To: Board of School Directors

From: Robert O’Donnell, Ed Poprik and Randy Brown

RE: Memorial Field Project Update

Date: March 18, 2019

The bids for the Memorial Field Project were opened on Feb. 22, 2019. A summary of the bid results are attached. The bid package was prepared with the following facts in mind:

- The base bid includes the short construction period and the completion of the classroom alternate.
- The alternate schedule (long construction period) adds cost to the project.
- Rejecting the classroom alternate would leave the classroom unfinished and deduct costs from the project.

The details contained in this document were discussed on Thursday, March 14, with the Board’s Facility and Grounds and Finance committees. On Monday evening, our intent is to discuss the below recommendation, as well as your options within that recommendation.

**Recommendation**

We recommend the base bid be accepted for the project. Our rationale for this recommendation includes:

- The alternate schedule adds cost to the project in a similar range as the costs of hosting events at an alternate location. The cost and details related to alternate locations are included below.
The costs deducted from the project by leaving the classroom unfinished do not result in significant savings at this time. In addition, the future costs of finishing the space are expected to exceed the current reduction. Finally, the completion of the classroom space provides for onsite visiting team locker room space, which is a primary goal of the project.

Cost reductions identified through the value engineering/cost reduction analysis will be processed as a change order deduct during the completion of the project.

Cost Reduction Analysis

The following is a recap of potential value engineering/cost reduction opportunities suggested during the bid evaluation phase of the project. At this stage, the figures should be viewed as estimates. If the Board has interest in any of the items, further refined estimates will be determined. Items 4 and 6 are primarily engineering issues and will not require Board input at this time.

1. Eliminate South Side Pedestrian Walkway Complete
The removal of this walkway would eliminate interior access from the west to the east stands, and vice versa. An accommodation for events of larger attendance would require a conversation with the State College Borough regarding the use of the sidewalk along Nittany Avenue.

2. Eliminate South Landscaping and Jacobs Ladder
The item is designed to prevent balls from getting stuck under the elevated walkway in item 1. Additionally, it improves the appearance of the south end zone. An alternate method of deflecting balls and other equipment from under this location would be required.

3. Delete Precast Ramp / East Stair and Add East Ramp
The contractor suggested looking at a more cost-effective ADA entrance to the stadium plaza than the steps and switchback ramp. The alternate includes ADA accessibility, which is currently in the design.

Total estimated savings for these 3 items combined: $415,000

Note: Eliminate Only South Landscaping & Jacobs Ladder: $44,000
Items 1 and 3 are co-dependent, therefore would be completed together or would require redesign of both items.
4. Demo Portions of Existing Foundation to Allow Machine Demo
The contractor inquired about the possibility of removing portions of the foundation wall of the
Nittany Avenue Building to facilitate building demolition at a reduced cost.

*Estimate for this item is still uncertain and depends on replacement cost of the removed
foundation wall.*

5. Delete Northeast Ticket/Concession Stand Complete
Being a stand-alone structure, this was identified as a potential cost-saving measure.

*Estimated savings for this item: $70,000*

6. Delete Engineered Fill at North Ramp
The contractor suggested a change in construction materials to a less costly alternative at the
south end of the stadium where the ramp and adjoining support walls are. The design team is
evaluating the idea.

*Estimated savings for this item: $45,000*

*Further engineering analysis required.

**Recommendation on Cost Reduction Items:** Items 1, 2, 3, and 5 remove scope from the project
and require Board direction. The total savings generated by these items is estimated at $485,000.
Balancing the functionality of these items against the estimated savings and potential redesign
costs, administration is recommending that these items not be pursued further.

**Discussion Of Calendar Options**

The bid includes cost information for two calendar options. Should the Board approve the base
bid, we will identify the timetable for determining options 1 or 3.

The calendar options are:

1) The base bid would start construction in April 2019, and continue work with the field closed
until project completion in August of 2020.
2) The alternate bid would start construction in April, stop construction for the fall 2019 sports season, begin construction again in the winter with another stop for the fall 2020 sports season, and finally completing in the summer of 2021.

3) In collaboration with the construction management team, we have developed a hybrid option, which would include access to Memorial Field for varsity football games (and potentially other fall sports) during the month of October 2019. This would include several league games, including the homecoming and senior night games. These events have traditionally seen higher attendance. This option would require additional construction and phasing costs. Implementing this option may delay access to Memorial Field in September of 2020; that is, the proposed option could shift the construction calendar by one month to October 1, 2020. However, this would mean both fall seasons could access the stadium during the month of October.

Below is a breakout of potential accommodations required for teams to use Memorial Field during October 2019, along with preliminary estimates. (See attached site plan for description.)

Work to be done by the general contractor:
- Pull up and reinstall field protection; along with extended rental period for equipment.
- Provisions for disruption to construction of northern retaining wall.
- Miscellaneous concrete repairs at north parklet sidewalk to reopen for games.
- Temporary fence panels to be installed along north end zone at field level.
- Safety precautions to convert temporary construction ramp to public access.
- Install temporary wooden stairs to field level.
- Cleanup and remobilization at southeast plaza to remain.

Total work by the general contractor: $115,000 to $140,000

Other temporary provisions include:
- Temporary public address system
- Temporary power to field lights
- Temporary pressbox
- Miscellaneous items

Cost for other temporary items: $15,000 to $25,000

Total temporary work estimate: $130,000 to $165,000

Not included in this cost is the purchase of towable bleachers, which would also be used in the north field scenario B. The bleachers could be used around the district for a variety of events.
Discussion Of Risk As Related To Calendar Options

Risk is inherent with any construction project. Below is a review of some selected risk factors that would be impacted by the calendar (schedule) selected. The risk for unforeseen conditions related to site, soils, and rock would remain relatively equal across all calendar options.

1) Base bid (short schedule)
   Relatively speaking, this schedule may have the least amount of risk. The driving factor behind this statement is due to the fact that there is a single completion date with continuous construction. This opinion is shared by the construction management team and the general contractor (the low bidder).

2) Alternate bid (long schedule)
   This schedule introduces additional risk due to multiple completion dates. According to bids, the contractor would be required to deliver substantial completion and occupancy on three separate occasions: fall of 2019, fall of 2020, and summer of 2021. At each of these occurrences, there is a risk that the project could be delayed.

   Additional risk is added by removing the months of September, October, and November from the available work calendar. This occurs twice, both in 2019 and 2020. These months are typically favorable months for construction work. This project is predominantly an “outdoor” project with a high dependency on weather. The calendar for this option is 23 months long in total; however, with the aforementioned six months removed, there are actually only 17 months allotted for project work. When comparing the 16 months of work on the base bid to the 17 months of work in alternate bid, the months of “favorable construction weather” are much greater in the base bid. Finally, limited project work time will be lost in August and December of the alternate bid for the contractor to prep the field for fall sports and then to remobilize when fall sports are complete.

3) Hybrid schedule (short schedule with home games in October 2019)
   This schedule includes two completion dates, as compared to one in the base schedule and three in the alternate schedule. As mentioned earlier, each completion date adds risk into the project. The completion dates for this option would be October 2019 and August 2020. Because this option includes an aggressive construction effort from the start, the calendar for this option includes less risk than the long schedule.
Potential Options For Hosting Games During Construction

Both the short and long construction schedules include closing Memorial Field for at least one spring sport season. During construction, spring sports would be relocated to the North or South Track Fields. The long construction schedule allows for playing fall sports on the Memorial Field, while the short schedule requires relocation.

Current discussions regarding fall sports during the construction schedule revolve around the options below:

1. Play all home varsity football games at an alternate location in the district (North Field). Other teams would utilize the South Track stadium or North Field.

2. Play September home varsity football games at an alternate location in the district. During September, other teams would utilize the South Track stadium or North Field. Play October home games at Memorial Field.

The current work is now focused on developing details for the North Field option, as well as the new hybrid schedule, which would include use of Memorial Field during October 2019.

The North Field option would require enhancements to increase seating. Increased seating capacity for 1,000 additional spectators would cost an estimated additional $350,000. This would create a total of 1,500 seats. Because the temporary bleachers would sit on the field level, this would result in some lower seats offering obstructed views. (See below for the difference between North Field Scenario A and Scenario B.)

Review Of Potential North Field Improvements

As part of the decision-making process for the Memorial Field bids, several scenarios have been developed regarding improvements to the new North Field athletic facility. These scenarios would add items to the North Field so that competition sporting events could be held at this location.

Scenario A:
500 spectator seats
Scoreboard
Removable football goal posts
Press box (size to be determined)
Cost estimate: $200,000 to $250,000
• Note: Scenario A would also provide access to the North Field for competitive events for soccer, lacrosse, field hockey, and middle school, ninth grade and junior varsity football.

**Scenario B:**
1,500 towable spectator seats
Retaining wall and grading site work
Scoreboard
Removable football goal posts
Press box (8’ by 18’)
Cost estimate: $550,000 to $575,000

Using the North Field for competition events is not only necessary during periods when Memorial Field would be closed for construction, but also after the completion of the proposed construction. Generally, 500 seats would accommodate spectators attending events planned for that field. The larger quantity of 1,500 seats would be required for the field to be an alternate site for varsity football in the event Memorial Field is closed. In the Scenario B option, the additional 1,000 seats would be portable, providing the ability to move them to other locations as needed or desired.

The grand total of Memorial Field construction costs and North Field Scenario A or B is attached.

The estimated cost difference between the two scenarios for North Field costs due to the construction schedule is currently $325,000. Further analysis will refine our understanding of the estimated costs of the viable options.

### Impact on Students

<table>
<thead>
<tr>
<th>No. of Participants</th>
<th>Fall Sports</th>
<th>Spring Sports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memorial Field Only</td>
<td>358</td>
<td>94</td>
</tr>
<tr>
<td>South Track Only</td>
<td>0</td>
<td>341</td>
</tr>
<tr>
<td>Both Sites</td>
<td>358</td>
<td>435</td>
</tr>
</tbody>
</table>

• Impact on South Track only if lights are not installed. Without lights, a second daily event is not possible at the South Track. The second daily event allows additional events to occur during the Memorial Field Project’s construction timetable.
Another option involves renting stadium seating for a season, at an estimated cost of $58 per seat, $52,200 for 900 and $69,600 for 1,200 seats.

Towable seats purchased at banks of 300 are estimated to cost $51,200 for 300, $153,600 for 900 and $204,800 for 1,200 seats.

In addition to the construction costs, which are outlined in the bid summary, various soft costs will be required to complete the project. Based on the bids received, soft costs have been preliminarily estimated as follows. They provide total project costs when added to construction costs.

**Estimated Soft Costs:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testing and Fees</td>
<td>$1,011,119</td>
</tr>
<tr>
<td>Permit</td>
<td>122,456</td>
</tr>
<tr>
<td>FF&amp;E</td>
<td>500,000</td>
</tr>
<tr>
<td>Financing</td>
<td>200,000</td>
</tr>
<tr>
<td>Change order contingency</td>
<td>612,280</td>
</tr>
<tr>
<td>Asbestos</td>
<td>60,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$2,505,855</strong></td>
</tr>
</tbody>
</table>

**Project Financing**

From our financial advisors the administration has requested financing scenarios, including but not necessarily limited to: timing of issuance, bank loan versus bond financing, and use of capital reserve fund balance. Compilation and analysis of this information will be completed for the March 20 work session.

**Capital Campaign**

To date, we have received $600,000 in commitments for naming opportunities. While we are continuing to pursue major gifts at this time, we will be announcing the formal capital campaign details in the near future.
## Bid Scenarios

### Bid Scenario 1 - Base Bid Only

**Short schedule**

**Classroom is finished**

<table>
<thead>
<tr>
<th>Bid Package</th>
<th>Company</th>
<th>Base Bid</th>
<th>Schedule Alternate</th>
<th>Classroom Alternate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>LS Fiore</td>
<td>$9,284,000</td>
<td>Not Accepted</td>
<td>Not Accepted</td>
<td>$9,284,000</td>
</tr>
<tr>
<td>Plumbing / FP</td>
<td>Silvertip</td>
<td>$896,000</td>
<td>Not Accepted</td>
<td>Not Accepted</td>
<td>$896,000</td>
</tr>
<tr>
<td>HVAC</td>
<td>Silvertip</td>
<td>$579,600</td>
<td>Not Accepted</td>
<td>Not Accepted</td>
<td>$579,600</td>
</tr>
<tr>
<td>Electric</td>
<td>Bob Biter</td>
<td>$897,300</td>
<td>Not Accepted</td>
<td>Not Accepted</td>
<td>$897,300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>$11,656,900</td>
<td>-</td>
<td>-</td>
<td>$11,656,900</td>
</tr>
</tbody>
</table>

### Bid Scenario 2 - Base Bid w/ schedule alternate

**Long Schedule**

**Classroom is finished**

<table>
<thead>
<tr>
<th>Bid Package</th>
<th>Company</th>
<th>Base Bid</th>
<th>Schedule Alternate</th>
<th>Classroom Alternate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>LS Fiore</td>
<td>$9,284,000</td>
<td>$440,000</td>
<td>Not Accepted</td>
<td>$9,724,000</td>
</tr>
<tr>
<td>Plumbing / FP</td>
<td>Silvertip</td>
<td>$896,000</td>
<td>$89,000</td>
<td>Not Accepted</td>
<td>$985,000</td>
</tr>
<tr>
<td>HVAC</td>
<td>Silvertip</td>
<td>$579,600</td>
<td>$58,000</td>
<td>Not Accepted</td>
<td>$637,600</td>
</tr>
<tr>
<td>Electric</td>
<td>Westmoreland</td>
<td>$899,000</td>
<td>-</td>
<td>Not Accepted</td>
<td>$899,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>$11,658,600</td>
<td>$587,000</td>
<td>-</td>
<td>$12,245,600</td>
</tr>
</tbody>
</table>

**Alternate Home Game Costs**

- $350,000

**Total**

- $12,595,600
## State College Area School District

### Memorial Field Construction plus North Field

<table>
<thead>
<tr>
<th>Construction Alternatives</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base Bid</strong></td>
<td>$11,656,900</td>
<td>$11,656,900</td>
<td></td>
</tr>
<tr>
<td><strong>Alternate Schedule</strong></td>
<td></td>
<td></td>
<td>$12,495,600</td>
</tr>
<tr>
<td>October temporary work @ Memorial Field</td>
<td>165,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional seats @ Memorial Field</td>
<td>100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario B @ North Field - 1000 seats adt'l costs</td>
<td></td>
<td>350,000</td>
<td></td>
</tr>
<tr>
<td><strong>Soft Cost (estimate)</strong></td>
<td>$2,505,585</td>
<td>$2,505,585</td>
<td>$2,505,585</td>
</tr>
<tr>
<td><strong>Memorial Field Project Costs</strong></td>
<td>$14,427,485</td>
<td>$14,512,485</td>
<td>$15,001,185</td>
</tr>
<tr>
<td><strong>Total Project</strong></td>
<td>$14,427,485</td>
<td>$14,512,485</td>
<td>$15,001,185</td>
</tr>
<tr>
<td><strong>Total Project w/out soft costs</strong></td>
<td>$11,921,900</td>
<td>$12,006,900</td>
<td>$12,495,600</td>
</tr>
</tbody>
</table>
**SCASD - Memorial Field**

**Hybrid Schedule Logistics 2019.03.12**
- Assumes SCASD field usage 10/4/19 through 10/26/19
- Assumes construction will progress on locker room structure during the day.
- Assumes red areas are off limits during SCASD usage of Memorial Field.
- Assumes there are costs associated with yellow items as well as modifications to fencing / partial demobilization at red areas.
- Assumes confirmation by CRCA on all access and life safety aspects of facility prior to use.

**Area Under Construction**
- No bleachers.
- Locker Room under construction.
- Existing building demolished and under construction.
- Parking lot and alley off limits.

**Area Under Construction**
- Upper wall near complete.
- Ramp and lower wall in progress.
- Area contained in 6 foot construction fence (no wind screen).

**Area possibly Under Construction**
- Foundations likely installed.
- Walking surface structure not likely installed.
- Existing wall and fence likely un-modified.

**Field Lights relocated.**
- Powered by temporary generator.
- Temporary PA system set up

**Score Board Relocated**
- with temporary control system.

**Play clocks relocated with temporary controls likely.**

**Field Lights relocated.**
- Added stone and/or asphalt paving to ramp area for field access

**Potential temporary stair for additional field access.**

**Potential temporary stair for additional field access.**

**Score Board Relocated**
- with temporary control system.

**Field Lights relocated.**
- Added stone and/or asphalt paving to ramp area for field access

**Potential temporary stair for additional field access.**

**Area Under Construction**
- Field Lights relocated.
- Powered by temporary generator.
- Temporary PA system set up

**Score Board Relocated**
- with temporary control system.