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110 ALLAN STREET  
LOWER BURRELL  
PENNSYLVANIA 15068

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TELE: 724-594-0326  
FAX: 724-594-3628  
[WWW.STREAMLINEENGINEERING.NET](http://WWW.STREAMLINEENGINEERING.NET)

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September 23, 2025

Project No. 21-109

VIA EMAIL  
trrobert@pa.gov

Tristan Robert, Aquatic Biologist 2  
Department of Environmental Protection  
Waterways & Wetlands Program  
Southwest Regional Office  
400 Waterfront Drive  
Pittsburgh, PA 15222

**RE: Quaker Valley School Joint Permit Application  
Request for Additional Information**

Dear Mr. Robert:

Please allow this letter to serve as Quaker Valley School District's response to your request on September 10th for additional information relating to the above-referenced project and permit application. Specifically, you have requested further information regarding the locations of the alternative sites considered by the School District for its new high school. Additionally, you have requested more detail regarding the District's analysis on using the current site of the Quaker Valley High School for a new/improved high school.

Attached for your review is a map identifying the locations of the alternative sites considered by the School District as potential new high school properties. If any additional information is needed on this point, please let me know.

With respect to the current High School site, the following documents are attached for your review:

- Quaker Valley High School 2014 Existing Site Analysis, prepared by Eckles Architecture; and
- Quaker Valley High School Options 2014 Cost Estimates, including estimates for a new high school building on the current site, prepared by Eckles Architecture.

As explained in more detail in the attached documents, the District considered 5 potential site development scenarios for the current High School property:

1. Demolish the existing High School building and stadium, redevelop/reconfigure the entire, unoccupied site (lower and upper portions of the property), and relocate the stadium. This would require a temporary relocation of students;
2. Demolish the existing stadium on the lower portion of the property, construct a new high school building on the lower site, and relocate the stadium;
3. Demolish the existing High School building, construct a new high school on the upper portion of the property, and maintain the existing stadium. This would require a temporary relocation of students;
4. Construct a new high school building in phases around the existing High School building, and maintain the existing stadium; and
5. Construct additions and alterations in phases around the existing High School building, and maintain the existing stadium.

Both the attached 2014 Existing Site Analysis and 2014 Cost Estimates documents outline considerations for each option, along with an analysis of the challenges that each option would present. Common challenges found for all of the 5 options are as follows:

- To the extent an option called for development of the lower portion of the property, Eckles noted that it is in the designated floodplain of the Ohio River, and development on that portion of the property would be subject to additional approvals that may be impractical.
- The Department of Education's recommendation for the QVSD high school, based on full-time equivalents, was 49 acres; however, the current site was approximately 35 acres below the recommended acreage.
- The site is constrained by property limits, municipal streets, and a steep slope that separates the existing High School from McNamara Park, which may limit the availability to fully differentiate bus, parent and student circulation.
- To the extent an option could allow for keeping the building occupied during construction, Eckles suggested that it may not be practical at this site and prove to limit the design options, lengthen the construction timeline, add to the construction costs, and further congest the existing site.
- Due to the limitations on buildable area at the current site, Eckles recommended the acquisition of adjacent property.

In addition to the challenges raised by Eckles, it is important to note that the current High School building cannot adequately support the School District's educational program. The existing High School facility is 139,106 square feet, with only 126,563 square feet being usable space. However, the District's current educational program requires approximately 167,000 square feet of space.

Additionally, based on the District's current enrollment, the Pennsylvania Department of Education ("PDE") recommends a site size of approximately 42 acres of land. The site size of the existing High School property is only 13 acres, which is 29 acres less than recommended by PDE. Further, because a significant portion of the 13 acres exists within a floodplain, the usability of the 13 acres is significantly limited.

Lastly, in an effort to keep school families, residents, and property owners informed, the District has published numerous documents on its website that contain various research and studies relating to the current High School building site, along with information related to the new high school site. That information may be found using the following link:

Mr. Tristan Robert, PADEP  
QVSD Request for Additional Information  
Leet Twp, Leetsdale Boro, & Edgeworth Boro Allegheny County

September 23, 2025  
Project 21-109

[https://www.qvsd.org/apps/pages/index.jsp?uREC\\_ID=1536859&type=d&pREC\\_ID=1676145](https://www.qvsd.org/apps/pages/index.jsp?uREC_ID=1536859&type=d&pREC_ID=1676145)

If DEP needs additional documentation, please contact us.

Respectfully yours,  
STREAMLINE ENGINEERING, INC.



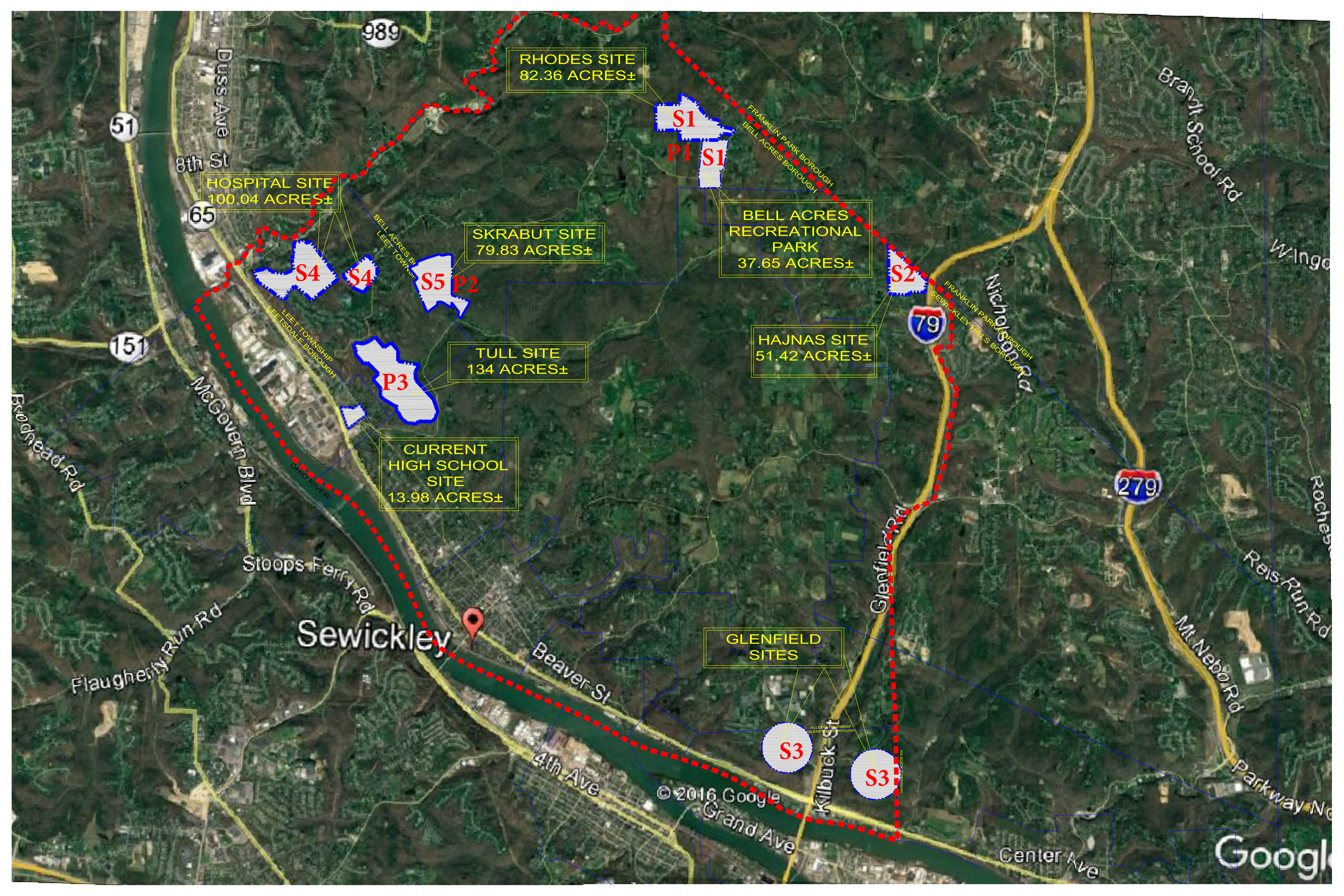
Martha L. Frech, P.E.  
President

Attachments

cc. Charlie Gauthier, Quaker Valley School District  
Geoff Phillips, Phillips & Associates, Inc.  
Emily Mueller, GRB Law

**ATTACHMENT 1**  
**Map of Optional Sites Considered**





RHODES SITE  
82.36 ACRES±

S1  
P1 S1

BELL ACRES  
RECREATIONAL  
PARK  
37.65 ACRES±

HOSPITAL SITE  
100.04 ACRES±

S4 S4

SKRABUT SITE  
79.83 ACRES±

S5 P2

TULL SITE  
134 ACRES±

P3

CURRENT  
HIGH SCHOOL  
SITE  
13.98 ACRES±

HAJNAS SITE  
51.42 ACRES±

S2

GLENFIELD  
SITES

S3

S3

Sewickley

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**ATTACHMENT 2**  
**Existing Site Alternative Study**  
**And**  
**Architecture Cost Estimate**

# QUAKER VALLEY SCHOOL DISTRICT

## **Exhibit F – EXISTING SITE ANALYSIS**



### **QUAKER VALLEY HIGH SCHOOL**

#### **2014 Existing Site Analysis**

**08/04/14**

**Prepared by Eckles Architecture**

In the summer of 2014, Eckles Architecture met with representatives from the District Administration and representatives from districts consultants Garvin Boward Beitko Engineering, Inc. (Geotechnical Engineering) and Phillips & Associates, Inc. (Civil Engineering) to develop potential site development scenarios for the existing High School campus.

Many thanks to Superintendent Dr. Heidi Ondek, Dir. of Administrative Services Dr. Joe Marrone, Doug Beitko, and Geoff Phillips for their time and assistance in developing this preliminary site analysis.

# QUAKER VALLEY HIGH SCHOOL



LEARNING SAFETY  
BUSES FLEXIBLE  
PARENTS ACTIVE  
COMMUNITY FORWARD-THINKING  
TRAFFIC ATHLETICS  
FITNESS  
SPACE  
TEACHERS  
STUDENTS  
CIRCULATION  
ENVIRONMENT  
PARKING

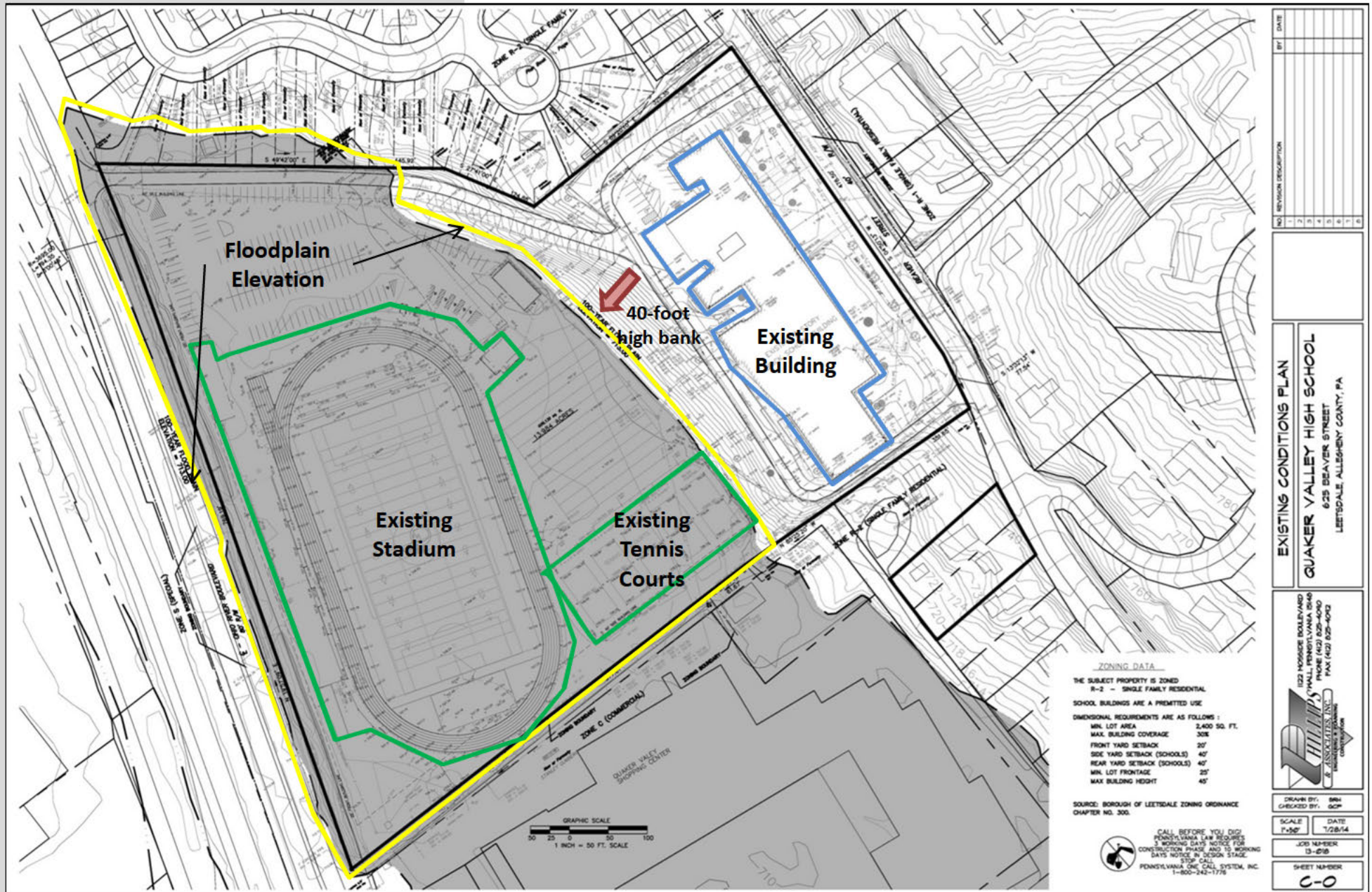


# EXISTING SITE CONDITIONS PLAN

Prepared by Phillips & Associates, Inc.

## QUAKER VALLEY HIGH SCHOOL

2014 Feasibility Study – SITE ANALYSIS





### POTENTIAL EXISTING SITE DEVELOPMENT SCENARIOS

1	<b>DEMO BUILDING &amp; SITE – REDEVELOP/RECONFIGURE ENTIRE UNOCCUPIED SITE</b> <ul style="list-style-type: none"> <li>Construct new building &amp; site features once earthmoving is completed</li> <li>Vacate building prior to construction (<b>temporarily relocate students</b>)</li> <li>Relocate stadium to alternate site</li> </ul>
2	<b>DEMO LOWER SITE – RELOCATE STADIUM</b> <ul style="list-style-type: none"> <li>Construct new building on lower site in first phase, additional site amenities to be constructed once building is demolished</li> <li>Occupy building during construction</li> <li>Relocate stadium to alternate site</li> </ul>
3	<b>DEMO UPPER SITE – RELOCATE STUDENTS</b> <ul style="list-style-type: none"> <li>Construct new building on upper site</li> <li>Vacate building prior to construction (<b>temporarily relocate students</b>)</li> <li>Maintain existing stadium</li> </ul>
4	<b>CONSTRUCT NEW BUILDING IN PHASES</b> <ul style="list-style-type: none"> <li>Construct new building in phases around existing building</li> <li>Occupy building during construction</li> <li>Maintain existing stadium</li> </ul>
5	<b>RENOVATE EXISTING BUILDING &amp; SITE</b> <ul style="list-style-type: none"> <li>Construct additions and alterations in phases around existing building</li> <li>Occupy building during construction</li> <li>Maintain existing stadium</li> </ul>

### SITE DEVELOPMENT SCENARIOS

## SCENARIO 1

### DEMO BUILDING & SITE – REDEVELOP/RECONFIGURE ENTIRE UNOCCUPIED SITE

- 222,000 SF New multi-story HS/DAO building – building located at mid-level between top & bottom of site
- Stadium relocated to alternate site
- Students relocated off-site during construction

#### Pros & Cons

##### Pros

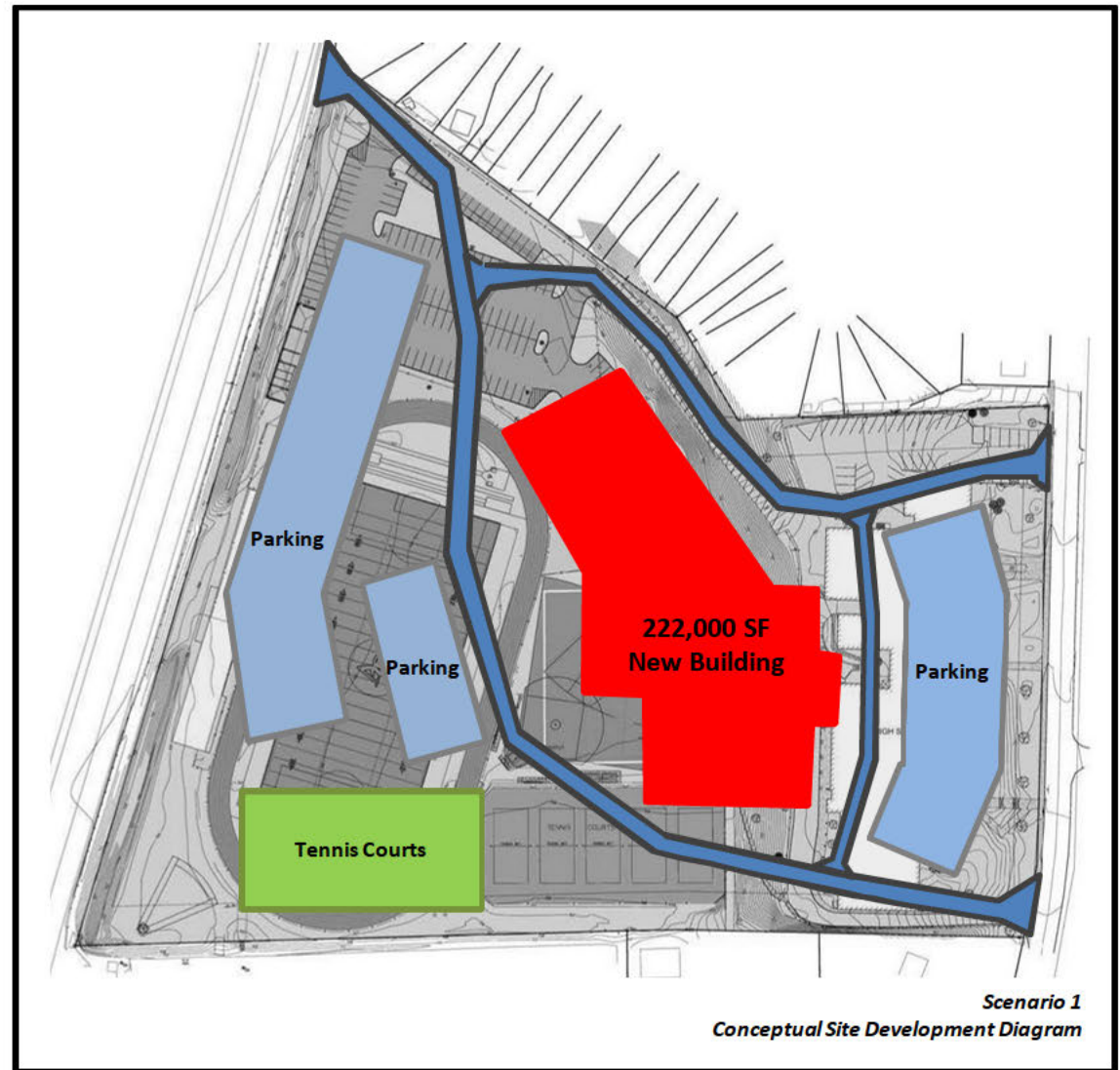
- Most straightforward construction phasing
- Safety during construction activities (students located off-site)
- Most efficient site development option (Geotechnical & Civil)
- Best opportunity to satisfy the building program

##### Cons

- **Need to find temporary facility for students**
- Stadium must be relocated prior to construction
- Athletic facilities are relocated off-site
- Multi-level building (three to four stories)
- Significant earthmoving activities
- Requires deep foundations
- May require significant site retaining walls
- On-going flooding concerns & maintenance at lower site
- No space available on-site for bus/maintenance facility

# QUAKER VALLEY HIGH SCHOOL

## 2014 Feasibility Study – SITE ANALYSIS





## SCENARIO 2

### DEMO LOWER SITE – RELOCATE STADIUM

- 222,000 SF New multi-story HS/DAO building – building located on lower site
- Stadium relocated to alternate site
- Students occupy existing building during construction
- Upper site construction occurs after new building completed

#### Pros & Cons

##### Pros

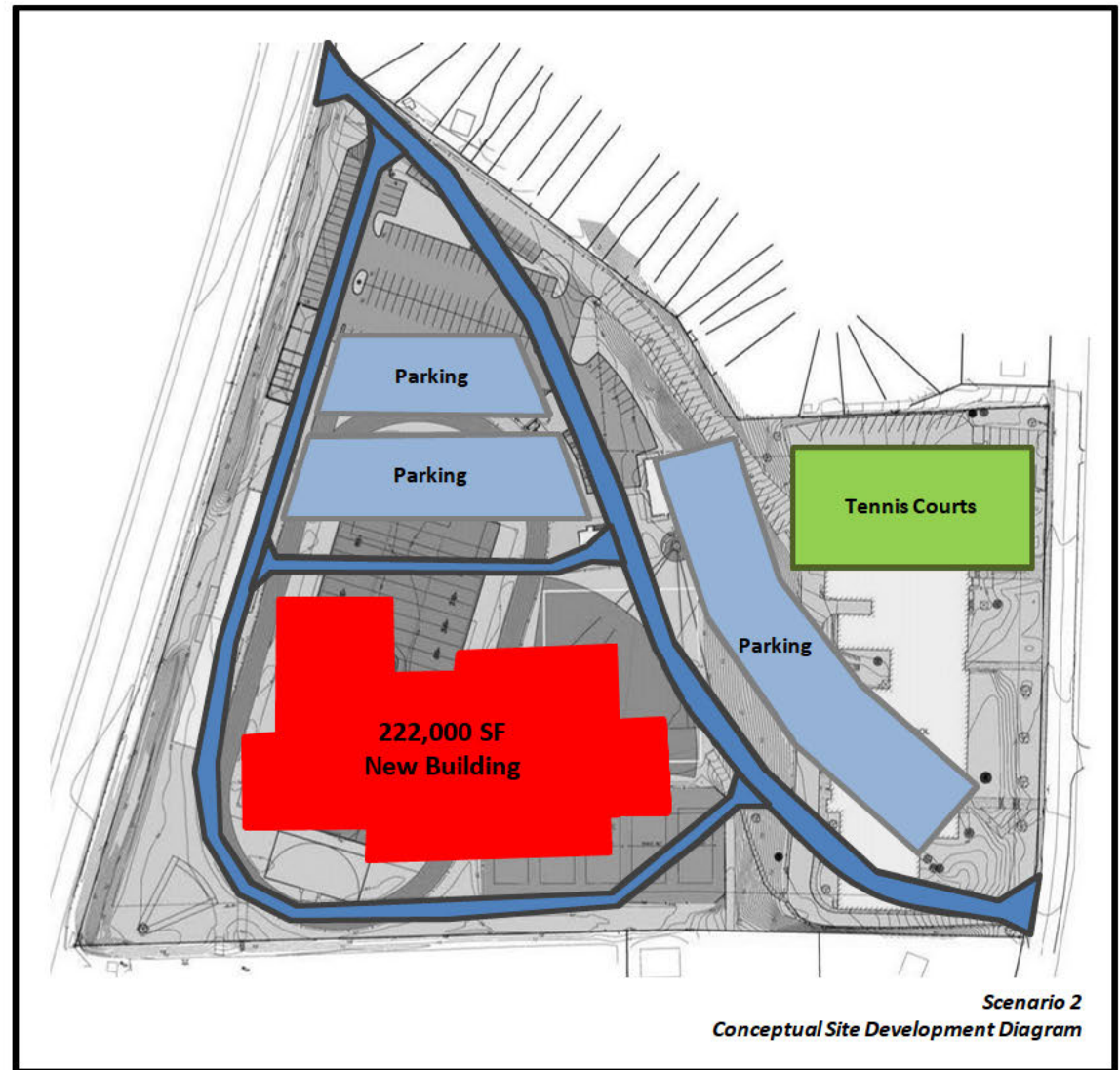
- Fairly straightforward construction phasing
- Relatively safe during construction activities (students are removed from construction area)
- Fairly efficient site development option
- Good opportunity to satisfy the building program

##### Cons

- Stadium must be relocated prior to construction
- Athletic facilities are relocated off-site
- Multi-level building (three to four stories)
- Requires deep foundations
- Building is within the flood-plain, additional approvals would be required & site would need to be raised to be above flood levels.
- Multiple phases – longer construction duration
- On-going flooding concerns & maintenance at lower site
- No space available on-site for bus/maintenance facility

# QUAKER VALLEY HIGH SCHOOL

## 2014 Feasibility Study – SITE ANALYSIS



### SCENARIO 3

#### DEMO UPPER SITE – RELOCATE STUDENTS

- 222,000 SF new multi-story HS/DAO building – building located on upper site & hillside
- Stadium to remain
- Students relocated off-site during construction

#### Pros & Cons

##### Pros

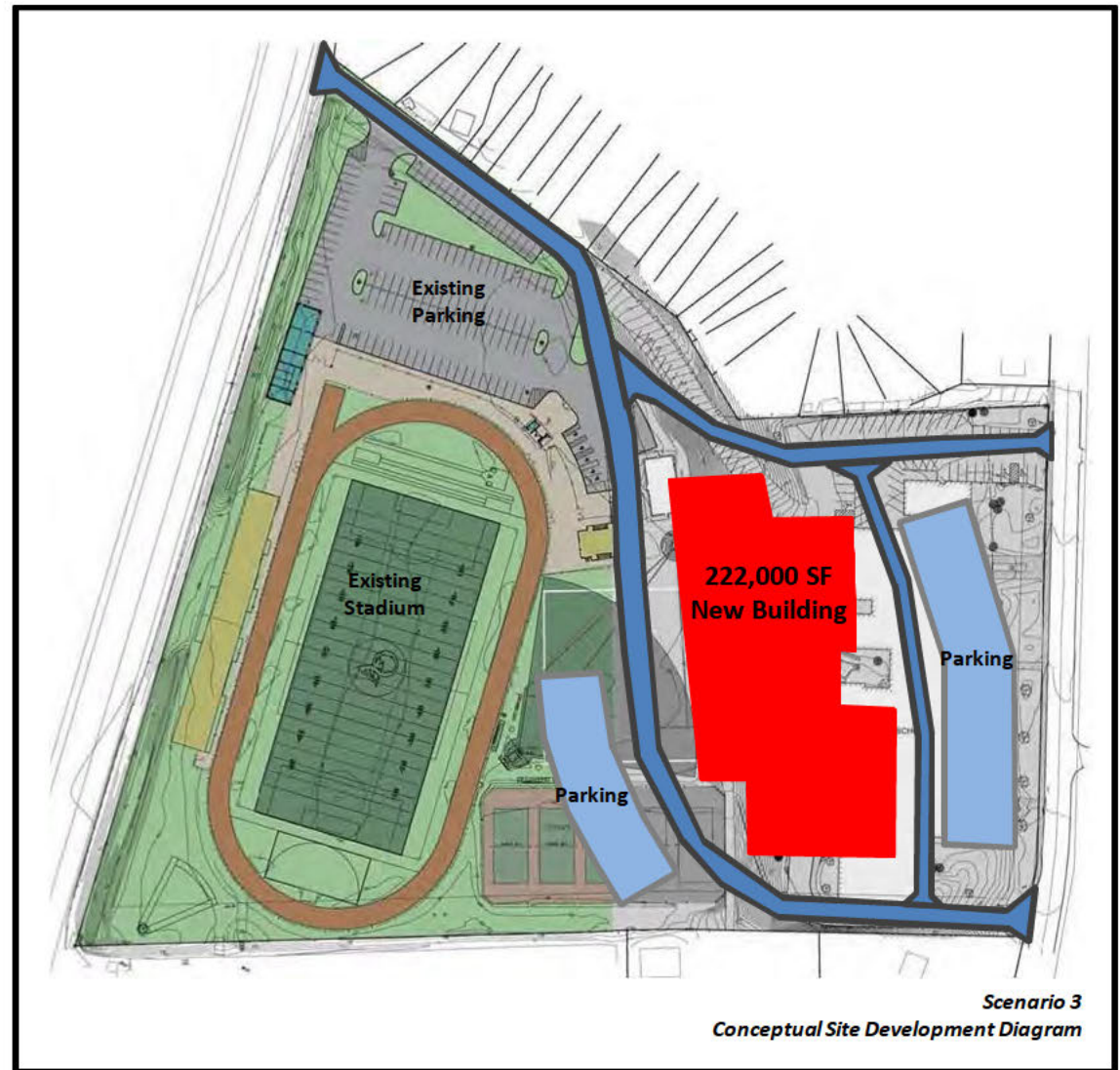
- Fairly straightforward construction phasing
- Relatively safe during construction (students located off-site during construction but stadium remains in use)
- Fairly efficient site development option
- Good opportunity to satisfy the building program
- Stadium remains on-site

##### Cons

- **Need to find temporary facility for students**
- Limited area for building, parking, athletics & construction laydown
- Multi-level building (four to five stories)
- Requires deep foundations
- Significant site prep & construction logistics costs
- Challenging topography and multiple ground floor levels
- Additional waterproofing requirements & costs (building built into hill)
- On-going flooding concerns & maintenance at lower site
- No space available on-site for bus/maintenance facility

## QUAKER VALLEY HIGH SCHOOL

### 2014 Feasibility Study – SITE ANALYSIS





## SCENARIO 4

### CONSTRUCT NEW BUILDING IN PHASES

- 222,000 SF new multi-story HS/DAO building – building located on upper site & hillside
- Stadium to remain
- Students occupy building during construction
- Students are shifted around the existing & new portions of the building as the construction phases progress

#### Pros & Cons

##### Pros

- Students occupy building during construction
- Stadium remains on-site

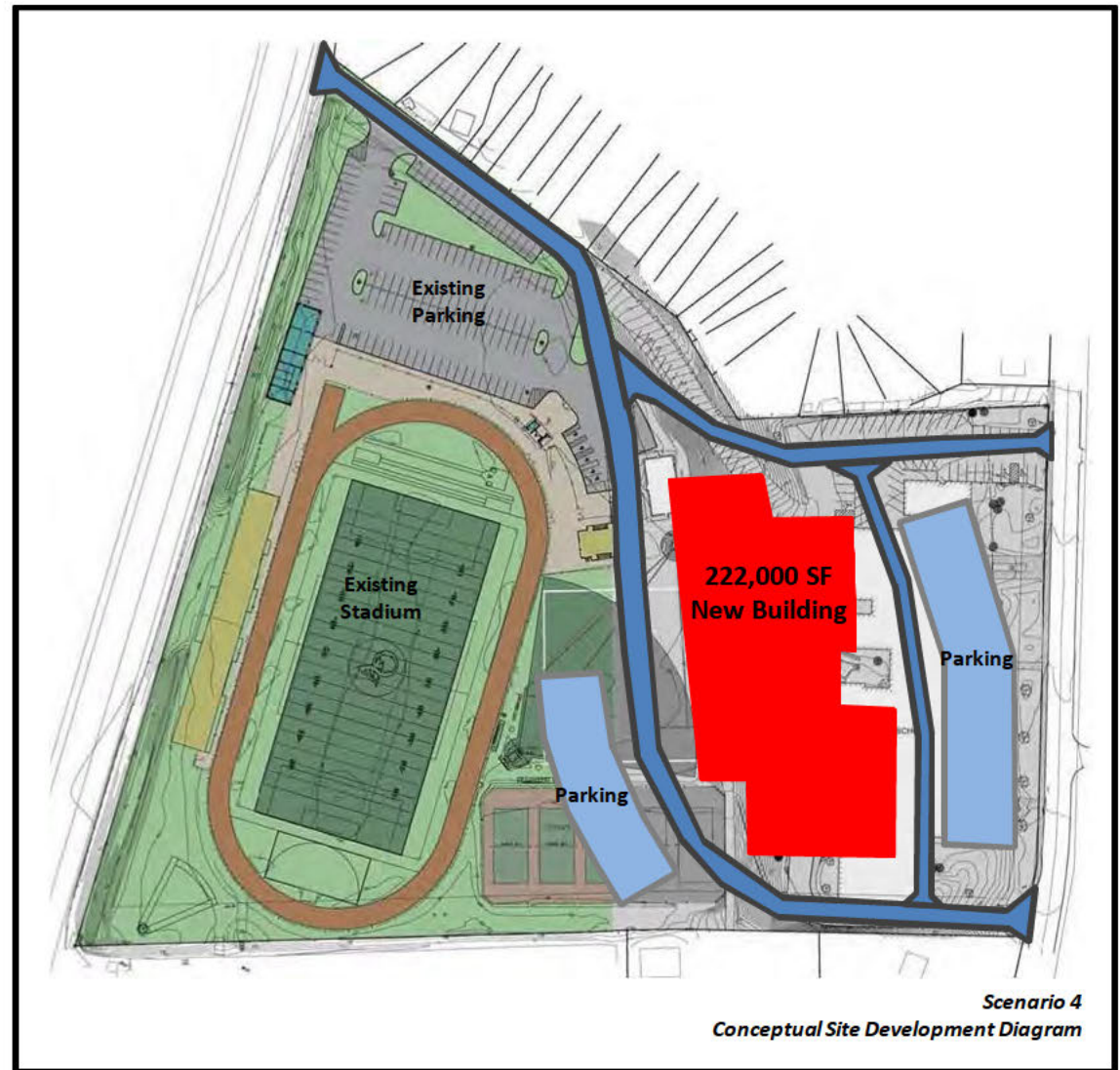
##### Cons

- Students remain on-site during construction – safety concern
- Significantly restricted area for building, parking, athletics & construction laydown
- Multi-level building (four to five stories)
- Requires deep foundations
- Challenging topography and multiple ground floor levels
- Additional waterproofing requirements & costs (building built into hill)
- Compromised access to public spaces (small first floor plate, multiple at grade entries, limited parking)
- Numerous complicated phases – significantly longer construction duration
- Significant site prep & construction logistics costs
- On-going flooding concerns & maintenance at lower site
- No space available on-site for bus/maintenance facility

## SITE DEVELOPMENT SCENARIOS

# QUAKER VALLEY HIGH SCHOOL

## 2014 Feasibility Study – SITE ANALYSIS





## SCENARIO 5

### ADDITIONS/ALTERATIONS TO EXISTING BUILDING

- 222,000 SF new multi-story HS/DAO building – building located on upper site & hillside
- Students occupy building during construction
- Students are shifted around the existing & new portions of the building as the construction phases progress

#### Pros & Cons

##### Pros

- Students occupy building during construction
- Stadium remains on-site

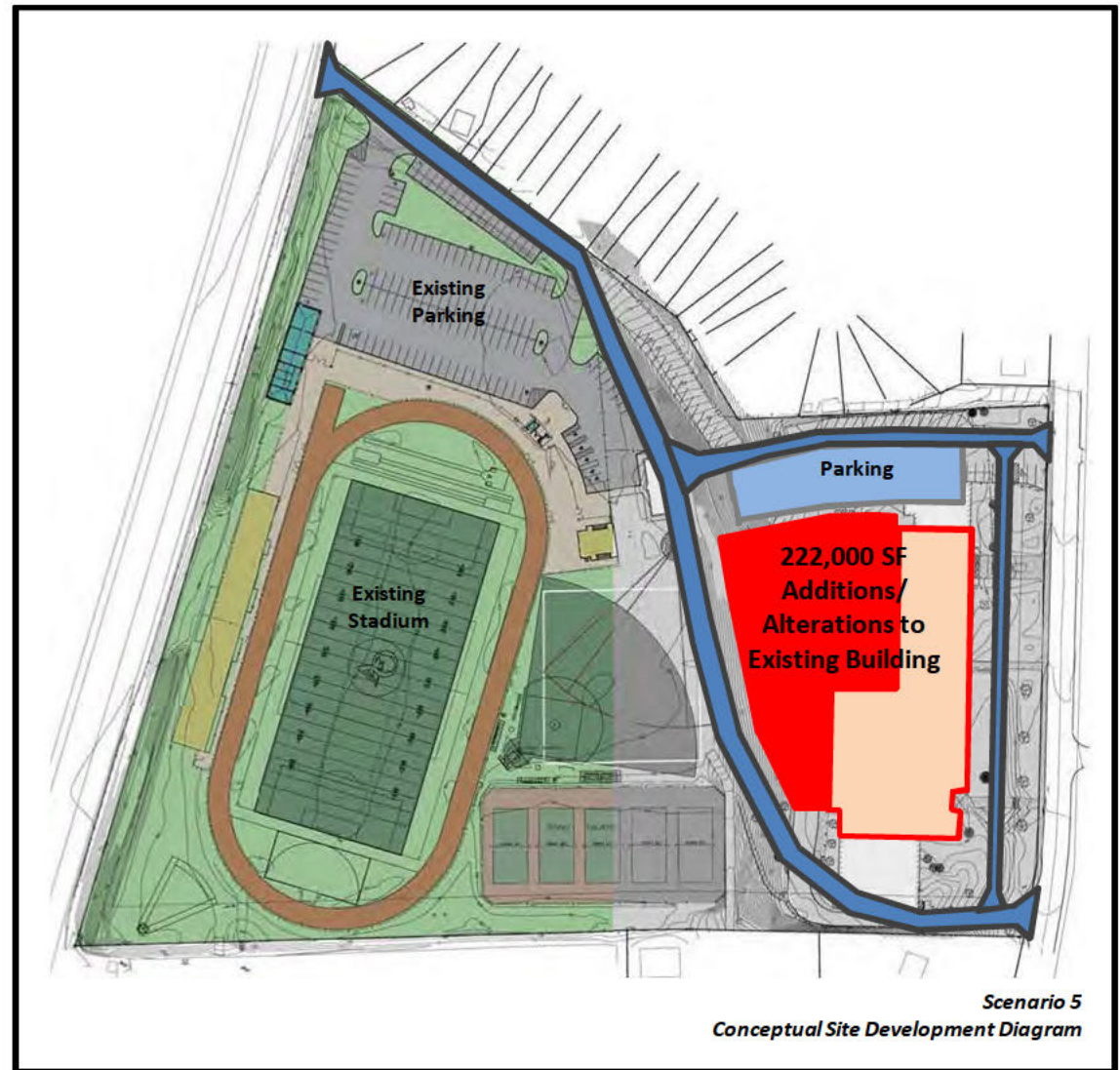
##### Cons

- Student safety - students remain on-site during construction
- Significantly restricted area for building, parking, athletics & construction laydown
- Multi-level building (four to five stories)
- Existing building may not be conducive to new programs & functions
- Requires deep foundations
- Challenging topography and multiple ground floor levels
- Additional waterproofing requirements & costs (building built into hill)
- Numerous complicated phases – significantly longer construction duration
- Compromised access to public spaces (restricted first floor, multiple at-grade entries, limited parking, etc.)
- Significant site prep & construction logistics costs
- On-going flooding concerns & maintenance at lower site
- No space available on-site for bus/maintenance facility

## SITE DEVELOPMENT SCENARIOS

# QUAKER VALLEY HIGH SCHOOL

## 2014 Feasibility Study – SITE ANALYSIS



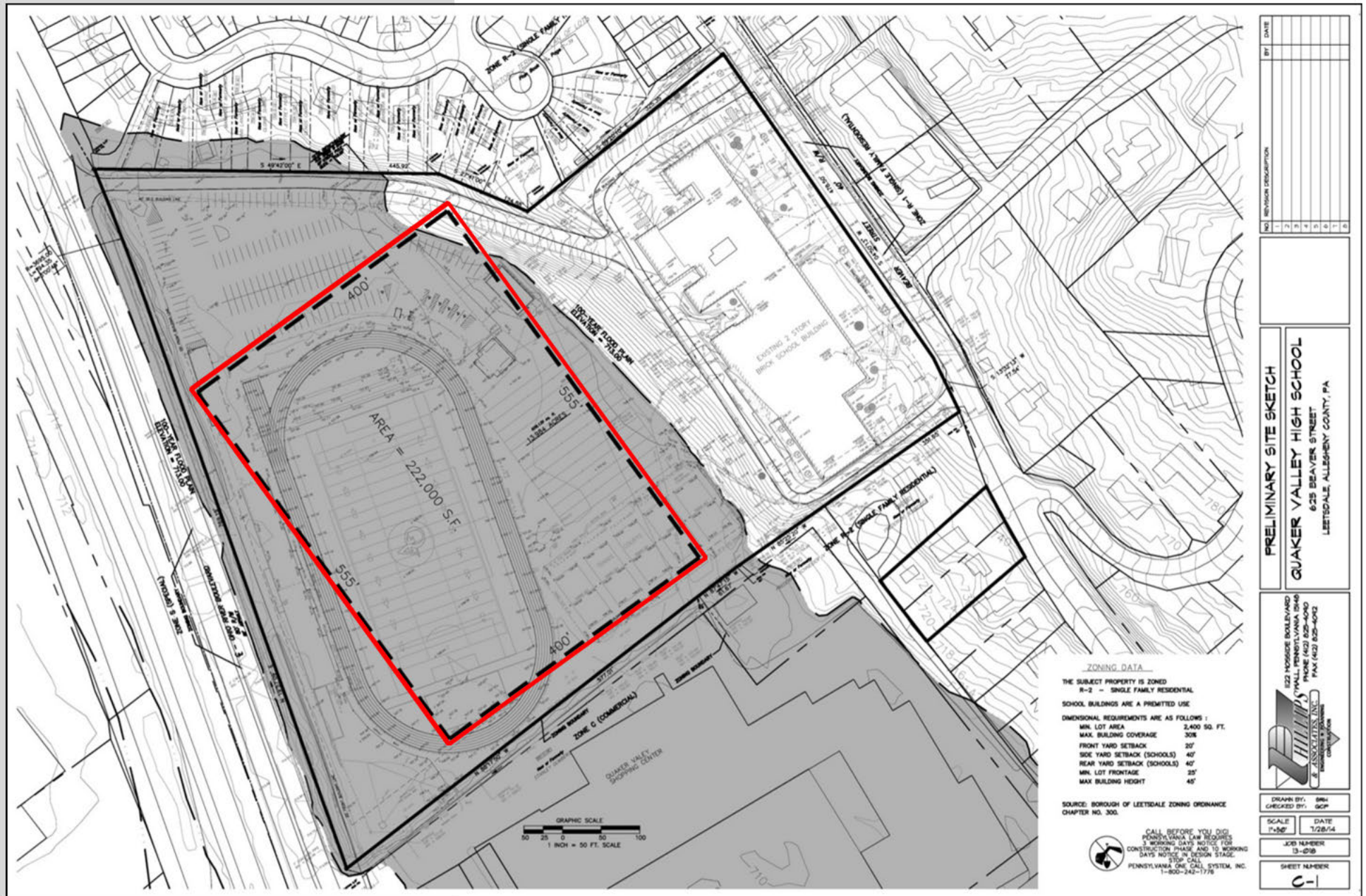


# PROGRAM AREA OVERLAY – 1 TO 2 STORY

Prepared by Phillips & Associates, Inc.

## QUAKER VALLEY HIGH SCHOOL

### 2014 Feasibility Study – SITE ANALYSIS



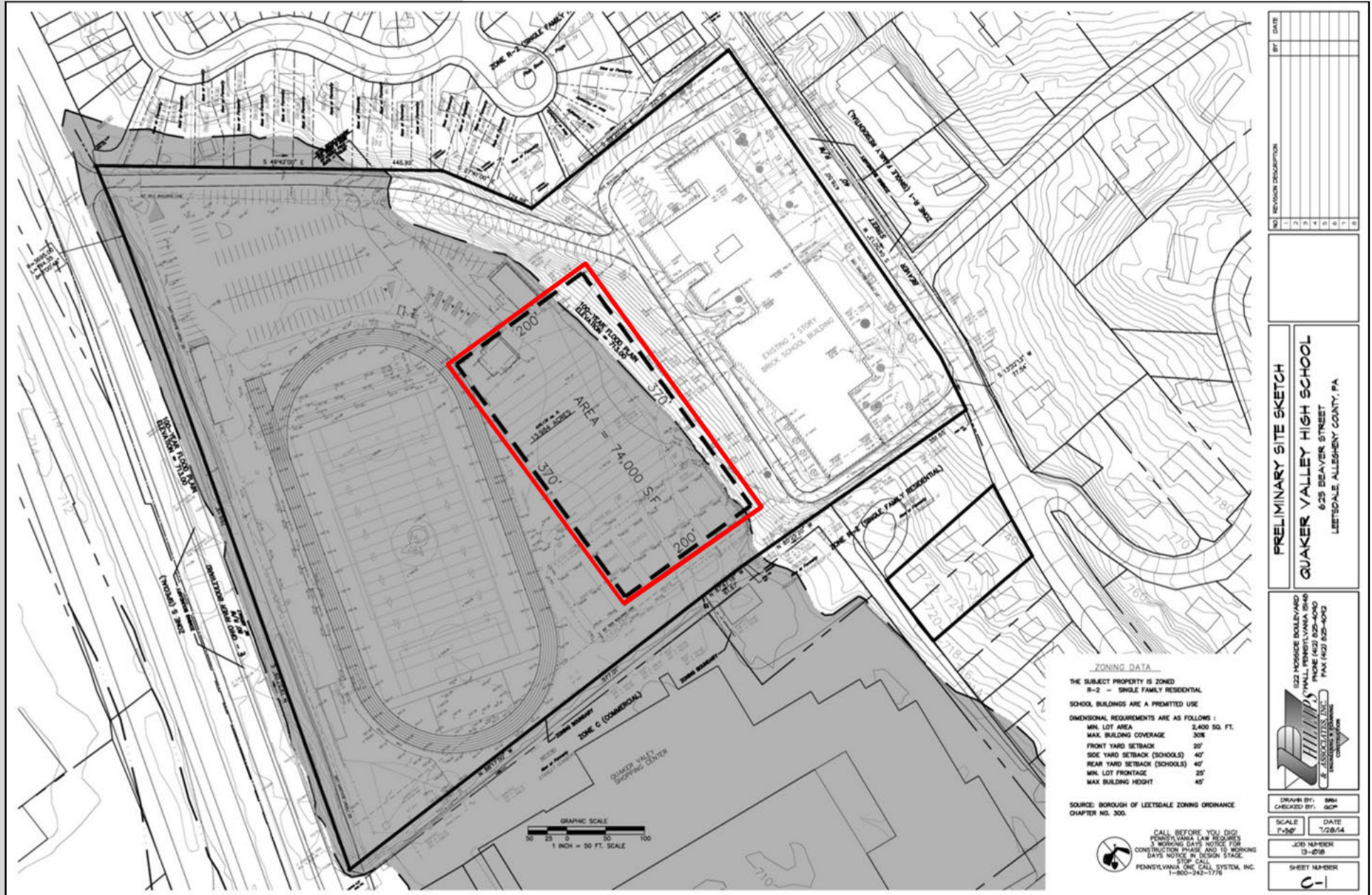


# PROGRAM AREA OVERLAY – 3 TO 4 STORY BUILDING

Prepared by Phillips & Associates, Inc.

## QUAKER VALLEY HIGH SCHOOL

2014 Feasibility Study – SITE ANALYSIS



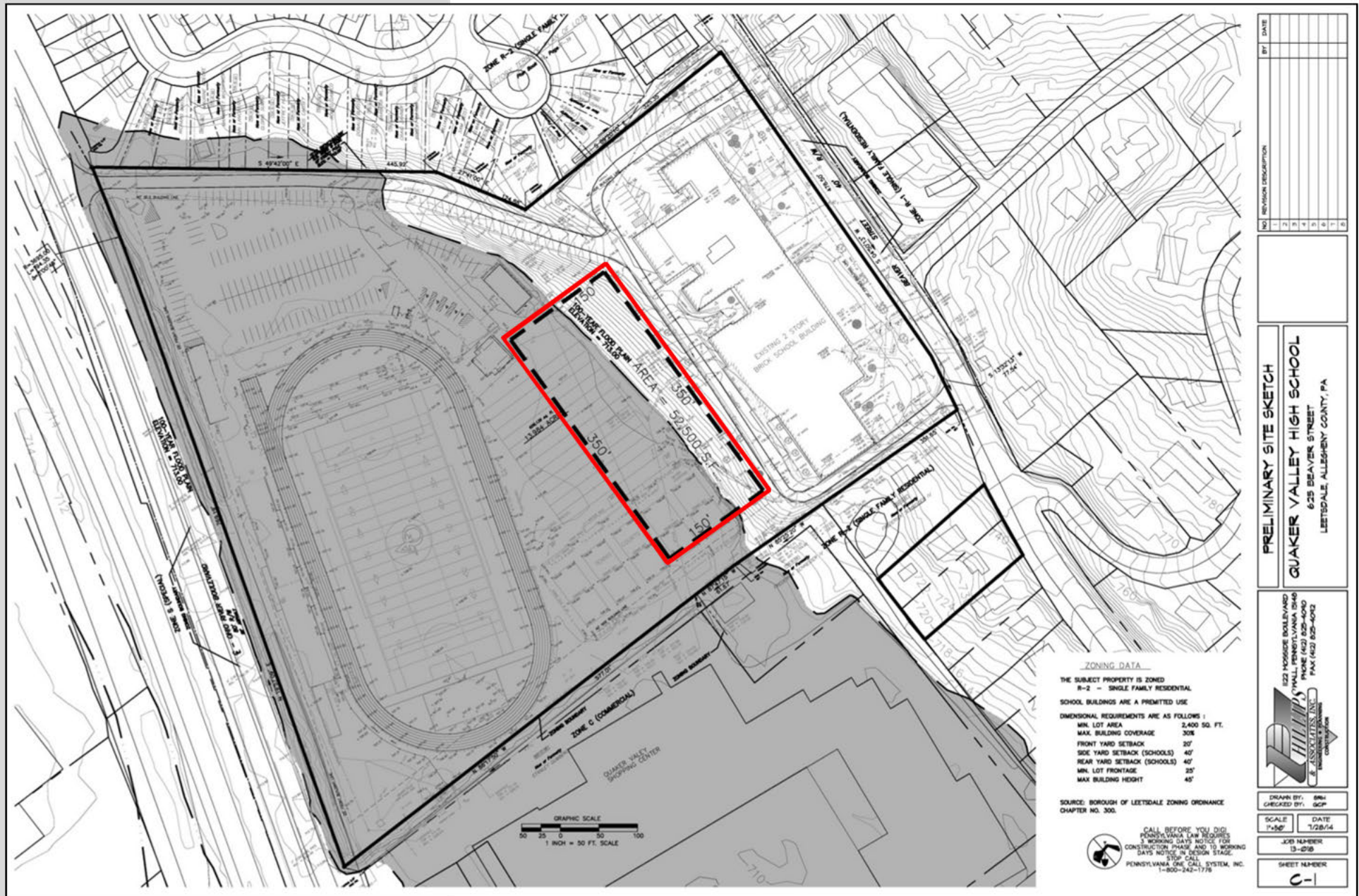


# PROGRAM AREA OVERLAY – 5 TO 6 STORY BUILDING

Prepared by Phillips & Associates, Inc.

## QUAKER VALLEY HIGH SCHOOL

### 2014 Feasibility Study – SITE ANALYSIS



## Options Considered

### HIGH SCHOOL OPTIONS \*

- IA** Deferred maintenance and capital improvement upgrades
- IB** Comprehensive alterations and additions (as required to accommodate program)
- IC** Partial demolition with comprehensive alterations and additions  
**(Scenario 5)**
- ID** New high school building on the existing site  
**(Scenario 3 & 4)**
- IE** New high school building on the existing campus – relocate Stadium  
**(Scenario 1 & 2)**
- IF** New high school building on a new site

- \* As part of any comprehensive High School project (Options IB thru IF), the District would like to relocate the District Administrative Offices to (or adjacent to) the High School.

**NOTE:** Numerous potential site development scenarios for the existing High School Campus reflecting the above Options IC, ID, and IE have been studied and are attached (Exhibit F). The corresponding Scenarios are referenced above in **red**.



## **OPTION 1A – High School**

### **Deferred Maintenance and Capitol Improvement Upgrades**

	<b><u>SUMMARY</u></b>	<b><u>COSTS</u></b>	
		<b><u>Low</u></b>	<b><u>High</u></b>
<b>ARCHITECTURAL UPGRADES</b>	<ul style="list-style-type: none"><li>•Kitchen &amp; Servery upgrades &amp; equipment replacement</li><li>•Roof Replacement</li><li>•Replace fire escape</li><li>•Exterior door and hardware replacement</li><li>•Stage Upgrades</li><li>•Site Improvements to include 'governors drive', additional visitor parking, &amp; existing parking lot repairs</li></ul>	\$2,060,000	\$3,000,000
<b>HVAC UPGRADES</b>	<ul style="list-style-type: none"><li>•Building-wide air conditioning</li><li>•Replace terminal equipment</li><li>•Replace boilers</li><li>•Replace air handling equipment</li><li>•New DDC controls</li><li>•New Chiller</li><li>•New HVAC system to serve Kitchen</li></ul>	\$2,350,000	\$4,120,000
<b>PLUMBING UPGRADES</b>	<ul style="list-style-type: none"><li>•New Plumbing to accommodate Kitchen upgrades</li><li>•Upgrade to low-flow fixtures</li><li>•Replace hot water boilers</li><li>•Install kitchen grease interceptor</li></ul>	\$470,000	\$830,000
<b>ELECTRICAL UPGRADES</b>	<ul style="list-style-type: none"><li>•New Electrical to accommodate HVAC upgrades</li><li>•New Electrical to accommodate Kitchen upgrades</li><li>•Site lighting at new 'governors drive' &amp; parking</li><li>•Technology Upgrades</li><li>•Security Upgrades</li></ul>	\$1,200,000	\$1,450,000
<b>CONSTRUCTION COST</b>		<b>\$6,170,000</b>	<b>\$9,900,000</b>
<b>PROJECT COST*</b>		<b>\$7,404,000</b>	<b>\$11,880,000</b>

\* Project Costs include 20% soft costs.

### **SUMMARY**

The scope of work in this option is viewed as the work that would be necessary to perform if the District were to maintain the status quo for more than the next five to eight years.

### **CHALLENGES**

This option does not include any improvements to accommodate current or future programmatic needs. Educational, administrative and community needs have changed over the years and are anticipated to change in the future and this option does not accommodate those needs or anticipate the changing trends in education.

Due to the age of the building and the nature of the previous renovations, other significant capital improvement needs could exist but be unknown at this time. It is generally recognized that the previous renovation projects did not address the building comprehensively, concealed conditions may exist that could become evident with time or construction activity.



## **OPTION 1B – High School / DAO**

### **Comprehensive Alterations & Additions**

	<b><u>SUMMARY</u></b>	<b><u>COSTS</u></b>	
		<b><u>Low</u></b>	<b><u>High</u></b>
<b>PROJECTED ENROLLMENT</b> (Stewman – 2018)	<b>705</b>		
<b>PDE CAPACITY</b> (FTE's HS/DAO))	<b>1376 / 22</b>		
<b>EXISTING BUILDING RENOVATIONS</b>	<b>126,560 SF**</b>	\$19,616,800*	\$20,882,400*
<b>HS NEW CONSTRUCTION</b>	<b>83,440 SF**</b>	\$18,356,800*	\$21,694,400*
<b>DAO NEW CONSTRUCTION</b>	<b>12,000 SF**</b>	\$2,640,000*	\$3,120,000*
<b>SITE DEVELOPMENT</b>	<b>13.98 Acres</b> (allowance****)	\$2,500,000*	\$3,500,000*
<b>CONSTRUCTION COST</b>		<b>\$43,113,600</b>	<b>\$49,196,800</b>
<b>PROJECT COST***</b>		<b>\$53,892,000</b>	<b>\$61,496,000</b>

\* Construction Costs are based on \$155/sf to \$165/sf for Renovations and \$220/sf to \$260/sf for New Construction. Unit costs are influenced by the complicated nature of the project and site; unknown existing conditions, previous renovations & additions, site logistics & phasing, tight site constraints, water proofing, retaining walls, special foundations, etc.

\*\* Proposed Area (including both Existing & New) is based on the Proposed Program Table in Exhibit E (HS 210,000 sf/ DAO 12,000 sf)

\*\*\* Project Costs include 25% soft costs

\*\*\*\* The site cost allowance assumes the site development is limited to the area immediately adjacent to the building and that the McNamara Park facilities would be preserved.

### **SUMMARY**

This option contemplates comprehensive alterations to the existing building and additions to accommodate program needs. In addition to physical plant updates and general modernization, it is recommended that the internal organization of the existing building be reconfigured to more effectively meet the program needs. Numerous educational spaces are currently undersized, internal walls should be moved to provide appropriately sized classrooms and support spaces. The interior environment should be outfitted to support the various educational programs. The comprehensive alterations will address the identified deficiencies within the existing facility and will include upgrades and modernizations that will bring the building up to current codes.

### Considerations:

- The District has identified programmatic deficiencies in the Food Service, Arts, Family & Consumer Science, Tech-Ed, and Athletics departments and Administration and it is assumed that additions will include facilities to enhance these program areas.
- The Existing Gymnasium is undersized and an addition would be necessary to enlarge it to the desired size.
- The existing Auditorium, stage, and support spaces are undersized and do not provide the appropriate amount of flexibility for a multi-use assembly space. An addition would be necessary to provide a large group assembly venue to meet both performance and educational needs.
- The usability/efficiency of the existing building is compromised by the organization of the original construction and previous improvement projects. The efficiency of the building may not be dramatically enhanced after renovations due to the existing building limitations.
- The District may consider eliminating the District Administration Offices from the project in order to reduce site congestion; in this scenario the DAO would remain in its current location.
- While the existing site utilization separates Bus and Parent drop-off zones, the circulation paths cross and are not adequately sized to accommodate the traffic. The parent drop-off occurs on a heavily trafficked main municipal street leading to congestion and unsafe conditions. Site modifications should address the traffic issues by providing an on-site parent drop-off, a more appropriate bus route and drop-off/pick-up area, and additional visitor and staff parking.

### **CHALLENGES**

This option assumes that the entire existing building will be renovated & reused in the additions and alterations project. It would be fair to speculate that when the schematic design is developed that the proposed program may not pair up exactly to the existing facility and at that time it may be considered that portions of the existing building be demolished and replaced with new construction. The extent to which that may be found to be desirable or necessary cannot be determined at this time.

The district should consider vacating the existing building during construction. While it might be possible to renovate and build new additions in phases while keeping the building occupied, it may not be a practical solution at this site. The site is already very congested and the buildable area of the site is limited by the adjacent residential properties, the city street, and the large slope that separates the High School from the McNamara Park facilities below. Occupying the building during construction may prove to limit the design options, lengthen the construction timeline, add to the construction costs and further congest the existing site.

The Department of Education's recommendation for this High School based on full-time equivalents (FTE's) is 49 acres, the existing site area is approximately 35 acres below the recommended acreage, and a portion of the existing site exceeds a 20% slope.



## **OPTION 1C – High School / DAO**

### **Partial Demolition and Comprehensive Alterations & Additions (See Exhibit F - Scenario 5)**

	<b><u>SUMMARY</u></b>	<b><u>COSTS</u></b>	
		<b><u>Low</u></b>	<b><u>High</u></b>
<b>PROJECTED ENROLLMENT</b> (Stewman 2018))	<b>705</b>		
<b>PDE CAPACITY</b> (FTE HS/DAO)	<b>1376 / 22</b>		
<b>EXISTING BUILDING RENOVATIONS</b>	<b>69,000 SF**</b>	\$10,695,000*	\$11,385,000*
<b>HS NEW CONSTRUCTION</b>	<b>141,000 SF**</b>	\$31,020,000*	\$36,660,000*
<b>DAO NEW CONSTRUCTION</b>	<b>12,000 SF**</b>	\$2,640,000	\$3,120,000
<b>PARTIAL DEMOLITION</b>	<b>(allowance)</b>	\$500,000	\$1,000,000
<b>SITE DEVELOPMENT</b>	<b>13.98 Acres (allowance****)</b>	\$2,500,000*	\$3,500,000*
<b>CONSTRUCTION COST</b>		<b>\$47,355,000</b>	<b>\$55,665,000</b>
<b>PROJECT COST***</b>		<b>\$59,193,750</b>	<b>\$69,581,250</b>

\* Construction Costs are based on \$155/sf to \$165/sf for Renovations and \$220/sf to \$260/sf for New Construction. Unit costs are influenced by the complicated nature of the project and site; unknown existing conditions, previous renovations & additions, site logistics & phasing, tight site constraints, water proofing, retaining walls, special foundations, etc.

\*\* Proposed Area (including both Existing & New) is based on the Proposed Program Table in Exhibit D (HS 210,000 sf/ DAO 12,000 sf)

\*\*\* Project Costs include 25% soft costs

\*\*\*\* The site cost allowance assumes the site development is limited to the area immediately adjacent to the building and that the McNamara Park facilities would be preserved.

### **SUMMARY**

This option contemplates the partial demolition of the existing building, those areas that offer limitations to their re-use, alterations to the remaining portion of the building, and construction of sizable additions. The demolition of the existing building provides additional opportunities for development of the site. The organization of the building design should be greatly improved; however it is assumed that the building would need to be multiple floors (possible 4 to 5) in order to accommodate the building on this site.

### **Considerations:**

- It would be recommended that the new portion of the building include the large venue spaces like the gym, auditorium and cafeteria, the highly specialized instructional and support spaces such as tech-ed, science, art, and music, and the existing building be utilized to accommodate general instruction.
- The District may consider eliminating the District Administration Offices from the project in order to reduce site congestion; in this scenario the DAO would remain in its current location.
- With a large portion of new building on this site, there may be an opportunity to develop parking under the building footprint.
- It is advisable that if a project is to be considered on the existing site, the District look into acquisition of adjacent property.
- While the existing site utilization separates Bus and Parent drop-off zones, the circulation paths cross and are not adequately sized to accommodate the traffic. The parent drop-off occurs on a heavily trafficked main municipal street leading to congestion and unsafe conditions. Site modifications should address the traffic issues by providing an on-site parent drop-off, a more appropriate bus route and drop-off/pick-up area, and additional visitor and staff parking.

## CHALLENGES

The district should consider vacating the existing building during construction. While it might be possible to renovate, demolish portions of the existing building and build new additions in phases while keeping the building occupied, it may not be a practical solution at this site. The site is already very congested and the buildable area of the site is limited by the adjacent residential properties, the city street, and the large slope that separates the High School from McNamara Park. Occupying the building during construction may prove to limit the design options, lengthen the construction timeline, add to the construction costs and further congest the existing site.

The Department of Education's recommendation for this High School based on full-time equivalents (FTE's) is 49 acres; the existing site area is approximately 35 acres below the recommended acreage.



## **OPTION 1D – High School / DAO**

### **New Building on Existing Site**

**(See Exhibit F – Scenarios 3 & 4)**

	<b><u>SUMMARY</u></b>	<b><u>COSTS</u></b>	
		<b><u>Low</u></b>	<b><u>High</u></b>
<b>PROJECTED ENROLLMENT</b> (Stewman 2018)	<b>705</b>		
<b>PDE CAPACITY</b> (FTE HS/DAO)	<b>1376 / 22</b>		
<b>EXISTING BUILDING RENOVATIONS</b>	<b>n/a</b>		
<b>HS NEW CONSTRUCTION</b>	<b>210,000 SF**</b>	\$46,200,000*	\$54,600,000*
<b>DAO NEW CONSTRUCTION</b>	<b>12,000 SF**</b>	\$2,640,000	\$3,120,000
<b>BUILDING DEMOLITION</b>	(allowance)	\$800,000	\$1,500,000
<b>SITE DEVELOPMENT</b>	<b>13.98 Acres</b> (allowance****)	\$3,500,000*	\$4,500,000*
<b>CONSTRUCTION COST</b>		<b>\$53,140,000</b>	<b>\$63,720,000</b>
<b>PROJECT COST***</b>		<b>\$66,425,000</b>	<b>\$79,650,000</b>

\* Construction Costs are based on \$220/sf to \$260/sf for New Construction. Unit costs are influenced by the complicated nature of the project and site; site logistics & phasing, tight site constraints, water proofing, retaining walls, special foundations, etc.

\*\* Proposed Area is based on the Proposed Program Table in Exhibit D

\*\*\* Project Costs include 25% soft costs

\*\*\*\* The site cost allowance assumes that the existing site would be utilized in its current configuration, with the new building occupying roughly the same area of the site as the existing building and that the McNamara Park facilities would be preserved.

### **SUMMARY**

This option contemplates the construction of a new building with associated site development to support the High School /DAO on the existing site. The demolition of the existing building provides additional opportunities for development of the site. The organization of the building design should be greatly improved; however it is assumed that the building would need to be multiple floors (possible 4 to 5) in order to accommodate the building on this site.

#### **Considerations:**

- The District may consider eliminating the District Administration Offices from the project in order to reduce site congestion; the DAO would remain in its current location.

- With a new building on this site, there may be an opportunity to develop parking under the building footprint.
- It is advisable that if a project is to be considered on the existing site, the District look into acquisition of adjacent property.
- While the existing site utilization separates Bus and Parent drop-off zones, the circulation paths cross and are not adequately sized to accommodate the traffic. The parent drop-off occurs on a heavily trafficked main municipal street leading to congestion and unsafe conditions. Site modifications should address the traffic issues by providing an on-site parent drop-off, a more appropriate bus route and drop-off/pick-up area, and additional visitor and staff parking.

## **CHALLENGES**

The district should consider vacating the existing building during construction. While it might be possible to renovate and build a new building & demolish the existing building in phases while keeping the building occupied, it may not be a practical solution at this site. The site is already very congested and the buildable area of the site is limited by the adjacent residential properties, the city street, and the large slope that separates the High School from McNamara Park. Occupying the building during construction may prove to limit the design options, lengthen the construction timeline, add to the construction costs and further congest the existing site.

While the organization of the building should be greatly improved over the existing, the site will still be constrained by the property limits, municipal streets, and the steep slope that separates the High School from McNamara Park. These site limitations will limit the availability to fully differentiate bus, parent and student circulation.

The Department of Education's recommendation for this High School based on full-time equivalents (FTE's) is 49 acres; the existing site area is approximately 35 acres below the recommended acreage.



## **OPTION 1E – High School / DAO**

### **New Building on Existing Campus – Relocate McNamara Park Facilities** **(See Exhibit F – Scenarios 1 & 2)**

	<b><u>SUMMARY</u></b>	<b><u>COSTS</u></b>	
		<b><u>Low</u></b>	<b><u>High</u></b>
<b>PROJECTED ENROLLMENT</b> (Stewman 2018)	<b>705</b>		
<b>PDE CAPACITY</b> (FTE HS/DAO)	<b>1376 / 22</b>		
<b>EXISTING BUILDING RENOVATIONS</b>	<b>n/a</b>		
<b>HS NEW CONSTRUCTION</b>	<b>210,000 SF**</b>	<b>\$46,200,000*</b>	<b>\$54,600,000*</b>
<b>DAO NEW CONSTRUCTION</b>	<b>12,000 SF**</b>	<b>\$2,640,000</b>	<b>\$3,120,000</b>
<b>BUILDING/ STADIUM DEMOLITION</b>	<b>(allowance)</b>	<b>\$1,500,000</b>	<b>\$2,000,000</b>
<b>SITE DEVELOPMENT</b>	<b>13.98 Acres</b> (allowance)	<b>\$5,000,000*</b>	<b>\$8,000,000*</b>
<b>RELOCATE MCNAMARA PARK</b>	<b>(allowance****)</b>	<b>\$3,500,000</b>	<b>\$4,500,000</b>
<b>CONSTRUCTION COST</b>		<b>\$58,840,000</b>	<b>\$72,220,000</b>
<b>PROJECT COST***</b>		<b>\$73,550,000</b>	<b>\$90,275,000</b>

\* Construction Costs are based on \$220/sf to \$260/sf for New Construction. Unit costs are influenced by the complicated nature of the project and site; site logistics & phasing, tight site constraints, water proofing, retaining walls, special foundations, etc.

\*\* Proposed Area is based on the Proposed Program Table in Exhibit D

\*\*\* Project Costs include 25% soft costs

\*\*\*\* The nature of the stadium relocation site is yet unknown, allowance assumes that the site is relatively flat and that basic utilities would be available in close proximity to the proposed stadium locations

Note: Site Acquisition Costs (if applicable) are not included.

### **SUMMARY**

This option contemplates the construction of a new building with associated site development to support the High School /DAO on the existing campus. The relocation of the existing stadium and demolition of the existing high school building provide additional opportunities for development of the site. The organization of the building design should be greatly improved; however it is assumed that the building would need to be multiple floors (possible 2 to 3) in order to accommodate the building on this site.

### Considerations:

- The District may consider eliminating the District Administration Offices from the project in order to reduce site congestion; the DAO would remain in its current location.
- With a new building on this site, there may be an opportunity to develop parking under the building footprint.
- It is advisable that if a project is to be considered on the existing site, the District look into acquisition of adjacent property.
- While the existing site utilization separates Bus and Parent drop-off zones, the circulation paths cross and are not adequately sized to accommodate the traffic. The parent drop-off occurs on a heavily trafficked main municipal street leading to congestion and unsafe conditions. Site modifications should address the traffic issues by providing an on-site parent drop-off, a more appropriate bus route and drop-off/pick-up area, and additional visitor and staff parking.

### **CHALLENGES**

The district may consider vacating the existing building during construction. While it might be possible to build a new building & demolish the existing building in phases while keeping the building occupied, it may not be a practical solution at this site. The site is already very congested and the buildable area of the site is limited by the adjacent residential properties, the city street, and the large slope that separates the High School from McNamara Park. Occupying the building during construction may prove to limit the design options, lengthen the construction timeline, add to the construction costs and further congest the existing site.

While the organization of the building should be greatly improved over the existing, the site will still be constrained by the property limits, municipal streets, and the steep slope that separates the High School from McNamara Park. These site limitations may limit the availability to fully differentiate bus, parent and student circulation.

The lower portion of the campus site is in the designated floodplain of the Ohio River, development of the lower site will be subject to additional approvals and may become impractical.

The Department of Education's recommendation for this High School based on full-time equivalents (FTE's) is 49 acres; the existing site area is approximately 35 acres below the recommended acreage.



## **OPTION IF – High School / DAO**

### **New Building on New Site**

	<b><u>SUMMARY</u></b>	<b><u>COSTS</u></b>	
		<b><u>Low</u></b>	<b><u>High</u></b>
<b>PROJECTED ENROLLMENT</b> (Stewman 2018))	<b>705</b>		
<b>PDE CAPACITY</b> (FTE HS/DAO))	<b>1376 / 22</b>		
<b>EXISTING BUILDING RENOVATIONS</b>	<b>n/a</b>		
<b>HS NEW CONSTRUCTION</b>	<b>210,000SF**</b>	<b>\$46,200,000*</b>	<b>\$54,600,000*</b>
<b>DAO NEW CONSTRUCTION</b>	<b>12,000 SF</b>	<b>\$2,640,000</b>	<b>\$3,120,000</b>
<b>SITE DEVELOPMENT</b>	<b>(allowance****)</b>	<b>\$8,000,000*</b>	<b>\$12,000,000*</b>
<b>CONSTRUCTION COST</b>		<b>\$56,840,000</b>	<b>\$69,720,000</b>
<b>PROJECT COST***</b>		<b>\$71,050,000</b>	<b>\$87,150,000</b>

\* Construction Costs are based on \$220/sf to \$260/sf for New Construction plus site development

\*\* Proposed Area is based on the Proposed Program Table in Exhibit E (HS 210,000 sf/DAO 12,000 sf)

\*\*\* Project Costs include 25% soft costs

\*\*\*\* The nature of a new site is yet unknown, allowance assumes that the site is relatively flat and that basic utilities would be available in close proximity to the proposed building location

Note: Site Acquisition Costs are not included;

PDE's recommended acreage = 49 acres,; For a HS it is 35 acres + 1 acre for every 100 FTE's

### **SUMMARY**

This option contemplates the construction of a new building with associated site development to support the High School/DAO on a new site within the District. The design options available for a new building on a new site should be extensive and be able to be driven by the program needs for the building without the constraints of the existing building and site.

### **Considerations:**

- The District would need to acquire land (costs outside this analysis); a site with a useable area of approximately 49 acres is recommended by PDE.
- The District may consider incorporating transportation and maintenance facilities into the project.
- This option assumes that the stadium facilities at McNamara Park will remain at the existing High School site & will not be relocated as part of this project. Additional opportunities for athletic facilities on the new site would be considered as part of the project.

- The new building should be designed to accommodate community and evening events within secured public areas.
- The new site should be organized to provide separate Bus and Parent circulation during arrival & dismissal, adequate staff and visitor parking, and outdoor recreational facilities for use of the school and community.
- The existing school can be utilized during construction of a new facility without any on-site construction activity.
- The final utilization of the existing HS building and site still to be determined; considerations include repurpose, divest, & demolish.

## **CHALLENGES**

The availability of property within the district is an unknown and while the state does reimburse for property acquisition, the costs associated with site acquisition and development of the property could be high. These costs for acquisition, regulatory approvals & site development beyond the typical earthmoving to receive the building are not factored into the above costs.