FACILITY MASTER PLAN PRESENTATION
April 12, 2016
KCBA – Architecture/Interior Design/Structural

Snyder Hoffman – MEP Engineering

Langan Engineering – Environmental Engineering

Nave Newell – Workforce Study Consulting
The School District of Cheltenham Township is in the midst of a long-term program to modernize educational facilities. This is demonstrated by a number of recent major projects including the construction of new buildings for Cheltenham, Glenside, and Wyncote Elementary Schools; the renovation of Myers Elementary School; and the currently underway reconstruction of Cedarbrook Middle School.
Focus

This study entailed a review of existing conditions, building capacities, delivery of educational programs, and operations protocols to produce a series of repair, renovation, and new construction concepts. The following were included in this process:

- Cheltenham Elementary School
- Glenside Elementary School
- Myers Elementary School
- Wyncote Elementary School
- Elkins Park School
- Cedarbrook MS (not studied - being rebuilt)
- Cheltenham High School
- Administration Building
Goals

Existing facilities were evaluated and long-term options developed in support of the following goals:

• Provide environments that are suited to support your 21st century educational program

• Establish an equal standard of quality across all district buildings

• Identify strategies to reduce district operating costs

• Assure optimal long-term facility functionality
The projected options, cost figures, schedules, and recommendations presented here will be further reviewed, evaluated and discussed by the administration and school board to develop a course of action.
Analysis of Existing Conditions
An architectural/engineering analysis of each building was conducted that evaluated the following:

- Overall site and building functionality
- General condition
- Maintenance needs
- Code compliance
- Energy efficiency
- Security protocols
School District of Cheltenham Township
Existing Facilities Report – Wyncote Elementary School

History:
Originally built as "Wyncote Elementary School" in 1945 with an addition in 1969. The latest renovations were completed in 2015 resulting in a completely new school building and campus.

Building Statistics:
- Size of Building: 84,831sf (two story building)
- Building Footprint: 68,613 sf
- Size of Site: 223,027 sf (5.12 acres)

Grades:
The school currently educates students in kindergarten through fourth grade. In 2015, it was reported that there are 400 students enrolled in the school. Kindergarten (50). 1st Grade (62). 2nd Grade (67). 3rd Grade (46). 4th Grade (52). There are approximately 39 Staff at the building.

Zoning District:
The school site is located in the R3 (Residential) Zoning District.

Site:
- Vehicular Circulation & Parking: Buses currently drop students off at the main entrance via a loop driveway accessed from Barker Road. The bus drop-off loop is separate from the vehicle parking areas and allows for the queuing of 5-6 buses. The school has use of 10 full size buses and 3 vans. Student/Bus pick-up is coordinated at the time of school release in the pm as to not allow for buses backing up onto public streets. All other vehicle access/parking is via a second entrance from Barker Road east of the bus drop-off loop. The parking area contains a total of 66 vehicle spaces and has been designed to allow parents to drop-off students on the northeastern side of the school. The parking area provides adequate spaces staff and visitors and for parent drop-off stacking.

Wyncote Elementary School Front Entrance
Aerial View of the Construction of the new Wyncote Elementary School
Parent Drop-Off Area

School District of Cheltenham Township
Existing Facilities Report – Elkins Park School

Accessibility: The main building was constructed in 1954 and predates the federal law, the Americans with Disabilities Act (ADA), mandating accessibility requirements in public buildings. As such, many of the spaces and components of the building do not meet ADA requirements. See the attached floor plans designating the non-accessible spaces in the building. If the building is renovated, any area that is renovated will need to be brought up to these accessibility requirements.

There are exterior stairs to many of the entrances to the building. The main entrance is the only access point equipped with and accessible ramp. At least 50% of entrances are to be accessible.

The primary accessible component for access between floors is an elevator. There is an elevator linking the three floors, except for the west portion of the basement.

Many of the toilet rooms do not meet ADA requirements for clearances at fixtures and mounting height of equipment.

Minimum clearances are required at doors for occupants with disabilities. Many of the classroom doors from the corridors do not provide the required clearances. In addition, the door hardware does not meet the accessible requirements.

Issues to consider: Doors also need to be of sufficient width (36") to provide the accessible width. Without these clearances met, the classrooms cannot be considered accessible.

The water fountains do not have the proper clearances, mounting height or controls to meet the accessibility requirements.

In the Instrumental Music room, there are tiers built into the floor. The tiered area of the room is not accessible.

Issues to consider:
EPS.BI.23 Regrade site or install accessible ramps at entrances to the building.
EPS.BI.24 A second elevator should be constructed to provide accessible access to the west end of the basement.
EPS.BI.25 Reconstruct toilet rooms to meet all accessibility requirements.

Sample Master Plan Pages - Existing Facilities Reports
CHELTENHAM ELEMENTARY SCHOOL

Age: Constructed in 2012
Grades: K to 4
Building Capacity: 600
Size: 81,026 SF (two stories)
Condition: Good
GLENSIDE ELEMENTARY SCHOOL

Age: Constructed in 2011

Grades: K to 4

Building Capacity: 550

Size: 68,862 SF (two stories)

Condition: Good
MYERS ELEMENTARY SCHOOL

Age: Constructed in 1923; Addition in 1967; Renovated in 2009

Grades: K to 4

Building Capacity: 500

Size: 70,000 SF (four stories)

Condition: Good
WYNCOOTE ELEMENTARY SCHOOL

Age: Constructed in 2015

Grades: K to 4

Building Capacity: 450

Size: 84,831 SF (two stories)

Condition: Good
ELKINS PARK SCHOOL

Age: Constructed in 1954; Addition in 1991

Grades: 5 & 6

Building Capacity: 878

Size: 124,397 SF (two stories)

Condition: Fair/Poor
Elkins Park School

Highlights of Identified Issues

- Multiple site concerns such as poor paving condition, no raised loading dock, inadequate stormwater management
- Cinder track and sports fields in poor condition
- Exterior masonry has deteriorated and allows water to penetrate the building interior
- Original single-pane windows are in bad shape and very inefficient
- Roofing systems have exceeded their life expectancy and do not meet current energy requirements
Elkins Park School

Highlights of Identified Issues

- Entry vestibule does not meet security guidelines; no direct link to administration area
- Existing crawlspace contributes to poor energy performance
- Much of the flooring is in poor condition; asbestos tile evident
- Some interior walls are cracked
- Casework, gym equipment, auditorium seats, and library furniture are in poor condition
- Building does not meet current safety and accessibility codes
- Mechanical, electrical, and plumbing systems require major renovation and/or replacement
CHELTENHAM HIGH SCHOOL

Age: Constructed in 1958; Addition in 2000

Grades: 9-12

Building Capacity: 1,530

Size: 412,525 SF (two stories)

Condition: Fair/Poor
Cheltenham High School

Highlights of Identified Issues

- Areas of pavement, curbing, and sidewalks in poor condition
- Football practice field in poor condition
- Site stormwater and sanitary sewer systems in need of repair
- Several areas have serious masonry issues and present safety concerns
- At multiple locations there is a gap between the storefront and metal roof drip edge
- Much of the roof is in poor shape and at the end of its life cycle
Much of the flooring is in poor condition and needs replacement
- There are several significant cracks in masonry walls
- Some casework, doors, and display surfaces in poor condition
- Pool has multiple issues related to condition, functionality, and inaccessibility
- Building does not meet current safety and accessibility codes
- Many academic spaces are not air conditioned; HVAC and BMS systems should be replaced
- Various plumbing/electrical/data upgrades recommended

Cheltenham High School
Highlights of Identified Issues
DISTRICT ADMINISTRATION BUILDING

Age:  Constructed in 1951; Addition in 1954
Grades: N/A
Building Capacity: N/A
Size: 50,785 (two stories)
Condition: Fair/Poor
District Administration Building
Highlights of Identified Issues

- Site paving, sidewalks, and curbs are in poor condition; stormwater system in need of upgrades
- The roof, building exterior, and windows are in poor condition
- Building does not meet current safety and accessibility standards
- Some interior flooring, ceilings, casework, doors, and window shades are in poor condition
- Mechanical, electrical, and plumbing systems have exceeded their life expectancy
Physical Needs Matrix
At the conclusion of the analysis of existing conditions, deficient items were identified and ranked on the following scale:

1. Long term need to be addressed within a 5-10 year timeframe
2. Medium term need to be addressed within a 4-5 year timeframe
3. Short term need to be addressed within a 2-3 year timeframe
4. Immediate need to be corrected within the next 1-2 years
5. Critical need represents a safety concern and should be corrected as soon as possible
### School District of Cheltenham Township

#### Physical Needs Matrix

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Priority</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pavement and curbing along Old Mill Road is in disrepair and should be replaced.</td>
<td>3</td>
<td>8,600 SY of Pavement Demo and Replacement @ $50/SY = $420,000, 2,000 LF Curb Replacement @ $18/LF = $36,000, TOTAL = $456,000</td>
</tr>
<tr>
<td>2</td>
<td>Pavement in the main parking area should be replaced.</td>
<td>3</td>
<td>25,000 SY @ $50/SY = $1,250,000</td>
</tr>
<tr>
<td>3</td>
<td>Replace pavement and curbed island at the bus drop-off lane along Panther Road.</td>
<td>3</td>
<td>1,660 SY Paving @ $50/SY = $83,000, 500LF curb @ $18/LF = $9,000, TOTAL = $94,000</td>
</tr>
<tr>
<td>4</td>
<td>Fix pavement around the concession building south of the track as to address drainage issues.</td>
<td>3</td>
<td>350 SY Paving @ $45/SY = $15,750</td>
</tr>
<tr>
<td>5</td>
<td>Sidewalks and crosswalks should be updated to provide ADA access at all ramps and crosswalks.</td>
<td>3</td>
<td>10 HC ramps @ $4,000/EA = $40,000, 500LF of ADA ramps @ steps</td>
</tr>
<tr>
<td>6</td>
<td>Replace sidewalks and curbing in poor condition.</td>
<td>3</td>
<td>19,800 SF @ $10/SF = $198,000</td>
</tr>
<tr>
<td>7</td>
<td>Assess the athletic program needs to determine if the number and size of fields are adequate for athletic programming.</td>
<td>2</td>
<td>SEE SEPARATE COST FOR ATHLETIC FIELDS</td>
</tr>
<tr>
<td>8</td>
<td>The track surface is worn and should be replaced soon and should include fire suppression system, grease interceptor, booster heater, and gas silenced valve.</td>
<td>3</td>
<td>Costs may range from $55k to $130k pending the extent of the replacement. Costs include $50k for electrical support.</td>
</tr>
<tr>
<td>9</td>
<td>The track surface is worn and should be replaced soon.</td>
<td>3</td>
<td>Costs may range from $55k to $130k pending the extent of the replacement. Costs include $50k for electrical support.</td>
</tr>
<tr>
<td>10</td>
<td>Install new domestic water service backflow preventer conforming to current plumbing codes and water Authority requirements. Review and verify meter pit and backflow preventer location with current Aqua-Fit requirements and upgrade as required.</td>
<td>3</td>
<td>Cost includes the BFP only. Additional portions of the proposed upgrade cannot be estimated.</td>
</tr>
<tr>
<td>11</td>
<td>Replace entire above ground plumbing system including new piping and plumbing fixtures including ADA/Accessible fixtures as required by current Accessibility building codes. Provide new low water consumption type fixtures compliant with the Energy Policy Act, 1992 and current plumbing codes. Additional water consumption savings would be realized by the installation of metered lavatory faucets and automatic flush valves. Replace all classroom sinks with ADA/Accessible sinks.</td>
<td>4</td>
<td>$5/Sqft</td>
</tr>
<tr>
<td>12</td>
<td>Address grading issues around the concession building as to eliminate puddling after rain events.</td>
<td>3</td>
<td>See Item CHS.S.4</td>
</tr>
<tr>
<td>13</td>
<td>Replace deteriorated inlets and investigate the storm pipe condition.</td>
<td>4</td>
<td>Replace all storm pipe and inlets</td>
</tr>
<tr>
<td>14</td>
<td>Provide stormwater rate, volume and quality control BMPs to improve stormwater discharge rates and quality.</td>
<td>4</td>
<td>Construct Water Quality swales</td>
</tr>
<tr>
<td>15</td>
<td>Reconstruct the sanitary sewer with new inlets and water tight pipe.</td>
<td>4</td>
<td>750 LF 8&quot; Sanitary @ $78/LF = $58,500, 8 manholes @ $3,500/EA = $30,000</td>
</tr>
<tr>
<td>16</td>
<td>Investigate the need to upgrade the water meter pit and the incoming water service line.</td>
<td>4</td>
<td>New Meter Pit @ $30,000; Assume 300 LF of new 8&quot; water line @ $70/LF = $21,000</td>
</tr>
<tr>
<td>EX</td>
<td>Perform a visual evaluation of the brick at locations required. Repoint the brick where necessary.</td>
<td>3</td>
<td>25,000 SF @ $30/SF</td>
</tr>
<tr>
<td>EX</td>
<td>Wash the masonry exterior with power wash equipment.</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

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### Physical Needs Matrix

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Priority</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Track Resurfacing</td>
<td>3</td>
<td>Track Resurfacing</td>
</tr>
<tr>
<td>2</td>
<td>Pedestrian and maintenance vehicle access to the northern fields should be provided with a paved path. The need for restroom and/or concession facilities to service the northern field should be determined.</td>
<td>2</td>
<td>1,013 LF x 10 FT wide = 1,0130 SY @ $45/SY = $45,450; Does not include Concession buildings</td>
</tr>
<tr>
<td>3</td>
<td>Reroute or replace damaged fencing in the northern athletic fields.</td>
<td>3</td>
<td>Track and Tennis court and northern fence replacement</td>
</tr>
<tr>
<td>4</td>
<td>Reconstruct the football practice field or provide synrthetic turf field to increase the number of uses that the field can accommodate.</td>
<td>3</td>
<td>Synthetic field and drainage</td>
</tr>
<tr>
<td>5</td>
<td>Replace deteriorated inlets and investigate the storm pipe condition.</td>
<td>4</td>
<td>Replace all storm pipe and inlets</td>
</tr>
<tr>
<td>6</td>
<td>Provide stormwater rate, volume and quality control BMPs to improve stormwater discharge rates and quality.</td>
<td>4</td>
<td>Construct Water Quality swales</td>
</tr>
<tr>
<td>7</td>
<td>Reconstruct the sanitary sewer with new inlets and water tight pipe.</td>
<td>4</td>
<td>750 LF 8&quot; Sanitary @ $78/LF = $58,500, 8 manholes @ $3,500/EA = $30,000</td>
</tr>
<tr>
<td>8</td>
<td>Investigate the need to upgrade the water meter pit and the incoming water service line.</td>
<td>4</td>
<td>New Meter Pit @ $30,000; Assume 300 LF of new 8&quot; water line @ $70/LF = $21,000</td>
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<tr>
<td>EX</td>
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<td>EX</td>
<td>Wash the masonry exterior with power wash equipment.</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

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**Sample Master Plan Pages – Physical Needs Matrix**
Program Analysis
Elkins Park School

1. Building Interior Spatial Needs
   a. Small group instruction spaces; some dedicated for STEM programming (“maker spaces”)
   b. A general building configuration suited to support the educational program in grades 5-6 (building was originally constructed as a junior high school)
   c. Classrooms of equal size and flexibility to support current instructional practices
   d. A large group instruction room for both student lessons and faculty meetings/training
   e. Abandon the classrooms in the basement as they are sub-standard educational spaces and removed from the balance of building program areas
   f. Achieve handicap accessibility throughout the building as the allocation of classroom spaces currently fluctuates with the changing needs of the school’s special needs population
   g. Establish a better physical and visual connection between the cafeteria and outdoor play area for improved safety and supervision
   h. Dedicated science rooms of appropriate size, configuration, and equipment to accommodate experiments and hands-on curriculum

Cheltenham High School

1. Building Interior Spatial Needs
   a. Air conditioning to be implemented throughout the building to establish optimal learning environments
   b. Enhance the thermal envelope (particularly the walls) to improve interior comfort
   c. Building upgrades to accommodate desired block scheduling structure
   d. Increase flexibility in classrooms to accommodate a wide range of teaching methods
   e. Instructional technology including smartboards and interactive devices to connect directly to smartphones
   f. Classrooms to accommodate an expanded humanities curriculum
   g. Additional spaces to accommodate desired academic programs
      i. Computer coding
      ii. Web design
      iii. Mandarin and Arabic languages
   h. Establishment of clustered STEM education suites
   i. Dedicated areas for collaborative learning activities
   j. Music and art program areas
Elkins Park School

Highlights of Identified Program Issues

- Improved configuration to support grades 5-6 programming
- Classrooms of equal size, flexibility, and quality
- Dedicated STEM and science spaces for hands-on curriculum
- A large group instruction room
- Achieve ADA accessibility
- Measures to improve student safety and supervision
- Enhanced areas for arts, science, and athletics programs
Cheltenham High School

Highlights of Identified Program Issues

- Environmental upgrades to achieve suitable learning environments; air conditioning and improved thermal envelope
- Flexibility in classrooms to accommodate current methods
- Instructional technology including smartboards & interactive devices
- Classrooms to house expanded humanities, engineering, and language programs
- Clustered STEM education suites
- Dedicated areas for collaboration
- Enhanced areas for arts, music, and athletic programs
Master Plan Options
## Master Plan Options

<table>
<thead>
<tr>
<th>Elkins Park Option A</th>
<th>Total renovation of existing building with a small addition (no work at administration building)</th>
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</thead>
<tbody>
<tr>
<td>Elkins Park Option B</td>
<td>Construction of a new Elkins Park School (on current school site) and renovation of a portion of the existing building to serve as a district administration building</td>
</tr>
<tr>
<td>Elkins Park Option C</td>
<td>Construction of a new building housing a new Elkins Park School and new district administration office on current school site</td>
</tr>
<tr>
<td>Cheltenham High School Option A</td>
<td>Renovation of the entire school to various degrees; construction of a new pool and locker room complex along the driveway leading to the stadium</td>
</tr>
<tr>
<td>Cheltenham High School Option B</td>
<td>Renovation of the entire school to various degrees; construction of a new pool and locker room complex to the north of the existing pool</td>
</tr>
<tr>
<td>Cheltenham High School Option C</td>
<td>New high school constructed south of the existing building along Rices Mill Road</td>
</tr>
<tr>
<td>Cheltenham High School Athletic Complex</td>
<td>Renovation of the athletic complex at Cheltenham High School including new track, synthetic fields, site amenities, and stormwater management system</td>
</tr>
</tbody>
</table>
Elkins Park School Option A
Total renovation of existing building with a small addition (no work at administration building)

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Budget</th>
</tr>
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<tbody>
<tr>
<td>Design, Documentation &amp; Bidding:</td>
<td>Renovate Elkins Park School 124,397 SF @ $250 $31,099,000</td>
</tr>
<tr>
<td>Phase 1: Renovation</td>
<td>Addition 16,400 SF @ $250 $4,100,000</td>
</tr>
<tr>
<td>Phase 2: Demolition</td>
<td>Environmental Remediation $1,787,000</td>
</tr>
<tr>
<td>Phase 3: Site</td>
<td>Site $2,000,000</td>
</tr>
<tr>
<td>Total</td>
<td>Total Construction Cost $38,986,000</td>
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<tr>
<td></td>
<td>Soft Costs 13% $5,068,000</td>
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<tr>
<td></td>
<td>Contingency 5% $1,949,000</td>
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<tr>
<td></td>
<td>Total Project Cost: $46,003,000</td>
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</table>

Pros: Building will be completely accessible
• All new materials, finishes and systems; resetting the building life cycle
• Most hazardous material removed

Cons: Not all programmatic and operational issues addressed
• Significant disruption to students and staff
• Building envelope performance and energy efficiency remain sub-standard
• Parity between district buildings not achieved
• Project cost only slightly less than construction of a new building
Elkins Park School Option A
Elkins Park School Option B
Construction of a new Elkins Park School (on current school site) and renovation of a portion of the existing building to serve as a district administration building

Pros:
- All programmatic and operational issues addressed; new state-of-the-art learning environments established
- Building will be completely accessible
- All new materials, finishes and systems
- All hazardous material removed
- All site amenities replaced
- Newly renovated district administration office

Cons:
- Disruptive to students and staff
- Project cost only slightly less than construction of a new school and new district administration office

Schedule

Design, Documentation & Bidding 12 months
Phase 1: Renovation and Demolition 06 months
Phase 2: Construct New EPS 18 months
Phase 3: Demolish Modular Building 06 months
Phase 4: Site Improvements 06 months
Total 48 months

Budget

<table>
<thead>
<tr>
<th>Description</th>
<th>SF</th>
<th>@</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>New EPS</td>
<td>112,000*</td>
<td>$250</td>
<td>$28,000,000</td>
</tr>
<tr>
<td>Building Demolition</td>
<td>89,500</td>
<td>$7</td>
<td>$626,000</td>
</tr>
<tr>
<td>Environmental Remediation</td>
<td></td>
<td></td>
<td>$1,787,000</td>
</tr>
<tr>
<td>Administration Building Renovation</td>
<td>35,000</td>
<td>$220</td>
<td>$7,700,000</td>
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<tr>
<td>Site</td>
<td></td>
<td></td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Total Construction Cost</td>
<td></td>
<td></td>
<td>$40,113,000</td>
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<tr>
<td>Soft Costs</td>
<td></td>
<td>13%</td>
<td>$5,215,000</td>
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<tr>
<td>Contingency</td>
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<td>5%</td>
<td>$2,005,000</td>
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<tr>
<td>Total Project Cost:</td>
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<td>$47,333,000</td>
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</table>

* New SF is an estimate as full building programming has not been completed

Design, Documentation & Bidding: 12 months
Phase 1: Renovation and Demolition: 06 months
Phase 2: Construct New EPS: 18 months
Phase 3: Demolish Modular Building: 06 months
Phase 4: Site Improvements: 06 months
Total: 48 months

* New SF is an estimate as full building programming has not been completed
Elkins Park School Option B
## Elkins Park School Option C

Construction of a new building housing a new Elkins Park School and new district administration office on current school site

### Schedule

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
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<tbody>
<tr>
<td>Design, Documentation &amp; Bidding</td>
<td>12 months</td>
</tr>
<tr>
<td>Phase 1: Demolish Modular Building</td>
<td>06 months</td>
</tr>
<tr>
<td>Phase 2: New EPS Construction</td>
<td>18 months</td>
</tr>
<tr>
<td>Phase 3: Demolish Old EPS</td>
<td>06 months</td>
</tr>
<tr>
<td>Phase 4: Complete Site Work</td>
<td>06 months</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>48 months</strong></td>
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### Budget

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>SF</th>
<th>Rate</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>New EP School</td>
<td>112,000*</td>
<td>SF</td>
<td>$250</td>
<td>$28,000,000</td>
</tr>
<tr>
<td>Building Demolition</td>
<td>124,500</td>
<td>SF</td>
<td>$7</td>
<td>$871,000</td>
</tr>
<tr>
<td>Environmental Remediation</td>
<td></td>
<td></td>
<td></td>
<td>$1,787,000</td>
</tr>
<tr>
<td>New Administration Building</td>
<td>35,000</td>
<td>SF</td>
<td>$250</td>
<td>$8,750,000</td>
</tr>
<tr>
<td>Site</td>
<td></td>
<td></td>
<td></td>
<td>$2,000,000</td>
</tr>
<tr>
<td><strong>Total Construction Cost</strong></td>
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<td></td>
<td></td>
<td><strong>$41,408,000</strong></td>
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<tr>
<td>Soft Costs</td>
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<td>13%</td>
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<td>$5,383,000</td>
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<tr>
<td>Contingency</td>
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<td>5%</td>
<td></td>
<td>$2,070,000</td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$48,861,000</strong></td>
</tr>
</tbody>
</table>

* New SF is an estimate as full building programming has not been completed

### Pros:

- All programmatic and operational issues addressed; new state-of-the-art learning environments established
- Negligible disruption to students and staff
- Building will be completely accessible
- All new materials, finishes and systems; resetting the building life cycle

### Cons:

- All hazardous material removed
- All site amenities replaced
- New district administration office
- Project cost only slightly more than Options A and B which yield less ideal solutions

---

**NO CONS WITH THIS OPTION**
Elkins Park School Option C
Cheltenham High School Option A
Renovation of the entire school to various degrees; construction of a new pool and locker room complex along the driveway leading to the stadium

Schedule

<table>
<thead>
<tr>
<th></th>
<th>Pros/Cons</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Design, Documentation &amp; Bidding</td>
<td>12 months</td>
</tr>
<tr>
<td></td>
<td>Multiple Construction Phases</td>
<td>26 months</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>38 months</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Pros:
- Highly visible location for new pool complex; establishes fresh identify for the building
- A new dedicated building entrance for athletics is established
- Deficiencies at pool addressed
- Building will be completely accessible
- New materials, finishes and systems; resetting the building life cycle
- All hazardous material removed
- Cost is significantly less than a new high school

Cons:
- Disruptive to students and staff
- Vehicular congestion during construction
- General layout of program spaces is restricted by the building’s existing configuration
- Building performance and energy efficiency remain below the levels of a new building
Cheltenham High School Option B
Renovation of the entire school to various degrees; construction of a new pool and locker room complex to the north of the existing pool

### Schedule

<table>
<thead>
<tr>
<th></th>
<th>Pros/Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pros:</strong></td>
<td>New pool complex; deficiencies at existing pool remedied</td>
</tr>
<tr>
<td></td>
<td>Building will be completely accessible</td>
</tr>
<tr>
<td></td>
<td>New materials, finishes and systems; resetting the building life cycle</td>
</tr>
<tr>
<td></td>
<td>All hazardous material removed</td>
</tr>
<tr>
<td></td>
<td>Cost is significantly less than a new high school</td>
</tr>
<tr>
<td><strong>Cons:</strong></td>
<td>Disruptive to students and staff</td>
</tr>
<tr>
<td></td>
<td>Vehicular congestion during construction</td>
</tr>
<tr>
<td></td>
<td>New pool complex is not in a visible location to contribute to a refreshed identity for the building</td>
</tr>
</tbody>
</table>
Cheltenham High School Option B - First Floor
Cheltenham High School Option B - Second Floor
Cheltenham High School Option C
New high school constructed south of the existing building along Rices Mill Road

**Pros:**
- Ideal arrangement of the educational program
- Modern, thermally efficient building
- More efficient building layout with less square footage than existing
- All deficiencies in existing building addressed
- Building will be completely accessible
- New materials, finishes and systems; resetting the building life cycle
- All hazardous material removed
- A number of existing athletic fields can be retained

**Cons:**
- Approximately twice the cost of renovating the existing building
- Disruptive to students and staff
- Vehicular congestion during construction
- Long construction schedule due to phasing

**Schedule**

- Design, Documentation & Bidding: 12 months
- Demolish Existing Auditorium: 06 months
- Construct New High School: 20 months
- Demolish Existing School, Construct New Athletic Wing & Athletic Fields: 18 months
- Total: 56 months

**Budget**

<table>
<thead>
<tr>
<th>Description</th>
<th>SF</th>
<th>@</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>New High School</td>
<td>325,000*</td>
<td>$250</td>
<td>$81,250,000</td>
</tr>
<tr>
<td>Environmental Remediation</td>
<td></td>
<td></td>
<td>$3,480,000</td>
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<tr>
<td>Demolition</td>
<td>412,000</td>
<td>$7</td>
<td>$2,884,000</td>
</tr>
<tr>
<td>Site</td>
<td></td>
<td></td>
<td>$7,000,000</td>
</tr>
<tr>
<td>Total Construction Cost</td>
<td></td>
<td></td>
<td>$94,614,000</td>
</tr>
<tr>
<td>Soft Costs</td>
<td>13%</td>
<td></td>
<td>$12,300,000</td>
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<tr>
<td>Contingency</td>
<td>5%</td>
<td></td>
<td>$4,730,000</td>
</tr>
<tr>
<td>Total Project Cost</td>
<td></td>
<td></td>
<td>$111,644,000</td>
</tr>
</tbody>
</table>

*New SF is an estimate as full building programming has not been completed
Athletic Complex
Master Plan
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Total Project Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elkins Park Option A</td>
<td>Total renovation of existing building with a small addition (no work at administration building)</td>
<td>$46,003,000</td>
</tr>
<tr>
<td>Elkins Park Option B</td>
<td>Construction of a new Elkins Park School (on current school site) and renovation of a portion of the existing building to serve as a district administration building</td>
<td>$47,333,000</td>
</tr>
<tr>
<td>Elkins Park Option C</td>
<td>C1: Construction of a new building housing a new Elkins Park School and new district administration office on current school site</td>
<td>C1: $48,861,000</td>
</tr>
<tr>
<td></td>
<td>C2: Construction of a new building housing a new Elkins Park School on current school site</td>
<td>C2: $38,538,000</td>
</tr>
<tr>
<td>Cheltenham High School Option A</td>
<td>Renovation of the entire school to various degrees; construction of a new pool and locker room complex along the driveway leading to the stadium</td>
<td>$67,576,000</td>
</tr>
<tr>
<td>Cheltenham High School Option B</td>
<td>Renovation of the entire school to various degrees; construction of a new pool and locker room complex to the north of the existing pool</td>
<td>$65,820,000</td>
</tr>
<tr>
<td>Cheltenham High School Option C</td>
<td>New high school constructed south of the existing building along Rices Mill Road</td>
<td>$111,644,000</td>
</tr>
<tr>
<td>Cheltenham High School Athletic Complex</td>
<td>Renovation of the athletic complex at CHS including new track, synthetic fields, site amenities, and stormwater management system</td>
<td>$8,658,770</td>
</tr>
</tbody>
</table>
Workforce Analysis
Basis of Workforce Analysis

- Gil Lappano, PE, a longtime facilities consultant and PA public school district facilities director, led an analysis of Cheltenham’s facilities operations
- The primary data source was PASBO’s benchmarking tool which obtains and compares facilities workflow data from all school districts in PA
- Cheltenham’s data was compared against 39 other school districts in the southeast region including Montgomery, Bucks, Chester, and Delaware Counties
Cheltenham Data

The following SD of Cheltenham Township data was used in the analysis:

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Enrollment</td>
<td>4,565</td>
<td>Utilities</td>
<td>$1,445,000</td>
</tr>
<tr>
<td>Instructional SF of Buildings</td>
<td>1,138,280</td>
<td>Equipment New</td>
<td>$20,000</td>
</tr>
<tr>
<td>Non-Instructional SF of Buildings</td>
<td>50,785</td>
<td>Equipment Replacement</td>
<td>$20,000</td>
</tr>
<tr>
<td>General Fund</td>
<td>$103,887,864</td>
<td>Plant Service Contracts</td>
<td>$15,600</td>
</tr>
<tr>
<td>Facilities Ops &amp; Maintenance</td>
<td>$7,692,560</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Key Measurements

Maintenance expenditure per sf of instructional space
Cheltenham: $5.49/SF
SE Region: $6.12 - $4.90/SF
Analysis: Within standard

Contract services per sf of instructional space
Cheltenham: $0.01/SF
SE Region: $0.54 - $0.29/SF
Analysis: Well below average

Instructional SF per custodial employee (full-time equivalent)
Cheltenham: 32,064 SF/custodial FTE
SE Region: 22,002 – 19,881 SF/custodial FTE
Analysis: Custodial FTE maintains 150% of the median SF of local districts

Instructional SF per buildings and grounds employee (full-time equivalent)
Cheltenham: 20,147 SF/B&G FTE
SE Region: 16,497 – 14,314 SF/B&G FTE
Analysis: B&G FTE maintains 133% of the median SF of local districts
Key Measurements

Instructional SF per skilled building trades and maintenance employee (full-time equivalent)
Cheltenham: 87,560 SF/SBT & M FTE
SE Region: 145,448 – 88,392 SF/SBT & M FTE
Analysis: Within standard

Instructional SF per facilities supervisor (FTE)
Cheltenham: 569,140 SF/Supervisor FTE
SE Region: 329,421 – 198,616 SF/Supervisor FTE
Analysis: Supervisor FTE maintains 228% of the median SF of local districts

Utilities expenditure per student
Cheltenham: $1.27/student
SE Region: $1.53 - $1.38/student
Analysis: Well below average
Workforce Analysis Recommendations

• Hire an Assistant Facility Director
• Hire a Maintenance Supervisor
• Fill the currently open maintenance position
• Hire a Custodial Supervisor
• Upgrade Security Manager position from 10 to 12 months
• Add a full time Security Officer
• Add custodial staff (18 custodians) to get to the recommended total of 54.
• Add service contracts for boiler maintenance, cooling tower maintenance, building automation system, emergency generator testing and maintenance, etc.
Discussion