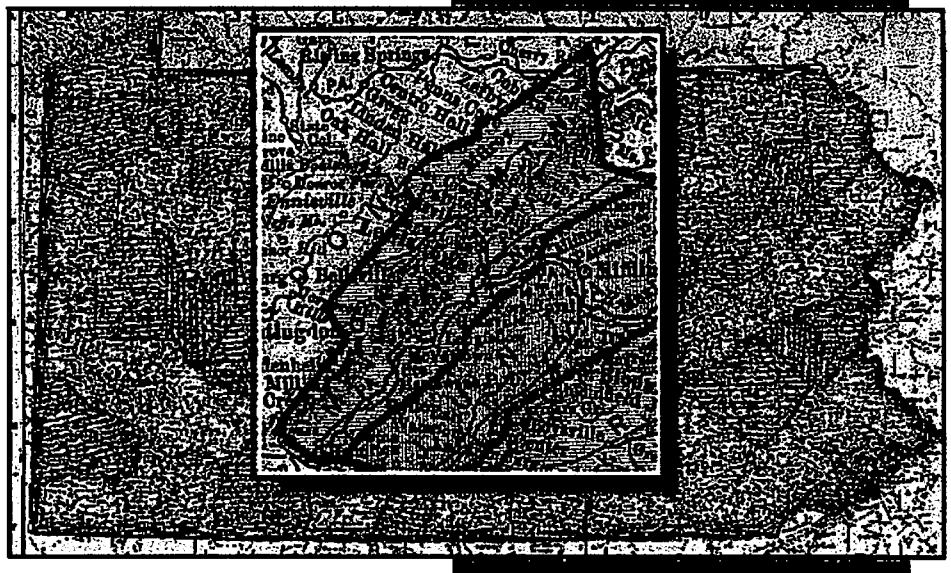
MIFFLIN SCHOOL



FEASIBIL UPDATE

HAYES LARGE A

Reynolds › CONSTRUCTION MANAGEMENT

CHARGE AND PUPOSE

On January 15, 2004, the Mifflin County School District authorized Hayes Large Architects to update the initial Feasibility Study dated July 16, 1999 that ultimately concluded with a presentation on November 13, 2000. The purpose of this update is to focus on moving forward with "Option 3 – Priority One Buildings" presented in the initial study and approved by the board.

Option 3 consisted of the following scope:

Priority One Buildings

- Additions & Alterations to East Derry Elementary, Indian Valley Middle and Indian Valley Senior High
- Build New Elementary School (Lewistown Elementary)
- Close Derry and Seventh Ward Elementary Schools

The District completed the new Lewistown Elementary School and closed Derry and Seventh Ward Elementary Schools. Additions & Alterations to East Derry Elementary are also complete. The District is now faced with options for the Indian Valley Middle School and Indian Valley Senior High School as well as options for the Mifflin-Juniata Career and Technology Center.

This update will again help the Board of School Directors, Administration and Community understand what they have in terms of school facilities, compared to what they need to satisfy their educational goals and enrollment projections.

Hayes Large Architects presented seven (7) options to the Board on January 15, 2004 that they reduced to the following three (3) for the purpose of this study update.

Option 1:	**Option 2:**	**Option 6:**
New High School	New High School/ CTC	
Renovate HS for Middle School	Renovate HS for Middle School	Renovate/Additions to existing High School
MS options open – sell, repurpose	MS options open – sell, repurpose	Renovate/Additions to existing Middle School
Renovate/Additions to CTC	Close existing CTC	Renovate/Additions to CTC

No decision regarding the Indian Valley Middle School, Indian Valley Senior High School and/or the Mifflin-Juniata Career and Technology Center will close the door or preclude any other option available for the other schools in the District. In a sense these are stand-alone options, but these decisions must be made in context of the future of the entire District.

Per PA Department of Education requirements for "School Construction Reimbursement Criteria," the information contained in this study "must be completed prior to, and within two years of, the date of the PlanCon Part A, Project Justification, submission." The information in this study update is valid for PlanCon projects with Part A submissions made to PDE before February 26, 2006.

ENROLLMENT

Enrollment projections show a decline. However, that situation could always change over the 20-30 year span that the schools must serve with the current state reimbursement. Enrollment could increase in the future from growth in State College or future development within Lewistown. For planning purposes at this time, the District determined to size the student capacity of the high school and middle school based on current enrollment (2003-2004) plus 10%. This will maximize the state reimbursement available for these projects.

OPTIONS AND COST ESTIMATES

OPTION 1

New Indian Valley High School

Hayes Large Architects held a meeting on February 11, 2004 with Mr. Runk (Superintendent), Mr. Curry (Director of Secondary Education), and Mr. Varner (Indian Valley High School Principal) and developed an initial room schedule for a new high school. Based on this schedule, HLA determined the square footage of the proposed new school. The district determined to size the student capacity based on current enrollment (2003-2004) plus 10%. The school could be designed to add a few more classrooms in the future, if necessary.

Target Building Capacity ..... 1,031 x 1.10 = 1,134

PDE Building Capacity ..... 90% utilization = 1,279 (plus SE)

Square Footage..... 205,000 – 244,000

The proposed new high school and parking could fit on the undeveloped acreage above the existing high school with some limitations. There would be no space for much additional expansion or the possibility to relocate the CTC on this site. Parking would be maximized, but might be less than the required number of spaces per the Derry Township Zoning Ordinance. A variance from the number of parking spaces is possible using the entire site and adjacent Highland Elementary site as part of the justification for adequate parking. The building would be three stories. Grading would be significant. The site would be fully developed – no additional playfields would be possible.

Cost per SF Range..... $155 – $175

Additional Site Construction Cost..... $650,000

Construction Cost Range ..... $32,425,000 – $43,350,000

Total Project Costs ..... $40,535,000 – $54,190,000

State Reimbursement..... $6,335,000 – $6,815,000 (w/o & w/ LEED certification)

Local Share ..... $33,720,000 – $47,855,000

SEE SITE PLAN/ SITE ANALYSIS

OPTION 1, continued

Renovate IVHS for Indian Valley Middle School

Hayes Large Architects held a meeting on February 11, 2004 with Mr. Runk (Superintendent), Mr. Curry (Director of Secondary Education), and Mr. Shinskie (Indian Valley Middle School Principal) and developed an initial room schedule for the middle school. Based on this schedule, HLA determined the square footage of the middle school. The district determined to size the student capacity based on current enrollment (2003-2004) plus 10%.

Target Building Capacity .....810 x 1.10 = 891

PDE Building Capacity ..... 90% utilization = 901 (plus SE)

Square Footage..... 130,000 – 160,000

The existing Indian Valley High School is approximately 132,000 square feet. Based on the math and an actual layout exercise, the existing school can house the middle school program without any additions. The district has determined that they could make the school function with little interior modifications.

Besides making the physical space of the school function per the educational program, the existing school would need addressed concerning its physical condition including: mechanical and electrical systems, windows, doors, security, technology, wall, floor and ceiling finishes, built-in equipment and furnishings. If the district wants reimbursement from the state for these improvements they should be extensive and thoroughly scoped to last 20-30 years.

Although some of the spaces have been recently addressed, for simple planning purposes we will include the entire building square footage for cost estimating renovation work. The school is generally in good condition and is a very good candidate for renovation as a middle school.

Existing Square Footage 132,000

Cost per SF Range (renovations)..... $80 – $110

Construction Cost Range ..... $10,560,000 – $14,520,000

Total Project Costs ..... $13,200,000 – $18,150,000

State Reimbursement..... $4,915,000 – $5,290,000 (w/o & w/ LEED certification)

Local Share ..... $7,910,000 - $13,235,000

Indian Valley Middle School Options Open – sell; repurpose

Renovate/ Additions to CTC – See separate study

OPTION 2

Combining a new CTC with a new high school or existing high school is not possible on the existing Indian Valley High School site. The available acreage is too small to situate both a new high school and new CTC facilities and parking.

OPTION 6

Renovate/ Additions to Existing Indian Valley High School

Target Building Capacity ..... 1,031 x 1.10 = 1,134

PDE Building Capacity ..... 90% utilization = 1,279 (plus SE)

Existing Building Capacity 967

Square Footage (if new facility) ..... 205,000 – 244,000

Existing Square Footage 132,000

Additions suggested ..... 73,000 – 112,000

73,000 s.f. reasonable*

*Additions would include at least 20 classrooms/ labs, expanded kitchen and cafeteria, expanded music department, and expanded library. Gym, existing classrooms, and recently renovated rooms would stay as-is, although those areas would likely be larger in a new facility.

Cost per SF Range (additions – 73,000 s.f.) ..... $155 – $175

Cost per SF Range (renovations) ..... $80 – $110

Construction Cost Range ..... $21,875,000 – $27,295,000

Total Project Costs ..... $27,345,000 – $34,120,000

State Reimbursement ..... $6,970,000 – $7,450,000 (w/o & w/ LEED certification)

Local Share ..... $19,895,000 – $27,150,000

Renovate / Partial Demolition / Additions to Existing Indian Valley Middle School

The following conditions still exist since the last study:

Overcrowded
The Indian Valley Middle School building was constructed in 1952. An addition was done in 1962. It consists of approximately 96,000 gross square feet and serves children in grades 6 through 8. The building has a Pennsylvania Department of Education (PDE) Full Time Equivalent (FTE) capacity of 739. The current enrollment is 810. It is over capacity by 71 students. Overall, the building is 60-70% the size it should be.

Building components life expectancy exceeded
Being 42 to 52 years of age, the building's original equipment has exceeded life expectancy and most of the non-original building components are not adequate to last another 20 years – the building is due for a complete renovation. The inadequate capacity must also be addressed.

OPTION 6, continued

Soil conditions questionable
The school sits on approximately 43 acres, the largest site in the District, but sinkholes have been identified which raises a red flag on the existing soil conditions. The district would need to prepare a geotechnical report before considering any new construction.

Structural system compromised
The building is steel framed, but there appears to be a considerable amount of cracking in the masonry walls. Some of the brick was repaired or even replaced with E.I.F.S. in the early 1990s. The cracking raises a concern for the general integrity, appearance, and maintenance of the existing building moving into the future. Some cracks appear in the floors – cause is unknown at this time. There is also no cavity wall insulation between the brick and block back-up wall.

Windows in need of replacement
Generally, the windows in the building are not energy efficient (single glazed), have cracked glazing compound and have missing hardware. A complete window-replacement is recommended.

Doors not ADA compliant
Most of the building's original doors are hollow metal with hollow metal frames. The doors are not ADA compliant. They are in need of replacement. A few doors have been replaced with new aluminum framed glass doors. The exterior doors in the northeast stair tower of the 1952 portion of the building have been replaced with ADA compliant aluminum framed glass doors. However, there is a step down from the doors, which is not ADA compliant. The Industrial Arts Corridor exit doors have also been replaced with ADA compliant doors, but the floor to grade transition is not compliant. Interior doors are not ADA compliant.

Roof needs monitored
Other than the roof membrane, the entire roof system: soffits, fascia, canopies, etc., need addressed. Depending on the level of renovations and additions, a new roof may be prudent for moving into the next 20 years.

Asbestos needs abated
Asbestos containing materials present in the building include floor tile, vibration dampers, acoustical ceiling plaster, pipe insulation, fitting insulation and tank insulation. The floor tile is in fair to good condition. The Management Plan Update, completed November 7, 1997 by Allegheny Mountain Research, Inc., suggests that "Acoustical plaster located in the Library Rooms and the Nurse's and Guidance Office exhibit approximately 20 square feet of damage and should be repaired. Pipe and fitting insulation located in the Industrial Arts Metal Shop, Plumbing Chase adjacent to Room 106 and 210, Ground Floor Janitor's Closet and the Water Tank Room in the Basement are damaged and should be removed."
OPTION 6, continued

Miscellaneous issues
- Most floor, wall, and ceiling finishes need replaced/ refurbished
- There are large metal lockers that should be refurbished or replaced.
- There are not enough lockers
- Fire extinguisher cabinets are too high to meet current codes.
- The basement corridor has exposed pipes.
- Skylights have been closed.
- Corridors are very crowded at certain times during the day.
- Stairways do not meet the requirements of today's codes
- There is no elevator in the building.
- Toilet Rooms not ADA compliant

Educational Issues

- Kitchen and Cafeteria are undersized and not accessible - too many lunch periods
- No Student Activity Room
- Health Suite undersized and not accessible
- Building Administration remote from main entrance
- Library undersized
- Not all Classrooms are adequate
- Auditorium needs attention
- Science Labs undersized
- Stage utilized for Music instruction
- Family & Consumer Science minimally sized
- Industrial Arts not efficient
- Gymnasium floor need refinished or replaced
- No Wrestling Room
- Locker Rooms not ADA compliant

Mechanical, Electrical, and Plumbing Systems need replaced

- No security system observed in the building

Target Building Capacity	810 x 1.10 = 891	
PDE Building Capacity	90% utilization = 901	(plus SE)
Existing Building Capacity	90% utilization = 739	
Square Footage	130,000 – 160,000	
Existing Square Footage	96,000	
Proposed Demolition Square Footage of 1952 Portion	50,000	
Additions Required	84,000 – 114,000	
Cost per SF Range (additions)	$155 – $175	
Cost per SF Range (renovations)	$80 – $110	
Demolition Cost	$300,000	
Construction Cost Range	$17,000,000 – $25,310,000	
Total Project Costs	$21,250,000 – $31,640,000	
State Reimbursement	$4,915,000 – $5,290,000	(w/o & w/ LEED certification)
Local Share	$15,960,000 – $26,725,000	

ALTERNATIVE OPTION 1A

New Indian Valley Middle School

Target Building Capacity .....810 x 1.10 = 891

PDE Building Capacity ..... 90% utilization = 901 (plus SE)

Square Footage..... 130,000 – 160,000

Cost per SF Range..... $155 – $175

Additional Site Construction Cost..... $600,000

Construction Cost Range ..... $20,750,000 – $28,600,000

Total Project Costs ..... $25,940,000 – $35,750,000

State Reimbursement..... $4,470,000 – $4,840,000 (w/o & w/ LEED certification)

Local Share ..... $21,100,000 – $31,280,000

Renovate/ Additions to Existing Indian Valley High School

Target Building Capacity ..... 1,031 x 1.10 = 1,134

PDE Building Capacity ..... 90% utilization = 1,279 (plus SE)

Existing Building Capacity 967

Square Footage (if new facility)..... 205,000 – 244,000

Existing Square Footage 132,000

Additions suggested ..... 73,000 – 112,000

73,000 s.f. reasonable*

*Additions would include at least 20 classrooms/ labs, expanded kitchen and cafeteria, expanded music department, and expanded library. Gym, existing classrooms, and recently renovated rooms would stay as-is, although those areas would likely be larger in a new facility.

Cost per SF Range (additions – 73,000 s.f.)..... $155 – $175

Cost per SF Range (renovations)..... $80 – $110

Construction Cost Range ..... $21,875,000 – $27,295,000

Total Project Costs ..... $27,345,000 – $34,120,000

State Reimbursement..... $6,970,000 – $7,450,000 (w/o & w/ LEED certification)

Local Share ..... $19,895,000 – $27,150,000

COST SUMMARY

OPTION 1

New Indian Valley High School

Total Project Costs ..... $40,535,000 – $54,900,000

Renovate IVHS for Indian Valley Middle School

Total Project Costs ..... $13,200,000 – $18,150,000

Option 1 Total Project Costs ..... $53,735,000 – $72,340,000

Option 1 State Reimbursement ..... $11,250,000 – $12,105,000

Option 1 Total Local Share ..... $41,630,000 – $61,090,000

OPTION 6

Renovate / Additions to Existing Indian Valley High School

Total Project Costs ..... $27,345,000 – $34,120,000

Renovate / Partial Demolition / Additions to Existing Indian Valley Middle School

Total Project Costs ..... $21,250,000 – $31,640,000

Option 6 Total Project Costs ..... $48,595,000 – $65,760,000

Option 6 State Reimbursement ..... $11,885,000 – $12,740,000

Option 6 Total Local Share ..... $35,855,000 – $53,875,000

ALTERNATIVE – OPTION 1A

New Middle School

Total Project Costs ..... $25,940,000 – $35,750,000

Renovate/ Additions to Existing Indian Valley High School

Total Project Costs ..... $27,345,000 – $34,120,000

Option 1A Total Project Costs ..... $53,285,000 – $69,870,000

Option 1A State Reimbursement ..... $11,440,000 – $12,290,000

Option 1A Total Local Share ..... $40,995,000 – $58,430,000

OPINION OF PROBABLE COST PARAMETERS

The project costs listed above are an opinion only. As such, they should not be assumed to represent the actual costs once a project is completely developed.

The cost opinions were provided by Reynolds Construction Management and represent an opinion of 2006 construction dollars. The opinion of state reimbursement was provided by Hayes Large Architects and is based on available information about new reimbursement formulas as of the printing date.

Costs not estimated: Costs for wetland mitigation, radon abatement, hazardous site waste removal, capitalized interest and government mandated off-site improvements.

Project costs include architect's fees, financing costs, moveable equipment and fixtures, construction contingency, advertising fees, agency approval/ review fees (L&I, land development, etc.), independent cost estimate, geotechnical report (test borings), legal fees, printing bidding documents, tap fee (if required), topographical survey, and misc. reimbursable expenses.

PROS AND CONS OF EACH OPTION

Option 1: New High School	**Option 1A:** New Middle School	**Option 6:**
Renovate HS for Middle School	Renovate/Additions to existing High School	Renovate/Additions to existing High School
MS options open – sell, repurpose	MS options open – sell, repurpose	Renovate/Partial Demolition/ Additions to existing Middle School
Renovate/Additions to CTC	Renovate/Additions to CTC	Renovate/Additions to CTC
Pros: Opportunity to build new high school to suit educational program	**Pros:** Opportunity to build new middle school to suit educational program	**Pros:** Conserves land at IVHS for some other use
Existing high school renovated for middle school without additions		Could renovate both buildings at the same time
Avoids renovating existing middle school	Avoids renovating existing middle school	Less cost than building new
Creates campus setting	Creates campus setting	
District owns land	District owns land	
Students and staff not in either building during construction	Students and staff not in middle school building during construction	
Cons: New HS is most expensive educational building to construct	**Cons:** Maintains existing high school – need additions not necessary if using high school as a middle school	**Cons:** Maintains existing middle school – not good candidate for renovations/ additions
Land is limited/ challenging slopes	High school educational program makes certain compromises due to existing facility constraints	Educational program makes certain compromises due to existing facility constraints
Prolongs students and staff in existing middle school conditions	Students and staff in high school building during renovations	Does not create campus setting
	Second most expensive option	Students and staff in both buildings during renovations

ANALYSIS

Option 6 is the lowest cost – as to be expected – since renovating is generally always cheaper than building new. However, the middle school addition design would be much less than optimal. Working around the existing 1952 portion of the building will be a great challenge during design and construction. The existing portion of both structures would continue to age at a greater pace than new construction and would have greater maintenance costs in the future.

The high-range cost of option 6, which is very possible to achieve, falls within the mid-range cost of Option 1. Thus, the cost to renovate could be close to or greater than the cost of new construction depending on future program choices.

The Alternative Option, Option 1A, is only slightly less than Option 1. For many positive reasons, we believe it would be much better to build new high school facilities and avoid additions to the existing high school that would be unnecessary if used as a middle school.

Additions and alterations to the existing high school would still leave many existing spaces as is, that is, smaller than desired due to existing constraints.

Note that the higher reimbursement levels, available through LEED certification, would be more difficult to achieve in the existing structures than in the new.

TIMETABLE

In order to have a major reimbursable high school project complete by fall 2009, the District would need to complete the Educational Specifications for Hayes Large Architects to begin schematic design by January 2005.

If the district would decide to build a new high school, the District could start renovations on the high school building now and continue to renovate the school with students in the building. This would make the high school serve as a middle school sooner.

If the district would decide to renovate both existing schools, design would need to begin for both by January 2006 to be ready for fall 2009.