspapers, books and non-circulating materials.

303.084 Equipment Space and Facilities
A. 18 inch shelving
B. Work table
C. Temperature and humidity control

EARLY CHILDHOOD/PRIMARY EDUCATION K-4

400 EARLY CHILDHOOD/PRIMARY EDUCATION K-4 CENTERS

References:
2. G - 5

All schools housing early childhood programs contain general purpose instructional areas, specialized instructional spaces, auxiliary spaces, safety facilities and service facilities. The school is carefully planned and is large enough to maintain reasonable efficiency. Available technology is incorporated into environmental controls to provide a comfortable environment which facilitates the educational program. Where design considerations permit, the facility will be constructed in a manner that utilizes maximum natural light.

Early childhood education is the beginning of education in West Virginia public schools. The kindergarten and transitional kindergarten stages provide developmental activities designed to stimulate the intellectual, physical/motor and social/emotional development of the child and begin the process of basic skills mastery. The educational program in grades K-4 reinforces the developmental activities and continues to enhance the mastery of the skills of reading; the basic communication skills of listening, speaking and writing; mathematics; social studies; physical and motor development; health/safety education; science education; and creative arts education.

400.01 Size of Centers

Early childhood/primary school centers should be organized for educational programs and administrative purposes according to the following enrollments.

A. Schools housing grades K-4 should have a minimum of 110 square feet per pupil unless factors such as enrollment or architectural design permit otherwise as determined by the state superintendent of schools. Regardless of school size, the teacher-student ratio should not exceed 25 students per teacher for regular instructional spaces.

B. Special class enrollments (such as special and early childhood education) must be considered in addition to the above figures.

C. Centers shall be planned for approximately 240 students per center. Smaller centers require approval from the West Virginia Board of Education.

D. Square footage of facilities funded by SBA will be established in accordance with SBA Guidelines and Procedures Handbook.

401 ESSENTIAL PHYSICAL AND SERVICE FACILITIES

401.01

Certain physical and service facilities such as a multipurpose room, dining, assembly and music areas are provided in larger elementary school centers. Similar facilities, modified in size and/or combined use, are provided in smaller elementary centers.

The following chart indicates the facilities considered essential to the implementation of high quality early childhood/primary education. Consideration should be given to changing various learning spaces and activity areas through the use of folding or movable walls.

PHYSICAL AND SERVICE FACILITIES CONSIDERED ESSENTIAL FOR VARIOUS SIZED EARLY CHILDHOOD/PRIMARY EDUCATION CENTERS

Enrollment			Physical Facility
210	420	630	
			Areas for:
5	5	5	A. Early Childhood Education
1	1	1	B. Primary
1	1	1	C. Outdoor Activities
			Instructional Spaces (Special)
5	5	5	A. Corrective/Remedial
5	5	5	B. Exceptional Children
			Specialized Areas
2	2	3	A. Assembly Room
2	2	1	B. Physical Education
2	1	1	C. General Music Area and Storage Space
2	1	1	1. Soundproof Instrumental Area
1	1	1	2. Music Equipment and Material Storage
2	1	1	3. Practice Room
2	1	1	4. Instructor's Office
			D. Cafeteria
2	2	3	1. Multipurpose/Dining
1	1	1	2. Food Preparation
1	1	1	3. Manager's Office
1	1	1	4. Serving
1	1	1	5. Storage and Disposal
1	1	1	6. Employee Comfort
			E. Administrative
1	1	1	1. Principal's Office
1	1	1	2. Reception Room
4	4	4	3. Teacher's Work Room
1	1	1	4. Health Unit
1	1	1	5. Conference/Special Instruction Room
1	1	1	6. Storage
1	1	1	7. Staff Lounge and Toilets
1	1	1	8. Guidance Unit
			F. Learning Resource Center
4	4	4	1. Reading/Browsing Area
4	4	4	2. Director's Office
4	4	4	3. Maintenance, Repair and Work Area
4	4	4	4. Production Area
4	4	4	5. Viewing/Listening Area
4	4	4	6. Equipment Storage Area
4	4	4	7. Periodical, book and newspaper storage area

Enrollment			Physical Facility
210	420	630	
1	1	1	G. Computer Laboratory or Distributed Network
			H. Instructional Areas
2	1	1	1. Art
2	1	1	2. Science
2	1	1	3. Art/Science Storage
			I. Toilets
1	1	1	1. Students
1	1	1	2. Staff
			J. Custodial
1	1	1	1. Office intercom and toilet
1	1	1	2. Receiving, storage, disposal and workroom
1	1	1	3. Outside storage for lawn tools and equipment
1	1	1	4. Slop sink areas
1	1	1	K. Heating plant and fuel storage
			Service Facilities
1	1	1	A. Light
1	1	1	B. Heat, ventilation & air conditioning
1	1	1	C. Telephone
1	1	1	D. Educational television
1	1	1	E. Water
1	1	1	F. Sewage

1 Facilities provided in each center for specified purpose.

2 Facilities provided in each center; however, multiple use may be made of a single space. The space must be designed and equipped to permit its use for various purposes during the school day.

3 Separate facility provided in each center, but should be planned to accommodate compatible activities.

4 Facilities should be provided in each school.
NOTE: Planning may permit combining areas.

5 Facilities provided in each center where included in educational program.

402 KINDERGARTEN AND TRANSITIONAL KINDERGARTEN

402.01 Size

Base the preliminary determination of early childhood education areas upon the allotment of 50 square feet per child.

402.02 Design Capacity - 20 Students

402.03 Location

A. On ground floor with easy access to an entrance not generally used by older children. Corner areas are also preferable to permit the development of separate, fenced-in play areas.

B. Direct access to segregated outdoor play area that contains a covered all weather area and a large grassy area with climbing equipment, obstacle course and garden area and adequate storage for equipment.

C. Area of the building which permits maximum natural light.

402.04 Activities

Major learning activities include: Units of work on areas of immediate interest, physical education, conversation, discussion, listening activities and creative activities with various media.

402.05 Equipment Space and Facilities

A. Work areas
   1. Deep sink equipped with mud trap, hot and cold water
   2. Waterproof counter top - 2 square feet per student with shelving beneath. Counter height to accommodate 5 year old children
   3. Grounded duplex electrical outlets at 3 feet intervals over counter top
      NOTE: Avoid placing over sink
   4. Facilities for hanging mobiles from ceiling

B. Instructional space and storage area for activities related to: art, science and nature, music and rhythmics, language development, creative play, crafts and construction

C. Pupil wrap area (storage for personal belongings)

D. Toilet facilities (within the early childhood area) and drinking fountains

E. Display space - movie screen/access to microcomputer

F. Provide light control facilities (ie., dimmer switches and blackout drapes for audiovisual media work)

G. Special consideration should be given to the H.V.A.C. system design to remove cold air from the floor during the heating season.

H. Acoustically treat to protect instructional areas from outside noises

I. Material combination of carpeting and resilient material

J. Movable student tables and chairs of appropriate height, easily joined or separated

K. Teacher's combination desk/table and chair

L. Large wall clock

403 GENERAL INSTRUCTIONAL AREAS - PRIMARY

403.01 Size

Base preliminary determination of area upon the allotment of 28 to 30 square feet per student. To accurately determine the area needed, trial layouts should be made using scaled templates representing furniture and equipment on scaled drawings of floor and wall elevations.

403.02 Design Capacity - 25 Students

403.03 Location

A. Acoustically treat to protect instructional spaces from the outside noise

B. Convenient access to the out-of-doors, particularly to recreational and physical education areas

C. If the building is a multiple-story structure, the first grade shall be assigned to the ground level floor.

403.04 Activities

General learning areas may support a variety of activities including individual study and work, group interaction, lectures, reading, writing, demonstration and movement. These spaces will accommodate a variety of audiovisual and teaching equipment for both group and individual use.

403.05 Equipment Space and Facilities

Ample space, movable furniture and equipment and well-designed storage areas are essential.

A. Chalkboards, bulletin boards and other display areas - as much as possible, a minimum two-thirds of available wall space
   1. Chalkboards and bulletin boards should have map rails installed above
   2. The bottom of the display area should be at the eye level of the student when seated
B. Student wardrobe
C. Storage space (may be separate room)
   1. Open and closed adjustable shelving of various heights and depths for a variety of sizes of construction paper, charts and large format books - 30 linear feet of each
   2. Storage for teacher's personal belongings
   3. Filing space for instructional material and supplies equivalent to 4-drawer, legal size file cabinets
D. Work counter - see Chapter 4, Section 402.05
E. Teacher's combination desk/table and chair
F. Provisions for microcomputer work station
G. Conference-type table and chairs
H. Desks and chairs, or combination chair-desks
I. Desirable equipment
   1. Corridor display cabinet for students' work
   2. Rack for storage of periodicals pertaining to subject matter being taught
   3. All major types of audiovisual equipment should be readily available within classroom or the nearby media center
J. Adequate provision for controlling the light level in instructional areas is essential. For efficient use of projection-type materials, the light in the room, particularly in the area of the projection surface, should not exceed one-tenth footcandle.
K. Duplex service receptacles should be installed on all walls of the instructional space for the use of instructional equipment. Sufficient branch electrical circuits service should be in each room. Conduits should be provided to permit installations of computer terminals, television and other electronic instructional devices. System's conduits should be at least 1 1/2 inches in diameter in order to provide for installation of television and other teaching devices as indicated above.
L. A projection surface should be permanently installed in each instructional area with provision for eliminating keystoning.

M. Use of audio devices mandates acoustical treatment of walls, ceilings and floors in instructional areas and media centers, particularly in open-type classrooms where many activities are occurring simultaneously.
N. Combination of carpeting and resilient material

404 CORRECTIVE/REMEDIAL INSTRUCTIONAL AREAS

Specialized facilities in the form of small or specially equipped instructional areas are provided in each facility.

404.01 Size

Base preliminary determination of area upon the allotment of 28 to 30 square feet per student with 15 to 1 student/teacher ratio with aide.

404.02 Location

Adjacent to general instructional areas, acoustically treated to protect instructional spaces from outside noise.

404.03 Activities

Individuals and groups engaged in tutoring, adding stimulation, reducing stimulation and positive reinforcement of regular programs.

404.04 Equipment Space and Facilities

See Chapter 4, Section 403.05.

405 MULTIPURPOSE ROOM

A multipurpose room is to be included. It should be based upon the amount of time required for the separate program activities to be housed.

405.01 Size

Base preliminary determination of multipurpose room area on the allotment of six to eight square feet per student enrolled in the school. Allow 12 to 15 square feet per student for dining. Allow approximately 65 square feet per student for physical education with 25 students per session.

405.02 Design Capacity

To be determined by school plant specialists.

405.03 Activities

To be determined on the basis of the school's program. Consideration should be given to providing a clear height from 20 to 24 feet if the room is used for such activities as basketball.

405.04 Location

A. Removed from quiet areas of the building by location and/or acoustical treatment
B. Direct access to outdoor physical education or recreation areas
C. Convenient access to public parking areas

D. Direct access to service drive
E. If used for dining purposes, locate close to kitchen

405.05 Equipment Space and Facilities

405.051 Stage - Optional

A. Provide 500 square feet of permanent or portable stage area. Consideration should be given to staging "in the round."
B. Two entrances to the stage, one direct from the building corridor. Entrances to be double door size.
C. Stage location should be one which makes instructional spaces accessible for use as stage dressing rooms.
D. Proscenium opening should be approximately 1/2 the width of the body of the multipurpose room.
E. Stage curtains of fire resistant materials, portable or permanent acoustical paneling and cyclorama and film projection screens should be part of the stage equipment.
F. Lighting facilities with controlled illumination.
G. Grounded duplex electrical receptacles - 5 to 10 - should be provided in the stage area.
H. Storage for electronic and stage equipment.
I. Every stage equipped with rigging for movable theater-type scenery and every enclosed platform larger than 500 square feet in area shall have a system of automatic sprinklers in accordance with the state fire code.

405.052 Chair and Table Storage

A. Area as needed for storage of tables and chairs used for dining purposes
B. Provision of ample space to accommodate assembly chairs stored on trucks

405.053 Equipment Storage

A. Approximately 200 square feet with convenient access to the outdoor physical education area and direct access to multipurpose area
B. Provide double doors with flush threshold
C. Shelving and cabinets for storage of miscellaneous types of physical education and other equipment

405.054 Public Toilets

A. If pupil toilets are not conveniently accessible for public use, 2 toilet rooms of approximately 50 square feet each should be provided.
B. Toilets must conform to Chapter 18, Article 10F of the Code of West Virginia, which makes provisions for the orthopedically impaired.

406 FOOD SERVICE FACILITIES

See Chapter 3, Section 302.

407 ADMINISTRATIVE AND SERVICE FACILITIES

See Chapter 3, Section 301.

408 ENGINEERING AND CUSTODIAL FACILITIES

See Chapter 12.

409 FACILITIES FOR EXCEPTIONAL STUDENTS

All schools having education programs for exceptional students shall provide adequate space designed to facilitate mainstreaming and equal access for all students and teachers. All facilities for special education are contained within the building. Facilities are designed to assist students to function safely with as much mobility as possible and are accessible to handicapped students. Facilities which house self-contained classes or other specialized facilities required for all exceptionalities are designed, furnished, equipped and maintained to facilitate the program requirements set forth in the individualized education program. See Chapter 7, Exceptional Students - Instructional Areas, to determine which programs can best be provided in specialized facilities.

410 ART FACILITIES - OPTIONAL

Consideration may be given to providing multi-use space for the instruction of art and music.

410.01

Space allotment of 45 to 50 square feet per child with movable tables and chairs. Table dimensions no less than 36 inches x 60 inches for each 4 students. Art room should be located on the ground floor.

410.02 Equipment Space and Facilities

A. 2 deep sinks, each with extra large drain, cleanout trap, and long drainage top - stainless steel recommended
B. Uncarpeted floor of concrete, tile, linoleum or other material not easily damaged by paint and clay
C. Counter space equivalent to the length of at least one wall
D. Closed-in storage shelves under counter - 6 or more drawers of built-in or movable storage space for flat pictures, at least 20 inches x 40 inches - storage cabinets and/or display boards on wall above counter
E. Adjacent storage room with shelves for art supplies - space allotment of 250 to 350 square feet
F. At least one chalkboard, movable or stationary
G. Bulletin boards - 30 linear feet recommended. Movable display panels are also recommended. (Recommended for hallways and general areas: glass enclosed display space and movable display cabinets.)
H. Electrical outlets, 12 or more, located conveniently to working area

I. Audiovisual facilities may be separate, or combined with art room. These require blackout curtains and projection facilities.

J. Ceilings should be equipped with facilities for hanging mobiles.

K. Art appreciation corner with facilities for rotating display of two and three-dimensional objects and related library materials. Recessed wall-display cabinets are desirable, but not essential.

L. Mechanical ventilation systems are utilized in the art rooms to handle fumes, dust, odors and gases from turpentine, lacquer thinners, acids, toxic markers and clays. Special areas such as kiln rooms, dark rooms, pug mills, burnout kilns and acid areas require additional specific ventilation.

M. Provision for ceramic kiln

410.03 Location - Ground Floor Location

410.04

Art facilities for small schools which have no special art room must include storage space for consumable art supplies, materials and equipment and an arts and crafts corner.

410.041 Arts and Crafts Space

A. At least one sink, preferably deep, with long drainboard, large drains and cleanout trap - stainless steel recommended

B. Built-in counter with formica top and closed-in storage shelves beneath - at least 8 feet in length. This may double as work space or drying area for unfinished work.

C. Display board or bulletin board, 12 linear feet or more

D. Uncarpeted floor area of tile, linoleum or other material not easily damaged by paint and clay

E. Storage for art supplies in closet, case or small storage room

F. At least 2 electrical outlets, adjacent to work area

410.042 Art Appreciation Corner

Equipped with glassed-in display case with shelves for crafts; and wall space for displaying two-dimensional work. Should also accommodate a section for library materials in the form of built-in shelves or portable unit.

411 LIBRARY/LEARNING RESOURCE OR MEDIA CENTER

See Chapter 3, Section 303.

412 MUSIC FACILITIES - OPTIONAL

See Chapter 4, Section 410.

Physical and spatial requirements for music education obviously exceed the capacity of the conventional classroom. Spaces for individual and group vocal and instrumental instruction and

rehearsal are necessary. The size, quality and number of these spaces will be determined by the enrollment and the educational level of the school, the scope of the music program and the degree of encouragement offered music education by the administration and the community.

A good location for the music room is in a wing of the building close to the stage or multipurpose room. Physical isolation should be sought to reduce the transmission of sound to other areas of the building. Practice rooms may be separated acoustically from the rehearsal room by placing storage rooms or wall having dead air space between them. It is important that the facility be arranged for supervision of all practice and storage rooms. Also, the temperature and humidity of instrument storage rooms must be maintained at acceptable levels.

412.01

This facility shall be large enough to accommodate physical movement and daily use of "classroom/general music" instruments for teaching general music and a facility for elementary instrumental music class instruction.

412.011 Size

400 cubic feet per student; ceiling 14 to 16 feet high. Allow space for design capacity of 25 students.

412.012 Location

A. Direct access to instrumental storage, practice room and storage rooms
B. Isolated area of building

412.013 Activities

Instruction in instrumental and classroom/general music.

412.014 Equipment

A. Stereo sound reproduction and recording equipment
B. Piano and bench
C. Classroom instruments
D. Chalkboard, 30 linear feet
E. Folding chairs
F. Music stands
G. Filing cabinets - legal size

412.02 Office Space for Planning or Studio Teaching

412.021 Size

250 to 350 square feet - 8 to 12 students.

412.022 Design Capacity

Accommodate small group.

412.023 Location

Convenient to music room.

412.024 Equipment

A. Desk and chair
B. Filing facilities
C. Chalkboard
D. Work table and chairs
E. Storage for tapes and records

412.03 Storage Space for Instruments, Equipment and Music

412.031 Size

Approximately 150 square feet. Secure room with shelving to accommodate stringed instruments, classroom instruments and legal size filing cabinets.

413 MICROCOMPUTER LAB

Whenever feasible, the use of technology in education will be integrated within the individual classroom, but there is a need for a demonstration/lecture laboratory to house equipment that may be utilized by all teachers and students. This laboratory will employ present day and futuristic applications of educational technology by exploring the areas of: computer controlled capability with use of modern, CD-ROM, laser disc, monitors and/or data projector; distance learning and teleconferences allowing interactive experiences; and authoring or production capabilities to develop programs and course ware for in-house applications. Ideally, the middle school instructional technology facility consists of one large room with a platform area for teacher demonstration/lecture and adjacent control room. This facility may also be used for large group instruction.

413.01 Size - 40 Square Feet Per Student

413.02 Design Capacity - 25 Students

413.03 Location

Provide sufficient labs for use by each curriculum area. Core group for smaller facilities and a minimum of one lab for each curriculum area in larger facilities.

413.04 Activities

Active use of microcomputer applications related to the curriculum.

413.05 Equipment Space and Facilities

A. 30 inches x 48 inches microcomputer work stations - 20
B. 30 inches x 60 inches host station - 1
C. Time-sharing printer stations - 4
D. Storage cabinets for disks and paper
E. Teacher's combination desk-table and chair
F. Due to the rapid advancement in computer technology, current information must be obtained before design work is completed.

500 MIDDLE CHILDHOOD/JUNIOR HIGH EDUCATION 5-8 CENTERS

Reference:
2. G-6

Middle childhood education builds upon the results of early childhood education and provides educational opportunities to help students extend competence in basic skills; develop self-understanding, self-knowledge, independence and interdependence; and engage in exploratory experiences in academic areas and career education. In addition, enrichment studies are provided for a broad range of potential growth options. Middle childhood education serves learners during the 10-14 years age range. In this age range, students have rapid changes in physical growth and social and intellectual development and maintain or establish new values, attitudes and beliefs which influence their decisions to remain or drop out of school. The middle childhood education program emphasizes extension of basic skills, broadening of academic skills to assist students in making the transition from childhood dependence to adult independence and opportunities for exploration.

500.01 Size Of Centers

An educational facility should be large enough to take advantage of reasonable economies of operation, comfortably accommodate the inhabitants and support the educational program. Other factors such as density of population, availability of sites and transportation should be considered in determining the size of facility.

A. All middle/junior high schools have a minimum allotment of 120 square feet per student, unless factors such as enrollment or architectural design permit otherwise as determined by the State Department of Education.
B. The size and type of facility will be determined by the number of students and the instructional program.
C. Centers (5-8 organizational pattern) shall be planned for a minimum of 600 students (85% utilization). Smaller centers or combination K-8 centers require approval from the West Virginia Board of Education. See Chapter 1, Section 100.016.
D. Square footage of facilities funded by SBA will be established in accordance with SBA Guidelines and Procedures Handbook.

501 PLANNING PROCESS

501.01

Middle school programs and facilities to accommodate such programs are the result of careful, complete and creative planning.

501.02

Closely coordinated planning will include factors such as the school's role in the community, the characteristics of students, how students learn most effectively, the physically disabled and what constitutes the total coordinated program of learning in the middle/junior high

school. Consideration should be given to changing various learning spaces and activity areas through the use of folding or movable walls.

501.03

Educational specifications shall be prepared to include a careful computation of room, area and building capacity as required to offer programs of study as outlined in the Master Plan, State Board Policy 2510 and the Criteria of Excellence.

501.04

Departmentalization, specialization of instructional spaces, elective subjects and scheduling are factors to be considered in determining the number of teacher stations.

NOTE: The following formula considers only the number of students; none of the above are considered.

A. The number of teaching stations needed may be determined by applying the following formula to each subject area. (If general purpose instructional spaces are considered interchangeable for different subject areas, the calculation may be made for a group of subject areas.)

B. The basic formula:

$$\text{Number of Teaching Stations} = \frac{\text{Number of students enrolled in subject} \times \text{Number of periods per week in subject}}{\text{Desired average class size} \times \text{Number of periods per week each teaching station can be used.}}$$

501.05

The student capacity of a school building is affected by the educational program; it changes each time the program is modified. A more complete analysis of the operational capacity of proposed school buildings may be obtained by referring to:

A. Conrad, M.J., A Manual for Determining the Operating Capacity of Secondary Schools. Bureau of Educational Research and Service, Ohio State University.

B. Castaldi, Basil, The Castaldi Nomogram. The New England School Development Council.

501.06

In recent years, middle/junior high education has undergone considerable experimentation and change in four areas: School organization, curriculum design, teaching methods and school community relations. Included in these are:

A. Microcomputer network

B. Use of large group, small group and individual instruction

C. Use of programmed instruction with or without teaching machines

D. Use of distance learning and related media

501.07

To aid in planning facilities to use the media center effectively, refer to Standards for School Media Programs, American Library Association of the National Educational Association, latest edition.

502 GENERAL PURPOSE (ACADEMIC) CLASSROOMS OR INSTRUCTIONAL AREAS

Rooms should be designed to serve specific needs of language arts, foreign language, mathematics, social studies and certain other subject areas. They should also be designed to permit interchanged use as program needs demand.

502.01 Size

Base preliminary determination of area upon allotment of 28 to 30 square feet per student. For example: 700 to 750 square feet of floor area should be planned for 25 students in an instructional space. To more accurately determine the area, trial room layouts should be made using scaled templates representing furniture and equipment and scaled floor and wall elevation drawings.

502.02 Design Capacity - 25 Students

502.03 Location

A. Isolation from noisy areas of the building
B. Close proximity to the media center
C. Location which will permit easy expansion

502.04 Activities

Speaking; laboratory drills; lecture; group discussion; viewing slides, films and other projected materials; listening to recordings and broadcasts; writing or drawing on chalkboards, desk and/or tables; displaying students' work; storing instructional materials and supplies; demonstrations; and lab activities in mathematics, where stations with individual assignments are to be done with manipulative materials.

502.05 Equipment Space and Facilities

A. Chalkboards, bulletin boards and other display areas - a minimum of two-thirds available wall space
    1. Chalkboards and bulletin boards with map rails installed above
    2. Bottom of display area should be at eye level of student when seated
B. Student wardrobe
C. Storage
    1. Teacher's storage for personal belongings
    2. Storage for teaching aids and supplies
        a. Closed and open shelving
        b. 4-drawer filing space
D. Teacher's combination desk-table and chair
E. Conference-type table and chairs
F. Desks and chairs, or combination chair-desks
G. Desirable equipment
    1. Corridor display cabinet for students' work

2. Rack for storage of periodicals pertaining to subject matter being taught
3. All major types of audiovisual equipment should be readily available within classroom or the nearby media center.

H. Adequate provision for controlling the light level in instructional areas is essential. (For efficient use of projection-type materials, the light in the room, particularly in the area of the projection surface, should not exceed one-tenth footcandle.)

I. Duplex service receptacles should be installed on all walls of the instructional space for the use of instructional equipment. Sufficient branch electrical circuit service should be in each room. Conduits should be provided to permit future installations of computer terminals, television and other electronic instructional devices. System conduits should be at least 1 1/2 inches in diameter in order to provide for installation of television and other teaching devices as indicated above.

J. Where there are to be specialized facilities such as language labs, study carrels, micro-teaching and television, provision should be made for electrical service in the floor.

K. A projection surface should be permanently installed in each instructional area with provision for eliminating keystoning.

L. Use of audio devices mandates acoustical treatment of walls, ceilings and floors in instructional areas, media centers and other such areas, participially in open-type classrooms where many activities are occurring simultaneously.

M. Carpeting and/or resilient floor covering where appropriate

503 CORRECTIVE/REMEDIAL INSTRUCTIONAL AREAS - OPTIONAL

Specialized facilities in the form of small or specially equipped instructional areas are provided in each facility. Facilities should be designed to serve corrective/remedial needs of language arts, foreign language, mathematics, social studies and certain other subject areas.

503.01 Size

Base preliminary determination of area upon an allotment of 28 to 30 square feet per student. For example: 420 to 450 square feet of floor area should be planned for 15 students in an instructional space. To more accurately determine the area, trial room layouts should be made using scaled templates representing furniture and equipment and scaled floor and wall elevation drawings.

503.02 Design Capacity - 15 Students

503.03 Location

A. Isolation from noisy areas of the building
B. Close proximity to the media center
C. Location which will permit easy expansion

503.04 Activities

Speaking; laboratory drills; lecture; group discussion; viewing slides, films and other projected materials; listening to recordings and broadcasts; writing or drawing on chalkboards, desk and/or tables; displaying pupils' work; storing instructional materials and supplies; demonstrations; and lab activities where stations with individual assignments are to be done with manipulative materials.

503.05 Equipment Space and Facilities
See Chapter 5, Section 502.05.

504 ART FACILITIES

Art facilities should accommodate the studio and classroom activities of a full art program. Basic to all activities would be space allotment, natural and artificial light, movable furniture or furnishings, display space, several kinds of storage space, deep sinks with cleanout traps and adequate electrical outlets.

504.01 Size
Studio, approximately 1200 square feet or the equivalent, exclusive of storage. Provide one room for every 150 art students enrolled.

504.02 Capacity
Recommended class size for studio activities is 25 students.

504.03 Location - Pertinent Factors
- A. Accessibility for consumable materials; ground floor location preferred
- B. Need for uncarpeted floor in studio areas. Floors should be of concrete, tile, linoleum or other material not easily damaged by paint.
- C. Good lighting, both natural and artificial. Natural light is important for many activities and essential for painting.
- D. Space should contain, or be accessible to facilities for the use of slides and film - blackout curtains, projection facilities and chairs equipped with tablet arms.
- E. Power tools and equipment may, subject to local policy, be borrowed from or shared with industrial arts area.
- F. Provide power ventilation for removal of fumes, dust, odors and gases from turpentine, lacquer thinners, acids and toxic markers.

504.04 Activities - Discussion, Studio, Lecture, Combination
Basic - drawing, painting, sculpturing, ceramics, design, art history and appreciation and crafts.

504.05 Equipment Space and Facilities
- A. Sink and work-counter units
  1. Hot and cold water with mixing faucets
  2. No less than 2 deep sinks of stainless steel with long drainboards
  3. Large drains and cleanout traps
  4. Long counter for mixing paints and other activities
  5. Storage for mixing pans, water jar and brushes (under sink and counter)

B. Special storage for:
   1. Drawing boards
   2. Shelves for storage of flat work, a minimum of 28 inches x 40 inches - may be built in or movable
   3. Prints - similar to above
   4. Audiovisual materials and special books
   5. Tools used in construction
   6. Unfinished work
C. Chalkboard - at least 6 linear feet
D. Bulletin boards - all available wall space - at least one full wall
E. Display facilities for projects, glass covered in studio and hall
F. Work benches, tilt-top tables and easels as selected by instructors, movable to permit flexible grouping, with accommodations for:
   1. Teachers' desk and storage area
   2. Provision for hanging mobiles from ceiling
G. Doorway opening at least 42 inches wide
H. Duplex outlets along wall spaces and above work counter - no less than 12
I. All electric and gas kilns hooded and mechanically ventilated when in use
J. A ceramic kiln co-located with each general art classroom

504.06 Storage Room

300 to 400 square feet, to include shelves for paper, paints and supplies; also for unfinished work which cannot be stacked, such as wet paints, prints and ceramics. Special shelf in studio or storage room for unfinished constructions, at least 20 linear feet.

505 BUSINESS EDUCATION FACILITIES

505.01 All-Purpose Business Education Room

This room would be needed for a small school (up to 150 business students per day) with only one business teacher. Therefore, it is necessary to provide adequate space to store, maintain and use a vast amount of equipment and supplies. The room consists of the following.

A. Equipment-oriented instructional lab area for courses such as Business Computer Applications, Advanced Business Computer Applications, Keyboarding and Office Technology
B. Multipurpose classroom instructional area for courses such as Accounting, Business Principles & Management, Shorthand/ Abbreviated Writing and Business Math
C. Storage for teaching materials, supplies and student references
D. Teacher's desk and demonstration center

An electrical grid system of 5 feet with flush floor outlet should be installed. A lavatory with hot and cold water should also be provided. Because of the chemicals contained in some of the correction materials, carbon packs, toners, and reprographic equipment, students and instructors need to have immediate access to a lavatory for their health and safety.

505.011 Size
1200 to 1400 square feet - 60 to 70 square feet per student.

505.012 Design Capacity - 25 Students Per Session

505.013 Location
In the central core of the building.

505.014 Activities
Lecture or carry on small group or class discussions; view slides, films and other projected materials; conferences of small groups of students; display student projects or work; store partially completed student projects; store instructional supplies; listen to recordings or broadcasts; view telecasts; write and transcribe notes; operate keyboarding equipment/microcomputers and other business equipment.

505.015 Equipment Space and Facilities
A. Bulletin board - 10 linear feet
B. Electrical convenience outlets on each wall
C. Calculators
D. Storage (lockable) for instructional supplies
E. Storage for instructor's personal belongings
F. Lockable, legal size file drawers - 16
G. Closed bookshelving - 10 to 12 linear feet
H. Microcomputers/modem and access to network
I. Plain paper copier
J. Electronic typewriters or microcomputers
K. Overhead projector/screen
L. Dictation/transcription equipment
M. Letter quality and dot matrix printers
N. Chalkboard - 40 to 42 linear feet
O. VCR and monitor
P. Provisions to darken room
Q. Adjustable classroom furniture (desks and chairs)
R. Instructor's desk and chair

506 CONSUMER/HOMEMAKING FACILITIES

The middle childhood consumer and homemaking area of study is designed to be exploratory in nature, broad in scope and integrated and/or coordinated with other subject matter areas.

506.01 Consumer & Homemaking Instructional Size & Space
Ideally, the middle school home economics facility consists of one large multipurpose room with adequate space to carry out a comprehensive curriculum. However, if more than one teacher is currently employed or if it is anticipated that in the near future more than one teacher will be needed, sufficient rooms are included in the original plan for meeting needs. Regardless of the number of rooms in a facility, each room is used for teaching more than one area of instruction.

Description of Facility	Space Square Feet	Design Capacity
One all purpose room, designed for a one teacher department, consisting of: Space and equipment for teaching clothing and textiles, nutrition and foods, personal development/ family relations, world of work, management and consumer education. 1. Foods Laboratory - 40 to 50 square feet per student. See Chapter 8, Section 805.021 for specialized equipment and facilities requirements. 2. Clothing Laboratory/Multipurpose Room - 50 square feet per student (minimum 1000 total square feet). See Chapter 8, Sections 805.04 and 805.05 for specialized equipment and facilities requirements. Also, includes space and equipment for: a. Storage of teaching materials, supplies and student references b. Teaching center c. Display case 3. Classroom (Optional)	95-100 square feet per student	25
TOTAL SQUARE FEET		1900- 2500
Two multipurpose rooms, designed for a two or more teacher department, with:		
Room 1 consisting of:		
A. Space and equipment for teaching foods and other instructional areas listed above	40-50 square feet per student	25
B. Storage for teaching materials, student projects, supplies and references		
C. Teaching center		
Room 2 consisting of:		
A. Space and equipment for teaching clothing and other instructional areas listed above	40-50 square feet per student	25
B. Storage for teaching materials, student projects, supplies and references		
C. Teaching center		
Classroom	700-750	
Conference/office area	150-200	
Display Case		24
TOTAL SQUARE FEET		2874-3474

A peripheral arrangement with a minimum of fixed equipment or furnishings extending out into the room promotes flexibility in the use of space. Equipment is arranged in relation to point of use to prevent congestion. Five feet is allowed between tables for students to pull out chairs and be seated and to permit instructor supervision.

506.02 Design Capacity - 25 Students (Lab); 25 Students (Classroom)

506.03 Location

Facilities should be located on the ground floor, preferably near an outside entrance, for:

A. Convenient delivery of groceries and instructional materials
B. Convenient installation and removal of large equipment
C. Easy accessibility for physically handicapped persons
D. Easy accessibility for parents and other visitors
E. Convenient entry for adult students and other persons seeking help with home-related problems

In multi-teacher facilities, rooms adjacent to each other tend to unify the program by allowing for ease of communication, sharing of equipment and exchanging rooms for instruction. In schools with several rooms, rooms on both sides of the corridor make for a more compact facility than a row of rooms the length of the corridor. The home economics facilities may be placed near social studies instructional spaces, science laboratories and art centers to facilitate coordination of subjects.

506.04 Activities

Viewing slides, films and other projected materials; class discussions; lectures; demonstrations; individual, small or large group activities such as vocational youth organization activities; selecting, planning, carrying out & evaluating varied student projects; preparation of teaching materials and planning of program activities.

506.05 Equipment Space and Facilities

A. Provisions made for blinds, shades and/or draperies at the windows to control classroom light levels. For efficient use of projection-type materials, the light in the room should not exceed one-tenth footcandle.
B. Window sills located 40 inches or higher above the floor when storage cabinets are to be installed along that wall
C. Electrical needs
    1. A separate electric control panel for the facility located in or adjacent to the home economics department
    2. Sufficient grounded electrical outlets located near the point of use to accommodate use of many pieces of equipment at one time
    3. Ample switches and outlets provided on each wall in each room
D. Plumbing needs
    1. Adequate and properly located plumbing connections provided for the equipment

2. Continuous supply of hot and cold water provided; separate hot water heater and water softener may be needed

E. Sufficient space provided for easy movement of students and instructor

F. Major floor area of each room free of heavy or permanently fixed equipment to allow for flexible room arrangement

G. Doors placed to prevent interference with traffic patterns

H. Chalkboards, bulletin boards and other display areas - a minimum two-thirds of available wall space - at least 8 linear feet of chalkboard and 15 square feet of bulletin board space per room

I. Projection surface permanently installed in each instructional area with provision for eliminating keystoning

J. Tables & chairs for seating of entire class - can be rearranged for small or large groups and for demonstrations as needed

K. Storage needs - Both general storage and storage within the instructional areas are provided. The two most commonly used types of storage arrangements are: (1) the separate room and (2) cabinets and/or open shelves within the classroom. Some advantages to the separate storeroom are: leaves more wall space within the classroom and frees floor space for flexible arrangement when items not in use are placed in the storeroom. A combination of the two types is desirable with a separate room for storage of large equipment which is not used frequently and cabinets in the classroom for student items, small equipment and frequently used teaching materials.

1. Shelving conveniently spaced and/or adjustable to fit the size and shape of equipment to be stored such as portable sewing machines, reference books, audiovisual equipment and small equipment items
2. Drawers of a depth to serve the materials or equipment to be stored
3. Mobile base cabinets providing additional work space and allow for more flexibility in room arrangement
4. Heavy articles stored at a carrying level
5. Movable trays or pullout sections used instead of shelves to facilitate removing articles
6. Total amount of storage space expanded by using items such as "lazy susan" shelves, divided drawers, vertical shelves and stairstep shelves
7. Closed storage space provided for items that need to be protected, are not used frequently or may detract from the appearance of the room
8. Cabinets with locks provided for storage of items such as electrical appliances, portable sewing machines, food and audiovisual equipment
9. Storage units located near the department's entrance for temporary storage of students' books and personal belongings
10. Storage space provided for cleaning supplies & equipment

L. Teacher/conference area - may be located in a designated area of the all-purpose room or in a separate room. A separate

room is desirable when there are 2 teachers and is essential for 3 or more teachers. If a separate center is necessary, it should be accessible from all rooms in the home economics facility. An additional shared conference area for several disciplines should be available in the middle school facility to accommodate inter-disciplinary planning needs.

1. Teacher's desk and chair - 1 each per teacher
2. Lockable storage for teachers' belongings
3. Open and closed adjustable shelving - minimum 30 linear feet
4. 4-drawer file cabinet - 1 or 2 per teacher
5. Electrical outlet by each teacher's desk

M. Carpeted area in the facility is optional

506.06 Nutrition and Foods Specialized Equipment and Facilities

A. Kitchen units arranged in different patterns (U-type, L-type, one wall, island, corridor) to simulate home conditions. One should be planned for demonstration purposes and include an adjustable overhead mirror. Unit kitchens are arranged for easy supervision by the teacher. Upper peninsular cabinets and range hoods that block the teacher's view are avoided.
   1. Each unit kitchen consists of: double sink, range, base and wall cabinets, tables, chairs and 10-12 linear feet of work surface, excluding sink and range
   2. 24 to 30 inches of base cabinets recommended at the left of each range and left and right of the sink; also allow space for mixing centers
   3. Sink located between range and mixing centers in each unit
   4. Waste disposal included in one unit
   5. 24 to 30 inches of counter work space provided for each student working in a unit kitchen. Adequate storage for basic equipment and supplies located in each kitchen unit with special equipment and food supplies located nearby.
   6. Tables and chairs adjacent to the kitchens for serving purposes
   7. Exhaust ducts and/or range hoods with fans to pull odors and fumes out of the room

B. At least one 48 inches x 72 inches cabinet with adjustable shelves needed for storing extra supplies, equipment and classroom materials

C. Variety of cabinet and counter materials, range and refrigerator models, and fuels should be used

D. Use of non-porous floor covering and finish for walls in unit kitchens.

E. Minimum of 3 electrical outlets per kitchen unit needed

F. Refrigerator, with freezer compartment, accessible to kitchen units - 24 to 36 inches of counter space provided adjacent to the latch side of the refrigerator

G. One portable or built-in dishwasher, optional

H. Microwave oven - 1 or 2

I. Fire extinguisher, blanket and first aid kit

506.07 Laundry Area

A. Automatic washer and dryer (gas dryer must be vented to outside)

B. 36 inches of counter space
C. Base and wall cabinet for storage
D. Located in a space which allows for class demonstrations

506.08 Textiles and Clothing Area

A. Adequately planned to allow use as a multipurpose area for the instruction of other home economics curricula
B. Multipurpose tables - 28 inches x 42 inches x 60 inches - minimum of 5 feet between tables
C. Multipurpose chairs - 1 per student
D. One sewing machine per 3 students. These may be a combination of cabinet-type and portable, which may be stored when not in use.
   1. Each sewing machine and chair/stool provides a minimum of 3 feet for pull out space
   2. Facility planned so that sewing machines can be stored when not in use to free space for multiple uses
   3. Grounded electrical outlet available for each machine
E. Pressing areas - one for each 10 students. These include:
   1. Ironing boards
   2. Steam irons
   3. Grounded electrical outlet in each pressing area
F. Full length, triple mirror, optional
G. Lockable storage
   1. Cabinets for tote trays located near the entrance. One tote tray per student - 4 3/4 inches x 12 inches x 18 inches. Top of upper tote tray should not be more than 60 inches from the floor.
   2. Cabinets or closet with adjustable rods for hanging garments. Allow 4 to 6 linear feet.
   3. Cabinets or walk-in closet for the storage of equipment, samples, portable machines and other materials and supplies
H. Running water source provided

507 FOREIGN LANGUAGE FACILITIES

Factors influencing the type of foreign language facility to be chosen include the type of laboratory facility desired. Laboratory facilities can be an electronic classroom, a language laboratory into which students are scheduled from classes held in general purpose classrooms or general purpose classrooms adapted for foreign language study.

507.01 Electronic Classroom

507.011 Size

35 square feet per student, exclusive of storage space.

507.012 Design Capacity

Allow five percent more stations - maximum class size 25.

507.013 Location

Near media center and isolated from noisy areas of building.

507.014 Equipment Space and Facilities:

A. Chalkboard - minimum of 20 linear feet; display and map rail above
B. Bulletin board - minimum of 10 linear feet; display and map rail above
C. Storage
    1. Teacher's storage for personal belongings
    2. Closed and open shelving - minimum of 24 linear feet of each
    3. Tape racks and storage cabinet
    4. Record racks and storage cabinet
D. Teacher's combination console-desk and chair
E. Conference-type table and chairs
F. Student seating
    1. Stationary tables wired to reproduce sound from console and movable chairs
    2. Overhead wiring on droppable units to reproduce sound from console and combination chair-desks (This type installation needs fewer square feet per student than stationary tables.)
G. Duplex electrical outlets on all feasible walls
H. Bookshelving - minimum of 20 linear feet
I. Provision for darkening room
J. Microphones, one per station
K. Headsets, one per station
L. Carpeting, desirable
M. Projection surface
N. Jack and plug to place sound track from 16 mm projector into classroom sound systems, desirable

507.02 Language Laboratory

507.021 Size

35 square feet per student, exclusive of storage space.

507.022 Design Capacity

Allow five percent more stations - maximum class size 25 students.

507.023 Location

In center of, or adjacent to, foreign language classrooms.

507.024 Activities

Language laboratory drill and recording.

507.025 Equipment Space and Facilities

A. Chalkboard - minimum of 10 linear feet
B. Bulletin board - minimum of 10 linear feet
C. Storage
    1. 4-drawer filing space
    2. Tape storage space
    3. Record storage space
    4. Lockable storage spaces for any detachable equipment, such as headset and microphones
D. Teacher's combination console-desk and chair

E. Stationary booths and movable chairs for students
F. Duplex electrical outlets on all walls
G. Headsets, one per station
H. Microphones, one per station
I. Provision for darkening rooms
J. Carpeting, optional
K. Projection surface

507.03 Teacher Work Area

507.031 Size
Area as needed, approximately 250 square feet.

507.032 Design Capacity
Two instructors and several students.

507.033 Location
Opening into language laboratory or classrooms.

507.034 Activities
Preparation of tapes, duplication of tapes and records, preparation of instructional materials, small group activities, reading, grading.

507.035 Equipment Space and Facilities
A. Desk and chair per teacher - 1
B. Legal size filing cabinet per teacher - 1
C. Storage for instructors' personal belongings
D. Table or movable cart for audiovisual equipment
E. Conference table and chairs
F. Chalkboard and bulletin board, minimum of 5 linear feet each
G. Storage for instructional aids
H. Soundproof area for recording tapes
I. Telephone, desirable
J. Projection surface

508 TECHNOLOGY EDUCATION FACILITIES

Factors influencing the location include providing location for easy delivery of instructional supplies, equipment and materials, some of which are bulky and heavy; design of laboratory to permit some change in individual room areas as activities are developed; and location which permits isolation from the remainder of the building. Since technology education programs differ from industrial arts programs, the assistance of specialists should be secured to adequately plan this suite. Technology education programs include instruction in the areas of communication, transportation, construction, and manufacturing.

508.01 Technology Education Production Laboratory

508.011 Size
The area should range from 100 to 125 square feet per student, laid out to permit open areas for construction of large group projects.

508.012 Design Capacity - 20 Students

508.013 Location

A. Direct access from the building corridor
B. Convenient access to other rooms in the technology education suite
C. Direct access to service drive

508.014 Activities

The laboratory facility will need to provide space for layout, measurement, cutting, forming and fabricating using a variety of materials (ie. wood, metal, plastics); a large open space for construction of group projects such as geodesic domes, space for using and caring for hand tools and a variety of machines; and space for finishing various materials. Facilities for instructional space and the use of all types of audiovisual equipment is necessary.

508.015 Equipment Space and Facilities

A. The major floor area should be free of heavy or permanently fixed equipment to allow for flexible room arrangement
B. Chalkboard and bulletin board - 8 linear feet minimum
C. A minimum of 4 work stations, with underneath storage
D. Maximum work counter and cabinet storage space
E. Wall mounted lockable tool panels, if a tool room is not available
F. Windows should be high enough to permit installation of equipment along outside walls
G. Provisions made for blinds or shades to allow for showing of audiovisual projection materials
H. Ceiling electrical grid system for 110 volt power to machines with master switches and emergency cut-off buttons
I. Adequate electrical wall outlets for power equipment and tools
J. Facilities for removal of chips, dust and harmful fumes
K. Door to corridor, minimum 48 inches wide
L. Outside door to service drive - double external doors with a removable mullion
M. Fire extinguishers of such kinds and sizes as recommended by the state Fire Marshal
N. Wash up area for personal cleanliness and preparation and cleaning of tools and supplies
O. Lighting should provide 75 footcandles throughout
P. Refer to the "Technology Education Curriculum Guide" for specific equipment necessary

508.02 Technology Education Communication Laboratory/Classroom

508.021 Size

Determination of size depends upon the number of students and related activities, varying from 45 to 50 square feet per student.

508.022 Design Capacity - 20 Students

508.023 Location
Direct access to production laboratory to provide for easy supervision.

508.024 Activities
Classroom instruction, project planning, small group activities, and a dust-free environment for instruction and activities with equipment such as computers, robotics, electronics, and lasers.

508.025 Equipment Space and Facilities

A. Glass walls or windows in wall facing laboratory to provide for easy supervision
B. Chalkboard - 20 linear feet minimum, and bulletin board - 10 linear feet
C. Maximum counter and cabinet storage space along walls (Some of this space may be used for computers. If so, height needs to be adjusted accordingly.)
D. Windows should be high enough to permit installation of counters along outside walls
E. Provisions made for blinds or shades to allow for showing of audiovisual materials
F. Adequate electrical wall outlet strips for use of electronic equipment, computers and related peripherals
G. Reconfigurable tables and chairs for 20-25 students
H. Bookcase for reference and resource books; magazine rack
I. Wall mounted projection screen
J. Floors - tile or other resilient covering
K. Ceiling - acoustical-type finished ceiling
L. Air conditioning

508.03 Instructor's Office

508.031 Size - 100 to 150 Square Feet

508.032 Location
Convenient or direct access to production laboratory and communication laboratory. (Could be part of communication classroom.)

508.033 Equipment Space and Facilities

A. Teacher's desk and chair
B. Conference chairs - 1 or 2
C. Storage
    1. Letter size, 4-drawer file cabinets - 2
    2. Open and closed shelving for supplies and references, 20-30 linear feet
D. Minimum of 2 duplex outlets

508.04 Raw Material and Tool Storage

508.041 Size - 150 to 250 Square Feet

508.042 Location
Direct access to production laboratory.

508.043 Activities
For storage of various types of stock, tools, and other supplies necessary in the technology classroom.

508.044 Equipment Space and Facilities
A. Wide access door
B. Storage racks for various types of stock. If stock includes wood and metal, rack may be as large as 4 feet x 8 feet
C. Adjustable shelving and cabinets for small items and portable electric tools
D. Peg board for display of hand tools

508.05 Project Storage

508.051 Size - 75 to 200 Square Feet

508.052 Location
Direct access to production laboratory.

508.053 Activities
Limited to storage of student projects.

508.054 Equipment Space and Facilities
A. Provide maximum adjustable shelving 24 inches deep along walls
B. Provide free floor area for storage of large items

NOTE: This storage may be provided in the form of cabinetry in the laboratory. If so, adjust square footage of laboratory accordingly.

508.06 Audiovisual Laboratory

508.061 Size - 100 to 200 Square Feet

508.062 Location
Direct access to communication laboratory.

508.063 Activities
Developing film and photographic paper; enlarging pictures; demonstrating lasers, producing a variety of audiovisual materials such as mock radio and television segments.

508.064 Equipment Space and Facilities
A. Safe light as well as regular overhead lighting
B. Maximum work counter space
C. Maximum cabinet storage; some must be light safe
D. Positive ventilation
E. Sink and hot and cold running water
F. Electrical outlets along counter

G. Lightproof and soundproof from exterior influences
H. Additional electrical outlets for equipment usage

509 MUSIC FACILITIES

Factors influencing the location of this complex include: isolation from quiet areas of the building; ease of isolating the area for use during and after school hours; inclusion in the general arts area with convenient access to the stage; and direct or convenient access to the out-of-doors. Location of facilities within the suite should provide ease of supervision of all areas. Acoustical treatment should provide proper sonic environment to prevent sound transmission to remainder of the building.

509.01 Music Studio

NOTE: Classroom/general music, choral and instrumental studios may be planned as separate or combined facilities. Assistance in design and planning may be obtained from the music specialist of the state Department of Education.

509.011 Size - 30 to 40 Square Feet Per Student

509.012 Design Capacity - 25 Students

509.013 Location

A. Direct access to instrumental storage
B. Direct or convenient access to other rooms in the music suite
C. Isolated as much as possible from quiet areas of the building

509.014 Activities

Instruction in classroom/general music, choral and instrumental music; viewing slides, films and other projected materials; listening to recorded music; movements; demonstrations of various types of instruments; writing or drawing on chalkboard and display materials.

509.015 Equipment Space and Facilities

A. Chalkboard - 30 linear feet, maximum, on front wall of which at least 8 linear feet is etched with staff lines
B. Bulletin board - 8 to 10 linear feet, located near entrance
C. Storage for vocal and instrument accessories
   1. Wall cabinets for music folders
   2. Open shelving for books, tapes, cartridges and record albums, 12" deep and 12" clear height - 40 linear feet
D. Folding chairs with folding tablet arms
E. Music stands
F. Director's podium
G. Tape recorder
H. Conference/work table
I. Legal size, 4-drawer filing cabinets - 2 or 3

J. Wide door with flush threshold for moving large instruments to and from the studio
K. Microphone outlets for recording in the studio - 2 or 3
L. Stereo sound reproducing system with a minimum capacity of 40 watts - 20 watts per channel
M. Piano and bench
N. Pupil wardrobes
O. Availability of audiovisual equipment
P. Instructor's desk

509.02 Practice Rooms - Optional

509.021 Size - 50 to 60 Square Feet Each

509.022 Design Capacity - 2 to 4 Students

509.023 Location
A. Convenient access from other music rooms
B. Access to instrumental storage without passing through studio
C. Convenient access from building corridor
D. Permit ease of supervision

509.024 Activities - Vocal and Instrumental Practice

509.025 Equipment Space and Facilities
A. Chairs and music stands - 2 or 3
B. Glazed partition of insulating glass for ease of supervision
C. Acoustical treatment
D. Independent, forced ventilation

509.03 Instructor's Office and Library
May be separate rooms or combination.

509.031 Size - Approximately 250 Square Feet

509.032 Design Capacity - 2 Instructors and 6 Students

509.033 Location
A. Direct or convenient access to other music rooms
B. Permit ease of supervision of studio and auxiliary rooms

509.034 Equipment Space and Facilities
A. Instructor's desk and chair
B. Legal size, 4-drawer filing cabinets - 3 or 4
C. Storage for instructor's personal belongings
D. Chalkboard and bulletin board - 6 to 8 linear feet each
E. Conference table and chairs
F. Storage for printed music, records, tapes and other instructional aids
1. Open shelving - 15 to 20 linear feet
2. Closed shelving - 30 to 40 linear feet
G. Stereo sound reproducing equipment

H. Music sorting rack

509.04 Instrument Storage

509.041 Size - Approximately 350 Square Feet

509.042
Provide storage shelving necessary to accommodate instruments of various sizes.

509.043
Temperature and humidity are maintained at acceptable levels.

509.05 Robe and Uniform Storage
May be in portable wardrobes or separate rooms; ventilate as needed.

510 PHYSICAL EDUCATION FACILITIES

Factors influencing location include: Isolation from quiet areas of the building; direct access to the outside and provision for closing off the area for after-school use.

NOTE: Although less desirable, these facilities may be combined with assembly facilities.

510.01 Gymnasium (Physical Education Learning station)

510.011 Size
Determination of size is dependent upon physical education spaces to be located - 5400 square feet minimum. Floor area should be marked for various games.

510.012 Design Capacity
Maximum of 35 students at 125 square feet per student.

510.013 Location
Convenient access from locker and shower rooms.

510.014 Activities
Include soccer, volleyball, basketball, football, softball, folk and square dance, gymnastics and other activities to meet the county curriculum. Recommend junior high basketball court (42 feet x 74 feet) with some spectator seating. As a minimum provide 24 feet ceiling height.

510.015 Equipment Space and Facilities
A. Provisions for using the learning center as 2 or more teaching stations may require canvas-net partition, folding door partition or mechanical folding walls.
B. Electrical outlets, record player, auxiliary lighting and cleaning equipment. Additional special outlets.
C. Forced ventilation
D. Small cases for display purposes - 2 or 3
E. Bulletin board - 12 to 16 linear feet

F. Public telephone
G. Drinking fountains (angle jet type)
H. Comfortable, low-wall seating
I. Wood gymnasium floor or equal

510.02 Gymnasium Equipment Storage Rooms
At least 2 in each station.

510.021 Size
Area as needed to store all equipment.

510.022 Location
Directly accessible to each teaching station when the station is divided into 2.

510.023 Equipment Space and Facilities

A. Open storage area for items such as standards, vaulting horses, and horizontal bars
B. Enclosed storage cabinets for small items of physical education equipment
C. Double doors and flush threshold

510.03 General Storage

510.031 Size
Large enough to store all equipment.

510.032 Location
Direct or convenient access to learning station.

510.04 Male and Female Locker/Dressing Rooms

NOTE: Recommend treatment of walls in these areas with epoxied materials to enhance maintenance. Also similar floor materials.

510.041 Size
Dependent upon manner in which gym clothing, street clothing and towel distribution are handled and the number of students expected to use this facility, 600-700 square feet.

510.042 Location
A. Direct or convenient access to learning station
B. Direct access to outside physical education areas
C. Direct access to building corridor
D. Direct access to body-drying room
E. Permit ease of supervision

510.043 Activities
Dressing for physical education; storing street and gym clothes; informal talks with physical education instructors.

510.044 Equipment Space and Facilities
A. Street clothes lockers dispersed among gym clothes lockers

B. Space for additional lockers
C. Benches adjacent to or between rows of lockers
D. Small toilet room or partitioned area with water closet, lavatory and urinal
E. Forced ventilation
F. Mirrors to accommodate large numbers of pupils, shelving under each mirror and one full-length mirror
G. Bulletin board near entrance - 4 to 8 linear feet
H. Chalkboard - 6 linear feet
I. Drinking fountain

510.05 Male and Female Shower Rooms

510.051 Size - Approximately 200 Square Feet

510.052 Location
Access to locker/dressing room only through the body-drying room.

510.053 Equipment Space and Facilities
A. Gang showers - 12 to 16
B. Master volume and maximum temperature controls
C. Individual temperature and on-and-off controls
D. Bar soap trays
E. Forced ventilation
F. Easily cleanable construction
G. Floor drains away from normal traffic
H. Hose bibb for hot and cold water
I. Walls of non-absorbent material

NOTE: Individual dressing, drying and showering booths may be provided in girls' shower area. The number should not exceed 4.

510.06 Male and Female Body-Drying Rooms

510.061 Size - Approximately 100 Square Feet

510.062 Location
A. Direct access from locker/dressing and shower rooms; entries to require maximum travel distance through drying room
B. Direct or convenient access from varsity locker/dressing room

510.063 Equipment Space and Facilities
A. Stubb towel holders
B. Floor drains away from center
C. Forced ventilation
D. Easily cleanable construction
E. Hose bibb for hot and cold water

510.07 Towel Room - Optional

510.071 Size - 50 to 60 Square Feet

510.072 Location

A. Convenient to the locker/dressing and shower areas
B. Permit ease of supervision from locker/dressing area and instructor's office

510.073 Activities

Temporary storage, distribution and collection of towels.

510.074 Equipment Space and Facilities

A. Shelving to accommodate laundered towels
B. Movable laundry carts to accommodate used towels
C. Dutch door for issuing and receiving towels

510.08 Laundry Area - Optional

510.081 Size - Approximately 100 Square Feet

510.082 Location

Convenient to physical education and dressing rooms or areas.

510.083 Activities

Launder and dry gym clothing.

510.084 Equipment Space and Facilities

A. Washing machine
B. Vented dryer
C. Laundry tub
D. Separate work surface for handling both clean and soiled clothing and equipment

510.09 Instructors' Office - 1 For Each Instructor

510.091 Size - Approximately 100 Square Feet

510.092 Location

A. Direct access to locker/dressing room
B. Direct or convenient access to gymnasium and outdoor physical education areas
C. Permit ease of supervision of locker/dressing rooms

510.093 Activities

Instructor's showering, toilet and dressing.

510.094 Equipment Space and Facilities

A. Toilet, lavatory and shower
B. Desk and chair
C. Conference chairs
D. 4-drawer filing cabinet
E. Storage of personal belongings
F. Bookshelving - 10 to 15 linear feet
G. First aid equipment
H. Telephone

510.10 Training Area - Optional

510.101 Size - 200 Square Feet

510.102 Location
Convenient to locker/dressing rooms.

510.103 Activities - Care of Body

510.104 Equipment Space and Facilities
A. Whirlpool hookup
B. Rub-down table
C. Heat lamps
D. Supply cabinet

510.11 Equipment Storage Room

510.111 Size - Approximately 150 Square Feet

510.112 Location
Convenient to locker/dressing rooms.

510.113 Activities
Uniform and equipment storage.

511 SCIENCE FACILITIES

Items to be considered in locating these facilities are: Ease of access to outdoor areas; ease of delivery of supplies and materials; and isolation so odors cannot infiltrate the remainder of the building.

511.01 Biology and/or General Science Classroom and Laboratory

511.011 Size
Base preliminary determination of area on allotment of 40 to 50 square feet per student; minimum 1000 square feet, exclusive of separate storage room.

511.012 Design Capacity - 25 Students

511.013 Location
A. Direct access to project preparation room
B. Direct or convenient access to storage and growing room. Growing room facilities may be included in Instructional Space Laboratory.
C. Convenient access to other rooms in the science suite

511.014 Activities
Instruction and demonstrations; class-size and small group discussion; individual and small group experimentation; viewing slides, films and other projected materials; writing or drawing at tables and chalkboards; individual study and research; displaying student projects.

511.015 Equipment Space and Facilities

A. Chalkboard - 20 to 30 linear feet, chart and display rail above
   1. Minimum of 40 inches clear height
   2. Major portion on front wall
B. Bulletin board - 10 to 12 linear feet, chart and display rail above
C. Work-counter - 40 to 50 linear feet, minimum, and must have student work space to accompany it
   1. 3 to 4 acid-resistant sinks with hot and cold water
   2. Impervious work surface
   3. Gas and electricity
   4. Storage under work-counter
   5. Movable aquariums and terrariums
D. Closed shelving - 30 to 40 linear feet, 18 inches deep
E. Open shelving - 15 to 20 linear feet
F. Instructor's demonstration table including sink, hot and cold water, gas and electricity. Student work space of 2 1/2 linear feet per student may be provided as equivalent student work space, which is not as restrictive as combination desk-chairs.
G. Student tables and chairs - 2
H. Teacher's desk and chair
I. Facilities for darkening room
J. Fire extinguisher and blanket
K. Lavatory
L. Main shut-off valve located in a readily accessible location

511.02 Biology and/or General Science Storage
Shared storage areas recommended in multiple laboratory situations.

511.021 Size - Approximately 200 Square Feet

511.022 Location
A. Direct access from project preparation room
B. Direct or convenient access from instructional space laboratory and growing room

511.023 Equipment Space and Facilities
Maximum varied height and depth, adjustable shelving (150 linear feet minimum).

511.03
Project Preparation Room. May be planned as combination with storage area.

511.031 Size - Approximately 200 Square Feet

511.032 Design Capacity - Instructor and 6 Students

511.033 Location
Direct access from instructional space laboratory and from building corridor.

511.034 Equipment Space and Facilities

A. Acid-resistant work surface with acid-resistant sink, hot and cold water, gas and electricity
B. File cabinet

511.04 Darkroom - Optional

511.041 Size - Approximately 100 Square Feet

511.042 Design Capacity - Instructor and 4 Students

511.043 Location

A. Direct access from instructional space laboratory
B. Convenient access to corridor without passage through instructional space laboratory

511.044 Equipment Space and Facilities

Laboratory work-counter - acid-resistant sink, large enough to accommodate three pans.

512 LIBRARY/LEARNING RESOURCE OR MEDIA CENTER

See Chapter 3, Section 303.

513 EXCEPTIONAL STUDENT INSTRUCTIONAL AREAS

See Chapter 7, Section 700.

514 MICROCOMPUTER LAB

514.01 Size - 35 to 40 Square Feet Per Student

514.02 Design Capacity - 20 Students

514.03 Location

Provide sufficient labs for use by each curriculum area. Core group for smaller facilities and a minimum of one lab for each curriculum area in larger facilities.

514.04 Activities

Active use of microcomputer applications related to the curriculum.

514.05 Equipment Space and Facilities

A. Microcomputer work stations, 30 inches x 48 inches - 20
B. Host station, 30 inches x 60 inches - 1
C. Time sharing printer stations - 4
D. Storage cabinets for disks, paper and other supplies
E. Teacher's combination desk-table and chair
F. Due to the rapid advancement in computer technology, current information must be obtained before design work is completed.

515 ELECTRONIC TECHNOLOGY LABORATORY - OPTIONAL

Whenever feasible, the use of technology in education will be

integrated within the individual classroom, but there is a need for a demonstration/lecture laboratory to house equipment that may be utilized by all teachers and students. This laboratory will employ present day and futuristic applications of educational technology by exploring the areas of: computer controlled capability with use of modern, CD-ROM, laser disc, monitors and/or data projector; distance learning and teleconferences allowing interactive experiences; and authoring or production capabilities to develop programs and courseware for in-house applications. Ideally, the middle school instructional technology facility consists of one large room with a platform area for teacher demonstration/lecture and adjacent control room. This facility may also be used for large group instruction.

515.01 Electronic Technology Complex

515.011 Size - Approximately 2000 Square Feet

515.012 Design Capacity - 75 Students

515.013 Location
Near media center and isolated from noisy areas of building.

515.014 Equipment Space and Facilities

A. Dustless marking boards, approximately 10 linear feet
B. Bulletin board, approximately 10 linear feet
C. Storage
    1. Teachers' storage for personal belongings
    2. Closed and open shelving, approximately 50 linear feet of each
    3. Tape rack and storage cabinet
    4. Disc rack and storage cabinet
D. Platform area minimum 8 inches raised flooring for wiring
E. Adequate conduit throughout room to distribution panel
F. Adequate electrical outlets
G. Teacher station/console with control panel and phone line
H. Appropriate acoustical treatment depending on use of lab
I. Wall mounted monitors
J. Ceiling mounted data projector
K. Microphones - 1 per student station
L. Color correct lighting for video production and viewing
M. Adjustable lighting levels
N. Pull-down screen in platform area
O. On/off air sign at doors
P. Student seating - stationary tables and movable chairs
Q. Carpeting, desirable
R. Broadcast quality audio
S. Satellite receiving equipment, microwave, and/or fiber optics
T. Computer equipment
U. Due to the rapid advancement in computer technology, current information must be obtained before design work is completed.
V. Final technology designs must be approved by the Office of Technology and Information Systems (OTIS) in the state Department of Education prior to final approval by the state Board of Education.

515.015 Control Room

A. Size - approximately 150 square feet
B. Downlinking capability
C. Uplinking capability (when justified)
D. Broadcast capability

515.016 Activities

Telecomputing concepts to access bulletin boards/data bases, CD-ROM and laser disc interactive applications, usage of electronic music keyboards, microscopes, video cameras, etc., teleconference allowing live interactive classes. A video production engineer should be consulted when laboratories are designed for video production.

516 ADMINISTRATIVE AND SERVICE FACILITIES

See Chapter 3, Section 301.

517 FOOD SERVICE FACILITIES

See Chapter 3, Section 302.

518 ENGINEERING AND CUSTODIAL FACILITIES

See Chapter 12.

519 STAGE

Locate for use in relation to the gymnasium or dining area for spectator seating. Must have convenient access to language arts and music instructional space and physical education locker/dressing rooms to permit use as stage dressing rooms.

A. Provide at least 800 square feet of permanent or portable stage area. Consideration should be given to staging "in the round".
B. Two entrances to the stage, one direct from the building corridor. Entrances to be double door size.
C. Stage location should be one which makes instructional spaces accessible for use as stage dressing rooms.
D. Proscenium opening should be approximately one-half the width of the body of the multipurpose room.
E. Stage curtains of fire resistant materials, portable or permanent acoustical paneling, cyclorama and film projection screens should be part of the stage equipment.
F. Lighting facilities with controlled illumination
G. 5 to 10 grounded duplex electrical receptacles should be provided in the stage area.
H. Storage for electronic and stage equipment
I. Every stage equipped with rigging for movable theater-type scenery and every enclosed platform larger than 500 square feet in area shall have a system of automatic sprinklers in accordance with the state fire code.

600 ADOLESCENT/HIGH SCHOOL EDUCATION 9-12 CENTERS

600.01 Size of Centers

An educational facility should be large enough to take advantage of reasonable economies of operation, comfortably accommodate the inhabitants and support the educational program. Other factors such as density of population, availability of sites and transportation make it difficult to generalize about optimum size.

600.02

Allow 130 square feet per student, unless factors such as enrollment or architectural design permit otherwise as determined by the State Superintendent of Schools. Square footage of facilities funded by SBA will be established in accordance with SBA Guidelines and Procedures Handbook.

600.03

The size and type of facility will be determined by the number of students and the instructional program.

600.04

Centers shall be planned for a minimum of 800 students, 200 students per grade level. See Chapter 1, Section 100.0142.

601 PLANNING PROCESS

References:

2. G - 6.

601.01

Adolescent/high school programs and facilities to accommodate such programs are the result of careful, complete and creative planning.

601.02

The planning process is essentially identical for all types of educational environments. It involves identifying the users, describing the learning activities and their desired outcomes, defining the relationship of one learning space to others, describing needed equipment and furnishings and specifying special environmental considerations.

601.03

Educational specifications shall be prepared to include a careful computation of room, area and building capacities required to offer programs of study as outlined in the Master Plan, State Board Policy 2510 and Criteria of Excellence. Consideration should be given to changing various learning spaces and activity areas through the use of folding and movable walls.

601.04

Departmentalization, specialization of instructional spaces, elective

subjects and scheduling are factors to be considered in determining the number of teacher stations. See Chapter 3, Section 301.05.

NOTE: The following formula considers only the number of students; none of the above are considered.

A. The number of teaching stations needed may be determined by applying the following formula to each subject area. (When general purpose instructional spaces are considered interchangeable for different subject areas, the calculation may be made for a group of subject areas.)

B. The basic formula:

$$\text{Number of Teaching Stations} = \frac{\text{Number of students enrolled in subject} \times \text{Number of periods per week in subject}}{\text{Desired average class size} \times \text{Number of periods per week each teaching station can be used.}}$$

C. Example of tenth grade social studies:

$$\text{Number of Teaching Stations} = \frac{200 \text{ students enrolled} \times 5 \text{ periods per week}}{25 \text{ students per class} \times 30 \text{ periods of use of teaching station}}$$

$$= \frac{1{,}000 \text{ student-periods of instruction}}{750 \text{ student-periods that can be provided in one teaching station}}$$

$$= 1.4$$

D. The formula may also be adopted to determine the student capacity of a proposed school building.

601.05

The student capacity of a school building is affected by the educational program; it changes each time the program is modified. A more complete analysis of the operational capacity of proposed school buildings may be obtained by referring to: Conrad, M.J., A Manual for Determining the Operating Capacity of Secondary Schools - Bureau of Educational Research and Service, Ohio State University; Castaldi, Basil, The Castaldi Nomogram - The New England School Development Council.

602 GENERAL PURPOSE (ACADEMIC) CLASSROOMS OR INSTRUCTIONAL AREAS

Rooms should be designed to serve specific needs of language arts, foreign language, mathematics, social studies and certain other subject areas. They should also be designed to permit interchanged use as program needs demand.

602.01 Size

Base preliminary determination of area upon an allotment of 28 to 30 square feet per student. For example: 700 to 750 square feet of floor area should be planned for 25 students in an instructional space. To more accurately determine the area, trial room layouts should be made using scaled templates representing furniture and equipment and scaled floor and wall elevation drawings.

602.02 Design Capacity - 25 Students

602.03 Location

A. Isolation from noisy areas of the building
B. Close proximity to the media center
C. Location which will permit easy expansion

602.04 Activities

Speaking; laboratory drills; lecture; group discussion; viewing slides, films and other projected materials; listening to recordings and broadcasts; writing or drawing on chalkboards, desk and/or tables; displaying students' work; storing instructional materials and supplies; demonstrations; and lab activities in mathematics where stations with individual assignments are to be done with manipulative materials.

602.05 Equipment Space and Facilities

A. Chalkboards, bulletin boards and other display areas - as much as possible, a minimum two-thirds of available wall space
   1. Chalkboards and bulletin boards should have map rails installed above
   2. The bottom of the display area should be at the eye level of the student when seated
B. Storage
   1. Storage for teacher's personal belongings
   2. Storage for teaching aids and supplies
      a. Closed and open shelving
      b. 4-drawer filing space
C. Teacher's combination desk-table and chair
D. Conference-type table and chairs
E. Desks and chairs, or combination chair-desks
F. Desirable equipment
   1. Corridor display cabinet for students' work
   2. Rack for storage of periodicals pertaining to subject matter being taught
   3. All major types of audiovisual equipment should be readily available within classroom or the nearby media center
G. Adequate provision for controlling the light level in instructional areas is essential. For efficient use of projection-type materials, the light in the room, particularly in the area of the projection surface, should not exceed one-tenth footcandle.
H. Duplex service receptacles should be installed on all walls of the instructional space for the use of instructional equipment. Sufficient branch electrical circuits service should be in each room. Conduit or other provisions shall be

installed to permit future use of computer terminals, television and other electronic instructional devices.

I. Where there are specialized facilities, such as language labs, study carrels, micro-teaching and television, provision should be made for electrical service in the floor.

J. A projection surface should be permanently installed in each instructional area with provision for eliminating keystoning.

K. Use of audio devices mandates acoustical treatment of walls, ceilings and floors in instructional areas, media centers and other such areas, particularly in open-type classrooms where many activities are occurring simultaneously.

L. Carpeting or resilient material.

603 CORRECTIVE/REMEDIAL INSTRUCTIONAL AREAS - OPTIONAL

See Chapter 5, Section 503.

603.01 Size

Base preliminary determination of area upon an allotment of 28 to 30 square feet per student. For example: 420 to 450 square feet of floor area should be planned for 15 students in an instructional space. To more accurately determine the area, trial room layouts should be made using scaled templates representing furniture and equipment and scaled floor and wall elevation drawings.

603.02 Design Capacity - 15 Students

603.03 Location

A. Isolation from noisy areas of the building
B. Close proximity to the media center
C. Location which will permit easy expansion

603.04 Activities

Speaking; laboratory drills; lecture; group discussion; viewing slides, films and other projected materials; listening to recordings and broadcasts; writing or drawing on chalkboards, desk and/or tables; displaying students' work; storing instructional materials and supplies; demonstrations; and lab activities in mathematics where stations with individual assignments are to be done with manipulative materials.

603.05 Equipment Space and Facilities

A. Chalkboards, bulletin boards and other display areas - as much as possible, a minimum two-thirds of available wall space
   1. Chalkboards and bulletin boards should have map rails installed above
   2. The bottom of the display area should be at the eye level of the student when seated
B. Storage
   1. Storage for teacher's personal belongings
   2. Storage for teaching aids and supplies
      a. Closed and open shelving
      b. 4-drawer filing space
C. Teacher's combination desk-table and chair

D. Conference-type tables and chairs
E. Desirable equipment
   1. Rack for storage of periodicals pertaining to subject matter being taught
   2. All major types of audiovisual equipment should be readily available within classroom or the nearby media center
F. Adequate provision for controlling the light level in instructional areas is essential. For efficient use of projection-type materials, the light in the room, particularly in the area of the projection surface, should not exceed one-tenth footcandle.
G. Duplex service receptacles should be installed on all walls of the instructional space for the use of instructional equipment. Sufficient branch electrical circuits service should be in each room. Conduits should be provided to permit future installation of computer terminals, television and other electronic instructional devices. System conduits should be at least 1 1/2 inches in diameter in order to provide for installation of television and other teaching devices as indicated above.
H. Where there are to be specialized facilities, such as language labs, study carrels, micro-teaching and television, provision should be made for electrical service in the floor.
I. A projection surface should be permanently installed in each instructional area with provision for eliminating keystoning.
J. Use of audio devices mandates acoustical treatment of walls, ceilings and floors in instructional areas and media centers, particularly in open-type classrooms where many activities are occurring simultaneously.
K. Carpeting and/or resilient material

604 ART FACILITIES

Art facilities should accommodate the studio and classroom activities of a full art program. Basic to all activities would be space allotment, natural and artificial light, movable furniture or furnishings, display space, several kinds of storage space, deep sinks with cleanout traps and adequate electrical outlets.

604.01 Size

Studio - approximately 1200 square feet, exclusive of storage.

604.02 Design Capacity

Recommended class size for studio activities - 25 students. For maximum flexibility, the studio should accommodate up to 40 students on occasion.

604.03 Location

Ground floor with outside accessibility is the preferred location. Pertinent factors:

A. Accessibility of freight elevator (if not first floor location) for heavy consumable materials such as clay and sculpture media.

B. Need for uncarpeted floor in studio areas. Floors should be of concrete, tile, linoleum or other material not easily damaged by paint or clay.
C. Good lighting, both natural and artificial. Natural light is important for many activities and essential for painting.
D. Space should contain, or be accessible to, facilities for the use of slides and film. Blackout curtains, projection facilities and chairs equipped with tablet arms.
E. Power tools and equipment may, subject to local policy, be borrowed from or shared with Industrial Arts area.
F. Provide power ventilation for removal of fumes, dust, odors and gases from turpentine, lacquer thinners, acids and toxic markers.

604.04 Activities

Discussion, studio, lecture, combination. Basic - drawing, painting, sculpturing, ceramics, design, art, history and appreciation and crafts.

604.05 Equipment Space and Facilities

A. Sink and work counter units
   1. Hot and cold water with mixing faucets
   2. No less than 2 deep sinks of stainless steel with long drainboards
   3. Large drains and cleanout traps
   4. Long counter for mixing paints and other such activities
   5. Storage for mixing pans, water jar and brushes (under sink and counter)
B. Special storage for:
   1. Drawing boards
   2. Shelves for storage of flat work, a minimum of 28 inches x 40 inches. May be built in or movable.
   3. Prints (similar to above)
   4. Audiovisual materials and special books
   5. Tools used in construction
   6. Unfinished work
C. Chalkboard - at least 6 linear feet
D. Bulletin boards - all available wall space (at least one full wall)
E. Display facilities for projects - glass covered in studio and hall
F. Work benches, tilt-top tables and easels, as selected by instructors - movable to permit flexible grouping, with accommodations for:
   1. Teachers' desk and storage area
   2. Provision for hanging mobiles from ceiling
   3. Kilns and potter's wheels. Kiln room - 8 feet x 10 feet is desirable for kiln, clay, glazes, equipment and shelves for work in progress. Adequate electrical circuits, including 220 volts for kiln
   4. Press for graphics
G. Dark room for photography, with mechanical ventilation
H. Doorway opening at least 42 inches wide
I. Duplex outlets along wall spaces and above work counter - no less than 12

J. All electric and gas kilns hooded and mechanically ventilated when in use
K. A ceramic kiln co-located with each general art classroom

604.06 Storage Room
Approximately 400 square feet is suggested for each full studio, to include shelves for paper, paints and supplies, and for unfinished work which cannot be stacked, such as wet paints, prints and ceramics, with a special shelf in studio or storage room for unfinished constructions - at least 20 linear feet.

605 DRIVER EDUCATION FACILITIES

Designed to provide a comprehensive course in Driver Education and must include instructional space, laboratory and storage areas.

605.01 Instructional Space

605.011 Size
A minimum of 28 to 30 square feet per student. A room rectangular in shape is essential to adequately accommodate the projection of visual instructional materials and to station the students a minimum distance from the projection screen.

605.012 Design Capacity - 25 Students

605.013 Location
For convenience and efficiency, this facility should be located on the ground level so as to permit easy access to automobiles used for behind-the-wheel instruction.

605.014 Activities
Lecture; group discussion; chalkboard presentations; use of psycho-physical testing equipment; viewing slides, transparencies and films; studying charts, cut-aways and models; and testing activities.

605.015 Equipment Space and Facilities
A. Chalkboard
B. Bulletin board
C. Black-out window shades
D. At least 4 electrical outlets
E. Wall rail to suspend charts
F. Teacher's desk and chairs
G. Work table
H. Lower work noise levels in room
I. Prevent transmission of sound to and from other rooms (Consult state Department of Education, Division of Instructional and Student Services, for list of required equipment.)
J. Carpet

605.02 Teacher Study and/or Office Room
Teacher's study and instructional space may be joined by a partition

for security and accessibility with facilities for counseling students and lesson preparation, and storage space for personal belongings and records.

605.021 Size - 50 to 75 Square Feet

605.022 Location - Adjoining Instructional Space

605.03 Storage Room

Allow 20 to 25 linear feet of open shelving and 40 to 50 linear feet of closed shelving. Instructional equipment, teaching aids and supplies must be secured to prevent loss and to assure accessibility when needed.

605.04 Laboratory or Simulator Room - Optional

This room should be free of columns which would obstruct the students' vision of the screen.

605.041 Size

Installation of 12 simulator units and the master console requires an absolute minimum area of 38 feet x 24 feet.

605.042 Design Capacity - 12 Students

605.043 Location

Adjoining driver education instructional space and office storage room with direct access to other areas.

605.044 Equipment Space and Facilities

A. Floor conduit for simulators and master control unit
B. Provide means for darkening room
    1. Black-out shades for windows, if any. Few or no windows are recommended.
    2. Dimmer switch for lighting control
    3. Two-way ceiling switch
C. Electrical outlets along walls supplied with 120 volt, 60 cycle, 15 amp. service
D. Sound control is very important
E. Instructor's desk and chair
F. Projection screen 12 feet x 16 feet for 16-place simulator system and 10 feet x 12 feet for 12-place system
G. Storage area - See Chapter 6, Section 605.03
H. Adequate ventilation and temperature control system
I. Should not be painted white, which would result in excessive reflection of light. A pastel shade of paint is recommended.

605.05 Multi-Media (Programmed Instruction) Instructional Space - Optional

This area could also be used for the regular instructional space.

605.051 Size

Approximately 33 feet long and 28 feet wide.

605.052 Design Capacity

30 students with special or adapted furniture and the instructor's console. Equipment is available to accommodate larger groups. An increase in class size will require a comparable adjustment in room size.

605.053 Location
Adjacent to driver education area.

605.054 Equipment Space and Facilities
- A. Floor conduit and master console
- B. Provide adequate means for darkening room
- C. A minimum of 12 feet distance between students and screen. The screen should not be viewed from more than a 30 degree angle.
- D. Electrical current - 120 volt, 80 amp. service with 4 20 amp. breakers
- E. Screen - 6 feet x 12 feet

605.06 Multiple-Car Driving Range - Optional
Intelligent planning of a multiple-car facility will provide acres of well-drained area. The surfacing of this area with stone or asphalt requires careful consideration to assure stabilization without undue pavement deterioration due to climatic conditions, nature of the soil base and drainage.

605.07 Planning the Multiple-Car Facility
These plans must include cost considerations, site selection and development, facility design, equipment and instructional plan. Consider use as parking for off-hour athletic or community use.

605.08 Planning Assistance
May be obtained from the West Virginia Department of Education, Division of Instructional and Student Services, Driver Education Coordinator.

606 FOREIGN LANGUAGE FACILITIES

Factors influencing the type of foreign language facility to be chosen include the type of laboratory facility desired. Laboratory facilities can be an electronic classroom, a language laboratory into which students are scheduled from classes held in general purpose classrooms or general purpose classrooms adapted for foreign language study.

606.01 General Purpose Classrooms Used for Foreign Language

606.011 Size
28 to 30 square feet per student, exclusive of storage areas.

606.012 Design Capacity - 25 Students

606.013 Location
- A. Isolation from noisy areas of the building
- B. Near the media center

606.014 Activities

Speaking; laboratory drills; group work; reading; chalkboard work; using audiovisual materials; singing; working with tapes and records individually (in carrels); play acting and dancing.

606.015 Equipment Space and Facilities

A. Chalkboard - minimum of 20 linear feet with display and map rail above
B. Bulletin board - minimum of 10 linear feet with display and map rail above
C. Storage
    1. Teacher's storage for personal belongings
    2. Closed and open shelving - minimum of 24 linear feet of each
    3. Tape racks and storage cabinet
    4. Record racks and storage cabinet
D. Teacher's combination desk-table and chair
E. Conference-type table and chairs
F. Non-stationary students' desks and chairs, or combination chair-desks
G. Duplex electrical outlets on all feasible walls
H. Bookshelving - minimum of 20 linear feet
I. Provision for darkening room
J. Movable cart for audiovisual equipment
K. Tape recorder with jack box and headsets
L. Carrels for individual work are desirable
M. Carpeting
N. Wireless laboratory, optional
O. Projection surface

606.02 Electronic Classroom

606.021 Size

35 square feet per student, exclusive of storage space.

606.022 Design Capacity - 25 Students

Allow five percent more stations.

606.023 Location

Near media center and isolated from noisy areas of building.

606.024 Activities

See Chapter 6, Section 606.014.

606.025 Equipment Space and Facilities

A. Chalkboard - minimum of 20 linear feet, with display and map rail above
B. Bulletin board - minimum of ten linear feet, with display and map rail above
C. Storage
    1. Storage for teacher's personal belongings
    2. Closed and open shelving - minimum of 24 linear feet of each
    3. Tape racks and storage cabinet

4. Record racks and storage cabinet

D. Teacher's combination console-desk and chair
E. Conference-type table and chairs
F. Student seating
   1. Stationary tables wired to reproduce sound from console and movable chairs
   2. Overhead wiring on droppable units to reproduce sound from console and combination chair-desks (This type installation needs fewer square feet per student than the stationary tables.)
G. Duplex electrical outlets on all feasible walls
H. Bookshelving: minimum of 20 linear feet
I. Provision for darkening room
J. Microphones, one per station
K. Headsets, one per station
L. Carpeting (optional)
M. Projection surface
N. Jack and plug to place sound track from 16 mm projector into classroom sound systems desirable.

606.03 Language Laboratory

606.031 Size
35 square feet per student, exclusive of storage space.

606.032 Design Capacity - 25 Students
Allow five percent more stations.

606.033 Location
In center of, or adjacent to, foreign language classrooms.

606.034 Activities
Language laboratory drill and recording.

606.035 Equipment Space and Facilities
A. Chalkboard - minimum of 10 linear feet
B. Bulletin board - minimum of 10 linear feet
C. Storage
   1. 4-drawer filing space
   2. Tape storage space
   3. Record storage space
   4. Lockable storage spaces for detachable equipment, such as headset and microphones
D. Teacher's combination console-desk and chair
E. Stationary booths and movable chairs for students
F. Duplex electrical outlets on all walls
G. Headsets, one per station
H. Microphones, one per station
I. Provision for darkening rooms
J. Carpeting (desirable)
K. Projection surface

606.04 Teacher Work Area

606.041 Size - Approximately 250 Square Feet

606.042 Design Capacity - Two Instructors and Several Students

606.043 Location
Opening into language laboratory or classrooms.

606.044 Activities
Preparation of tapes, duplication of tapes and records, preparation of instructional materials, small group activities, reading and grading.

606.045 Equipment Space and Facilities

A. Desk and chair per teacher - 1
B. Legal size filing cabinet per teacher - 1
C. Storage for instructors' personal belongings
D. Table or movable cart for audiovisual equipment
E. Conference table and chairs
F. Chalkboard and bulletin board, minimum of 5 linear feet each
G. Storage for instructional aids
H. Soundproof area for recording tapes
I. Telephone, desirable
J. Projection surface
K. Carpet

607 LIBRARY/LEARNING RESOURCE OR MEDIA CENTER

See Chapter 3, Section 303.

608 MUSIC FACILITIES

Factors influencing the location of this complex include: isolation from quiet areas of the building; ease of isolating the area for use during and after school hours; inclusion in the general arts area with convenient access to the auditorium stage; and direct or convenient access to the out-of-doors. Location of facilities within the suite should provide ease of supervision of all areas. Acoustical treatment should provide proper sonic environment to prevent sound transmission to remainder of the building.

608.01 Music Studio

NOTE: Choral and instrumental studios may be planned as combined facilities. Assistance in design and planning may be obtained from the music specialist of the State Department of Education.

608.011 Size
30 to 40 square feet per student, with ceiling height of 12 feet.

608.012 Design Capacity - 40 Students

608.013 Location

A. Direct access to instrumental storage
B. Direct or convenient access to other rooms in the music suite
C. Isolated as much as possible from quiet areas of the building

608.014 Activities

Conduct instrumental and choral music rehearsals; view slides, films and other projected materials; listen to recorded music; demonstrations of various types of instruments; write or draw on chalkboard and display materials.

608.015 Equipment Space and Facilities

A. Chalkboard - maximum of 30 linear feet, on front wall of which at least 8 linear feet is etched with staff lines
B. Bulletin board - 8 to 10 linear feet, located near entrance
C. Storage for vocal and instrument accessories
   1. Wall cabinets for music folders
   2. Open shelving for books, tapes, cartridges and record albums; 12 inches deep and 14 inches clear height: 40 linear feet
D. Folding chairs with folding tablet arms
E. Music stands
F. Director's podium
G. Tape recorder
H. Conference work table
I. 3 or more legal size, 4-drawer filing cabinets
J. Wide door with flush threshold for moving large instruments to and from the studio
K. 2 or 3 microphone outlets for recording in the studio
L. Stereo sound reproducing system with a minimum capacity of 40 watts - 20 watts per channel
M. Piano and bench
N. Student wardrobe or lockers
O. Instructor's desk
P. Availability of audiovisual equipment

608.02 Practice Rooms - Optional

608.021 Size - 50 to 60 Square Feet Each

608.022 Design Capacity - 2 to 4 Students

608.023 Location

A. Convenient access from other music rooms
B. Access to instrumental storage without passing through studio
C. Convenient access from building corridor
D. Permit ease of supervision

608.024 Activities

Vocal and instrumental practice.

608.025 Equipment Space and Facilities

A. 2 or 3 chairs and music stands
B. Glazed partition of insulating glass for ease of supervision
C. Acoustical treatment
D. Independent, forced ventilation

608.03 Ensemble Instructional Space - Optional

May be part of multi-use choral and instrumental studio.

608.031 Size - Approximately 30 Square Feet Per Student

608.032 Design Capacity - 8 to 12 Students

608.033 Location

A. Convenient access from other music rooms
B. Access to instrumental storage without passing through studio
C. Convenient access from building to corridor
D. Permit ease of supervision

608.034 Activities

Choral and instrumental practice and small group instruction.

608.035 Equipment Space and Facilities

A. Chalkboard - 16 to 20 linear feet, bulletin board
B. Glazed partition for ease of supervision
C. Acoustical treatment
D. Independent, forced ventilation
E. Piano and bench
F. Folding chairs with folding tablet arms
G. Music stands

608.04 Instructor's Office and Library

May be separate rooms or combination.

608.041 Size

Area as needed - approximately 250 square feet.

608.042 Design Capacity - 2 Instructors and 6 Students

608.043 Location

A. Direct or convenient access to other music rooms
B. Permit ease of supervision of studio and auxiliary rooms

608.044 Equipment Space and Facilities

A. Instructor's desk and chair
B. 4-drawer, legal size filing cabinets - 3 to 4
C. Storage for instructor's personal belongings
D. Chalkboard and bulletin board - 6 to 8 linear feet each
E. Conference table and chairs
F. Storage for printed music, records, tapes and other instructional aids
   1. Open shelving - 15 to 20 linear feet

2. Closed shelving - 30 to 40 linear feet

G. Stereo sound reproducing equipment

H. Music sorting rack

608.05 Instrument Storage

608.051 Size

Area as needed - approximately 350 square feet.

608.052 Storage Shelving

Necessary to accommodate instruments of various sizes.

608.053 Temperature

Temperature and humidity are maintained at acceptable levels.

608.06 Robe and Uniform Storage

May be in portable wardrobes or separate rooms; ventilate as needed.

609 PHYSICAL EDUCATION FACILITIES

Factors influencing location include: Isolation from quiet areas of the building; direct access to the outside; and provision for closing off area for after school use.

NOTE: Although less desirable, these facilities may be combined with assembly facilities.

609.01 Gymnasium

609.011 Size

Determination of size is dependent upon physical education spaces to be located. Allow approximately 7000 square feet. Floor area should be marked for various games.

609.012 Design Capacity

Maximum of 35 students at 125 square feet per student.

609.013 Location

Convenient access from locker and shower rooms.

609.014 Activities

Include soccer, volleyball, basketball, football, softball, folk and square dance, gymnastics and other activities to meet county curriculum. Recommend college-size basketball court (50 feet x 94 feet), plus spectator seating. As a minimum, provide 24 feet ceiling height.

609.015 Equipment Space and Facilities

A. Provisions for using the learning center as 2 or more teaching stations may require canvas-net partition, fold-door partition or mechanical folding walls.

B. Electrical outlets, record player, auxiliary lighting and cleaning equipment; additional special outlets.

C. Forced ventilation

D. Small cases for display purposes - 2 or 3
E. Bulletin board - 12 to 16 linear feet
F. Public telephone
G. Drinking fountains (angle jet type)
H. Seating to accommodate student body and staff
I. Minimum ceiling height - 24 feet

609.02 Equipment Storage Rooms
At least 2 in each station.

609.021 Size
Area for equipment storage - 150 square feet.

609.022 Location
When the station is divided into 2, have directly accessible to each teaching station.

609.023 Equipment Space and Facilities
A. Open storage area for items such as standards, vaulting horses and horizontal bars
B. Enclosed storage cabinets for small items of physical education equipment
C. Double doors and flush threshold

609.03 General Storage

609.031 Size
Large enough to store all equipment.

609.032 Location
Direct or convenient access to learning station.

609.04 Male and Female Locker/Dressing Rooms
Physical education and varsity programs.

NOTE: Recommend treatment of walls in these areas with epoxied materials to enhance maintenance. Also, quarry tile or similar floor materials.

609.041 Size
Dependent upon manner in which such items as gym clothing, street clothing and towel distribution are handled and the number of students expected to use this facility - 600 to 700 square feet.

609.042 Location
A. Direct or convenient access to learning station
B. Direct access to outside physical education areas
C. Direct access to building corridor
D. Direct access to body-drying room
E. Permit ease of supervision

609.043 Activities
Dressing for physical education; storing street and gym clothes; informal talks with physical education instructors.

609.044 Equipment Space and Facilities

A. Street clothes lockers dispersed among gym clothes lockers
B. Space for additional lockers
C. Benches adjacent to or between rows of lockers
D. Small toilet room or partitioned area with water closet, lavatory and urinal
E. Forced ventilation
F. Mirrors to accommodate large numbers of students, shelving under each mirror and one full-length mirror
G. Bulletin board near entrance - 4 to 8 linear feet
H. Chalkboard - 6 linear feet
I. Drinking fountain

609.05 Male and Female Shower Rooms

609.051 Size - Approximately 200 Square Feet

609.052 Location

Access to locker/dressing room only through the body-drying room.

609.053 Equipment Space and Facilities

A. Gang showers - 12 to 16
B. Master volume and maximum temperature controls
C. Individual temperature and on-and-off controls
D. Bar soap trays
E. Forced ventilation
F. Floors are of easily cleanable material
G. Floor drains away from normal traffic
H. Hose bibb for hot and cold water
I. Walls of non-absorbent material

NOTE: Individual dressing, drying and showering booths may be provided in female shower area. The number should not exceed 4.

609.06 Male and Female Body-Drying Rooms

609.061 Size - Approximately 100 Square Feet

609.062 Location

A. Direct access from locker/dressing and shower rooms; entries to require maximum travel distance through drying room
B. Direct or convenient access from varsity locker/dressing room

609.063 Equipment Space and Facilities

A. Stub towel holders
B. Floor drains away from center
C. Forced ventilation
D. Floors are of easily cleanable material
E. Hose bibb for hot and cold water

609.07 Towel Room - Optional

609.071 Size - 50 to 60 Square Feet

609.072 Location
- A. Convenient to the locker/dressing and shower areas
- B. Permit ease of supervision from locker/dressing area and instructor's office

609.073 Activities
Temporary storage, distribution and collection of towels.

609.074 Equipment Space and Facilities
- A. Shelving to accommodate laundered towels
- B. Movable laundry carts to accommodate used towels
- C. Dutch door for issuing and receiving towels

609.08 Laundry Area - Optional

609.081 Size - 100 Square Feet

609.082 Location
Convenient to physical education and dressing rooms or areas.

609.083 Activities
Launder and dry gym clothing.

609.084 Equipment Space and Facilities
- A. Washing machine
- B. Vented dryer
- C. Laundry tub
- D. Separate work surface for handling both clean and soiled clothing and equipment

609.09 Instructors' Offices - One For Each Instructor

609.091 Size - Approximately 100 Square Feet

609.092 Location
- A. Direct access to locker/dressing room
- B. Direct or convenient access to gymnasium and outdoor physical education areas
- C. Permit ease of supervision of locker/dressing rooms

609.093 Activities
Instructors' showering, toilet and dressing.

609.094 Equipment Space and Facilities
- A. Toilet, lavatory and shower
- B. Desk and chair
- C. Conference chairs
- D. 4-drawer filing cabinet
- E. Storage of personal belongings
- F. Book shelving - 10 to 15 linear feet
- G. First aid equipment
- H. Telephone

609.10 Training Area

609.101 Size - Approximately 200 Square Feet

609.102 Location - Convenient to Locker/Dressing Room

609.103 Activities
Care of body.

609.104 Equipment Space and Facilities
A. Whirlpool hook-up
B. Rub-down table
C. Heat lamps
D. Supply cabinet

609.11 Equipment Storage Room

609.111 Size - Approximately 150 Square Feet

609.112 Location - Convenient to Locker/Dressing Rooms

609.113 Activities
Uniform and equipment storage.

609.12 Optional Spaces

609.121 Wrestling - 42 Feet x 42 Feet, or 1800 Square Feet

609.122 Weight Room - 1000 Square Feet

609.123 Multi-purpose Room - 1600 Square Feet

609.124 Auxiliary Gymnasium
In schools of more than 1000 student population - 5400 square feet.

610 SCIENCE FACILITIES

Items to be considered in locating these facilities are: Ease of access to outdoor science areas; ease of delivery of supplies and materials; and isolation so odors cannot infiltrate the remainder of the building. Facilities may be designed for instruction in single disciplines or in combinations, such as physics-biology, physics general-science and chemistry-biology. Although optional, DC electricity, compressed air and vacuum are desirable inclusions due to the expense of portable units over a series of years.

610.01 Combination Chemistry/Physics Lecture Laboratory

610.011 Size
Base preliminary determination of area on allotment of 50 to 60 square feet per student; approximately 1200 square feet, exclusive of separate storage.

610.012 Design Capacity - 20 Students

610.013 Location

A. Direct access to storage and project preparation rooms
B. Convenient access to other science instructional space laboratories

610.014 Activities

Instruction and demonstration; class-size and small group discussion; viewing films, slides and other projected materials; individual study and research; individual and small group experimentation; and storing of equipment and materials.

610.015 Equipment Space and Facilities

A. Chalkboard - 25 to 35 linear feet; chart and display rail above
   1. Minimum of 40 inches clear height
   2. Major portion on front wall
B. Bulletin board - 10 to 16 linear feet; chart and display rail above
C. Adjustable shelving - 30 linear feet
D. Conference table and chairs
E. Ventilated (portable or fixed) fume hood
   1. Equip with gas, compressed air, AC and DC electricity and water with vacuum breakers
   2. Wide enough for 2 pupils
   3. Easily visible from demonstration area if fixed piece of equipment
F. Instructor's demonstration table, including sink, hot and cold water, gas, AC and DC electricity, compressed air and vacuum
G. Laboratory work space 2 1/2 linear feet per student (may be provided as tables or work counter)
   1. Equip with sink, water, gas, AC and DC electricity flush plates and support rods
   2. Individual student storage units
   3. Corrosive-resistant work surface and plumbing
   4. Perimeter location preferred
H. Open shelving for often-used chemicals and other materials
I. Fire extinguisher and blanket
J. Balance cases - 5 to 6
K. Tablet-arm chairs or 2-student work tables and chairs
L. Teacher's desk and chair
M. Facilities for darkening the room
N. Emergency showers
O. Provide main gas shut-off valve for all laboratory equipment

610.02 Chemistry Storage

610.021 Size - Approximately 100 Square Feet

610.022 Location

A. Direct access from project preparation room

B. Convenient access from instructional space laboratory

610.023 Equipment Space and Facilities
- A. 75 to 100 linear feet of adjustable shelving of varied heights and depths
- B. Positive, independent ventilation
- C. Window between storage area and instructional space
- D. Storage of explosive or flammable material and concentrated acids

610.03 Physics Storage Room

610.031 Size - Approximately 100 Square Feet

610.032 Location
- A. Direct access from project preparation room
- B. Convenient access from instructional space laboratory

610.033 Equipment Space and Facilities
- A. Adjustable shelving of varied heights and depths - 75 to 100 linear feet
- B. Maximum closed adjustable shelving

610.04 Project Preparation Room
Optional as a separate room. However, preparation facilities must be provided outside the instructional space laboratory.

610.041 Size
Approximately 200 square feet; if combined with storage - 400 square feet.

610.042 Design Capacity - Instructor and Approximately 6 Students

610.043 Location
- A. Direct access from instructional space laboratory and from building corridor
- B. Convenient access from other science facilities located in adjacent portions of the science suite
- C. Permit ease of supervision from instructional space laboratories

610.044 Activities
Preparation for demonstrations; storage of projects; individual and small group project work.

610.045 Equipment Space and Facilities
- A. Maximum work counter space with minimum of 2 sinks
- B. Storage units above and below work counter
- C. Water, gas, vacuum, compressed air and AC and DC electricity at work counter
- D. File cabinet

610.05 Darkroom - Optional

610.051 Size - Approximately 100 Square Feet

610.052 Design Capacity - Instructor and Approximately 4 Students

610.053 Location

A. Direct access from instructional space laboratory
B. Convenient access to corridor without passage through instructional space laboratory

610.054 Equipment Space and Facilities

A. Laboratory work counter
    1. Acid-resistant sink, large enough to accommodate three pans
    2. Storage below
    3. Gas, electricity and hot and cold water with vacuum breakers
    4. Safety lights
B. Storage cabinet for photography equipment and materials
C. Warning light with switch near door
D. Adequate ventilation

610.06 Biology and/or General Science Instructional Space Laboratory

610.061 Size

Base preliminary determination of area on allotment of 40 to 45 square feet per student; approximately 800 square feet, exclusive of separate storage room.

610.062 Design Capacity - 20 Students

610.063 Location

A. Direct access to project preparation room
B. Direct or convenient access to storage and growing room. Growing room facilities may be included in Instructional Space Laboratory.
C. Convenient access to other rooms in the science suite

610.064 Activities

Instruction and demonstrations; class-size and small group discussion; individual and small group experimentation; viewing slides, films and other projected materials; writing or drawing at tables and chalkboards; individual study and research; display of student projects.

610.065 Equipment Space and Facilities

A. Chalkboard - 20 to 30 linear feet with chart and display rail above
    1. Minimum of 40 inches clear height
    2. Major portion of front wall
B. Bulletin board - 10 to 12 linear feet with chart and display rail above
C. Work counter - 40 to 50 linear feet, minimum; and must have student work space to accompany it
    1. 3 to 4 acid-resistant sinks with hot and cold water

2. Impervious work surface
3. Gas and electricity
4. Storage under work counter
5. Movable aquariums and terrariums

D. Closed shelving - 30 to 40 linear feet, 18 inches deep
E. Open shelving - 15 to 20 linear feet
F. Instructor's demonstration table including sink, hot and cold water, gas and electricity. 2 1/2 linear feet per student may be provided as equivalent student work space, which is not as restrictive as combination desk-chairs.
G. 2-student tables and chairs
H. Teacher's desk and chair
I. Facilities for darkening room
J. Fire extinguisher and blanket
K. Lavatory
L. Provide main gas shut-off valve for all laboratory equipment

610.07 Biology and/or General Science Storage

610.071 Size - Approximately 200 Square Feet

610.072 Location

A. Direct access from project preparation room
B. Direct or convenient access from instructional space laboratory and growing room

610.073 Equipment Space and Facilities

Maximum varied height and depth adjustable shelving - approximately 100 linear feet.

610.08 Project Preparation Room

May be planned as combination with storage area.

610.081 Size - Approximately 200 Square Feet

610.082 Design Capacity - Instructor and Approximately 6 Students

610.083 Location

Direct access from instructional space laboratory and from building corridor.

610.084 Equipment Space and Facilities

A. Acid-resistant work surface with acid-resistant sink, hot and cold water, gas and electricity
B. File cabinet

611 BUSINESS EDUCATION FACILITIES

See Chapter 8, Section 807.

612 CONSUMER/HOMEMAKING FACILITIES

See Chapter 8, Section 805.

613 TECHNOLOGY EDUCATION FACILITIES

See Chapter 8, Section 808.

614 EXCEPTIONAL STUDENTS - INSTRUCTIONAL AREAS

See Chapter 7.

615 MICROCOMPUTER LAB

615.01 Size - 40 to 45 Square Feet Per Student

615.02 Design Capacity - 20 Students

615.03 Location
Provide sufficient labs for use by each curriculum area. Core group for smaller facilities and one lab for each curriculum area in larger facilities.

615.04 Activities
Integrated use of microcomputer applications in the curriculum.

615.05 Equipment Space and Facilities

A. 20 - 30 inches x 48 inches microcomputer work stations
B. 1 - 30 inches x 60 inches server station
C. 4 - time-sharing printers
D. Storage cabinets for disks, paper and other materials
E. Teacher's combination desk-table and chair
F. Conference-type table and chairs
G. Chalkboard - 10 linear feet (dustless type dry marker)
H. Bulletin board - 10 linear feet
I. Dedicated electrical power with surge protection for equipment and conduit for interconnection requirements
J. Projection surface
K. Carpeting
L. Lighting with segmented room control. Use of rheostats is recommended for dimming purposes.
M. Provision for darkening room
N. Dedicated phone line for telecommunications
O. Because of the equipment specifications, air conditioning is highly recommended.
P. Due to the rapid advancement in computer technology, current information must be obtained before design work is completed.
Q. Carpeting, desirable.
R. Final technology designs must be approved by the Office of Technology and Information Systems (OTIS) in the state Department of Education prior to final approval by the state Board of Education.

616 AUDITORIUM

Factors influencing the location of the auditorium include: Ground level position easily shut off from other areas of the building,

convenient access to music and language arts instructional space and physical education locker/dressing rooms to permit use as stage-dressing rooms and to service drive for the delivery of bulky properties; location which allows community groups to use the facility during school hours without interfering with school activities; and a location which permits planned multiple use of lobby area. Location shall be convenient to public parking facilities. Consider accessibility of pupil toilets for public use and instructional space for coat check areas during after school hours.

616.01 Body of Auditorium

616.011 Size

Dependent upon ultimate seating capacity desired and singular or multiple use of the facility. Approximately 6 square feet will be needed for each seat provided.

616.012 Design Capacity

Should accommodate at least 1/3 of student enrollment, dependent upon desire to seat portion of or entire student enrollment at one time.

616.013 Activities

Production and performance of various student plays, concerts and variety shows; performances before student audiences by visiting groups or individuals contributing to the educational program of the school; multiple use of the area for instructional purposes, such as large and small group instruction and distance learning.

616.014 Equipment Space and Facilities

A. Space in front and below auditorium stage for orchestra, band and other activities
B. Acoustical quality so that weak voices of some platform participants may be heard throughout the auditorium with use of sound support system
C. Facilities whereby programs originating in the auditorium may be broadcast throughout the school
D. Sound amplification controls should be located in projection niche or booth
E. Convenience lights arranged and located for partial illumination during performances
F. Light control by multi-way switches convenient to entrances, near stairs to the stage and projection booth
G. Convenience and pilot light circuits should be tied into main light panel for control during productions
H. Duplex electrical outlets, appropriate in number, should be provided
    1. Along front of stage apron
    2. At rear of the body of the auditorium
    3. About 1/3 the distance from the stage to the rear of the auditorium for use with various audiovisual projectors

I. Projection niche (optional) at the rear of the room for use of film projector
J. Speakers for use with projector located in the rear of the seating area
K. See Chapter 5 for equipment necessary for distance learning.

616.02 Lobby or Student Commons

616.021 Size
Area as needed to handle anticipated capacity.

616.022 Location
To serve as common lobby for auditorium and gymnasium if facilities are provided in the same unit, or may be used as common lobby with other public service areas.

616.023 Activities
This facility may also serve as a student gathering area.

616.03 Stage

616.031 Size - 1400 to 1600 Square Feet

616.032 Location
A. Provide ample wing space on each side of the stage
B. Access to the stage and building corridor without entering lobby or body of the auditorium

616.033 Equipment Space and Facilities
A. Apron in front of the main curtain, approximately 8 feet wide, with direct access to the body of the auditorium at each end
B. Wide double doors with flush threshold opening onto the stage to permit passage of bulky scenery and equipment
C. Hardwood floor for the apron and the stage, and soft wood floor for backstage and wing areas
D. Electrical circuits
1. Border with roundels of 4 different colors
2. Circuits for adjustable spotlights mounted on at least 2 battens
3. Flush floor pockets or equivalent mounted in floor behind cyclorama with at least one outlet directly behind proscenium arch on each side
4. Duplex electrical outlets mounted near floor on walls of stage
5. Stage work lights (overhead and foot) controlled by multi-way switches at stage entrances
E. Provide panel for controlling stage and house lights, including beam and spotlights; mount in the ceiling of the auditorium
F. Light control panel should be designed to avoid overloading of circuits, resulting in dimmer damage, and should be flexible and expansible

G. Means for mounting 10 to 12 foot roll-up motion picture screen
H. Microphone outlets to the rear of the proscenium arch and 2 or 3 under the leading edge of the stage apron

616.04 Stage Crafts Workshops Storage

616.041 Size - Approximately 300 Square Feet

616.042 Location
Direct access to the stage, arranged to prevent noise interference on the stage.

616.043 Activities
Prepare, alter and store materials, such as stage flats and properties; store general purpose equipment used for auditorium programs.

616.044 Equipment Space and Facilities
A. Double doors with flush threshold
B. Work counter approximately 30 inches deep, with storage: Ten linear feet
C. Tool cabinet
D. Sink with hot and cold water
E. Movable storage cabinets for stage properties
F. Electrical outlets on available wall space, including area over work bench
G. Bulletin board - 6 linear feet
H. Storage for flats of various widths, appropriate for height of the proscenium arch
I. Locked storage for grand piano, costumes, stage properties and lighting and projection equipment

617 FOOD SERVICE FACILITIES

See Chapter 3, Section 302.

618 ADMINISTRATIVE AND SERVICE FACILITIES

See Chapter 3, Section 301.

619 ENGINEERING AND CUSTODIAL FACILITIES

See Chapter 12.

EXCEPTIONAL STUDENT EDUCATION

700 EXCEPTIONAL STUDENTS - INSTRUCTIONAL AREAS

Special education programs shall be provided in classrooms that are: situated within the main school facility; located with age-appropriate non-disabled students, and physically comparable to regular education classrooms.

References:

4. School Laws of West Virginia (18-10F)
5. American National Standards Institute
7. Section 504 of the Rehabilitation Act of 1973
8. West Virginia Board of Education Policy 2419: Regulations for the Education of Exceptional Students, effective August 6, 1991
9. Uniform Federal Accessibility Standards
10. Individuals With Disabilities Education Act (IDEA) 1990
11. Americans With Disabilities Act

701 PLANNING PROCESS

701.01 Facilities

All facilities designed for special education shall be planned to assist students to function safely with as much mobility as possible and shall be accessible to students with disabilities. The separate class program requires that the student receive instruction from special education teacher(s) for the majority of the school day. The ages of students in this type of program will vary, usually spanning more than one grade level.

701.02 Additional Factors

Additional factors required to conform with the Uniform Federal Accessibility Standards are:

A. Accessibility ramps
B. Safe area for loading and unloading of buses and other means of transportation
C. Toilet rooms, drinking fountains and lavatories that are appropriately equipped
D. Special furniture for wheelchair students to permit easy use
E. Switches, controls, hardware and fire protection systems that are easily used and understood by the exceptional student
F. Food service facilities designed to fit the individual needs of students
G. Non-skid floor covering or carpet
H. Lockable cabinets for securing medications

701.03 Location

Special education classrooms should be easily accessible to cafeteria, library and other central activities. Special education classrooms are situated within the main school facility, located with age-appropriate, non-disabled students, and are physically comparable to regular education classrooms.

702 BEHAVIOR DISORDERS - SEPARATE CLASS

702.01 Size - 600 Square Feet

702.02 Design Capacity - 8 Students

702.03 Location

Should be in an area with a minimum amount of outside distraction, such as traffic or hallway noise, with direct or convenient access to out-of-doors, and within close proximity to existing rest room facilities.

702.04 Equipment Space and Facilities

Should be stationary or heavy.

A. Instructional Center
   1. Teacher's desk and chair
   2. 8 desks and chairs or combination desk-chairs, adjustable in height
   3. 2 or 3 round or rectangular work tables with chairs for student seating
   4. Minimum of 3 individual learning carrels
   5. Teacher aide's desk and chair

B. Storage
   1. 2 metal storage lockers
   2. One 4-drawer file with lock
   3. 30 linear feet of open shelving
   4. Cart for audiovisual equipment
   5. Coat rack or locker available

C. Chalkboard - 30 linear feet; display and map rail above

D. Bulletin board - 20 linear feet

E. Covered and grounded electrical receptacles located on all walls

F. Carpeting

G. Movable, designed to be secured, screens - for making 2 or 3 study cubicles

H. "Time-out" room - 64 to 100 square feet as described in the student's Individualized Education Program (IEP)
   1. Means of monitoring, auditorially and visually (ie., two-way vision)
   2. One bench or chair
   3. Remove all locks

I. Phonograph - 1

J. Tape recorder - available

K. Typewriter - available

L. Intercom - ideally, two-way intercom unit connected to administrative offices

M. Computer - available

N. Capability of darkening room

O. Clock

P. Availability of audiovisual equipment

Q. Computer and work stations - available

703 COMMUNICATION DISORDERS - SEPARATE CLASS

703.01 Size - 600 to 800 Square Feet

703.02 Design Capacity - 12 Students

703.03 Location
Refer to Chapter 7, Section 701.03.

703.04 Equipment Space and Facilities

A. Instructional Center
   1. 2 office desks and 3 adult chairs
   2. Large table (5 feet)
   3. 8 to 10 chairs for students
   4. Student desk and chairs
   5. Set swastika style carrels
   6. Movable screen covered with sound absorbing material

B. Storage
   1. 4-drawer file with lock - 1
   2. Cart for audiovisual equipment - 1

C. Lighting, artificial - 60 to 75 foot candles

D. Lighting, natural - at least one window with drapes

E. Acoustical treatment - acoustical treatment of ceilings, doors and walls; ideally, draped; carpeted floors

F. Electrical power supply: 110 volt duplex receptacle on each wall

G. Intercom - ideally, intercom unit connected to administrative offices; telephone would suffice

H. Chalkboard - 3 feet x 5 feet, mounted on wall at appropriate height for students

I. Bulletin board - 3 foot x 5 feet, mounted to wall

J. Full mirror which enables 3 to 5 children to work in front of it

K. Audiometer - properly calibrated, portable audiometer available

L. Auditory training equipment: Individual amplification units according to need

M. Tape recorder - assigned for exclusive use of clinician

N. Phonograph - three speed phonograph available in building

O. Language master - assigned for exclusive use of clinician

P. Typewriter - made available

Q. Clock

R. Carpeting

S. Closed-shelf storage bin

T. Computer and work stations - available

704 DEAF - BLIND - SEPARATE CLASS

704.01 Size - 300 to 500 Square Feet

704.02 Design Capacity - 3 Students

704.03 Location
See Chapter 7, Section 701.03.

704.04 Equipment Space and Facilities

A. Instructional Center
   1. Teacher's desk and chair

2. 2 library tables with 3 chairs each, or seating arrangements appropriate to the concomitant physical handicaps

B. Storage (may be common resource area)
1. One cart for audiovisual material
2. One storage locker, recessed if possible. This locker should be of sufficient size to hold braille writer, closed circuit television, typewriter, large print books and talking book machines.
3. One desk-high file with lock
4. Open shelving - 40 linear feet

C. Illumination - the room should be free from glare and direct sunlight. Artificial illumination fixtures should be wired for independent control. Footcandles of light should be measured throughout the room - 150-170.

D. Wall Surfaces - colors should be chosen in a range of pastel shades; surfaces should have a dull finish and be easily washable

E. Chalkboard - gray or gray-green in color; 4 linear feet; display and map rail above, or as appropriate to the program

F. Bulletin board - 4 linear feet, or as appropriate to the program

G. Tape recorder and listening station

H. Covered and grounded electrical receptacles located on all walls

I. Carpeting - solid color

J. Sink with hot and cold water

K. Typewriter - primary type - available

L. Projection and magnifying equipment - available

M. Toilet

N. Electrical power supply - 3 on each wall

O. Braille writer and other special equipment, as appropriate

P. Computer and work stations - available

705 MILD MENTALLY IMPAIRED - SEPARATE CLASS

705.01 Size - 600 to 750 Square Feet

705.02 Design Capacity - Maximum of 12 Students

705.03 Location

See Chapter 7, Section 701.03.

705.04 Equipment Space and Facilities

A. Instructional center
1. Teacher's desk and chair
2. Teacher aide's desk and chair
3. 12 desks and chairs, or combination desk-chairs, adjustable in height
4. 2 library tables with 6 chairs for each

B. Storage
1. Cart for audiovisual material - 1
2. Metal storage lockers - 2
3. desk-high file - 1
4. 4-drawer file with lock - 1
5. 20 linear feet of open shelving

C. Full length mirror - should be designed to be covered
D. Chalkboard - 24 linear feet; display and map rail above
E. Bulletin board - as much as possible; minimum of 20 linear feet
F. Covered and grounded electrical receptacles located on all walls
G. Sink with hot and cold water
H. Fire extinguisher and blanket
I. Phonograph
J. Tape recorder - available
K. Clock
L. Typewriter - available
M. Carpeting
N. Audiovisual equipment should be available
O. Access to instructional areas/equipment conducive to teaching functional skills
P. Computer and work stations - available

706 MODERATE MENTALLY IMPAIRED - SEPARATE CLASS

706.01 Size - 650 to 850 Square Feet

706.02 Design Capacity - Maximum of 12 Students

706.03 Location
See Chapter 7, Section 701.03.

706.04 Equipment Space and Facilities
A. Instructional center
1. Teacher's desk and chair
2. Teacher aide's desk and chair
3. 12 desks and chairs or combination desk-chairs, adjustable in height
4. 2 library tables with 6 chairs for each table
B. Storage
1. Cart for audiovisual material
2. 2 metal storage lockers
3. 4-drawer file with lock
4. 20 linear feet of open shelving
C. Chalkboard - 20 linear feet; display and map rail above
D. Bulletin board - as much as possible; minimum 20 linear feet
E. Facilities for darkening room
F. Electrical receptacles with protective covers on all walls
G. Sink with hot and cold water
H. Phonograph
I. Tape recorder - available
J. Clock
K. Typewriter - available
L. Carpeting
M. Toilet
N. Instructional areas/equipment conducive to teaching functional skills (ie., kitchen facilities, laundry facilities and bathing facilities)
O. Doorways that are 3 1/2 feet wide and without thresholds

P. Full length mirror - should be designed to be covered
Q. Computer and work stations - available

707 ORTHOPEDICALLY IMPAIRED - SEPARATE CLASS

707.01 Size - 800 to 1000 Square Feet

707.02 Location
Direct or convenient access to out of doors. See Chapter 7, Section 701.03.

707.03 Design Capacity - 10 Students

707.04 Equipment Space and Facilities
A. Teacher's desk and chair
B. Teacher aide's desk and chair
C. Individual wheelchair cut-out tables for each student, where appropriate; 2 five foot round tables; some chairs depending on needs
D. Storage
   1. Cart for audiovisual material
   2. 2 metal storage lockers
   3. 4-drawer file with lock
   4. 30 linear feet of open shelving
   5. Adequate storage space for specialized equipment as required by the student's Individualized Education Program (IEP)
E. Rest room facilities (bathtub, sink, toilet) to conform with the Uniform Federal Accessibility Standards (UFAS)
F. Doorways that are 3 1/2 feet wide and without threshold
G. Ramps and handrails, if needed
K. Non-skid floor surfaces
I. Electrical receptacles with protective covers on all walls
J. Wheelchair-accessible sink with hot and cold water
K. Washer and dryer
L. Student changing area
M. Range and refrigerator, when appropriate
N. Convenient access to lunchroom suitable to the individual needs of students
O. Chalkboard - 40 linear feet; display and map rail above
P. Bulletin board - as much as possible; minimum 20 linear feet
Q. Carpeting
R. Phonograph
S. Tape recorder - available
T. Clock
U. Typewriter - available
V. Computer and work stations - available

708 SEVERE/PROFOUND MENTALLY IMPAIRED - SEPARATE CLASS

708.01 Size - 800 to 1,000 Square Feet

708.02 Design Capacity - 9 Students

708.03 Location
See Chapter 7, Section 701.03.

708.04 Equipment Space and Facilities

A. Instructional Center
   1. Teacher's desk and chair
   2. 9 desks and chairs or combination desk-chairs, adjustable in height
   3. 2 or 3 round or rectangular work tables with chairs for student seating

B. Storage
   1. Metal storage lockers - 2
   2. 4-drawer file with lock
   3. 30 linear feet of open shelving
   4. Adequate storage space for specialized equipment as required by the student's IEP
   5. Cart for audiovisual equipment - 1

C. Chalkboard - 30 linear feet; display and map rail above
D. Bulletin board - 20 linear feet
E. Covered and grounded electrical receptacles located on all walls
F. Full length mirror, designed to be covered
G. Carpeting
H. Non-skid floor surface
I. Movable screens which can be secured for making 2 or 3 study cubicles
J. "Time-out" room - 64 to 100 square feet, as described in the student's IEP
   1. Bench or chair
   2. Means for monitoring audibly and visibly (ie., 2-way mirror)
   3. Removal of existing locks
   4. Free from objects, materials and equipment
K. Phonograph
L. Tape recorder - available
M. Instructional areas/facilities to promote the teaching of functional skills, ie., stove, refrigerator, washer, dryer
N. Typewriter - available
O. Range
P. Doorways that are 3 1/2 feet wide and without thresholds
Q. Specialized equipment as required by the student's IEP
R. Computer and work stations - available

709 DEAF AND HARD OF HEARING - SEPARATE CLASS

709.01 Size - 600 to 750 Square Feet

709.02 Design Capacity - 10 Students

709.03 Location
Should be located out of close proximity to high noise level areas (ie., gymnasiums, rhythm rooms, shops, noisy streets, railroad tracks and airports). Baffle of trees, embankments and/or turf should lie between building and possible noise sources. See Chapter 7, Section 701.03.

709.04 Equipment Space and Facilities

A. Housing structure
   1. Walls of brick, 4 1/2 inches thick, plastered on both sides
   2. Combination cork/peg boards - one wall
   3. Doors, solid-core type (air gaps sealed with rubber edging stripe)
   4. Windowless or partially windowless (double pane) classroom
   5. Ventilation system that causes little noise (ducts can be baffled and lined)
   6. Toilet equipment should be silent in operation and accessible to students with disabilities
   7. Minimum of 18 linear feet of chalkboard (natural slate or dark green) - magnetic chalkboards are optional
   8. Sink, with counter area and storage for books
   9. Closets (walk-in type)
   10. Space to house amplification equipment, audiovisual arts, and storage for books

B. Acoustic considerations
   1. Installation of wall-to-wall carpeting
   2. Acoustical plaster and tile, (appropriate amounts on walls and ceilings) or sound absorption tiles on each wall
   3. Drapes
   4. Sound levels of 30 to 35 db on the A scale of a sound level meter measured in the empty classroom with normal activity in adjacent areas. The signal-to-noise ratio in the occupied classroom is to be 20 to 30 db for optimal speech discrimination opportunities.

C. Instructional Center
   1. Teacher's chair and desk
   2. Student desks/chairs
   3. Round table - 5 foot
   4. Set of swastika style carrels for individualized instruction
   5. Movable screen covered with sound absorbing material

D. Lighting
   1. Controls in teaching area
   2. Incandescent lighting - 150 footcandles
   3. Projection shades for windows

E. Electrical power supply - 2 to 3 plugs on each wall; grounded system

F. Equipment
   1. FM system with individual aids for each student; loop installation
   2. 16 and 35 mm projector, available
   3. Slide projector, available
   4. Language master, available
   5. Opaque and overhead projectors
   6. Portable VCR, camera, film and playback/monitor system
   7. Tape recorder
   8. Record player
   9. 4-drawer file cabinets with locks
   10. Speech mirror - portable, at least 2 feet x 1 foot
   11. Visual fire safety signals

12. Full length mirror
13. Telephone trainer unit with teletype device for the deaf

G. Observation room equipped with amplification system, lock and one-way glass (entrance outside of classroom)

H. Computer and work stations - available

710 BLIND AND PARTIALLY SIGHTED - SEPARATE CLASS

710.01 Size - 600 to 750 Square Feet

710.02 Design Capacity - 10 Students

710.03 Location

See Chapter 7, Section 701.03.

710.04 Equipment Space and Facilities

A. Instructional Center
   1. Teacher's desk and chair
   2. Teacher aide's desk and chair
   3. Desks and chairs or combination desk-chair, movable and adjustable in height; of light neutral color and with a dull finish
   4. 2 library tables with 3 chairs each

B. Storage
   1. Cart for audiovisual material
   2. Storage locker, recessed if possible. This locker should be of sufficient size to hold: braille writer, closed circuit television, typewriter, large print books and talking book machines (may be storage closet).
   3. 4-drawer file with lock, recessed if possible
   4. Desk-high file
   5. Open shelving - 40 linear feet

C. Illumination - the room should be free from glare and direct sunlight. Artificial illumination fixtures should be wired for independent control. Footcandles of light should be measured throughout the room: 150-170.

D. Environment must be barrier free in order to be conducive to physical mobility of students.

E. Facilities and equipment conducive to active physical education program shall be available.

F. Low-vision aids or other mechanical and/or electronic aids (ie., braille writer, closed circuit television, talking computer)

G. Wall surfaces - colors should be chosen in a range of pastel shades; surfaces should have a dull finish and be easily washable

H. Chalkboard - gray or gray-green in color; 20 linear feet; display and map rail above

I. Bulletin board - 20 linear feet

J. Tape recorder and listening station

K. Electrical power source, 2 or 3 on each wall - covered and grounded

L. Carpeting - solid dark color

M. Sink with hot and cold water

N. Typewriters - 2 primary type
O. Projection and magnifying equipment - available
P. Tangible apparatus - braillers, talking book machines, reading stands and racks and relief globes
Q. Toilet
R. Computer and work stations - available

711 SPECIFIC LEARNING DISABILITIES - SEPARATE CLASS

711.01 Size - 540 Square Feet

711.02 Design Capacity - Maximum of 12 Students

711.03 Location
See Chapter 7, Section 701.03.

711.04 Equipment Space and Facilities
A. Instructional Center
   1. Teacher's desk and chair
   2. Teacher aide's desk and chair
   3. Desks and chairs or combination desk-chairs, adjustable in height - 8
   4. 2 library tables with 4 chairs for each
   5. Minimum of 4 individual learning stations

B. Storage
   1. Cart to use for audiovisual materials
   2. Metal storage lockers - 2
   3. Desk-high file with lock
   4. 4-drawer file with lock
   5. Open shelving - 30 linear feet

C. Chalkboard - 30 linear feet; display and map rail above
D. Bulletin board - minimum 20 linear feet
E. Movable screens - 2 or 3, 5 feet x 6 feet
F. Covered and grounded electrical receptacles located on walls
G. Phonograph
H. Tape recorder
I. Clock
J. Computers and work stations - available
K. Audio card readers - 2
L. Overhead projector
M. Instructional television
N. Filmstrip projector - available
O. Painting easel - 2
P. Projector and screen - available

712 PRE-SCHOOL - SEPARATE CLASS

712.01 Size - 600 to 800 Square Feet

712.02 Design Capacity - 10 Students

712.03 Location
See Chapter 7, Section 701.03.

712.04 Equipment Space and Facilities

A. Teachers' desks and chairs, one each for teacher and aide
B. 2 tables with chairs for pupil seating; carpet squares or low cushions for additional seating per child
C. Storage
   1. Cart for audiovisual material
   2. Storage cabinets
   3. 4-drawer file with lock
   4. 20 linear feet of shelving adjacent to instructional area
D. Rest room facilities (including changing table and cots) to conform with Vocational Rehabilitation requirements
E. Doorways that are 3 1/2 feet wide and without threshold
F. Ramps and handrails, if needed
G. Non-skid floor surfaces
H. Electrical receptacles with protective covers on all walls
I. Sink with hot and cold water
J. Chalkboard - 30 linear feet
K. Bulletin board - as much as possible; minimum 20 linear feet
L. Facilities for darkening room
M. Carpeted Area
N. Phonograph - available
O. Tape recorder - available
P. Clock
Q. Typewriter - available
R. Projector and screen - available
S. Instructional television - available
T. VCR - available
U. Computer and work stations - available

713 GIFTED EDUCATION - SEPARATE CLASS

713.01 Size - 600 to 750 Square Feet

713.02 Design Capacity - 15 Students

713.03 Location

See Chapter 7, Section 701.03.

713.04 Activities

Individuals and groups engaging in study and work activities; experimentation; problem solving situations; and such activities as using educational media aids and technology, using a variety of reference materials, developing cultural skills and displaying students' work.

713.05 Equipment Space and Facilities

Ample space, movable furniture and equipment and well-designed storage areas are essential.

A. Chalkboards, bulletin boards and other display areas: As much as possible; a minimum two-thirds of available wall space
   1. Chalkboards and bulletin boards should have map rails installed above.
   2. The bottom of the display area should be at the eye level of the student when seated.

B. Student wardrobe - accessible
C. Storage space
   1. Open and closed adjustable shelving of various heights and depths for a variety of sizes of construction paper, charts and large format books - 30 linear feet of each
   2. Storage for teacher's personal belongings
   3. Filing space for instructional material and supplies equivalent to two 4-drawer, legal size file cabinets
D. Work space - 2 square feet per student with shelving beneath. Sink equipped with mud trap and hot and cold water.
E. Teacher's combination desk-table and chair
F. 2 conference-type tables and chairs
G. Desks and chairs, or combination chair-desks
H. Computers and work stations - available
I. Electrical receptacles located on all walls, covered and grounded
J. A minimum of 1 movable screen
K. Clock
L. Phonograph

714 REGULAR EDUCATION - PART TIME

Students with mildly-disabling conditions or gifted students are assigned to regular education, part time programs, for 1 to 3 hours daily. The ages of students in this type of room will vary, usually spanning more than one grade level.

714.01 Size - 500 to 600 Square Feet

714.02 Design Capacity - 15 Students

714.03 Location

See Chapter 7, Section 701.03.

714.04 Equipment Space and Facilities

A. Instructional center
   1. Teacher's desk and chair
   2. Student desks and chairs or combination desk-chairs, adjustable in height
   3. Library table with 8 chairs
   4. Typing stand and typewriter
B. Storage
   1. Cart for audiovisual material
   2. Metal storage locker
   3. Desk-high file with lock
   4. 4-drawer files with lock - 2
   5. 20 linear feet of closed and open shelving
C. Full length mirror designed to be covered
D. Chalkboard - 20 linear feet; display and map rail above
E. Bulletin board - as much as possible; minimum 20 linear feet
F. Covered and grounded electrical receptacles located on all walls

G. Classroom (including equipment and facilities) must be modified in order to accommodate student needs as specified in the IEP.
H. Computers and work stations - available

715 PROFESSIONAL SUPPORT STAFF

Services provided by professional support staff, such as school psychologists, counselors, audiologists, speech/language pathologists and related services specialists may provide itinerant or full-time services to the students. If itinerant services are provided, areas of the school may be used by professional support staff on a part-time basis with adequate spaces being made available. Those services which are provided on a full-time basis require an individual full-time room assignment.

715.01 Size - 250 to 350 Square Feet

715.02 Design Capacity
Maximum of 10 students and, in some cases, parents.

715.03 Location
See Chapter 7, Section 701.03.

715.04 Activities
Individual and group guidance; counseling and conferences with pupils, parents and teachers; individual evaluations; individual and group instruction.

715.05 Equipment Space and Facilities
A. Desk and chair
B. Conference chairs
C. Shelving - 10 to 15 linear feet
D. Bulletin board - 4 to 6 linear feet
E. Chalkboard - 4 to 6 linear feet
F. Storage for personal belongings
G. 4-drawer file cabinet with lock for each professional assigned full-time to facility
H. Additional file space for other professionals providing itinerant services
I. Professional support staff facilities, including equipment, must be modified in order to accommodate student needs as specified in the individualized education program.
J. Telephone with one or more outside lines
K. Computers and work stations - available

Chapter 8

VOCATIONAL EDUCATION

800 VOCATIONAL EDUCATION FACILITIES

When planning facilities of a service area program for Vocational-Technical Education, refer to the Division of Technical and Adult Education Services, Handbook on Planning School Facilities Vocational Education Supplement. The assistance of specialists in agricultural education should be secured in planning facilities.

801 AGRICULTURAL EDUCATION FACILITIES

Factors influencing the location of facilities include: Isolation from quiet areas of the building; location which provides easy delivery of instructional supplies, materials and equipment including farm machinery; location which permits isolation from remainder of the building for after school use.

801.01 Classroom Space

801.011 Size

Base preliminary determination of area upon allotment of 30 to 40 square feet per student (minimum of 600 square feet), exclusive of storage space. If classroom space is based on the minimum of 30 square feet per student (600 square feet total), an additional 200 square feet should be provided for a demonstration and work area - wet sink, etc.

801.012 Design Capacity - 20 Students

801.013 Location

A. Convenient or direct access to shop and office
B. Ground floor, convenient to a building entrance

801.014 Activities

Lecture; demonstration; experimentation; discussion; viewing slides, films and other projected materials; writing or drawing on chalkboard and tables; displaying students' work; storing instructional materials and supplies.

801.015 Equipment Space and Facilities

A. Chalkboard - 20 to 24 linear feet; display and chart rail above
B. Bulletin board - as much as possible; minimum 8 linear feet; height 4 feet; display and chart rail above. Locate one section adjacent to entrance.
C. Student tables (minimum of 10 - 24 inches x 60 inches x 30 inches) and chairs
D. Teacher's desk and chair
E. Demonstration lab table with wet sink, gas and electric - 24 inches x 60 inches x 36 inches
F. Storage
   1. Magazine rack

2. Minimum of 40 linear feet of adjustable shelving
3. Record book holder

G. Duplex electrical outlets on all walls
H. Facilities for light control to permit use of visual aid
I. Refer to the "Agricultural Education Program Guide" for list of equipment.

801.02 Agricultural Mechanics Laboratory

801.021 Size
Minimum of 2400 square feet. Base preliminary determination of area on allotment of 120 to 150 square feet per student, exclusive of storage and tool room space.

801.022 Design Capacity - 20 Students

801.023 Location
A. Convenient access to classroom space and instructor's office
B. Direct access to service drive

801.024 Activities
Construct and repair agricultural equipment and machinery; weld; finish and paint equipment; operate power machinery or equipment; store tools, materials and partially completed projects.

801.025 Equipment Space and Facilities
A. Varies with program offered in shop
B. Chalkboard and bulletin board - 6 linear feet each
C. Windows should be at least 42 inches above the floor to permit installation of equipment along wall and electrical outlets above work benches
D. Floor or ceiling electrical grid system for 110 and 220 volt power to various machines with master control switches
E. Overhead door from service drive, minimum 14 feet wide and 10 feet high
F. Storage for hand tools, may be provided in separate rooms or in cabinets and racks within the lab.
G. Fire extinguishers, per state Fire Code
H. Work benches, wooden, minimum of 30 linear feet
I. Work benches, metal, minimum of 40 linear feet
J. Floor drain near machinery repair area
K. Half-circle wash fountain installed in shop
L. Emergency eye wash
M. Refer to the "Agricultural Education Program Guide" for list of equipment.

801.03 Agricultural Mechanics Storage Area

801.031 Size - Minimum of 600 Square Feet

801.032 Location
A. Adjacent to the laboratory area and machinery storage area

B. Area should be protected from the weather, but not necessarily heated

801.033 Activities
Storage of instructional materials and consumables.

801.034 Facilities
A. Storage rack for metal
B. Storage rack for lumber

801.04 Machinery and Material Storage Area

801.041 Size - Minimum of 600 Square Feet

801.042 Location
Adjacent to the lab with direct access through the overhead lab door.

801.043 Equipment Space and Facilities
A. Macadam base sloped for drainage
B. Surrounded by chain link fence at least 7 feet high
C. Double gate entrance, minimum of 14 feet wide

801.05 Greenhouse

801.051 Size - Minimum of 22 Feet x 48 Feet

801.052 Location
Convenient access to other program facilities.

801.06 Instructor's Office and Storage Area

801.061 Size - Minimum of 200 Square Feet

801.062 Location
Convenient or direct access to shop and classroom area.

801.063 Equipment Space and Facilities
A. Teacher's desk and chair
B. 1 or 2 conference chairs
C. Storage
1. Letter size, 4-drawer file cabinet
2. Legal size, 4 drawer file cabinets, minimum of 2
3. Adjustable shelving of various heights and depths
D. Minimum of 2 duplex electrical outlets

802 MARKETING EDUCATION FACILITIES

802.01 Instructional Space

802.011 Size
The size of the facility is driven by the curriculum. The Marketing Education curriculum calls for small group work areas, project areas, and regular classroom instruction space. The

suggested average space is 40 - 45 square feet per student (1000 - 1125 square feet).

802.012 Design Capacity - 25 Students

802.013 Location
The most desirable location for a facility will be found along a main corridor receiving maximum student exposure.

802.014 Activities
Learning activities will include role playing; realistic job situations; demonstrating job related skills; observing and evaluating films; job activities and processes; independent study in an area; panel presentations and discussions; and conferences.

802.015 Equipment Space and Facilities
A. Trapezoid-shaped tables with chairs
B. Chalkboards and bulletin boards
C. Exterior display window
D. File cabinet
E. Electronic cash register with counter
F. Calculators, 1 per student, per class
G. Teacher desk and chair
H. Bookcase
I. Mannequins - 1 or 2
J. Bookcase
K. Microcomputer
L. Refer to the "Cooperative Education Administrative Handbook" for list of additional equipment.

802.02 Office

802.021 Size
Because of the Marketing Education teachers' daily contact with the business community, an office connected to the classroom is necessary. This office should be 200 - 250 square feet and should accommodate 1 - 2 teachers. A clear window or partition should separate the office from the classroom.

802.021 Location
Direct or convenient access to instructional space.

802.023 Equipment Space and Facilities
A. Teacher's desk and chair
B. Telephone
C. Conference chairs - 1 or 2
D. Computer with printer
E. Letter size 4-drawer file cabinets - 2
F. 20 to 30 linear feet of shelving, open or closed
G. Plain paper copier
H. Refer to the "Cooperative Education Administrative Handbook"

802.03 Storage

802.031 Size

A storage closet of at least 100 square feet should be attached to the classroom. Some shelving should be built in.

802.032 Location

Direct or convenient access to instructional space or school store.

802.032 Equipment Space and Facilities

Adjustable shelving throughout.

802.04 School Store

802.041 Size

If a retail lab is part of the marketing education program, spaces from 150 square feet to 1500 square feet can be utilized, depending on the type of store and planned operation. Contact the state Supervisor for Marketing Education for assistance in planning a school store.

802.042 Location

The most successful location would be on a high traffic corridor, attached to the marketing education classroom and office.

802.043 Equipment Space and Facilities

Contact the state Supervisor for Marketing Education for specs.

802.044 Activities

Stock and operate a retail enterprise, selling items identified as appropriate by school survey and the administration, teacher and advisory committee.

803 DIVERSIFIED COOPERATIVE TRAINING FACILITIES

803.01 Instructional Space

803.011 Size

The size of this facility will be dependent upon the type of furniture and equipment contained; 30 to 35 square feet per student.

803.012 Design Capacity - 25 Students

803.013 Location

The most desirable location for a facility will usually be found along a main floor corridor receiving maximum student exposure.

803.014 Activities

Learning activities will include role playing; realistic job situations; demonstrating job related skills; observing and evaluating films; job activities and processes; independent study in an area; panel presentations; and discussions and conferences.

803.015 Equipment Space and Facilities

A. Tables and chairs
B. Bulletin boards and chalkboards
C. File cabinets
D. Calculators
E. Telephone
F. Storage cabinet
G. Typewriter
H. Teacher's desk and chair
I. Bookcase
J. Microcomputer
K. Refer to the "Cooperative Education Administrative Handbook" for list of additional equipment.

804 VOCATIONAL HEALTH OCCUPATIONS FACILITIES

One factor influencing the location of the facilities would be whether the location permits parking and easy access for bus and auto transportation to clinical facilities.

804.01 Instructional Space

804.011 Size

Base preliminary determination of area upon allotment of 25 to 30 square feet per student.

NOTE: If classroom/laboratory area is combined, need 75 to 100 square feet per student.

804.012 Design Capacity - 25 Students/Classroom

804.013 Location

Convenient to laboratory and office.

804.014 Activities

Lecture; large and small group discussion; independent study; utilization of audiovisuals; chalkboard demonstrations; role playing and similar learning strategies.

804.015 Equipment Space and Facilities

A. Chalkboard - 8 to 12 linear feet
B. Bulletin board - 4 feet by 4 feet
C. Student chairs with arm rests, or 30 inches x 60 inches library tables and chairs
D. Teacher's desk and chair
E. Equipped simulation/patient care units with provision for privacy. If the instructional space/laboratory area is combined, a demonstration unit is not needed.
F. Storage
   1. Legal size, 4-drawer file cabinet
   2. Magazine rack
   3. Adjustable shelving
   4. Cabinet storage areas
   5. Open shelves within classroom

G. Electrical outlets to permit use of equipment at demonstration unit and for small or large group viewing of audiovisuals
H. Provisions for light control to permit use of visual aids
I. Sink with hot water
J. Fire extinguisher (per state Fire Code)
K. Refer to the "Health Occupations Program Guide" for list of equipment for specific programs.

804.02 Health Occupations Laboratory

804.021 Size

Base preliminary determination of area on allotment of 75 to 100 square feet per student in the following occupational areas.

A. Dental assistant
B. Practical nursing
C. Health assistant
D. Nursing assistant
E. Medical assistant
F. Medical lab assistant
G. Dental lab assistant
H. Respiratory therapy technician
I. Pharmacy technician
J. Medical transcriptionist
K. Surgical technician

NOTE: The assistance of specialists in health careers and health occupations should be secured in planning these facilities.

804.022 Design Capacity - 25 Students/Lab

804.023 Location

A. Convenient access to instructional space and instructor's office
B. Provision for room privacy during patient care/simulation procedures

804.024 Activities

Learning experiences in patient care and recording, dental/medical office procedures and related activities, depending upon health occupation being taught.

804.025 Equipment Space and Facilities

A. Equipment should be comparable to that used in the health occupations field.
B. The equipment and work stations will vary with the occupational objectives of the program.
C. Windows should be high enough to permit installation of equipment along the wall.
D. Consultation should be made with Vocational Health Occupations Education Supervisor for equipment needs of various occupational areas.
E. Sink and lavatory should have hot and cold water.
F. Counter top should have work space with cabinet storage.

G. Storage room should have locked storage for visual aids, equipment and supplies.
H. Equipment supplied should include dressing room and student lockers.
I. Refer to the "Health Occupations Program Guide" for list of equipment.

804.03 Instructor's Office/Station

804.031 Size - 100 to 150 Square Feet

804.032 Location
Direct access to the laboratory, instructional space and corridor.

804.033 Equipment Space and Facilities
A. Teacher's desk and chair
B. Conference chairs - 2
C. 4-drawer file cabinet with lock
D. Mirror

804.04 Resource/Study Area

804.041 Size - 225 Square Feet

804.042 Location
Can be separate room or can be part of laboratory.

804.043 Equipment and Facilities
A. Round tables or library tables with 10 chairs each - 2
B. Bookshelves or bookcases along walls
C. Storage cabinets for visual aids and independent study materials
D. Bookkeeping drawer and forms for book borrowing
E. Magazine display rack for journals, pamphlets, periodicals and other materials

805 HOME ECONOMICS FACILITIES - GRADES 9-12

Consumer and homemaking education is a group of home economics instructional programs that prepare individuals at all educational levels for the occupation of homemaking, emphasizing the acquisition of knowledge and the development of understanding attitudes, standards, values, and skills relevant to individual and family life as well as the world of work. They also emphasize the improvement of the home and the quality of individual and family life and enhance potential employability. These programs prepare individuals for the multiple roles of homemaker and wage earner. Programs include, but are not limited to, instruction in consumer education, food and nutrition, family living and parenthood education, child growth and development, health and safety, housing and home management (including resource management) and clothing and textiles. Course offerings include: Adult Roles and Functions; Steps, Parenting; and/or special interest courses.

805.01 Consumer & Homemaking Instructional Space

805.011 Size

The home economics facility consists of 1 or more rooms. Regardless of the number of rooms, space is provided for carrying out a comprehensive curriculum. In small high schools, a single room with 1 teacher is used for teaching all aspects of the curriculum. If more than one teacher is currently employed, or if it is anticipated that in the near future more than one teacher will be needed, sufficient rooms are included in the original plan for meeting needs. Regardless of the number of rooms in a facility, each room is used for teaching more than one area of consumer and homemaking instruction.

A. One all-purpose room shall be designed for a 1-teacher department. Space and equipment for teaching textiles and clothing, nutrition and foods, housing/home furnishings, parenting and child development, family living, management and consumer education. The total amount of space needed is 95-100 square feet per student and is designed to include the following areas:
   1. Foods laboratory - 45 square feet per student (minimum of 900 total square feet). See Chapter 8, Section 805.021 for specialized equipment and facilities requirements.
   2. Clothing laboratory/multi-purpose room - 50 square feet per student (minimum 1000 total square feet). See Chapter 8, Sections 805.04 and 805.05 for specialized equipment and facilities requirements. Also, includes space and equipment for:
      a. Storage for teaching materials, supplies, and student references
      b. Teaching center
      c. Display case

B. Two multi-purpose rooms shall be designed for a 2 or more teacher department
   1. Room one consists of:
      a. Space and equipment for teaching foods and other instructional areas listed above - 55 to 60 square feet per student
      b. Storage for teaching materials, student projects, supplies and references
      c. Teaching center
   2. Room two consists of:
      a. Space and equipment for teaching clothing and other instructional areas listed above - 55 to 60 square feet per student.
      b. Storage for teaching materials, student projects, supplies and references.
      c. Teaching center with conference/office area of 150 to 200 square feet.
      d. Display cases of 24 square feet.

Per each additional teacher, there should be classroom space of 625 to 800 square feet and conference/office area of 50 square feet.

A peripheral arrangement with a minimum of fixed equipment or furnishings extending out into the room promotes flexibility in the use of space. Equipment is arranged in relation to point of use to prevent congestion. Allowance between tables is 5 feet for students to pull out chairs and be seated and to permit instructor supervision.

805.012 Design Capacity - 20 Students (Lab) 25 Students (Classroom)

805.013 Location

Facilities should be located on the ground floor, preferably near an outside entrance for:

A. Convenient delivery of groceries and instructional materials
B. Convenient installation and removal of large equipment
C. Easy accessibility for physically handicapped persons
D. Easy accessibility for preschool age children and their parents
E. Convenient entry for adult students and other persons seeking help with home-related problems

NOTE: In multi-teacher facilities, rooms adjacent to each other tend to unify the program by allowing for ease of communication, sharing of equipment and exchanging rooms for instruction. In schools with several rooms, rooms on both sides of the corridor make for a more compact facility than a row of rooms the length of the corridor.

805.014 Activities

Viewing slides, films and other projected materials; class discussions; lectures; demonstrations; individual, small or large group activities such as vocational youth organization activities; selecting, planning and evaluating student projects; preparation of teaching materials and planning of program activities.

805.015 Equipment Space and Facilities

A. Provisions made for blinds, shades and/or draperies at the windows
B. Window sills located 40 inches or higher above the floor when storage cabinets are to be installed along that wall
C. Electrical needs
    1. Separate electric control panel for the facility located in or adjacent to the home economics department
    2. Sufficient grounded electrical outlets located near the point of use to accommodate the use of many pieces of equipment at one time
    3. Ample switches and outlets provided on each wall in each room

D. Plumbing needs
   1. Adequate and properly located plumbing connections provided for the equipment
   2. A continuous supply of hot water provided. A separate hot water heater and water softener may be needed.

E. Sufficient space provided for easy movement of students and instructor

F. Major floor area of each room free of heavy or permanently fixed equipment to allow for flexible room arrangement

G. Doors placed to prevent interference with traffic patterns

H. Chalkboard - minimum of 8 linear feet per room

I. Bulletin board - minimum 15 square feet per room

J. Tables and chairs for seating of entire class. Can be rearranged for small or large groups and for demonstrations as needed. (Desk/chairs may be used for non-laboratory classes).

K. Storage needs - Both general storage and storage within the instructional areas are provided. The two most commonly used types of storage arrangements are: (1) the separate room and (2) cabinets and/or open shelves within the classroom. Some advantages to the separate storeroom are: it leaves more wall space within the classroom, and it frees floor space for flexible arrangement when items not in use are placed in the storeroom. A combination of the 2 types is desirable with a separate room for storage of large equipment which is not used frequently, and cabinets in the classroom for student items, small equipment and frequently used teaching materials.
   1. Shelving conveniently spaced and/or adjustable to fit the size and shape of equipment to be stored, such as portable sewing machines, reference books, audiovisual equipment and small equipment items
   2. Drawers of a depth to serve the materials or equipment to be stored
   3. Mobile base cabinets to provide additional work space and allow for more flexibility in room arrangement
   4. Heavy articles stored at a carrying level
   5. Movable trays or pullout sections used instead of shelves to facilitate removing articles
   6. Total amount of storage space expanded by using items such as "Lazy Susan" shelves, divided drawers, vertical shelves and stairstep shelves
   7. Closed storage space provided for items that need to be protected, not used frequently, or may detract from the appearance of the room
   8. Cabinets with locks provided for storage of items such as electrical appliances, portable sewing machines, food and audiovisual equipment
   9. Storage units located near the department's entrance for temporary storage of students' books and personal belongings

10. Storage space provided for cleaning supplies and equipment

805.016 Teacher/Conference Area

This center may be located in a designated area of the all-purpose room or in a separate room. A separate room is desirable when there are 2 teachers and is essential for 3 or more teachers. If a separate center is necessary, it should be accessible from all rooms in the home economics facility. Equipment needed follows.

A. Teacher's desk and chair (1 each per teacher)
B. Lockable storage for teachers' belongings
C. Open and closed adjustable shelving - minimum 30 linear feet
D. 4-drawer file cabinet - 1 to 2 per teacher
E. An electrical outlet needed by each teacher's desk
F. Room size - 125 to 150 square feet. For each additional teacher add 50 square feet.

805.02 Nutrition and Foods Specialized Equipment and Facilities

805.021 Equipment Space and Facilities

A. Kitchen units, 4 to 6, arranged in different patterns (U-type, L-type, one wall, island, corridor) to simulate home conditions. One should be planned for demonstration purposes and include an adjustable overhead mirror. Unit kitchens are arranged for easy supervision by the teacher. Upper peninsular cabinets and range hoods that block the teacher's view are avoided.
   1. Each unit kitchen consists of: double sink, range, base and wall cabinets, tables, chairs and 10-12 linear feet of work surface, excluding sink and range.
   2. 24 to 30 inches of base cabinets recommended at the left of each range and left and right of the sink; also allow space for a mixing center.
   3. Sink located between the range and mixing centers in each unit
   4. Waste disposal included in each unit
   5. 24 to 30 inches of counter work space provided for each student working in a unit kitchen and adequate storage for basic equipment and supplies located in each kitchen unit with special equipment and food supplies located nearby
   6. Tables and chairs adjacent to the kitchens for serving purposes
   7. Exhaust ducts and/or range hoods with fans to pull odors and fumes out of the room
B. At least one 48 inches x 72 inches cabinet with adjustable shelves needed for storing extra supplies, equipment and classroom materials
C. Variety of cabinet and counter materials, range and refrigerator models and fuels
D. Non-porous floor covering and finish for walls in unit kitchens
E. Minimum of 3 electrical outlets per kitchen unit

F. Refrigerators with freezer compartments, accessible to kitchen units: One per each 2 kitchen units. 24 to 36 inches of counter space should be provided adjacent to the latch side of each refrigerator.
G. Separate freezer desirable if used extensively as a part of the foods curriculum
H. Portable or built-in dishwasher - 1
I. Microwave oven - 1 to 2
J. Fire extinguisher, blanket and first aid kit

805.03 Laundry Area

805.031 Equipment Space and Facilities
A. Automatic washer and dryer (gas dryer must be vented to outside)
B. Sink for stain removal
C. 36 inches of counter space
D. Base and wall cabinet for storage
E. Locate in a space which allows for class demonstrations

805.04 Textiles and Clothing Area

805.041 Equipment Space and Facilities
A. One sewing machine per 2 students. These may be a combination of cabinet-type and portable (which may be stored when not in use).
1. Each sewing machine and chair/stool provides a minimum of 3 feet for pull out space.
2. The facility is planned so that sewing machines can be stored and the area is available for multiple uses.
3. A grounded electrical outlet is available for each machine.
B. Multi-purpose tables, 28 inches x 42 inches x 60 inches - minimum of 5 feet between tables
C. Multi-purpose chairs - one per student
D. Pressing area - one for each 6 to 8 students. Includes:
1. Ironing boards
2. Steam irons
3. A variety of small pressing equipment, such as seam roll, sleeve board and tailor's ham
4. Grounded electrical outlet in each pressing area
E. Full length triple mirror
F. Fitting stand
G. Private space for the fitting of student garments
H. Lockable storage
1. Cabinets for tote trays located near the entrance. One tote tray (4 3/4 inches x 12 inches x 18 inches) per student. Top of upper tote tray should not be more than 60 inches from the floor.
2. Cabinets or closet with adjustable rods for hanging garments. Allow 4 to 6 linear feet.
3. Cabinets or walk-in closet for the storage of equipment, samples, portable machines and other materials.
I. Running water source provided

805.05 Multi-purpose Area

For instruction in the areas of housing and home furnishings, parenting and child development, personal and family relations, family health, management, consumer education and related subjects.

805.051 Equipment Space and Facilities

A. Carpeted area
B. Bathroom
   1. Tub/shower
   2. Sink and mirror
   3. Toilet
C. Easy access to (or direct) outside entrance
D. Variety of equipment, furnishings and accessories, such as living center furniture (sofa, chair, tables, lamps and pictures); roll-away bed; play pen; baby bed; high chair; bookcase; vacuum cleaner and attachments; and play equipment
E. Window(s) with draperies
F. Low, movable storage cabinets with shallow, open shelves for play supplies, equipment and children's personal belongings

Occupational home economics programs are designed to prepare students for employment in occupations utilizing the knowledge and skills in one or more of the areas related to home economics. The programs prepare persons for employment at entry or advanced levels as well as assist in the updating of skills or retraining of those already in the labor force. Jobs that relate to home economics are basically those that produce services. However, some jobs involve the production and distribution of goods. Program offerings include, but are not limited to, child care services; fashion management, production and services; food management, production and services; furnishings and interior services; management services; and hospitality services; as well as interdisciplinary programs such as home-based employment and care services.

805.06 Food Management, Production and Services - Occupational

805.061 Size

Approximately 1940 to 2540 square feet. Foods laboratory to provide work stations for 20 students - 1440 square feet. Dining area to accommodate approximately 40 persons at 14-16 square feet per person (can serve as classroom space also) - 600 square feet. Dry storage of food supplies - 200 square feet. Dressing, rest room and locker facilities - 300 square feet.

805.062 Design Capacity - 20 Students

805.063 Location

Ground level, readily accessible to receiving entrance. Dining area should have an outside entrance if it is to be open to the public. The foods laboratory should be located on an outside wall or in a single story area to allow installation of exhaust fans.

805.064 Activities

Viewing slides, films and other projected materials; class discussions, lectures and demonstrations; individual and small or large group activities; instruction in planning, selecting, storing, purchasing, preparing and serving quantity food and food products; nutritive values; safety and sanitation precautions; use and care of commercial equipment; serving techniques, special diets and management of food establishments.

805.065 Equipment Space and Facilities

A. Foods laboratory to provide work stations for 20 students, including but not limited to preparation areas for meats, entrees, salads, vegetables, sandwiches, beverages and baked, fried and broiled foods. Stainless steel tables are utilized for work areas.
B. Dining area - 14 to 16 square feet per person. Can be used as instructional area. Seating accommodates every student enrolled and allows for dining service for customers. Additional space is necessary if the facility is to accommodate banquets.
C. Dry storage with temperature and humidity controls. Equipped with locks and located near delivery entrance. Shelving is adjustable.
D. Storage for cleaning supplies and equipment, located away from food preparation center
E. Storage for equipment and supplies
F. Refrigerated storage. Both freezer and refrigerator should be placed outside storeroom but adjacent to it where it is accessible to work areas.
G. Grounded electrical appliances with adequate heavy duty circuits to allow operation of more than one piece of equipment at a time. Provide a sufficient number of conveniently located outlets.
H. Dishwashing area located near the dining area. Includes a commercial dishwashing machine and a 3-compartment stainless steel sink.
I. Major traffic aisles at least 5 feet wide; 3 feet between work tables and equipment, except for ovens or kettles, where the aisle should be 3 1/2 to 4 feet
J. Variety of equipment reflective of the food service industry (such as grills, convection ovens, deep-fat fryer, microwave oven, range, cash register, ice machine and waitress station) available
K. Equipment which can be used for several purposes is desirable, ie., a mixer with attachments for cutting, dicing and slicing.
L. Salad preparation center near dining area with refrigeration nearby
M. Baking and salad areas located next to each other so one refrigerator can serve both units
N. Teaching area with 8 to 10 linear feet of chalkboard, teaching desk, chair, 4-drawer file cabinet and minimum 15 square feet bulletin board space
O. Lavatory in lab area for hand washing

P. Constant supply of hot and cold water. Plumbing adequate to accommodate commercial dishwasher needs.
Q. Fire extinguisher and first aid kit
R. Ventilation adequate to remove smoke, odors, moisture and grease laden vapor and to bring in fresh air
S. Heating and cooling system to provide working temperatures of approximately 65-70 F. in winter and 70-75 F. in the summer
T. Combination of gas and electric ranges, grills and/or ovens available for student use where feasible
U. Automatic washer and dryer (located away from food preparation areas) or easy access to laundry equipment
V. Portable demonstration table with adjustable mirror
W. Facilities and equipment must conform to public health sanitation guidelines.
X. Disposals should be located in the dishwashing and vegetable/salad preparation areas.
Y. Storage for equipment, texts, workbooks, periodicals, instructional materials and aids and students' personal belongings
Z. Lighting appropriate for task to be completed. Approximately 15-20 footcandles for non-work areas, 30-40 footcandles for work areas and 50 footcandles for reading areas.

805.07 Care and Guidance of Children - Occupational

805.071 Size - 1800 to 2400 Square Feet

805.072 Design Capacity - 20 students

805.073 Location
First floor with direct exit to outside play area.

805.074 Activities
Viewing slides, films and other projected materials; class discussions, lectures and demonstrations; individual, small or large group activities; observing small children; directing children's play; supervision of rest period; preparing and serving snacks or simple meals; instruction in child growth and development; nutrition; program planning and management; safety and behavior guidance; play activities; child abuse and neglect; parent-child relationships; learning experiences for children; interpersonal relationships; and laws, regulations and policies relating to child-care services and maintenance of children's environment.

805.075 Equipment Space and Facilities
A. Outside play area adjacent to indoor area or on same level; half paved - half turf with outdoor play equipment. Allow at least 75 square feet of outside play area per child. Outside play area is enclosed by a 3-feet high, child-safe barrier. An outside water source is located within the outside play area.

B. Indoor play equipment and space. Allow at least 35 square feet per child, excluding storage, food preparation and toilet areas. Include organized play centers for activities such as art, language arts, large muscle development, science, math, manipulative and dramatic play and building/climbing.

C. Observation room equipped with a shelf, chairs and one way vision mirror - approximately 100 square feet

D. Toilet with child-size facilities - one flush toilet and one hand washing basin for each 15 children. Should be easily accessible from outdoor play area.

E. Low lavatory near entrance from outside play area

F. Isolation area approximately 50 square feet

G. Kitchen area consisting of range, refrigerator, sink and work and cabinet storage areas

H. Storage for play equipment, books and reference materials, instructional and food supplies and teachers' and students' personal belongings

I. Child-size tables and chairs for approximately 15 children. Tables should be safe, durable and sturdy, with adjustable legs. Chairs should have a 12-inch seat height for 3 or 4 year olds.

J. Cot or mat with sheet and blanket for each child should be provided for childrens' rest period if children will be in the program all day.

K. Low, child-height drinking fountain (angle jet type with non-oxidizing mouth guard)

L. Fire extinguisher located in the food preparation area

M. Teaching area with 8 to 10 linear feet of chalkboard; minimum 15 square feet bulletin board space; chairs and tables or student desks for enrolled students; teachers' desk, chair and 4-drawer file

N. Clean, comfortable flooring - Fire Marshal approved carpeting on indoor play area, except snack area and arts and crafts area

O. Child-height lockers or space for childrens' clothing near main entrance

P. Chalkboard, bulletin board and window space available at child's viewing level (approximately 3 feet from floor)

Q. Electrical outlets sufficient in number (approximately one every 6 feet), grounded and conveniently located. Those within reach of children are protected by shields when not in use.

R. Thermometer located approximately 30 inches above floor level. Temperature should be maintained at 68-70 F. at floor level.

S. First aid kit which includes at least an approved disinfectant, sterile cotton and gauze bandages and adhesive tape

T. Soundproof walls and ceiling

U. Adequate and safe lighting (50 footcandles for play and activity areas and 30 for other areas), heat and ventilation

V. Inside storage provided for outdoor play equipment as well as for indoor toys and play equipment
W. Lockable storage for household cleaners, chemicals and medications

805.08 Fashion Management, Production and Services - Occupational

805.081 Size
1600 square feet, exclusive of storage; related classroom area - 600 square feet.

805.082 Design Capacity - 20 Students

805.083 Location
Convenient to other home economics facilities if additional courses are offered.

805.084 Activities
Viewing slides, films and other projected materials; class discussions, lectures and demonstrations; individual and group activities; activities covering the entire spectrum of clothing, apparel and textile management, production and services, including but not limited to construction, fabric care, pattern design, clothing care and selection, fitting and alterations of ready-to-wear garments, custom tailoring and fashion merchandising.

805.085 Equipment Space and Facilities
A. Walk-in or built-in storage for garments, equipment and supplies
B. Adequate student work stations are available, including pattern drafting, cutting, sewing, fitting and pressing stations
C. Ample electrical power with conveniently placed electrical outlets to accommodate commercial equipment demands
D. Well lighted room with specialized lighting where needed
E. Domestic sewing machines - 2
F. Commercial sewing machines - minimum of 8, such as single needle, lockstitch, overlock, blind stitch and button hole. All machines are equipped with safety guards.
G. Operators' chairs
H. Cutting table - 6 feet x 12 feet x 3 feet
I. Cutting equipment
J. Teaching area with 8 to 10 linear feet of chalkboard, 15 square feet of bulletin board space, tables and chairs or student desks and teachers' desk, chair and 4-drawer file
K. Ironing and pressing equipment
L. Dress forms
M. Full length triple mirror
N. Fitting area or room with a fitting stand
O. Single-bowl stainless steel sink with adequate hot and cold water
P. Drawing boards and other pattern drafting equipment

805.09 Institutional and Home Management Services - Occupational

805.091 Size

Approximately 1700 to 2200 square feet; size is dependent upon emphasis of curriculum.

805.092 Design Capacity - 20 Students

805.093 Location

Convenient to other home economics facilities and health occupations facilities, if additional courses are offered.

805.094 Activities

Viewing slides, films and other projected materials; demonstrations; class discussions; lectures; individual, small or large group activities; varied homemaking and housekeeping activities including hospital/executive housekeeping, hotel/motel housekeeping, commercial cleaning, provision of services to the aged in their homes and in institutions, home health aides, assistance in the management of household tasks as domestic housekeepers, assistance to consumers in decision making in relation to housing, food, clothing, community resources and other homemaking concerns and lodging services such as front desk operation.

805.095 Equipment Space and Facilities

A. Planned so that it is flexible enough to offer variety of institutional and home settings
B. Storage space for large equipment, furnishings and supplies
C. Movable walls wherever possible
D. Variety of wall and floor finishes and window treatments
E. Ample electric power; enough heavy duty circuits and outlets to permit use of many pieces of equipment at one time
F. Kitchen - 1. Reflects home setting. Includes dishwasher and garbage disposal.
G. Simulated motel room and bath
H. Laundry areas with sink, sorting table, storage area, washer and dryer
I. Simulated front desk/carpeted lobby area
J. Access to health occupations facilities for hospital housekeeping simulation
K. Adequate plumbing to accommodate equipment needs
L. Teaching area with 8 to 10 linear feet of chalkboard, at least 15 square feet of bulletin board space, teacher's desk, chair and 4-drawer file; bookshelves; students' tables and chairs or desks
M. Variety of related equipment, such as maid's cart, floor polisher/rug shampooer, carpet sweeper, vacuum cleaner, two-step ladder, luggage rack, key and mail rack, credit card machine, computer and cash register
N. Provision made for lockers, rest rooms and dressing facilities in a nearby area

806 VOCATIONAL INDUSTRIAL AND TECHNICAL FACILITIES

Factors influencing the location of the building include: isolation from quiet areas; location to provide easy delivery of instructional supplies, materials and equipment; and location convenient to parking area for adult education classes.

806.01 Instructional Space - Classroom

806.011 Size

Base preliminary determination of area upon the allotment of 25 to 30 square feet per student with a minimum of 500 square feet per instructional space.

806.012 Design Capacity - 20 Students

806.013 Number Required

One instructional space is required per each industrial or technical laboratory.

806.014 Location

Convenient access to the laboratory.

806.015 Activities

Lectures; demonstrations; viewing slides, films and other audiovisual materials; reading printed materials; writing or drawing on chalkboard; using overhead projector and tables; displaying students' work; instructing with guides, progress charts and instruction sheets; storing instructional materials and supplies.

806.016 Equipment Space and Facilities

A. Chalkboard - 20 to 24 linear feet
   1. Display and chart rail above
   2. Chalkboard in pastel colors is preferred
B. Bulletin board - minimum 4 feet x 4 feet
C. Tables and chairs for 20 students
D. Teacher's planning unit with stool or teacher's desk and chair
E. Demonstration table - 30 inches x 60 inches, minimum
F. Storage
   1. Legal size, 4-drawer, filing cabinets - 2
   2. Minimum of 40 linear feet of shelving
   3. Bookcase for reference books
G. Flat mat screen - 60 inches x 60 inches, minimum
H. Overhead projector and projection stand
I. Duplex electrical outlets - one per 7 linear feet of wall space
J. Provisions for light control to permit use of visual aids
K. Ceiling height - 8 feet minimum; 12 feet maximum
L. Finish
   1. Floors - tile or other resilient covering
   2. Ceiling - acoustical-type finished ceiling

806.02 Industrial and Technical Laboratories

806.021 Specific Requirements of Labs

The following labs require:

A. A minimum of 100 square feet per student work station

CODE	LABS
F, N, S, V, W, DD, EE, FF	Electronics, Electronics Technology
D, M, N, GG	Commercial Art Occupations
D, M, N, CC, DD, HH	Cosmetology
A, C, E, G, H, L, N, T, U, V, W, DD, JJ	Masonry
D, F, M, BB, DD, EE, FF	Computer Technology and Systems

B. A minimum of 120 square feet per student work station

CODE	LABS
D, M, N, Q, DD	Drafting, Civil Technology
A, B, C, H, N, R, W, BB, DD, CC	Heating, Ventilation and Air Conditioning
D, F, H, M, N, Q, R, W, BB, DD, JJ, CC	Quantity Food Occupations, Culinary Arts
B, D, E, F, L, N, S, T, U, V, W, AA, BB, DD, CC	Electrical Occupations
A, D, M, N, W, DD, GG, CC	Graphic Communications
B, C, E, L, N, P, Q, T, U, V, W AA, BB, DD, JJ, CC	Sheet Metal
D, F, N, DD	Textile Production & Fabrics

C. A minimum of 160 square feet per student work station

CODE	LABS
A, B, C, E, F, H, L, N, O, P, S, T, U, V, W, X, Y, AA, BB, DD, JJ, CC	Millwork & Cabinetmaking
A, B, C, E, F, H, L, N, S, T, U, V, W, Y, Z, AA, BB, DD, JJ, CC	General Building Construction, Facilities Maintenance, Building Maintenance, Carpentry
A, B, C, E, F, H, L, N, P, Q, S, T, U, V, W, AA, BB, DD, FF, II, JJ, CC	Welding, Metal Trades, Combined
A, B, C, E, G, H, K, L, N, O, P, Q, T, U, V, W, X, Y, DD, JJ, CC	Auto Body
A, B, C, E, G, H, J, L, N, P, T, U, V, W, X, DD, JJ, CC	Automobile Mechanics, Power Mechanics

D. A minimum of 240 square feet per student work station

CODE	LABS
A, B, C, E, F, H, I, L, N, P, R, S, T, U, V, W, X, AA, BB, DD, JJ, CC	Industrial Equipment Maintenance & Machine Shop
A, B, C, E, G, H, I, L, N, P, T, U, V, W, X, DD, JJ, CC	Diesel Mechanic & Heavy Equipment Mechanic

NOTE: The assistance of specialists in Vocational Industrial and Technical Education should be secured in planning these labs and must be secured when planning labs not listed above.

806.022 Special Facility Requirements

A. Hose bibb
B. Compressed air
C. Concrete floors
D. Resilient finish floors
E. Overhead door - 10 feet x 12 feet, minimum
F. High electrical demand
G. Floor drainage
H. Exhaust system
I. Monorail
J. Automobile hoist
K. Frame rack
L. Ceiling height - 14 feet, minimum
M. Finished ceiling
N. Student wash area
O. Spray booths
P. Heavy machinery
Q. Vents
R. Natural gas
S. Master control switch
T. Ground floor
U. Access driveway
V. Tool room
W. Wainscot 4 feet from finished floor
X. Storage for flammables
Y. Dust collector
AA. 3 phase
BB. 208 V., minimum
CC. Instructional space - See Chapter 8, Section 806.011 for space requirements.
DD. Storage room - 80 square feet
EE. Air conditioning
FF. Separate electrical circuit with ground fault
GG. Dark room with sink
HH. Hair wash station
II. Outside storage for gas
JJ. Dressing and rest room facilities for male and female students

806.023 Design Capacity - 20 students

806.024 Location

A. Convenient access to instructional space and parking area
B. Convenient access must be provided for physically handicapped persons
C. High noise labs are to be isolated from quiet areas of the school

806.025 Activities

Construct, test, operate and service equipment and tools; provide personal services for customers; depicting, shaping, forming, assembling and servicing equipment and materials; demonstrations, lectures and individualized instruction.

806.026 Equipment Space and Facilities

A. Equipment should be comparable to that used in industry
B. The equipment will vary with the occupational objectives of the program
C. Chalkboard and bulletin board - 6 linear feet, minimum
D. Window stools should be high enough to permit installation of equipment along wall - 4 feet, minimum.
E. Provide appropriate fire extinguishers for equipment and materials used in program
F. Consultation should be made with Vocational Industrial Education Service for equipment needs of various occupational areas.

807 BUSINESS EDUCATION FACILITIES

The facilities for business education should be located, ideally, on the first floor in a central location where it is relatively quiet. A first floor location, in a two-story building, makes the department easily accessible to handicapped students, adult and community education classes and for service technicians. Business education rooms should be clustered to unify the programs and allow for easy communications, sharing equipment and exchanging classrooms. The number of students enrolled and the curriculum offered determine the number and type of rooms needed.

807.01 All-Purpose Business Education Room

This room would be needed for a small school (up to 150 business students per day) with only one business teacher. Therefore, it is necessary to provide adequate space to store, maintain and use a vast amount of equipment and supplies. The room consists of the following.

A. Equipment-oriented instructional lab area for courses such as Business Computer Applications, Advanced Business Computer Applications, Keyboarding and Office Technology
B. Multi-purpose classroom instructional area for courses such as Accounting, Business Principles & Management, Shorthand/Abbreviated Writing and Business Math
C. Storage for teaching materials, supplies and student references
D. Teacher's desk and demonstration center

A 5 foot electrical grid system with flush floor outlet should be installed. A lavatory with hot and cold water should also be provided. Because of chemicals contained in some of the correction materials, carbon packs, toners, and reprographic equipment, students and instructors need to have immediate access to a lavatory for their health and safety.

807.011 Size

1200 to 1400 square feet - 60 to 70 square feet per student.

807.012 Design Capacity - 25 Students Per Session

807.013 Location

In the central core of the building.

807.014 Activities

Lecture or carry on small group or class discussions; view slides, films and other projected materials; conferences of small groups of pupils; display pupil projects or work; store partially completed pupil projects; store instructional supplies; listen to recordings or broadcasts; view telecasts; write and transcribe notes; operate keyboarding equipment/microcomputers and other business equipment.

807.015 Equipment Space and Facilities

A. Bulletin board - 10 linear feet
B. Electrical convenience outlets on each wall
C. Calculators
D. Storage (lockable) for instructional supplies
E. Storage for instructor's personal belongings
F. Lockable, legal size file drawers - 16
G. Closed bookshelving - 10 to 12 linear feet
H. Microcomputers/modem and access to network
I. Plain paper copier
J. Microcomputers or electronic typewriters
K. Overhead projector/screen
L. Dictation/transcription equipment
M. Letter quality and dot matrix printers
N. Chalkboard - 40 to 42 linear feet
O. VCR and monitor
P. Provisions to darken room
Q. Adjustable classroom furniture (desks and chairs)
R. Instructor's desk and chair

807.02 Instructional Space

This room is designed to provide space and equipment for teaching lecture/project oriented courses such as Accounting, Business Principles & Management, Business Math and Business Communications. Also provided are teacher's desk and demonstration center and storage for teaching materials, supplies and student references.

807.021 Size

900 to 1000 square feet - 36 to 40 square feet per student.

807.022 Design Capacity - 25 Students

807.023 Location

A. Direct access to the keyboarding, computer lab, or office technology laboratory
B. Convenient access to other business education rooms

807.024 Activities

Complete accounting projects; listen to recordings or broadcasts; display pupil projects or work.

807.025 Equipment Space and Facilities

A. Chalkboard - 40 to 42 linear feet
B. Bulletin board - 12 linear feet
C. Display and map rails above chalkboard and bulletin board

D. Tables or adjustable desks with space for calculators and a flat working surface for other desk activities - 20; height-adjustable chairs - 20
E. Instructors desk and chair
F. Work table - 3 feet x 6 feet
G. Work counter - 15 linear feet; 28 to 32 inches deep, with storage underneath
H. Electrical outlets
   1. Convenience strip above work counter
   2. Electrical outlets flush with floor on a grid of 5 feet
   3. Master control panel for all electrical outlets
I. Closed bookshelving - 8 to 10 linear feet
J. 4 legal size file drawers (lockable)
K. Storage for instructional supplies
L. Storage for partially completed pupil projects
M. Storage for instructor's personal belongings
N. VCR and monitor
O. Provisions to darken room

807.03 Keyboarding Laboratory

The room consists of the following.

A. Space and equipment for teaching keyboarding and typewriting (If equipped with microcomputers, it may also be used for teaching computer literacy and computer-oriented courses.)
B. Storage for teaching materials, supplies and student references
C. Teacher's desk and demonstration center

An electrical grid system of 8 feet with flush floor outlet should be installed. A lavatory with hot and cold water should be provided.

807.031 Size

The size of this facility is dependent upon the type of furniture and equipment contained; 35 to 45 square feet per student may be used for preliminary estimates.

807.032 Design Capacity - 30 Students

807.033 Location

In the central core of the building, in the area of other business education rooms.

807.034 Activities

Demonstrate keyboarding techniques; operate electronic and electric keyboards; write and transcribe shorthand, abbreviated writing; listen to recordings or broadcasts; display student projects or work.

807.035 Equipment Space and Facilities

A. Chalkboard - 16 to 20 linear feet (dustless type)
B. Bulletin board - 12 linear feet
C. Tables or adjustable desks appropriate for equipment to be used, with height-adjustable chairs - 30

D. Instructor's desk and chair
E. Teacher's demonstration stand
F. Display and map rails above chalkboard and bulletin board
G. Electrical outlets
    1. Convenience outlets on each wall
    2. Floor outlets flush with floor spaced on an 8 foot grid
    3. Master control panel for all electrical outlets
H. Closed bookshelving - 8 to 10 linear feet
I. Four legal size file drawers (lockable)
J. Work table - 30 inches x 72 inches
K. Storage for instructional supplies
L. Storage for partially completed pupil projects
M. Storage for instructor's personal belongings
N. Microcomputers and electronic keyboarding equipment of various types
O. Provisions for darkening room

807.04 Teachers' Office and Conference Room

The room consists of the following.

A. Area for conferences
B. Space for instructional planning, instructional materials, supplies, and record keeping
C. Storage for student records and teachers' personal belongings

807.041 Size - 200 to 250 Square Feet Per Teacher

807.042 Design Capacity

Office space for teachers and for conferences with individuals.

807.043 Location

Direct access to other business education rooms.

807.044 Activities

Teacher conferences; teacher-pupil conferences; instructional planning and record keeping.

807.045 Equipment Space and Facilities

A. Chalkboard - 5 to 6 linear feet
B. Bulletin board - 5 to 6 linear feet
C. Conference table with chairs
D. Desk and chair for each teacher
E. Work counter with shelving below - 10 linear feet
F. Legal size file drawers - 12 per teacher
G. Storage for personal belongings of instructors

807.05 Office Technology Laboratory

This room consists of the following items:

A. Space and equipment for teaching equipment-oriented courses such as Keyboarding, Office Technology, Word Processing, Business Computer Applications, Advanced Business Computer Applications, Computer Literacy, Shorthand, Abbreviated Writing, Computerized Accounting and Machine Transcription

B. Storage for teaching materials, supplies and student references
C. Teacher's desk and demonstration center

An electrical grid system of 8 feet with flush floor outlet should be installed. A lavatory with hot and cold water should be provided.

807.051 Size
1200 to 1400 square feet, 60 to 70 square feet per student.

807.052 Design Capacity - 20 students

807.053 Location
Convenient access to other business education rooms.

807.054 Activities
Write at chalkboard or tables; conference of small groups of pupils; display pupil projects or work; store partially completed pupil projects; store instructional supplies; write and transcribe shorthand or abbreviated writing notes; operate business equipment.

807.055 Equipment, Furniture and Facilities
A. Furniture
1. Adjustable desks appropriate to equipment being used, and adjustable posture chairs
2. Two work tables, 3 feet x 6 feet
B. Office equipment
1. Plain paper copier
2. Dictation/transcription equipment
3. Electronic typewriters (some with memory)
4. Calculators
5. Microcomputers (640 K min.), networked; hard disk; modem; letter quality and dot matrix printers
C. Electrical outlets flush with floor, spaced on a grid of 8 feet
D. Chalkboard and bulletin board - 4 to 6 linear feet of each
E. Base cabinets for storage of supplies and additional machine stations
F. Lavatory with hot and cold water
G. Provisions to darken room
H. VCR and monitor
I. Instructor's desk and chair

808 TECHNOLOGY EDUCATION FACILITIES - GRADES 9-12

Factors influencing the location include providing location for easy delivery of instructional supplies, equipment and materials, some of which are bulky and heavy; and design of laboratory to permit some change in individual room areas as activities are developed. Since technology education programs differ from industrial arts programs, the assistance of specialists should be

secured to adequately plan this suite. Technology education programs include instruction in the areas of communication, transportation, construction, and manufacturing.

808.01 Technology Education Production Laboratory

808.011 Size

1200-1500 square feet, with the room being no less than 32 feet wide.

808.012 Design Capacity - 20 students

808.013 Location

A. Direct access from the building corridor
B. Direct access to other rooms in the technology education suite
C. Direct access to service drive

808.014 Activities

The laboratory facility will need to provide space for layout, measurement, cutting, forming and fabricating using a variety of materials (ie. wood, metal, plastics); space for using and caring for hand tools and a variety of machines; and space for finishing various materials.

808.015 Equipment Space and Facilities

A. The major floor area should be free of heavy or permanently fixed equipment to allow for flexible room arrangement.
B. Chalkboard and bulletin board - 8 linear feet minimum
C. A minimum of 2 student work stations, with underneath storage
D. Maximum work counter and cabinet storage space
E. Lockable tool panels, if a tool room is not available
F. Windows should be high enough to permit installation of equipment along outside walls
G. Ceiling electrical grid system for 110 volt power to machines with master switches and emergency cutoff buttons
H. Adequate electrical wall outlets for power equipment and tools
I. Equipment for removal of dust, chips and harmful fumes
J. Outside door to service drive - double external door with removable mullion
K. Fire extinguishers of such kinds and sizes as recommended by the state Fire Marshal
L. Wash up area for personal cleanliness and preparation and cleaning of tools and supplies
M. Lighting should provide 75 footcandles throughout
N. Refer to the "Technology Education Curriculum Guide" for a list of specific equipment.

808.02 Technology Education Systems Laboratory/Design Area

808.021 Size

Determination of size depends upon the number of students and related activities, varying from 100 to 125 square feet per student.

808.022 Design Capacity - 20 Students

808.023 Location

Direct access to production laboratory to provide for easy supervision.

808.024 Activities

Classroom instruction, project planning, small group activities, and a dust-free environment for instruction and activities with equipment such as computers, robotics, electronics, and lasers.

808.025 Equipment Space and Facilities

A. Glass walls or windows in wall facing production laboratory to provide for easy supervision
B. Chalkboard - 20 linear feet minimum, and bulletin board - 10 linear feet
C. Maximum counter and cabinet storage space along walls (Some of this space may be used for computers. If so, height needs to be adjusted accordingly.)
D. Windows should be high enough to permit installation of counters along outside walls
E. Provisions made for blinds or shades to allow for showing of audiovisual materials
F. Adequate electrical wall outlet strips for use of electronic equipment, computers and related peripherals
G. Reconfigurable tables and chairs for 20-25 students
H. Bookcase for reference and resource books; magazine rack
I. Wall mounted projection screen
J. Floors - tile or carpeting
K. Ceiling - acoustical-type finish
L. Air conditioning
M. If modular furniture is to be used (4 feet, 5 feet, 6 feet), room layout needs planned accordingly.

808.03 Instructor's Office

808.031 Size - Varying from 100 to 150 Square Feet

808.032 Location

Convenient or direct access to production laboratory and systems laboratory.

808.033 Equipment Space and Facilities

A. Teacher's desk and chair
B. Conference chairs - 1 or 2
C. Storage
    1. Letter size, 4-drawer file cabinets - 2
    2. Open and closed shelving for supplies and references, 20 to 30 linear feet

D. Minimum of 2 duplex outlets

808.04 Finishing Area

This area needs to be a separate room or enclosed, ventilated spray booth.

808.041 Size

Varying from 75 to 125 square feet.

808.042 Location

Direct access to production laboratory.

808.043 Activities

Mixing and application of a variety of surface finishes.

808.044 Equipment Space and Facilities

A. Window in wall facing laboratory to provide for easy supervision
B. Maximum work counter space
C. Positive ventilation
D. Metal storage cabinet for paint, varnish and other flammable materials
E. Fireproof containers for paint rags
F. Fire extinguishers
G. Adjustable, high intensity, spark-proof lights
H. Hooded spray booth

808.05 Material Storage

808.051 Size

Varying from 150 to 200 square feet.

808.052 Location

Direct access to other laboratories.

808.053 Activities

For storage of various types of stock and other supplies necessary in the technology classroom.

808.054 Equipment Space and Facilities

A. Wide access door
B. Storage racks for various types of stock. If stock includes wood and metal, stock may be as large as 4 feet x 8 feet
C. Adjustable shelving and cabinets for small items

NOTE: This storage may be provided in the form of cabinetry in the laboratory. If so, adjust square footage of laboratory accordingly.

808.06 Audiovisual Darkroom Laboratory

808.061 Size - Varying From 200 to 250 Square Feet

808.062 Location

Direct access to systems laboratory.

808.063 Activities

Developing film and photographic paper; enlarging pictures; demonstrating lasers, producing a variety of audiovisual materials such as mock radio and television segments.

808.064 Equipment Space and Facilities

A. Safe light as well as regular overhead lighting
B. Maximum work counter space
C. Maximum cabinet storage; some must be light safe
D. Positive ventilation
E. Sink and hot and cold running water
F. Electrical outlets along counter
G. Lightproof and soundproof from exterior influences
H. Additional electrical outlets for equipment usage

809 CAREER EXPLORATION

Career exploration programs should utilize existing agriculture, business, home economics and technology education laboratories. With adequate career exploration equipment and materials, existing vocational laboratories may be utilized effectively. See particular sections for areas of specifications.

Chapter 9

GENERAL SUPPORT FACILITIES

900 COUNTY SUPPORT FACILITIES

County boards of education have sufficient support facilities to maximize the efficient administration of the county schools. Accessible county support facilities are provided and maintained to promote a healthy and safe environment. Space and equipment available in such facilities provide the support services necessary for a thorough and efficient educational program. When possible, support facilities are housed together to maximize efficiency.

901 ADMINISTRATIVE FACILITIES

County boards of education provide adequate office and ancillary space to house all administrative personnel and functions.

901.01 Size

Support facilities are organized in such a manner as to provide effective services as economically as possible. The size and number of such facilities are dependent upon the services required by the county.

901.02 Site

901.021 Location

Each administrative facility should be located and developed in proper relationship to the county's governmental agencies, such as the county center of government.

901.022 Size

Site shall be of adequate size to provide parking for the staff and regular visitors. Allow approximately 325 square feet of space for each car. See Chapter 2 for applicable site information.

902 GENERAL OFFICE AND RECEPTION/WAITING AREAS - ADMINISTRATIVE FACILITIES

902.01 Size

Dependent upon size of the center, 200 to 400 square feet will likely be needed for secretarial and reception areas.

902.02 Location

A. At the hub of the administrative suite
B. Direct access to a building corridor and to work room
C. Direct or convenient access to other office rooms in the administrative suite
D. Near main entrance to facility
E. Convenient access to workroom

902.03 Activities

Reception of visitors, pupils and staff; general secretarial activities required in the operation of the center.

902.04 Equipment Space and Facilities

A. Counter separating reception/waiting room or area from the secretarial work area
B. Comfortable chairs in reception area
C. Small table for magazines and other literature
D. Display space and bulletin board
E. Secretarial furniture
F. Master telephone station or other communication to all locations in the administrative areas
G. Carpeting or resilient floor covering

903 WORK ROOMS - ADMINISTRATIVE FACILITIES

903.01 Size - 200 to 300 Square Feet

903.02 Location

Direct access to the general office and waiting room.

903.03 Activities

Preparation of materials, reports and layouts of instructional materials by both secretarial and other personnel.

903.04 Equipment Space and Facilities

A. Combination of open shelving and closed cabinets for storage of a variety of supplies and equipment
B. Space for duplicating machine
C. Work table or counter
D. Lavatory
E. Microcomputer work station
F. Carpeting or resilient floor covering
G. Forced ventilation

904 STORAGE FOR BOOKS AND INSTRUCTIONAL SUPPLIES - ADMINISTRATIVE FACILITIES

904.01 Size

500 to 1000 square feet. Base size on county needs for central instructional supply and distribution.

904.02 Location

A. Convenient access to the general office
B. Direct opening to corridor through "dutch door" or window to permit distribution of supplies
C. Exterior door for receiving and distribution

904.03 Activities

Storage and distribution of instructional materials and supplies including books, paper, notebooks, erasers and pencils.

905 BOARD ROOMS/MEETING ROOMS - ADMINISTRATIVE FACILITIES

905.01 Size

Approximately 600 square feet, depending on the space needed for spectator seating.

905.02 Location

A. Convenient access to general office
B. Design and location should permit groups to confer without being overheard in adjacent rooms.

905.03 Activities

Conferences and training involving staff, and regular and special board meetings.

905.04 Equipment Space and Facilities

A. Conference table, chairs and spectator chairs
B. Chalkboard - 6 to 8 linear feet
C. Bulletin board - 4 to 6 linear feet
D. Pull-down projection screen
E. Forced ventilation
F. Capability of darkening room
G. Carpet

906 SUPERINTENDENT'S OFFICE - ADMINISTRATIVE FACILITIES

906.01 Size - 180 to 300 Square Feet

906.02 Location

A. Direct or convenient access to general office
B. Convenient access to the corridor without going through the general office
C. Convenient access to other areas in the administrative suite
D. Convenient to board room

906.03 Activities

Planning, research and administrative activities conducted individually or in groups.

906.04 Equipment Space and Facilities:

A. Room design should permit the superintendent to confer without being overheard in adjacent areas.
B. Conference desk and chair
C. Work table convenient to desk for layout work
D. Conference chairs
E. Bookshelving - 10 to 15 linear feet
F. Storage for personal belongings
G. Telephone service and intercom to secretary in general office
H. Carpet

907 ASSISTANT SUPERINTENDENT'S OFFICE - ADMINISTRATIVE FACILITIES

907.01 Size - 125 to 200 Square Feet

907.02 Location

Convenient access to general office and superintendent's office.

907.03 Activities

Planning, research and administrative activities conducted individually or in small groups.

907.04 Equipment Space and Facilities

A. Room design should permit the assistant superintendent to confer without being overheard in adjacent areas.
B. Conference desk and chair
C. Work table convenient to desk for layout work
D. Conference chairs
E. Bookshelving - 10 to 15 linear feet
F. Storage for personal belongings
G. Telephone service and intercom to secretary in general office.

908 OFFICES FOR PROFESSIONAL SUPPORT PERSONNEL - ADMINISTRATIVE FACILITIES

NOTE: Number of spaces required will depend on the local staff size.

908.01 Size - 120 to 150 Square Feet Per Office

908.02 Location

A. Direct access from reception area and convenient access to meeting room and general office in the administrative suite.
B. Design and location should permit conferences without voices being overheard in the adjacent areas.
C. Easy access to vault and records

908.03 Activities - Daily Execution of Job Duties

908.04 Equipment Space and Facilities

A. Desk and chair
B. Conference chairs
C. Shelving - 10 to 15 linear feet
D. Bulletin board - 4 to 6 linear feet
E. Storage for personal belongings
F. Telephone communication with general office and intercom to secretary. Require private telephone line or lines to the counselor's office.
G. 4-drawer file cabinet with lock - 1
H. Carpet
I. Microcomputer work station

909 RECORD VAULT - ADMINISTRATIVE FACILITIES

NOTE: Vault may be eliminated by providing fire resistant filing cabinets in the general office or other storage area.

909.01 Size - 200 to 300 Square Feet

909.02 Location

Direct or convenient access from the general office.

909.03 Activities - Storage of Current and Inactive Records

909.04 Equipment Space and Facilities
- A. General construction should be fire resistant
- B. Cart storage units preferable for current records
- C. Carpet

910 SECRETARIAL WORK AREAS OR OFFICES - ADMINISTRATIVE FACILITIES

NOTE: Number of spaces required will depend on the local staff size.

910.01 Size - 100 to 120 Square Feet

910.02 Location - Direct Access to Offices Served

910.03 Activities - Daily Execution of Job Duties

910.04 Equipment Space and Facilities
- A. Secretarial desk and chair
- B. Typewriter and stand
- C. Comfortable chairs
- D. Filing cabinets
- E. Carpet
- F. Telephone communication with general office
- G. Microcomputer work station

911 STAFF LOUNGE - ADMINISTRATIVE FACILITIES

911.01 Size - 150 to 180 Square Feet

911.02 Location
- A. Direct access from a building corridor
- B. Location avoiding major traffic, yet reasonably close to the administrative area
- C. Toilets should not have direct opening into the lounge area.
- D. Carpet or resilient flooring

911.03 Equipment Space and Facilities
- A. Comfortable lounge furniture
- B. Kitchenette to prepare light refreshments
- C. Adequate ventilation
- D. Toilets

912 SERVICE FACILITIES - ADMINISTRATIVE FACILITIES

See Chapter 11.

913 ENGINEERING AND CUSTODIAL FACILITIES - ADMINISTRATIVE FACILITIES

See Chapter 12.

914 COUNTY MAINTENANCE AND OPERATIONS FACILITIES

The maintenance component of the program is concerned with keeping all school facility sites, buildings and equipment at their original condition of completeness and efficiency, either through repairs or replacement. The operation component of the program is concerned with the day-to-day services which are necessary to keep the physical plant open and in a safe, usable condition.

915 MAINTENANCE FACILITIES

County boards of education provide sufficient, secure and centrally located repair and maintenance facilities for educational facilities. County boards of education provide sufficient facilities for storage of all supplies, equipment and food items.

915.01 Size

Maintenance facilities are organized in such a manner as to provide effective services as economically as possible. The size of such facilities is dependent upon the services required by the county.

915.02 Location/Site

The operations and maintenance facility should be located centrally in the county for the convenience of maintenance personnel traveling from the facility to schools and other staff traveling to this facility for training sessions. It may be desirable to have a combination administrative, operations and maintenance facility.

Site shall be of adequate size to provide parking for staff automobiles, maintenance trucks and delivery vehicles. Allow 325 square feet of space for each car.

916 GENERAL OFFICE AND RECEPTION/WAITING AREAS - MAINTENANCE FACILITIES

916.01 Size

Dependent upon size of the center, 200 to 400 square feet will likely be needed for secretarial and reception areas.

916.02 Location

A. At the hub of the administrative suite
B. Direct access to a building corridor and to work room
C. Near main entrance of facility
D. Convenient access to work room

916.03 Activities

Reception of visitors and staff; general secretarial activities required in the operation of the center.

916.04 Equipment Space and Facilities

A. Counter separating reception/waiting room or area from the secretarial work area
B. Comfortable chairs in reception area
C. Small table for magazines and other literature
D. Display space and bulletin board
E. Secretarial furniture

F. Master telephone station or other communications to all locations in the facility
G. Carpeting or resilient floor covering

917 WORK ROOMS - MAINTENANCE FACILITIES

917.01 Size - 100 to 150 Square Feet

917.02 Location
Direct access to the general office and waiting room.

917.03 Activities
Preparation of reports and layouts of materials by both secretarial and other personnel.

917.04 Equipment Space and Facilities
A. Combination of open shelving and closed cabinets for storage of a variety of supplies and equipment
B. Duplicating machine
C. Work table or counter
D. Lavatory
E. Microcomputer work station
F. Resilient floor covering
G. Forced ventilation

918 MEETING ROOMS/TRAINING FACILITIES - MAINTENANCE FACILITIES

918.01 Size
Approximately 500 square feet (depending on needs for training sessions).

918.02 Location
A. Convenient access to general office/reception/waiting areas.
B. Design and location should permit groups to confer without being overheard in adjacent rooms.

918.03 Activities - Conferences and Training of Staff

918.04 Equipment Space and Facilities
A. Conference tables and chairs
B. Chalkboard - 6 to 8 linear feet
C. Bulletin board - 4 to 6 linear feet
D. Forced ventilation
E. Carpet
F. Capability of darkening room
G. Pull-down projection screen

919 RECORD STORAGE - MAINTENANCE FACILITIES

NOTE: Room may be eliminated by providing fire resistant filing cabinets in the general office or other storage area.

919.01 Size - 120 to 180 Square Feet

919.02 Location
Direct or convenient access from the general office and other areas.

919.03 Activities
Storage of current and inactive building documents.

919.04 Equipment Space and Facilities
- A. General construction should be fire resistant.
- B. Files for plans and documents
- C. Plan table
- D. Microcomputer work station
- E. Filing cabinets

920 OFFICES FOR PROFESSIONAL SUPPORT PERSONNEL AND SERVICE SUPERVISORS - MAINTENANCE FACILITIES

NOTE: Number of spaces required will depend on the size of the local staff.

920.01 Size - 125 to 200 Square Feet

920.02 Location
Convenient access to general office and other spaces.

920.03 Activities
Planning, research and administrative activities conducted individually or in small groups.

920.04 Equipment Space and Facilities
- A. Room design should permit staff members to confer without being overheard in adjacent areas.
- B. Conference desk and chair
- C. Conference chairs
- D. Bookshelving - 10 to 15 linear feet
- E. Storage for personal belongings
- F. Telephone service and intercom to secretary in general office
- G. Carpet or resilient floor covering

921 SECRETARIAL WORK AREAS OR OFFICES - MAINTENANCE FACILITIES

NOTE: Number of spaces required will depend on the size of the local staff.

921.01 Size - 100 to 120 Square Feet

921.02 Location - Direct Access to Offices Served

921.03 Activities - Daily Execution of Job Duties

921.04 Equipment Space and Facilities
- A. Secretarial desk and chair
- B. Typewriter/word processor
- C. Comfortable chairs
- D. Filing cabinets

E. Telephone communication with general office
F. Carpet
G. Microcomputer work station

922 CARPENTRY, PLUMBING, HEATING AND ELECTRICAL MAINTENANCE SHOPS - MAINTENANCE FACILITIES

922.01 Size
500 to 1000 square feet for each shop; base size on county needs for maintenance services.

922.02 Location
A. Convenient access to the general office
B. Exterior door for distribution and receiving
C. May be desirable to have an enclosed loading and unloading area for service vehicles.

922.03 Activities
Storage of replacement parts, repairs to building components and distribution of maintenance supplies.

923 SERVICE FACILITIES - MAINTENANCE FACILITIES

See Chapter 11.

924 ENGINEERING AND CUSTODIAL FACILITIES - MAINTENANCE FACILITIES

See Chapter 12.

925 STAFF LOUNGE - MAINTENANCE FACILITIES

925.01 Size
100 to 150 square feet, or according to staff number.

925.02 Location
A. Direct access from a building corridor
B. Location avoiding major traffic, yet reasonably close to the administrative area
C. Toilets should not have direct opening into the lounge area.

925.03 Equipment Space and Facilities
A. Comfortable lounge furniture
B. Kitchenette to prepare light refreshments
C. Adequate ventilation

926 STORAGE FACILITIES

County board of education provides sufficient facilities for storage of all supplies, equipment and food items.

926.01
Custodial and food service storage rooms. (Must be separate spaces.)

926.011 Size

500 to 1000 square feet; base size on county needs for central supply and distribution of custodial supplies, dry foods, refrigerated foods and frozen foods to the local system.

926.012 Location

A. Convenient access to the general office
B. Direct opening to corridor through "dutch door" or window to permit distribution of supplies
C. Exterior door for receiving and distribution

926.013 Activities

Storage and distribution of materials and supplies.

927 TRANSPORTATION FACILITIES

Transportation services are an integral part of the system of education in West Virginia. With expanding transportation requirements comes the necessity to maximize efficiency and at the same time exercise extreme concern for safety. County boards of education provide sufficient, secure and centrally located staff offices, training spaces and storage, repair and maintenance facilities for all school buses and vehicles.

927.01 Size

Transportation facilities are organized in such a manner as to provide effective services as economically as possible. The size and number of such facilities are dependent upon the services required by the county. The following is generally felt to be required to adequately serve a smaller county and may be used as a standard for multi-centers in larger counties.

927.02 Site

The transportation facility must have a site sufficient to park the county's entire fleet of buses, as well as employees' and visitors' vehicles. See Chapter 2, Section 206 for additional information. The following can be used for preliminary planning, but final layouts must be done to insure accurate planning.

A. Buses - 20 per acre
B. Cars - 325 square feet
C. Due to the size of buses and their turning radius large amounts of space are required for circulation of vehicles.
D. Center should be located to facilitate easy access and reduce bus runs.

928 BUS REFUELING/PUMP STATIONS - TRANSPORTATION FACILITIES

Refueling pumps and/or stations are safely separated from maintenance and storage areas. Facility must supply all types of fuel in use, such as gasoline, diesel, LPG and CNG. Facility should be visible from the office area, must comply with applicable safety standards, and provide adequate space for bus circulation.

929 RECEPTION/WAITING AREAS - TRANSPORTATION FACILITIES

929.01 Size

Dependent upon size of the center, 200 to 400 square feet will likely be needed for secretarial and reception areas.

929.02 Location

A. At the hub of the administrative suite
B. Direct access to a building corridor and to work room
C. Direct or convenient access to director's office and other rooms in the administrative suite
D. Near main entrance to facility
E. Access to work room

929.03 Activities

Reception of visitors and staff, and general secretarial activities required in the operation of the center.

929.04 Equipment Space and Facilities:

A. Counter separating reception/waiting room or area from the secretarial work area
B. Comfortable chairs in reception area
C. Small table for magazines and other literature
D. Display space and bulletin board
E. Secretarial furniture
F. Master telephone station, or other communication, to all locations
G. Carpeting or resilient floor covering

930 DIRECTOR'S OFFICE - TRANSPORTATION FACILITIES

930.01 Size - 150 to 225 Square Feet

930.02 Location

A. Direct or convenient access to general office
B. Convenient access to the corridor without going through the general office
C. Convenient access to other areas

930.03 Activities

Planning, research and administrative activities conducted individually or in small groups.

930.04 Equipment Space and Facilities

A. Room design should permit the director to confer without being overheard in adjacent areas.
B. Conference desk and chair
C. Work table convenient to desk for layout work
D. Conference chairs
E. Bookshelving - 15 to 30 linear feet
F. Storage for personal belongings
G. Telephone service and intercom to secretary in general office

930.05 Assistant Director/Trainer Offices
These spaces may be needed, depending on the size of the local transportation system.

930.051 Size - 125 to 180 Square Feet

931 WORK ROOM - TRANSPORTATION FACILITIES

931.01 Size - 100 to 150 Square Feet

931.02 Location
Direct access to the general office and waiting room.

931.03 Activities
Preparation of materials, reports and layouts of materials by both secretarial and other personnel.

931.04 Equipment Space and Facilities
- A. Combination of open shelving and closed cabinets for storage of a variety of supplies and equipment
- B. Duplicating machine
- C. Work table or counter
- D. Lavatory
- E. Microcomputer work station
- F. Resilient floor covering

932 STAFF LOUNGE/TRAINING ROOM - TRANSPORTATION FACILITIES

932.01 Size
According to staff number, 250 to 700 square feet.

932.02 Location
- A. Direct access from a building corridor
- B. Location avoiding major traffic, yet reasonably close to the director's office
- C. Toilets should not have direct opening into the lounge area.

932.03 Equipment Space and Facilities
- A. Comfortable lounge furniture (if not used for training)
- B. Kitchenette to prepare light refreshments
- C. Adequate ventilation
- D. Toilets
- E. Pull-down projection screen
- F. Capability of darkening room
- G. Chalkboard - 8 feet x 12 feet
- H. Bulletin board - 4 feet x 6 feet
- I. Tables and chairs (if used for training)

NOTE: The size of staff lounge/training room will vary, depending upon availability of space for training activities at other locations within the system.

933 GENERAL SERVICE BAYS - TWO (2) - TRANSPORTATION FACILITIES

933.01 Size

20 feet x 60 feet space, with 14 feet x 14 feet overhead door; provide 14 feet minimum height.

933.02 Location

A. Direct access to vehicle storage yard
B. Access to tool room (200 square feet)
C. Access to parts room (400 to 600 square feet with 15 feet ceiling height and double doors for removal of large parts)

933.03 Equipment Space and Facilities:

A. Mechanic work benches with wall space above
B. Overhead beam and lift for engine removal
C. Outlets for exhaust removal
D. Compressed air
E. Cold water
F. 120 volt and 240 volt electric
G. Trench drains
H. Non-slip concrete floor

934 HYDRAULIC LIFT BAY - ONE (1) - TRANSPORTATION FACILITIES

934.01 Size

20 feet x 60 feet space, with 14 feet x 14 feet overhead door. Provide minimum 18 feet height.

934.02 Location

A. Access to the new oil storage room (100 square feet)
B. Access to tool room
C. Access to parts room

934.03 Equipment Space and Facilities

A. Mechanic work benches with wall space above
B. Adjustable length hydraulic lift for lifting entire bus at one time
C. Outlets for exhaust removal
D. Used oil receiver
E. Compressed air
F. Cold water
G. Electric - 120 volt and 240 volt
H. Floor drains
I. Non-slip concrete floor

935 WASH BAY - ONE (1) - TRANSPORTATION FACILITIES

935.01 Size

20 feet x 60 feet pull-thru, if possible. If automatic wash equipment is used, the room size must be coordinated with the equipment manufacturer.

935.02 Location

A. Fully partitioned space
B. Adjacent to other service bays

C. Easy circulation to and from the service yard
D. Access to hot water heater room and mixing equipment

935.03 Equipment Space and Facilities
A. Adequate heat and ventilation for year-round usage.
B. Water resistant floor and wall finishes
C. Adequate drains
D. Non-slip concrete floor

936 BODY REPAIR/PAINT BAY - ONE (1) - TRANSPORTATION FACILITIES

NOTE: Wash bay may be used for this purpose, but this is not recommended because of the need for a clean, dry environment and the requirements to satisfy health and safety concerns.

936.01 Size
20 feet x 60 feet space, with 14 feet x 14 feet overhead door. Provide minimum 14 feet ceiling height.

936.02 Location
A. Easy access to vehicle storage yard
B. Access to paint equipment and supply room
C. Access to parts room
D. Must be self-contained space

936.03 Equipment Space and Facilities
A. Mechanic work benches.
B. Heated, filtered make-up air and filtered exhaust air system
C. Compressed air
D. Cold water
E. Electric, 120 volt and 240 volt
F. Floor drains
G. Non-slip concrete floor

937 SERVICE FACILITIES - TRANSPORTATION

See Chapter 11.

938 ENGINEERING AND CUSTODIAL FACILITIES - TRANSPORTATION

See Chapter 12.

FACILITY SAFETY

1000 OVERALL FACILITY SAFETY

All school facilities are designed, constructed, furnished and maintained in a manner that assures every reasonable and necessary safeguard to the life and health of persons who enter and use the facility.

The safety of each facility is determined upon compliance with the minimum requirements of the state Fire Code, as well as the state Department of Health and other regulatory agencies. The contents of this section are not all-encompassing, and reference is necessary to the applicable law for compliance.

1001 STRUCTURAL SAFETY

References:

12. Building Officials and Code Administrators International Basic Building Code - B.O.C.A.
13. State Building Code of West Virginia (Latest Edition)

All school facilities are to be designed, constructed, furnished and maintained with methods, materials and equipment that provide adequate structural safety, fire resistance and protection and convenience in traffic circulation. All school facilities shall be in compliance with all applicable state regulatory agencies.

1001.01

The structural design elements shall provide the following:

A. The ability of the building to resist lateral forces such as are imposed by extreme winds and earthquakes
B. The ability of the building to resist distortion and rapid deterioration from excessive or uneven foundation settling or the overstress of structural members and inadequate tying
C. The ability of the building to carry the maximum live loads imposed on it by school and community use

1002 TYPES OF CONSTRUCTION AND AREA LIMITATIONS

1002.01

Approved automatic sprinkler systems must be installed in all new buildings used for any occupancies exceeding the areas in the building height table. See Chapter 10, pages 171 and 172.

1002.02 Places of Assembly

These, in educational facilities, shall be limited as the following explains. Places of assembly include, but are not limited to, all buildings or portions of buildings used for gathering together 50 or more persons for such purposes as deliberation, worship, entertainment, dining, amusement or awaiting transportation. Examples: gymnasiums, auditoriums, libraries and cafeterias. Classification of places of assembly are explained as follows. Each place of assembly shall be classified, according to its capacity:

Class A, capacity of 1000 persons or more; Class B, capacity of 300 to 1000 persons; Class C, capacity of 50 to 300 persons.

Type of Construction	Below LED	LED	Number of Levels Above LED			
			1	2	3	4 & Above
I(443) I(332) II(222)	A*B*C* Any number of Levels	ABC	ABC	ABC	ABC	A*B*C
II(111)	A*B*C One Level Below LED	ABC	ABC	A*BC	B*C*	N.P.
III(211) IV(2HH) V(111)	A*B*C* One Level Below LED	ABC	ABC	A*B*C	B*C*	N.P.
II(000)	B*C* One Level Below LED	ABC	C*	N.P.	N.P.	N.P.
III(200) V(000)	B*C* One Level Below LED	BC	C*	N.P.	N.P.	N.P.

*Permitted if the level of the place of assembly and any story intervening between that level and the level of exit discharge are protected throughout by an approved automatic sprinkler system. If there are any openings between the level of exit discharge and the exits serving the place of assembly, the level of exit discharge shall also be protected throughout by an approved automatic sprinkler system.

N.P. - Not Permitted
LED - Level of Exit Discharge

1003 FIRE PROTECTION

1003.01 Fire Safety

Fire safety, in educational facilities, includes, but is not limited to fire resistive construction, fire alarm systems, sprinkler systems, exits, enclosure of vertical openings and evacuation plans.

1003.02

Refer to appropriate sections of West Virginia Fire Code. This code is on file in every county clerk's office.

1003.03 Heating Plant and Kitchen Ranges

A. The furnace room shall be isolated from pupil-occupied areas by location and/or treatment (fire resistive construction).
B. Heat plant installations shall be in accordance with appropriate state and local codes.

C. Kitchen ranges of more than four burners, deep fat friers and ovens must have ventilation and protection in accordance with the state Fire Code; NFPA 96, Vapor Removal Cooking Equipment.

1003.04 Electric Services

A. All wiring, connections and electrical installations shall be in accordance with the state Fire Code; NFPA 70, National Electrical Code.

1003.05 Fire Alarm System

1003.051 General Requirements

A. All fire alarm systems, including all components, shall be electrically supervised. Components shall include pull stations, automatic detection, sounding devices, flow switches, tamper switches and main panel.

B. All fire alarm systems shall be tied in ahead of the main power disconnect unless secondary power source is provided.

C. All fire alarm system wiring shall be in accordance with The National Fire Codes, imposed by Section 4 of the state Fire Code.

D. Sprinkler system(s) installed - the OS & Y and P.I.V. Valves shall be electrically supervised and tied into the trouble side of the panel.

E. Sprinkler system(s) shall be tied in so flow will activate the general fire alarm sounding device(s).

F. Flow and/or pressure switches shall be annunciated separately on the main fire alarm panel.

G. Heating, ventilation, air conditioning systems (HVAC)

1. All heating, ventilation and air conditioning systems greater than 2000 CFM and less than 15,000 CFM shall have a duct-type smoke detector in the return air duct or plenum for automatic shut down to close main fan dampers and to sound general fire alarm when activated.
2. All heating, ventilation and air conditioning systems greater than 15,000 CFM shall have duct-type smoke detectors installed in both supply and return air duct to automatically shut down, close main fan dampers and sound general fire alarm when activated.
3. 100% utilization of outside air will not require duct detector(s).
4. Exception: HVAC systems used as part of the engineered smoke control systems are exempt.

H. Audible alarm indicating devices shall be of such character and so distributed as to be effectively heard above the ambient noise level obtained under normal conditions of occupancy. Audible alarm indicating devices shall produce audible signals that are distinctive from those used for other purposes in the same building.

Prerecorded or live voice evacuation instructions to occupants are permitted. Prerecorded instructions shall be preceded by not less than 5 seconds, or more than 10 seconds, of a continuous alerting signal. Upon completion or failure of prerecorded instructions, the fire alarm evacuation signal shall sound. Prerecorded instructions shall be repeated two or more times. Live voice instructions shall be permitted to interrupt the prerecorded message or the fire alarm evacuation signal. Audible and visual fire alarm devices shall be used only for the fire alarm system.

I. Manual pull stations shall be located no greater than 200 feet from each other and at all exits. Manual pull stations shall be of the same general operational type.

J. Thermal detectors are required in the following areas in all occupancies requiring a fire alarm system, and as listed or identified in the Life Safety Code (NFPA 101):

1.	Elevator Shafts	Fixed Temperature
2.	Attic and Cockloft Spaces	Fixed Temperature
3.	Storage Rooms	Rate of Rise
4.	Furnace or Boiler Rooms	Fixed Temperature
5.	Janitor Closets	Rate of Rise
6.	Kitchens	Fixed Temperature
7.	Laboratories, Home Economics, Woodworking Shops, Auto Shops, Utility Rooms & Locker Rooms	Rate of Rise

K. Smoke detectors are required in the following areas in all occupancies requiring fire alarm systems:
   1. Rooms and/or areas designated for the location of electrical distribution panels or transformers.
   2. Stages - smoke detectors, where required, shall be placed a maximum of 15 feet from ends of corridors or walls and 30 feet apart on centers. Variance with these requirements must have submission of technical data to justify exceeding these distance requirements.

L. A building or structure being used for more than one occupancy must comply with the fire alarm system requirements of the most stringent occupancy.

1003.052 Requirements for Educational Occupancy

A. A fire alarm system is required in every educational occupancy area (as defined in the Life Safety Code), and such a system must meet the requirements and standards as provided herein. Educational occupancies area as defined in the Life Safety Code. Exception: One or two room buildings of less than 2500 square feet gross floor area with direct exit to the outside from each classroom.

B. The general requirements set forth in Chapter 10, Section 1003.051 must be complied with.

C. Open plan classroom concepts will require a complete smoke detection system throughout the facility.

D. Day care centers located in buildings other than educational facilities shall have smoke detectors installed on ceilings of each story. Detectors must be placed in front of the doors to the stairways, and in the corridors of all floors occupied by the center (no farther than 30 feet apart). Detectors shall also be installed in lounges and recreation areas in the center.

E. An annunciator for the fire alarm panel is to be readily accessible to local fire department personnel if more than one zone is provided.

F. Rate of rise thermal detectors are required in all rest rooms having three (3) or more fixtures.

G. Smoke detectors shall be installed in all corridors, except in single story buildings with direct exit to the exterior (via a door) from every room normally occupied by students.

1003.06 Fire Extinguishers

A fire extinguisher shall be installed in accordance with the state Fire Code; NFPA 10, Portable Extinguishers.

1003.07 Occupant Load Calculations

A. The occupant load of educational facilities, or any individual stories or sections thereof, shall be as determined by the state Fire Code; NFPA 101, Life Safety Code: One person for each 20 square feet of net classroom area, or 50 square feet of the net area of shops, laboratories and similar vocational rooms.

B. Occupant load requirements of lecture rooms, gymnasiums or cafeterias used for assembly purposes shall also be determined by the state Fire Code; NFPA 101, Life Safety Code.

1003.08 Emergency Lighting

Every educational facility shall have emergency lighting for the following:

A. All interior stairs and corridors

B. All spaces that are normally occupied, except administrative areas, classrooms and mechanical and storage areas

NOTE: Shops and laboratories require emergency lighting.

1003.09 Extinguishment Requirement

A. Every portion of each educational building below the floor of exit discharge shall be protected throughout by an approved automatic sprinkler system in accordance with the state Fire Code; NFPA 101, Life Safety Code.

B. Every educational building shall be provided with an automatic sprinkler system, as required in Section 5 of the state Fire Code and other applicable sections. See Chapter 10, Section 1002.01.

1003.10 Vertical Openings

All vertical openings in educational buildings shall be enclosed and protected by fire resistive construction, as required by the state Fire Code.

1003.11 Classrooms

Every room or space used for classroom or other educational purposes shall have at least one outside window used for emergency rescue or ventilation. Such window shall be openable from the inside without the use of tools and provide a clear opening of not less than 20 inches in width, 24 inches in height and 5.7 square feet in area. The bottom of the opening shall be no higher than 44 inches above the floor. Exceptions to this requirement are completely sprinklered buildings and/or classrooms contained therein having direct exit to the outside.

1004 NOTIFYING THE FIRE DEPARTMENT

Whenever an unwanted fire occurs in any building or on any premises of any kind, the owner, manager, occupant, or any person in control of such building or premises, upon discovery of an unwanted fire, or evidence of there having been an unwanted fire, even though it has apparently been extinguished, immediately shall cause notice of the existence of such fire, circumstances of same, and the location thereof to be given to the Fire Department. This requirement shall not be construed to forbid the owner, manager, or other person in control of the aforementioned building or premises from using all diligence necessary to extinguish such fire prior to the arrival of the Fire Department.

No person shall make, issue, post, or maintain any regulation or order, written or verbal, that would require any person to take any unnecessary delaying action prior to reporting a fire to the Fire Department.

1005 CIRCULATION, SAFETY AND CONVENIENCE

1005.01 Corridors

A. Each corridor shall be a minimum of 6 feet wide in the clear. Room and locker doors swinging into corridors shall not, at any point of the swing, reduce the minimum clear passage.

B. A means of egress shall exist at each end of a corridor, and in no case shall any corridor extend more than 20 feet beyond an exit.

C. Doors separating corridors from stair enclosures shall be B Label fire rated doors and swing in the direction of exiting.

1005.02 Stairways

A. All stairways shall conform to the requirements of the state Fire Code; NFPA 101, Life Safety Code. Chapter 5 of the Life Safety Code provides details for construction and dimensions.

B. Closets, storage areas or other rooms or spaces shall not open into the stairway enclosure; nor shall such space be permitted under or over stairways.

C. Buildings of more than one story shall have a minimum of two stairways, located remote from each other, which provide a continuous exit to the outside. Additional stairways may be necessary, dependent upon occupant load and square footage of the floor(s).

1005.03 Exits

A. All buildings, including one room buildings or classrooms over 1000 square feet, shall have a minimum of two exits, remote from each other.

B. All exits shall comply with the state Fire Code, NFPA 101, Life Safety Code. Chapter 5, of Code, provides information for determining number, kinds, arrangement and capacity of required exits.

1005.04 Signs

A. All auditoriums, assembly areas, gymnasiums, stairways, corridors and exits should have illuminated signs marked "EXIT" in plain, legible letters (with direction arrow, if necessary).

B. Low hanging signs, ceiling lights and similar objects, signs and fixtures that protrude into regular corridors or traffic ways shall be avoided. A minimum height of 7 feet 6 inches from the floor is necessary.

1006 OTHER CIRCULATION AND TRAFFIC PROBLEMS WHICH NEED SPECIAL ATTENTION

1006.01

The plan of the drive and bus-loading platform should be such that all buses can line up in tandem, permitting children to enter the bus from the right (that is, without crossing in front or to the rear of buses). No backing up of buses will be permitted.

1006.02

Access to the school grounds should be such that pupils coming to the site do not need to walk through any part of the building to get to the playground.

1006.03

Pupil circulation to and from toilet units is simplified when these units and hand washing facilities are located as follows.

A. On normal traffic routes from instructional spaces to outdoor recreation areas

B. Adjoining playgrounds so that the building proper need not be entered by playground users

C. Near cafeteria or lunchroom

1007 DEMOLITION, RENOVATION AND ALTERATION

References:

2. N - 3

Before embarking on a renovation project, there are preliminary steps which must be taken. The existing facility must be examined carefully. Information about the educational program, the community, enrollment and so forth must be assembled and analyzed. Educational goals must be clearly established and alternative solutions to the facilities problem (including renovation, renovation plus additions, demolition and replacement or new site acquisition and new construction) must be developed and compared.

1007.01

An assessment of the existing facility should include an examination of at least the following areas:

A. Program support
B. Structural soundness
C. Adaptability of the building
D. Adequacy of space
E. Aesthetics
F. Operational and maintenance efficiency
G. Condition of mechanical systems
H. Compliance with safety codes
I. Location
J. Site characteristics
K. Cost of project

1008 EMERGENCY SHELTERS

1008.01

Professional advice and assistance in the design of shelter areas for school buildings is available at no cost to architects and school boards. This service is obtained through the state Department of Emergency Services.

1009 RELOCATABLE, WOOD FRAME OR METAL BUILDINGS

1009.01

These installations shall be made only to relieve overcrowding or to provide interim housing while an approved school construction project is being planned and/or completed. Local school districts must include in their facilities plan a method and time frame for replacing these buildings with permanent structures. These buildings shall comply with all state usage guidelines, including installation of potable water and toilet facilities for early childhood (K-4), and applicable building and fire codes.

1010 SAFETY AND CLEANLINESS OF BUILDINGS

1010.01

All schools must be maintained in a safe condition. Scheduled inspections will insure that facilities are kept in a state as near to the original condition as possible at all times. Facilities shall also be kept clean and sanitary at all times by scheduled cleaning of all sections of the buildings. This shall be insured by regular inspections for compliance with scheduled cleaning tasks.

NOTES FOR BUILDING HEIGHT TABLE

(1) The word "area" means that area enclosed by exterior or foundation walls, fire barriers or a combination of exterior and foundation walls. A fire barrier is a continuous vertical membrane designed and constructed with a fire resistance rating of two (2) hours to limit the spread of fire and smoke. Fire barriers shall have protected openings.

(2) The phrase "not permitted" means that buildings of these heights are not permitted for the type of construction indicated.

(3) The phrase "Section 10-High Rise" means that the building shall also comply with Section 10 of the state Fire Code.

(4) Types of building construction indicated in the chart are located in NFPA 220, Standard on Types of Building Construction.

(5) Protection of structural members in Type I and Type II construction: Columns, girders, trusses, beams, lintels or other structural members that are required to have a fire resistance rating and support more than two floors or one floor and roof, or that support a bearing wall or a nonbearing wall more than two stories high, shall be individually protected on all sides for their length or height with materials having the required fire resistance rating. All other structural members required to have a fire resistance rating may be protected by individual encasement, by a membrane or ceiling protection which is part of an approved assembly which meets the required fire resistance rating or by a combination of both.

BUILDING HEIGHT

Type of Construction	1 Story	2 Story	More than 2 stories and up to 40 ft.	More than 40 feet	More than 75 feet
Type I 443 Fire Resistive	40,000	30,000	10,000	Sec. 10 High Rise	Sec.10 High Rise
332 Fire Resistive	40,000	30,000	10,000	Sec. 10 High Rise	Sec. 10 High Rise
Type II 222 Protected Non-Com.	30,000	20,000	8,000	Sec. 10 High Rise	Sec. 10 High Rise
111 Protected Limited Combustible	20,000	15,000	5,000	Sec. 10 High Rise	NOT PERMITTED
000 Unprotected Limited			All Areas		
Unprotected Non-Com.	7,000	4,000	Require Sprinklers	NOT PERMITTED	NOT PERMITTED
Type III 211 Ordinary Protected	9,000	6,000	All Areas Require Sprinklers	NOT PERMITTED	NOT PERMITTED
200 Ordinary Non-Protected	7,000	4,000	All Areas Require Sprinklers	NOT PERMITTED	NOT PERMITTED
Type IV 2HH Heavy Timber	9,000	6,000	3,000	NOT PERMITTED	NOT PERMITTED
Type V 111 Protected Wood Frame	7,000	4,000	All Areas Require Sprinklers	NOT PERMITTED	NOT PERMITTED
000 Non-Protected Wood Frame	5,000	3,000	NOT PERMITTED	NOT PERMITTED	NOT PERMITTED

Chapter 11

SERVICE FACILITIES

1100 WATER/SEWAGE FACILITIES

All schools contain adequate service facilities that are designed, constructed, maintained and equipped to facilitate the operation of the school.

1100.01 Sanitary Facilities - Water Supply and Sewage Disposal

The water supply and sewage disposal systems of all schools are designed, constructed, maintained and equipped to facilitate the operation of the schools. The sanitary facilities systems meet all requirements of state and federal regulatory agencies. Toilet facilities are accessible to the physically handicapped, are provided on each floor level of the building and contain hot and cold water mixing faucets and provisions for privacy. Paper towels and toilet tissue are provided at all times. Service sinks with hot and cold water are provided in each custodial closet, in the custodial general service area and in the food service area.

1100.011

Adequate source of water supply that is both safe and potable. Tests to verify the quantity and sanitary quality must be conducted prior to the occupation of the school. The state and/or local health departments welcome the opportunity for consultation regarding water conditions prior to site selection or acquisition.

1100.012

Ample supply and storage of water should be available at all times for present and future expanded needs - at least 30 gallons per day per student for all purposes.

1100.013

Water must be safe for use, as determined by state and/or local health authorities, and maintained safe by protection of source of supply, treatment if necessary and periodic analysis.

1100.014

Sewage disposal system design requires the technical services of a sanitary engineer. The type of installation depends upon the character of the soil as determined by percolation tests, location of wells and sources of water supply. State and local health departments will provide maximum assistance in the development of approved sewage disposal systems in rural and suburban areas.

1100.015

The sanitary protection of an individual water supply and/or sewage disposal system shall be upgraded to meet current standards when any renovation or addition is to be provided at an existing school.

1100.016

All on site water supplies and extended aeration treatment sewage plants will require personnel that are properly certified by the West Virginia Department of Health to operate these systems.

1100.017

All boilers shall have an approved back flow preventer device placed on the make-up water line to prevent contamination of the potable water supply. All laboratories shall be isolated from the remainder of the school by an approved back flow preventer device on the water line. Back flow preventer devices are to be shown on plans submitted for review and included in the specifications to the West Virginia Department of Health.

1100.018

The required ratio of water closets, urinals, lavatories or wash fountains and drinking fountains shall be maintained when a renovation or an addition enlarges the school population.

1100.02 Toilet Facilities

Federal regulations demand that toilet rooms shall have at least one toilet stall that has the following:

A. 3 feet wide
B. At least 5 feet 6 inches deep
C. Door that is 32 inches wide and swings out
D. Handrails on each side, 32 inches in height and parallel to the floor
E. Water closet with the seat height between 17 and 19 inches from the floor

Toilet and facilities must conform to U.S.A. Standard Specifications for making buildings accessible to and usable by the orthopedically impaired. American National Standards Institute, 1430 Broadway, New York, N.Y. 10018

1100.021

Toilet facilities should be provided for both sexes on each floor level of school building. Some economy may be achieved if toilet rooms are located adjacent to each other with common utility space between for servicing; the same is true in multi-story buildings, where toilets may be located one above the other.

1100.022

Entrances to toilet rooms must be designed to prevent visibility from the corridor. Toilet room doors must be self closing.

1100.023

Toilets for public use should be conveniently available to the auditorium, gymnasium and other parts of the building commonly used by the public. Students' general toilet rooms may be strategically located for public use in some cases.

1100.024

Toilet room floors, preferably, should be of ceramic tile or similar impervious masonry material.

1100.025

Wall surfaces should be of impervious material, such as glazed tile, to a height of at least 6 feet, and preferably to the ceiling.

1100.026
Provide stall toilet partitions with doors of smooth nonporous material. These should be securely anchored.

1100.027
Floor drains, hose bibbs and cleanout plugs should be provided in gang toilet rooms.

1100.03 Plumbing Fixtures

1100.031
Service sinks with hot and cold water should be provided in each custodian's closet, in the custodian's general service room and in the cafeteria-kitchen. Vacuum breakers may be needed on sink water lines.

1100.032
Hydrants, tamper proof and frost proof, should be provided at least every 120 feet around the perimeter of the building. Underground stop and waste cocks shall not be permitted on frost proof hydrants.

1100.033
All piping and valves in the plumbing system should be tagged for identification, and a chart of plumbing layouts should be readily accessible in the head custodian's room.

SCHOOL Type	Elementary	Secondary	Notes:
Water Closets:			
Ratio: Female	1-35	1-45	Ratio in elementary schools applicable only when general facilities are provided. In other schools, provide a minimum of two in gang toilets. U-type seats for commodes. Provide toilet paper in dispensers at all times.
Male	1-40	1-75	
Height:	13 inches	15 inches	
Urinals:			
Ratio:	1-30	1-30	Not required in toilet rooms of individual instructional spaces.
Height:	18-20 in.	22-24 in.	
Lavatories & Wash Fountain:			
Ratio:	1-50	1-50	Cold and temperate water (maximum 115 degrees F.) with mixing faucet.
Height:	24-27 in.	30-32 in.	
Drinking Fountains:			
Ratio:	1-75	1-75	Lavatories to include hot and cold water mixing faucet, sanitary towels in a dispenser and hand cleaner. Preferably, separate fixtures.
Height:	24-28 in.	32-36 in.	

NOTE: See Chapters 4, 5, 6, 7 and 8 for additional fixture requirements in special areas of the building.

1101 ELECTRICAL SERVICE

Reference:
14. National Electrical Code

The electrical system of each school is designed, constructed, maintained and equipped to facilitate the safe operation of the school. The electrical system provides adequate service for present and anticipated loads to insure maximum efficiency and meets all requirements of applicable state regulatory agencies.

1101.01
All electrical service shall comply with the National Electrical Code.

1101.02
Adequate electrical service for present and anticipated loads should be provided to insure maximum efficiency.

1101.03
All transmission wiring systems should be in separate conduits.

1101.04
Wherever feasible and possible, electrical service should be brought into a meter and switch room specifically designed for this purpose and appropriately located within the school building.

1101.05
A directory shall be provided for electrical panel boards, and a schematic plan of the electrical systems should be available in the head custodian's office.

1101.06
In all shops, master controls shall be strategically located to shut off machines in case of an emergency.

1101.07
All electrical equipment used in the school shall be properly grounded and protected against electrical surges that might damage the equipment.

1102 AUDIOVISUAL FACILITIES

All schools shall be designed, constructed, maintained and equipped to provide the audiovisual facilities required for the educational program of the school.

1102.01
Instructional spaces and production areas should be furnished to permit the use of all types of audiovisual materials and equipment.

1102.02

Adequate provision for controlling the light level in instructional areas is essential. For efficient use of projection-type materials, the light in the room, particularly in the area of the projection surface, should not exceed one-tenth footcandle.

1102.03

Duplex service receptacles should be installed on all walls of the instructional space for the use of instructional equipment. Sufficient branch electrical circuits service should be in each room.

1102.04

Where there are to be specialized facilities, such as language labs, study carrels, micro-teaching and television, provision should be made for electrical service in the floor.

1102.05

Conduits shall be provided to permit future installation of computer terminals, television and other electronic instructional devices.

1102.06

System conduits shall be of sufficient size to provide for installation of television and other teaching devices.

1102.07

A projection surface should be permanently installed in each instructional area with provision for eliminating keystoning.

1102.08

Media production centers and photographic darkroom facilities should be provided with adequate sinks for hot and cold running water.

1102.09

Adequate ventilating facilities, including exhaust fans, shall be installed in production areas for the removal of fumes resulting from the use of rubber cement and other chemicals.

1102.10

For preservation of book and nonbook materials and equipment, temperature and humidity control are essential. Air conditioning of media centers and production areas is a must.

1102.11

Use of audio devices mandates acoustical treatment of walls, ceilings and floors in instructional areas and media centers, particularly in open-type classrooms where many activities are occurring simultaneously.

1102.12

Adequate display and exhibit facilities, including such things as magnetic boards, chalkboards, bulletin boards and show cases, are required.

1102.13

Adequate storage facilities for materials such as supplies, book and nonbook materials and equipment are required.

1103 COMMUNICATION AND PROGRAM FACILITIES

All schools are designed, constructed, maintained and equipped to facilitate adequate intercommunication among major areas of the school plant. All schools contain a master clock, a signal and tone system and telephone for outside communication.

1104 FIRE ALARM SYSTEM

References:

14. National Electrical Code - Supplement A
15. West Virginia Fire Code
16 Life Safety Code 101 and National Fire Code

1104.01

Fire alarm signals shall be of the continuous type, shall be distinctly different from all other signals or sounds and shall comply with the state Fire Code.

1104.02

Signals providing alarm to other potential emergencies shall be distinctly different from the one used to evacuate the building in case of fire.

Chapter 12

OTHER FACILITIES

1200 ENGINEERING AND CUSTODIAL FACILITIES

All schools are designed, constructed, maintained and equipped to provide adequate and appropriate space and services for custodians. All schools are equipped with custodial and engineering areas, individually accessible to a service drive, with exterior doors sized to permit removal of room equipment or delivery of supplies. The areas are isolated from student occupied areas by location and/or treatment. Custodial closets are located within the school in strategic and convenient areas. Adequate facilities are provided for storage of supplies and equipment, and adequate provisions are made for waste disposal. Each custodial service facility is in compliance with all requirements of appropriate state regulatory agencies.

1200.01 Heat Plant - Size

Area as needed.

1200.02 Heat Plant - Location

A. Directly accessible to service drive, with exterior doors to permit removal of room equipment
B. Isolated from pupil-occupied areas by location and/or treatment

1200.03 Heat Plant - Equipment and Facilities

As needed, with provision to permit expansion if necessary.

1201 RECEIVING, STORAGE AND WORK ROOM

1201.01 Size - Area as Needed - Approximately 250 Square Feet

1201.02 Location - Direct Access From the Service Drive

1201.03 Equipment Space and Facilities

A. Shelving in a variety of depths and heights to provide temporary storage for supplies and equipment delivered to the school and custodial equipment not used daily, such as ladders, vacuum cleaners and scrubbers. Shelving should be of fine resilient construction.
B. Provide work bench equipped with vise and storage for small hand and power tools used in minor repair
C. Grounded duplex receptacles over work bench at three feet intervals
D. Storage lockers under bench
E. Wide doors sized to permit passage of large, bulky equipment and supplies
F. In multistory buildings, a freight or service elevator for conveyance of supplies and equipment and use by the handicapped is needed.

1202 GENERAL REQUIREMENTS

1202.01

Adequate and appropriate space, facilities and services should be provided for the custodians, including locker, shower, toilet and lavatory.

1202.02

In large schools, it is desirable to provide an office for the head custodian near custodial quarters. These facilities will be available for preparing and filing reports, preparing requisitions, schedules and records and for holding private conferences.

1202.03

Some school buildings, particularly large high schools, have laundry facilities for cleaning physical education, food service, custodial and other equipment and supplies. Automatic drying machines may require venting to the outside. Compliance to the state Fire Code is necessary.

1202.04

Since portable electric floor cleaners are frequently used, ample electrical outlets shall be located at convenient points not more than 75 feet apart in corridors and rooms. See Chapter 11, Section 1101.

1203 LAWN TOOL EQUIPMENT STORAGE ROOM

1203.01 Size - 50 to 100 Square Feet

1203.02 Location - Direct Access From Out-Of-Doors

1203.03 Equipment Space and Facilities

Shelving and space to permit easy storage of lawn mower, lawn tools and snow removal and other equipment needed in the care of the school grounds.

1204 POWER, METER AND SWITCH ROOM

1204.01 Size - Area as Needed

1204.02 Location

A. Convenient access from the boiler room and custodian's area
B. Location to avoid damage from water or moisture

1204.03 Equipment Space and Facilities

Electrical panels, meters and switches needed to provide electrical service in the building. See Chapter 11, Section 1101.05.

1205 INCINERATOR AND WASTE ROOM

NOTE: An incinerator may be installed to burn refuse. The incinerator (either indoor or outdoor) and space occupied thereby, should be chosen with special consideration given to daily

disposal of waste. Fire hazards, fire insurance rates and ecology also must have careful consideration. Incinerators must be of a type that meets the construction and air quality control standards of the state Department of Health, state Fire Code and the West Virginia Air Pollution Control Commission. The use of compactors and haulaway service are alternative methods.

1205.01 Size - Area as Needed

1205.02 Location
Easy access from the custodian's room and heating plant.

1206 LOCKER/DRESSING ROOMS

1206.01 Size - 75 to 100 Square Feet

1206.02 Location - Adjacent to Custodian's Room

1206.03 Equipment Space and Facilities
A. Lockers
B. Mirror
C. Chairs or benches
D. Toilet
E. Shower

1207 CUSTODIAL CLOSETS

1207.01 Size and Number - Area as Needed

1207.02 Location
Strategically located along corridors, a minimum of one per floor, and in food service area to reduce the travel necessary to properly maintain a healthful and clean school.

1207.03 Equipment Space and Facilities
A. Service sink with mud trap and hot and cold water
B. Shelving for various cleaning supplies and equipment
C. Storage space for mops and brooms

1208 STORAGE OTHER THAN CUSTODIAL

1208.01
Firesafe vault or fire-resistive files shall be available in the administrative area for storage of pupil and school records and valuables.

1208.02
Government donations of surplus foods, some of a bulky nature, may create a need for substantial storage space located convenient to the cafeteria-kitchen. Additional refrigeration or freezer space may also be needed.

1208.03

Appropriate provisions shall be made for the storage of wraps of students, teachers and other school employees. No single plan for such storage can be applied to all schools. Whatever plan is adopted, the following factors should be considered.

A. Convenient for individuals wearing the clothing
B. Safe from theft or vandalism
C. Sanitation
D. Adequate ventilation
E. Orderly arrangement in appearance
F. Economy of provisions

1209 MISCELLANEOUS SERVICE FACILITIES

1209.01

Parking spaces, walks and entrances should be adequately lighted, chiefly by floodlights located at strategic points within or upon the building, or upon poles or standards.

1209.02

Parking space should be provided for automobiles of school employees, visitors and students who drive their own cars to school. Frequently, parking space must also be provided for school buses which are idle during the day. Such parking space, if possible, should be screened from the view of the general public.

1209.03

Approximately five percent of the parking spaces should be identified for use by the physically handicapped. The parking spaces should be open on one side, allowing room for individuals in wheelchairs or on braces or crutches to get in and out. Level surfaces are preferred.

1209.04

In laying out bus and traffic patterns, it should be remembered that discharge or pick-up of students at loading/unloading zones must always be from the side of the vehicle opposite the driver and toward the building. Backing up of buses will not be permitted.

1210 ACCESSIBILITY OF FACILITIES

Reference:

5. A - 117.1

All schools are designed, constructed, maintained and equipped to provide a barrier-free environment and maximum accessibility by the handicapped to all floors. All facilities are in compliance with the requirements of state and federal regulatory agencies concerned with accessibility to the handicapped.

Chapter 13

ENVIRONMENTAL CONTROLS

1300 COMMON ENVIRONMENTAL FACTORS

All schools are designed, constructed, furnished and maintained in a manner which incorporates all existing technology into the common environmental factors which facilitate the educational program of the school. Spatial and aesthetic considerations are incorporated into the school design, construction, equipment and maintenance. The thermal, visual and acoustical systems are balanced in a manner which properly controls the environment and facilitates the educational program of the school.

School facilities must be in compliance with the requirements of the state Fire Code, state Health Department and other regulatory agencies.

1301 THERMAL ENVIRONMENT

References:

2. I-16 and G-2, 3
17. Climatological Data For West Virginia
18. American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.
19. Energy Consumption Guidelines for Educational Facilities

The school facility is designed, constructed, equipped and maintained in a manner which provides for maximum comfort and economy. The heating, ventilating and air-conditioning systems in all school facilities are in compliance with the requirements of applicable state regulatory agencies.

1301.01

Minimum functions of the space conditioning system employed to maintain the proper thermal environment in a school building are as follows.

A. Supply heat for warm-up and balance heat losses from the room to the outside.
B. Supply tempered outside air for the removal of excess heat.
C. Dilute and remove unpleasant odors by ventilation.
D. In special cases, the system must remove injurious or noxious gases, vapors, fumes and dust by the induction of outside air or by filtration.

With the increasing tendency toward longer school terms and, in some cases, year-round use of physical plants, it is recommended that serious consideration be given to summer air conditioning to provide the desired level of environmental control.

1301.02

Space conditioning systems should be of sufficient rated capacity to meet the building requirements under extreme local weather conditions. This will avoid sustained operation beyond the capacity of the system. Outdoor design temperatures shall be based on climatological data collected by the U.S. Department of Commerce.

1301.021 Operative Temperature

Heating systems of conventional design should provide the following temperatures.

A. Instructional spaces, auditoriums, offices and cafeterias - 68 degrees F, measured 30 inches above the floor

B. Closed corridors, stairways, shops, laboratories and kitchens - 68 degrees F, measured 60 inches above the floor

C. Activity rooms, such as gymnasiums - 65 degrees F, measured 60 inches above the floor
Special cases: Toilet rooms - 65 degrees F, locker rooms and showers - 78 degrees F and swimming pools - 83 degrees F, each measured 60 inches above the floor.

D. The maximum temperature gradient from floor to 60 inches above the floor should not exceed three degrees.

1301.022 Air supply

Space conditioning systems should have sufficient capacity to provide for introduction of outside air as follows:

A.

Classrooms	8 cubic feet per minute/person
Library	8 cubic feet per minute/person
Auditorium	7 cubic feet per minute/person
Corridors	.02 cubic feet per minute/feet squared
Utility Rooms	.02 cubic feet per minute/feet squared
Offices	20 cubic feet per minute/ person
Meeting Rooms	35 cubic feet per minute/ person
Teachers' Lounge	35 cubic feet per minute/ person

B. If air conditioning is not provided, 12 to 15 air changes per hour may be desired in auditoriums or other assembly space in summer.

1301.023 Air Movement

Air motion, with proper distribution and without drafts, is essential in educational facilities. Also important are effective air cleaning, positive temperature control, low noise level and acceptable humidity conditions.

A. Air motion should generally fall within a range of 25 to 50 linear feet per minute and should be maintained at a constant rate with a pattern that prevents temperature stratification.

B. Special provisions may have to be made in the window zone to overcome the effects of cold window down draft.

C. Since positive pressure is usually desirable in conditioned areas, approximately 10 percent more air should be supplied than is exhausted, thus minimizing infiltration.

1301.024 Humidity Control

While normal comfort conditions may be maintained with a wide range in relative humidity, it is desirable that actual levels not fall below 30 percent nor exceed 70 percent. This may require the installation of humidification equipment for winter use, while air conditioning may meet dehumidification requirements during warmer weather. It should also be stated that very dry conditions contribute to eye, nose, and throat irritation, while higher moisture promotes unhealthy mold growth.

NOTE: Special requirements for libraries, resource rooms and music facilities.

1301.025 Air Cleaning

Air cleaning is essential in areas where the air is heavily laden with dust or smoke. Filtering, washing, screening, precipitation, absorption or other cleaning methods may be used.

1301.026 Radiant Temperature

Reduced radiant temperatures are usually compensated for by increased air temperatures. Special treatment of the window zone may be desirable to compensate for the greatly reduced radiant temperature there as compared with the rest of the room.

1301.03

Some form of cooling system is desirable, and may be essential, for schools in areas where the outside temperature is above the optimum during a portion of the school year.

1301.04

Determining the type of heating and ventilating system to be used is a highly technical problem dependent upon the original cost, the operating cost, the maintenance services available, the size of the building, the level of student comfort which can be economically obtained and, in some instances, the designer's preference. Technical advice concerning the type of heating and ventilating system to be utilized should be secured from consulting engineers qualified to deal with heating and ventilating problems. Because of the many different types of environmental systems available, the variations in owning costs by type installation and the relative costs of competing energy sources, the architect and/or engineer must make an in depth study to determine the best and most economical system and energy used to meet the objectives of the school board regarding space conditioning.

1301.05

Zone control heating and ventilating systems should be provided in order to secure the maximum utilization of facilities and the greatest economy in operation. Special education centers require special room control to satisfy student needs. Controls shall be a type that will permit easy interfacing of energy management systems.

1301.06

Boards of education, before accepting the heating contractor's work, should receive complete written instructions regarding the operation and maintenance of the mechanical equipment and should insist that a designated school employee be given direct instruction by one or more competent representatives of the contractor or equipment firms.

1301.07 Inspection of Systems

The specifications should require an independent consulting engineering firm or other qualified individuals to inspect, balance and evaluate the finished system before title passes to the school board to assure that the system is installed as designed and is operating according to specifications.

NOTE: Warranties and brochures should be furnished to the board by the installation contractor on all equipment.

1301.08

The architect/engineer shall analyze the facility for its total energy efficiency and shall certify the energy usage in BTU/Gross S.F./Year. Energy usage must be within guidelines established by the Fuel and Energy Office, Governor's Office of Economic and Community Development.

1301.09 Interior Air Quality Standards

A. There shall be no open-flame, fuel burning heaters in student and staff occupied spaces. This equipment shall be located in enclosed rooms or cabinets using outside air for combustion and be properly vented to the outside in a manner that exhausts all fuel gases.
B. Materials which, under normal use conditions, may release formaldehyde in excess of .1 parts per million or asbestos dust, or which contribute to levels of indoor air pollutants considered potentially harmful to human health, shall not be permitted in building systems.
C. Pesticides used for termite and rodent control shall not be used at levels that might cause contamination of air quality in interior spaces.
D. Fresh air intakes shall be located to disallow contamination from stacks, vents or motor vehicles. Stacks shall be designed to completely exhaust flue gas away from the building.

1302 VISUAL ENVIRONMENT

Reference:

20. Lighting Handbook, Illuminating Engineering Society

The school facility is designed, constructed, equipped and maintained in a manner which provides a good visual environment. The facility is attractively painted and illuminated in a manner which most effectively contributes to an environment of visual accuracy and comfort. All schools are in compliance with requirements of applicable state regulatory agencies.

1302.01 General

1302.011

Technical assistance from qualified lighting engineers is generally required to insure adequate visual conditions within spaces.

NOTE: Electric power companies usually employ competent lighting engineers who may assist in finding solutions to lighting problems.

1302.012

Plans and specifications for new plants should be developed to achieve as many of the desired lighting goals as possible in the original construction with due consideration for the need of maintaining a balance between the visual and other major environmental factors.

1302.013

Proper visual environment lessens the expenditure of energy required for students and teachers to carry on visual tasks in the instructional space.

1302.014

A sufficient quantity of light is essential for good visual conditions. However, a task becomes visible, not by the light falling upon it, but by reflected brightness.

1302.015

Visual comfort and efficiency may best be achieved in an environment in which the brightness difference would be as small as possible between the task and the brightest surface and between the task and the darkest surface in the total visual field while the general level of illumination is high.

1302.016

Informal seating in the instructional space has gained wide acceptance. The visual field, therefore, must be recognized as encompassing all four walls, the floor and the ceiling.

1302.02 Desirable Brightness

1302.021

In an instructional space, the brightness of any surface viewed from any normal sitting or standing position should not be excessively greater than the brightness of the visual task. As the high brightness of surfaces in the visual field approaches the brightness of the task, visual comfort and efficiency increase. Present research indicates that, with a 30 footcandle level of illumination, the highest acceptable brightness of any surface in the visual field should not be greater than 10 times the brightness of the task. Above 30 footcandles, the brightness ratio should decrease as the footcandles increase.

1302.022

In an instructional space, the brightness of any surface viewed from any normal standing or sitting position should not be excessively lower than the brightness of the visual task. As the low brightness of the surfaces in the visual field approaches the brightness of the task, visual comfort and efficiency increase. Present research indicates that the lowest acceptable brightness of any surface in the visual field should not be less than one-third the brightness of the task.

1302.023

The brightness of surfaces immediately adjacent to the visual task is more critical in terms of visual comfort and efficiency than that of more remote surfaces in the visual field. These adjacent surfaces have lower acceptable brightness limits than surfaces farther removed from the task. Present research indicates that surfaces immediately adjacent to the visual task should not exceed the brightness of the task.

1302.024

The brightness difference between adjacent surfaces in the total visual field should be reduced to an acceptable minimum.

1302.025

The characteristics of any lighting system should be such that direct and reflected glare are not objectionable. If the brightness difference produced by a lighting system is held within the limits stated in Goals 1, 2 and 3, of Lighting Handbook, direct and reflected glare will not be objectionable.

1302.026

Daylight and electric light systems should conform to the same brightness and brightness difference goals, and both systems should be coordinated in design to assure the effective contribution of both.

1302.027

Any lighting system should be designed in such a manner that it will contribute to a cheerful, friendly and aesthetically pleasing instructional space environment.

1302.028

The brightness goals stated above assume an illumination level of range 30 to 150 footcandles on the reference task produced by combined radiant energy of daylight and any system of electric lighting used.

1302.03 Light Sources

1302.031

Electric lighting systems should be evaluated on the basis of the following items.

A. The lighting should produce a uniform distribution of shadow-free and glare-free illumination with the

intensities necessary to maintain an acceptable brightness balance between the tasks and other surfaces within the total visual environment.

B. Consideration should be given to probable deterioration of service efficiency under prevailing conditions of school operation and maintenance.

C. Lighting fixtures should not produce a surface brightness on the fixture or on the ceiling that exceeds ten times the task brightness.

1302.032

Where daylight supplements artificial illumination, controls (preferably fixed) should be as follows.

A. Exclude direct sunlight and at the same time admit about 15 percent of the outdoor brightness

B. Provide a surface free from excessive brightness or glare

C. Permit ease of maintenance

1302.04

Surfaces within rooms should be finished in accordance with the following items.

1302.041

Ceilings should provide a 70 to 90 percent reflection factor, flat, white surface.

1302.042

Upper walls (from wainscot or dado upward) should provide a surface with a reflection factor of at least 60 percent.

1302.043

Lower walls (from wainscot or dado downward) should provide a surface with a reflection factor of at least 60 percent.

1302.044

Where maintenance conditions permit, it is considered good practice to finish entire walls, from ceiling to floor, with surfaces having a 60 percent reflection factor.

1302.045

Finishes should be flat or matte on all interior surfaces, particularly at eye level or above.

1302.046

Trim should provide a surface with a 40 to 60 percent reflection factor.

1302.047

Desks and equipment should have finishes that fall within the 35 to 50 percent reflection factor range.

1302.048

Floor finishes should fall within the 30 to 50 percent reflection factor range.

1302.049
Chalkboards are available with practicable maximum reflection factors of 20 percent. This high factor range is practical only when the level of illumination is sufficiently high to overcome the loss in visibility due to reduced brightness difference between chalk and the light colored board.

1303 SONIC ENVIRONMENT

The school facility is designed, constructed, equipped and maintained in a manner which provides for the control of sound within a particular space so that internal sound can be heard well and unwanted sounds are prevented from intruding from the outside environment.

1303.01 General

1303.011
A sonic engineer should be consulted when designing educational spaces.

1303.012
Although it is often impossible to prevent the creation of unwanted noises, it is both possible and practicable to prevent excessive noises which inhibit hearing and create distractions.

1303.02 Zoning

1303.021
The concept of zoning as related to sound engineering revolves about the basic premise that prevention is better than correction.

1303.022 Site

A. Every effort should be made to acquire a site that has a relatively low ambient noise level.
B. If a noisy site cannot be avoided, then it is necessary to locate the school's noisy activities nearest the outside noise source.
C. Planting of trees, bushes and shrubs around the perimeter of the site, particularly on noisy sides, will provide added noise reduction.

1303.023 The Building

A. It is important, where possible, to group noisy activities with other noisy activities, such as playgrounds, gymnasiums, music areas and shops.
B. Administrative facilities, general instructional spaces, media centers and other similar areas should be grouped together in a quiet zone somewhat removed from noisy activities.
C. Intermediate between the two extremes may be typing or bookkeeping rooms where machines are used, the cafeteria and home economics facilities.

D. If these various activity levels are not adequately separated by space, then it is necessary to intercept these noises to the degree necessary to prevent them from conflicting with each other.

1303.024 Instructional and Service Facilities

A. Administrative Offices
   1. Noise reduction by treatment, in the form of absorbent materials, is invariably mandatory to keep speech levels low and to keep sound from office machines and traffic noise at a minimum.
   2. It is advisable to provide sound-intercepting barriers to keep noisy activities in some administrative rooms from interfering.

B. Corridors
   1. Unless adequate noise reduction treatment is provided in corridors, they act as communication channels conveying a sound or noise throughout the building.
   2. Acoustical treatment in such passageways should be placed on the ceiling and may also be placed on walls. Carpet is a good noise reducer.
   3. Undesirable noise may be reduced by proper attention to non-parallel floor or walk surfaces and ceiling surfaces.

C. Instructional Spaces
   1. Instructional spaces should be treated for noise reduction.
   2. The degree of sound interception requiring instructional space boundaries depends upon adjacent activities.
   3. In the case of certain business education rooms, noise reduction treatment is to be preferred over critical reverberation control, and the boundaries must have a higher degree of sound interception, particularly where such rooms are near or next to the more academic-type instructional spaces.

D. Media Center
   1. Noise reduction treatment, coupled with adequate sound interception, is a primary requisite in this area, where there may be disturbing and/or distracting sound from a nearby activity.

E. Shops
   1. Adequate noise reduction treatment is essential, and adequate interception should be provided in the boundaries.
   2. Where doors are left open, shop layouts must be oriented so that openings are away from academic and similar activities.

F. Cafeterias
   1. An environment with a somewhat critical reverberation control (with particular stress upon sound absorption in the high pitches) is desirable.

2. Kitchens should have considerable noise reduction treatment because the noise from a reverberant kitchen can be conducted to the dining room area.

G. Gymnasiums
   1. An environment with a somewhat critical reverberation control is usually desirable.
   2. Where facilities are near quiet areas, adequate interception must be built into the boundaries.

H. Toilets

   Better-planned schools provide noise reduction treatment in rest rooms, as well as special sound interception measures within the room boundaries.

I. Music Rooms
   1. Choral, band and orchestral rehearsal rooms require critical reverberation control over a wide range of pitches.
   2. Maximum noise reduction is not the correct solution.
   3. For information concerning the environment in rehearsal rooms, see Geerpes, Harold P, Planning and Equipping Educational Music Facilities, Reston: Music Educators National Conference.
   4. Individual practice rooms are usually most satisfactory when provided with maximum noise reduction treatment.
   5. Maximum sound interception is advisable.
   6. Special attention should be given to insure that strategic walls are not reduced in interception by the insertion of clocks, electrical outlets or ventilating grills.
   7. Ducts in ventilating systems should be given special treatment to prevent transmission of sound.

J. Auditoriums
   1. From the standpoint of noise control, the auditorium is one of the most critical rooms in the entire unit or plant.
   2. The level of noise (including that from the ventilating system, heating system, water supply and external sources) must be kept low.
   3. Adequate barriers must be provided to intercept sounds from such sources as traffic and mechanical equipment rooms.
   4. The proper acoustical environment of the auditorium is a highly scientific problem, therefore, technical assistance should be secured in order to provide a reasonable environment.

1304 SPATIAL AND AESTHETIC ENVIRONMENT

The school facility is designed, constructed, equipped and maintained in a manner which provides an efficient and attractive facility.

1304.01
It is usually recognized that an impression of beauty - the aesthetic aspect of conditioning spaces, both indoors and outdoors - should be the building's primary effect upon occupants and visitors.

1304.02
The school plant, when truly functional, is beautiful because it fulfills, not only a physical function, but also an emotional function.

1305 BALANCED CONDITIONING OF SPACES

1305.01
Designing to achieve adequate and economical conditioning of educational spaces must be done by persons highly specialized in each of the separate major fields involved.

1305.02
Factors involved in the conditioning of spaces for education include the following items.

A. Spatial
B. Thermal
C. Visual
D. Sonic
E. Aesthetic

1305.03
A crucial problem in good planning is to be aware of, and to guard against, the disposition of each design specialist to overdo the solution in his particular field. Balancing solutions among the specialized design fields becomes one of the most important responsibilities of the administrator and architect.

1305.04
Balance in providing adequate space, and in conditioning it for safety and educational usefulness, results from a defined and executed school district policy.

1305.05
School district policy should require, as a minimum, that school house conditioning be comparable to that used in non-school structures, such as homes, offices, government buildings, churches, clubs and lodge halls.

1305.06
If comparable structures generally do not meet acceptable criteria, then it may be that school conditioning should set an example.

1305.07
When balance is threatened by inadequate funds or high bids, a defensible procedure in making plan and specification cutbacks is one based upon priorities carefully established before the actual time for decisions. Such a list should also identify those

provisions that should not be deleted nor seriously compromised because of their importance to the following items.

A. The safety, health and comfort of teachers and students
B. The operational success of the educational program
C. The protection of the investment in the building
D. The maintenance and repair budget

1305.08

Reductions in building areas should be made on the basis of complete facilities and services, rather than by reduction that is below good practice of the dimensions of facilities retained. Temporary elimination of some spaces is preferred to overall reduction in quality.

1305.09

The complexities of school planning require nothing less than the highest available architectural, engineering and technical competence in the various environmental areas if planners are to realize the long-term aims of comfort, efficiency, economy, as well as reduce the initial cost of construction.

1306 FIRE INSURANCE

1306.01

Some economy in the life time operation and maintenance of a building may be achieved when future fire insurance assessments are considered in the planning stages.

1306.02 Items Affecting Insurance Premiums

A. The building's exposure to adjacent properties not under the jurisdiction of the Board of Education
B. The location and treatment of "hot spots" - potential hazards - within the building
C. The degree of internal and external protection, such as heat and smoke detectors, sprinklers, extinguishers and alarms strategically located, accessibility of hydrants and fire fighting equipment
D. The degree of fire-resistance of component construction materials and of the building totally

1306.03

For new construction, insurance values and costs can be estimated by having plans and specifications reviewed by the West Virginia Board of Risk and Insurance Management.

1307 ROOF SLOPES

1307.01

Unless waived in exceptional circumstances, all roof areas shall have a minimum slope of 1/4" per foot. This shall include roofs with built-up membrane, as well as single-ply membrane systems.

1400 RELATED INFORMATION - STATUTES

Reference: 8.

1400.01

School construction or improvement projects are frequently influenced or regulated by various statutes of the Code of West Virginia. Listed are sections with which school personnel should be familiar.

CHAPTER	ARTICLE	SECTION	SUBJECT
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10	2A	1-26	Athletic Establishments
11	8	5-32	Levies
11	10	11d	Prerequisite to final settlement with state or political subdivision contractor; penalty
13	1	2-4	Bond Issues For Original Indebtedness
16	1	7	Board of Health; Promulgation of rules and regulations
16	1	9	Supervision over local sanitation
18	2	26	Establishment of multi-county regional educational service agencies
18	3	9a	Authority of state superintendent as to fire hazards and safety of buildings
18	4	10	Duties (5): Close temporarily a school when conditions are detrimental to the health, safety or welfare of the pupils
18	4	11	Other powers and duties (3): Recommend for condemnation buildings unfit for school use
18	5	5	County Board of Education: Exemption of school property from legal process & taxes
18	5	6	Validation of titles to land in possession of board
18	5	7	Sale of school property; oil and gas leases
18	5	8	Condemnation of land necessary for educational purposes
18	5	9	Schoolhouses, buildings and equipment
18	5	10	Approval by state board of plans & specifications for buildings
18	5	11	Joint establishment of schools
18	5	12	Bond of contractors
18	5	13	Authority of boards generally: consolidation; transportation of pupils
18	5	13a	School closing or consolidation
18	5	25	Duties of superintendent as secretary of board (3) & (4)
18	5	36	Payment for fire services on public school property

CHAPTER	ARTICLE	SECTION	SUBJECT
18	6	1	Driver Education
18	9	1-8	School Finances
18	9D	1-16	School Building Authority
18	10F	1-6	Disabled Persons and Public Use Buildings and Facilities: Elimination of structural barriers in public buildings
21	5A	1-11	Wages for Construction of Public Improvements
29	3	19	Fire Prevention and Control Act: protection
29	12	5a	State Insurance: WV Board of Risk and Insurance Management
30	12	2	Use of title "architect"
30	13	13	What plans of state political sub-divisions to be approved by registered engineer
38	2	39	Public buildings; bond of contractor; no lien in such case
47	5	1-3	Safety glazing material in hazardous locations
54	1-2	1-11	Eminent domain
61	10	15	Pecuniary interest of county & district officers, teachers and school officials in contracts; exception; offering or giving compensation; penalties

1401 INCLUSION OF PLANS IN COMPREHENSIVE EDUCATIONAL FACILITIES PLAN (CEFP)

1401.01

Regulations of the West Virginia Department of Education and West Virginia Code §18-9D-16 require all plans for new construction, additions or renovations, closings and grade reconfigurations to be included in the CEFP. The CEFP must be amended to include projects deemed necessary by the county board of education but not included in the original CEFP.

In order to ensure that the state board be fully informed about proposed amendments to comprehensive plans, the following conditions must be satisfied:

A. All requests for amendments to CEFPs, including budget amendments, must be signed by the county superintendent and must show the date such amendments were approved by the county board of education.

B. Changes in comprehensive plans may not be implemented prior to state Board of Education approval and, for those projects receiving SBA funds, SBA approval.

C. All amendments must be fully explained; substantive changes must be accompanied by complete justification with data addressing the subjects of enrollment, facilities, finance, personnel, transportation and educational programs.

D. The proposed amendments shall include evidence of citizen awareness of changes in the comprehensive plan.
E. Approval of the closure by the state Board of Education automatically amends the CEFP and the Regional CEFP. However, this does not assure SBA funding of a related project.

1401.02 Regional Comprehensive Educational Facilities Plan Approval Process

Each RESA shall develop a preliminary regional CEFP that addresses the facility needs of each county in their region. The CEFP shall be in accordance with the regulations of the state Board of Education and SBA.

1401.03 Submission of Design Development Plans and Specifications for Individual Projects

Once the regional comprehensive plan has been approved, individual project planning should be implemented. Under statutory authority and regulations, approval of plans and specifications for the construction of new buildings, additions, and renovations is required by the state Board of Education, SBA when SBA funds are utilized, West Virginia Department of Health, West Virginia Department of Highways when new construction, and the state Fire Marshal's Office. The Local Education Agency (LEA) and project architect shall be responsible for securing approval of design development plans from each of these agencies.

1401.04 Plan Review Process - Design Development Plans

The LEA and project architect are responsible for distributing educational specifications, design development drawings, outline specifications and P-1 form for project approval. Documentation must be provided to the state Department of Education, and when applicable to SBA. The LEA will distribute plans to the state regulatory agencies in the following manner.

A. One set of plans and specifications and the application for project approval (P-1) to the West Virginia Department of Education
B. One set of plans and specifications to the West Virginia Department of Health
C. Two sets of plans and specifications to the West Virginia Fire Marshal's Office
D. If new, one set of plans and specifications to the West Virginia Department of Highways
E. If SBA funds are being utilized, one set of plans and specifications to SBA
F. See Chapter 14, Section 1401.06 regarding plan approvals.

1401.05 Interagency Review

Each month a meeting, conducted by the coordinator of school transportation and facilities of the state Department of Education, is held with representatives of the state regulatory agencies. Individual project plans and specifications are reviewed and discussed, and the comments of each agency reviewer are noted. Plans and specifications not received on or before the

first Wednesday of the month will not be reviewed at the current month's meeting. These will be discussed at the next monthly meeting. Staffing of the state regulatory agencies is such that in many cases review cannot be accomplished within the 30 day time frame.

Therefore, in order to insure review and approval prior to planned construction, a 60 day period should be set aside for plan review. If all requirements have been met, the project is then recommended to the state Board of Education, and SBA if applicable, for approval. After the meeting, the county superintendent is notified of the status of his project. Projects shall not be advertised, contracts awarded, or construction started until the plans and specifications are revised to conform with the review comments.

1401.06 Plan Review Process - Final Plans

Approval of preliminary, design development or final construction plans and specification must always be contingent upon final review by the appropriate regulatory and funding agencies. The procedures outlined in Chapter 14, Sections 1401.03, 1401.04 and 1401.05 must also be followed in the submission of final plans.

1402 CONTENT OF DOCUMENTS SUBMITTED FOR APPROVAL

1402.01

Design development plans, educational specifications, and building outline specifications should include the following items.

A. Plot plan which includes size and shape of site, orientation, general topography, location of existing and new buildings, streets and highways, means of sewage disposal, and tentative development of the site

B. Floor plans showing existing and new buildings (minimum scale of 1/16 inch), type of wall, floor, partition, roof and stair construction, size and purpose of rooms, stairs, corridors, doors, windows, plumbing fixtures and built-in equipment, and probable future additions

C. Elevations, at least one side of the building, overall dimensions, finished floor and ceiling levels, finished outside grade level, windows, doors, steps, areas, retaining walls and materials

D. Sections explaining any conditions not made clear on other drawings

E. Proposed service connections, including gas, water, electricity and sewer, and location of wells and sewage disposal system, if any

F. Outline specifications to augment information shown on drawings

G. Description of how the current facility does not meet the following goals, and how the proposed project will meet them

1. Student health and safety needs

2. Economies of scale, including compatibility with similar schools that have achieved the most economical organization, facility utilization, and pupil-teacher ratios
3. Reasonable travel time and practical means of addressing other demographic considerations
4. Multi-county and regional planning to achieve the most effective and efficient instructional delivery system
5. Curricular improvement and diversification, ie., computerization and technology, and advanced senior courses in science, math, language arts, and social studies
6. Innovations in education, ie., community-based programs and year-round schools
7. Adequate space for projected enrollment

1402.02 Final Plans and Specifications

These shall include the following:

A. Site or plot plan - size and shape of site, adjoining streets, highways and walks, position of existing and new buildings on the site, location and connections of all service lines, finish contours with finish grades at building and elevation of first floor rooms, location of wells and sewage disposal system, if any, general landscaping and location of walks, driveways, parking areas and exterior steps

B. Floor plans showing existing and new buildings (each floor and roof at not less than 1/8 inch scale), footings and foundations, dimensions and schedules showing type and size of each door and window, complete figures so that size and thickness of walls and partitions can be readily determined, level of finished floors, furred walls and ceilings, door swings, location of built-in equipment, floor construction, run, dimensions and spacing of joists and girders, notation of safe live loads, and materials

C. Elevations for all sides (same scale as architectural plans)

D. Sections (same scale, or larger, as that of floor plans), 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 pollution

E. Details (larger scale) showing 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, chalkboard, bulletin board, trim, chalk troughs, built-in equipment, counters, cupboards and drawers, and wardrobes, unless of standard manufacture

F. Plumbing plans, including foundation drain lines, storm and sanitary sewer lines, complete water supply system and location of all plumbing fixtures, including hose cabinets and sewage disposal system

G. Heating and ventilating plans showing size and type of heat unit, with all connections, pumps, all supply and return lines with sizes, valves and slopes, motors and fans, including types, periphery speed, capacity and air velocity in ducts, and locations, sizes and capacity of all ducts, grilles and ventilators

H. 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, 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

I. Structural plans showing all concrete and steel columns, beams, trusses, girders, joists, slabs and reinforcing, fireproofing of structural members, details, diagrams and schedules as required for a complete understanding of plans

J. 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, toilet room accessories and lockers and all other permanent equipment forming an integral part of the building.

1402.03 Application for Approval of Preliminary and Final Plans and Specifications - Form P-1

1402.04 Exceptions Process

Local educational agencies may appeal any recommendation the joint interagency review committee or its professional staff makes. A final appeal of any committee decision to the state Board of Education is available to the local agency, which must notify by letter to the coordinator stating its intention.

NOTE: Fire Code appeals must be made to the state Fire Commission.

1403 ARCHITECTURAL AREA AND VOLUME OF FACILITIES

1403.01

The "Application for Approval" (form P-1) requires data on proposed buildings. The information is necessary for the Department to make space and cost comparisons and disseminate construction data to agencies and interested persons. If area and cubage data are to be valid in comparisons, the same method of computation must be used.

1403.02 Architectural Area of Buildings

A. The architectural area of a building is the sum of the areas of all floors of the building, including: basement, mezzanine, intermediate floored tiers and penthouse of

headroom heights, measured from the faces of exterior walls or from the center line of walls separating buildings.

B. Covered walkways, open roofed-over areas that are paved, porches and similar spaces shall have the architectural area multiplied by an area factor of 0.50.

C. The architectural area does not include such features as pipe trenches, exterior terraces or steps, chimneys or roof overhangs.

1403.03 Architectural Volume of Buildings

The architectural volume (cube or cubage) of a building is the product of the total areas defined above times the height from the under side of the lowest floor construction system to the average height of the surface of the finished roof above.

1403.04 Energy Analysis

An analysis documenting the availability and costs of energy types and comparing various space conditioning systems shall be utilized as a basis for the selection of each. Also, an energy analysis to determine the BTU/Gross S.F./Year shall be submitted. The architect/engineer may submit printouts of recognized computer programs to satisfy this requirement.

1404 STANDARDS FOR ARCHITECTURAL SERVICES

1404.01

The project architect will provide services, plans and specifications which may be executed within the project budget. It becomes the architect's responsibility to redesign a project at no cost to a board of education in order to construct a facility within the budget and to comply with county boards of education and state Department of Education requirements.

1404.02

It shall be the responsibility of the project architect to assure that the project meets the requirements of this policy and to assure the legitimacy of bidders.

1404.03 Basis for Determining Architect's Fees

A. The architect's compensation for the basic services discussed above is usually based on one of the following methods:
   1. Percentage of construction cost of the work
   2. Fixed lump sum fee
   3. Professional fee plus reimbursement of expenses
   4. Multiple of direct personnel expense
   5. Salary, per diem or hourly rate

B. Counties may contact the SBA with questions concerning architectural services

1404.04 The Architect's Agreement

No services should be rendered by the architect without a definite understanding as to the scope of services and the fee basis. This contract is for the protection of both the client and the architect.

1405 TRADITIONAL TASKS PERFORMED IN SCHOOL BUILDING PROGRAMS

1405.01

Tasks listed are those generally performed during the completion of a satisfactory school building project. The sequence of tasks is not always the same, nor is the time allotment always the same.

1405.02

Care should be exercised by the owner (County Board of Education) when undertaking any project to assure that all activities are in accordance with statutory and regulatory provisions and that the investment is adequately protected at all times.

1405.03

Particular caution is required in Phase V if the board is acting as its own contractor, or if maintenance employees are constructing the building or addition.

TRADITIONAL TASKS

Approximate Time Allotted	Task	Responsibility
PHASE I	Anticipates School Building Needs	O
	Seeks Aid of Education Specialist	O
24 to 30 Weeks	Completes Preliminary Survey Determining Remodeling and Construction Needs	O-S
	Acts to Secure Funding	O
	Seeks Legal Counsel on Procedures to Secure Levy or Bond Monies (when applicable)	O
	Initiates Preparation of Educational Specifications	O
PHASE II	Seeks Architectural Services	O-S
	Seeks Construction Manager Service	O-S
	Arranges Preliminary and Final Screening of Architect & Construction Manager	O-S
	Selects Architect and Construction Manager	O-S
	Negotiates Architect and Construction Manager's Contract	O-A-S-CM
12 to 20 Weeks	Sets Production Time Limits For Building Design & Construction	O-A-S-CM
	Verifies Availability of Utilities and Seeks Necessary Approvals	O-A-CM
	Reviews Potential Sites	O-A-S
	Selects and Acquires Sites	O
	Surveys Site and Performs Subsoil Investigations	O-A-CM

C - Contractor
O - Owner (Board of Education)
A - Architect
S - SBA Representative (when applicable)
E - Department of Education
CM - Construction Manager (when applicable)

TRADITIONAL TASKS

Approximate Time Allotted	Task	Responsibility
PHASE II (cont'd)	Analyzes Educational Specifications and Establishes Building Program	O-A-S-CM
	Prepares Schematic Design Documents	A
	Reviews Schematic Design in Light of Educational Specifications	O-A-S
	Prepares Preliminary Estimate of Probable Construction Costs	A-CM
	Reviews Schematic Designs and Preliminary Cost Estimates	O-S
	Prepares Preliminary Design and Layout of Furniture and Equipment	O-A-S
	Prepares Design Development Documents	A
	Prepares Outline Specifications	A-CM
	Selects Equipment	O-A
	Updates Preliminary Estimate of Probable Construction Costs	A-CM
	Submits Design/Development Document for Preliminary Approval by State Agencies	O-A-CM
	Confers on Design Development Review Comments	O-A-S-CM
	Revises Design Development Documents (if required)	A
	Approves Design Development Documents	O-S-E
	Authorizes Preparation of Final Plans and Specifications (Bidding & Construction Documents)	O-S

C - Contractor
O - Owner (Board of Education)
A - Architect
S - SBA Representative (when applicable)
E - Department of Education
CM - Construction Manager (when applicable)

TRADITIONAL TASKS

Approximate Time Allotted	Task	Responsibility
PHASE III	Approves Special Consultant (if required)	O-A-S
	Confers on Project Specifics	O-A-S-E-CM
	Prepares Final Construction Drawings (Consisting of Drawings and Specifications)	A
16 to 24 Weeks	Prepares Final Estimate of Probable Construction Costs	A-CM
	Verifies Construction Time Limits	O-S-CM
	Submits Preliminary Application for Project Approval (P-1) and Final Documents for Approval of State Agencies and Owner	O-A
	Confers on Construction Documents	O-A-S-E-CM
	Revises Construction Documents (if required)	A
	Seeks Approval of Contract Documents by Legal Advisor (if required)	O
	Approves Final Construction Documents	O-E-S
PHASE IV	Advertises for Bids	O
	Issues Bid Documents	A
	Conducts Pre-Construction Meetings for Bidders	O-A-S-CM
	Receives Bids	O-A-S-CM
3 to 5 Weeks	Tabulates and Reviews Bids	O-A-S-CM
	Advises on Contract Award	A-S-CM
	Awards Construction Contract	O

C - Contractor
O - Owner (Board of Education)
A - Architect
S - SBA Representative (when applicable)
E - Department of Education
CM - Construction Manager (when applicable)

TRADTIONAL TASKS

Approximate Time Allotted	Task	Responsibility
	Issues Notice to Proceed Letter to Contractor	A
PHASE V	Selects Furniture	O-A-S-CM
	Reviews and Approves Shop Drawings and Submittals	A-CM
40 to 72 Weeks	Makes Adjustments and Corrections of Shop Drawings and Submittals (if required)	O-A-C
	Constructs Building	C-CM
	Conducts Timely Construction Progress Meetings	O-A-S-CM
	Reviews & Observes Construction	O-A-S-CM
	Prepares Field Observation Reports	A-S-CM
	Confers and Accepts or Rejects Construction Deviations	O-A-S-C-CM
	Approves Construction Certificates for Payment	O-A-S-CM
	Pays Construction Costs Monthly	O-S-C
	Reviews Construction Reports, Progress and Delays	O-A-S-CM
	Prepares and Signs Change Orders Requests	A-C-CM
	Approves and Countersigns Change Orders	O-CM
	Prepares List of Construction Deficiencies (Project Punch List)	O-A-S-CM
	Accepts Building as Substantially Complete	O-A-S-CM

C - Contractor
O - Owner (Board of Education)
A - Architect
S - SBA Representative (when applicable)
E - Department of Education
CM - Construction Manager (when applicable)

Approximate Time Allotted	Task	Responsibility
PHASE V (cont'd)	Receives Special Guarantees and Warranties from Contractors	O-A
	Instructs Building Owners Staff in Use and Operation of Building	C-CM
	Makes Final Inspection	O-A-S
	Accepts Building as Complete	O-S
	Assembles Project Close Out Documentation and Submits Close Out Documentation to Owners	A-C-CM
	Arranges Dedication	O-A-S
	Makes Final Payment	O-S
	Prepares Application for Final Project Approval (P-1) and Submit to State Agency	O-A
	Prepares Certificate for Project Completion (BP-13-A) and Submit to State Agency	O-A
	Performs Final Walk-through Review of Project and Signs Off On BP-13-A Certificate	O-A-C-E-S
	Assumes Maintenance	O
PHASE VI	Performs Walk-through Inspection of Project Prior to the Expiration of Guarantees Warranties	O-A-C-CM

C - Contractor
O - Owner (Board of Education)
A - Architect
S - SBA Representative (when applicable)
E - Department of Education
CM - Construction Manager (when applicable)

1406 FINAL INSPECTION

1406.01

When a project is completed, the county must complete a Certification of Project Completion, form BP 13-A (See Appendices) and submit it to the Office of School Transportation and Facilities, and SBA when applicable. If the amounts on the BP 13-A differ from the project budget amount in the regional CEFP, the plan must be amended in order to reconcile any difference. Following receipt of the BP 13-A, the appropriate agencies will contact the county and schedule a final inspection. A final inspection of completed construction shall also be conducted by the project architect, the contractor and the state Fire Marshal, and the SBA project representative when applicable.

NOTE: A certificate of occupancy must be acquired from the Fire Marshal's Office before any completed construction can be occupied.

1406.02

Upon completion of any necessary corrections and subsequent inspection, official final acceptance of the project will be made.

1406.03

For the sake of illustration, the following list contains items which should be examined during the final inspection to assure compliance with final plans and specifications. Examine for proper type, location, installation, finish, cleanliness, mounting heights and operation.

SITE AND DEVELOPMENT

Finish Grading
Landscaping
Drives
Fencing
Seeding
Walks and Ramps
Parking Areas with Curb Cuts
Playground

BUILDING EXTERIOR

Foundation
Window & Door Frames
Railings
Flashing
Drains
Wall Surfaces
Glass & Glazing
Roof Surface
Trim
School Name

BUILDING INTERIOR

Floor Surfaces
Ceiling Surfaces
Doors & Frames
Thresholds
Chalkboards
Wood & Metal Trim
Wall Surfaces
Acoustical Materials
Door Hardware
Window Hardware
Bulletin boards
All Surface Finishes

PLUMBING, WATER, GAS

Fixtures
Cleanouts
Special Toilets
Shutoffs
Drainage System

ELECTRICAL SERVICE

Switches & Plates
Lighting Fixtures
Clock & Program Systems
Telephone Systems
Runs
Panels
Fire Alarm System
Heating & Ventilating
Equipment
Controls
Emergency Lighting

EQUIPMENT AND FURNISHINGS

Lockers
Refrigeration
Display Cases
Elevators
Extinguishers
Fountains
Kitchen Equipment

1500 STANDARDS FOR EXISTING FACILITIES

The following standards are required for all existing facilities in operation during the 1985-86 school year and thereafter.

1500.01
Buildings, grounds, furnishings and equipment are clean and free from debris.

1500.02
Buildings, grounds, furnishings and equipment are free from observable safety hazards.

1500.03
The county board of education has reviewed the most recent reports of state regulatory agencies and has a plan for corrective action.

1500.04
The county board of education has a policy on the efficient use of energy.

1500.05
All toilet facilities must contain hot and cold water mixing faucets in workable condition and individual stalls with doors on all toilets. Soap, paper towels and toilet tissue must be available to students at all times. All toilet entrance doors must be self closing.

1500.06
All custodians' closets must contain service sinks with hot and cold water.

1500.07
All schools must be attractively painted and illuminated in a manner which most effectively contributes to an environment of visual accuracy and comfort.

1500.08
The county board of education has a policy providing for the eradication and/or containment of asbestos in public school facilities and has on file in each school facility an approved asbestos management plan for that school.

1500.09
The heating, ventilating and air-conditioning systems in all school facilities are maintained in a manner that provides maximum comfort and economy.

1500.10
Adequate drinking fountains in workable condition are available to the school population.

1500.11

The exterior of the building, including windows, doors and roof, is free of air and water infiltration.

1500.12

The county has on file with the state Department of Education an approved current comprehensive educational facilities plan.

1500.13

The county's comprehensive educational facilities plan is properly amended before any renovation, addition or new construction is started.

1500.14

Renovations, additions and new construction are completed in accordance with the most current edition of "Handbook on Planning School Facilities."

APPENDICES

Sample Time Line Projections (100.016)

Johnson County Schools
Facility Planning Time Line Projections
Dates indicate years projects are to start.

1990	Addition	Smithson Elementary School
	Renovation	Walters Elementary School
1991	Roof Replacement	Clark Jr. High School
1992	New Construction	East Johnson High School
1993		
1994	Rest Room & Kitchen Modernization	Edison Elementary School
	Multi-purpose Room	Washington Elementary School
1995		
1996	Consolidation/ Addition	Roane Elementary closed - James Elementary Addition
	Consolidation	Close Ellison and Spangler Elementary Schools - Move to Smithson Elementary School
1997		
1998	Addition	West Johnson High School
1999	Renovation/ Addition	William Bryant Junior High School

1100r/37&38a

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

AND

WEST VIRGINIA DEPARTMENT OF EDUCATION

FACILITY CLASSIFICATION FORM

COUNTY: _____ DATE: _____

FACILITY NUMBER	FACILITY NAME	CURRENT ENROLLMENT	CURRENT GRADE CONFIGURATION	CLASSIFICATION	DESCRIBE FUTURE USE TRANSITIONAL FACILITIES

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 period but will experience a change in its grade configuration or use.

F = Functional: A school facility that is projected for closure in 1995 or thereafter during the 10 year planning period.

= Closure: A school facility that is projected for closure before 1995.

SBA/WVDE 116
0168a/80&81a
Rev. 12/11/90

Adoption of Resolution
School Consolidation and Student Transportation

Upon motion by Mr. Hall, second by Mrs. Seago, the board adopted the following resolution and asked that it be made a part of the official minutes:

WHEREAS, many school systems in West Virginia are having financial difficulty in balancing operating budgets; and

WHEREAS, student enrollments statewide are continuing to decline; and

WHEREAS, consolidation of schools provides counties the potential to reduce costs by reducing the number of facilities and more efficiently utilizing personnel; and

WHEREAS, many students live in the rural, sparsely populated areas of West Virginia; and

WHEREAS, there appears to be a concern that consolidation may result in students spending an inordinate amount of time in transit to school; and

WHEREAS, the statutory responsibility for approval of school closures lies within the purview of the West Virginia Board of Education.

THEREFORE BE IT RESOLVED BY THE WEST VIRGINIA BOARD OF EDUCATION AS FOLLOWS:

The West Virginia Board of Education recognizes that there may be cases where consolidation of schools can be viewed as a positive action. Decisions about specific proposals to consolidate schools will be based upon whether consolidation reflects the following three priorities:

1. Improves educational programs for students.
2. Avoids inappropriate increases in travel time.
3. Achieves efficient utilization of personnel.

In general, the West Virginia Board of Education will consider more favorably, when necessary, well-documented proposals which involve significant extension of travel time for older students, that is, middle school, junior high school and high school age students.

However, the West Virginia Board of Education will review very carefully proposals which involve additional transportation time for younger students, that is, early childhood, primary or elementary age, in order to determine the potential impact on students and whether the consolidation is reasonable and practical.

The West Virginia Board of Education agrees to include, as part of its legislative program, requests to increase funding for schools in sparsely populated areas where consolidation of early childhood and primary grade students is not feasible due to unreasonable travel time and conditions.

BE IT FURTHER RESOLVED, that this resolution be made a part of the official minutes of the board.

Adopted unanimously this 9th day of March, 1990

Virgil C. Cook

Virgil C. Cook, President
West Virginia Board of Education

WEST VIRGINIA DEPARTMENT OF EDUCATION
AND
SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA
APPLICATION FOR PROJECT APPROVAL

West Virginia Department of Education
1900 Kanawha Boulevard East, Bldg. #6 Room B-264
Charleston, West Virginia 25305

School Building Authority of West Virginia
2300 Kanawha Boulevard, East
Charleston, West Virginia 25311

COUNTY _____
SCHOOL NAME _____
LOCATION _____

ESTIMATED STARTING DATE _____
ESTIMATED COMPLETION DATE _____
GRADES HOUSED _____ ENROLLMENT _____

PROJECT DESCRIPTION _____

SITE ACRES _____ USEABLE ACRES _____
ENERGY EFFICIENCY (BTU/Sq.Ft./Yr) _____
WATER SOURCE _____

GROSS BUILDING AREA NEW CONSTRUCTION _____
SQ. FT. AFFECTED BY THIS PROJECT _____
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			
S AND WINDOWS			
ISHES (Floors, Walls, Ceilings, Painting)			
ECIALTIES (Chalkbd, Tbd., Locker, Toil Acc.)			
EQUIPMENT (Food Service, Etc.)			
FURNISHINGS (Seating, Casework, Etc.)			
SPECIAL CONSTRUCTION			
CONVEYING SYSTEMS (Elevators, Etc.)			
MECHANICAL (HVAC, Plumbing, Etc.)			
ELECTRICAL			
OTHERS (Describe)			
GRAND TOTALS			
FUNDING			
COUNTY SOURCE			
SBA NET NEED			
FEDERAL SOURCE			
GRAND TOTALS			

AGENCIES APPROVALS	RECEIVED	APPROVED	RECEIVED	APPROVED	RECEIVED	APPROVED
STATE DEPARTMENT OF HIGHWAYS						
STATE DEPARTMENT OF HEALTH						
STATE FIRE MARSHAL						
SCHOOL BUILDING AUTHORITY						
STATE BOARD OF EDUCATION						

_____ Signature of Architect or Engineer

_____ Signature of County Superintendent

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 _____
Project/School Name _____
Project Number _____
Enrollment _____
Teaching Stations _____

Substantial Completion Date _____
Final Inspection Date _____
Fire Marshal - Date of Occupancy Permit (If Required) _____

SOURCES OF FUNDS:

State Funds
SBA "Net" $_____
SBA "Needs" $_____
Local Funds (Bond) $_____
Local Funds (Other) $_____
Vocational (State) $_____
Vocational (Fed) $_____
Federal (Other) $_____
Other Funds (List) $_____
_____
_____
_____
TOTAL FUNDS $_____

SUMMARY OF PROJECT DATA:

Sq. Ft. in Building _____
Site Acquisition $_____
Site Preparation $_____
Building Construction Costs - Total $_____
* Renovation Costs $_____
Building Construction Costs-Per Sq. Ft $_____
Building Renovation Costs-Per Sq. Ft $_____
Moveable Equip. Cost $_____
A & E Fees $_____
** Miscellaneous Costs $_____
TOTAL PROJECT COSTS $_____

*A project may include both new construction/addition and renovation costs.
**Geotech, Site Survey, Deed Search, Technology Equipment (Explain on Back)

_____ _____
Architect Date

_____ _____
Contractor/Construction Manager Date

_____ _____
Clerk-of-the-Works Date

_____ _____
County Superintendent Date

***Inspected this date by a representative of the School Building Authority or the West Virginia Department of Education.

_____ _____
Signature Date

***SBA funded projects must have a final inspection by an SBA representative.

WVDE BP-13-A
0075c/35&36a
Rev. 3-21-91

REFERENCES

REFERENCES

1. A Master Plan for Public Education, West Virginia Board of Education, Charleston, West Virginia, 1982-83.

2. Guide for Planning Educational Faciilities, The Council of Educational Facilities Planners International, 941 Chatham Lane, Suite 217, Columbus, Ohio 43221.

3. West Virginia Board of Education - Policy 2510, Charleston, West Virginia.

4. School Laws of West Virginia.

5. American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018.

6. National Flood Insurance Program, Federal Emergency Management Agency, 105 South Street, Liberty Square Building, Philadelphia, Pennsylvania 10506.

7. Section 504 - Rehabilitation Act of 1973 (29 U.S.C. 794), Department of Health, Education and Welfare, Washington, D.C.

8. West Virginia Board of Education - Policy 2419, Charleston, West Virginia.

9. Uniform Federal Accessibility Standards.

10. Individuals With Disabilities Education Act (IDEA).

11. Americans With Disabilities Act.

12. Building Officials and Code Administrators International - Basic Building Code (B.O.C.A.), 17926 South Halsted Street, Homewood, Illinois 60430.

13. State Building Code of West Virginia (Latest Edition).

14. National Electrical Code - Supplement A, National Fire Association, Batterymarch Park, Quincy, Massachusetts 02269.

15. West Virginia Fire Code, Rules and Regulations of the West Virginia Fire Commission, Charleston, West Virginia.

16. Life Safety Code 101 and National Fire Code, National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269.

17. Climatological Data for West Virginia, National Climatic Data Center, Asheville, North Carolina.

18. American Society of Heating, Refrigeration and Air-Conditioning Engineers, Inc., Atlanta Georgia.

19. Energy Consumption Guidelines for Educational Facilities, West Virginia Governor's Office of Economic and Community Development, Fuel and Energy Office, Charleston, West Virginia.

20. Lighting Handbook, Illuminating Engineering Society, 1860 Broadway, New York, New York.

APPENDIX B

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

AND

WEST VIRGINIA DEPARTMENT OF EDUCATION

FACILITY CLASSIFICATION FORM

COUNTY: _____ DATE: _____

FACILITY NUMBER	FACILITY NAME	CURRENT ENROLLMENT	CURRENT GRADE CONFIGURATION	CLASSIFICATION	DESCRIBE FUTURE USE TRANSITIONAL FACILITIES

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 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.

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APPENDIX C

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA
SCHOOL FACILITIES EVALUATION INSTRUMENT
INSTRUCTIONS MANUAL

Charles Duffy, Kent Gandee,
Butch Kasey, Charles Smith, David Sneed,
Don Richardson and Clacy Williams

March 1990

INSTRUCTIONS FOR COMPLETING A SCHOOL BUILDING AUTHORITY (SBA) SCHOOL FACILITY EVALUATION FORM

March 1990

- There are 3 different form packages available. One for Early Childhood/Primary, one for Junior/Middle High and one for Senior High.

- Each package contains a General Facilities Evaluation, Section I, which is identical for each. In addition, the package includes an Academic Facilities Evaluation, Section II, Curriculum Program Spaces Data Sheets and a Project Cost Summary Form, all of which are tailored for each type school.

- The appropriate form is to be completed for each existing facility as it is currently used.

- The evaluation ratings, which have been assigned point values on the form, are defined as follows:

  I = Inadequate
  U = Under Average
  A = Average
  O = Over Average
  E = Excellent

  Select a rating for each item and write the corresponding number in the space to the left of the letter.

- Throughout the form the evaluator should think in terms of a comparison to similar facilities throughout not only the RESA but statewide. Select a rating of I, U, A, O or E in the perspective of schools generally.

- For the "other" choices always specify what other is.

- For "condition" rating evaluate the general overall condition if more than one item is involved.

- Please refer to the attached completed form package when reading these instructions.

I. General Facilities Evaluation

1. Record the name of the facility and its current use.

2. Record the name and phone number of the contact person in the county. Also, record the name and phone number of the principal of the school (or the manager of the facility if not a school facility).

3. Record this year's 2nd month enrollment, plus the projected enrollments for the future years 4 and 8. The projected enrollment data can be made available through the Director of the Office of Technology and Information Systems, Dr. John McClure at the State Department of Education.

4. Record the county name and its RESA number designation.

5. Record the name of the facility surveyor and the date of the survey.

6. Record any relevant remarks (throughout the form).

7. Record the gross square feet, the year constructed, the age for the original building and for each significant addition.

8. Record each of the building quantities shown. These data will be useful in estimating the capital cost required to bring the facility up to state standards for its current use.

9. Record the average energy index (for the last two years) in BTUs per square feet of floor space. Multiply kilowatt hours of electricity by 3,415 and mcf of gas by 1,050,000 to convert to BTUs. Add the two resulting values and divide by the gross square feet to calculate the index. BTUs will usually be more than 1 billion and gross square feet will usually be in the 10's of thousands. The index will generally range from a low of 50,000 to high of 150,000. The following are guidelines for this evaluation:

    I = over 130,000
    U = 110,000 to 130,000
    A = 90,000 to 110,000
    O = 70,000 to 89,999
    E = under 70,000.

10. Site

    A. Record the actual acres of the site and refer to Section 203.03 and 203.04 of the SBE Policy 6200, "Handbook on Planning School Facilities" for the required acres. Section 203.04 provides some flexibility. Evaluate the size of the site and its suitability for expansion.

    B. Evaluate the drainage. What is the degree of site drainage problems, if any?

    C. Evaluate the walks. How sufficient are they (including handicap access needs) and how is the condition?

    D. Evaluate the parking, including that needed for faculty, staff, students and visitors. How adequate and the condition (paved)?

    E. Evaluate the adequacy of the area for bus loading and unloading.

F. Evaluate any roads on the site; width, drainage, surface (paved).

G. Evaluate the adequacy of the playfields; size and conditions.

11. Utilities

A. Record the size of the gas supply line and the gas company.

B. Record the size of the water supply line and the water company.

C. Record the phase, voltage and amps of the electricity supply and the company.

D. Sewer - city or lagoon, package plant, etc.

12. Building Construction

A. Record type of building structure and evaluate its condition.

B. Record the type of floor structure and evaluate its condition.

C. Record the type of roof structure and evaluate its condition.

D. Record the type of exterior facing and evaluate its condition.

E. Record the type of windows and evaluate their condition.

F. Record the type of exterior doors and evaluate their condition.

G. Record the type of roof covering and evaluate its condition.

H. Record the type of floor covering and evaluate its condition.

I. Record the type of inside wall construction, the finish and their condition.

J. Record the type of exterior doors and evaluate their condition.

K. Record the type of ceiling construction, finish and evaluate their condition.

L. Toilets

- Repeat H., I. and K., above for toilet rooms.
- Evaluate the condition of the exhaust fans in the toilet rooms.

M. Kitchen

- Repeat H., I. and K. above for the kitchen.
- Evaluate the condition of the exhaust system in the kitchen.
- Evaluate the fire suppression system in the kitchen.
- Is there a hot water booster heater for the dishwasher in the kitchen and is it generating the temperature required by the Health Department?

13. Mechanical/Electrical System

A. Plumbing

- Record the type of water piping materials and evaluate its condition.
- Record the type of soil, waste and vent piping materials and evaluate their condition.

B. HVAC

- Record the basic type of system (i.e., gas heaters only, steam boiler with radiators, hot water boiler with convectors, forced air, etc.) and evaluate its condition.
- Record the type of ventilation systems (i.e., none, forced air duct work systems, ventilators, etc.). Does it provide outside air and is it adequate?
- Record the type of energy control system and evaluate its condition.

C. Electrical

- Record the type of general lighting in the building and evaluate its adequacy/condition.
- Does the building have emergency lighting, fire alarms and smoke detectors? Evaluate their condition.
- Evaluate the condition of the power outlets throughout the building.

14. Life Safety, Health and Accessibility

A. Review the latest Fire Marshal's Report and evaluate the life safety condition of the building.

B. Review the latest Health Department Sanitation Report, the latest DNR report on waste disposal, consider the adequacy of the ventilation and rate the health condition of the building.

C. Review the Asbestos Management Plan and the steps taken to implement it and evaluate the asbestos condition of the building.

D. Review the 504 report regarding handicap accessibility and based on observations made during the tour of the facility evaluate the handicap accessibility of the building.

Add all points for items 9 through 14 and record the subtotal.

II. Facilities Spaces Evaluation

- An applicable listing of required curriculum program spaces for each type of school facility is included with each evaluation form package. These data are compiled from the SBA Policy 6200, "Handbook on Planning School Facilities". Standards are provided for a range of enrollments. Use the column that most closely matches the enrollment of the school being evaluated.

- Evaluate each type of space separately. Referring to the attached Standards, record the number of spaces required. Record the number of spaces existing. Calculate and record the difference between the number of spaces required and the number of spaces existing. If the number of existing spaces are less than the number required, record the difference with a minus sign. Evaluate the number of spaces using the formula in parenthesis after "No. of Spaces" - differ x (the number shown). Evaluate the size of the spaces based on the square footages in the attached standards. Evaluate the condition of the spaces.

- Total the existing and required instructional storage spaces, for the entire building facility and evaluate it in total under the item "Storage Instructional".

- Total the existing and required General Storage Spaces, for the entire building facility and evaluate it in total under the item "Storage General".

- "Itinerant Spaces" means spaces allocated full-time for Itinerant instructional use.

- The terms Media Center, Instructional Material Center and Library are interchangeable.

- Most primary schools have multi-purpose rooms for both activities and dining, although some have separate dining. Spaces are provided for evaluating either type. If the multi-purpose room is full of kitchen coolers, freezers, etc., then, obviously kitchen space is inadequate and the available multi-purpose space is likely to fall short, also. Other storage in the multi-purpose room can also restrict its available space.

- Evaluate the number of toilet rooms as well as the number of toilet room fixtures against the standard (referring to Section 1100.033 of SBE Policy 6200, "Handbook on Planning School Facilities). On the average, elementary schools should have one fixture (a water closet, a wash basin or a urinal) for every 17 students. Secondary schools should have one fixture for every 21 students.

- If space is required but none exists, rate the number of spaces only. Do not rate size and condition.

- "Other Spaces" evaluation sections are provided in the event the form does not provide for every program provided at a school.

- If some schools have grade configurations that require the use of two Section II forms, pull the appropriate section from another form, use and include it in the evaluation.

- Evaluate the adequacy and condition of the furnishings, furniture and equipment, overall.

- Economies of Scale Guidelines are taken from Section 100.40(C) of the SBA Handbook and are summarized below:

	Grade	Min. Enrollment
Elementary:	1-6	300
	1-4	200
	or minimum of 2 classes (22 each) per grade level.	
Middle/Junior:	7-9	450
	6-8 or 5-8	600
	or 200 per grade level.	
Senior High:	10-12	600
	9-12	800
	or 200 per grade level.	

Consider a maximum of 85% of building design capacity for early childhood, intermediate and adolescent facilities.

- Section 100.10(H-4) of the SBA Handbook indicates that existing buildings be evaluated on the Specific Items. Program Support Appraisal and L. Standards for Accreditation. However, the evaluation form has been designed to capture data that reflect these factors. Therefore, these items are not listed separately on the form.

- Building Utilization is defined as the current 2nd month enrollment, divided by the number resulting from multiplying 25 times the total number of facility teaching spaces (including spaces used for Special Education), expressed as a percent. The following guidelines are provided for rating utilization:

  I = below 70%
  U = 70% to 80%
  A = 81% to 85%
  O = 86% to 93%
  E = over 93%.

- Add all points for items in Section II and record the subtotal. Add the two subtotals and record the grand total points for the building.

III. Project Cost Summary

Using the completed building evaluation form information, complete a Project Cost Summary form for each building. The purpose of this form is to estimate the cost of improving the facility to bring it up to State Standards for its current actual use. Standard unit cost values for each item of renovation or addition required to bring the building up to standard is provided on the last page of the evaluation instrument. Inquire locally for estimates of the cost of acquiring additional land acreage.

0577b/82&83a

**********SBA - EARLY CHILDHOOD/PRIMARY**********
A SCHOOL FACILITY EVALUATION FORM - W.V. SCHOOL BUILDING AUTHORITY(SBA)
****

I.GENERAL FACILITIES EVALUATION

NOTES:A.Complete a form for each existing facility as currently used.
B.For evaluation ratings used below: I=Inadequate; U=Under average; A=Average; O=Over average; E=Excellent. Select one for each item and write the corresponding number in the space to the left.
C:For "Other" choice below always specify what "Other" is.
D:For "Condition" rating below evaluate the general overall "Condition" if more than one item involved.

1.FACILITY NAME/USE:_____

2.PRINCIPAL/PHONE_____

3.ENROLLMENT:..THIS YEAR:_____...PROJECTED:..YEAR 4_____...YEAR 8_____

4.COUNTY/RESA #:_____5.SURVEYED:BY_____DATE_____

6.REMARKS:_____
_____

7.BUILDING AREAS:

Original building,Gross Sq.Ft.....____Year____Age____
Building addition 1,Gross Sq.Ft...____Year____Age____
Building addition 2,Gross Sq.Ft...____Year____Age____
Building addition 3,Gross Sq.Ft...____Year____Age____
Building addition 4,Gross Sq.Ft...____Year____Age____
Total gross Sq.Ft..... ....____

8.BUILDING QUANTITIES:

Number of floors.....____
Total building height,Ft.....____
Perimeter wall,Lin.Ft.....____
Roof Area,Sq.Ft.....____
Exterior wall area,Ft.....____
Windows,No.....____
Exterior doors,No.....____

EVALUATION PARAMETER	PARAMETER EVALUATION POINTS

9.ENERGY INDEX (BTU's/SQ.FT.
AVERAGE LAST TWO YEARS).....____
Energy Efficiency.....____I-14____U-7 ____A=0 ____O+7 ____E+14

10.SITE:

A.AREA ACTUAL,ACRES_____ AREA REQUIRED,ACRES_____
(Refer to Handbook 203.03 & 203.04)
Adequate size.....____I-30____U-15____A=0 ____O+15____E+30
Adequate for fac. expansion.____I-30____U-15____A=0 ____O+15____E+30
Remarks:_____

B.DRAINAGE.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

C.WALKS.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

D.PARKING:.....Adequate:____I-6 ____U-3 ____A=0 ____O+3 ____E+6
.....Condition:____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

E.BUS LOADING:.....:____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

F.ROADS:.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

G.PLAYFIELDS.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

11.UTILITIES:

a.Gas.....Size_____Utility Co._____
b.Water.....Size_____Utility Co._____
c.Electric.....Phase___Voltage___Amps___Utility Co._____
Supply to the building is - Underground___Overhead___
d.Sewer.....City_____Other_____
Overall utilities adequacy..____I-14____U-7 ____A=0 ____O+7 ____E+14
Remarks:_____

12.BUILDING CONSTRUCTION:

A.BUILDING STRUCTURE:

Load bearing masonry.....____
Steel frame.....____
Wood frame.....____
Other(specify).....____
Overall Condition:..... ____I-20____U-10____A=0 ____O+10____E+20

B.FLOOR STRUCTURE:

Steel joists/concrete.....____
Wood joists.....____
Slab on grade.....____
Other(specify).....____
Overall Condition:..... ____I-10____U-5 ____A=0 ____O+5 ____E+10

C.ROOF STRUCTURE:

Steel.....____
Wood.....____
Other(specify).....____
Overall Condition:..... ____I-10____U-5 ____A=0 ____O+5 ____E+10

D.EXTERIOR FACING.....Brick___Conc. block___Other_____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

E.WINDOWS.....Steel___Wood___Aluminum___Other_____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

F.EXTERIOR DOORS.....Wood____Hollow Metal____Aluminum_____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

G.ROOFING.....Built-up___Mineral surf___Membrane___
Condition:.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

H.FLOORS.....Asbes tile___Othr tile___Wood___Carpet___Other_____
Condition:.....___I-4 ___U-2 ___A=0 ___O+2 ___E+4
Remarks:_____

I.INTERIOR WALLS.....Masonry___Plaster___Other_____
Type finish:_____
Condition:.....___I-4 ___U-2 ___A=0 ___O+2 ___E+4
Remarks:_____

J.INTERIOR DOORS.....Wood___Metal___Hollow___Solid_____
Condition:.....___I-4 ___U-2 ___A=0 ___O+2 ___E+4
Remarks:_____

K.CEILINGS...Plaster___Acust tile___Wood/Other fiber___Other_____
Type finish:_____
Condition:.....___I-4 ___U-2 ___A=0 ___O+2 ___E+4
Remarks:_____

L.TOILETS..FLOORS:Asbs tile___Othr tile___Wood___Carpet___Other___
Other_____
Condition:.....___I-2 ___U-1 ___A=0 ___O+1 ___E+2
Remarks:_____

WALLS:.....Masonry___Plaster___Other_____
Type finish:_____
Condition:.....___I-2 ___U-1 ___A=0 ___O+1 ___E+2
Remarks:_____

CEILINGS:.....Plaster___Acoust tile___Other_____
Type finish:_____
Condition:.....___I-2 ___U-1 ___A=0 ___O+1 ___E+2
Remarks:_____

VENTILATION: Condition:.___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Remarks:_____

M.KITCHEN..FLOORS:Asbs tile___Othr tile___Wood___Carpet___Other___
Other_____
Condition:.....___I-2 ___U-1 ___A=0 ___O+1 ___E+2
Remarks:_____

WALLS:.....Masonry___Plaster___Other_____
Type finish:_____
Condition:.....___I-2 ___U-1 ___A=0 ___O+1 ___E+2
Remarks:_____

CEILINGS:.....Plaster___Acoust tile___Other_____
Type finish:_____
Condition:.....___I-2 ___U-1 ___A=0 ___O+1 ___E+2
Remarks:_____

VENTILATION: Condition:.....___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Remarks:_____

FIRE SUPPRESSION SYSTEM?....Yes___No___
Condition:.....___I-4 ___U-2 ___A=0 ___O+2 ___E+4
Remarks:_____

HOT WATER BOOSTER HEATER?...Yes___No___
Water sufficiently hot?.....___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Remarks:_____

13.MECHANICAL/ELECTRICAL SYSTEMS:

A. PLUMBING: WATER SUPPLY:
Piping materials: Copper_____ Galvanized_____ Plastic_____ Other_____
Condition:..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Remarks:_____

SOIL, WASTE, VENT:
Piping materials: Copper_____ Galvanized_____ Plastic_____ Other_____
Condition:..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Remarks:_____

B. HVAC:
BASIC SYSTEM:.....Type_____
Age_____ Fuel_____
Condition:..... ____I-20 ____U-10 ____A=0 ____O+10 ____E+20
Remarks:_____

VENTILATION SYSTEM:.....Type_____
Includes mechanical outside air supply capability? Yes____ No____
Adequacy:..... ____I-40 ____U-20 ____A=0 ____O+20 ____E+40
Remarks:_____

Energy/Control System:.....Type_____
Condition:..... ____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

C. ELECTRICAL:

General lighting.....Type?_____
Adeq/Cond:..... ____I-20 ____U-10 ____A=0 ____O+10 ____E+20
Remarks:_____

Emergency Lighting?.....Yes____ No____
Fire alarms?.....Yes____ No____
Smoke detectors?.....Yes____ No____
Condition:..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Remarks:_____

Power outlets:
Condition:..... ____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

14. LIFE SAFETY, HEALTH AND ACCESSABILITY:

A. LIFE SAFETY CONDITION:..... ____I-40 ____U-20 ____A=0 ____O+20 ____E+40
(Refer to Fire Marshal's report)

B. HEALTH CONDITION:..... ____I-40 ____U-20 ____A=0 ____O+20 ____E+40
(Refer to Health Dept/DNR reports)

C. ASBESTOS CONDITION:..... ____I-40 ____U-20 ____A=0 ____O+20 ____E+40
(Refer to Management Plan)

D. HANDICAP ACCESSABILITY:..... ____I-20 ____U-10 ____A=0 ____O+10 ____E+20
(Refer to 504 report)

PAGES 1 THROUGH TOP OF 5 - SUB TOTAL OF EVALUATION POINTS..... 0

II. FACILITIES SPACES EVALUATION - EARLY CHILDHOOD/PRIMARY

EVALUATION PARAMETER	PARAMETER EVALUATION POINTS

NOTE: Difference = No. of existing spaces -(minus) No. of Required spaces.

1. ADMINISTRATION: ..Exist. spaces___ Reqd. spaces___ Difference, +or-____
No. of spaces (differx16): ..... 0I-16 0E+16
Size: ..... ____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Condition: ..... ____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks: ....._____

2. STUDENT SERVICES: Exist. spaces___ Reqd. spaces___ Difference, +or-____
No. of spaces (differx16): ..... 0I-16 0E+16
Size: ..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Condition: ..... ____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks: ....._____

3. KINDERGARTEN: ....Exist. spaces___ Reqd. spaces___ Difference, +or-____
No. of spaces (differx16): ..... 0I-16 0E+16
Size: ..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Condition: ..... ____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks: ....._____

4. PRIMARY: .....Exist.spaces___ Reqd. spaces___ Difference, +or-____
No. of spaces (differx16): ..... 0I-16 0E+16
Size: ..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Condition: ..... ____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks: ....._____

5. ITINERANT SPACES: Exist. spaces___ Reqd. spaces___ Difference, +or-____
No. of spaces (differx16): ..... 0I-16 0E+16
Size: ..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Condition: ..... ____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks: ....._____

6. MEDIA CENTER....: Exist. spaces___ Reqd. spaces___ Difference, +or-____
No. of spaces (differx16): ..... 0I-16 0E+16
Size: ..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Condition: ..... ____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks: ....._____

7. SPECIAL EDUCATN.: Exist. spaces___ Reqd. spaces___ Difference, +or-____
No. of spaces (differx16): ..... 0I-16 0E+16
Size: ..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Condition: ..... ____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks: ....._____

8. MUSIC.....: Exist. spaces___ Reqd. spaces___ Difference, +or-____
No. of spaces (differx16): ..... 0I-16 0E+16
Size: ..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Condition: ..... ____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks: ....._____

9. ART.....: Exist. spaces___ Reqd. spaces___ Difference, +or-____
No. of spaces (differx16): ..... 0I-16 0E+16
Size: ..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Condition: ..... ____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks: ....._____

10. COMPUTER LAB...: Exist. spaces___ Reqd. spaces___ Difference, +or-____
No. of spaces (differx16): ..... 0I-16 0E+16
Size: ..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10

Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

11.MULTI-PURPOSE..:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... 0I-16 0E+16
A.ACTIVITIES:
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....
B.DINING:
Size:.....____I-16____U-8 ____A=0 ____O+8 ____E+16
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

12.SEPERATE DINING:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... 0I-16 0E+16
Size:.....____I-16____U-8 ____A=0 ____O+8 ____E+16
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

13.KITCHEN.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... 0I-16 0E+16
Size:.....____I-16____U-8 ____A=0 ____O+8 ____E+16
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Adequate storage:.....____I-16____U-8 ____A=0 ____O+8 ____E+16
Remarks:.....

14.STAFF/FACULTY..:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... 0I-16 0E+16
Size:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Condition:.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:.....

15.TOILETS.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx10):..... 0I-10 0E+10
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
FIXTURES.....:Exist. fixtrs____Reqd. fixtrs____Difference, +or-____
No. of spaces(differx4):..... 0I-4 0E+4
Condition:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Remarks:.....

16.STORAGE GENERL.:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx2):..... 0I-2 0E+2
Size:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Condition:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Remarks:.....

17.STORAGE INSTR..:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx4):..... 0I-4 0E+4
Size:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Condition:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Remarks:.....

18.CUSTODIAL.....:No. of spaces____No. required____Difference, +or-____
No. of spaces(differx4):..... 0I-4 0E+4
Size:.....____I-10____U-8 ____A=0 ____O+8 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

19.OTHER SPACES...:No. of spaces____No. required____Difference, +or-____
No. of spaces(differx16):..... 0I-16 0E+16
Size:.....____I-10____U-8 ____A=0 ____O+8 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

APPENDIX R

OTHER EVALUATION PARAMETERS

20. ADEQUACY/CONDITION OF FURNISHINGS AND EQUIPMENT:
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:.....____

21. ECONOMIES OF SCALE:.....____I-20____U-10____A=0 ____O+10____E+20
(Refer to Handbook - 100.0142 G.)

22. BLDG UTILIZATION, (U):_____%____I-12____U-6 ____A=0 ____O+6 ____E+12
U =100x(This year's enrollment)/(25 x No. existing teaching spaces)
Name Exceptionality programs/no spaces used_____

PAGES BOTTOM OF 5 THROUGH 8 - SUB TOTAL EVALUATION POINTS..... 0

PAGES 1 THROUGH 8 - GRAND TOTAL EVALUATION POINTS..... 0

THE END

SCHOOL NAME/USE _____

COUNTY/RESA _____

DESIGN CAPACITY ENROLLMENT..... _____

IMPROVEMENT ITEM	UNIT	QUANT'Y	UNIT COST,$	ITEM COST,$	REMARKS
1.SITE WORK:					
Land acquisition	ACRES		.00	.00	
Excavation/grad	CUB FT		3.00	.00	
Drainage	LIN FT		15.00	.00	
Walks(6 ft wide)	SQ FT		2.00	.00	
Parking	SQ FT		2.25	.00	
Bus loading	SQ FT		2.25	.00	
Roads	SQ FT		2.25	.00	
Playing fields	SQ FT		2.25	.00	
Other				.00	
Sub-total				.00	
2.RENOVATIONS,EXTERIOR:					
Wall structure	SQ FT		6.00	.00	
Floor structure	SQ FT		5.00	.00	
Roof structure	SQ FT		5.00	.00	
Wall facing	SQ FT		6.00	.00	
Windows	EACH		750.00	.00	
Doors/frames	EACH		800.00	.00	
Roofing	SQ FT		3.50	.00	
Coping/parapet	LIN FT		15.00	.00	
Painting	SQ FT		.75	.00	
Other	SQ FT			.00	
Sub-total				.00	
3.RENOVATIONS,INTERIOR:					
Floor covering	SQ FT		2.00	.00	
Patch & painting	SQ FT		.40	.00	
Ceiling finish	SQ FT		.70	.00	
Plumbing	SQ FT		3.00	.00	
Heating/Ventilat	SQ FT		6.00	.00	
Air Conditioning	SQ FT		3.00	.00	
Lighting	SQ FT		2.50	.00	
Wiring	SQ FT		2.00	.00	
Fire alarm	SQ FT		1.25	.00	
Communic system	SQ FT		1.00	.00	
Interior doors	EACH		500.00	.00	
Other	SQ FT			.00	
Other	SQ FT			.00	
Sub-total				.00	
4.BUILDING ADDITIONS INCLUDING FURNITURE,FURNISHINGS AND EQUIPMENT:					
Administration	SQ FT		70.00	.00	
Student services	SQ FT		72.00	.00	
Kindergarten	SQ FT		70.00	.00	
Primary	SQ FT		70.00	.00	
Media center	SQ FT		76.00	.00	
Special Educatn	SQ FT		76.00	.00	
Music	SQ FT		76.00	.00	
Art	SQ FT		76.00	.00	
Computer lab	SQ FT		76.00	.00	
Multi-Purpose	SQ FT		72.00	.00	
Kitchen	SQ FT		80.00	.00	
Staff/Faculty	SQ FT		70.00	.00	
Toilets/Fixtrs	SQ FT		80.00	.00	

Storage genrl	SQ FT		60.00	.00
Storage Instr	SQ FT		65.00	.00
Custodial	SQ FT		72.00	.00
Other	SQ FT		72.00	.00
Circulation	@30%		72.00	.00
Sub-total				.00
5.SPECIAL CONSTRUCTION;				
Elevator	EACH			.00
Sprinkler system	SQ FT		1.50	.00
Kitchen equip	ALL			.00
Waste treatment	EACH			.00
Other				.00
Sub-total				.00
6.OTHER SPECIAL COSTS:				
				.00
				.00
				.00
Sub-total				.00
7.ARCHITECTURAL/ENGINEERING FEES:				
New constr	%	.00	.06	.00
Renovations	%	.00	.08	.00
Sub-total				.00
8.MISCELEANOUS:				
Survey	EACH		5,000.00	.00
Soil Inv	EACH			.00
				.00
				.00
Sub-total				.00
9.CONTINGENCIES:				
New constr	%	.00	.05	.00
Renovations	%	.00	.10	.00
Sub-total				.00
10.GRAND TOTAL PROJECT COST:				.00
ADDITIONAL LAND IMPROVED TO BRING TO STATE STANDARD	ACRES			.00
	DSGN CAP	$/STDNT		AMOUNT
COST TO BUILD A NEW SCHOOL/ NO LAND				.00
RATIO - COST TO IMPROVE THE BLDG/ COST OF NEW BLDG				

COST TO BUILD A NEW EARLY CHILDHOOD/PRIMARY SCHOOL BASED ON DATA TAKEN FROM THE HANDBOOK. USE THE DESIGN CAPACITY AND THE $/STUDENT FROM THE TABLE BELOW FOR THE CORRESPONDING DESIGN CAPACITY RANGE. THE $/STUDENT FIGURES WERE CALCULATED BY MULTIPLYING $68 PER SQUARE FOOT X 1.05 ALLOWANCE FACTOR X THE SQUARE FEET PER STUDENT GIVEN IN THE HANDBOOK.

ENROLLMENT RANGE	$/STUDENT
Up to 240 students	8,925
241 to 265 students	8,568
266 to 290 students	8,211
291 to 315 students	7,854
316 to 340 students	7,497
341 to 389 students	7,140
390 to 440 students	6,783
441 to 490 students	6,426
491 to 540 students	6,069
541 to 590 students	5,712
591 to 640 students	5,712
Over 641 students	5,712

K–4 ELEMENTARY FACILITY – CURRICULUM PROGRAM SPACES

SPACE	ENROLLMENT 240 Students	340 Students	440 Students	540 Students
ADMINISTRATIVE				
a. Waiting	1 @ 150	1 @ 150	1 @ 150	1 @ 150
b. General Office	1 @ 200	1 @ 200	1 @ 200	1 @ 200
c. Work Room	1 @ 200	1 @ 200	1 @ 200	1 @ 200
d. Communications Room	–	1 @ 120	1 @ 120	1 @ 120
e. Conference Room	1 @ 180	1 @ 180	1 @ 180	1 @ 180
f. Principal's Office	1 @ 180	1 @ 180	1 @ 180	1 @ 180
g. V. Principal's Office	–	1 @ 125	1 @ 125	1 @ 125
Subtotal	–	–	–	–
STUDENT SERVICES				
a. Clinic	1 @ 180	1 @ 180	1 @ 180	1 @ 180
b. Guidance	1 @ 120	1 @ 120	1 @ 120	1 @ 120
Subtotal	–	–	–	–
EARLY CHILDHOOD EDUCATION				
a. Classrooms	2 @ 900	2 @ 900	2 @ 900	2 @ 900
Subtotal	–	–	–	–
ELEMENTARY EDUCATION				
a. Classrooms	8 @ 720	12 @ 720	16 @ 720	20 @ 720
Subtotal	–	–	–	–
MEDIA CENTER				
a. Media Center	1 @ 1000	1 @ 1200	1 @ 1400	1 @ 1800
b. Audio/Visual	1 @ 150	1 @ 150	1 @ 150	1 @ 150
Subtotal	–	–	–	–
SPECIALIZED EDUCATION				
a. Resource	1 @ 720	2 @ 720	2 @ 720	3 @ 720
b. Special Space	1 @ 720	1 @ 720	2 @ 720	2 @ 720
c. Itinerant	2 @ 125	3 @ 125	3 @ 125	3 @ 125
Subtotal	–	–	–	–
MUSIC/ART				
a. Classrooms		1 @ 1200	1 @ 1200	1 @ 1200
COMPUTER				
a. Lab		1 @ 800	1 @ 800	1 @ 800
MULTI-PURPOSE				
a. Activity	1 @ 3100	1 @ 3100	1 @ 3100	1 @ 3100
DINING				
a. Dining Room			1 @ 1800	1 @ 2200
KITCHEN				
a. Preparation	1 @ 750	1 @ 750	1 @ 750	1 @ 750
b. Serving	1 @ 200	1 @ 200	1 @ 200	1 @ 200
c. Dishwashing	1 @ 140	1 @ 140	1 @ 140	1 @ 140
d. Dry Foods	1 @ 150	1 @ 150	1 @ 150	1 @ 150
e. Walk-in Cooler	1 @ 150	1 @ 150	1 @ 150	1 @ 150
f. Janitor	1 @ 25	1 @ 25	1 @ 25	1 @ 25
g. Locker Room	1 @ 60	1 @ 60	1 @ 60	1 @ 60
Subtotal	–	–	–	–

K-4 ELEMENTARY FACILITY – CURRICULUM PROGRAM SPACES

SPACE	ENROLLMENT 240 Students	340 Students	440 Students	540 Students
FACULTY				
a. Faculty Lounge	1 @ 250	1 @ 250	1 @ 250	1 @ 250
CUSTODIAL				
a. Mechanical Room	1 @ 500	1 @ 500	1 @ 500	1 @ 500
b. Janitor's Closet	2 @ 25	2 @ 25	2 @ 25	2 @ 25
c. Custodian w/toilet	1 @ 150	1 @ 150	1 @ 150	1 @ 150
Subtotal	–	–	–	–
STORAGE				
Instructional				
a. Early Childhood	1 @ 100	1 @ 100	1 @ 100	1 @ 100
b. Elementary Education	4 @ 100	6 @ 100	8 @ 100	10 @ 100
c. Media Center	1 @ 130	1 @ 130	1 @ 130	1 @ 130
d. Music/Art		2 @ 100	2 @ 100	2 @ 100
e. Multi-purpose	2 @ 175	2 @ 175	2 @ 175	2 @ 175
f. Dining	1 @ 175	1 @ 175	1 @ 175	1 @ 175
Subtotal	–	–	–	–
Non-Instructional				
a. Administrative	1 @ 120	1 @ 120	1 @ 120	1 @ 120
b. Central Storage	1 @ 175	1 @ 175	1 @ 175	1 @ 175
c. Outdoor Storage	1 @ 200	1 @ 200	1 @ 200	2 @ 200
Subtotal	–	–	–	–
TOILET				
a. Student Services	1 @ 25	1 @ 25	1 @ 25	1 @ 25
b. Early Childhood	2 @ 20	2 @ 20	2 @ 20	2 @ 20
c. Elementary Education	8 @ 20	12 @ 20	16 @ 20	20 @ 20
d. Faculty	2 @ 40	2 @ 40	2 @ 40	2 @ 40
e. Public	2 @ 150	2 @ 200	2 @ 200	2 @ 200
Subtotal	–	–	–	–
TOTAL NET PROGRAM AREA				
CIRCULATION, WALLS, ETC.				
TOTAL GROSS BUILDING AREA				

K-6 ELEMENTARY FACILITY - CURRICULUM PROGRAM SPACES

SPACE	ENROLLMENT 340 Students	440 Students	540 Students
ADMINISTRATIVE			
a. Waiting	1 @ 150	1 @ 150	1 @ 150
b. General Office	1 @ 200	1 @ 200	1 @ 200
c. Work Room	1 @ 200	1 @ 200	1 @ 200
d. Communications Room	1 @ 120	1 @ 120	1 @ 120
e. Conference Room	1 @ 180	1 @ 180	1 @ 180
f. Principal's Office	1 @ 180	1 @ 180	1 @ 180
g. V. Principal's Off.	1 @ 125	1 @ 125	1 @ 125
Subtotal	-	-	-
STUDENT SERVICES			
a. Clinic	1 @ 180	1 @ 180	1 @ 180
b. Guidance	1 @ 120	1 @ 120	1 @ 120
Subtotal	-	-	-
EARLY CHILDHOOD EDUCATION			
a. Classrooms	2 @ 900	2 @ 900	2 @ 900
Subtotal	-	-	-
ELEMENTARY EDUCATION			
a. Classrooms	12 @ 720	18 @ 720	24 @ 720
Subtotal	-	-	-
MEDIA CENTER			
a. Media Center	1 @ 1200	1 @ 1600	1 @ 2400
b. Audio/Visual	1 @ 150	1 @ 150	1 @ 150
Subtotal	-	-	-
SPECIALIZED EDUCATION			
a. Resource	2 @ 720	2 @ 720	4 @ 720
b. Special Space	1 @ 720	2 @ 720	2 @ 720
c. Itinerant	3 @ 125	3 @ 125	3 @ 125
Subtotal	-	-	-
MUSIC/ART			
a. Classrooms	1 @ 1200	1 @ 1200	1 @ 1200
COMPUTER			
a. Lab	1 @ 800	1 @ 800	1 @ 800
MULTI-PURPOSE			
a. Activity	1 @ 3100	1 @ 3100	1 @ 3100
DINING			
a. Dining Room	-	1 @ 1800	1 @ 2200
KITCHEN			
a. Preparation	1 @ 750	1 @ 750	1 @ 750
b. Serving	1 @ 200	1 @ 200	1 @ 200
c. Dishwashing	1 @ 140	1 @ 140	1 @ 140
d. Dry Foods	1 @ 150	1 @ 150	1 @ 150
e. Walk-in Cooler	1 @ 150	1 @ 150	1 @ 150
f. Janitor	1 @ 25	1 @ 25	1 @ 25
g. Locker Room	1 @ 60	1 @ 60	1 @ 60
Subtotal	-	-	-

K-6 ELEMENTARY FACILITY - CURRICULUM PROGRAM SPACES

SPACE	ENROLLMENT 340 Students	440 Students	540 Students
FACULTY			
a. Faculty Lounge	1 @ 250	1 @ 250	1 @ 250
CUSTODIAL			
a. Mechanical Room	1 @ 500	1 @ 500	1 @ 500
b. Janitor's Closet	2 @ 25	2 @ 25	2 @ 25
c. Custodian w/toilet	1 @ 150	1 @ 150	1 @ 150
Subtotal	-	-	-
STORAGE			
Instructional			
a. Early Childhood	1 @ 100	1 @ 100	1 @ 100
b. Elementary Education	6 @ 100	8 @ 100	10 @ 100
c. Media Center	1 @ 130	1 @ 130	1 @ 130
d. Music/Art	2 @ 100	2 @ 100	2 @ 100
e. Multi-purpose	2 @ 175	2 @ 175	2 @ 175
f. Dining	1 @ 175	1 @ 175	1 @ 175
Subtotal	-	-	-
Non-Instructional			
a. Administrative	1 @ 120	1 @ 120	1 @ 120
b. Central Storage	1 @ 175	1 @ 175	1 @ 175
c. Outdoor Storage	1 @ 200	1 @ 200	1 @ 200
Subtotal	-	-	-
TOILET			
a. Student Services	1 @ 25	1 @ 25	1 @ 25
b. Early Childhood	2 @ 20	2 @ 20	2 @ 20
c. Elementary Education	12 @ 20	16 @ 20	20 @ 20
d. Faculty	2 @ 40	2 @ 40	2 @ 40
e. Public	2 @ 200	2 @ 200	2 @ 200
Subtotal	-	-	-
TOTAL NET PROGRAM AREA			
CIRCULATION, WALLS, ETC.			
TOTAL GROSS BUILDING AREA			

**********JUNIOR HIGH/MIDDLE**********
A SCHOOL FACILITY EVALUATION FORM - W.V. SCHOOL BUILDING AUTHORITY(SBA)
****

I.GENERAL FACILITIES EVALUATION

NOTES:A.Complete a form for each existing facility as currently used.
B.For evaluation ratings used below: I=Inadequate; U=Under average; A=Average; O=Over average; E=Excellent. Select one for each item and write the corresponding number in the space to the left.
C:For "Other" choice below always specify what "Other" is.
D:For "Condition" rating below evaluate the general overall "Condition" if more than one item involved.

1.FACILITY NAME/USE:_____

2.PRINCIPAL/PHONE_____

3.ENROLLMENT:..THIS YEAR:_____...PROJECTED:..YEAR 4_____...YEAR 8_____

4.COUNTY/RESA #:_____5.SURVEYED:BY_____DATE_____

6.REMARKS:_____
_____

7.BUILDING AREAS:

Original building,Gross Sq.Ft.....____Year____Age____
Building addition 1,Gross Sq.Ft...____Year____Age____
Building addition 2,Gross Sq.Ft...____Year____Age____
Building addition 3,Gross Sq.Ft...____Year____Age____
Building addition 4,Gross Sq.Ft...____Year____Age____
Total gross Sq.Ft..... ....____

8.BUILDING QUANTITIES:

Number of floors.....____
Total building height,Ft.....____
Perimeter wall,Lin.Ft.....____
Roof Area,Sq.Ft.....____
Exterior wall area,Ft.....____
Windows,No.....____
Exterior doors,No.....____

EVALUATION PARAMETER	PARAMETER EVALUATION POINTS

9.ENERGY INDEX (BTU's/SQ.FT.
AVERAGE LAST TWO YEARS).....____
Energy Efficiency.....____I-14____U-7 ____A=0 ____O+7 ____E+14

10.SITE:

A.AREA ACTUAL,ACRES_____ AREA REQUIRED,ACRES_____
(Refer to Handbook 203.03 & 203.04)
Adequate size.....____I-30____U-15____A=0 ____O+15____E+30
Adequate for fac. expansion.____I-30____U-15____A=0 ____O+15____E+30
Remarks:_____

B.DRAINAGE.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

C.WALKS.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

D.PARKING:.....Adequate:____I-6 ____U-3 ____A=0 ____O+3 ____E+6
.....Condition:____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

E.BUS LOADING:.....:____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

F.ROADS:.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

G.PLAYFIELDS.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

11.UTILITIES:

a.Gas.....Size_____Utility Co._____
b.Water.....Size_____Utility Co._____
c.Electric.....Phase___Voltage___Amps___Utility Co._____
Supply to the building is - Underground___Overhead___
d.Sewer.....City_____Other_____
Overall utilities adequacy..____I-14___U-7 ____A=0 ____O+7 ____E+14
Remarks:_____

12.BUILDING CONSTRUCTION:

A.BUILDING STRUCTURE:

Load bearing masonry.....____
Steel frame.....____
Wood frame.....____
Other(specify).....____
Overall Condition:..... ____I-20___U-10___A=0 ____O+10___E+20

B.FLOOR STRUCTURE:

Steel joists/concrete.....____
Wood joists.....____
Slab on grade.....____
Other(specify).....____
Overall Condition:..... ____I-10___U-5 ____A=0 ____O+5 ____E+10

C.ROOF STRUCTURE:

Steel.....____
Wood.....____
Other(specify).....____
Overall Condition:..... ____I-10___U-5 ____A=0 ____O+5 ____E+10

D.EXTERIOR FACING.....Brick___Conc. block___Other_____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

E.WINDOWS.....Steel___Wood___Aluminum___Other_____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

F.EXTERIOR DOORS.....Wood____Hollow Metal____Aluminum_____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

G.ROOFING.....Built-up___Mineral surf___Membrane____
Condition:.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

H.FLOORS.....Asbes tile___Othr tile___Wood___Carpet___Other_____
Condition:.....___I-4 ___U-2 ___A=0 ___O+2 ___E+4
Remarks:_____

I.INTERIOR WALLS.....Masonry___Plaster___Other_____
Type finish:_____
Condition:.....___I-4 ___U-2 ___A=0 ___O+2 ___E+4
Remarks:_____

J.INTERIOR DOORS.....Wood___Metal___Hollow___Solid_____
Condition:.....___I-4 ___U-2 ___A=0 ___O+2 ___E+4
Remarks:_____

K.CEILINGS...Plaster___Acust tile___Wood/Other fiber___Other_____
Type finish:_____
Condition:.....___I-4 ___U-2 ___A=0 ___O+2 ___E+4
Remarks:_____

L.TOILETS..FLOORS:Asbs tile___Othr tile___Wood___Carpet___Other___
Other_____
Condition:.....___I-2 ___U-1 ___A=0 ___O+1 ___E+2
Remarks:_____

WALLS:.....Masonry___Plaster___Other_____
Type finish:_____
Condition:.....___I-2 ___U-1 ___A=0 ___O+1 ___E+2
Remarks:_____

CEILINGS:.....Plaster___Acoust tile_____Other_____
Type finish:_____
Condition:.....___I-2 ___U-1 ___A=0 ___O+1 ___E+2
Remarks:_____

VENTILATION: Condition:.___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Remarks:_____

M.KITCHEN..FLOORS:Asbs tile___Othr tile___Wood___Carpet___Other___
Other_____
Condition:.....___I-2 ___U-1 ___A=0 ___O+1 ___E+2
Remarks:_____

WALLS:.....Masonry___Plaster___Other_____
Type finish:_____
Condition:.....___I-2 ___U-1 ___A=0 ___O+1 ___E+2
Remarks:_____

CEILINGS:.....Plaster___Acoust tile_____Other_____
Type finish:_____
Condition:.....___I-2 ___U-1 ___A=0 ___O+1 ___E+2
Remarks:_____

VENTILATION: Condition:.....___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Remarks:_____

FIRE SUPPRESSION SYSTEM?....Yes___No___
Condition:.....___I-4 ___U-2 ___A=0 ___O+2 ___E+4
Remarks:_____

HOT WATER BOOSTER HEATER?...Yes___No___
Water sufficiently hot?.....___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Remarks:_____

13.MECHANICAL/ELECTRICAL SYSTEMS:

A. PLUMBING: WATER SUPPLY:
Piping materials: Copper____ Galvanized____ Plastic____ Other____
Condition:.....____I-10____U-5____A=0____O+5____E+10
Remarks:_____

SOIL, WASTE, VENT:
Piping materials: Copper____ Galvanized____ Plastic____ Other____
Condition:.....____I-10____U-5____A=0____O+5____E+10
Remarks:_____

B. HVAC:
BASIC SYSTEM:.....Type_____
Age_____ Fuel_____
Condition:.....____I-20____U-10____A=0____O+10____E+20
Remarks:_____

VENTILATION SYSTEM:.....Type_____
Includes mechanical outside air supply capability? Yes____ No____
Adequacy:.....____I-40____U-20____A=0____O+20____E+40
Remarks:_____

Energy/Control System:.....Type_____
Condition:.....____I-4____U-2____A=0____O+2____E+4
Remarks:_____

C. ELECTRICAL:

General lighting.....Type?_____
Adeq/Cond:.....____I-20____U-10____A=0____O+10____E+20
Remarks:_____

Emergency Lighting?.....Yes____ No____
Fire alarms?.....Yes____ No____
Smoke detectors?.....Yes____ No____
Condition:.....____I-10____U-5____A=0____O+5____E+10
Remarks:_____

Power outlets:
Condition:.....____I-4____U-2____A=0____O+2____E+4
Remarks:_____

14. LIFE SAFETY, HEALTH AND ACCESSABILITY:

A. LIFE SAFETY CONDITION:.....____I-40____U-20____A=0____O+20____E+40
(Refer to Fire Marshal's report)

B. HEALTH CONDITION:..... ____I-40____U-20____A=0____O+20____E+40
(Refer to Health Dept/DNR reports)

C. ASBESTOS CONDITION:.....____I-40____U-20____A=0____O+20____E+40
(Refer to Management Plan)

D. HANDICAP ACCESSABILITY:.....____I-20____U-10____A=0____O+10____E+20
(Refer to 504 report)

PAGES 1 THROUGH TOP OF 5 - SUB TOTAL OF EVALUATION POINTS..... .00

II. FACILITIES SPACES EVALUATION - JUNIOR HIGH/MIDDLE

EVALUATION PARAMETER — PARAMETER EVALUATION POINTS

NOTE: Difference = No. of existing spaces -(minus) No. of Required spaces.

1. ADMINISTRATION:..Exist. spaces___ Reqd. spaces___ Difference, +or-___
No. of spaces(differx16):..... .00I-16 .00E+16
Size:..... ___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Condition:..... ___I-6 ___U-3 ___A=0 ___O+3 ___E+6
Remarks:.....___

2. STUDENT SERVICES: Exist. spaces___ Reqd. spaces___ Difference, +or-___
No. of spaces(differx16):..... .00I-16 .00E+16
Size:..... ___I-10 ___U-5 ___A=0 ___O+5 ___E+10
Condition:..... ___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Remarks:.....___

3. BASIC.....:Exist. spaces___ Reqd. spaces___ Difference, +or-___
No. of spaces(differx16):..... .00I-16 .00E+16
Language Arts, Size:..... ___I-10 ___U-5 ___A=0 ___O+5 ___E+10
Mathematics, Condition:.... ___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Social Studies, Remarks:.....___
Science

4. READING.....:Exist. spaces___ Reqd. spaces___ Difference, +or-___
No. of spaces(differx16):..... .00I-16 .00E+16
Size:..... ___I-10 ___U-5 ___A=0 ___O+5 ___E+10
Condition:..... ___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Remarks:.....___

5. HEALTH EDUCATION: Exist. spaces___ Reqd. spaces___ Difference, +or-___
No. of spaces(differx16):..... .00I-16 .00E+16
Size:..... ___I-10 ___U-5 ___A=0 ___O+5 ___E+10
Condition:..... ___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Remarks:.....___

6. COMPUTER LAB....:Exist. spaces___ Reqd. spaces___ Difference, +or-___
No. of spaces(differx16):..... .00I-16 .00E+16
Size:..... ___I-10 ___U-5 ___A=0 ___O+5 ___E+10
Condition:..... ___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Remarks:.....___

7. INST. MAT. CENTER: Exist.spaces___ Reqd. spaces___ Difference, +or-___
No. of spaces(differx16):..... .00I-16 .00E+16
Size:..... ___I-10 ___U-5 ___A=0 ___O+5 ___E+10
Condition:..... ___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Remarks:.....___

8. HOME ECONOMICS..:Exist. spaces___ Reqd. spaces___ Difference, +or-___
No. of spaces(differx16):..... .00I-16 .00E+16
Size:..... ___I-10 ___U-5 ___A=0 ___O+5 ___E+10
Condition:..... ___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Remarks:.....___

9. ART.....:Exist. spaces___ Reqd. spaces___ Difference, +or-___
No. of spaces(differx16):..... .00I-16 .00E+16
Size:..... ___I-10 ___U-5 ___A=0 ___O+5 ___E+10
Condition:..... ___I-8 ___U-4 ___A=0 ___O+4 ___E+8
Remarks:.....___

10. IND. TECHNOLOGY: Exist. spaces___ Reqd. spaces___ Difference, +or-___
No. of spaces(differx16):..... .00I-16 .00E+16

Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

11.MUSIC.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

12.PHYSICAL ED....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

13.AUDITORIUM.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

14.KITCHEN.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-16____U-8 ____A=0 ____O+8 ____E+16
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Adequate storage:.....____I-16____U-8 ____A=0 ____O+8 ____E+16
Remarks:.....

15.DINING.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Condition:.....____I-16____U-8 ____A=0 ____O+8 ____E+16
Remarks:.....

16.SPECIAL ED.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

17.STAFF/FACULTY..:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx10):..... .00I-10 .00E+10
Size:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Condition:.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:.....

18.TOILETS.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx10):..... .00I-10 .00E+10
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
FIXTURES.....:Exist. fixtrs____Reqd. fixtrs__Difference, +or-____
No. of spaces(differx4):..... .00I-4 .00E+4
Condition:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Remarks:.....

19.CUSTODIAL.....:No. of spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx4):..... .00I-4 .00E+4
Size:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Condition:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Remarks:.....

20.MECHANICAL.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10

Condition:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Remarks:....._____

21.STORAGE GENERL.:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx2):..... .00I-2 .00E+2
Size:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Condition:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Remarks:....._____

22.STORAGE INSTR..:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx4):..... .00I-4 .00E+4
Size:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Condition:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Remarks:....._____

23.OTHER SPACES...:No. of spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:....._____

24.OTHER SPACES...:No. of spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:....._____

OTHER EVALUATION PARAMETERS

25. ADEQUACY/CONDITION OF FURNISHINGS AND EQUIPMENT:
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:.....____

26. ECONOMIES OF SCALE:.....____I-20____U-10____A=0 ____O+10____E+20
(Refer to Handbook - 100.0142 G.)

27. BLDG UTILIZATION, (U):_____%____I-12____U-6____A=0 ____O+6 ____E+12
U =100x(This year's enrollment)/(25 x No. existing teaching spaces)
Name Exceptionality programs/no spaces used_____

PAGES BOTTOM OF 5 THROUGH 8 - SUB TOTAL EVALUATION POINTS..... .00

PAGES 1 THROUGH 8 - GRAND TOTAL EVALUATION POINTS..... .00

THE END

SCHOOL NAME/USE_____

COUNTY/RESA_____

DESIGN CAPACITY ENROLLMENT.....

IMPROVEMENT ITEM	UNIT	QUANT'Y	UNIT COST,$	ITEM COST,$	REMARKS
1.SITE WORK:					
Land acquisition	ACRES		.00	.00	
Excavation/grad	CUB FT		3.00	.00	
Drainage	LIN FT		15.00	.00	
Walks(6 ft wide)	SQ FT		2.00	.00	
Parking	SQ FT		2.25	.00	
Bus loading	SQ FT		2.25	.00	
Roads	SQ FT		2.25	.00	
Playing fields	SQ FT		2.25	.00	
Other				.00	
Sub-total				.00	
2.RENOVATIONS,EXTERIOR:					
Wall structure	SQ FT		6.00	.00	
Floor structure	SQ FT		5.00	.00	
Roof structure	SQ FT		5.00	.00	
Wall facing	SQ FT		6.00	.00	
Windows	EACH		750.00	.00	
Doors/frames	EACH		800.00	.00	
Roofing	SQ FT		3.50	.00	
Coping/parapet	LIN FT		15.00	.00	
Painting	SQ FT		.75	.00	
Other	SQ FT			.00	
Sub-total				.00	
3.RENOVATIONS,INTERIOR:					
Floor covering	SQ FT		2.00	.00	
Patch & painting	SQ FT		.40	.00	
Ceiling finish	SQ FT		.70	.00	
Plumbing	SQ FT		3.00	.00	
Heating/Ventilat	SQ FT		6.00	.00	
Air Conditioning	SQ FT		3.00	.00	
Lighting	SQ FT		2.50	.00	
Wiring	SQ FT		2.00	.00	
Fire alarm	SQ FT		1.25	.00	
Communic system	SQ FT		1.00	.00	
Interior doors	EACH		500.00	.00	
OTHER	SQ FT			.00	
Sub-total				.00	
4.BUILDING ADDITIONS INCLUDING FURNITURE,FURNISHINGS AND EQUIPMENT:					
Administration	SQ FT		70.00	.00	
Student services	SQ FT		70.00	.00	
Basic	SQ FT		76.00	.00	
Reading	SQ FT		76.00	.00	
Health Education	SQ FT		76.00	.00	
Computer lab	SQ FT		80.00	.00	
Inst. Mat Center	SQ FT		80.00	.00	
Home Economics	SQ FT		80.00	.00	
Art	SQ FT		76.00	.00	
Ind. Technology	SQ FT		80.00	.00	
Music	SQ FT		80.00	.00	
Physical Ed	SQ FT		80.00	.00	
Auditorium	SQ FT		80.00	.00	

Kitchen	SQ FT		80.00	.00
Dining	SQ FT		72.00	.00
Business Ed	SQ FT		76.00	.00
Co-op Education	SQ FT		76.00	.00
Special Ed	SQ FT		76.00	.00
Drivers Ed	SQ FT		76.00	.00
Staff/Faculty	SQ FT		70.00	.00
Toilets/Fixtrs	SQ FT		80.00	.00
Custodial	SQ FT		65.00	.00
Mechanical	SQ FT		60.00	.00
Storage genrl	SQ FT		60.00	.00
Storage Instr	SQ FT		65.00	.00
Other	SQ FT		.00	.00
Other	SQ FT		.00	.00
Circulation	@30%		72.00	.00
Sub-total				.00
5.SPECIAL CONSTRUCTION;				
Elevator	EACH			.00
Sprinkler system	SQ FT		1.50	.00
Kitchen equip	ALL			.00
Waste treatment	EACH			.00
Other				.00
Sub-total				.00
6.OTHER SPECIAL COSTS:				
				.00
				.00
				.00
				.00
Sub-total				.00
7.ARCHITECTURAL/ENGINEERING FEES:				
New constr	%	.00	.06	.00
Renovations	%	.00	.08	.00
Sub-total				.00
8.MISCELEANOUS:				
Survey	EACH		5,000.00	.00
Soil Inv	EACH			.00
				.00
				.00
Sub-total				.00
9.CONTINGENCIES:				
New constr	%	.00	.05	.00
Renovations	%	.00	.10	.00
Sub-total				.00
10.GRAND TOTAL PROJECT COST:				.00
ADDITIONAL LAND IMPROVED TO BRING	ACRES		.00	.00

COST TO BUILD A NEW SCHOOL/ NO LAND _____ _____ _____ _____ .00 _____

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

COST TO BUILD A NEW JUNIOR HIGH/MIDDLE SCHOOL BASED ON DATA TAKEN FROM THE HANDBOOK. USE THE DESIGN CAPACITY AND THE $/STUDENT FROM THE TABLE BELOW FOR THE CORRESPONDING DESIGN CAPACITY RANGE. THE $/STUDENT FIGURES WERE CALCULATED BY MULTIPLYING $72 PER SQUARE FOOT X 1.10 ALLOWANCE FACTOR X THE SQUARE FEET PER STUDENT GIVEN IN THE HANDBOOK.

ENROLLMENT RANGE	$/STUDENT
Up to 500 students	11,880
501 to 550 students	11,484
551 to 600 students	11,088
601 to 650 students	10,692
651 to 700 students	10,296
701 to 750 students	9,900
751 to 800 students	9,504
801 to 850 students	9,108
851 to 925 students	8,712
926 to 1000 students	8,316
Over 1000 students	7,920

MIDDLE/JUNIOR HIGH FACILITY - CURRICULUM PROGRAM SPACES

SPACE	ENROLLMENT 500 Students	750 Students	1000 Students
ADMINISTRATIVE			
a. Reception	1 @ 150	1 @ 150	1 @ 150
b. General Office	1 @ 300	1 @ 600	1 @ 800
c. Work Room	1 @ 200	1 @ 200	1 @ 200
d. Communications Control	1 @ 75	1 @ 75	1 @ 75
e. Principal's Office	1 @ 175	1 @ 175	1 @ 175
f. V. Principal's Office	1 @ 150	1 @ 150	1 @ 150
g. Conference Room	1 @ 250	1 @ 250	1 @ 250
h. Coordinator's Office			1 @ 125
Subtotal	-	-	-
PUPIL SERVICES			
a. Waiting	1 @ 100	1 @ 100	1 @ 100
b. Guidance Office	1 @ 125	1 @ 125	2 @ 125
c. Conference	1 @ 125	1 @ 125	1 @ 125
d. Health/Clinic/w/toilet and two cots	1 @ 250	1 @ 250	1 @ 250
Subtotal	-	-	-
LANGUAGE ARTS			
a. Language Arts Classrooms	4 @ 720	5 @ 720	6 @ 720
Subtotal	-	-	-
SOCIAL STUDIES			
a. Social Studies Classrooms	4 @ 720	5 @ 720	6 @ 720
Subtotal	-	-	-
MATHEMATICS			
a. Mathematics Classrooms	3 @ 720	4 @ 720	5 @ 720
b. Computer Laboratory	1 @ 720	1 @ 720	1 @ 720
Subtotal	-	-	-
SCIENCE AREA			
a. Science Lab	1 @ 1200	1 @ 1200	1 @ 1200
b. Science Classrooms	3 @ 950	4 @ 950	6 @ 950
c. Preparation	4 @ 120	5 @ 120	6 @ 120
Subtotal	-	-	-
COMPUTERS			
a. Laboratory	1 @ 800	2 @ 800	3 @ 800
READING			
a. Classrooms	1 @ 720	2 @ 720	3 @ 720
b. Laboratory	1 @ 720	1 @ 720	1 @ 720
Subtotal	-	-	-
FOREIGN LANGUAGE			
a. Classroom/Laboratory	1 @ 875	1 @ 875	2 @ 875
INSTRUCTIONAL MATERIALS CENTER			
a. Reading Area	1 @ 2000	1 @ 3000	1 @ 4000
b. Work Room	1 @ 300	1 @ 300	1 @ 300
c. Librarian's Office	1 @ 150	1 @ 150	1 @ 150
d. Audio/Visual	1 @ 200	1 @ 200	1 @ 200
e. Listening/Viewing Room	1 @ 200	1 @ 200	1 @ 200
Subtotal	-	-	-

MIDDLE/JUNIOR HIGH FACILITY - CURRICULUM PROGRAM SPACES

SPACE	ENROLLMENT 500 Students	750 Students	1000 Students
HOME ECONOMICS CLUSTER			
a. Clothing Lab	1 @ 1000	1 @ 1000	1 @ 1000
b. Foods Lab	1 @ 1000	1 @ 1000	1 @ 1000
c. Classrooms	1 @ 500	1 @ 500	1 @ 500
d. Laundry	1 @ 100	1 @ 100	1 @ 100
Subtotal	-	-	-
ART			
a. Art Studio	1 @ 1500	1 @ 1500	2 @ 1500
b. Ceramics	1 @ 200	1 @ 200	1 @ 200
Subtotal	-	-	-
TECHNOLOGY EDUCATION			
a. Production Lab	1 @ 2000	1 @ 2000	1 @ 2000
b. Communication/Classroom	1 @ 1000	1 @ 1000	1 @ 1000
c. Audio Visual Lab	1 @ 100	1 @ 100	1 @ 100
d. Projects Storage	1 @ 75	1 @ 75	1 @ 75
e. Tool Storage	1 @ 150	1 @ 150	1 @ 150
Subtotal	-	-	-
MUSIC DEPARTMENT			
a. Music Studio	1 @ 1200	1 @ 1600	1 @ 2000
b. Office/Library	1 @ 200	1 @ 200	1 @ 200
c. Individual Practice	2 @ 50	2 @ 50	2 @ 50
d. Choral	1 @ 1200	1 @ 1500	1 @ 1500
e. Music Classrooms	1 @ 750	1 @ 750	1 @ 750
f. Instrument Storage	1 @ 350	1 @ 350	1 @ 350
Subtotal			
PHYSICAL EDUCATION			
a. Gymnasium	1 @ 5400	1 @ 5400	1 @ 5400
b. Seating	1 @ 1500 Seating 500	1 @ 2250 Seating 750	1 @ 3000 Seating 1000
c. Boys' Locker Room	1 @ 1200	1 @ 1200	1 @ 1200
d. Girls' Locker Room	1 @ 1200	1 @ 1200	1 @ 1200
e. Health Classrooms	1 @ 850	1 @ 850	2 @ 850
Subtotal	-	-	-
FOODS SERVICE			
a. Dining Area	1 @ 2000	1 @ 3000	1 @ 4200
b. Serving	1 @ 250	1 @ 250	1 @ 250
c. Kitchen	1 @ 800	1 @ 800	1 @ 800
d. Employee Locker Room with Toilet	1 @ 100	1 @ 100	1 @ 100
e. Dietician's Office	1 @ 100	1 @ 100	1 @ 100
f. Concessions	1 @ 240	1 @ 240	1 @ 240
g. Walk-in	1 @ 240	1 @ 240	1 @ 240
Subtotal	-	-	-
SPECIALIZED EDUCATION			
a. Resource	2 @ 600	2 @ 600	2 @ 600
b. Special Spaces	Refer to Chapter 7 of Handbook on Planning		
c. Itinerant	School Facilities (SBE Policy 6200)		
d. Conference	1 @ 150	1 @ 150	1 @ 150
Subtotal	-	-	-
STAFF/FACULTY			
a. Lounge	1 @ 300	2 @ 300	2 @ 300
b. Work Room	1 @ 200	2 @ 200	2 @ 200
Subtotal	-	-	-

MIDDLE/JUNIOR HIGH FACILITY – CURRICULUM PROGRAM SPACES

SPACE	ENROLLMENT 500 Students	750 Students	1000 Students
CUSTODIAL			
a. Custodial Work Room	1 0 200	1 0 200	1 0 200
b. Mechanical Room	1 0 1500	1 0 1500	1 0 1500
c. Custodian's Office	1 0 150	1 0 150	1 0 150
d. Utility Rooms	3 0 50	3 0 50	3 0 50
Subtotal	–	–	–
LARGE GROUP INSTRUCTION/ ELECTRONIC TECH. LAB	1 @ 2000	1 @ 2000	1 @ 2000
a. Control Room (Optional)	1 0 150	1 0 150	1 0 150
Subtotal	–	–	–
STORAGE			
Instructional			
a. Science	4 0 120	5 0 120	6 0 120
b. Book Storage	1 0 150	2 0 150	3 0 150
c. Home Economics	2 0 100	2 0 100	2 0 100
d. Art	1 0 200	1 0 200	1 0 200
e. Sp. Ed. Storage	1 0 100	1 0 100	1 0 100
Subtotal	–	–	–
Non-Instructional			
a. Administrative	1 0 125	1 0 125	1 0 125
b. Central Storage	2 0 200	2 0 200	2 0 200
c. Outdoor Storage	1 0 200	1 0 200	1 0 200
d. Uniform Storage	1 0 120	1 0 120	1 0 120
e. Robe Storage	1 0 60	1 0 60	1 0 60
f. P.E. Storage	2 0 200	2 0 200	2 0 200
g. Gym Storage	1 0 200	1 0 200	1 0 200
h. Food Service/dry stor.	1 0 240	1 0 240	1 0 240
i. Stage Storage	1 0 200	1 0 200	1 0 200
Subtotal	–	–	–
TOILET			
a. Faculty	2 0 50	4 0 50	4 0 50
b. Student Commons	2 0 200	4 0 200	4 0 200
Subtotal	–	–	–
TOTAL NET PROGRAM AREA			
CIRCULATION, WALLS, ETC.			
TOTAL GROSS BUILDING AREA			

**********SENIOR HIGH**********
A SCHOOL FACILITY EVALUATION FORM - W.V. SCHOOL BUILDING AUTHORITY(SBA)
****

I.GENERAL FACILITIES EVALUATION

NOTES:A.Complete a form for each existing facility as currently used.
B.For evaluation ratings used below: I=Inadequate; U=Under average; A=Average; O=Over average; E=Excellent. Select one for each item and write the corresponding number in the space to the left.
C:For "Other" choice below always specify what "Other" is.
D:For "Condition" rating below evaluate the general overall "Condition" if more than one item involved.

1.FACILITY NAME/USE:_____

2.PRINCIPAL/PHONE_____

3.ENROLLMENT:..THIS YEAR:_____...PROJECTED:..YEAR 4_____...YEAR 8_____

4.COUNTY/RESA #:_____5.SURVEYED:BY_____DATE_____

6.REMARKS:_____
_____

7.BUILDING AREAS:

Original building,Gross Sq.Ft.....____Year____Age____
Building addition 1,Gross Sq.Ft...____Year____Age____
Building addition 2,Gross Sq.Ft...____Year____Age____
Building addition 3,Gross Sq.Ft...____Year____Age____
Building addition 4,Gross Sq.Ft...____Year____Age____
Total gross Sq.Ft..... ....____

8.BUILDING QUANITITIES:

Number of floors.....____
Total building height,Ft.....____
Perimeter wall,Lin.Ft.....____
Roof Area,Sq.Ft.....____
Exterior wall area,Ft.....____
Windows,No.....____
Exterior doors,No.....____

EVALUATION PARAMETER	PARAMETER EVALUATION POINTS

9.ENERGY INDEX (BTU's/SQ.FT.
AVERAGE LAST TWO YEARS).....____
Energy Efficiency.....____I-14____U-7 ____A=0 ____O+7 ____E+14

10.SITE:

A.AREA ACTUAL,ACRES_____ AREA REQUIRED,ACRES_____
(Refer to Handbook 203.03 & 203.04)
Adequate size.....____I-30____U-15____A=0 ____O+15____E+30
Adequate for fac. expansion.____I-30____U-15____A=0 ____O+15____E+30
Remarks:_____

B.DRAINAGE.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

C.WALKS.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

D.PARKING:.....Adequate:____I-6 ____U-3 ____A=0 ____O+3 ____E+6
.....Condition:____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

E.BUS LOADING:.....:____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

F.ROADS:.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

G.PLAYFIELDS.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

11.UTILITIES:

a.Gas.....Size_____Utility Co._____
b.Water.....Size_____Utility Co._____
c.Electric.....Phase____Voltage____Amps____Utility Co._____
Supply to the building is - Underground____Overhead____
d.Sewer.....City_____Other_____
Overall utilities adequacy..____I-14____U-7 ____A=0 ____O+7 ____E+14
Remarks:_____

12.BUILDING CONSTRUCTION:

A.BUILDING STRUCTURE:

Load bearing masonry.....____
Steel frame.....____
Wood frame.....____
Other(specify).....____
Overall Condition:..... ____I-20____U-10____A=0 ____O+10____E+20

B.FLOOR STRUCTURE:

Steel joists/concrete.....____
Wood joists.....____
Slab on grade.....____
Other(specify).....____
Overall Condition:..... ____I-10____U-5 ____A=0 ____O+5 ____E+10

C.ROOF STRUCTURE:

Steel.....____
Wood.....____
Other(specify).....____
Overall Condition:..... ____I-10____U-5 ____A=0 ____O+5 ____E+10

D.EXTERIOR FACING.....Brick____Conc. block____Other_____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

E.WINDOWS.....Steel____Wood____Aluminum____Other_____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

F.EXTERIOR DOORS.....Wood____Hollow Metal____Aluminum_____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

G.ROOFING.....Built-up____Mineral surf____Membrane____
Condition:.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:_____

H.FLOORS.....Asbes tile____Othr tile____Wood____Carpet____Other_____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

I.INTERIOR WALLS.....Masonry____Plaster____Other_____
Type finish:_____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

J.INTERIOR DOORS.....Wood____Metal____Hollow____Solid_____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

K.CEILINGS...Plaster____Acust tile____Wood/Other fiber____Other_____
Type finish:_____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

L.TOILETS..FLOORS:Asbs tile____Othr tile____Wood____Carpet____Other____
Other_____
Condition:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Remarks:_____

WALLS:.....Masonry____Plaster____Other_____
Type finish:_____
Condition:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Remarks:_____

CEILINGS:.....Plaster____Acoust tile_____Other_____
Type finish:_____
Condition:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Remarks:_____

VENTILATION: Condition:.____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:_____

M.KITCHEN..FLOORS:Asbs tile____Othr tile____Wood____Carpet____Other____
Other_____
Condition:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Remarks:_____

WALLS:.....Masonry____Plaster____Other_____
Type finish:_____
Condition:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Remarks:_____

CEILINGS:.....Plaster____Acoust tile_____Other_____
Type finish:_____
Condition:.....____I-2 ____U-1 ____A=0 ____O+1 ____E+2
Remarks:_____

VENTILATION: Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:_____

FIRE SUPPRESSION SYSTEM?....Yes____No____
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

HOT WATER BOOSTER HEATER?...Yes____No____
Water sufficiently hot?.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:_____

13.MECHANICAL/ELECTRICAL SYSTEMS:

A. PLUMBING: WATER SUPPLY:
Piping materials: Copper_____ Galvanized_____ Plastic_____ Other_____
Condition:..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Remarks:_____

SOIL, WASTE, VENT:
Piping materials: Copper_____ Galvanized_____ Plastic_____ Other_____
Condition:..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Remarks:_____

B. HVAC:
BASIC SYSTEM:.....Type_____
Age_____ Fuel_____
Condition:..... ____I-20 ____U-10 ____A=0 ____O+10 ____E+20
Remarks:_____

VENTILATION SYSTEM:.....Type_____
Includes mechanical outside air supply capability? Yes____ No____
Adequacy:..... ____I-40 ____U-20 ____A=0 ____O+20 ____E+40
Remarks:_____

Energy/Control System:.....Type_____
Condition:..... ____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

C. ELECTRICAL:

General lighting.....Type?_____
Adeq/Cond:..... ____I-20 ____U-10 ____A=0 ____O+10 ____E+20
Remarks:_____

Emergency Lighting?.....Yes____ No____
Fire alarms?.....Yes____ No____
Smoke detectors?.....Yes____ No____
Condition:..... ____I-10 ____U-5 ____A=0 ____O+5 ____E+10
Remarks:_____

Power outlets:
Condition:..... ____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:_____

14. LIFE SAFETY, HEALTH AND ACCESSABILITY:

A. LIFE SAFETY CONDITION:..... ____I-40 ____U-20 ____A=0 ____O+20 ____E+40
(Refer to Fire Marshal's report)

B. HEALTH CONDITION:..... ____I-40 ____U-20 ____A=0 ____O+20 ____E+40
(Refer to Health Dept/DNR reports)

C. ASBESTOS CONDITION:..... ____I-40 ____U-20 ____A=0 ____O+20 ____E+40
(Refer to Management Plan)

D. HANDICAP ACCESSABILITY:..... ____I-20 ____U-10 ____A=0 ____O+10 ____E+20
(Refer to 504 report)

PAGES 1 THROUGH TOP OF 5 - SUB TOTAL OF EVALUATION POINTS..... .00

II. FACILITIES SPACES EVALUATION - SENIOR HIGH

EVALUATION PARAMETER	PARAMETER EVALUATION POINTS

NOTE: Difference = No. of existing spaces -(minus) No. of Required spaces.

1. ADMINISTRATION: ..Exist. spaces ___ Reqd. spaces ___ Difference, +or- ___
No. of spaces (differx16): ..... .00I-16 .00E+16
Size: ..... ___ I-8 ___ U-4 ___ A=0 ___ O+4 ___ E+8
Condition: ..... ___ I-6 ___ U-3 ___ A=0 ___ O+3 ___ E+6
Remarks: .....

2. STUDENT SERVICES: Exist. spaces ___ Reqd. spaces ___ Difference, +or- ___
No. of spaces (differx16): ..... .00I-16 .00E+16
Size: ..... ___ I-10 ___ U-5 ___ A=0 ___ O+5 ___ E+10
Condition: ..... ___ I-8 ___ U-4 ___ A=0 ___ O+4 ___ E+8
Remarks: .....

3. BASIC ..... : Exist. spaces ___ Reqd. spaces ___ Difference, +or- ___
No. of spaces (differx16): ..... .00I-16 .00E+16
Language Arts, Size: ..... ___ I-10 ___ U-5 ___ A=0 ___ O+5 ___ E+10
Mathematics, Condition: .... ___ I-8 ___ U-4 ___ A=0 ___ O+4 ___ E+8
Social Studies, Remarks: .....
Science

4. READING ..... : Exist. spaces ___ Reqd. spaces ___ Difference, +or- ___
No. of spaces (differx16): ..... .00I-16 .00E+16
Size: ..... ___ I-10 ___ U-5 ___ A=0 ___ O+5 ___ E+10
Condition: ..... ___ I-8 ___ U-4 ___ A=0 ___ O+4 ___ E+8
Remarks: .....

5. HEALTH EDUCATION: Exist. spaces ___ Reqd. spaces ___ Difference, +or- ___
No. of spaces (differx16): ..... .00I-16 .00E+16
Size: ..... ___ I-10 ___ U-5 ___ A=0 ___ O+5 ___ E+10
Condition: ..... ___ I-8 ___ U-4 ___ A=0 ___ O+4 ___ E+8
Remarks: .....

6. COMPUTER LAB .... : Exist. spaces ___ Reqd. spaces ___ Difference, +or- ___
No. of spaces (differx16): ..... .00I-16 .00E+16
Size: ..... ___ I-10 ___ U-5 ___ A=0 ___ O+5 ___ E+10
Condition: ..... ___ I-8 ___ U-4 ___ A=0 ___ O+4 ___ E+8
Remarks: .....

7. INST. MAT. CENTER: Exist. spaces ___ Reqd. spaces ___ Difference, +or- ___
No. of spaces (differx16): ..... .00I-16 .00E+16
Size: ..... ___ I-10 ___ U-5 ___ A=0 ___ O+5 ___ E+10
Condition: ..... ___ I-8 ___ U-4 ___ A=0 ___ O+4 ___ E+8
Remarks: .....

8. HOME ECONOMICS .. : Exist. spaces ___ Reqd. spaces ___ Difference, +or- ___
No. of spaces (differx16): ..... .00I-16 .00E+16
Size: ..... ___ I-10 ___ U-5 ___ A=0 ___ O+5 ___ E+10
Condition: ..... ___ I-8 ___ U-4 ___ A=0 ___ O+4 ___ E+8
Remarks: .....

9. ART ..... : Exist. spaces ___ Reqd. spaces ___ Difference, +or- ___
No. of spaces (differx16): ..... .00I-16 .00E+16
Size: ..... ___ I-10 ___ U-5 ___ A=0 ___ O+5 ___ E+10
Condition: ..... ___ I-8 ___ U-4 ___ A=0 ___ O+4 ___ E+8
Remarks: .....

10. IND. TECHNOLOGY: Exist. spaces ___ Reqd. spaces ___ Difference, +or- ___
No. of spaces (differx16): ..... .00I-16 .00E+16

Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

11.MUSIC.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

12.PHYSICAL ED....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

13.AUDITORIUM.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

14.KITCHEN.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-16____U-8 ____A=0 ____O+8 ____E+16
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Adequate storage:.....____I-16____U-8 ____A=0 ____O+8 ____E+16
Remarks:.....

15.DINING.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Condition:.....____I-16____U-8 ____A=0 ____O+8 ____E+16
Remarks:.....

16.BUSINESS ED....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

17.CO-OP EDUCATION:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

18.SPECIAL ED.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

19.DRIVERS ED.....:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....____I-10____U-5 ____A=0 ____O+5 ____E+10
Condition:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Remarks:.....

20.STAFF/FACULTY..:Exist. spaces____Reqd. spaces____Difference, +or-____
No. of spaces(differx10):..... .00I-10 .00E+10
Size:.....____I-8 ____U-4 ____A=0 ____O+4 ____E+8
Condition:.....____I-6 ____U-3 ____A=0 ____O+3 ____E+6
Remarks:.....

21.TOILETS.....:Exist. spaces___Reqd. spaces___Difference, +or-____
No. of spaces(differx10):..... .00I-10 .00E+10
Size:.....___I-10___U-5___A=0___O+5___E+10
FIXTURES.....:Exist. fixtrs___Reqd. fixtrs___Difference, +or-____
No. of spaces(differx4):..... .00I-4 .00E+4
Condition:.....___I-10___U-5___A=0___O+5___E+10
Remarks:....._____

22.CUSTODIAL.....:No. of spaces___Reqd. spaces___Difference, +or-____
No. of spaces(differx4):..... .00I-4 .00E+4
Size:.....___I-2___U-1___A=0___O+1___E+2
Condition:.....___I-2___U-1___A=0___O+1___E+2
Remarks:....._____

23.MECHANICAL.....:Exist. spaces___Reqd. spaces___Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....___I-10___U-5___A=0___O+5___E+10
Condition:.....___I-10___U-5___A=0___O+5___E+10
Remarks:....._____

24.STORAGE GENERL.:Exist. spaces___Reqd. spaces___Difference, +or-____
No. of spaces(differx2):..... .00I-2 .00E+2
Size:.....___I-2___U-1___A=0___O+1___E+2
Condition:.....___I-2___U-1___A=0___O+1___E+2
Remarks:....._____

25.STORAGE INSTR..:Exist. spaces___Reqd. spaces___Difference, +or-____
No. of spaces(differx4):..... .00I-4 .00E+4
Size:.....___I-4___U-2___A=0___O+2___E+4
Condition:.....___I-2___U-1___A=0___O+1___E+2
Remarks:....._____

26.OTHER SPACES...:No. of spaces___Reqd. spaces___Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....___I-10___U-5___A=0___O+5___E+10
Condition:.....___I-8___U-4___A=0___O+4___E+8
Remarks:....._____

27.OTHER SPACES...:No. of spaces___Reqd. spaces___Difference, +or-____
No. of spaces(differx16):..... .00I-16 .00E+16
Size:.....___I-10___U-5___A=0___O+5___E+10
Condition:.....___I-8___U-4___A=0___O+4___E+8
Remarks:....._____

OTHER EVALUATION PARAMETERS

28. ADEQUACY/CONDITION OF FURNISHINGS AND EQUIPMENT:
Condition:.....____I-4 ____U-2 ____A=0 ____O+2 ____E+4
Remarks:.....____

29. ECONOMIES OF SCALE:.....____I-20____U-10____A=0 ____O+10____E+20
(Refer to Handbook - 100.0142 G.)

30. BLDG UTILIZATION, (U):_____%____I-12____U-6____A=0 ____O+6 ____E+12
U =100x(This year's enrollment)/(25 x No. existing teaching spaces)
Name Exceptionality programs/no spaces used_____

PAGES BOTTOM OF 5 THROUGH 9 - SUB TOTAL EVALUATION POINTS..... .00

PAGES 1 THROUGH 9 - GRAND TOTAL EVALUATION POINTS..... .00

THE END

SCHOOL NAME/USE_____

COUNTY/RESA_____

DESIGN CAPACITY ENROLLMENT.....

IMPROVEMENT ITEM	UNIT	QUANT'Y	UNIT COST,$	ITEM COST,$	REMARKS
1.SITE WORK:					
Land acquisition	ACRES		.00	.00	
Excavation/grad	CUB FT		3.00	.00	
Drainage	LIN FT		15.00	.00	
Walks(6 ft wide)	SQ FT		2.00	.00	
Parking	SQ FT		2.25	.00	
Bus loading	SQ FT		2.25	.00	
Roads	SQ FT		2.25	.00	
Playing fields	SQ FT		2.25	.00	
Other				.00	
Sub-total				.00	
2.RENOVATIONS,EXTERIOR:					
Wall structure	SQ FT		6.00	.00	
Floor structure	SQ FT		5.00	.00	
Roof structure	SQ FT		5.00	.00	
Wall facing	SQ FT		6.00	.00	
Windows	EACH		750.00	.00	
Doors/frames	EACH		800.00	.00	
Roofing	SQ FT		3.50	.00	
Coping/parapet	LIN FT		15.00	.00	
Painting	SQ FT		.75	.00	
Other	SQ FT			.00	
Sub-total				.00	
3.RENOVATIONS,INTERIOR:					
Floor covering	SQ FT		2.00	.00	
Patch & painting	SQ FT		.40	.00	
Ceiling finish	SQ FT		.70	.00	
Plumbing	SQ FT		3.00	.00	
Heating/Ventilat	SQ FT		6.00	.00	
Air Conditioning	SQ FT		3.00	.00	
Lighting	SQ FT		2.50	.00	
Wiring	SQ FT		2.00	.00	
Fire alarm	SQ FT		1.25	.00	
Communic system	SQ FT		1.00	.00	
Interior doors	EACH		500.00	.00	
Other	SQ FT			.00	
Other	SQ FT			.00	
Sub-total				.00	
4.BUILDING ADDITIONS INCLUDING FURNITURE,FURNISHINGS AND EQUIPMENT:					
Administration	SQ FT		70.00	.00	
Student services	SQ FT		70.00	.00	
Basic	SQ FT		76.00	.00	
Reading	SQ FT		76.00	.00	
Health Education	SQ FT		76.00	.00	
Computer lab	SQ FT		80.00	.00	
Inst. Mat Center	SQ FT		80.00	.00	
Home Economics	SQ FT		80.00	.00	
Art	SQ FT		76.00	.00	
Ind. Technology	SQ FT		80.00	.00	
Music	SQ FT		80.00	.00	
Physical Ed	SQ FT		80.00	.00	
Auditorium	SQ FT		80.00	.00	

Kitchen	SQ FT		80.00	.00
Dining	SQ FT		72.00	.00
Special Ed	SQ FT		76.00	.00
Staff/Faculty	SQ FT		70.00	.00
Toilets/Fixtrs	SQ FT		80.00	.00
Custodial	SQ FT		65.00	.00
Mechanical	SQ FT		60.00	.00
Storage genrl	SQ FT		60.00	.00
Storage Instr	SQ FT		65.00	.00
Other	SQ FT		.00	.00
Other	SQ FT		.00	.00
Circulation	@30%		72.00	.00
Sub-total				.00
5.SPECIAL CONSTRUCTION;				
Elevator	EACH			.00
Sprinkler system	SQ FT		1.50	.00
Kitchen equip	ALL			.00
Waste treatment	EACH			.00
Other				.00
Sub-total				.00
6.OTHER SPECIAL COSTS:				
				.00
				.00
				.00
				.00
Sub-total				.00
7.ARCHITECTURAL/ENGINEERING FEES:				
New constr	%	.00	.06	.00
Renovations	%	.00	.08	.00
Sub-total				.00
8.MISCELEANOUS:				
Survey	EACH		5,000.00	.00
Soil Inv	EACH			.00
				.00
				.00
Sub-total				.00
9.CONTINGENCIES:				
New constr	%	.00	.05	.00
Renovations	%	.00	.10	.00
Sub-total				.00
10.GRAND TOTAL PROJECT COST:				.00
ADDITIONAL LAND IMPROVED TO BRING TO STATE STANDARD	ACRES		.00	.00

DSGN CAP $/STDNT

TO STATE STANDARD _____ _____ _____ _____ _____

	DSGN CAP	$/STDNT			
COST TO BUILD A NEW SCHOOL/ NO LAND				.00	
RATIO - COST TO IMPROVE THE BLDG/ COST OF NEW BLDG					

COST TO BUILD A NEW HIGH SCHOOL BASED ON DATA TAKEN FROM THE HANDBOOK. USE THE DESIGN CAPACITY AND THE $/STUDENT FROM THE TABEL BELOW FOR THE CORRESPONDING DESIGN CAPACITY ENROLLMENT RANGE. THE $/STUDENT FIGURES WERE CALCULATED BY MULTIPLYING $78 PER SQUARE FOOT X 1.15 ALLOWANCE FACTOR X THE SQUARE FEET PER STUDENT GIVEN IN THE HANDBOOK.

ENROLLMENT RANGE	$/STUDENT
Up to 500 students	20,631
501 to 550 students	19,734
551 to 600 students	19,286
601 to 650 students	18,837
651 to 700 students	17,492
701 to 750 students	16,595
751 to 825 students	15,698
826 to 900 students	14,801
901 to 1000 students	14,352
1001 to 1150 students	13,904
1151 to 1300 students	13,455
1301 to 1500 students	13,007
Over 1500 students	12,558

SENIOR HIGH FACILITY – CURRICULUM PROGRAM SPACES

SPACE	ENROLLMENT 500 Students	750 Students	1000 Students	1500 Students
ADMINISTRATIVE				
a. Reception	1 @ 150	1 @ 150	1 @ 150	1 @ 200
b. General Office	1 @ 300	1 @ 600	1 @ 800	1 @ 800
c. Work Room	1 @ 300	1 @ 300	1 @ 300	1 @ 300
d. Commun., Control	1 @ 75	1 @ 75	1 @ 75	1 @ 75
e. Principal's Office	1 @ 180	1 @ 180	1 @ 180	1 @ 180
f. V. Principal's Office	1 @ 125	1 @ 125	1 @ 125	1 @ 125
g. Conference Room	1 @ 200	1 @ 200	1 @ 250	1 @ 250
h. Financial Office	1 @ 100	1 @ 100	1 @ 100	1 @ 100
i. Record Vault	1 @ 150	1 @ 150	1 @ 150	1 @ 150
Subtotal	–	–	–	–
STUDENT SERVICES				
a. Waiting	1 @ 120	1 @ 120	1 @ 120	1 @ 120
b. Career Lab	1 @ 250	1 @ 250	1 @ 300	1 @ 300
c. Guidance Office	1 @ 150	1 @ 150	2 @ 250	2 @ 250
d. Conference	1 @ 150	1 @ 150	1 @ 200	1 @ 200
e. Health/Clinic/w/toilet and 3 cots	1 @ 250	1 @ 250	1 @ 250	1 @ 250
Subtotal	–	–	–	–
LANGUAGE ARTS				
a. Language Arts	3 @ 720	6 @ 720	8 @ 720	12 @ 720
b. Foreign Language Lab	1 @ 875	1 @ 875	2 @ 875	3 @ 875
c. Dark Room	1 @ 125	1 @ 125	1 @ 125	1 @ 125
d. Writing Lab			1 @ 720	1 @ 720
Subtotal	–	–	–	–
MATHEMATICS				
a. Mathematics	2 @ 720	3 @ 720	3 @ 720	6 @ 720
b. Higher Mathematics		1 @ 720	1 @ 720	2 @ 720
c. Technical Math/Comp.	1 @ 720	1 @ 720	2 @ 720	3 @ 720
Subtotal	–	–	–	–
SOCIAL STUDIES				
a. Social Studies	3 @ 720	5 @ 720	7 @ 720	10 @ 720
b. Computer	1 @ 500	1 @ 500	1 @ 500	1 @ 500
Subtotal	–	–	–	–
SCIENCE AREA				
a. Chemistry/Cl/Lab	1 @ 1200	1 @ 1200	1 @ 1200	2 @ 1200
b. Physics Cl/Lab			1 @ 1200	1 @ 1200
c. General Science	1 @ 900	2 @ 900	2 @ 900	4 @ 900
d. Biology	1 @ 900	2 @ 900	3 @ 900	3 @ 900
e. Preparation	3 @ 200	5 @ 200	7 @ 200	10 @ 200
f. Dark Room	1 @ 100	1 @ 100	1 @ 100	1 @ 100
Subtotal	–	–	–	–
READING				
a. Reading Lab	1 @ 720	1 @ 720	1 @ 720	1 @ 720
HEALTH EDUCATION				
a. Classrooms	1 @ 850	1 @ 850	1 @ 850	1 @ 850
COMPUTERS				
a. Computer Cl/Lab	1 @ 1500	1 @ 1500	1 @ 1500	2 @ 1500
Subtotal	–	–	–	–

SENIOR HIGH FACILITY - CURRICULUM PROGRAM SPACES

SPACE	ENROLLMENT 500 Students	750 Students	1000 Students	1500 Students
INSTRUCTIONAL MATERIALS CENTER				
a. Reading Stack Area 10% @ 40 s.f.	1 @ 2000	1 @ 3000	1 @ 4000	1 @ 6000
b. Inst. Materials Comp.	1 @ 500	1 @ 500	1 @ 500	1 @ 500
c. Librarian's Office	1 @ 200	1 @ 200	1 @ 200	1 @ 200
d. Work Room	1 @ 200	1 @ 200	1 @ 200	1 @ 200
e. Audio/Visual	1 @ 200	1 @ 300	1 @ 300	1 @ 300
f. Listening/Viewing Room	2 @ 250	2 @ 150	1 @ 150	1 @ 150
Subtotal	-	-	-	-
HOME ECONOMICS CLUSTER				
a. Clothing Lab	1 @ 1150	1 @ 1150	1 @ 1150	2 @ 1150
b. Classrooms	1 @ 500	1 @ 500	2 @ 500	2 @ 500
c. Foods Lab	1 @ 950	1 @ 950	1 @ 950	2 @ 950
d. Laundry	1 @ 50	1 @ 50	1 @ 50	1 @ 50
e. Office	1 @ 125	1 @ 125	1 @ 125	1 @ 125
f. Child Care			1 @ 1200	1 @ 1200
Subtotal	-	-	-	-
ART				
a. Art Lab	1 @ 1200	1 @ 1200	1 @ 1200	2 @ 1200
b. Ceramics	1 @ 400	1 @ 400	1 @ 400	2 @ 400
c. Kiln	1 @ 100	1 @ 100	1 @ 100	1 @ 100
Subtotal	-	-	-	-
INDUSTRIAL ARTS				
a. Industrial Arts Shop	1 @ 3000	1 @ 3000	1 @ 3000	1 @ 3000
b. Finishing Room	1 @ 150	1 @ 150	1 @ 150	1 @ 150
c. Office/Planning Area	1 @ 200	1 @ 200	1 @ 200	1 @ 200
d. Drafting	1 @ 1000	1 @ 1000	1 @ 1000	1 @ 1000
Subtotal	-	-	-	-
MUSIC DEPARTMENT				
a. Band Rehearsal	1 @ 2000	1 @ 3000	1 @ 4500	1 @ 5400
b. Vocal Rehearsal	1 @ 1000	1 @ 1500	1 @ 2000	1 @ 2400
c. Office/Library	1 @ 250	1 @ 250	1 @ 250	1 @ 250
d. Individual Practice	2 @ 50	4 @ 50	6 @ 50	6 @ 50
e. Ensemble/Piano Lab	1 @ 250	1 @ 250	1 @ 250	1 @ 250
f. Music Classrooms	1 @ 720	1 @ 720	1 @ 720	1 @ 720
Subtotal	-	-	-	-
PHYSICAL EDUCATION				
a. Gymnasium w/seating (Approximately)	1 @ 9000 Seating 500	1 @ 10000 Seating 750	1 @ 11400 Seating 1000	1 @ 12000 Seating 1500
b. Auxiliary Gym			1 @ 4500	1 @ 4500
c. Boys' Locker Room	1 @ 600	1 @ 600	1 @ 700	1 @ 700
d. Boys' Shower Room	1 @ 200	1 @ 200	1 @ 200	1 @ 200
e. Boys' Drying Area	1 @ 100	1 @ 100	1 @ 100	1 @ 100
f. Girls' Locker Room	1 @ 600	1 @ 600	1 @ 700	1 @ 700
g. Girls' Shower Room	1 @ 200	1 @ 200	1 @ 200	1 @ 200
h. Girls' Drying Room	1 @ 100	1 @ 100	1 @ 100	1 @ 100
i. Instructor's Office w/toilet	2 @ 200	2 @ 200	2 @ 200	2 @ 200
j. Boys' Team Room	1 @ 800	1 @ 800	1 @ 800	1 @ 800
k. Boys' Shower	1 @ 150	1 @ 150	1 @ 150	1 @ 150
l. Girls' Team Room	1 @ 800	1 @ 800	1 @ 800	1 @ 800
m. Girls's Shower	1 @ 150	1 @ 150	1 @ 150	1 @ 150
n. Coaches' Off. w/toilet	2 @ 200	2 @ 200	2 @ 200	2 @ 200
o. Weight Room(Optional)	1 @ 1000	1 @ 1000	1 @ 1000	1 @ 1000
p. Training Room	1 @ 200	1 @ 200	1 @ 200	1 @ 200
q. Laundry	1 @ 100	1 @ 100	1 @ 100	1 @ 100

SENIOR HIGH FACILITY – CURRICULUM PROGRAM SPACES

SPACE	ENROLLMENT 500 Students	750 Students	1000 Students	1500 Students
r. Wrestling	1 @ 1800	1 @ 1800	1 @ 1800	1 @ 1800
s. Athletic Director			1 @ 200	1 @ 200
t. Officials w/toilet	1 @ 200	1 @ 200	1 @ 200	1 @ 200
Subtotal	–	–	–	–
AUDITORIUM				
a. Seating	1 @ 1800 Seating 200	1 @ 2300 Seating 250	1 @ 3100 Seating 350	1 @ 4500 Seating 500
b. Stage	1 @ 1500	1 @ 1500	1 @ 1600	1 @ 1600
c. Dressing Rm w/toilet	2 @ 250	2 @ 250	2 @ 350	2 @ 350
d. Back Stage	1 @ 1200	1 @ 1200	1 @ 1200	1 @ 1200
e. Drama	1 @ 720	1 @ 720	1 @ 720	1 @ 720
Subtotal	–	–	–	–
FOODS SERVICE				
a. Kitchen	1 @ 1000	1 @ 1200	1 @ 1200	1 @ 1200
b. Serving	1 @ 300	1 @ 300	1 @ 300	1 @ 300
c. Freezer/Refrigerator	1 @ 300	1 @ 300	1 @ 400	1 @ 500
d. Empl Locker Rm/Toilet	1 @ 120	1 @ 120	1 @ 120	1 @ 120
e. Utility Room	1 @ 80	1 @ 80	1 @ 80	1 @ 80
f. Dietician's Office	1 @ 80	1 @ 80	1 @ 80	1 @ 80
g. Dishwashing	1 @ 300	1 @ 300	1 @ 300	1 @ 300
h. Can Wash	1 @ 100	1 @ 100	1 @ 100	1 @ 100
i. Trash Room	1 @ 150	1 @ 150	1 @ 150	1 @ 150
Subtotal	–	–	–	–
DINING				
a. Dining Area	1 @ 2000	1 @ 3000	1 @ 4200	1 @ 6000
BUSINESS EDUCATION				
a. General Typing	1 @ 950	1 @ 950	1 @ 950	1 @ 950
b. Bookkeeping/Accounting/ Shorthand	1 @ 950	1 @ 950	1 @ 950	1 @ 950
c. Office Technology	1 @ 950	1 @ 950	1 @ 950	1 @ 950
d. General Business Classrooms			1 @ 800	1 @ 800
e. Office	1 @ 250	1 @ 250	2 @ 250	2 @ 250
f. Computer Lab	1 @ 950	1 @ 950	1 @ 950	1 @ 950
Subtotal	–	–	–	–
COOPERATIVE EDUCATION				
a. Classrooms	1 @ 950	1 @ 950	1 @ 950	1 @ 950
b. School Store	1 @ 500	1 @ 500	1 @ 500	1 @ 500
c. School Concessions	1 @ 200	1 @ 200	1 @ 200	1 @ 200
d. Coordinator's Office	1 @ 150	1 @ 150	1 @ 150	1 @ 150
Subtotal	–	–	–	–
SPECIALIZED EDUCATION				
a. Resource	2 @ 600	3 @ 600	3 @ 600	4 @ 600
b. Computer Lab	1 @ 800	1 @ 800	1 @ 800	1 @ 800
d Conference	1 @ 250	1 @ 250	1 @ 250	1 @ 250
e. Itinerant	2 @ 150	2 @ 150	2 @ 150	2 @ 150
Refer to Chapter 7, Handbook on Planning School Facilities (SBE Policy 6200)				
Subtotal	–	–	–	–
DRIVERS EDUCATION				
a. Driver's Education Classrooms	1 @ 850	1 @ 850	2 @ 850	3 @ 850

SENIOR HIGH FACILITY - CURRICULUM PROGRAM SPACES

SPACE	ENROLLMENT 500 Students	750 Students	1000 Students	1500 Students
STAFF/FACULTY				
a. Planning Area	2 @ 500	2 @ 500	2 @ 500	2 @ 500
b. Lounge w/toilet	2 @ 300	2 @ 300	2 @ 300	2 @ 300
c. Faculty Dining	1 @ 250	1 @ 250	1 @ 250	1 @ 250
Subtotal	-	-	-	-
CUSTODIAL				
a. Mechanical Room	1 @ 1500	1 @ 2000	1 @ 2000	1 @ 3000
b. Cust. Off. w/toilet	1 @ 200	1 @ 200	1 @ 200	1 @ 300
c. Utility Rooms	4 @ 50	4 @ 50	6 @ 50	6 @ 50
d. Waste Room	1 @ 200	1 @ 200	1 @ 200	1 @ 200
e. Custodial Work Room	1 @ 250	1 @ 250	1 @ 300	1 @ 400
Subtotal	-	-	-	-
TOILET				
a. Home Economics	1 @ 100	1 @ 100	1 @ 100	1 @ 100
b. P.E. Girls'	1 @ 120	1 @ 120	1 @ 120	1 @ 120
c. P.E. Boys'	1 @ 100	1 @ 100	1 @ 100	1 @ 100
d. P.E. Girls' Team	1 @ 150	1 @ 150	1 @ 150	1 @ 150
e. P.E. Boys' Team	1 @ 100	1 @ 100	1 @ 100	1 @ 100
f. Student	2 @ 200	4 @ 200	4 @ 200	4 @ 200
g. Commons	2 @ 200	2 @ 200	2 @ 200	2 @ 200
Subtotal	-	-	-	-
STORAGE				
a. Science/Biology	3 @ 200	5 @ 200	7 @ 200	10 @ 200
b. Science/Chemical	1 @ 100	1 @ 100	1 @ 100	1 @ 100
c. Inst. Mater./Book	2 @ 150	2 @ 150	2 @ 150	2 @ 150
d. Home Economics	2 @ 125	2 @ 125	2 @ 125	2 @ 125
e. Art	1 @ 400	1 @ 400	1 @ 400	2 @ 400
f. Indus. Art/Project	1 @ 400	1 @ 400	1 @ 400	1 @ 400
g. Music/Instruments	1 @ 150	1 @ 150	1 @ 150	1 @ 150
h. Music/Uniform	1 @ 150	1 @ 150	1 @ 150	1 @ 150
i. Music/Robe	1 @ 150	1 @ 150	1 @ 150	1 @ 150
j. Physical Education	2 @ 200	2 @ 200	2 @ 200	2 @ 200
k. PE Athletic Equip. (1)	1 @ 150	1 @ 150	1 @ 150	1 @ 150
l. Athletic Equip. (2)	1 @ 150	1 @ 150	1 @ 150	1 @ 150
m. Business Ed.	1 @ 150	1 @ 150	2 @ 150	2 @ 150
n. Cooperative Ed.	1 @ 150	1 @ 150	1 @ 150	1 @ 150
Subtotal	-	-	-	-
Non-Instructional				
a. Admin/Work Room	1 @ 200	1 @ 200	1 @ 200	1 @ 200
b. Industrial/Art/Tools	1 @ 150	1 @ 150	1 @ 150	1 @ 150
c. Outdoor Storage	2 @ 200	2 @ 200	2 @ 200	2 @ 200
d. Auditorium/Stage	1 @ 300	1 @ 300	1 @ 300	1 @ 300
e. Auditorium/Piano	1 @ 150	1 @ 150	1 @ 150	1 @ 150
f. Foods Service/Dry	1 @ 300	1 @ 300	1 @ 400	1 @ 500
g. Foods Service/Chair	1 @ 400	1 @ 400	1 @ 400	1 @ 400
h. Staff/Faculty/Dept.	8 @ 150	8 @ 150	8 @ 150	8 @ 150
i. Custodial/Central	2 @ 250	2 @ 300	2 @ 400	2 @ 500
j. Custodial/Outdoor	2 @ 250	2 @ 300	2 @ 400	2 @ 500
Subtotal	-	-	-	-
SPECIAL PROGRAMS				
a.		1 @ 1000	1 @ 1500	1 @ 1500
TOTAL NET PROGRAM AREA				
CIRCULATION, WALLS, ETC.				
TOTAL GROSS BUILDING AREA				

APPENDIX D

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. This size is based upon their grade structure. The recommended sizes to effectively meet economies of scale are as follows:

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

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

Often there are factors such as distance geographic barriers or financial limitations that will effect 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.

Rev. 10/19/94
1426r/80&81a

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 is 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.

0849b/94&95a
Rev. 10/94

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 consolidated 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 the 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 student 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.

APPENDIX E

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA
AND
WEST VIRGINIA DEPARTMENT OF EDUCATION

COMPREHENSIVE EDUCATIONAL FACILITY PLAN
APPLICATION FOR AMENDMENT

To be submitted to the SDE and the SBA
Do not include more than one (1) project per application form

RESA: _____ COUNTY: _____ DATE: _____

Project Location/Number: _____ Present Enrollment: _____

Total Cost of the Project: $_____

Date Project Originally Submitted to SDE: _____ SBA: _____

Funding Source: (LOCAL/BOND) _____ (BSBA) _____ (STATE/OTHER) _____

(LOCAL/OTHER) _____ (SBA MIP) _____ (SBA NEEDS) _____ (FEDERAL) _____

A. BUDGET AMENDMENTS FOR PREVIOUSLY APPROVED PROJECT

Include a revised Exhibit A (SBA 101) to include all county projects and to specifically reflect the new project expenditures requested in this amendment. Attach a brief description explaining the need to adjust the present budget.

1. Amount of total project budget previously approved $_____
2. Amount of SBA budget previously approved $_____
3. Amount of the amendment to this project budget $_____
4. Total amount of this project if amendment is approved $_____

B. AMENDMENT TO EXISTING OR NEW PROJECT (Complete Information on Reverse Side of Form)

Date Amendment Approved by County Board of Education

Signature of County Superintendent

FOR SBA and SDE USE ONLY

Project Number: _____ Previous Budget Approved $ _____

SBA APPROVAL DATE: _____ SDE APPROVAL DATE: _____

REVISED BUDGET APPROVED: _____

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SBA/WVDE 106 1442r/80&81a

School _____ Cost of the Proposed Project $_____

Project Description and Reason for Amendment:

Describe how the existing facilities do not and the proposed project does meet the following goals of the SBA:

1. Student Health and Safety

2. Economy of Scale

3. Travel Times

4. Multi-County Project

5. Curricular Improvements

6. Educational Innovations

7. Adequate Space

8. Local Bond History Efforts

1442r/80&81a
10/19/94

APPENDIX F

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

EXHIBIT B

REQUISITION FORM

COUNTY: _____ DATE: _____

SUBMIT TO:

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

SUBMIT TO:

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

You are authorized to make the following disbursement from the School Building Authority of West Virginia Project Fund (the "Fund") 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 _____, 199 .

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.

SBA 104A 1905e/228&229a
Revised 10/26/94

APPENDIX G

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

EXECUTIVE SUMMARY - NEEDS PROJECT

PROJECT _____

COUNTY _____ PROJECT COST $_____

FUNDING SOURCE

IMPLEMENTING TOTAL CEFP

SBA NEED $_____ SBA MIP _____
LOCAL $_____ TYPE _____
OTHER $_____
TOTAL $_____

FUNDING SOURCE - THIS PROJECT

SBA $_____
LOCAL $_____ TYPE _____
OTHER $_____
TOTAL $_____

BONDING CAPACITY $_____
EXCESS LEVY CAPACITY $_____

AVAILABLE BONDING CAPACITY $_____
AVAILABLE LEVY CAPACITY $_____

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 _____
WVA BOE APPROVED	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 guide.
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 19___
- __ major addition(s) in 19_____
- 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 _____
- Existing site is _____ acres and is Adequate __ Inadequate __
- Cost to upgrade to current standards 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 19___
- __ major addition(s) in 19_____
- 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 _____
- Existing site is _____ acres and is Adequate __ Inadequate __
- Cost to upgrade to current standards is $_____
- Existing facility contains ___ major structural problems
- Health, safety and building accessibility, Comments:_____

#3. DESCRIPTION OF EXISTING FACILITIES

- _____ School currently houses grades ____
- Constructed on a ____ acre site in 19___
- __ major addition(s) in 19_____
- 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 _____
- Existing site is _____ acres and is Adequate __ Inadequate __
- Cost to upgrade to current standards is $_____
- Existing facility contains ___ major structural problems
- Health, safety and building accessibility, Comments:_____

#4. DESCRIPTION OF EXISTING FACILITIES

- _____ School currently houses grades ____
- Constructed on a ____ acre site in 19___
- __ major addition(s) in 19_____
- 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 _____
- Existing site is _____ acres and is Adequate __ Inadequate __
- Cost to upgrade to current standards is $_____
- Existing facility contains ___ major structural problems
- Health, safety and building accessibility, Comments:_____

#5. DESCRIPTION OF EXISTING FACILITIES

- _____ School currently houses grades ____
- Constructed on a ____ acre site in 19___
- __ major addition(s) in 19_____
- 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 _____
- Existing site is _____ acres and is Adequate __ Inadequate __
- Cost to upgrade to current standards is $_____
- Existing facility contains ___ major structural problems
- Health, safety and building accessibility, Comments:_____

APPENDIX H

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

PROCEDURES FOR REVIEW OF "NEEDS" PROJECTS

The SBA staff will utilize the following approach to review the projects submitted by each county for competitive "needs" 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 is responsible for determining in their facilities plan the specific project(s) for which SBA "needs" funds will be requested. This individual project will be fully developed in regard to the issues indicated in 100.10 in this guidelines handbook and have an SBA "Needs" Project Summary Report completed.

Proposals for "needs" projects must be part of an approved CEFP, and submitted at the request of the Authority based upon the availability of funds for distribution.

The Authority will review and evaluate the projects based upon criteria set forth in 100.10 of the guidelines handbook. A priority list of projects to be funded equal to the amount of the funds available during the specific funding phase will be developed by the Authority.

The SBA will appoint a plan review team that will utilize the "Procedure for Review of Needs Projects" to assist in the rating 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.

1. Review of the competitive "needs" projects

    a. A review team will be appointed to evaluate the "needs" 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 "needs" funding.

        (1) Health and Safety
        (2) Curriculum and Instruction
        (3) Adequate Space for Projected Enrollment
        (4) Economies of Scale
        (5) Travel Time and demographics
        (6) Multi-county/regional aspects
        (7) Educational Innovations

2. Verification of Evaluations of Existing Facilities -- "Needs Projects"

   a. An on-site evaluation team will visit the sites of the "needs projects" throughout the state as identified by the Authority This visit will:

      (1) Verify the scope of the project
      (2) Assess cost estimates of proposed facilities
      (3) Evaluate the feasibility of the project

   b. The on-site evaluation team will prepare and submit to the SBA a report of each visit providing a general description of the project; an evaluation of the existing facilities to be effected by the project; judgements of the feasibility of the project including transportation and demographic problems; and cost estimates ie. new vs rehabilitation, and/or other options as presented in the plan.

3. The judgments/ratings of the Plan Review Team, and the reports of the On-site Evaluation Team will be provided to the Authority for consideration in their deliberation and final selection of projects to be funded from the "needs" funds.

4. 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 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 to 10 minutes will be enforced by the Authority.
(2) Questions will be asked by the SBA Members concerning the project. A 15 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 time lines 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 maybe 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. 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 "needs" grants.

Rev. 10/94
1213r/80&81a

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

PROCEDURES FOR THE PLAN REVIEW TEAM

The Plan Review Team shall consist of nine members, one representing each of the state's RESAs and the State Department of Education's Director of Facilities Planning.

1. Subdivide the review team into three committees to review the following areas of each project plan:

   a. H&S, space adequacy
   b. Curriculum needs, educational innovations
   c. Economies of scale, multi-county, travel time

2. Each committee will review and discuss the segments of the "needs" projects they have been assigned to review for all of the first projects from each RESA when projects are listed alphabetically. All of these projects are to be reviewed prior to assignment of any evaluation ratings in order to conceptualize a competitive standard in the judgment of the evaluators.

3. Each committee member will read the appropriate segments of the project plan and a consensus rating of the committee will be determined for each of the first projects. The committee is responsible for making appropriate notes to substantiate their evaluation to the whole team on each project.

4. The committee will continue to read and rate each of the projects alphabetically from each RESA and reaching a consensus rating for each project. Ratings can now be done at the completion of each reading from this point.

5. Each committee will return to the review team a consensus rating on each of the projects in the areas they were assigned to evaluate.

6. The consensus committee ratings will be compiled on each project using the project summary form and posted on a wall chart for easy observation and comparison by the entire team.

7. The whole team will then review the total ratings for each project and discuss all of the items for evaluation.

8. After the plans have been reviewed by the SBA, interviews will be held with the superintendents of counties where additional information regarding the specifics of their facility plan is needed and project budgets will be developed. The SBA retains the prerogative to include any or all of the projects submitted in the final review.

Rev. 7/18/94
0200a/80&81a

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

PROJECT EVALUATION FORM

ECONOMIES OF SCALE, EFFICIENCY, TRAVEL TIMES

Project Name: _____

County: _____

(Circle the appropriate number to indicate your rating.)

1. What is the extent to which the project demonstrates efficiency and/or economies of scale? ie, improves teacher/administrator utilization, improves building utilization, saves funds through school consolidations or other economies, meets SBA enrollment guidelines, etc.

1	2	3	4	5	6	7	8	9
	(Some)			(Moderate)			(High)	

Enrollment: Grade levels____-____, SBA recommended enrollment_____
Proposed Project enrollment_____?

2. Does the proposed project contain a multi-county/regional facility in order to achieve an effective and efficient instructional delivery system? In order to qualify, the project must receive support of all LEA's participating in the project.

_____ No = 1 _____ Yes = 9

3. To what extent does the proposed project impact upon student travel?

1	2	3	4	5	6	7	8	9
	(Poor)			(Acceptable)			(Improved)	

Complete Item #4 after the committee has discussed the proposed project.

4. What is your committee's consensus rating of the proposed project regarding the economies of scale and efficiencies of the plan?

1	2	3	4	5	6	7	8	9
	(Low)			(Moderate)			(High)	

_____
Date

Comments: Use the back of this sheet.

SBA 107A
Rev. 11/12/90
1214r(1)/80&81a

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

PROJECT EVALUATION FORM

EDUCATIONAL PROGRAM IMPROVEMENT

Project Name: _____

County: _____

(Circle the appropriate number to indicate your rating.)

1. What is the extent to which the project provides for curricular improvement?

1	2	3	4	5	6	7	8	9
	(Some)			(Considerable)			(Extensive)	

2. Does the proposed project contain educational innovations designed to more effectively or efficiently deliver the instructional program? (In order to qualify, a plan should provide a new or different delivery method than any previously used in the county.)

1	2	3	4	5	6	7	8	9
	(Low)			(Moderate)			(High)	

Complete Item #3 after your committee has discussed the proposed project.

3. What is your committee's consensus rating of the proposed project regarding educational improvements and innovations?

1	2	3	4	5	6	7	8	9
	(Low)			(Moderate)			(High)	

_____
Date

Comments: Please write a short description of how this plan achieves improvement over the present educational program. Use the back of this sheet, if needed.

SBA 107B
Rev. 11/12/90
1214r(2)/80&81a

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

PROJECT EVALUATION FORM

HEALTH, SAFETY, SPACE

Project Name: _____

County: _____

(Circle the appropriate number to indicate your rating.)

1. What is the severity of the health and/or safety conditions which are being addressed by this project?

1	2	3	4	5	6	7	8	9
	(Minor)			(Moderate)			(Severe)	

2. What is the severity of the need for space to house projected student enrollment in existing facilities?

1	2	3	4	5	6	7	8	9
	(Minor)			(Moderate)			(Severe)	

Complete Item #3 after the committee has discussed the proposed project.

3. What is your committee's consensus rating of the proposed project regarding the health, safety and space issues of the plan?

1	2	3	4	5	6	7	8	9
	(Low)			(Moderate)			(High)	

_____
Date

Comments:

SBA 107C
Rev. 11/12/90
1214r(3)/80&81a

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA
PLAN REVIEW TEAM PROJECT SUMMARY FORM
(To Be Completed For Each Project by the Full Review Team)

OU _____ PROJECT: _____ Date: _____

(CIRCLE THE AVERAGE COMMITTEE SCORE ON THIS PROJECT - MULTIPLY BY THE INDEX* TO ATTAIN THE PROJECTS FINAL RATING.)

	RAW SCORE	SBA INDEX	FINAL RATING	MAXIMUM SCORE
1. To what extent does the project demonstrate efficiency and/or economies of scale? 1 2 3 (Some) | 4 5 6 (Moderate) | 7 8 9 (High)	____	X 1.5 =	____	13.5
2. To what extent does the project provide for curricular improvement? 1 2 3 (Some) | 4 5 6 (Considerable) | 7 8 9 (Extensive)	____	X 1.5 =	____	13.5
3. To what extent does the project provide for educational innovations? 1 2 3 (Some) | 4 5 6 (Considerable) | 7 8 9 (Extensive)	____	X 1.5 =	____	13.5
4. What is the severity of the existing health and/or safety conditions? 1 2 3 (Minor) | 4 5 6 (Moderate) | 7 8 9 (Severe)	____	X 1.5 =	____	13.5
5. What is the existing severity of the need for space to house projected student enrollment? 1 2 3 (Minor) | 4 5 6 (Moderate) | 7 8 9 (Severe)	____	X 1.0 =	____	9.0
6. To what extent does the proposed project impact upon student travel? 1 2 3 (Poor) | 4 5 6 (Acceptable) | 7 8 9 (Improves)	____	X 1.0 =	____	9.0
7. Is this a multi-county project? Circle one: Yes = 9 No = 1	____	X 1.0 =	____	9.0
8. What is the review team's overall rating of this project? 1 2 3 (Fair) | 4 5 6 (Good) | 7 8 9 (Excellent)	____	X 1.0 =	____	9.0
		Total	____	90.0

SBA 121 0110c/80&81a

APPENDIX I

SBA GRANT CONTRACTS

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 __th day of _____19__.

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. Pursuant to the Act and a Trust Indenture dated as of November 10, 1994 (the "Indenture") and related supplemental indenture between the Authority and United National Bank, as trustee, the Authority has issued its Capital Improvement Revenue Bonds Series 1994, (the "Bonds") to provide funds to finance "Costs of Projects" (within the meaning of the Act).

C. 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.

D. 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 January 1, 1997.

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 Building Capital Improvements 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 funds 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 SBA for funding as described in Exhibit A-1 and in accordance with the regulations, guidelines and direction of the SBA.

Section 6. In accordance with the mandates of the Act and, as required to maintain the tax-exempt status of the Bonds under the Internal Revenue Code of 1986, as amended, and regulations promulgated thereunder (the "Code"), the County Board covenants and agrees to expend all of the proceeds of the Grant by it's designated expiration date as set forth in Paragraph D., Section 1., (ii), 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 7. The County Board hereby covenants and agrees that it will submit the educational specifications, as well as design plans and specifications as per the State Board of Education Policy 6200 and the SBA's Guidelines 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 8. The County Board shall award bids only to properly licensed contractors as per the state Tax Department requirements.

Section 9. The County Board agrees to include in its contracts relating to projects receiving funds from the Authority items set forth in Appendice K of the School Building Authority Policy and Regulations Manual.

Section 10. 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 11. 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 SBA's Construction Committee, be required to proceed with the construction project using an SBA approved design, construction schedule and construction management method. Requirement of a Clerk-of-the-Works will be waived for counties using construction management.

Section 12. 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 AIA B141, Standard Form of Contract between Owner and Architect, latest Edition or the approved School Building Authority Architectural/Engineering Services 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 K of the SBA Guidelines.

(ii) 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 change orders shall be submitted to the Authority for review and approval. Any change orders executed by the County Board, but not approved by the Authority, shall be the responsibility of the County Board for payment.

Section 13. The County Board acknowledges that Bonds have been issued on the basis that the interest on the Bonds is excludable from the gross income of the recipients thereof for federal income tax purposes. In order to assure the continued excludability of the interest on the Bonds, the County Board hereby further covenants and agrees as follows:

(i) The County Board will not use any of the proceeds of the Grant for any "private business use", directly or indirectly, or in a "trade or business" carried on by any person other than the County Board, within the meaning of the Code;

(ii) The County Board will not use any of the proceeds of the Grant, directly or indirectly, to make or finance loans;

(iii) The County Board will not take any action or permit or suffer any action to be taken which may directly or indirectly cause the Bonds to be "federally guaranteed" within the meaning of the Code; and

(iv) The County Board will not invest any of the proceeds of the Grant and will request disbursements of portions of the Grant only for costs of the project duly incurred and then due and owing.

Section 14. No educational facility shall be occupied without prior approval from the School Building Authority of West Virginia, and the appropriate state and county regulatory agencies.

Section 15. The County Board agrees to keep the projects in good repair and working order after completion. 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 16. Any funds designated in this contract are provided in accordance to the details of the project as presented in the Comprehensive Educational Facilities Plan approved by the State Board of Education for _____ County. 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 17. The County Board has represented that the amount of $_____ in local funds will be available for the projects described in Exhibit A-1. The parties recognize that such local funds are necessary to permit the County Board to undertake such projects. The County Board agrees to provide evidence satisfactory to the Authority by June 30, 1995, that it has such local funds. No funds shall be provided under this Contract for expenditure prior to satisfaction of such condition. Expenses for any local bond election will not be paid from this grant and such amounts shall not be considered part of the cost of the projects. Notwithstanding anything in this Contract to the contrary, in the event that evidence is not provided to the Authority as aforesaid, the Needs Grant to the County Board described herein shall expire on June 30, 1995, and the County Board shall thereafter have no rights whatsoever with respect to the moneys which are the subject of such Needs Grant.

Section 18. 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.

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 funds dedicated to this project. Payment shall be made based on the following schedule:

Responsible Party	Percentage of Funds Submitted for Payment
County Board	%
Authority	%
	100.00%

Section 19. 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. Default by the Grantee will constitute termination of the grant thereby causing cancellation of 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 regulations under which this grant is made.

Section 20. This Grant Contract shall become effective as of the date first written and upon your mutual acceptance thereof.

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 _____
Superintendent

By _____
President, County Board of Education

SBA 125 1907e/228&229a
Revised 12/19/94

APPENDIX J

ARCHITECTURAL AND CONSTRUCTION REGULATIONS

APPLICATION FOR PROJECT APPROVAL P-1
PROCUREMENT OF ARCHITECTURAL/ENGINEERING SERVICES
CONSTRUCTION PROJECT DEVELOPMENT
CONSTRUCTION PROJECT SUBMISSION AND SCHOOL BUILDING AUTHORITY REVIEW
REAL ESTATE ACQUISITIONS USING SCHOOL BUILDING AUTHORITY FUNDS
CLERK-OF-THE-WORKS REQUIREMENTS
CONSTRUCTION PROJECT BID REPORTING
CONTRACTOR EVALUATION FORM
ARCHITECT EVALUATION FORM
CONSTRUCTION OBSERVATION REPORT
CERTIFICATE OF PROJECT COMPLETION

ARCHITECTURAL AND CONSTRUCTION REGULATIONS

1. 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 completion report. (Attachment 1)

2. 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 and Engineering 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 services on all projects where fifty percent (50%) or more of the project budget is funded by the SBA. 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.

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

- Services shall be rendered under standard AIA contracts or the SBA Architectural/Engineering Services Agreement in Appendix S of this handbook.

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 A.I.A. construction documents and agreements or the SBA Architectural/Engineering Services Agreement. (Section S, p. 153)

3. Construction Project Development

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

- 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 phase and the design development phase. All contractual agreements with architects/engineers or construction managers must include language that requires the architect/engineers or construction managers provide for the School Building Authority and the county board of education approval, schematic designs and design development drawings along with a construction estimate of probable construction costs. The School Building Authority, the county board of education, the curriculum and facilities planning team and the architect should be in agreement at this time that:

- 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;

- The project is being constructed on an approved site for which a clear and free deed is held by the grantee. Use of leased properties must receive prior approval of the SBA.

It is advisable to provide for alternate prices within the bidding documents for items that could possibly be deleted and provided at a later date. All effort should be made to prevent the need for rebidding any project as a result of insufficient funds.

4. Construction Project Submission and School Building Authority Review

All construction projects funded by the School Building Authority are required to be submitted for review to the School Building Authority staff. Project documentation as required by the "Handbook on Planning School Facilities" (latest edition of State Board Policy 6200) and in accordance with all requirements of the School Building Authority. Minimally, the School Building Authority must review and approve schematic drawings, design development documents and final construction drawings as they are developed. The design development submission for review must include but is not limited to the following:

- Educational Specifications or Program
- Design Development Drawings
- Outline Construction Specifications
- Estimate of Probable Construction Cost

Final construction document submissions submitted for review must include:

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

Applicable submission requirements can be found in Chapter 14, of the "Handbook on Planning School Facilities." Projects shall not be advertised for bid or construction started until after the School Building Authority staff has reviewed the submitted documents and the School Building Authority review comments have been satisfactorily addressed.

5. 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.

6. Clerk-of-the-Works Requirements

The educational agency shall be required to employ a clerk-of-the-works to monitor all construction projects in excess of $100,000 unless waived by the SBA, or an SBA approved construction management method is being utilized. Candidates for construction 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. (Attachment 3)

7. Construction Project Bid Reporting

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 bids are received. The tabulation sheet should be self-explanatory and include explanations of base bid pricing and all alternates being requested. We do not anticipate the generation of a separate document for the School Building Authority, other than the normal bid tabulation sheet prepared for county staff and county board reviews. The bid tabulation must accompany the list of subcontractors and major equipment and material suppliers list (SBA Form 123) also required to be forwarded to the School Building Authority office. Bid openings shall not be scheduled after 2:00 p.m., so that bidding information can be transmitted to the School Building Authority office the same business day. No construction contract shall be awarded without the School Building Authority review and approval of the construction bid and the contractor being recommended for the award.

8. Contractor Evaluation (SBA 124)

The School Building Authority requires the Owner to do evaluations of all contractors performing work on School Building Authority projects. This information must be submitted during the construction phase at 25%, 50%, and 75% of project completion and submitted with the request for payments for the corresponding periods. This information must also be submitted to the SBA with the BP-13-A. 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. (Attachment 4)

9. Architect Evaluation (SBA 138)

The School Building Authority requires the Owner to do evaluations of all architects performing work on School Building Authority projects. This information must be submitted during the construction phase at 25%, 50%, and 75% of project completion and submitted with the request for payments for the corresponding pay periods. This information must also be submitted to the SBA with the BP-13-A. Our 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. (Attachment 5)

10. 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. The Observation Reports do not have to be sent to the SBA Office. This report may also be used by project architects/engineers if desirable. The timelines of the project Observation Reports can be established by the project administrator and must be approved by the School Building Authority. (Attachment 5)

11. 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 report, including the project close-out checklist (located on the reverse side of the BP-13-A), 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. 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. (Attachment 7)

Rev. 10/94

0771b/81&82a

WEST VIRGINIA DEPARTMENT OF EDUCATION
AND
SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA
APPLICATION FOR PROJECT APPROVAL

es[redacted]rginia Department of Education
900 Kanawha Boulevard East, Bldg. #6 Room B-264
harleston, West Virginia 25305

School Building Authority of West Virginia
2300 Kanawha Boulevard, East
Charleston, West Virginia 25311

OUNTY _____
CHOOL NAME _____
OCATION _____

ESTIMATED STARTING DATE _____
ESTIMATED COMPLETION DATE _____
GRADES HOUSED _____ ENROLLMENT _____

ROJECT DESCRIPTION _____

ITE ACRES _____ USEABLE ACRES _____
NERGY EFFICIENCY (BTU/Sq.Ft./Yr) _____
ATER SOURCE _____

GROSS BUILDING AREA NEW CONSTRUCTION _____
SQ. FT. AFFECTED BY THIS PROJECT _____
SEWAGE DISPOSAL TYPE _____

INE ITEM	PRELIMINARY ESTIMATE	FINAL COST	FINAL UNIT COST (Per Sq. Ft.)
ENERAL REQUIREMENTS (A/E, Legal, Etc.)			
ITE ACQUISITION			
ITE WORK (Geotech, Grading, Paving, Etc.)			
ONCRETE (Ftg./Foundations, Slabs, Etc.)			
ASONRY			
ETALS (Str, Stl., Jt., Deck)			
ARPENTRY			
HERMAL & MOISTURE PROTECTION			
O[redacted]ND WINDOWS			
I[redacted]S (Floors, Walls, Ceilings, Painting)			
PECIALTIES (Chalkbd, Tbd., Locker, Toil Acc.)			
QUIPMENT (Food Service, Etc.)			
URNISHINGS (Seating, Casework, Etc.)			
PECIAL CONSTRUCTION			
ONVEYING SYSTEMS (Elevators, Etc.)			
ECHANICAL (HVAC, Plumbing, Etc.)			
LECTRICAL			
THERS (Describe)			
RAND TOTALS			
UNDING			
OUNTY SOURCE			
BA NET NEED			
EDERAL SOURCE			
RAND TOTALS			

AGENCIES APPROVALS	RECEIVED	APPROVED	RECEIVED	APPROVED	RECEIVED	APPROVED
STATE DEPARTMENT OF HIGHWAYS						
STATE DEPARTMENT OF HEALTH						
STATE FIRE MARSHAL						
SCHOOL BUILDING AUTHORITY						
STATE BOARD OF EDUCATION						

_____
[redacted]nature of Architect or Engineer

_____
Signature of County Superintendent

WVDE P-1
Rev. 12/11/91
0080b/80&81a

CHAPTER 5G - STATE CODE OF WEST VIRGINIA

PROCUREMENT OF ARCHITECT ENGINEER SERVICES BY STATE AND ITS SUBDIVISIONS.

Article
1. Procurement of Architect-Engineer Services.

ARTICLE 1.

PROCUREMENT OF ARCHITECT-ENGINEER SERVICES.

Sec.
5G-1-1. Declaration of legislative policy.
5G-1-2. Definitions.
5G-1-3. Contracts for architectural and engineering services; selection process where total project costs are estimated to cost two hundred fifty thousand dollars or more.
5G-1-4. Contracts for architectural and engineering services; selection process where total project costs are estimated to cost less than two hundred fifty thousand dollars.

Effective dates. - Acts 1990, c.24 provided that the act take effect July 1, 1990.

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§ 5G-1-1. Declaration of legislative policy.

The Legislature hereby declares it to be the policy of the state, and its political subdivisions, to procure architectural or engineering services or both on the basis of demonstrated competence and qualification for the type of professional services required. (1990, c. 24.)

§ 5G-1-2. Definitions.

As used in this section:

(a) The term "agency" means all state departments, agencies, authorities, quasi-public corporations and all political subdivisions, including cities, counties, boards of education and public service districts.

(b) The term "architectural and engineering services" includes those professional services of an architectural or engineering nature as well as incidental services that members of those professions and those in their employ may logically or justifiably perform.

(c) The term "director of purchasing" means any individual assigned by any agency to procure the services of architects and engineers.

(d) The term "firm" or "professional firm" means any individual, firm, partnership, corporation, association or other legal entity permitted by law to practice the professions of architecture and engineering. (1990, c. 24.)

§ 5G-1-3. Contracts for architectural and engineering services; selection process where total project costs are estimated to cost two hundred fifty thousand dollars or more.

In the procurement of architectural and engineering services for projects estimated to cost two hundred fifty thousand dollars or more, the director of purchasing shall encourage such firms engaged in the lawful practice of the profession to submit an expression of interest, which shall include a statement of qualifications and performance data, and may include anticipated concepts and proposed methods of approach to the project. All such jobs shall be announced by public notice published as a Class II legal advertisement in compliance with the provisions of article three [§ 59-3-1 et seq.], chapter fifty-nine of this code. A committee of three to five representatives of the agency initiating the request shall evaluate the statements of qualifications and performance data and other material submitted by interested firms and select a minimum of three firms which, in their opinion, are best qualified to perform the desired service: Provided, That on projects funded wholly or in part by school building authority moneys, in accordance with sections fifteen and sixteen, article nine-d, chapter eighteen of this code, two of said three firms shall have had offices within this state for a period of at least one year prior to submitting an expression of interest regarding a project funded by school building authority moneys. Interviews with each firm selected shall be conducted and the committee shall conduct discussions regarding anticipated concepts and proposed methods of approach to the assignment. The committee shall then rank, in order of preference, no less than three professional firms deemed to be the most highly qualified to provide the services required, and shall commence scope of service and price negotiations with the highest qualified professional firm for architectural or engineering services or both. Should the agency be unable to negotiate a satisfactory contract with the professional firm considered to be the most qualified, at a fee determined to be fair and reasonable, price negotiations with the firm of second choice shall commence. Failing accord with the second most qualified professional firm, the committee shall undertake price negotiations with the third most qualified professional firm. Should the agency be unable to negotiate a satisfactory contract with any of the selected professional firms, it shall select additional professional firms in order of their competence and qualifications and it shall continue negotiations in accordance with this section until an agreement is reached: Provided, however, That county boards of education may either elect to start the selection process over in the original order of preference or it may select additional professional firms in order of their competence and qualifications and it shall continue negotiations in accordance with this section until an agreement is reached.

§ 5G-1-4. Contracts for architectural and engineering services; selection process where total project costs are estimated to cost less than two hundred fifty thousand dollars.

In the procurement of architectural and engineering services for projects estimated to cost less than two hundred fifty thousand dollars, competition shall be sought by the agency. The agency shall conduct discussions with three or more professional firms solicited on the basis of known or submitted qualifications for the assignment prior to the awarding of any contract: Provided, That if a judgment is made that special circumstances exist and that seeking competition is not practical, the agency may, with the prior approval

of the director of purchasing, select a firm on the basis of previous satisfactory performance and knowledge of the agency's facilities and needs. After selection, the agency and firm shall develop the scope of services required and negotiate a contract. (1990, c. 24.)

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 Board 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 Board 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/Engineers 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 which 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.

0788b/82&83b

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

CONTRACTOR EVALUATION FORM

COUNTY _____ DATE _____

CONTRACTOR'S NAME	ADDRESS	PHONE	PROJECT NAME	EVALUATION OF WORK*

This document must be submitted to the SBA Office semi-annually.

*"E" - Excellent, "A" - Average, "P" - Poor

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SBA 124

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

ARCHITECT/ENGINEER EVALUATION FORM

COUNTY _____ PROJECT _____

ARCHITECTURAL/ENGINEERING FIRM NAME _____

_____

Please respond to the following questions regarding the professional services performance of the above architectural or engineering firm performing planning design and construction service for the above project. Please circle the appropriate response.

- Did the architect/engineer demonstrate a cooperative ability to work successfully with the educational facilities planning committees?

Poor			Average			Excellent		
1	2	3	4	5	6	7	8	9

- To what extent did the architect/engineer provide accurate estimates of the probable construction cost of the project?

Poor			Average			Excellent		
1	2	3	4	5	6	7	8	9

- To what extent did the architect/engineer demonstrate the ability to produce the building design and construction documents within the established time schedule?

Poor			Average			Excellent		
1	2	3	4	5	6	7	8	9

- To what extent did the architect provide adequate on-site project observations during the construction phase of the project?

Poor			Average			Excellent		
1	2	3	4	5	6	7	8	9

- To the best of your knowledge did the architect/engineer provide timely responses on project submission documents and construction questions presented by the contractor during construction?

Poor			Average			Excellent		
1	2	3	4	5	6	7	8	9

- To what extent were construction change orders required as a result of the architect/engineer's errors or omissions in the construction documents (drawings and written specifications).

Poor			Average			Excellent		
1	2	3	4	5	6	7	8	9

Indicate the number of project change orders _____ that increased the cost of the project $_____. Of these change orders how many were required due to errors and omissions by the architect or engineer _____.

- Please indicate your overall evaluation of the architect's performance on this project.

Poor			Average			Excellent		
1	2	3	4	5	6	7	8	9

Would you consider using this architect/engineering firm in the future?
Yes _____ No _____

Confidential information provided will be compiled by the SBA and will be used in conjunction with an SBA Architect/Engineer performance instrument to formulate a composite evaluation of the overall performance of architectural and engineering firm's ability to perform future architectural or engineering services on SBA funded services.

This document must be submitted to the SBA Office at the completion of each construction project.

ADDITIONAL COMMENTS:

_____

_____

_____

_____

_____

_____

EVALUATOR _____ TITLE _____ DATE _____

2007b/232&233a

SBA Form 138

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

CONSTRUCTION OBSERVATION REPORT

COUNTY _____ PROJECT _____

PROJECT NUMBER _____ PREPARED BY _____

DATE _____ CLERK-OF-THE-WORKS _____

WEATHER _____ JOB PHONE # _____

ARCHITECT/ENGINEER _____ PHONE # _____

CONTRACTORS	PRESENT	CONTRACTORS	PRESENT

DIVISION OF WORK	% COMPLETE	DIVISION OF WORK	% COMPLETE
GENERAL REQUIREMENTS		FINISHES	
S[redacted]WORK		Floors	
[redacted]olition		Walls	
Subsurface		Ceilings	
Clearing/Grading		SPECIALITIES	
CONCRETE		Chalk/Tackboard	
Ftg./Foundations		Fire Extinguishers	
Slabs/Decks		Others	
Walks		EQUIPMENT	
MASONRY		FURNISHINGS	
Foundations		SPECIAL CONSTRUCTION	
Exterior Walls		CONVEYING SYSTEMS	
Interior Walls		Elevator	
METAL		MECHANICAL	
Structural Steel		Insulation	
Steel Joists		Plumbing/Piping/Drain	
Floor Decking		Sprinkler System	
Roof Decking		H.V.A.C.	
Fabricated Metals		ELECTRICAL	
CARPENTRY		Service & Distribution	
MOISTURE PROTECTION		Lighting	
Waterproofing		Communications/Fire Alarms	
Building Insulation		OTHERS	
Metal Flashing/Trim		_____	
Roofing		_____	
Sealers		_____	

T[redacted] PROJECT COMPLETE% _____ %

SBA 113
0109a/80&81a

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

CONSTRUCTION OBSERVATION REPORT

COUNTY _____ PROJECT _____

PROJECT NUMBER _____ PREPARED BY _____

DATE _____ CLERK-OF-THE-WORKS _____

REMARKS:

Page __ of Page __

SBA 113
0109a/80&81a

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 of Occupancy Permit (If Required)	_____
Enrollment	_____		
# Teaching Stations	_____		

SOURCES OF FUNDS:		SUMMARY OF PROJECT DATA:	
State Funds		Sq. Ft. in Building	_____
SBA "MIP"	$_____	Site Acquisition	$_____
SBA "Needs"	$_____	Site Preparation	$_____
Local Funds (Bond)	$_____	Building Construction Costs - Total	$_____
Local Funds (Other)	$_____	* Renovation Costs	$_____
Vocational (State)	$_____	Building Construction Costs-Per Sq. Ft.	$_____
Vocational (Fed)	$_____	Building Renovation Costs-Per Sq. Ft.	$_____
Federal (Other)	$_____	Moveable Equip. Cost	$_____
Other Funds (List)	$_____	A & E Fees	$_____
_____		** Miscellaneous Costs	$_____
_____			
_____			
TOTAL FUNDS	$_____	TOTAL PROJECT COSTS	$_____

*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
_____	_____
County Superintendent	Date

***Inspected this date by a representative of the School Building Authority or the West Virginia Department of Education.

_____	_____
Signature	Date

***SBA funded projects must have a final inspection by an SBA representative.

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WEST VIRGINIA SCHOOL BUILDING AUTHORITY

CERTIFICATE OF CONTRACT COMPLETION

FOR MULTIPLE PRIME PROJECT

Upon completion of each prime contractors contract the agency receiving SBA funding shall be responsible for submitting this completed original form to the SBA, with each prime contractors 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: _____

SBA 139
1943b/83&84b
9/28/94

APPENDIX K

SBA SUPPLEMENTAL, GENERAL AND SPECIAL CONDITIONS

CONTRACT DOCUMENT REQUIREMENTS
   1) GENERAL REQUIREMENTS
   2) CONTRACT FORMS
CONTRACTOR REGISTRATION CERTIFICATE AND TAX RELEASES
CONTRACTOR LICENSING
BID BOND
PERFORMANCE BONE
CONTRACTOR INSURANCE
CONTRACTOR PREFERENCE
PERMITS AND LICENSE
SEMI-PROPRIETARY SPECIFICATIONS
WAGE RATES AND CERTIFIED PAYROLL
PROCESSING OF PAYMENT APPLICATIONS
RETAINAGES
LIQUIDATED DAMAGES
STANDARDS OF QUALITY AND CODES
BID WITHDRAWAL
REJECTION OF BIDS
SUBCONTRACTOR AND MAJOR EQUIPMENT AND MATERIAL SUPPLIERS LIST
CONTRACTOR QUALIFICATIONS AND FINANCIAL STATEMENT
AWARD OF CONTRACTS
PROJECT JOB SIGNS
SBA PROJECT OBSERVATION
CONSTRUCTION PROJECT CLOSEOUT
ASBESTOS ABATEMENT REQUIREMENTS

SBA SUPPLEMENTAL, GENERAL AND SPECIAL CONDITIONS

The following School Building Authority Regulations change, delete from or add to the AIA Supplemental, General and Special Conditions relating to bidding documents where SBA funding is being used in whole or in part for the construction of schools and school related facilities. The SBA requires all referenced documents to be bound within the contract documents. The SBA encourages the use of standard AIA forms when possible including but not limited to the following:

CONTRACT DOCUMENT REQUIREMENTS

GENERAL REQUIREMENTS

Construction Drawing
Construction Specification
General and Special Conditions
Invitation to Bid
Instructions to Bidders
Bid Proposal Form
Bid Bond (A310)
Insurance Requirements
Performance Bond and Payment Bond
Contractor's Qualification Statement (Specimen)
Standard Form and Agreement Between Owner and Contractor

CONTRACT FORMS

General Conditions of the Contract for Construction (AIA 201)
Standard Form of Agreement Between Owner and Contractor (AIA A101)
Performance Bond and Payment Bond (AIA A312)
Change Order (AIA G701)
Application and Certificate for Payment (AIA G702)
Continuation Sheet (AIA G703)
Certificate of Substantial Completion (AIA G704)
Certificate of Insurance (G705) (Acord Form 25)
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 G713)
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)

CONTRACTOR REGISTRATION CERTIFICATE AND TAX RELEASES

A. 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.

B. 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.

C. 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 have been paid on completed construction projects in West Virginia.

CONTRACTOR LICENSING

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 contractor's license number shall be included in all contracting advertisements and all fully executed and binding contracts.

- 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 a contractor's license number must be included on any bid submission.

- 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 subcontractors license number to be submitted with the list of subcontractors within two hours after bids are received 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.

BID BOND

A. 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 listed on the most current Federal Register, Circular 570, and authorized to do business in the State of West Virginia and signed or co-signed by a resident West Virginia agent. Should the Bidder refuse to enter into a contract with the Owner on the terms stated in the Bidding Documents or fail to furnish bonds covering faithful

performance of the Contract and all obligations arising thereunder, 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.

B. Irrevocable Letter of Credit is not acceptable as a Bid Bond.

C. A certified cashier's check is not acceptable as a Bid Bond.

D. Personal securities are not acceptable as a Bid Bond.

PERFORMANCE BOND

A. 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 a 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 signed or co-signed by a resident West Virginia agent, and which is satisfactory to and approved by the Owner 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 thereunder. The Labor and Material Payment Bond shall be in the sum of one hundred percent (100%) of the contract amount. No Performance Bond is required for projects of $25,000 or less.

B. 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.

C. Irrevocable Letter of Credit is not acceptable as a Performance Bond.

D. A certified cashier's check is not acceptable as a Performance Bond.

E. Personal securities are not acceptable as a Performance Bond.

CONTRACTOR INSURANCE

A. In furtherance of Article 11 of the General Conditions, each contractor furnishing labor and materials shall furnish 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.

(1) Worker's Compensation/Employer's Liability
Statutory - State of West Virginia - Compensation thru 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 WV 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.

Named 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 existing building, the Owner will provide coverage while under construction by adding the contractor and all subcontractors, ATIMA to the permanent property policy.

B. Certificate of Insurance.

The Certificate of Insurance 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 cancelled until at least sixty (60) 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 and Architect are ADDITIONAL INSUREDS under the Contractor's policy.

The Certification shall be countersigned by a licensed WV Resident Agent.

The Certificate of Insurance shall indicate the carriers financial rating. The rating must be no less than A or A-.

CONTRACTOR PREFERENCE

The County Board of Education may give preference to registered West Virginia contractors as set forth in §5A-3-37 of the West Virginia Code. If the in-state contractor (vendor) preference is to be used, notification of such will be included in the bidding documents. In order to claim the preference, the contractor (vendor) must submit with the formal bid, written claim for the preference. No preference will be given unless the owner makes provisions for the preference within the bidding documents and the written claim is provided with the bid. (SBA Form 125 - Attachment #1)

PERMITS AND LICENSES

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.

SEMI-PROPRIETARY SPECIFICATIONS

A. To encourage competitive bidding, the project specifications shall specify not less than three products, materials or equipment. The product, material or equipment used shall comply with the contract requirements.

B. In certain instances, a single product may be the only one that will comply with the specific design/function requirement.

WAGE RATES AND CERTIFIED PAYROLL

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 term "fair minimum rate of wages" shall be as set forth in §21-5A-3 of the West Virginia Code. Contractors must submit monthly certified payroll reports to the owner for review to assure compliance with West Virginia prevailing wage laws. Upon request, counties will be required to submit the certified payroll report to the SBA for review.

These rates are included for reference purposes only. Each contractor shall be responsible to obtain correct and fair minimum rate of wages as established by the West Virginia Department of Labor.

PROCESSING OF PAYMENT APPLICATIONS

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.

RETAINAGES

A. The Owner will pay 90% 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 made by the Owner, until the contracted work is 50% complete. After 50% compleiton, if the contractor has met all bid document and contract requirements, the SBA, architect/construction manager and owner will agree, on future Applications for Payment to reduce the retainage to zero, authorizing the remaining applications for payment to be paid in full. The contract retainage of (10%) may be reinstated at anytime if the methods, manner, progress and subsequent compleiton of work do not remain satisfactory. This will be determined by the SBA, architect/construction manager and owner.

B. 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.

LIQUIDATED DAMAGES

The contractor agrees that from the compensation otherwise to be paid, the Owner may retain a sum in accordance with the following schedule for each day thereafter, Sundays and holidays included, that the work remains uncompleted, which sum is agreed upon as the proper measure of liquidated damages which the Owner will sustain per diem by the failure of the contractor to complete the work at the stipulated time, and the sum is not to be construed in any sense a penalty.

Liquidated damages will be assessed as follows:

Project Cost	Liquidated Damage
Up to $1,000,000	$150.00/per day
$1,000,000 to $5,000,000	$300.00/per day
Over $5,000,000	$500.00/per day

STANDARDS OF QUALITY AND CODES

A. 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:

(1) West Virginia State Building Code
(2) Building Officials and Code Administrators (BOCA).
(3) American Society for Testing Materials (ASTM).
(4) American National Standards Institute (ANSI).
(5) National Fire Protection Association (NFPA).
(6) National Electrical Code (NEC).

B. 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:

(1) West Virginia State Fire Marshal.
(2) West Virginia Department of Health.
(3) West Virginia Department of Natural Resources.
(4) West Virginia Department of Highways
(5) West Virginia Department of Education.
(6) School Building Authority of West Virginia

BID WITHDRAWAL

Bids may not be withdrawn for a period of thirty (30) days following the date for receipt of Bids without forfeiture of bid security as liquidated damages, not as a penalty.

REJECTION OF BIDS

The Owner shall have the right to reject any or all Bids and to reject a Bid not accompanied by the required bid security, or by other data required by the Bidding Documents, or to reject a Bid which is in any way incomplete or irregular.

SUBMITTAL OF SUBCONTRACTORS AND MAJOR EQUIPMENT AND MATERIAL SUPPLIERS

A. The bidder(s) submitting the lowest qualified bid(s) as determined by the owner and architect/engineer at the time of the bid 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 in accordance with SBA Form #123 within two hours after the completion of the bid opening.

B. Each bidder is required to establish the reliability and responsibility of all proposed subcontractors and equipment/material suppliers being proposed to perform the work. 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.

C. Failure to submit a list of subcontractors and major equipment and material suppliers as described on the SBA Form #123 within two hours after the completion of the bid shall result in disqualification of the bid. (Attachment #2)

CONTRACTOR QUALIFICATION AND FINANCIAL STATEMENT

Completed Contractor Qualification Statement will be required to be submitted to the owner and the School Building Authority upon request by the Contractor. Qualification Statement must be submitted prior to the award of bids and will be used in the bid review process by the owner and SBA. (Attachment #3)

The Confidential Financial Statement section of this document shall be required of the lowest qualified bidder(s) being considered for award of the contract.

AWARD OF CONTRACT

A. 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 waive any informality or irregularity in any Bid or Bids received. The Owner shall have the right to accept the Bid or Bids which, in his judgment, is in his own best interest. (Attachment #4)

B. 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.

C. 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 such Alternate items appearing on the proposal, thereby reducing or increasing the amount of the Base Bid.

D. 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.

PROJECT JOB SIGNS

All SBA needs funded projects and major net enrollment funded projects shall have project job signs erected at the construction site. Project signs must be visible and readable from highways. The SBA encourages the reuse of project signs when possible for net enrollment projects. 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 information is provided within this document. Construction details are provided within the contract documents. (Attachment #5)

SBA PROJECT OBSERVATION

A. 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.

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

CONSTRUCTION PROJECT CLOSE-OUT

A. Immediately prior to final Application for Payment, the Contractor shall submit the following documents:

(1) Contractor's Affidavit of Payment of Debts and Claims (AIA Document G706).

(2) Contractor's Affidavit of Release of Liens (AIA Document G706A).

(3) Consent of Surety Company to Final Payment (AIA Document G707) with effectively dated powers of attorney attached.

(4) Bound and indexed Operation and Maintenance Manuals.

(5) Certificate of Insurance (AIA Document G705) covering required/specified products and completed operation.

(6) One complete set of reproducible as built drawings; specifications and change orders in good order and clearly marked to show installation of work where the actual installation varies substantially from the work as originally shown.

(7) Certificate of Release from the Department of Tax and Revenue stating all appropriate taxes have been paid.

B. The SBA shall be notifed 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-throughs and will accept or reject the contract as completed. A completed WVDE BP-13-A form 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. Final payment for the contract will then be processed.

ASBESTOS ABATEMENT REQUIREMENTS (If Required)

A. Contractors/vendors must show proof of having successfully completed an E.P.A. approved training course. All certification must be current.

B. 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.

C. All contractors/vendors performing work using School Building Authority funding shall comply with all applicable codes including but not limited to the requirements 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

D. 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.

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Revised 10/94

CONTRACTOR PREFERENCE CERTIFICATE

Requisition No: _____

Certification and application is hereby made for Contractor Preference in accordance with West Virginia Code Section 5A-3-37. Bidder is authorized to transact business within the State of West Virginia, maintains an office in West Virginia, has actually paid personal property taxes on equipment used in the regular course of supplying services of the type offered and has actually paid business taxes to the State of West Virginia. Further, bidder agrees to disclose any reasonably requested information to the Purchasing Division of the Department of Administration and to authorize the Division of Tax of the Department of Tax and Revenue to disclose to the Purchasing Division information as to whether business taxes have been paid by bidder.

A. Application is made for 2.5% preference for the reason checked:

_____ 1. Bidder is an individual vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification.

or

_____ 2. Bidder is a partnership, association or corporation and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification.

_____ 3. Application is made for 2.5% preference as bidder certifies that on the average at least 60% of the employees working on the project being bid will be continuous residents of West Virginia for the two (2) years immediately preceding submission of the bid, that this 60% requirements extends to employees of subcontractors and bidder is responsible for ensuring compliance with the 60% requirements by subcontractors, and that sufficient records will be maintained to verify such percentage.

B. Bidder understands if the Secretary of Tax and Revenue determines that a vendor receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to:

1. rescind the contract or purchase order issued; or
2. assess a penalty against such vendor in an amount not to exceed 5% of the vendor's bid and that such penalty shall be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

C. Under penalty of law for false swearing (West Virginia Code Section 61-5-3), bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to bidder and if anything contained within this certificate changes during the term of the contract, bidder will notify the Purchasing Division in writing immediately.

_____ _____

Bidder Signed

_____ _____

Title Date

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

REQUIRED LANGUAGE FOR BIDDING DOCUMENTS ON SBA FUNDED PROJECTS

The following language shall be included within the Instructions to Bidders and Form of Proposal of all bidding documents for projects funded, in whole or in part, by the School Building Authority of West Virginia.

INSTRUCTIONS TO BIDDERS

SUBMITTAL OF SUBCONTRACTORS:

A. The bidder(s) submitting the lowest qualified bid(s) as determined by the Owner and Architect/Engineer at the time of the bid shall submit a listing of all subcontractors and all major equipment and material suppliers along with the contractor's license number for each subcontractor as required by the "West Virginia Contractor Licensing Act" proposed for each major branch of work itemized and described in the contract documents for the project within two hours after the completion of the bid opening. This information is to be provided on the "List of Proposed Subcontractors, Equipment/Material Suppliers". (SBA Form 123)

B. Each bidder is required to establish the reliability and responsibility of all proposed subcontractors and equipment/material suppliers being proposed to perform the work. 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.

C. Failure to submit a list of subcontractors and major equipment and material suppliers along with the contractor's license number for each subcontractor as required by the "West Virginia Contractor Licensing Act" within two hours after the completion of the bid shall result in disqualification of the bid.

D. 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.

E. A financial statement shall be submitted to the agency receiving bids by the lowest qualified bidder(s) within a reasonable length of time after the bid opening and prior to the execution of contracts or agreements between the local board of education and the contractor(s). The latest available financial information must be used. Minimum requirements for financial statements are:

(1) Accountants compilation report;

(2) Balance sheet;

(3) Income statement;

(4) Statement of changes in retained earnings;

(5) Statement of cash flows; and

(6) Notes to the financial statement.

LIST OF MAJOR EQUIPMENT AND MATERIALS:

A. The bidder(s) submitting the lowest qualified bids as determined by the Owner and Architect/Engineer at the time of the bid shall submit a complete list of major equipment and materials as requested by the Architect/Engineer within two hours after the completion of the bid opening. This information is to be provided on the "List of Proposed Subcontractors, Equipment/Material Suppliers". (SBA Form 123)

B. In addition, the successful bidder, thereafter known as the Contractor, may be requested within thirty (30) calendar days after award of contract to furnish to the Owner, Architect/Engineer or SBA, a more detailed and complete list of the materials and equipment, together with the manufacturer's or maker's name, brand and/or catalogue number and a catalogue cut or illustration thereof.

C. 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.

D. Written approval shall be obtained from the Architect/Engineer covering any substitution of equipment or materials. Substitutions are permitted in the following instances:

(1) Failure to meet quality and intent of specification and/or

(2) Failure of the supplier or manufacturer to meet delivery schedules or other conditions of the contract.

E. The Owner reserves the right to reject the proposal of any bidder who fails to furnish all required information.

PAYROLL CERTIFICATION:

A. 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.

B. Contractors completing SBA funded projects must submit monthly certified payroll reports to the local board of education for potential review by the agency and the SBA to assure compliance with West Virginia's prevailing wage laws.

LIST OF PROPOSED SUBCONTRACTORS, EQUIPMENT/MATERIAL SUPPLIERS

List as designated below each major branch of work and major equipment/material category for this proposal and the subcontractor or supplier proposed for that portion of work, also provide the 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 the Contractor, so indicate. If the acceptance of an alternate proposal changes a subcontractor or equipment/material supplier, indicate by notation below. The bidder may be requested to change an unsatisfactory subcontractor or equipment/material supplier. The contractor is responsible for selecting or changing subcontractors and/or equipment/material suppliers. 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. The Contractor has full responsibility for satisfactory execution of all work in accordance with the contract documents. Any change of proposed subcontractors or material suppliers shall be at no additional cost to the Owner, as the Contractor has full responsibility for execution of the work.

	BRANCH OF WORK/MATERIAL CATEGORY (To Be Completed by Architect/Engineer)	SUBCONTRACTOR/SUPPLIER (To Be Completed By Contractor)	CONTRACTOR LICENSE NUMBER
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			

(Use Additional Pages as Required)

SBA 123

Rev. 1/8/92
0332b/80&81a

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.

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

SUBMITTED BY: Firm Name: _____

Address: _____

_____

Principal Office Location: _____

QUALIFICATION STATEMENT SUBMITTED FOR - 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 _____

Partnership _____

Individual _____

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

	Perform	Subcontract
Earth Work	_____	_____
Concrete Work	_____	_____
Masonry Work	_____	_____
Structural Work	_____	_____
Roofing Work	_____	_____
Sprinkler	_____	_____
Plumbing	_____	_____
HVAC	_____	_____
Electrical	_____	_____

EXPERIENCE

Please list the type and number of educational projects your firm has constructed which were subject to the West Virginia Department of Education Guidelines and other West Virginia regulatory agency construction requirements:

Type	Number
New Construction - Primary	_____
New Construction - Secondary	_____
Renovations - Primary	_____
Renovations - Secondary	_____

Please list on a separate sheet marked "Appendix A" the major construction 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 on a separate sheet marked "Appendix B" the major 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.

INSURANCE AND BONDS

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

_____

_____

_____

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

_____

_____

CLAIMS AND SUITS

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 judgement or injunctive relief with respect Yes ___ No ___

to the construction or operation of any building which your firm, its principals, predecessors or affiliates constructed?

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 ___

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 ___

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 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%) in an attachment.

FINANCIAL CONDITION

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 firm preparing attached financial statement and date thereof.

REFERENCES

Please list below Trade References:

_____

_____

_____

Please list below Bank References:

_____

_____

_____

SIGNATURE

Dated at _____ this _____ day of _____, 19___.

Name of Organization: _____

_____

By: _____

Title: _____

State of _____, County of _____

Subscribed and sworn before me this _____ day of _____, 19 ____.

Notary Public: _____

My Commission Expires: _____

Rev. 12/11/91
SBA 105 1459r/80&81a

RESOLUTION OF THE SCHOOL BUILDING AUTHORITY

Pursuant to the laws of the State of West Virginia, the School Building Authority of West Virginia may award bids only to the lowest and best bidder. Accordingly, it is the expectation of the Authority that county boards of education will consider the following factors when making a determination as to whether a bid is not only the "lowest" bid, but also the "best" most qualified bid:

1. Whether bidder's work force is drawn mainly from area residents,

2. Experience and skills of bidder's work force,

3. Continuity of the bidder's work force,

4. The number of years bidder has been in the construction, renovation or repair business,

5. Bidder's familiarity with the project,

6. Bidder's record on similar construction projects,

7. Whether bidder generally experiences cost overruns,

8. Bidder's compliance with completion deadlines,

9. Bidder's bonding record,

10. Bidder's compliance with Workers Compensation laws,

11. Bidder's compliance with Unemployment Compensation laws,

12. Bidder's compliance with federal and state prevailing wage laws,

13. Bidder's compliance with the Fair Labor Standards Act, and

14. Bidder's compliance with fringe benefit contribution requirements

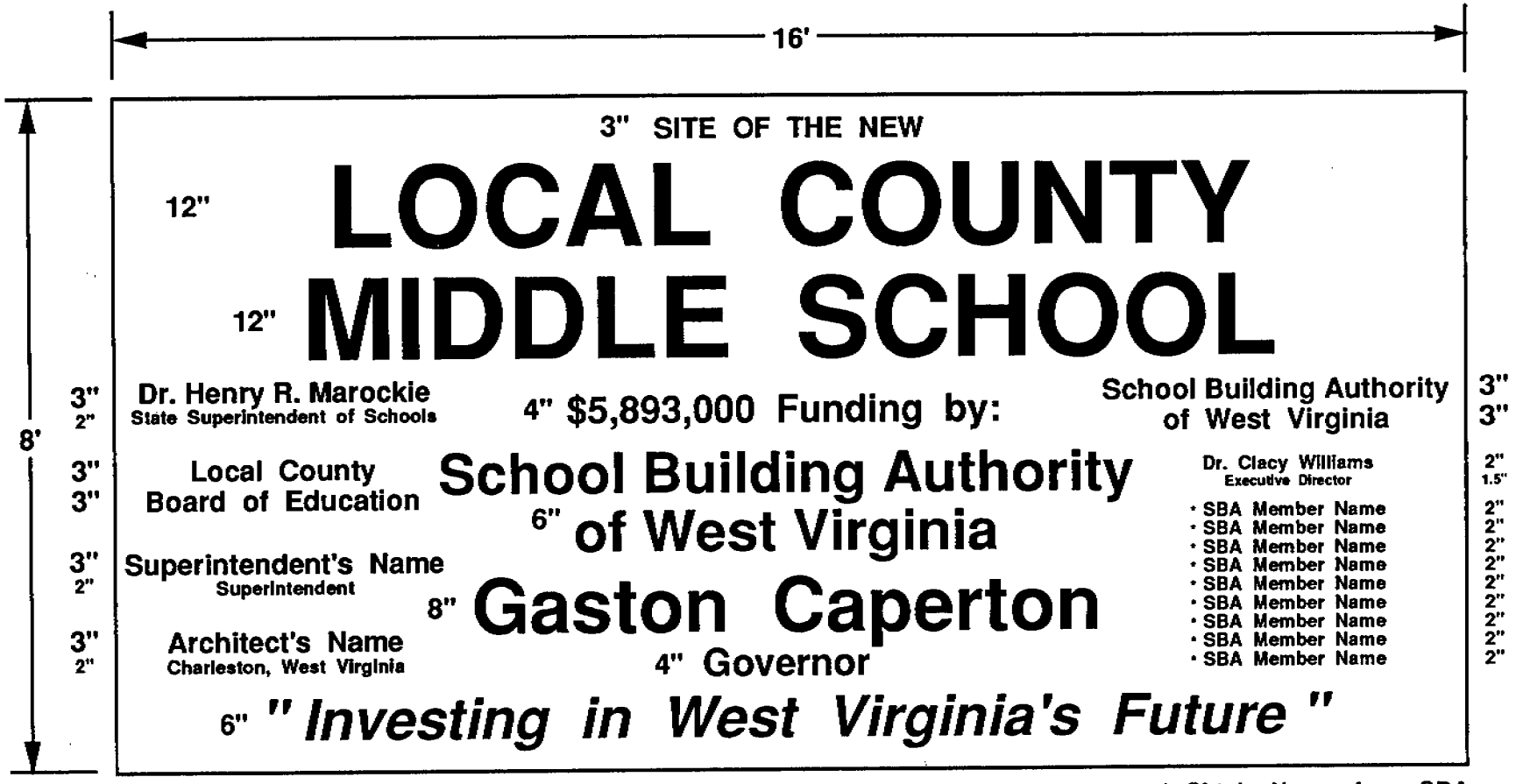
All of the above factors will be considered by the county board of education in making a decision as to whether a bid is the "best" most qualified bid. No single factor will be controlling in determining whether a bid is, or is not, the "best" bid.

15. It is also desirable that the successful bidder sponsor and participate in an approved joint apprenticeship program approved by the West Virginia Bureau of Apprenticeship Training and the U.S. Department of Labor.

16. Successful bidders should meet the objectives, applicable laws and regulations required for a drug free workplace.

1971b/80&81a
Revised - 2/19/92

TYPICAL PROJECT JOB SIGN
"Needs" Projects



Scale : 1/2" = 1'0"

* Obtain Names from SBA

NOTE:

1) The Project Sign must be visible and readable from highways.
2) The Project Sign size may vary as a result of local conditions.
3) If the Project Sign is located on Department of Highways Right-of-Way, coordinate placement with the regional office.
4) The Project Sign should be placed in a location so as not to create a safety hazard for motorists or pedestrians.
5) Additional project information may be provided including County Board, Construction Manager and Contractor Names if desirable.

APPENDIX L

WEST VIRGINIA DEPARTMENT OF EDUCATION

SEMI-ANNUAL FINANCIAL REPORT

CUMULATIVE EXPENDITURE BREAKDOWN

COUNTY: _____

DATE: JAN. 31, 19_____
JULY 31, 19_____

PROJECT NUMBER	SCHOOL/ LOCATION	LOCAL BOND PROCEEDS	BSBA	FEDERAL	PERMANENT IMPROVEMENT	SBA	SBA NEEDS	OTHER	TOTAL

Notes:

This cumulative report includes all facilities where capital improvements have been made since January 1990 regardless of the funding source.

Rev. 12-11-90
WVDE 103B 1396r/80&81a

APPENDIX M

(To Be Received at a Later Date)

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 counsels of area vocational centers for facility renovations, maintenance and construction projects with a cost greater than fifty thousand dollars but may not exceed five hundred thousand dollars. 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 facility needs must be identified within the Major Improvement Plan or an approved 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 remain 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 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 coexist with the county Comprehensive Educational Facilities Plan (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 charges.

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.

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 Submitted Project
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 reflect 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:

    1. An increase in local building improvement funding
    2. More efficient use of funds
    3. Increased performance of the in-house staff (i.e., staff development)
    4. Additional staff or assistance thru contracted maintenance
    5. A reduction in the number of buildings to be maintained
    6. 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:

1. Facility Evaluations
2. Building Component Inventories
3. Priorities List of Deficiencies
4. Preventive and Routine Maintenance Plan
5. Methods for Performing Maintenance
6. Maintenance Plan Cost Summary
7. 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. An evaluation 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 CEFP, 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 preventive 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.

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 will be a schedule for the anticipated replacement of each facility. 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 $500,000. These funds shall not supplant local funding for school improvements and will be distributed on a "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 the Economies of Scale will be based on:

   - 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;

   - 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 school/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 Agencies CEFP, 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 affects of a project or improvement plan.

F. Project Submission Requirements

Supportive data for projects submitted for funding consideration by the SBA shall meet the requirements of the Major Improvement Plan indicated herein and those included in the School Building Authority's MIP computer software. 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;

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 137)

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 on or before November 1, 1996 and continue each subsequent year. The SBA may require that a county, the state board or the administration counsel 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(i).

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.

Amending the Plan (SBA Form 106A)

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 100.90 of this manual for additional amendment requirements.

Project Selection Process

MIP Grant requests shall be submitted as a part of the annual CEFP and MIP update in accordance with the SBA Policy and Procedure Manual, Section 202-D. MIP Projects will be reviewed and evaluated first by a statewide review team and then 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 for SBA consideration under separate cover in conjunction with the annual update documentation or upon request by the Authority. Each project submitted will be evaluated by the SBA staff and on-site visits will be performed as necessary to familiarized 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 specific's 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.

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APPENDIX N

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

CONSTRUCTION OBSERVATION REPORT

COUNTY _____ PROJECT _____

PROJECT NUMBER _____ PREPARED BY _____

DATE _____ CLERK-OF-THE-WORKS _____

WEATHER _____ JOB PHONE # _____

ARCHITECT/ENGINEER _____ PHONE # _____

CONTRACTORS	PRESENT	CONTRACTORS	PRESENT

DIVISION OF WORK	% COMPLETE	DIVISION OF WORK	% COMPLETE
GENERAL REQUIREMENTS		FINISHES	
SITE WORK		Floors	
Demolition		Walls	
Subsurface		Ceilings	
Clearing/Grading		SPECIALITIES	
CONCRETE		Chalk/Tackboard	
Ftg./Foundations		Fire Extinguishers	
Slabs/Decks		Others	
Walks		EQUIPMENT	
MASONRY		FURNISHINGS	
Foundations		SPECIAL CONSTRUCTION	
Exterior Walls		CONVEYING SYSTEMS	
Interior Walls		Elevator	
METAL		MECHANICAL	
Structural Steel		Insulation	
Steel Joists		Plumbing/Piping/Drain	
Floor Decking		Sprinkler System	
Roof Decking		H.V.A.C.	
Fabricated Metals		ELECTRICAL	
CARPENTRY		Service & Distribution	
MOISTURE PROTECTION		Lighting	
Waterproofing		Communications/Fire Alarms	
Building Insulation		OTHERS	
Metal Flashing/Trim		_____	
Roofing		_____	
Sealers		_____	

TOTAL PROJECT COMPLETE% _____ %

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SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

CONSTRUCTION OBSERVATION REPORT

COUNTY _____ PROJECT _____

PROJECT NUMBER _____ PREPARED BY _____

DATE _____ CLERK-OF-THE-WORKS _____

REMARKS:

Page __ of Page __

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APPENDIX O

WEST VIRGINIA DEPARTMENT OF EDUCATION
AND
SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA
APPLICATION FOR PROJECT APPROVAL

West Virginia Department of Education
1900 Kanawha Boulevard East, Bldg. #6 Room B-264
Charleston, West Virginia 25305

School Building Authority of West Virginia
2300 Kanawha Boulevard, East
Charleston, West Virginia 25311

COUNTY _____
SCHOOL NAME _____
LOCATION _____

ESTIMATED STARTING DATE _____
ESTIMATED COMPLETION DATE _____
GRADES HOUSED _____ ENROLLMENT _____

PROJECT DESCRIPTION _____

SITE ACRES _____ USEABLE ACRES _____
ENERGY EFFICIENCY (BTU/Sq.Ft./Yr) _____
WATER SOURCE _____

GROSS BUILDING AREA NEW CONSTRUCTION _____
SQ. FT. AFFECTED BY THIS PROJECT _____
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, Toil Acc.)			
EQUIPMENT (Food Service, Etc.)			
FURNISHINGS (Seating, Casework, Etc.)			
SPECIAL CONSTRUCTION			
CONVEYING SYSTEMS (Elevators, Etc.)			
MECHANICAL (HVAC, Plumbing, Etc.)			
ELECTRICAL			
OTHERS (Describe)			
GRAND TOTALS			
FUNDING			
COUNTY SOURCE			
SBA NET NEED			
FEDERAL SOURCE			
GRAND TOTALS			

AGENCIES APPROVALS	RECEIVED	APPROVED	RECEIVED	APPROVED	RECEIVED	APPROVED
STATE DEPARTMENT OF HIGHWAYS						
STATE DEPARTMENT OF HEALTH						
STATE FIRE MARSHAL						
SCHOOL BUILDING AUTHORITY						
STATE BOARD OF EDUCATION						

_____ Signature of Architect or Engineer

_____ Signature of County Superintendent

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APPENDIX P

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 _____
Project/School Name _____
Project Number _____
Enrollment _____
Teaching Stations _____

Substantial Completion Date _____
Final Inspection Date _____
Fire Marshal - Date of Occupancy Permit (If Required) _____

==========

SOURCES OF FUNDS:

State Funds
SBA "MIP" $_____
SBA "Needs" $_____
Local Funds (Bond) $_____
Local Funds (Other) $_____
Vocational (State) $_____
Vocational (Fed) $_____
Federal (Other) $_____
Other Funds (List) $_____
_____
_____
_____
TOTAL FUNDS $_____

SUMMARY OF PROJECT DATA:

Sq. Ft. in Building _____
Site Acquisition $_____
Site Preparation $_____
Building Construction Costs - Total $_____
* Renovation Costs $_____
Building Construction Costs-Per Sq. Ft. $_____
Building Renovation Costs-Per Sq. Ft. $_____
Moveable Equip. Cost $_____
A & E Fees $_____
** Miscellaneous Costs $_____
TOTAL PROJECT COSTS $_____

*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

_____ _____
County Superintendent Date

==========

***Inspected this date by a representative of the School Building Authority or the West Virginia Department of Education.

_____ _____
Signature Date

***SBA funded projects must have a final inspection by an SBA representative.

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WEST VIRGINIA SCHOOL BUILDING AUTHORITY

CERTIFICATE OF CONTRACT COMPLETION

FOR MULTIPLE PRIME PROJECT

Upon completion of each prime contractors contract the agency receiving SBA funding shall be responsible for submitting this completed original form to the SBA, with each prime contractors 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: _____

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9/28/94

APPENDIX Q

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

REQUIRED LANGUAGE FOR BIDDING DOCUMENTS ON SBA FUNDED PROJECTS

The following language shall be included within the Instructions to Bidders and Form of Proposal of all bidding documents for projects funded, in whole or in part, by the School Building Authority of West Virginia.

INSTRUCTIONS TO BIDDERS

SUBMITTAL OF SUBCONTRACTORS:

A. The bidder(s) submitting the lowest qualified bid(s) as determined by the Owner and Architect/Engineer at the time of the bid shall submit a listing of all subcontractors and all major equipment and material suppliers along with the contractor's license number for each subcontractor as required by the "West Virginia Contractor Licensing Act" proposed for each major branch of work itemized and described in the contract documents for the project within two hours after the completion of the bid opening. This information is to be provided on the "List of Proposed Subcontractors, Equipment/Material Suppliers". (SBA Form 123)

B. Each bidder is required to establish the reliability and responsibility of all proposed subcontractors and equipment/material suppliers being proposed to perform the work. 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.

C. Failure to submit a list of subcontractors and major equipment and material suppliers along with the contractor's license number for each subcontractor as required by the "West Virginia Contractor Licensing Act" within two hours after the completion of the bid shall result in disqualification of the bid.

D. 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.

E. A financial statement shall be submitted to the agency receiving bids by the lowest qualified bidder(s) within a reasonable length of time after the bid opening and prior to the execution of contracts or agreements between the local board of education and the contractor(s). The latest available financial information must be used. Minimum requirements for financial statements are:

(1) Accountants compilation report;

(2) Balance sheet;

(3) Income statement;

(4) Statement of changes in retained earnings;

(5) Statement of cash flows; and

(6) Notes to the financial statement.

LIST OF MAJOR EQUIPMENT AND MATERIALS:

A. The bidder(s) submitting the lowest qualified bids as determined by the Owner and Architect/Engineer at the time of the bid shall submit a complete list of major equipment and materials as requested by the Architect/Engineer within two hours after the completion of the bid opening. This information is to be provided on the "List of Proposed Subcontractors, Equipment/Material Suppliers". (SBA Form 123)

B. In addition, the successful bidder, thereafter known as the Contractor, may be requested within thirty (30) calendar days after award of contract to furnish to the Owner, Architect/Engineer or SBA, a more detailed and complete list of the materials and equipment, together with the manufacturer's or maker's name, brand and/or catalogue number and a catalogue cut or illustration thereof.

C. 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.

D. Written approval shall be obtained from the Architect/Engineer covering any substitution of equipment or materials. Substitutions are permitted in the following instances:

(1) Failure to meet quality and intent of specification and/or

(2) Failure of the supplier or manufacturer to meet delivery schedules or other conditions of the contract.

E. The Owner reserves the right to reject the proposal of any bidder who fails to furnish all required information.

PAYROLL CERTIFICATION:

A. 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.

B. Contractors completing SBA funded projects must submit monthly certified payroll reports to the local board of education for potential review by the agency and the SBA to assure compliance with West Virginia's prevailing wage laws.

LIST OF PROPOSED SUBCONTRACTORS, EQUIPMENT/MATERIAL SUPPLIERS

List as designated below each major branch of work and major equipment/material category for this proposal and the subcontractor or supplier proposed for that portion of work, also provide the 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 the Contractor, so indicate. If the acceptance of an alternate proposal changes a subcontractor or equipment/material supplier, indicate by notation below. The bidder may be requested to change an unsatisfactory subcontractor or equipment/material supplier. The contractor is responsible for selecting or changing subcontractors and/or equipment/material suppliers. 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. The Contractor has full responsibility for satisfactory execution of all work in accordance with the contract documents. Any change of proposed subcontractors or material suppliers shall be at no additional cost to the Owner, as the Contractor has full responsibility for execution of the work.

	BRANCH OF WORK/MATERIAL CATEGORY (To Be Completed by Architect/Engineer)	SUBCONTRACTOR/SUPPLIER (To Be Completed By Contractor)	CONTRACTOR LICENSE NUMBER
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			

(Use Additional Pages as Required)

SBA 123

Rev. 1/8/92
0332b/80&81a

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. 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 CEFP.

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9/30/91
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APPENDIX S

SBA ARCHITECTURAL/ENGINEERING SERVICES AGREEMENT

THIS AGREEMENT, Made this TYPE DATE day of TYPE MONTH, 19__, between the BOARD OF EDUCATION OF THE COUNTY OF TYPE COUNTY (hereinafter "OWNER") and TYPE NAME OF ARCHITECT IN CAPS (hereinafter "ARCHITECT/ENGINEER").

PROJECT

Title: TYPE NAME OF SCHOOL PROJECT

CONSTRUCTION FUNDS AVAILABLE

TOTAL FIXED LIMIT FUNDS available by OWNER for construction only for this Project are: TYPE Total Amount of Dollars Available for Construction SAMPLE

CONSTRUCTION COST

The CONSTRUCTION COST shall be defined as follows:

1. For completed construction: the total applicable Contract cost of all such WORK;
2. For WORK constructed: the lowest bona fide base bid received from qualified bidder for WORK within the stated budget;
3. For WORK for which no such bid or proposal is received: the latest approved Detailed Base Bid Estimate of CONSTRUCTION COST within the stated budget. CONSTRUCTION COST does not include the compensation to ARCHITECT/ENGINEER.

COMPENSATION

ARCHITECT/ENGINEER shall provide professional services for this Project in accordance with the Terms and Conditions of this Agreement and OWNER shall compensate ARCHITECT/ENGINEER in accordance with the Terms and Conditions of this Agreement as follows:

BASIC SERVICES: Basic Compensation shall be computed on the basis of: TYPE PERCENTAGE (%) of NEW CONSTRUCTION COST and TYPE PERCENTAGE (%) of RENOVATION COST. If any portions of the Project are deleted or otherwise not constructed, compensation for such portions of the Project shall be payable to the extent services are performed on such portions based on: (1) the lowest bona fide bid or negotiated proposal; or (2) if no such bid or proposal is received, the most recent Statement of Probable CONSTRUCTION COST or Detailed Estimate of CONSTRUCTION COST for such portions of the Project. If the Scope of the Project or if the ARCHITECT'S/ENGINEER'S services are changed materially, the amounts of compensation shall be equitably adjusted.

PAYMENT SCHEDULE TO ARCHITECT

A. BASIC SERVICES:

Payment for ARCHITECT'S/ENGINEER'S Basic Services shall be made monthly upon presentation of ARCHITECT'S/ENGINEER'S statement of services rendered in proportion to the amount of services performed, provided that the compensation of each Phase of Basic Services shall not exceed the limits set out below:

Schematic Design Phase	15%
Design Development Phase	35%
Construction Documents Phase	65%
Bidding and Bid Award Phase	70%

Construction Administration Phase	
At 25% Completed Construction	75%
At 50% Completed Construction	80%
At 75% Completed Construction	85%
At SUBSTANTIAL COMPLETION	90%
At 100% Completion, Including Furnishing OWNER with Reproducible RECORD DRAWINGS (Contractor's marked up RECORD DRAWINGS may be substituted with Owner's Approval) and Other Documents Required	100%

Additionally, the ARCHITECT shall coordinate and conduct, with the OWNER'S authorized representative and appropriate contractors present, a post construction project walk-through prior to the expiration of the CONTRACTOR'S one year warranty on the building. The walk-through shall be scheduled one month prior to the expiration of the one year warranty period. Building deficiencies shall be identified and reported to the CONTRACTOR prior to the expiration of the warranties.

No deduction shall be made for ARCHITECT'S/ENGINEER'S compensation as a result of penalty, liquidated damages or other sums withheld from CONTRACTOR.

ARTICLE 1 — ARCHITECT'S/ENGINEER'S BASIC SERVICES AND RESPONSIBILITIES

A. GENERAL

1. ARCHITECT'S/ENGINEER'S Basic Professional Services consist of the phases described as follows and include, but are not limited to, normal architectural, structural, mechanical and electrical engineering services. ARCHITECT/ENGINEER shall obtain written approval of OWNER and the SBA before proceeding with each phase. Nothing in this Agreement shall be construed as placing any obligation on OWNER to proceed with any phase beyond the latest phase approved by OWNER.
2. ARCHITECT/ENGINEER agrees to accept OWNER'S program and budget and further agrees to accomplish said project within the intent of the program and established budget. Should ARCHITECT/ENGINEER determine that the project cannot be accomplished within the established budget, ARCHITECT/ENGINEER shall notify OWNER, in writing, so that the project scope can be reviewed and modified as necessary.
3. ARCHITECT/ENGINEER agrees to OBSERVE the construction of WORK and to insist that CONTRACTOR(s) comply with CONTRACT DOCUMENTS. Such OBSERVATION shall include, unless otherwise specified, the general administration of the Contract; the review and approval of Certificates of Payment; review and approval of SHOP DRAWINGS; and observation of construction. General administration of the Contract includes, but is not limited to, the performance of all acts, services, and responsibilities described, referred to, or implied in this Contract and to the performance of all acts, services, and responsibilities described, referred to, or implied in the General and Supplemental Condition of Contract for Construction.
4. ARCHITECT/ENGINEER agrees to strictly conform to and be bound by standards, criteria, budgetary considerations and memoranda of policy furnished to him by OWNER and further agrees that he shall design WORK in strict compliance with all applicable laws, codes and industry standards including pertinent provisions of State Board of Education Policy 6200 and the Policies and Procedures of the School Building Authority.

5. ARCHITECT/ENGINEER shall meet with OWNER beginning with the execution of the contract on a monthly basis to discuss progress and problems which may be encountered. These meetings shall be coordinated through the OWNER'S designated project representative. ARCHITECT/ENGINEER shall report directly to the TYPE TITLE OF THE OWNER'S DESIGNATED PROJECT REPRESENTATIVE.
6. ARCHITECT/ENGINEER must proceed with the performance of the services called for in this agreement so that all construction bids are awarded so as to allow substantial completion of the project by TYPE DATE, or as directed by the OWNER. (Base bid of proposal will allow Contractor to state his required Substantial Completion date.)
7. ARCHITECT/ENGINEER agrees to design the project within the OWNER'S construction budget. The ARCHITECT shall advise the OWNER prior to approval of design development drawings if adjustments are required in the project scope in order to construct the facility within the approved project budget. Statements of Probable Construction Cost prepared by the ARCHITECT/ENGINEER represent the ARCHITECT'S/ENGINEER'S best judgment as a design professional. The ARCHITECT/ENGINEER cannot and does not warrant or represent that bids or negotiated prices will not vary from the Cost Estimate prepared by the ARCHITECT/ENGINEER. The ARCHITECT/ENGINEER shall be permitted with the OWNER'S approval to include contingencies for design, bidding and price escalation; to determine what materials, equipment, component systems and types of construction are to be included in the CONTRACT DOCUMENTS; to make reasonable adjustments in the scope of the Project with written approval by OWNER; and to include in the CONTRACT DOCUMENTS alternate bids to adjust the CONSTRUCTION COST to the fixed limit. Any such fixed limit shall be increased in the amount of any increase in the Contract Sum occurring after execution of the Contract for Construction. Should all acceptable bids received for the project exceed the CONSTRUCTION COST the ARCHITECT/ENGINEER agrees to redesign the project including reducing the scope of the project at no additional cost to OWNER and, in a manner acceptable to the OWNER, so as not to exceed the OWNER'S Fixed Limit construction budget.
8. ARCHITECT/ENGINEER agrees that the plans and specifications provided to the CONTRACTOR for this project shall be adequate and sufficient for the proper construction of the project and their intended purpose.
9. ARCHITECT/ENGINEER agrees to provide professional services to assist the OWNER in defending all claims against the OWNER which relate in any way to alleged errors or omissions of an alleged failure to OBSERVE by the ARCHITECT/ENGINEER arising out of the Contract without additional compensation.

B. ARCHITECT'S/ENGINEER'S RESPONSIBILITIES IN CONJUNCTION WITH BASIC SERVICES
   1. DESIGN PHASE
      a. SCHEMATIC DESIGN PHASE
         (1) ARCHITECT/ENGINEER shall review the needs and requirements of OWNER to determine the requirements of the project.
         (2) ARCHITECT/ENGINEER shall then review these project requirements to determine the project scope with the OWNER.
         (3) ARCHITECT/ENGINEER shall evaluate OWNER'S budget.
         (4) ARCHITECT/ENGINEER shall provide a preliminary evaluation of project scope and requirements for OWNER, taking into account OWNER'S educational program and project budget.

(5) ARCHITECT/ENGINEER shall then review with OWNER alternate methods and approaches to project design and construction and recommend the method best suited to the needs and budget of OWNER.

(6) ARCHITECT/ENGINEER shall, relying on OWNER'S project requirements, budget restrictions and method of design and construction selected by OWNER, prepare for the OWNER'S approval of Schematic Design Documents including, but not limited to, drawings and other documents demonstrating and illustrating the project scope and scale and the relationship of project components. Schematic design documents shall be reviewed and approved by the SBA prior to submission to the county board of education for final approval.

(7) ARCHITECT/ENGINEER shall at the time of submission of Schematic Design Documents furnish to OWNER a Statement of Probable Construction Cost, based on the OWNER'S project requirements and current areas, volumes or other unit costs.

b. DESIGN DEVELOPMENT PHASE

(1) Prior to beginning the project Design Development Phase, the ARCHITECT/ENGINEER shall secure approval of the Schematic Design Documents and Statement of Probable Project Cost from the OWNER and the School Building Authority.

(2) ARCHITECT/ENGINEER shall prepare Design Development Phase Documents based on the Schematic Design Phase Documents and any approved adjustments in the program or project budget.

(3) Design Development Documents shall include sufficient data, information and material to define the scope of the project and to demonstrate, delineate, and define the general design of the project, including size and character of the project as to architectural, structural, mechanical and electrical system, materials, and any other project elements appropriate under the project scope and design.

(4) Design Development Phase Documents shall be developed based on the OWNER'S project requirements (including educational program) and shall include, but not be limited to drawings, outline specifications, and a Revised Statement of Probable Construction Cost.

(5) DRAWINGS:
The Design Development Phase Documents shall reflect all architectural and/or engineering skills applicable to the project and shall graphically illustrate the approved educational program provided by the OWNER.

(6) OUTLINE SPECIFICATIONS: Outline Specifications and Probable Construction Cost shall be developed by ARCHITECT/ENGINEER to a uniform level, reflecting the material, trades, mechanical and electrical system, and specialties required to reflect the project as a whole.

(7) STATEMENT OF PROBABLE CONSTRUCTION COST: Probable Construction Cost furnished in this phase shall be calculated by ARCHITECT/ENGINEER based on drawings and the Outline Specifications for the project reflecting the changes in probable construction cost and taking into

account the building trades and construction components utilized in the project design. The ARCHITECT/ENGINEER shall advise the OWNER of any adjustments to the previous Statement of Probable Construction Cost indicated by changes in requirements or general market conditions.

(8) Upon completion of the Design Development Phase and prior to the submission to the county board of education for approval the ARCHITECT/ENGINEER shall submit to the School Building Authority for approval the Design Development Documents including the latest approved educational program, Outline Specifications and the statement of the revised Probable Construction Cost, together with any other material or documents necessary to show the design and scope of the project.

c. CONSTRUCTION DOCUMENTS PHASE

(1) Prior to the beginning the Construction Documents Phase of the project, approval in writing of the Design Development Documents, and specifically the Revised Statement of Probable Construction Cost, shall be secured from the School Building Authority and the OWNER by the ARCHITECT/ENGINEER.

(2) ARCHITECT/ENGINEER shall prepare the Construction Documents from the approved Design Development Documents for approval by the School Building Authority and the OWNER with a final Statement of Probable Construction Cost, including information necessary to bid the project.

(3) Construction Documents shall include, but not be limited to, drawings and specifications setting forth in adequate, reasonable, and reliable detail the final requirements for the construction of the project.

(4) ARCHITECT/ENGINEER shall prepare for filing by the OWNER all documents necessary to obtain all approvals and permits required of the project by governmental authorities having jurisdiction over the project. The ARCHITECT shall incorporate required changes in all documents resulting from regulatory agency reviews at no additional cost to the OWNER. Building Permits are not a part of this contract.

(5) Approval of the Construction Documents and Statement of Probable Construction Cost by the School Building Authority and the OWNER shall not relieve ARCHITECT/ENGINEER of any responsibility for design deficiencies, omissions or errors.

(6) All plans and specifications shall bear the signature and seal of the approved project ARCHITECT/ENGINEER. ARCHITECT/ENGINEER, Consultants, agents and employees shall be fully responsible for all designs.

d. BIDDING AND BID AWARD PHASE

(1) Prior to beginning the Bidding and Bid Award Phase of the project, approval in writing of the Construction Documents and the Final Statement of Probable Construction Cost shall be secured from the School Building Authority and the OWNER by ARCHITECT/ENGINEER.

(2) ARCHITECT/ENGINEER shall prepare the Bid Documents necessary for obtaining bids for the construction of the project.

(3) ARCHITECT/ENGINEER shall prepare the Invitation for Bids for OWNER which shall include all contractual terms and conditions applicable to the project.

(4) ARCHITECT/ENGINEER shall prepare and submit the construction contract and the Invitation for Bids for the written approval of OWNER prior to the advertising and solicitation of bids.

(5) ARCHITECT/ENGINEER shall hold a pre-bid conference, with an agenda prepared by ARCHITECT/ENGINEER appropriate to the size, complexity, and scope of the project.

(6) ARCHITECT/ENGINEER shall assist OWNER by receiving, recording, and evaluating the bids received for the construction of the project and shall assist the OWNER in the submission of the complete bid tabulation summary to the School Building Authority.

(7) ARCHITECT/ENGINEER shall review all bids and qualifications of the lowest responsive bidders and shall recommend to OWNER those deemed responsive. ARCHITECT/ENGINEER shall prepare and certify the bid tabulation and shall upon request mail copies of the bid tabulation to all bidders within ten (10) DAYS following the bid opening.

2. CONSTRUCTION ADMINISTRATION PHASE

a. The Construction Administration Phase shall commence with the award of the Construction Contract or contracts and will terminate when all identified construction deficiencies have been corrected and when final payment to the Contractor is made.

b. ARCHITECT/ENGINEER shall have the authority to act on behalf of OWNER to the extent provided in this Contract, unless otherwise modified in writing.

c. ARCHITECT/ENGINEER shall at all times have access to WORK.

d. ARCHITECT/ENGINEER shall conduct a pre-construction conference with CONTRACTOR and shall take and distribute to OWNER and CONTRACTOR written minutes of the pre-construction conference and of all meetings conducted by ARCHITECT/ENGINEER.

e. ARCHITECT/ENGINEER shall attend job progress meetings at intervals appropriate to the stage of construction as determined by the ARCHITECT/ENGINEER and at which time CONTRACTOR and ARCHITECT/ENGINEER may discuss and resolve such matters as job progress, construction problems, scheduling or other matters relating to the timely and successful completion of the project in accordance with the contract requirements. Additional special job site meetings, when deemed necessary by ARCHITECT/ENGINEER, shall be held, as required.

f. On the basis of these on-site visits, ARCHITECT/ENGINEER shall keep OWNER and the School Building Authority informed through a monthly written report of the progress and quality of WORK. While periodic visits by ARCHITECT/ENGINEER may vary with the progress of WORK and other conditions, these visits shall not be less than one visit by ARCHITECT/ENGINEER to the project biweekly during the course of construction, unless otherwise agreed upon by OWNER and ARCHITECT/ENGINEER.

g. Based on observations at the site and on CONTRACTOR'S written request for payment, ARCHITECT/ENGINEER shall determine the amount owed to CONTRACTOR and shall certify requests for payment in such amounts, on the basis that WORK has progressed to the

point indicated and that the quality of WORK is in accordance with CONTRACT DOCUMENTS and sound construction practices. The issuance of a Certificate for Payment shall not be a representation that ARCHITECT/ENGINEER has made any examination to ascertain how and for what purpose the Contractor has used the monies paid on account of the Contract Sum.

h. ARCHITECT/ENGINEER will be the interpreter of the requirements of CONTRACT DOCUMENTS. ARCHITECT will render written interpretations within ten (10) DAYS of receipt of any written request or within an agreed upon time limit. These interpretations as between OWNER and CONTRACTOR will be binding upon both. ARCHITECT/ENGINEER shall not be responsible for construction means, methods, techniques, sequences or procedures or for safety precautions and programs in connection with the WORK.

i. ARCHITECT/ENGINEER, in cooperation with the OWNER and School Building Authority, shall reject WORK which in ARCHITECT'S opinion does not conform to CONTRACT DOCUMENTS; to confirm the requirements of CONTRACT DOCUMENTS, ARCHITECT may request approval of OWNER and the School Building Authority for special inspection and/or testing.

j. ARCHITECT/ENGINEER shall review and approve SHOP DRAWINGS. SHOP DRAWINGS shall only be approved if they are in conformance with the design concept of the project and in compliance with the CONTRACT DOCUMENTS sufficient deviations affecting building components, equipment quality and associated cost as required in the Contract Documents must have the written approval of the OWNER prior to their approval by the ARCHITECT. SHOP DRAWINGS, samples, and other submissions of CONTRACTOR for general conformance with the design concept of the project and for compliance with the information given in CONTRACT DOCUMENTS shall be returned to CONTRACTOR within fifteen (15) DAYS of receipt thereof. If review and approval are delayed beyond the time set out above, ARCHITECT/ENGINEER shall notify CONTRACTOR and OWNER in writing stating the reason for the delay. The ARCHITECT'S/ENGINEER'S approval of a specific item shall not indicate approval of an assembly of which the item is a component.

k. ARCHITECT/ENGINEER shall review and analyze all requests for CHANGE ORDERS including any documents offered to substantiate such requests. ARCHITECT/ENGINEER shall submit written recommendations and shall prepare those CHANGE ORDERS recommended for approval by the School Building Authority and the OWNER.

l. ARCHITECT/ENGINEER shall require that no changes may be made in WORK by any party without prior written consent of the OWNER.

m. The responsibility of ARCHITECT/ENGINEER under the terms of this Contract is not relieved or affected in any respect by the presence of any other agents, consultants, or employees of OWNER.

n. ARCHITECT/ENGINEER shall endeavor to the best of his ability through observations that WORK has been or is being installed in accordance with CONTRACT DOCUMENTS and normal industry construction practices.

o. ARCHITECT/ENGINEER is fully responsible for any WORK designed, approved, certified, or accepted by his Engineers, Consultants, agents, and employees the same as if the said WORK were designed, approved, certified, or accepted by him. Additionally, ARCHITECT/ENGINEER shall determine the amount, quality, acceptability and fitness of the kind of WORK and materials which are to be paid for under this Contract.

p. ARCHITECT/ENGINEER shall make decisions promptly and in any event shall respond within ten (10) DAYS after presentation of an issue, claim or complaint by the parties to the Construction Contract.

q. If CONTRACTOR shall be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should persistently or repeatedly refuse or fail to supply enough properly skilled workmen or proper materials, or if he should fail to make prompt payment to SUBCONTRACTORS or for material or labor, or persistently disregard laws, ordinances or the instructions of the School Building Authority and the OWNER, or otherwise be guilty of a material violation of any provision of the Contract, or if he should fall behind the progress SCHEDULE as described in CONTRACT DOCUMENTS, then ARCHITECT/ENGINEER may advise OWNER to serve notice to CONTRACTOR and his surety setting forth the asserted violations and demanding compliance with the Contract. Unless within ten (10) consecutive calendar DAYS after serving such notice, such violations shall cease and satisfactory arrangements for correction be made, ARCHITECT/ENGINEER shall advise OWNER in writing either to suspend CONTRACTOR'S right to proceed with WORK or to terminate the contract with CONTRACTOR.

r. Should CONTRACTOR fail to comply with the orders of ARCHITECT/ENGINEER relative to any particular portion of WORK, then ARCHITECT/ENGINEER shall have the authority to stop WORK for 24 hours. Thereafter, if the suspension is to continue, ARCHITECT/ENGINEER shall so advise the School Building Authority and the OWNER, recommend the suspension stating the reasons therefor, and obtain the written authorization of the School Building Authority and the OWNER for transmittal to CONTRACTOR.

s. If CONTRACTOR refuses or fails to prosecute WORK, or any part thereof, with such diligence as will insure its completion within the time specified in the Contract, or any extension thereof, or fails to complete said WORK within such time, or refuses to correct defective WORK, ARCHITECT/ENGINEER may advise the School Building Authority and the OWNER to terminate the contract.

t. ARCHITECT/ENGINEER, at the completion of the entire WORK or a designated portion thereof, shall issue with the approval of the School Building Authority and the OWNER, a Certificate of SUBSTANTIAL COMPLETION which shall state that WORK performed under this contract has been reviewed and found to be substantially complete in accordance with all requirements on CONTRACT DOCUMENTS except for identified minor items which, in the opinion of ARCHITECT/ENGINEER, will not interfere with complete and satisfactory use of the facilities.

u. ARCHITECT/ENGINEER shall provide a close-out program for the project including, but not limited to, the preparation and enforcement of "punch lists." ARCHITECT/ENGINEER shall also:
   i. Assist and cooperate with CONTRACTOR in the completion of punch list WORK.
   ii. Transmit from CONTRACTOR to OWNER all guarantees, warranties, equipment, records, drawings, and maintenance manuals and operating instructions.
   iii. Require CONTRACTOR to schedule and coordinate all start-up and shake-down operations of all equipment with OWNER'S operating personnel and shall require brief periods of instruction for OWNER'S operating personnel as required in the specifications, and shall arrange for, coordinate, and monitor the balancing of all systems.
   iv. Obtain from CONTRACTOR and furnish to OWNER all guarantees and required affidavits of releases from CONTRACTOR.
   v. Assist the OWNER with required School Building Authority project close-out documentation.

v. Upon completion of the Construction Phase, ARCHITECT/ENGINEER shall provide to the OWNER reproducible RECORD DRAWINGS (Contractor's marked up record drawing may be substituted with the approval of the OWNER) showing all changes made during construction. Record Drawings shall be certified by the CONTRACTOR and ARCHITECT as record drawings.

w. ARCHITECT/ENGINEER shall arrange for final observation and shall require that all WORK performed by CONTRACTORS is in accordance with the requirements of CONTRACT DOCUMENTS.

x. Subsequent to the final completion of construction operations and the occupancy of the project by OWNER, ARCHITECT/ENGINEER shall review all outstanding claims of which he has knowledge of and which have not been settled during the construction phase of the project and shall prepare a written report outlining the background and status of such claims and making recommendations as to the ultimate disposition of such outstanding claims.

y. One month prior to the expiration of the one-year warranty period as called for in the Construction Documents, ARCHITECT/ENGINEER, OWNER and School Building Authority shall inspect the project for any deficiencies that may have developed under the one-year warranty. Upon completion of inspection, a written report shall be furnished to OWNER and CONTRACTOR, and ARCHITECT/ENGINEER shall assist the OWNER in taking necessary action to see that the deficiencies are corrected at no cost to OWNER.

ARTICLE 2 -- ADDITIONAL SERVICES

A. GENERAL: The following additional Services shall be provided only when authorized in writing by OWNER and shall be paid for by OWNER:
   1. Making revisions in CONTRACT DOCUMENTS when such revisions are inconsistent with written approvals or instructions previously given are required by the enactment or revision of codes, laws or regulations subsequent to the preparation of such documents or are due to other causes not solely within the control of the ARCHITECT/ENGINEER.

2. Providing consultation concerning replacement of any WORK damaged by fire or other cause during construction, and furnishing services as may be required in connection with the replacement of such WORK.
3. Providing services made necessary by the default of a CONTRACTOR.
4. Preparing to serve or serving as an expert witness in connection with any public hearing, arbitration proceeding or legal proceeding.
5. Providing services of Consultants for other than the normal architectural, structural, mechanical and electrical engineering services for the Project.
6. Preparing an environmental impact statement for submission to the Environmental Protection Agency (EPA).
7. Providing services relative to future facilities, system and equipment which are not intended to be constructed during the Construction Phase of this Project.
8. Providing services in connection with the WORK of the OWNER'S Construction Manager or other Consultants retained by the OWNER.
9. Providing coordination of WORK provided by the OWNER'S own forces.
10. Providing financial feasibility studies.
11. Preparing surveys, studies or material, other than the CONTRACT DOCUMENTS, for submission to governmental or other authorities having jurisdiction over the Project.
12. Providing services to make measured drawings of existing buildings.
13. Providing extensive assistance in the utilization of any equipment or system such as initial start-up, testing, adjusting or balancing, preparation of operating or maintenance manuals, training operating or maintenance personnel and consultation during operation.
14. Employment of Consultants requested by the OWNER.
15. Constructing the Project with more than one Prime Contractor.
16. Segmented or phase construction process.

ARTICLE 3 -- OWNER'S RESPONSIBILITIES

A. OWNER shall provide full information regarding his requirements for the project including related budgetary information and shall cooperate fully with ARCHITECT/ENGINEER at all times.
B. OWNER shall provide an on-site project Clerk-of-the-Works (C.O.W.) for projects exceeding one hundred thousand dollars ($100,000) in scope. The duties and responsibilities of the C.O.W. are as described by the School Building Authority. The C.O.W. shall not assume any responsibilities of the ARCHITECT/ENGINEER or any contractor and shall work directly for the OWNER.
C. If the OWNER observes or otherwise becomes aware of any fault or defect in the project or nonconformance with CONTRACT DOCUMENTS, he shall provide prompt WRITTEN NOTICE thereof to ARCHITECT/ENGINEER.
D. OWNER shall furnish information required of it as expeditiously as is necessary for the orderly progress of WORK so as not to unnecessarily delay ARCHITECT/ENGINEER in the performance of the duties. The ARCHITECT/ENGINEER shall be entitled to rely upon the accuracy and completeness of all services, information, surveys and reports furnished by the OWNER.
E. OWNER shall bear the cost of obtaining the following information for the ARCHITECT/ENGINEER from LAND SURVEYOR or MATERIAL TESTING ENGINEER selected by the ARCHITECT/ENGINEER, with the OWNER'S approval, provided the cost is approved by OWNER before it is incurred:
   1. All tests deemed necessary by ARCHITECT/ENGINEER.

2. The surveys, tests, engineering data, and any other information described under this ARTICLE shall be obtained for the ARCHITECT'S/ENGINEER'S use in making design decisions for this project.

F. OWNER shall furnish at its expense any Consultants required to evaluate the Project for existing asbestos materials or hazardous wastes, including professional recommendations for their removal. (Professional Services relating to asbestos in any way are not a part of this Contract.)

ARTICLE 4 -- REIMBURSABLE EXPENSES

A. Reimbursable Expenses are defined as direct costs which may be in addition to the compensation for Basic and/or Additional Services and may include, but are not necessarily limited to, the following:
   1. Travel expenses in connection with the project including mileage, meals, lodging and fees paid for securing approval of authorities having jurisdiction over the project.
   2. Long distance communication.
   3. Expense of reproductions, postage and handling of documents, renderings and models requested and approved by the OWNER. Reproductions for the office use of the ARCHITECT/ENGINEER and the ARCHITECT'S/ENGINEER'S Consultants are excluded.

   Reimbursable Expenses for this Project shall not exceed TYPE AMOUNT.

ARTICLE 5 -- ARCHITECT'S/ENGINEER'S ACCOUNTING RECORDS

A. Daily records of ARCHITECT'S/ENGINEER'S Direct Personnel, Consultants and Reimbursable Expenses pertaining to the Project shall be kept on a generally recognized accounting basis and shall be available to OWNER or his authorized representatives upon request.

ARTICLE 6 -- ARCHITECT'S/ENGINEER'S COOPERATION

A. ARCHITECT/ENGINEER agrees to perform his services under this Contract in such manner and at such times so that OWNER and/or any CONTRACTOR who has WORK to perform, or contracts to execute, can do so without unreasonable delay.

ARTICLE 7 -- OWNERSHIP OF DOCUMENTS

A. Drawings and Specifications as instruments of service are and shall remain the property of the ARCHITECT/ENGINEER whether the Project for which they are made is executed or not. The OWNER shall be permitted to retain copies, including reproducible copies, of Drawings and Specifications for information and reference in connection with the OWNER'S use and occupancy of the Project. The Drawings and Specifications shall not be used by the OWNER on other projects or for completion of this Project by others provided the ARCHITECT/ENGINEER is not in default under this Agreement, except by agreement in writing and with appropriate compensation to the ARCHITECT/ENGINEER.

B. Submission or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the ARCHITECT'S/ENGINEER'S rights.

ARTICLE 8 -- SUCCESSORS AND ASSIGNS

A. OWNER and ARCHITECT/ENGINEER each binds himself, his partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors, assigns and legal representatives of such other party with respect to all covenants of this Agreement. Neither OWNER nor ARCHITECT/ENGINEER shall assign, sublet or transfer his interest in this Agreement without the written consent of the other.

ARTICLE 9 -- TERMINATION

A. THIS AGREEMENT, for any reason including the convenience of OWNER or for cause, may be terminated by OWNER by WRITTEN NOTICE to ARCHITECT/ENGINEER specifying the termination date which shall be effective within seven (7) DAYS from the date to be stated by OWNER in the notice to ARCHITECT/ENGINEER.

B. In the event of termination which is not the fault of ARCHITECT/ENGINEER, OWNER shall pay to ARCHITECT/ENGINEER the compensation properly due for services properly performed prior to the effective date of the termination and for any reasonable reimbursable expenses properly incurred.

C. In the event ARCHITECT/ENGINEER through any cause fails to perform any of the terms, covenants, or provisions of this Contract on his part to be performed, or if he for any cause fails to make progress in WORK hereunder in a reasonable manner, or if the conduct of ARCHITECT/ENGINEER impairs or prejudices the interests of OWNER, or if ARCHITECT/ENGINEER violates any of the terms, covenants, or provisions of this Contract, OWNER shall have the right to terminate this Contract by giving notice in writing of the fact and date of such termination to ARCHITECT/ENGINEER, and all drawings, specifications, and other documents relating to the design or SUPERVISION OF WORK shall be surrendered forthwith by ARCHITECT/ENGINEER to OWNER.

ARTICLE 10 -- INSURANCE

A. Within ten (10) DAYS after execution of the Agreement and during the entire period of ARCHITECT'S/ENGINEER'S responsibility under this Agreement, ARCHITECT/ENGINEER shall obtain and maintain professional liability insurance coverage. ARCHITECT/ENGINEER shall file with OWNER the certificate from an insurance company authorized to do business in the State of West Virginia showing issuance of professional liability insurance (errors and omissions insurance) in the amount of $250,000 coverage with a maximum of $100,000 deductible. The certificate shall bear an endorsement in words exactly as follows:

> "The insurance company certifies that the insurance covered by this certificate has been endorsed as follows: 'The insurance company agrees that the coverage shall not be cancelled, changed, allowed to lapse, or allowed to expire until ten DAYS after notice to: THE BOARD OF EDUCATION OF THE COUNTY OF TYPE COUNTY NAME.'"

ARTICLE 11 -- ARBITRATION

A. If, at any time, a difference of opinion or dispute shall arise between the parties to this Agreement with respect to any right or obligation arising under this Agreement, the question in dispute, if it cannot be

settled between the parties themselves, may be referred to arbitrators consisting of three competent and disinterested persons, of which persons one shall be selected by the OWNER, one by the ARCHITECT/ENGINEER, and the third by the two arbitrators thus chosen by the OWNER and project ARCHITECT/ENGINEER. The party desiring that any matter be submitted to arbitration shall give written notice thereof to the other party, stating therein the specific point or points in dispute and naming the person selected by said party as an arbitrator, and it shall be the duty of the other party within fifteen (15) DAYS after receiving such notice to name an arbitrator and, in the event such other party does not do so, the party desiring arbitration may apply to any judge of the Circuit Court of TYPE NAME County, West Virginia, to appoint such arbitrator. Likewise, in the event of the failure of the two arbitrators thus named to agree upon the third arbitrator within twenty (20) DAYS after notification of their appointment then the third arbitrator may be named by any such judge upon application of either party hereto, and such judge is hereby requested to sit in the premises and name such arbitrator. The arbitrators thus chosen shall give to the parties to any dispute written notice of the time and place of hearing and at the time and place appointed shall proceed with the hearing, unless, for some good cause of which the arbitrators, or a majority of them, shall be the sole judge, it shall be postponed until some later date within a reasonable time. The determination of the board of arbitrators thus constituted, or a majority of the persons composing the same, shall be made in writing and a copy thereof delivered to each of the said parties. Payment of the expenses of such arbitration, including the fees of the arbitrators, shall be directed by the board of arbitration, or a majority thereof. Arbitration shall be conducted in accordance with the American Arbitration Association's Construction Industry Arbitration Rules.

B. It is hereby expressly agreed by the parties hereto that submission of any dispute to arbitration as herein provided shall not be specifically enforceable and shall not be a condition precedent to the bringing of an action with respect to such dispute in any court having jurisdiction thereof.

C. Where the parties have submitted any question to the arbitration as herein provided, the award of the arbitrators shall be final and conclusive upon said parties with reference to the question so submitted and judgment may be entered upon it in accordance with the provisions of West Virginia Code 55-10-1 et seq.

THIS AGREEMENT represents the entire and integrated Agreement between OWNER and ARCHITECT/ENGINEER and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both OWNER and ARCHITECT/ENGINEER.

THIS AGREEMENT shall be governed by the laws of the State of West Virginia.

The pertinent statute of limitations for any cause of action based upon this Contract shall commence to run on the date of this instrument.

THIS AGREEMENT entered into as of the day and year first written above.

OWNER
BOARD OF EDUCATION OF THE
COUNTY OF TYPE NAME

BY _____
Its President

ARCHITECT/ENGINEER
TYPE NAME OF ARCHITECT/ENGINEER

By _____
Its_____

CW:lm 2/4/92
0761b/73&74a

APPENDIX T

ANNUAL UPDATE

COMPREHENSIVE EDUCATIONAL FACILITIES PLANS

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

1. County-wide Facility Classification Report (SBA/WVDE 116 - Appendix B - SBA Guidlines

2. High School Attendance Area Facilities Chart -- for each high school in the county (SBA #132)

3. Feeder School Summary Report -- narrative

4. "Needs" Project Summary and Review - For the project that the county is submitting for competitive "Needs" grant funding from the SBA in the next funding cycle (SBA 120 - Appendix H - SBA Guidelines)

5. Prioritized list of all foreseeable projects where SBA "MIP" grants are anticipated as the funding source for their completion

6. Updated CEFP Executive Summary

The annual update is to be compiled and submitted to the State Department of Education (1 copy) and the School Building Authority (1 copy) in tabbed, 3 ring binder(s). Tabs should locate the above listed categories.

1970b/Revised 10/94

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

WEST VIRGINIA DEPARTMENT OF EDUCATION
FACILITY CLASSIFICATION FORM

COUNTY: _____ DATE: _____

FACILITY NUMBER	FACILITY NAME	CURRENT ENROLLMENT	CURRENT GRADE CONFIGURATION	CLASSIFICATION	DESCRIBE FUTURE USE TRANSITIONAL FACILITIES

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 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
0168a/35&36a
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INSTRUCTIONS FOR SBA FORM 132

1. One form should be completed for each high school attendance area proposed to be operational in the school year 1999 - 2000.

2. All facilities that were in operation during the 1990 - 1991 school year must be shown with a dashed box. 1990 - 1991 second month enrollments for these facilities must be shown in the brackets. Only facilities that will be in operation during the 2000 school year must be in solid boxes. Year 1999 - 2000 projected enrollments must be within parenthesis.

3. If the facility is to be built after 1990 - 1991, list "NEW" in the brackets. If the facility is to be redesignated from its current usage, list "REDSG" in the brackets.

4. **CLOSURES** - list schools that are scheduled for closure before school year 1999 - 2000, and will not be used by the county board of education for other purposes.

   FACILITY REDESIGNATION - list schools that are scheduled to change their current usage before the school year 1999 - 2000. Designate what type of facility it will become.

   ELEMENTARY - list only those schools that will still be operational in the year 1999 - 2000.

   JHS/MIDDLE - list only those schools that will still be operational in the year 1999 - 2000.

   HIGH SCHOOL - list only the high school for this attendance area for the school year 1999 - 2000.

0912b/101&102a

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

EXECUTIVE SUMMARY - NEEDS PROJECT

PROJECT _____

COUNTY _____ PROJECT COST $_____

FUNDING SOURCE

IMPLEMENTING TOTAL CEFP				FUNDING SOURCE - THIS PROJECT			
SBA NEED	$_____	SBA MIP	_____	SBA	$_____		
LOCAL	$_____	TYPE	_____	LOCAL	$_____	TYPE	_____
OTHER	$_____			OTHER	$_____		
TOTAL	$_____			TOTAL	$_____		

BONDING CAPACITY $_____ AVAILABLE BONDING CAPACITY $_____

EXCESS LEVY CAPACITY $_____ AVAILABLE LEVY CAPACITY $_____

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	_____
WVA BOE APPROVED	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 guide.

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 19___
- __ major addition(s) in 19_____
- 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 _____
- Existing site is _____ acres and is Adequate __ Inadequate __
- Cost to upgrade to current standards 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 19___
- __ major addition(s) in 19_____
- 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 _____
- Existing site is _____ acres and is Adequate __ Inadequate __
- Cost to upgrade to current standards is $_____
- Existing facility contains ___ major structural problems
- Health, safety and building accessibility, Comments:_____

#3. DESCRIPTION OF EXISTING FACILITIES

- _____ School currently houses grades ____
- Constructed on a ____ acre site in 19___
- __ major addition(s) in 19_____
- 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 _____
- Existing site is _____ acres and is Adequate __ Inadequate __
- Cost to upgrade to current standards is $_____
- Existing facility contains ___ major structural problems
- Health, safety and building accessibility, Comments:_____

#4. DESCRIPTION OF EXISTING FACILITIES

- _____ School currently houses grades ____
- Constructed on a ____ acre site in 19___
- __ major addition(s) in 19_____
- 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 _____
- Existing site is _____ acres and is Adequate __ Inadequate __
- Cost to upgrade to current standards is $_____
- Existing facility contains ___ major structural problems
- Health, safety and building accessibility, Comments:_____

#5. DESCRIPTION OF EXISTING FACILITIES

- _____ School currently houses grades ____
- Constructed on a ____ acre site in 19___
- __ major addition(s) in 19_____
- 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 _____
- Existing site is _____ acres and is Adequate __ Inadequate __
- Cost to upgrade to current standards is $_____
- Existing facility contains ___ major structural problems
- Health, safety and building accessibility, Comments:_____

EXECUTIVE SUMMARY
COMPREHENSIVE EDUCATIONAL FACILITIES PLAN

RESA _____ COUNTY _____

- Number of existing schools currently within the county (Include vocational, special education, adult education) _____
- Number of schools that will be closed by the year 2000 if the CEFP is implemented _____
- Number of schools that will exist in the county in the year 2000 if the CEFP is implemented _____
- Total estimated cost remaining to implement the entire CEFP $_____
- Total estimated cost of anticipated SBA funded "needs" and "net enrollment" projects in the CEFP $_____
- Total cost for all other projects within the CEFP to be funded from county or other sources excluding SBA funds $_____
- Has regionalization of school facilities been considered within the CEFP? If so, please give a brief description. Yes _____ No _____

_____

_____

_____

- * Approximate annual cost savings as a result of school closures anticipated in the CEFP

$_____ Annual Cost Savings

$_____ Avoided Costs

Include approximate savings such as: annual utilities, annual maintenance, reduced staff; also, include any related costs associated with additional transportation cost, one time cost for moving of student and staff from a closed facility and securing the facilitated school

- Has educational innovation been addressed within the 10 year CEFP? 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.

* Please note that the data on the attached Statewide CEFP summary reflects the status you reported in 1990 and will be used for comparative progress toward implementing the CEFP.

_____ _____

Date County Superintendent

0090a/1&2A

FEEDER SCHOOL SUMMARY REPORT

YOUR COUNTY - UNSER HIGH SCHOOL ATTENDANCE AREA

Unser High School
- Becomes 9-12 facility; Sept., 1997
  - Goodyear Middle School
    - Feeder to Unser High School
    - Opens as 6-8 Middle School; Sept., 1997
  - Crawford Junior High School
    - Currently feeds Unser High School
    - Closes June, 1997
    - 9th Graders transfer to Unser HS; Sept., 1997
    - 7th and 8th Graders transfer to Goodyear MS; Sept., 1997
      - Brayton Elementary
        - Currently feeds Crawford JHS
        - Changes to K-5 facility; Sept., 1997
        - 6th Graders transfer to Goodyear MS; Sept., 1997
      - St. James Elementary
        - Currently feeds Crawford JHS
        - To become feeder to Goodyear MS; Sept., 1997
        - 6th Graders transfer to Goodyear MS; Sept., 1997
      - Pruett Elementary
        - Currently feeds Crawford JHS
        - To become feeder to Goodyear MS; Sept., 1997
        - 6th Graders transfer to Goodyear MS; Sept., 1997
      - Cheever Elementary
        - Currently Feeds Crawford JHS
        - Students transferred to St. James Elementary; Sept., 1992
        - Becomes Bus Garage; Sept., 1992
      - Tracy Elementary
        - Currently feeds Crawford JHS
        - Students transferred to Brayton EL; Sept., 1997
      - Fox Elementary
        - Currently feeds Crawford JHS
        - 120 students transferred to St. James EL; Sept., 1997
        - 30 students transferred to Brayton EL; Sept., 1997
  - Andretti Middle School
    - Scheduled to become 6-8 Middle School; Sept., 1997
    - Feeder to Unser High School
    - 9th Graders transfer to Unser HS; Sept., 1997
  - Mears Junior High School
    - Currently feeds Unser High School
    - Scheduled to become EL Center; Sept., 1997
    - 9th Graders transfer to Unser HS; Sept., 1997
    - 7th and 8th Graders transfer to Andretti MS; Sept., 1997
      - Mears Elementary Center
        - Feeder to Goodyear MS
      - Gache Elementary
        - Currently feeds Mears JHS
        - 6th Graders to be transferred to Andretti MS; Sept., 1997
        - Students to be transferred to new Mears EL Center; 9/97
      - Dobson Elementary
        - Currently feeds Mears JHS
        - 6th Graders to be transferred to Andretti MS; Sept., 1997
        - Students to be transferred to new Mears EL Center; 9/97
      - Sullivan Elementary
        - Currently feeds Mears JHS
        - 6th Graders transfer to Andretti MS; Sept., 1997
        - Students to be transferred to new Mears EL Center; 9/97
      - Foyt Elementary
        - Currently feeds Mears JHS
        - To become feeder to Andretti MS; Sept., 1997
        - 6th Graders transfer to Andretti MS; Sept., 1997

UNDERLINED schools are operational facilities in 1999 - 2000
0910b/101&102a

High School

County -

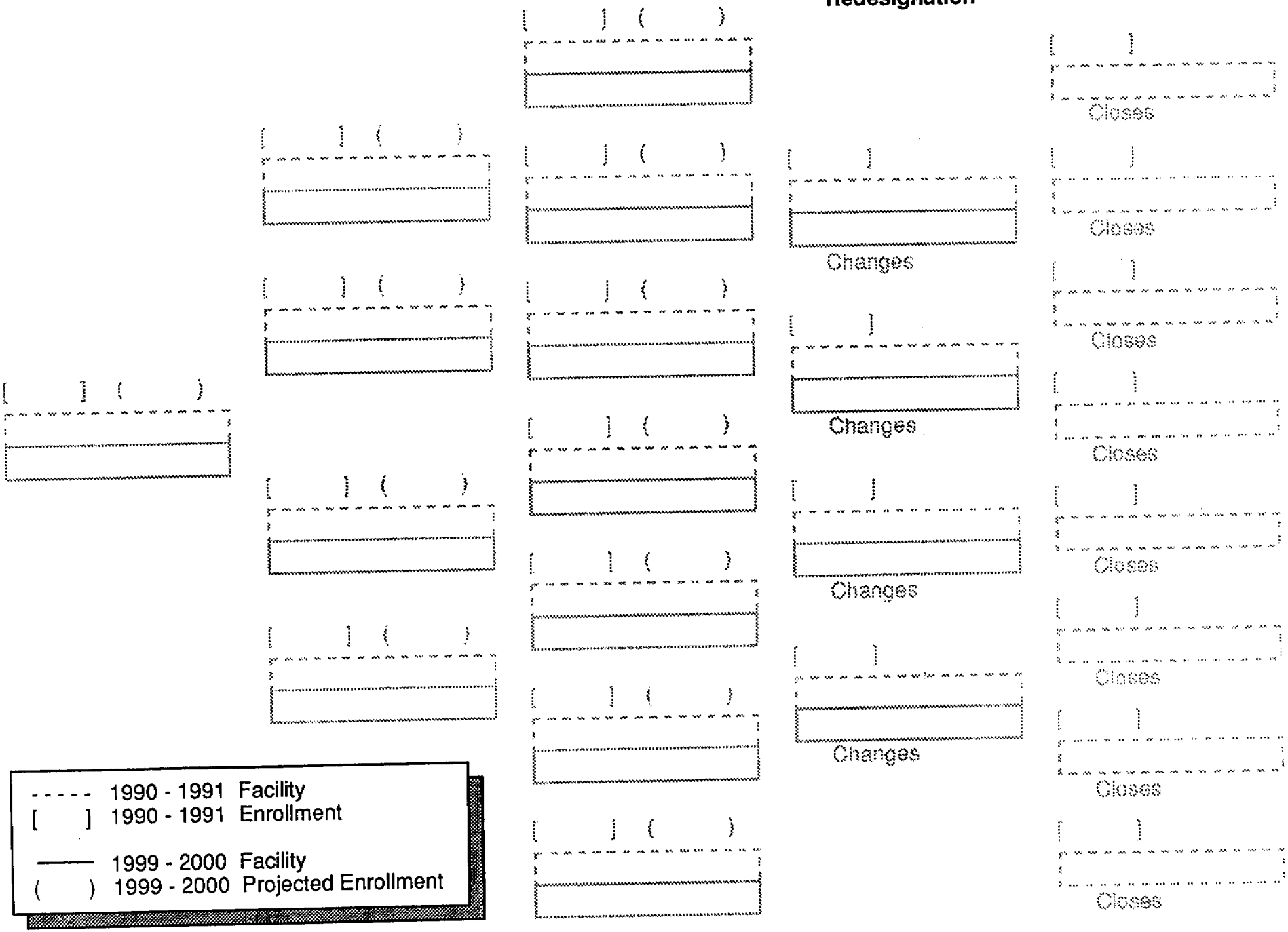
JHS / Middle

Elementary

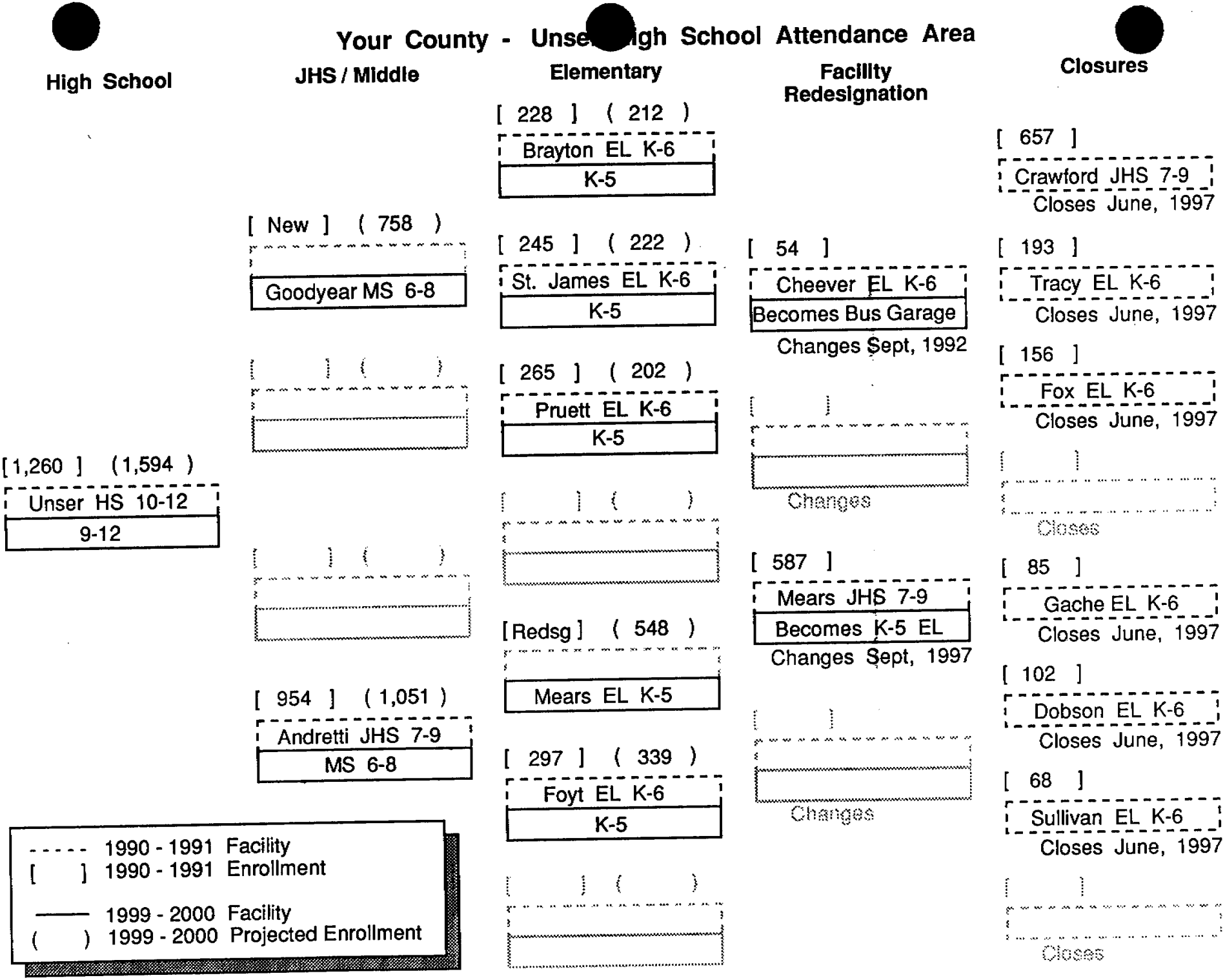
High School Attendance Area

Facility Redesignation

Closures



Your County - Unse[illegible]igh School Attendance Area



APPENDIX U

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

EXHIBIT A

NEEDS GRANT

COUNTY: _____ DATE: _____

(Please provide project number, brief description and cost for each project)

NUMBER	SCHOOL	DESCRIPTION	PROJECT COST	"NEEDS GRANT"

SBA 101A
1456r/80&81a

SCHOOL BUILDING AUTHORITY OF WEST VIRGINIA

PROJECT DESCRIPTION AND FINANCE PLAN

COUNTY: _____ DATE OF GRANT: _____

SBA PROJECT NUMBER,
SCHOOL AND INITIAL
ESTIMATED COST: XXX-XXX-XXX $_____

PROJECT DESCRIPTION:

REVENUE SOURCES:

1990A Bond Series Supplemental Net Enrollment Grant	$_____
1990B Bond Series Net Enrollment Grant	$_____
1991A Bond Series Net Enrollment Grant	$_____
Other Net Grant Allocations	$_____
Total SBA Net Grant Allocation	$_____
SBA "Needs" Grant Allocation	$_____
TOTAL SCHOOL BUILDING AUTHORITY GRANT	$_____
BETTER SCHOOL AMENDMENT MONIES	$_____
FEDERAL MONIES	$_____
OTHER MONIES 1990A Bond Series Original Net Enrollment Grant	$_____
TOTAL FINANCE PLAN	$_____

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1393r/80&81a

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Henry R. Marockie
State Superintendent of Schools