

3.3.5 LOCAL ACTIONS & APPROVALS

LOCAL ACTIONS AND APPROVALS CERTIFICATION A

CERTIFIED MEETING MINUTES B

LIST OF MEETING DATES AND AGENDA C

3.3.5 - LOCAL ACTIONS & APPROVALS

A. LOCAL ACTIONS AND APPROVALS CERTIFICATION



TOWN OF BELMONT
OFFICE OF THE BOARD OF SELECTMEN
455 CONCORD AVENUE
BELMONT, MASSACHUSETTS 02478

Selectmen@belmont-ma.gov

455 CONCORD AVENUE
BELMONT, MA 02478-2573
PHONE (617) 993-2610
FAX (617) 993-2611

BOARD OF SELECTMEN
JAMES R. WILLIAMS, Chair
MARK A. PAOLILLO, Vice Chair
ADAM DASH, Selectman

TOWN ADMINISTRATOR
PATRICE GARVIN

ASSISTANT TOWN ADMINISTRATOR
PHYLLIS L. MARSHALL

February 13, 2018

Ms. Diane Sullivan
Senior Capital Program Manager
40 Broad Street
Boston, Massachusetts 02109

Dear Ms. Sullivan:

The Town of Belmont School Building Committee ("SBC") has completed its review of the Feasibility Study *Preferred Schematic Report* for the Belmont High School project (the "Project"), and on February 13th, 2018, the SBC voted to approve and authorize the Owner's Project Manager to submit the Feasibility Study related materials to the MSBA for its consideration. A certified copy of the SBC meeting minutes, which includes the specific language of the vote and the number of votes in favor, opposed, and abstained, are attached.

Since the MSBA's Board of Directors invited the District to conduct a Feasibility Study on November 09, 2016, the SBC has held thirty (30) meetings regarding the proposed project, in compliance with the state Open Meeting Law. These meetings include:

1. School Building Committee meeting #10 held at the Homer Municipal Building, Belmont MA at 7:30am on December 08, 2016
2. School Building Committee meeting #11 held at Belmont Town Hall, Belmont MA at 4:30pm on December 22, 2016
3. School Building Committee meeting #12 held at the Homer Municipal Building, Belmont MA at 7:30am on January 05, 2017
4. School Building Committee meeting #13 held at the Homer Municipal Building, Belmont MA at 7:30am on February 02, 2017
5. School Building Committee meeting #14 held at the Homer Municipal Building, Belmont MA at 7:30am on February 17, 2017

A. LOCAL ACTIONS AND APPROVALS CERTIFICATION

- 6. School Building Committee meeting #15 at the Homer Municipal Building, Belmont MA at 7:30am on March 01, 2017
- 7. School Building Committee meeting #16 at the Beech Street Center, Belmont MA at 7:00pm on April 06, 2017
- 8. School Building Committee meeting #17 held at the Homer Municipal Building, Belmont MA at 7:30am on April 13, 2017
- 9. School Building Committee meeting #18 held at the Homer Municipal Building, Belmont MA at 7:30am on April 20, 2017
- 10. School Building Committee meeting #19 held at the Beech Street Center, Belmont MA at 6:00pm on May 04, 2017
- 11. School Building Committee meeting #20 held at the Homer Municipal Building, Belmont MA at 7:30am on June 15, 2017
- 12. School Building Committee meeting #21 held at the Homer Municipal Building, Belmont MA at 7:30am on July 20, 2017
- 13. School Building Committee meeting #22 held at the Homer Municipal Building, Belmont MA at 7:30am on August 10, 2017
- 14. School Building Committee meeting #23 held at the Homer Municipal Building, Belmont MA at 7:30am on August 24, 2017
- 15. School Building Committee meeting #24 held at the Homer Municipal Building, Belmont MA at 7:30am on September 14, 2017
- 16. School Building Committee meeting #25 held at the Homer Municipal Building, Belmont MA at 7:30am on October 5, 2017
- 17. School Building Committee meet #26 (joint meeting with School Committee) held at the Homer Municipal Building, Belmont MA at 7:30am on October 19, 2017
- 18. School Building Committee meeting #27 (joint meeting with Board of Selectmen and School Committee) held at the Wellington Middle School, Belmont MA at 6:30pm on November 2, 2017
- 19. School Building Committee meeting #28 (joint meeting with Board of Selectmen and School Committee) held at Belmont High School, Belmont MA at 6:30pm on November 16, 2017
- 20. School Building Committee meeting #29 (joint meeting with Board of Selectmen and School Committee) held at the Wellington Elementary School, Belmont MA at 6:30pm on November 30, 2017
- 21. School Building Committee meeting #30 (joint meeting with Board of Selectmen and School Committee) held at the Wellington Elementary School, Belmont MA at 6:30pm on December 07, 2017
- 22. School Building Committee meeting #31 (joint meeting with Board of Selectmen and School Committee) held at the Chenery Middle School, Belmont MA at 6:30pm on December 12, 2017
- 23. School Building Committee meeting #32 (joint meeting with Board of Selectmen and School Committee) held at the Belmont High School, Belmont MA at 7:00pm on December 14, 2017

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A. LOCAL ACTIONS AND APPROVALS CERTIFICATION

24. School Building Committee meeting #33 (joint meeting with Board of Selectmen and School Committee) held at the Belmont High School, Belmont MA at 7:00pm on January 9th, 2018
25. School Building Committee meeting #34 held at the Wellington Elementary School, Belmont MA at 6:30pm on January 11th, 2018
26. School Building Committee meeting #35 (joint meeting with Board of Selectmen and School Committee) held at the Chenery Middle School, Belmont MA at 7:00pm on January 16th, 2018
27. School Building Committee meeting #36 held at the Homer Municipal Building, Belmont MA at 7:30am on January 18th, 2018
28. School Building Committee meeting #37 (joint meeting with Board of Selectmen and School Committee) held at the Wellington Elementary School, Belmont MA at 7:00pm on January 23rd, 2018
29. School Building Committee meeting #38 (joint meeting with Board of Selectmen and School Committee) held at the Wellington Elementary School, Belmont MA at 7:00pm on February 1st, 2018
30. School Building Committee meeting #39 (joint meeting with Board of Selectmen and School Committee) held at the Chenery Middle School, Belmont MA at 7:00pm on February 13th, 2018

In addition to the SBC meetings listed above, the District held four (4) public meetings, which were posted in compliance with the state Open Meeting Law, at which the Project was discussed. These meetings include:

1. New Belmont High School public presentation #2 held Chenery School Belmont MA at 7:00pm on September 19, 2017
2. New Belmont High School public presentation #3 held Beech Street Center, Belmont MA at 1:15pm on October 13, 2017
3. New Belmont High School public presentation #4 held at Belmont High School, Belmont MA at 10am October 28th, 2017
4. New Belmont High School public presentation #5 and interactive design discussion held at Belmont High School, Belmont MA at 7:00pm on December 14th, 2017

The presentation materials for each meeting, meeting minutes, and summary materials related to the Project are available locally for public review at:

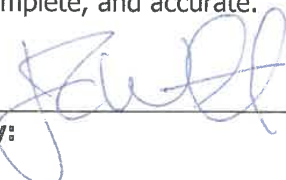
1. <http://www.belmont.k12.ma.us/bps/Committee>
2. <http://www.belmont-ma.gov/belmont-high-school-building-committee>
3. <http://www.belmont-ma.gov/belmont-high-school-building-project>

To the best of my knowledge and belief, each of the meetings listed above complied with the requirements of the Open Meeting Law, M.G.L. c. 30A, §§ 18-25 and 940 CMR 29 *et seq.*

If you have any questions or require any additional information, please contact Thomas Gatzunis, Daedalus Projects Inc. tgatzunis@dpi-boston.com or (617) 451 2717.

A. LOCAL ACTIONS AND APPROVALS CERTIFICATION

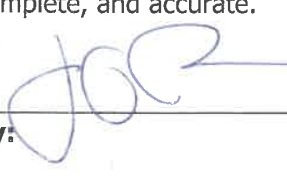
By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By: 

Title: Chief Executive Officer

Date:

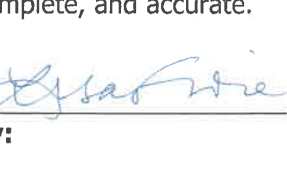
By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By: 

Title: Superintendent of Schools

Date: 2/14/18

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By: 

Title: Chair of the School Committee

Date: 2/14/18

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A. LOCAL ACTIONS AND APPROVALS CERTIFICATION

BELMONT PUBLIC SCHOOLS

JOHN P. PHELAN
SUPERINTENDENT OF SCHOOLS
(617) 993-5401

JANICE G. DARIAS
ASSISTANT SUPERINTENDENT
FOR CURRICULUM & INSTRUCTION
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ANTHONY R. DI COLOGERO
DIRECTOR OF FINANCE,
BUSINESS & OPERATIONS
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MARY PEDERSON
DIRECTOR OF HUMAN RESOURCES
(617) 993-5425

February 5, 2018

Ms. Diane Sullivan
Senior Capital Program Manager
40 Broad Street
Boston, Massachusetts 02109

Dear Ms. Sullivan:

The Town of Belmont School Committee ("SC") understands a proposed change to existing grade structure is being proposed in the *Preferred Schematic Report* for the Belmont High School project (the "Project"), and on January 23, 2018, the SC voted to approve and authorize the proposed change to the existing grade structure for the following reason: *{the Belmont Public School supports the change from a building with grades 9-12 to a school with grades 7-12; as this structure will support a smooth and successful academic and social emotional transition for our students to our high school setting while taking advantage of the shared learning and programming spaces and experiences we can provide them in our educational vision.}* as described in the Feasibility Study related materials. A certified copy of the SC meeting minutes, which includes the specific language of the vote and the number of votes in favor, opposed, and abstained, are attached.

The SC has held fifteen (15) meetings regarding the proposed change to existing grade structure as related to the proposed Project, in compliance with the state Open Meeting Law. These meetings include:

1. Belmont School Committee meeting held at the School Administration Building, Belmont MA at 6:00pm on July 6th, 2017. Belmont High School Building Committee Update.
2. Belmont School Committee meeting held at the School Administration Building, Belmont MA at 6:30pm on August 30th, 2017. Superintendent of Schools Update on schedule and enrollment.

A. LOCAL ACTIONS AND APPROVALS CERTIFICATION

3. Belmont School Committee meeting held at the Chenery Middle School, Belmont MA at 7:00pm on September 12th, 2017. Belmont High School Building Committee Update.
4. Belmont School Committee meeting held at the Chenery Middle School, Belmont MA at 7:00pm on September 26th, 2017. Belmont High School Building Committee Update.
5. Belmont School Committee meeting held at the Chenery Middle School, Belmont MA at 7:00pm on October 10th, 2017. Superintendent of Schools Update on High School Educational Visioning.
6. Belmont School Committee meeting held at the Shelburne Community Center, Roxbury MA at 6:30pm on October 24th, 2017. Superintendent of Schools report on enrollment.
7. Joint Belmont School Committee, Belmont School Building Committee and Belmont Board of Selectmen meeting held at the Chenery Middle School, Belmont MA at 6:30pm on November 2nd, 2017. Discussion on Project Schedule, Space Summary, Building Options and Project Costs.
8. Belmont School Committee meeting held at the Chenery Middle School, Belmont MA at 7:00pm on November 28th, 2017. Superintendent of Schools Update on High School Grade Configuration
9. Joint Belmont School Committee, Belmont School Building Committee and Belmont Board of Selectmen meeting held at the Wellington Elementary School, Belmont MA at 6:30pm on November 30th, 2017. Review and approval to submit Preliminary Design Proposal to MSBA.
10. Joint Belmont School Committee, Belmont School Building Committee and Belmont Board of Selectmen meeting held at the Wellington Elementary School, Belmont MA at 6:30pm on December 7th, 2017. Discussion on sustainable design features on the proposed New HS.
11. Joint Belmont School Committee, Belmont School Building Committee and Belmont Board of Selectmen meeting held at the Chenery Middle School, Belmont MA at 7:00pm on December 12th, 2017. Grade configuration presentation.
12. Joint Belmont School Committee, Belmont School Building Committee and Belmont Board of Selectmen meeting held at the Belmont High School, Belmont MA at 7:00pm on December 14th, 2017. Community Engagement #5.
13. Joint Belmont School Committee, Belmont School Building Committee and Belmont Board of Selectmen meeting held at the Belmont High School, Belmont MA at 6:30pm on January 9th, 2018. Update on grade configuration.
14. Joint Belmont School Committee, Belmont School Building Committee and Belmont Board of Selectmen meeting held at the Chenery Middle School, Belmont MA at 6:30pm on January 16th, 2018. Review of proposed building options and project costs.
15. Joint Belmont School Committee, Belmont School Building Committee and Belmont Board of Selectmen meeting held at the Wellington Elementary School,

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A. LOCAL ACTIONS AND APPROVALS CERTIFICATION

Belmont MA at 6:00pm on January 23rd, 2018. School Committee vote on grade configuration.

In addition to the SBC meetings listed above, the District held four (4) public meetings, which were posted in compliance with the state Open Meeting Law, at which the Project was discussed. These meetings include:

1. New Belmont High School public presentation #2 held Chenery School Belmont MA at 7:00pm on September 19, 2017
2. New Belmont High School public presentation #3 held Beech Street Center, Belmont MA at 1:15pm on October 13, 2017
3. New Belmont High School public presentation #4 held at Belmont High School, Belmont MA at 10am October 28, 2017
4. New Belmont High School public presentation #5 and interactive design discussion held at Belmont High School, Belmont MA at 7:00pm on December

The presentation materials for each meeting, meeting minutes, and summary materials related to the Project are available locally for public review at:

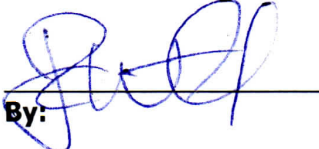
1. <http://www.belmont.k12.ma.us/bps/Committee>
2. <http://www.belmont-ma.gov/belmont-high-school-building-committee>
3. <http://www.belmont-ma.gov/belmont-high-school-building-project>

To the best of my knowledge and belief, each of the meetings listed above complied with the requirements of the Open Meeting Law, M.G.L. c. 30A, §§ 18-25 and 940 CMR 29 *et seq.*

If you have any questions or require any additional information, please contact Thomas Gatzunis, Daedalus Projects Inc. tgatzunis@dpi-boston.com or (617) 451 2717.

A. LOCAL ACTIONS AND APPROVALS CERTIFICATION

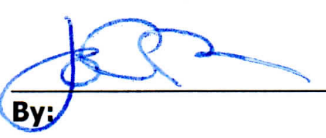
By signing this Grade Reconfiguration and Districting Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By: 

Title: Chief Executive Officer

Date: 2/13/18

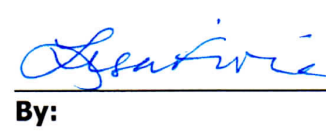
By signing this Grade Reconfiguration and Districting Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By: 

Title: Superintendent of Schools

Date:

By signing this Grade Reconfiguration and Districting Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By: 

Title: Chair of the School Committee

Date: 2/12/18

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B. CERTIFIED MEETING MINUTES

BELMONT HIGH SCHOOL BUILDING COMMITTEE
COMMUNITY ENGAGEMENT #5
December 14, 2017
BELMONT HIGH SCHOOL
7:00 PM

RECEIVED
TOWN CLERK
BELMONT, MA

2018 JAN 16 PM 2:03

[Meeting #32]

Committee Members Attending:

Chair Lovallo; Members: Pat Bruschi, Diane Miller, Jamie Shea, John Phelan, Adam Dash, Tom Caputo, Chris Messer, Robert McLaughlin, Dan Richards, Phyllis Marshall, and Emma Thurston

Board of Selectmen: Chair Williams and Selectman Dash

From Daedalus: Tom Gatzunis and Shane Nolan

From Perkins+Will: Brooke Trivas, Chris Karlson, Laura Pomarico, Patrick Cunningham

Approximately 60 members from the General Public were in attendance.

The meeting was called to order by Chair Lovallo for the BHS Building Committee and by Chair Williams for the Board of Selectmen at 7:02 p.m.

Approval of Minutes

Ms. Bruschi made a motion to approve the minutes of 12/7/2017, the motion was seconded by Phyllis Marshall. The motion passed unanimously.

A motion to approve the minutes of 12/12/2017 was made by Ms. Shea, the motion was seconded by Ms. Miller. The motion passed unanimously.

Approval of Two Invoices:

1. Ms. Marshall made a motion to recommended approval of an invoice for Perkins + Will in the amount of \$90,000; the motion was seconded by Mr. Messer. The motion passed unanimously.

2. Ms. Marshall made a motion to recommend approval of an invoice for Daedalus Projects in the amount of \$18,040; the motion was seconded by Mr. Richards. The motion passed unanimously.

Next Meetings

Chair Lovallo advised all present that the next meetings of the BHSBC will be on January 9, 2018 in the High School auditorium. The topic will be district grade configuration. There will be a traffic presentation on January 11, 2018 in the Wellington School cafeteria.

Presentation (copy attached)

I. Brainstorming

FINAL

B. CERTIFIED MEETING MINUTES

a. Learning Commons

Chair Lovallo provided opening remarks, reviewed the agenda for the evening, and provided background information. Ms. Trivas prompted audience member to think about the Learning Commons and for them to indicate what should or should be incorporated into them. Audience members provided their comments, which were captured on flip charts for P+W to incorporate into their design.

b. Collaboration

The group was then asked to perform the same exercise for collaboration spaces. Audience members provided their comments, which were captured on flip charts for P+W to incorporate into their design.

c. Café Commons

The group was asked to provide their input for the Café and Commons spaces(s) within the new building. Audience members provided their comments, which were captured on flip charts for P+W to incorporate into their design.

d. Outdoor Learning

The group was asked to finally provide their input for the outdoor learning opportunities. Audience members provided their comments, which were captured on flip charts for P+W to incorporate into their design.

II. Working Groups

a. Adjacency Diagrams

Ms. Trivas informed the audience that the next sessions would require them to prepare adjacency diagrams based on what their thoughts were regarding which major learning centers should be connected and why. At the conclusion of this exercise, each group reported back with their recommendations. The results were retained by P+W for inclusion in their design.

b. Site Plans

In the final exercise of the evening, the group was asked to mark up any of the site plans that they had comments on. Audience members provided their comments, which were captured on flip charts for P+W to incorporate into their design.

III. Visual Listening

P+W had placed image boards in the back of the room. Audience members were asked to place green dots on items that they liked and red dots on items that they did not want to see incorporated into the new school design. This was an ongoing exercise conducted throughout the evening. The final results were captured by P+W for inclusion in the design of the new school.

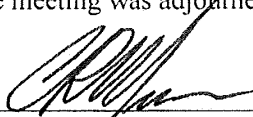
Adjourn

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The meeting was adjourned at 9:05 p.m.


Secretary, BHSBC – Chris Messer
1/12/18

B. CERTIFIED MEETING MINUTES

BELMONT HIGH SCHOOL BUILDING COMMITTEE
FINAL MEETING MINUTES
January 9, 2018
Belmont High School Auditorium
7:00 PM

RECEIVED
TOWN CLERK
BELMONT, MA

2018 JAN 17 PM 1:59

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Meeting #33

BHS Building Committee Members Attending:

Chair Lovallo; Members: Adam Dash, Tom Caputo, Bob McLaughlin, John Phelan, Chris Messer, Dan Richards, Pat Bruschi, Emma Thurston, Diane Miller, and Jamie Shea

BHSBC Members Absent: Phyllis Marshall, Joe DeStefano, Joel Mooney

Board of Selectmen Attending: Chair Jim Williams and Adam Dash

Board of Selectmen Absent: Mark Paolillo

School Committee Attending: Chair Lisa Fiore, Susan Burgess-Cox, Catherine Bowen, Thomas Caputo, Andrea Prestwich, and Murat Bicer

The meeting was a joint meeting with the School Committee and Board of Selectmen in which the Belmont High School Building Committee was presented an overview of the District Grade Configuration work that the School Department has been undertaking.

1. Call to Order

The Belmont High School Building Committee meeting was called to order at 7:05 p.m. by Chair Lovallo. A count of attendees totaled 73 in addition to the Building Committee, School Committee, and Board of Selectmen.

2. Presentation of Grade Configuration Options by School Department

Superintendent John Phelan presented the School Department work on district configuration studies. Mr. Phelan explained how the High School configuration affects the entire K-12 district and the School Department has been examining what those possible impacts will be.

Mr. Phelan explained the possible District grade configurations that fall into 5 categories:

1. Option 1: K-4, 5-8, 9-12 (existing conditions)
2. Option 2: K-4, 5-7, 8-12 (8, 9-12)
3. Option 3: K-4, 5-7, 8-12 (8-9, 10-12)
4. Option 4: K-3, 4-6, 7-12 (7-8, 9-12)
5. Option 5: K-3, 4-6, 7-12 (7-9, 10-12)

Mr. Phelan briefly reviewed the work that was done with visioning, surveys, meetings, etc. Much of this work was previously presented at the December 9th meeting. Mr. Phelan then cited some of the research that the School Department has read regarding grade configurations and number of moves from K-12. Several articles spoke to the impact to students socially and academically. Mr. Phelan

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noted that there was no consistency in the actual grade groupings. Rather, the articles generally stated that as much as a school move has an impact on students, the greater impact is the *environment that is created* for those students. This can have more of an impact on the students than the move itself.

Mr. Phelan noted that the School Department has reviewed the grade configuration options through the lens of educational appropriateness, space needs (both short term and long term), financial costs to Town (both short term and long term), and timeline to meet the District's challenges. Mr. Phelan noted that at this time, the preferred configuration has consistently been 7-12, although no decisions have been made and the School Department continues to discuss all three options.

Mr. Phelan then answered questions from the School Committee and the public regarding this presentation.

3. Presentation of Lower School Space Options by School Department

Mr. Phelan explained that the School Department retained the Design firm of SMMA to perform studies on the remaining District schools (the 4 elementary schools and the middle school) to provide recommendations for properly accommodating the students that do not get located at the new High School. He noted that they have examined the schools, met with principals and staff, and explored options in the district for building adjustments to meet the growing student enrollment.

The assumptions used included:

- 360 students in each grade level
- no modular classrooms
- all schools accommodating art, music, physical education, special education, EL's and LABBB

Each elementary school will contain a maker/innovation space to support the planned learning path at the upper levels. Chenery and Wellington will retain their Community rooms.

Classroom population is to be based on the room sizes and uses MSBA guidelines which limits classroom sizes to 23 students (with appropriate space) except for K which is limited to 18. These numbers are in line with the Belmont class size guidelines.

Considering those factors when one examines the entire district, the schools become "right-sized" which Mr. Phelan explains is the adjustment necessary to meet the target criteria. Existing schools will then see a reduction in student capacity from today's number requiring more classrooms to be added to the District. The net total number of students in K-8 requiring new space accommodating is 704 – with 318 students requiring new space at the Chenery School and 386 at the four elementary schools.

Mr. Phelan then explained that SMMA examined all 5 Options for the HS project (explained previously) and offered solutions for space needs in the remaining 5 buildings. A 6th option was added, which was a new elementary school, however Mr. Phelan noted that there is currently no space available in Belmont to construct a new elementary school. He explained that the 6th option would allow K-5 in the elementary schools, 6-8 in the middle school, and 9-12 in the high school.

Mr. Phelan then summarized each solution by option. Some areas require light renovation, which can include minor changes such as modifying interior classroom setups. Some areas require

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comprehensive renovations, which involve moving walls and MEP systems, possible additions to cafeteria and gym, and upgrades for ADA. A summary of the solutions followed:

Option 1:

- renovations in Burbank along with an addition
- renovations in Butler along with an addition
- no work in Wellington, renovation in Winn Brook
- renovations in Chenery along with addition
- **total project cost is \$54-\$66M**

Option 2/3 (A):

- renovations in Burbank along with an addition
- renovations in Butler along with an addition
- no work in Wellington
- renovation in Winn Brook
- no work in Chenery
- **total project cost is \$39.5-\$47.5M**

Option 2/3 (B):

- renovations in Burbank
- renovations in Butler
- no work in Wellington
- renovation in Winn Brook along with addition
- no work in Chenery
- **total project cost is \$41-\$48.5M**

Option 4/5:

- renovations in Burbank
- renovations in Butler
- no work in Wellington
- renovation in Winn Brook
- renovations in Chenery
- **total project cost is \$18-\$25.5M**

Option 6:

- renovations in Burbank
- renovations in Butler
- no work in Wellington
- renovation in Winn Brook
- renovations in Chenery
- construction of a new school
- **total project cost is \$72-\$82.5M**

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B. CERTIFIED MEETING MINUTES

Mr. Phelan noted that there is currently no vehicle for moving any of these projects forward. There is no committee formed, no funding in place for design, and there are other projects currently in the Belmont pipeline. Therefore, the reality is that these solutions outlined above will not come to fruition until well after the HS is complete. He also noted that for Option 4/5, the solution to accommodate the anticipated students in the current buildings, with no requirement for capital projects, seems possible given that the schools will all see a reduction in population and the needed adjustments can be reduced and/or phased in the future.

Mr. Phelan then answered questions from the School Committee and the public regarding this presentation.

4. Discussion of School Impact

Mr. Phelan asked principals of four of the District's six schools to comment on the challenges they see currently in their school, the opportunities that the "right sizing" of their school will bring, and their opinion of the configuration options being proposed. The following principals provided comments:

Dr. Tricia Clifford, Burbank Principal
Janet Carey, Winn Brook Principal
Dan Richards, Belmont High School Principal
Michael McAllister, Chenery Middle School Principal

Mr. Phelan then answered questions from the School Committee and the public regarding this presentation.

5. Related Meeting Documents

1. Presentation Slides on District Configuration prepared by School Department
2. Presentation Slides on Grade Configuration Study prepared by SMMA


4. End Meeting

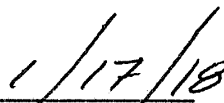
The meeting ended at 9:00 p.m. by Mr. McLaughlin

Respectfully submitted by:

Lisa Gibalerio

Approved:


Chris Messer, Secretary


Date

B. CERTIFIED MEETING MINUTES

**BELMONT HIGH SCHOOL BUILDING COMMITTEE
FINAL MEETING MINUTES
January 11, 2018
Wellington School Cafeteria
6:30 PM**

RECEIVED
TOWN CLERK
BELMONT, MA

2018 FEB -5 PM 2:31

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Meeting #34

Committee Members Attending:

Chair Lovallo; Members: Chris Messer, Adam Dash, John Phelan, Tom Caputo, Pat Brusch, Dan Richards, Bob McLaughlin, Diane Miller, Emma Thurston, Jamie Shea, Joe DeStefano (arrived at 7:20 p.m.)

From Daedalus: Tom Gatzunis, Shane Nolan

From Perkins+Will: Brooke Trivas, Patrick Cunningham, Rick Kuhn

Mr. Jason Schrieber - from Nelson Nygaard

BHSBC Members Absent: Joel Mooney, Phyllis Marshall

School Committee Members Attending: Catherine Bowen, (Tom Caputo), Susan Burgess-Cox

Board of Selectmen Attending: Chair Jim Williams and Adam Dash
[Chair Williams called the BOS to order at 6:50 p.m.]

Approximately 30 members from the General Public were in attendance.

I. Call to Order

The BHSBC meeting was called to order at 6:35 p.m. by Chair Lovallo. He noted that Mr. Gerry Boyle recently retired from his position as Facilities Director and that his retirement leaves a void with the BHSBC Secretary position. He then reviewed the agenda for the evening's meeting. He noted that Ms. Marshall is absent, but that three invoices would be processed tonight.

II. Appointment of Officers

Chair Lovallo reviewed the BHSBC Secretary's responsibilities.

Ms. Brusch moved: To nominate Mr. Chris Messer as Secretary of the BHSBC.
The motion passed unanimously.

Chair Lovallo reviewed the Vice Chair's responsibilities.

Mr. McLaughlin moved: To nominate Ms. Pat Brusch as Vice Chair of the BHSBC.
The motion passed unanimously.

III. Minutes of Previous Meetings

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Chair Lovallo noted that the Minutes of January 9 will be sent out for BHSBC review soon. However, the following set is ready for approval:

Mr. McLaughlin moved: To approve the Minutes of 12/14/17.
The motion passed unanimously.

IV. Treasurer's Report

Chair Lovallo informed the Committee that the following Invoices are ready for their approval:

Invoice 1 - \$11,030

Ms. Bruschi moved: To approve the Invoice of \$11,030.00 from Daedalus.
The motion passed unanimously.

Invoice 2 - \$90,000

Mr. McLaughlin moved: To approve the Invoice of \$90,000 from Perkins + Will.
The motion passed unanimously.

Invoice 3 - \$765.00

Mr. McLaughlin moved: To approve the Invoice of \$765.00 for Minute's Recording, from Ms. Lisa Gibalerio.
The motion passed unanimously.

V. Public Meeting Schedule Update

Chair Lovallo reviewed several of the upcoming meetings:

Tues., January 16, 7:00 p.m.	Design Solutions with feedback from previous meeting
Thurs., January 18, 7:30 a.m.	Review of Design Solutions, thus far, and Survey Feedback Summary
Tues., January 23, 7:00 p.m.	Grade Configuration and Design Option Decision
Thurs., February 1, 6:30 p.m.	Review of draft Preferred Schematic Report
Tues., February 13, 7:00 p.m.	Approval of Final Preferred Schematic Report

VI. Traffic Update – Report Summary

Chair Lovallo noted that Ms. Trivas has met with several town departments concerning issues relating to traffic.

Mr. Schrieber summarized the Site Access Analysis Traffic Report concerning the current BHS. He noted that many site visits occurred to observe the flow of traffic, the numbers of vehicles, bike activity, walking routes, MBTA activity, U-turns, crosswalk conflicts, etc. Also analyzed were crash data, parking lot numbers, and delays and queues. He noted that peak morning time for traffic is from about 7:20 to 7:40 a.m. He highlighted the areas that queue up intensely. He noted that about 60% of faculty and students are driving (or being dropped off), with the remaining 40% walking, biking, etc.

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He reviewed nine potential improvement recommendations that have come out of the last several months of traffic analysis:

1. Adding a Traffic Signal to the Goden/Concord intersection
2. Implementing two full-access site driveways (distributes the traffic more evenly)
3. Providing drop-off loops internal to the site (to prevent queues)
4. Providing walking and transit access
5. Enhanced biking access
6. Adding on-site parking
7. Shorter delay and queues at key intersections, e.g., Concord/Goden, Concord/Underwood, Underwood/Hittenger
8. Neutral impacts to Hittenger & Brighton
9. Enhanced emergency vehicle circulation

These improvements, he said, will increase safety and add benefits for not only the school community, but also the community as a whole.

He then applied the nine improvements to the various design scenarios (specifically the four design options that are currently on the table).

Questions

Chair Lovallo asked about the recommendations concerning Goden Street (light signal). Mr. Schrieber noted that Goden is already heavily traversed with cars (as it provides the Concord Ave cross-over), U-turns, and walkers, etc. so that it made sense to focus on Goden to improve safety. He explained how the traffic volume would be calmed; he noted that there are several ways in which the signal could be designed.

BOS Chair Williams also asked about the Goden recommendation and expressed concern about the cut-through use to get to the Chenery. Mr. Schrieber said that the signal could reduce (control) traffic on Goden. BOS Chair Williams asked several follow-up questions concerning Hittenger St., the MBTA train, the Alexander Street tunnel, etc.

III. Comments and Questions from Belmont Residents

Ms. Anne Marie Mahoney, 24 Goden Street, made several points about traffic on Goden Street. She noted that this neighborhood was constructed before there were even cars. Goden is too narrow for the traffic it receives and over 20 cars are backed up every single day. A light will not fix the traffic on Goden, it will, in fact, increase the traffic on Goden. She suggested opening up the medians to Concord from the other side streets: Orchard, Oak, Myrtle, etc. That, she said, would mitigate the traffic on Goden. Mr. Schrieber responded to some of the concerns raised by Ms. Mahoney.

Selectman Dash, a Goden Street resident, asked a series of questions concerning the Goden Street recommendations. Mr. Schrieber responded to some of the concerns raised by Selectman Dash. The topic of making Goden Street a one-way was raised.

Ms. Chris Kochem, Town Meeting Member Precinct 8, spoke to the evening traffic on Concord/Goden. She asked about the Channing Road access to the new school via Alexander Ave. Chair Lovallo noted that the BHSBC is not analyzing Alexander Ave. as it is not a part of the new

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building project.

Ms. Miller asked about adding more bussing options to the new building as a way to mitigate traffic from the north side as well as to mitigate community-wide traffic.

Mr. David Otte, 9 Goden Street, said that all of the high school traffic is being placed on to Goden Street. He asked several questions pertaining to cross traffic and added that adding two grades to the high school will definitely increase traffic in the area. How could it not? he asked.

Ms. Thurston asked about the Hittenger flow of traffic to Brighton, Baker, and Concord. She expressed concern about the intense traffics on these streets during morning and evening times.

Dr. Ana Abrams, 15 Goden Street, spoke to the unsafe walking conditions in the area. She suggested that the streets be restricted more than they presently are. She agreed that the streets cannot take more traffic than they currently are exposed to. She said she would favor a light on Goden, but only if it increased pedestrian safety. Mr. Schrieber stated that perhaps a signal at Goden/Concord would make the intersection more safe for walkers.

Ms. Kate Bowen, SC Member, asked about staggering the start times. She also asked about other safety concerns for pedestrians, e.g., bump-outs, congestion under the bridge, traffic calming initiatives, etc.

Ms. Anne Paulson, School Street, said she hopes town-wide solutions can be brainstormed for Belmont as a whole. Cambridge, she said, has initiated some successful traffic calming mitigations. She said it looks like cars are being *encouraged* to drive to the BHS site, not discouraged from driving. Mr. Schrieber agreed that biking and walking should be encouraged.

Mr. McLaughlin noted that Cottage and Goden are the only ways to get to the Center and to the Hill. He asked why the medians from the other streets, e.g., Oak, Myrtle, etc. can't be opened up to Concord. Mr. Schrieber said that Goden can be managed without opening the other medians.

Mr. Camille Fuleihan, 3 Sandrick Road, spoke to the cut-through traffic from Route 2 that is causing problems. The cut-through traffic is the main problem and only Belmont residents should be allowed to drive through Belmont. Belmont should have busses continually dropping kids off and picking kids up from the high school.

Ms. Jane Otte, Goden Street, asked why the Alexander Street tunnel is not a part of this project? Chair Lovallo provided some background information on this issue.

Mr. Russell Mann agreed that cut-through traffic is a major public health and quality of life problem for Belmont. This issue should be a top priority for Belmont.

Superintendent Phelan noted that there are now eight busses in Belmont. Each bus costs about \$60-70K annually. He then explained the laws around bussing as well as bussing fees. The fees are high, he said, and that could be why more people don't have their children take the bus. Ms. Bowen (SC member) directed several bussing questions to Mr. Phelan.

Mr. Fred Paulson, TMM Pct. 1, suggested that the BHSBC will need to answer these questions and concerns before Town Meeting and the town vote on these issues. The Selectmen, the School

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Committee, and the Building Committee will need to address these issues. Chair Lovallo noted that these issues have been focused on and will continue to be focused on. He then asked several clarifying questions which Mr. Schrieber addressed.

Ms. Gretchen McClain, School Street, noted that these plans seem to be creating a lot of traffic on School Street/Goden Street. Bussing, she said, is not always an option because the high school students have such varying schedules. She requested that other traffic options are explored.

Mr. Al [?], 311 Brighton Street, reiterated that the issue of cut-through traffic needs to be addressed. Even if there are no cars at the high school, traffic will still be a major issue.

BOS Chair Williams spoke to the overlap concerning traffic issues. Many groups in town are concerned with traffic. He suggested that Mr. Schrieber present his analysis to the Traffic Advisory Committee.

Mr. Caputo asked if the traffic mitigation has a definitive due date or if solutions can be brainstormed as the project evolves. Chair Lovallo noted that the MSBA is expecting to know the definition of the project this summer. Therefore, many of these issues need to be resolved sooner rather than later – although some issues will continue to be worked out.

XII. Next Full Building Committee Meeting

Tuesday, January 16, 2018 at 7:00 p.m.
Chenery Middle School, Community Room

XIII. Related Meeting Documents

1. Belmont High School Site Access Analysis
2. BHSBC Meeting Summary
3. BHSBC Minutes Draft 12/14/17

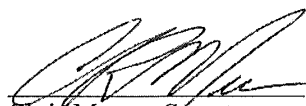
XIV. End Meeting

The meeting ended at 8:59 p.m. by Mr. McLaughlin

Respectfully submitted by:

Lisa Gibalerio

Approved:


Chris Messer, Secretary

2/5/18
Date

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B. CERTIFIED MEETING MINUTES

**BELMONT HIGH SCHOOL BUILDING COMMITTEE
FINAL MEETING MINUTES
January 16, 2018
Chenery Middle School
7:00 PM**

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Meeting #35

Committee Members Attending:

Chair Lovallo; Members: Adam Dash, John Phelan, Tom Caputo, Pat Bruschi, Phyllis Marshall, Bob McLaughlin, Joe DeStefano, Joel Mooney, Diane Miller, Chris Messer, Emma Thurston, Jamie Shea

Patrice Garvin (Town Administrator)

From Daedalus: Tom Gatzunis, Shane Nolan

From Perkins+Will: Brooke Trivas, Patrick Cunningham, Rick Kuhn

BHSBC Member Absent: Dan Richards

School Committee Members Attending: Catherine Bowen, [Tom Caputo], Andrea Prestwich, Susan Burgess-Cox [The SC called their meeting to order at 7:12 p.m.]

There were roughly 30 citizens in attendance at this meeting.

I. Call to Order

The meeting was called to order at 7:04 p.m. by Chair Lovallo. He briefly reviewed the evening's agenda and then introduced Belmont's new Town Administrator, Ms. Patrice Garvin, to the BHSBC, et al. Mr. Messer updated the BHSBC on the handouts that were prepared for tonight's meeting.

II. Minutes of Previous Meetings

Mr. McLaughlin moved: To approve the Minutes of 1/9/18.
The motion passed unanimously.

III. Comments from Belmont Residents

Ms. Anne Paulson, School Street, asked about pedestrian and biking access. Specifically, she asked when these issues, as they relate to the BHS project, would be addressed again by the Committee? Chair Lovallo provided some information on what would happen next, namely that the Traffic Advisory Committee will meet to discuss the traffic recommendations that were explored at the BHSBC meeting of January 11, 2018.

Ms. Tara Donner, Belmont parent and a teacher outside the Belmont school district, asked if the costs associated with turning the Chenery into an elementary school had been explored. She stated that the younger kids are not being given full consideration. Mr. Phelan provided some information, although he stated that he has not priced out a K-6 option for the Chenery. She stated that research has shown that additional school transitions negatively impact children. She said the information regarding grade

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configuration options has not been presented to the public in an unbiased way. She said she hopes the issue is given more attention going forward.

IV. Update on Project Costs (Tom Gatzunis)

Mr. Gatzunis reviewed the three grade configurations (7-12, 8-12, 9-12) as well as the various options for the new project, e.g., major renovation, partial renovation, new construction, etc. He reviewed potential construction costs, noting that the construction rates are increasing about 4% annually. He said the average cost is \$550.00 per square foot of building construction, when considering current local MSBA school building costs on average, plus adjustments for specific building and site impacts, and adjustment for inflation. The MSBA will only reimburse up to \$326.00 per square foot of eligible building components. The 7-12 option will be the most expensive, as it entails the biggest size building.

He noted that the current MSBA agreement with Belmont is to reimburse for 36.89% of *eligible* costs. There are costs that are ineligible for reimbursement. He reviewed areas that might be deemed ineligible, as well as costs that might be capped. The estimated net cost to Belmont is about 74% of the total project cost, based on the anticipated final reimbursement rate from the MSBA and historical information from the MSBA.

Mr. Gatzunis's handout included the price to taxpayers for each of the various options.

V. Funding the Project (Floyd Carman)

Mr. Carman reviewed the tax impact ranges based on the various construction options. The total cost of the project ranges from a low of \$318.9M to a high of \$402.1M. Regarding tax impact from the Belmont High School Project only, the average assessed property value in Belmont is \$1M, therefore the low impact annual cost will be \$1,460.00 to a high cost impact of \$1,840.00 – per property owner. This is at an estimated 4% borrowing rate, over 30 years.

Chair Lovallo noted that better cost numbers will not be identified until this summer. Mr. Carman stressed the need for a cash flow report; the cash flow report, he said, will be important when the project is bonded.

Audience Comments

Mr. Charles Smart, 71 Elizabeth Road, asked two clarifying questions about the tax impact. It was determined that, if the home assessments go up, the amount of taxes paid for the Belmont High School Project stays the same. Mr. Carman agreed with that statement.

Ms. Heather Barr (?), asked about the bonding mechanism as well as the costs of upgrading the elementary schools. Will those costs be tied in to the high school? Mr. Carman stated that it depends how those costs are bonded. Chair Lovallo noted that the fiscal impact of the elementary school improvements that Superintendent Phelan presented on January 9, 2018 are not part of the Belmont High School Project and will have to be managed separately from the new BHS project. However, at this time there is no mechanism in place in Belmont to move those elementary school improvements forward.

VI. Costs for K-8 Schools (John Phelan)

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Mr. Phelan reviewed costs, spanning several grade configuration options, for “right sizing” the lower grade schools. (The full PowerPoint slide set from January 9, 2018 is on both the BPS and BHSBC website.) Total project costs for the new building, *combined with* the right-sizing costs, is not a realistic summary because a plan to execute the right-sizing of the K-8 schools does not exist. Furthermore, funding has not been identified for any of the lower grade right-sizing projects.

Mr. Phelan added that, even with the 7-12 grade configuration option for the new building, there is still a \$18M-\$25.5M cost to right-size the elementary buildings (K-3) and to make Chenery a 4-6 school. Chair Lovallo asked: if the 7-12 solution for the HS is chosen, can the District execute the K-8 space needs without the cost of this right-size solution? Mr. Phelan responded that he can open the doors to the K-8 schools and accommodate the anticipated student enrollment in the remaining five school buildings should that 7-12 configuration be chosen, without the right-size solution being executed as described by SMMA.

VII. Preliminary Site Design Updates (Brooke Trivas)

Ms. Trivas began by reviewing the four main options for the new building:

- 2.1 Major Reno/Add
- 2.3 Reno/Major Add
- 2.4 Reno/Major Add
- 3.1 New Construction

She noted where the plans have been updated since the BHSBC meeting held at the end of November, based on comments received from the Committee and public. She briefly reviewed some of the pros/cons of the 4 options. For example, new construction does not take the pool into consideration.

Both Mr. Kuhn and Mr. Cunningham provided additional information on the four options, outlined above. They each discussed pros/cons as well as the impact on phasing during the construction process. Mark-up photos of the potential designs/site plans were reviewed. Bicycle and pedestrian access as well as landscaping possibilities were also reviewed. Gym, Auditorium, and Field House locations vis-a-vis class-room space, green space, and Concord Ave. were also explored for the various options.

Ms. Trivas noted that the options outlined above can be re-worked to keep the positive elements and attempt to eliminate the elements that are not liked. Therefore, it may be that an option that *combines* some of the above is what is ultimately moved forward. However, the basic design integrity would need to be maintained and the final design would need to be rational execution of the positive elements.

The BHSBC asked questions and offered comments on the various design options.

Selectman Dash asked process and timing questions related to the next steps and votes on design/site selection. He also stated his thoughts on the four proposed designs and site locations. Ms. Trivas stated that the traffic issues related to the project will not be decided by choosing a design or site location.

Chair Lovallo stressed that traffic flow, pedestrian, and bike issues will continue to be explored. Mr.

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McLaughlin asked about the financial implications of the options, as well as the square footage, and he specifically asked when the information would be forthcoming concerning a particular design option's impact on the building's operational costs. Mr. Cunningham responded that he anticipates that the operational and maintenance costs for all four solutions appear to be cost-neutral.

Chair Lovallo noted that the BHSBC will continue this dialogue on Thursday morning.

XII. Next BHSBC Meetings

Thursday, January 18, 2018 at 7:30 a.m.
Tuesday, January 23, 2018 at 7:00 p.m.

XIII. Other/New Business

Chair Lovallo noted that there is an Evaluation sheet pertaining to the design / site selection options. He requested that Committee members fill out the form and be prepared to discuss it.

XIV. Related Meeting Documents

1. January 9, 2018 Minutes
2. Summary of Potential K-8 Costs for Right Sizing Schools
3. PDP Site Strategies Matrix
4. Concept Cost Summary PDP
5. BHS Proposed Building Configurations
6. BHS Building Project (tax impact)
7. Evaluation Matrix

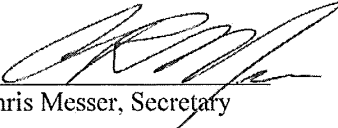
XV. End Meeting

The meeting ended at 8:55 p.m. by Mr. McLaughlin.

Respectfully submitted by:

Lisa Gibalerio

Approved:


Chris Messer, Secretary

Date 2/5/18

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B. CERTIFIED MEETING MINUTES

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**BELMONT HIGH SCHOOL BUILDING COMMITTEE
FINAL MEETING MINUTES
January 18, 2018
Homer Building Gallery
7:30 AM**

2018 FEB -5 PH 2: 31

Meeting #36

Committee Members Attending:

Chair Lovallo; *Members:* Adam Dash (left at 8:50 a.m.), John Phelan, Tom Caputo, Pat Bruschi, Phyllis Marshall, Bob McLaughlin, Joel Mooney (left at 8:20 a.m.), Diane Miller, Chris Messer, Jamie Shea, Emma Thurston (arrived at 8:01 a.m.)

From Daedalus: Tom Gatzunis

From Perkins+Will: Brooke Trivas, Patrick Cunningham, Rick Kuhn

BHSBC Members Absent: Dan Richards, Joe DeStefano

I. Call to Order

The meeting was called to order at 7:34 a.m. by Chair Lovallo.

Invoice 1: Daedalus (Geotechnical Services) \$1,504.45

Mr. Mooney moved: To approve the Invoice of \$1,504.45.
The motion passed unanimously.

II. Community Input Survey Report (Diane Miller)

Ms. Miller briefly reviewed the survey data from the report's executive summary. She noted that the survey was online for 8 weeks and it received almost 1,800 responses, with almost half of the respondents being students. Students expressed concern about rats in the building and the overall condition of the building, as well as space/lighting issues and the need for more quiet spaces (and a library space). They named performing arts and athletic facilities as priorities and they expressed a desire to be a part of the decision-making process. Other respondent groups (parents, teachers, etc.) named dealing with enrollment as a top priority.

She reviewed data highlights from the survey questions.

Chair Lovallo noted that the data will be put online and will be forwarded to Perkins+Will.

The BHSBC briefly discussed the survey results, specifically other ways to receive community feedback on the building project. Mr. Gatzunis suggested that the major questions/concerns raised in the survey be responded to. Ms. Marshall agreed and added that, along with providing project updates, the group should attempt to be responsive to the survey. Chair Lovallo suggested that a student focus group be formed as a way to continue to get more student feedback. Ms. Bruschi added that it is time to engage a broader range of residents more fully – Town Meeting members and parents have been enrolled in the process, she said, but more could be done to involve older residents.

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Issues dealing with *how* to involve a broader range of community members were briefly explored.

Chair Lovallo stated that perhaps it is time for the BHSBC Communications Working Group to become an official BHSBC subcommittee, which means posting meetings, holding meetings in public places, taking meeting minutes, filing meeting minutes, etc. The Subcommittee distinction (versus Working Group) was explored.

Ms. Bruschi moved: That the BHSBC Chair create a *Communications Subcommittee* of the BHSBC.

The motion passed with 11 members in favor and one member abstaining.

III. Discussion on Preliminary Site Designs

Mr. Mooney began this portion of the meeting by providing feedback on the preliminary site design options. He requested that street-level sight lines be further developed for C2.3 and C2.4. Mr. McLaughlin suggested that it be confirmed (very soon) that these sites are possible (from a hazardous waste/geotechnical perspective) to put a building. The placement of the rink, in relation to the placement of the fields, was briefly explored. Mr. Cunningham explained the 100-year floodplain guidelines. These guidelines will impact the ground level design, overall elevation levels, drainage, resilience issues, etc. The 500-year floodplain guidelines were briefly discussed as well.

Superintendent Phelan stated that he believes option C2.1 is not workable because of the phasing issues; C3.1 falls off because it does not allow for a pool or a field house. This leaves C2.4 or C2.3 as viable options, with C2.4 as his first choice.

Chair Lovallo discussed the process around choosing the design site option. The vote does not have to be unanimous but should have a majority of BHSBC members in favor of it. He said he hopes that Committee members can support the *process*, even if the design site selection does not go his/her way. The process could be simple elimination. Mr. Caputo asked a question about the Atrium space in the center of the building in C2.4. He noted that these spaces can be loud. Mr. Cunningham responded to the acoustics issue.

The Committee discussed whether or not taking a straw poll today would be helpful. (A straw poll was not taken.)

Mr. McLaughlin expressed his preference for C2.4 but added that the Committee must keep its eye on the cost of this project. The cost and the fiscal impact on residents will have a lot to do with getting this project passed. Mr. Gatzunis clarified the estimated cost scenarios that are available. Each design has different costs associated with it and the calculus is more than just construction price per square foot times the total square footage. Each design option does not cost the same, as they have different elements. And some of these elements have not even been selected yet. As time goes on, the cost estimate will become more precise.

Ms. Thurston added that the grade-configuration determination impacts both the design selection and the cost. If grade 8-12 is selected, money will need to be spent in dealing with enrollment at the lower grades. Mr. Messer added that the building's design should blend in with the town's overall aesthetics. He also raised a concern about space gaps. Chair Lovallo stated that a downside of C2.3 is that it has an imposing L corridor that will be prominent to Concord Ave. Ms. Shea agreed about the L shape

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and its imposing view to Concord Ave. and added that, as a BHS teacher, C2.4 is a better educational design.

Ms. Bruschi asked to have the differences between C2.3 and C2.4 made more clear. Can the positive elements of both these designs be brought together, she asked, to create a C2.3/4?

Chair Lovallo informed the BHSBC that, after the vote on Tuesday night, he will ask the Committee to vote to establish the formation of another Subcommittee: Building Operations and Systems. He also informed the Committee that the Evaluation sheets (on the four design options) will need to be collected and incorporated into the final report.

IV. Next Building Committee Meeting (Joint Meeting with BOS and SC)

Tuesday, January 23, 2018 at 7:00 p.m.

X. Related Meeting Documents

1. Initial Community Input Survey

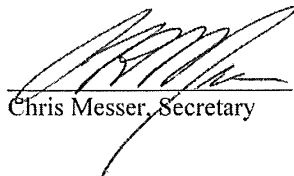
XI. Adjournment

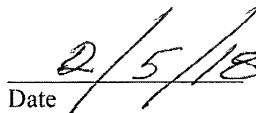
The meeting ended at 9:11 a.m. by Mr. McLaughlin.

Respectfully submitted by:

Lisa Gibalerio

Approved:


Chris Messer, Secretary


Date

B. CERTIFIED MEETING MINUTES

**BELMONT HIGH SCHOOL BUILDING COMMITTEE
FINAL MEETING MINUTES
January 23, 2018
Wellington School Cafeteria
7:00 PM**

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BELMONT, MA

2018 FEB -5 PM 2: 31

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Meeting #37

Committee Members Attending:

Chair Lovallo; Members: Adam Dash, John Phelan, Tom Caputo, Pat Bruschi, Dan Richards, Phyllis Marshall, Bob McLaughlin, Joe DeStefano, Joel Mooney, Diane Miller, Chris Messer, Emma Thurston, Jamie Shea

Patrice Garvin, Town Administrator

From Daedalus: Tom Gatzunis

From Perkins+Will: Brooke Trivas, Patrick Cunningham, Rick Kuhn

BHSBC Members Absent: [none]

School Committee (SC) Members Attending: Chair Lisa Fiore, Catherine Bowen, (Tom Caputo), Andrea Prestwich, Susan Burgess-Cox, Murat Bicer
[Chair Fiore called the SC to order at 7:06 p.m.]

Board of Selectmen Attending: Chair Jim Williams, Mark Paolillo (arrived 7:29 p.m.) and Adam Dash
[Chair Williams called the BOS to order at 7:06 p.m.]

There were roughly 85 citizens in attendance at this meeting.

I. Call to Order

The meeting was called to order at 7:06 p.m. by Chair Lovallo. Chair Lovallo reviewed the agenda and he stated his hope that the dialogue (and engagement with the community) would continue to be open and respectful.

II. Comments from Belmont Residents

Ms. Hyon-Jee Voigt stated that the decisions made tonight will impact the younger students in Belmont. These decisions could negatively impact the growth of the community as well.

Ms. Gerri Cummings, a lifetime resident of Belmont, stated that she is not interested in supporting a new high school; Belmont students are doing well with the current high school.

Ms. Ellen Schreiber thanked all the committees involved who have worked on this project. This has been a transparent and informative process.

Mr. Justin [Backley? sp?], stated that the overall new building costs are a concern, and perhaps the

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3.3.5 - LOCAL ACTIONS & APPROVALS

B. CERTIFIED MEETING MINUTES

public should be able to comment *after* the discussion pertaining to costs. The price of the building is a concern for the community, he said, even if it is an investment in the future.

Mr. Jack Weis asked whether the project is at greater risk of failing at the polls if the most expensive grade configuration option is put forth to the voters. Perhaps the grade 9-12 option would stand a better chance of passing, he wondered.

Ms. Fitzie Cowing, BHS graduate and Belmont parent, spoke to her concern about the Brendan Grant Memorial Baseball Field. Brendan's memory needs to be preserved wherever the new baseball field is relocated to. She also requested that consideration be paid to other sentimental aspects of the current building. Chair Lovallo commented that the Building Committee is very sensitive of the Brendan Grant Memorial Field and contacted the Brendan Grant Foundation at the onset of design. The Foundation is aware that the Brendan Grant Memorial Field is moving and continues to provide comments to the Building Committee.

III. Project Costs

Chair Lovallo provided some background information on the cost factors of the project. He spoke to the many factors that impact the cost of the project. There are construction costs as well as project costs. Project costs include construction costs ("hard costs"), but also encompass many other cost components. He then explained how the construction cost estimates are arrived at during this phase of estimation – mainly they are derived from the square footage of the project, which is controlled by the MSBA. He explained several other factors that impact the cost of the project, including the escalation costs.

The building committee, he said, is working very hard to control the costs. A better-defined cost estimation should be known over the next few months. He explained that the MSBA will define its reimbursement of eligible costs, which will help identify Belmont's contribution. The MSBA has a construction cost cap as well as exclusions, i.e., things they will not reimburse for. The current estimated reimbursement rate for Belmont is roughly 36.89 percent, and is based on socioeconomics and demographics.

Ms. Shea summarized that the project cost is driven by construction costs, which are based on square footage. She then asked: to reduce the size of the building, and therefore reduce the costs, would the predicted enrollment need to decrease? Chair Lovallo agreed that the building size (square footage) is based on enrollment.

Member McLaughlin noted that if the grade configuration for the new building is 7-12, Belmont will save money by not needing to build an elementary school. Mr. Phelan agreed and noted that a grade 9-12 school will not handle the enrollment issues at the lower grades; in that scenario, costs incurred to handle lower-grade enrollment would be around \$54-56M. Even if the new building is grades 7-12, some right-sizing would be needed at the Chenery and elementary levels, costing about \$18M. He noted that it would not be possible to build an elementary school near the high school; in fact, no space has been identified in Belmont where an elementary school could be built.

Mr. McLaughlin then spoke to the tax impact (an average of \$1,800 per year for 30 years) and added that the new high school would likely increase home values in Belmont.

Mr. Phelan added that, while there is financial help from the MSBA to fund a new high school, there
FINAL

B. CERTIFIED MEETING MINUTES

are no corresponding vehicles to fund the building of a new elementary school or make additions to the existing schools. The grade 7-12 option may therefore provide the best and most cost-effective option to the community.

Mr. Gatzunis spoke to the MSBA process for supporting another elementary school. It would be a very long way down the road, he said, and could not even begin until the high school process comes to completion.

The BHSBC and SC discussed issues relating to the potential costs of the various design options.

Preliminary Design Program (PDP) Comments from the MSBA

Mr. Gatzunis noted that the MSBA's comments on the recently submitted PDP report were not at all atypical. The MSBA asked for some clarification on certain points. The responses will be submitted in the Preferred Schematic Report (PSR) document.

IV. Subcommittee on Building Systems and Operations

Chair Lovallo explained what this subcommittee might be responsible for and why it is necessary at this stage in the process.

Member McLaughlin moved: To form a Subcommittee on Building Systems and Operations. The motion passed unanimously.

V. Preliminary Site Design Updates

Ms. Trivas explained the MSBA requirements around the various design options. She explained some of the differences among the options. The pool and the field house would not be allowed in the option that is total new construction C3.1. She explained the work that has been ongoing with various consultants, e.g., landscape, traffic, ZNE, etc. The playing fields (except the tennis courts) are accommodated within the new options. It was noted that the designs would continue to evolve and that conversations related to traffic would also continue.

Mr. McLaughlin raised several issues relating to phasing, which drives much of the decision-making process. He advised that it might be cheaper to separately fund a new pool, rather than to finance an expensive building, in order to save the existing pool. He said that he favors options C2.3 and C2.4.

Ms. Trivas briefly reviewed some of the points of the four design options.

Mr. Phelan noted that community feedback has been incorporated into the design options. He agreed that the staging of the work is a very important consideration and has a high education value to it. He said that he also favors C2.3 and C2.4. Both of these options have profound educational benefits for students as well as teachers. Ms. Shea concurred with Mr. McLaughlin and Mr. Phelan's reasons for favoring C2.3 and C2.4. She said C2.4 provides multi-age educational opportunities. Ms. Miller explained why she prefers the C2.4 option, e.g., open spaces, natural light.

Selectman Dash expressed his thoughts on the four options. C2.4 is more circular in design, keeps more greenery intact, and does not hug Concord Ave.

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3.3.5 - LOCAL ACTIONS & APPROVALS

B. CERTIFIED MEETING MINUTES

Chair Lovallo noted that the School Committee would now opine on the grade configuration options: 9-12, 8-12, 7-12.

VI. Selection of Grade Configuration (School Committee)

Superintendent Phelan spoke to many of the challenges facing the school district over the years. He acknowledged the community for its commitment to education. He then reviewed the historical district-wide enrollment growth as well as the enrollment forecasts, which clearly continue to trend upwards. He described the impact on the lower grades (as well as some of the cost implications) of each of the grade configuration options. He outlined several challenges of only building a 9-12/8-12 building. He then outlined his support for and the overall benefits of the 7-12 configuration option.

SC Chair Fiore then asked for a motion in support of the Superintendent's grade configuration recommendation – 7-12.

SC Member Caputo moved: That the SC accept the Superintendent's recommendation for a 7-12 grade configuration option for the BHS project as required by the MSBA.

The SC then discussed the grade 7-12 option and how they came to support this grade configuration.

The motion passed unanimously.

[The SC adjourned at 9:18 p.m.]

VII. Selection of Preferred Solution (BHSBC)

Member McLaughlin moved: To instruct the design team to pursue the C2.4 proposal.
The motion passed unanimously.

Chair Lovallo thanked the Superintendent and the SC for all of their efforts.

VIII. Next Full Building Committee Meeting

Thursday, February 1, 2018 at 6:30 p.m.

X. Related Meeting Documents

1. Concept Cost Summary - PDP
2. BHS Design Selection Options

XI. End Meeting

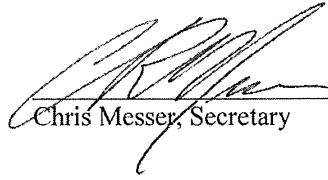
The meeting ended at 9:22 p.m. by Mr. McLaughlin.

Respectfully submitted by:

Lisa Gibalerio

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B. CERTIFIED MEETING MINUTES

Approved: 
Chris Messer, Secretary

Date 2/5/18

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PREFERRED SOLUTION	3.3.4
FINAL EVALUATION OF ALTERNATIVES	3.3.3
EVALUATION OF EXISTING CONDITIONS	3.3.2
INTRODUCTION	3.3.1
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B. CERTIFIED MEETING MINUTES

**BELMONT HIGH SCHOOL BUILDING COMMITTEE
DRAFT MEETING MINUTES
February 1, 2018
Wellington School Community Room
6:30 PM**

Meeting #38

Committee Members Attending:

Chair Lovallo; Members: Adam Dash, John Phelan, Patrice Garvin, Tom Caputo, Pat Brusch, Phyllis Marshall, Bob McLaughlin, Joe DeStefano, Joel Mooney, Diane Miller, Chris Messer, Emma Thurston, Jamie Shea

From Daedalus: Shane Nolan

From Perkins+Will: Brooke Trivas, Rick Kuhn

BHSBC Members Absent: Dan Richards

School Committee Members Attending: (Tom Caputo), Susan Burgess-Cox

Board of Selectmen Attending: Chair Jim Williams, Adam Dash
[Chair Williams called the BOS to order at 6:36 p.m.]

There were roughly four citizens in attendance at this meeting.

I. Call to Order

The meeting was called to order at 6:36 p.m. by Chair Lovallo. He reviewed the evening's agenda and then turned to the first item.

II. Minutes of Previous Meetings

Mr. McLaughlin moved: To approve the Minutes of 1/11/18, 1/16/18, 1/18/18, 1/23/18.
The motion passed unanimously.

III. Comments from Belmont Residents

No comments this evening.

IV. Preliminary Site Design Updates

Ms. Trivas noted that one site plan, one building plan, and one grade configuration will be focused on going forward. She noted that there is a site plan [C2.4] which is continuing to develop and is currently focusing on traffic, bus zones, drop off areas, parking, athletic fields, etc.

Chair Lovallo reviewed some of the parking lot space data. Parking for this project will need to accommodate staff for grades 7-12 and upper class students. Overall, there are 430 (?) spaces being planned for throughout the campus. He added that he and Ms. Brusch will meet soon with the

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B. CERTIFIED MEETING MINUTES

Planning Board to review the project and to touch base on the schematic design process.

Ms. Shea raised the topic of the Brendan Grant Memorial Field and asked what considerations have been taken to preserve this memorial field. Chair Lovallo explained that the BHSBC has been, from the very beginning of the process, in contact with the Brendan Grant Foundation. He reviewed the elements of the field, e.g., drainage, lighting, field layout, etc. Some of these issues are under the School Committee’s purview. The Brendan Grant Foundation would like to collaborate with the BHSBC and the SC throughout the schematic design process. Mr. Phelan reiterated that the communication has been ongoing with Mr. Grant and the Foundation. He said it has been helpful to have Mr. Davis, BHS’s Athletic Director, included in the conversations.

Ms. Shea then asked about the placement of tennis courts, which are not currently on the site plan. Mr. Phelan said that there will be a tennis team and that the other tennis courts, across town, would need to be utilized.

Returning to the site plan, Mr. Trivas highlighted the green space that surrounds the building and keeps the parking area on the North side near the tracks. Ms. Miller noted that the parking is centralized on the East side but that the building entrances are on the West side; this will lead to a longer walk for the high school students (which is good for exercise), and brings the upper school students closer to the lower school. It was noted that the School Department may designate the student parking areas.

Issues and questions relating to parking logistics were explored.

Ms. Trivas reviewed the flow of bikes, walkers, and cars. Chair Lovallo noted that the Traffic Advisory Committee (TAC) has retained a traffic engineer to work with the BHSBC on traffic flow. The first meeting will be held next week, after which, other groups will be involved in the process. Selectman Dash noted that the flow of traffic, once it is determined, will impact the parking planning. Ms. Trivas noted that the traffic flow is still under analysis; nothing is final at this point.

Ms. Trivas then reviewed the “academic neighborhood diagram”, e.g., where classrooms, innovation spaces, shared spaces, breakout spaces, teacher planning spaces, circulation space, learning commons, etc. might be located. Stairs, bathrooms, elevators are all being placed in the building, as well. Both the student and faculty experiences are being taken into consideration as the planning process continues. Chair Lovallo asked about BHSBC input versus School Department input in making these types of building design decisions. Mr. Phelan noted that the Leadership Council is meeting and exploring with faculty what the impact of this new configuration means. This will require interface with the design team. He explained what this process might look like going forward, over the next few months. Chair Lovallo requested periodic updates on what the Leadership Council is discussing and deciding throughout this process. Mr. Phelan agreed and added that there will need to be a myriad of ways to involve the school staff, the BHSBC, and the community in this ongoing dialogue.

Ms. Trivas explained the process by which the various spaces (classrooms, innovation spaces, shared spaces, breakout space, teacher planning spaces, circulation space, learning commons, etc.) will be designed. She then discussed proposed ceiling heights and the items that will need to be placed on the roof. The square footage of the building is fairly set, she said, so if one area is enlarged, another area will need to be made smaller.

The BHSBC asked various questions and offered insights pertaining to the preliminary design plan.

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3.3.5 - LOCAL ACTIONS & APPROVALS

B. CERTIFIED MEETING MINUTES

V. Discussion of Preferred Schematic Report (PSR) Submission

Chair Lovallo noted that the PSR is due on Friday, February 16, 2018 and consists of multiple sections (see handout #4.) The BHSBC will vote on the PSR when it meets next week (2/13/18).

Chair Lovallo then reviewed the five PSR sections:

- 1. Introduction**
(MSBA inquiries/PDP review, project schedule update)
- 2. Evaluation of Existing Conditions**
(traffic report)
- 3. Final Evaluation of Alternatives**
(building options, new cost estimate, structural/mechanical components, Qualitative Matrix)
- 4. Preferred Solution**
(sustainability evaluation - Leeds, educational program, space summary)
- 5. Local Actions Approval Certifications**
(regulatory approvals, meeting minutes)

Chair Lovallo spent a few minutes reviewing the project schedule update, including the MSBA's approval vote date (August 29, 2018) and the Town of Belmont's vote (November 6, 2018).

VI. Next Full Building Committee Meeting

Tuesday, February 13, 2018 at 7:00 at CMS Community Room to approve the PSR

Ms. Bruschi noted that the Board of Selectmen will need to vote, over the summer, to place the BHS debt exclusion on the ballot. Chair Lovallo read the Wellington School debt exclusion ballot question and noted that the wording for the BHS ballot question would be similar.

VII. Other/New Business

BSO Update: Chair Lovallo noted that the Building Systems and Operations (BSO) Subcommittee has met to discuss temperature control, air conditioning, lighting, mechanical systems, energy efficiencies (plug load), etc.

PR Update: Ms. Shea noted that the Public Relations subcommittee met recently and heard from a concerned citizen. The BHS video is in process and the BHSBC website is coming along.

VIII. Related Meeting Documents

1. Meeting Minutes: 1/11/18, 1/16/18, 1/18/18, 1/23/18
2. Perkins + Will Site Plan documentation
3. Summary Project Schedule
4. PSR Schedule/Outline

B. CERTIFIED MEETING MINUTES

IX. End Meeting

The meeting ended at 8:20 p.m. by Mr. McLaughlin.

Respectfully submitted by:

Lisa Gibalerio

Approved:

Chris Messer, Secretary

Date

3.3.5 - LOCAL ACTIONS & APPROVALS

C. LIST OF MEETING DATES AND AGENDA

BELMONT HIGH SCHOOL BUILDING COMMITTEE

PSR Public Meeting Summary

- Sustainability Presentation and Discussion
December 7th 6:30 p.m. – Joint Meeting
Wellington Elementary School, Cafeteria
Discussion of sustainability options to consider for new High School
- District Configuration Presentation – (School Committee Meeting)
December 12th 7:00 p.m. – Joint Meeting
Chenery Middle School, Community Room
Presentation of district configuration options being considered as part of the High School project
- Community Engagement #5 – Design Workshop
December 14th 7:00 p.m. (Tours at 6:00) – Joint Meeting
Belmont High School, Cafeteria
Hands-on design workshop approach to exploring building design options for the new High School
- District Configuration Community Discussion – (School Committee Meeting)
January 9th 7:00 p.m. – Joint Meeting
Belmont High School, Auditorium
Open Belmont Community forum on district configuration options
- Traffic Presentation and Discussion
January 11th 6:30 p.m. – Joint Meeting
Wellington Elementary School, Cafeteria
Review and discuss traffic solutions proposed for various High School site design solutions
- Preliminary Design Update from Design Workshop – Joint Meeting
January 16th 7:00 p.m.
Chenery Middle School, Community Room
Review and comment on design solutions incorporating feedback from previous Design Workshop
- Grade Configuration Selection and Preliminary Design Option Selection
January 23rd 7:00 p.m. – Joint Meeting
Chenery Middle School, Community Room
School Committee decision on grade configuration and Building Committee decision on design option
- Preferred Schematic Report Presentation
February 1st 6:30 p.m. – Joint Meeting
Wellington Elementary School, Community Room
Review of draft Preferred Schematic Report to be submitted to MSBA
- Preferred Schematic Report Approval
February 13th 7:00 p.m. – Joint Meeting
Chenery Middle School, Community Room
Final review and approval of Preferred Schematic Report for MSBA Board review

3.3.6 PSR REV.1/ DOCUMENTS

PSR REVIEW COMMENTS	A
PSR SPACE SUMMARY REVIEW	B
COST ESTIMATE / OPM REV.1	C
COST ESTIMATE / DESIGN TEAM REV.1	D
PRELIMINARY DESIGN PRICING REV.1	E
PSR OPTIONS RECONCILIATION REV.1	F
MEETING MINUTES	G
LOCAL ACTIONS AND APPROVALS CERTIFICATION REV.1	H

3.3.6 PSR REV. 1/ DOCUMENTS

A. PSR REVIEW COMMENTS

ATTACHMENT A MODULE 3 – PREFERRED SCHEMATIC REPORT REVIEW COMMENTS

District: *Town of Belmont*
School: *Belmont High School*
Owner’s Project Manager: *Daedalus Projects, Inc.*
Designer Firm: *Perkins+Will*
Submittal Due Date: *February 21, 2018*
Submittal Received Date: *February 20, 2018*
Review Date: *February 21-March 26, 2018*
Reviewed by: *K. Brown, J. Jumpe*

MSBA REVIEW COMMENTS

The following comments¹ on the Preferred Schematic Report submittal are issued pursuant to a review of the project submittal document for the proposed project presented as a part of the Feasibility Study submission in accordance with the MSBA Module 3 Guidelines.

MSBA notes the following regarding the Preferred Solution:

- *Reference ongoing discussions with the District, design team and MSBA at the March 21, 2018 Facilities Assessment Subcommittee (“FAS”) meeting and following discussions with MSBA staff regarding the benefit to the District of additional time to further develop its preferred option prior to the MSBA Board of Director vote.*
- *Provide any updates regarding discussions with the Belmont High School steering committee that may affect the development of the proposed design and associated cost and schedule; specifically, will the revised design package submitted to MSBA on April 12, 2018 incorporate all final input from the committee that may affect the building layout, cost, and schedule. **The Belmont High School Building Committee met on April 11, 2018 and voted unanimously to support the revised submission. The committee will continue to review adjustments or changes made throughout the design process.***
- *Please confirm the District’s intent to target a Net Zero level of energy efficiency, and confirm that the cost estimates and budgets provided for the options in this submittal include all costs associated with the proposed sustainable systems. Provide any cost analysis or cost/benefit analysis regarding these systems associated with this targeted energy goal. **The District continues to target a Net Zero level of energy efficiency. The cost estimates include the associated costs for this.***
- *As mentioned at the FAS an area of concern for the MSBA and its Board of Directors is what is deemed as eligible soft costs associated with scope beyond MSBA guidelines and higher*

¹ The written comments provided by the MSBA are solely for purposes of determining whether the submittal documents, analysis process, proposed planning concept and any other design documents submitted for MSBA review appear consistent with the MSBA’s guidelines and requirements, and are not for the purpose of determining whether the proposed design and its process may meet any legal requirements imposed by federal, state or local law, including, but not limited to, zoning ordinances and by-laws, environmental regulations, building codes, sanitary codes, safety codes and public procurement laws or for the purpose of determining whether the proposed design and process meet any applicable professional standard of care or any other standard of care. Project designers are obligated to implement detailed planning and technical review procedures to effect coordination of design criteria, buildability, and technical adequacy of project concepts. Each city, town and regional school district shall be solely responsible for ensuring that its project development concepts comply with all applicable provisions of federal, state, and local law. The MSBA recommends that each city, town and regional school district have its legal counsel review its development process and subsequent bid documents to ensure that it is in compliance with all provisions of federal, state and local law, prior to bidding. The MSBA shall not be responsible for any legal fees or costs of any kind that may be incurred by a city, town or regional school district in relation to MSBA requirements or the preparation and review of the project’s planning process or plans and specifications.

A. PSR REVIEW COMMENTS

construction costs. Please note that during review of the District's forthcoming Schematic Design Submittal because of the ineligible scope associated with the renovated pool, field house, and offsite traffic mitigation MSBA will be reviewing costs associated with project management and design services and may deem portions of these costs ineligible for reimbursement. The proposed area of the District's preferred addition/renovation option is 83,757 square feet ("sf") or 23% greater than the area included in the MSBA space guidelines. **Acknowledged, we request a further discussion with the MSBA of areas deemed ineligible for reimbursement.**

- The District's preferred addition/renovation option has a project cost that is \$13.3m higher than the new construction option.
- As noted at the FAS meeting because the preferred solution is essentially a new school attached to the existing field house and pool the MSBA is expecting that all forthcoming submittals are based on a grossing factor of no more than 1.50 exclusive of areas associated the existing field house and pool. **As discussed in a telephone conversation with MSBA staff, the entire building will meet the grossing factor of 1.5. The new construction portion will also meet the 1.5 grossing factor by including a credit of 31,604 s.f. for the P.E. spaces.**
- At \$544/sf, the construction cost of the preferred addition/renovation option is \$92/sf or 20% over the average of \$452/sf of seven recently approved MSBA new high school projects.
- The MSBA compared the cost estimate for the District's preferred solution with seven recently approved high school projects and notes that direct costs per square foot were 15% higher for Shell and Services (HVAC, electrical, etc.), and greater than 40% higher for Foundations and Construction Markup than the average of the seven high school projects recently approved. The MSBA encourages the District and its consultants to further review the proposed project to confirm that the underlying factors leading to the higher costs provide sufficient benefit to warrant the added costs and where possible adjust the proposed design to reduce costs. The MSBA also noted costs that were 19% greater than the average of the seven high schools for Special Construction of which most is for hazardous material abatement. The MSBA looks to the District and its consultants to ensure the project scope and budget documentation is of sufficient detail to capture the anticipated costs associated with hazardous material abatement, some of which will be eligible for reimbursement and some that will be ineligible for reimbursement. Please acknowledge. **Acknowledged. Spray fire proofing insulation materials containing asbestos were applied during the original construction of the building which is very expensive to abate. The soil boring testing results require a deep pile foundation system and heavy framed slab-on-grade. The mechanical costs include Zero Net Energy (ZNE) features that are expected to significantly reduce operating costs and these systems will be further evaluated in SD. High escalation rates for the anticipated GMP dates, and the current busy construction market also increase projected costs above current market numbers.**
- Some of this area in excess of guidelines and cost in the addition/renovation option is associated with maintaining the existing field house and pool. The submittal notes this was a primary reason for the support of the preferred solution and that the District acknowledges that associated costs are ineligible for reimbursement by MSBA. Proposed areas beyond that included in the MSBA guidelines and proposed construction costs greater than construction costs with other recently approved high school projects increase the District's share of the project cost.

3.3.6 PSR REV.1/ DOCUMENTS

A. PSR REVIEW COMMENTS

- *MSBA encourages the District and its consultants to look for ways to reduce excessive area and costs in the subsequent Project Scope and Budget phase of the Feasibility Study. Acknowledged, the District and its consultants are continuing to review ways to reduce program and accessory areas as well as any and all cost reduction measures.*
- *Please acknowledge the District’s understanding of the proposed scope, costs and estimated impact to the District’s share of the proposed project costs. Acknowledged, the District and its consultants are continuing to review ways to reduce program and accessory areas as well as any and all cost reduction measures.*

3.3 PREFERRED SCHEMATIC REPORT

Overview of Preferred Schematic Submittal	Complete	Provided; <i>Refer to comments following each section</i>	Not Provided; <i>Refer to comments following each section</i>	Receipt of District’s Response; <i>To be filled out by MSBA Staff</i>
OPM Certification of Completeness and Conformity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Table of Contents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3.1 Introduction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3.2 Evaluation of Existing Conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3.3 Final Evaluation of Alternatives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3.4 Preferred Solution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3.5 Local Actions and Approval Certification	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.3.1 INTRODUCTION

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District’s response required</i>	Not Provided; <i>District’s response required</i>	Receipt of District’s Response; <i>To be filled out by MSBA Staff</i>
1	Overview of the process undertaken since submittal of the Preliminary Design Program that concludes with submittal of the Preferred Schematic Report, including any new information and changes to previously submitted information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Summary of updated project schedule, including				
	a) Projected MSBA Board of Directors Meeting for approval of Project Scope and Budget Agreement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Projected Town/City vote for Project Scope and Budget Agreement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A. PSR REVIEW COMMENTS

	c) Anticipated start of construction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) Target move in date	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Summary of the final evaluation of existing conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Summary of final evaluation of alternatives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Summary of District’s preferred solution	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	A copy of the MSBA Preliminary Design Program project review and corresponding District response	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

- 1) *The Introduction notes the District selected the 7-12 grade configuration option as the preferred option, including renovation of the existing pool, field house and gym. Note that for the purposes of clarity in this review, the 1970 field house located within the existing high school facility will be referred to as the “existing field house”, and the separate existing historic field house building will be referred to as the “1910/1932 White Memorial field house” (no response required).*

- 2) *The submittal includes a detailed analysis by Symmes Maini & McKee Associates, Inc, working directly with the District, to review a district-wide capacity analysis of the various schools in the district and how the 7-12, 8-12 and 9-12 grade options for this project will affect the remaining middle school and elementary schools in Belmont. The selection by the District to reconfigure the high school to a 7-12 upper and lower high school was based on this analysis due to current and projected overcrowding at all grade levels in the district (no response required).*

- 3) *The existing conditions summary notes an existing challenge of onsite traffic flow, parking and backed up traffic on the adjoining local streets during pick-up and drop-off periods. Describe any design strategies to mitigate the added traffic resulting from the addition of grades 7 and 8, and how the additional traffic was considered in the decision to select the 7-12 option. **The current high school site creates off-site queues and intersection impacts that have grown over time with the general increase in driving to schools observed in Belmont, regionally, and nationally, as more students have access to their own car and parents are more inclined to giving their children rides instead of walking, biking or taking the bus. However, the high school’s off-site impacts are mostly the result of three site design factors:***
 - *First, a one-way driveway concentrates all entering traffic at the Hittinger & Underwood intersection, forcing all entering cars and buses to use only those smaller residential streets during morning drop-off when overall commute traffic is near its peak. This problem is compounded by allowing some exiting traffic to go back out into the Hittinger & Underwood intersection. Meanwhile, the majority of exiting traffic is concentrated at the Concord Ave. exit and can only turn right, which puts left-turn and U-turn burden on the next available intersection at Goden Street for all cars destined for points east and south, which is the typical commute direction.*
 - *Second, the main parking lot has an entry and exit under 100-feet from the Hittinger & Underwood intersection, creating multiple conflict and decision points within a very short distance. This forces drivers to cautiously yield to other entering traffic, exiting traffic, entering*

3.3.6 PSR REV. 1/ DOCUMENTS

A. PSR REVIEW COMMENTS

bicycles, and students on foot at two crosswalks within a very short distance, contributing to delays.

- Third, while ample queue storage exists between the front door drop-off and the nearest intersection (Hittinger & Underwood), this is not the case with parking lot queues. Any delays created in the main lot can create a parking queue that readily spills the short distance (100-foot) onto the entry driveway, which is already a conflicted location, as noted above.

In summary, these three aspects of the existing site conditions cause extensive queuing on Hittinger & Underwood, which impacts their respective intersections with Brighton and Concord quite some distance away. To remedy this situation and accommodate the planned enrollment growth, the proposed site configuration resolves each of these three conditions. Firstly, the main driveway is recommended to be two-way, which enables trips to and from Concord as well as Hittinger. Nearly half the existing volume entering at Hittinger & Underwood is expected in the future, with approximately half of entrances and exits now occurring at Concord. Furthermore, the Concord exit is planned to allow lefts out of the site, eliminating any U-turn threat by providing direct eastbound access and encouraging the use of streets besides Goden to proceed southbound. Secondly, the driveway has no internal intersections for at least 300-feet into the site (from either Hittinger or Concord), eliminating the multiple conflict points which are causing most of the delay and queuing on Hittinger and Underwood. Not only is each end of the driveway separated from nearby intersections, conflicts are further minimized by reducing the multiple conflict points with walking and biking students by separating walk & bike desire lines from driving desire lines (walkers and bikers will primarily enter and exit a block west of the eastern driveway or a block east of the western driveway). Finally, if there is any queuing caused by any parking delays on-site, all parking is separated from the driveway's intersections by over 300-feet with no redundant conflict points in-between, helping store any potential queues internal to the site.

With respect to future student population growth, a conservative estimation of future enrollment growth in grades 9-12 projects about 200 new driving trips during drop-off or pick-up. However, the project hopes that rates of walking, biking and transit will increase with better programs to manage driving demand, including priced parking permits, reduced bus service fees, and new signalized crossings of Concord Ave. If implemented, these measures would offset any growth in enrollment. Meanwhile, the addition of 7th and 8th grades to the site is not expected to grow traffic significantly due to the known access patterns of students in these grades, which includes significantly higher rates of bus ridership, no on-site parking, and greater rates of walking and biking. This produces another 300 new driving trips, resulting in a maximum increase of 500 cars during drop-off or pick-up. The above circulation improvements will easily accommodate this growth without impact to surrounding streets.

4,5) The submittal notes that the District's unanimous support of Option C.2.4 was primarily due to preservation of the existing pool and field house, and for siting advantages over the other options (no response required).

6) The District provided a February 2, 2018 response to the MSBA PDP submittal review. MSBA notes the following statements from the District's response (Confirm and acknowledge each item):

A. PSR REVIEW COMMENTS

- *The District will provide a copy of the timelines regarding the Project Notification Form and approvals by MA Historical Commission in the forthcoming Schematic Design submittal for any modifications of the Clay Pit Pond landscaped area and proposed demolition of the 1910/1932 White Memorial field house. Acknowledged, the schedule submitted with the Schematic Design Submittal will include all milestone dates.*
- *All costs associated with the demolition of the 1910/1932 White Memorial field house, any scope of work associated with the adjacent existing skating rink, and costs associated with constructing a parking area and amenities adjacent to the existing skating rink must be itemized as ineligible for MSBA reimbursement in the following Schematic Design submittal. Demolition of the White Field house is necessary in order to replicate existing school related sports fields on the property, it should be noted that due to the site constraints, the Tennis Courts are not being replaced. The parking area adjacent to the skating rink will be used for teacher and student parking on school days, it will also serve the needs of the skating rink during non-school hours. Renovations to the skating rink are not a part of this project.*
- *The preferred option under consideration does not include the construction of any structure or critical facility within the Zone AE (in the vicinity of the existing Clay Pit Pond), and the Zone AE area would remain open space and available for flood storage as required. Acknowledged.*
- *The project team does not anticipate any development restrictions or additional project costs associated with the existing MBTA Fitchburg rail line along the northern site border. Acknowledged.*
- *Any scope of work associated with the future Belmont community path parallel to the rail line and existing multi-generational Clay Pit Pond walking path & amenities (both on-site), and the potential future pedestrian connecting underpass at Alexander St. / MBTA Fitchburg rail line (off-site) will be procured, designed, funded and implemented by the Town of Belmont separate from the scope of work for the high school project. Acknowledged.*
- *The phase 1 environmental report notes the potential presence of an abandoned underground storage tank in the vicinity of the existing skating rink, and that the existing site was used as a landfill prior to development by the town for a school. Geo-technical and geo-environmental investigations are ongoing and will be completed in the Schematic Design phase of the feasibility study. MSBA noted that all costs associated with abatement of contaminated soil from any source and abatement of underground storage tanks must be itemized as ineligible for MSBA reimbursement. Acknowledged.*

No further review comments for this section.

3.3.6 PSR REV.1/ DOCUMENTS

A. PSR REVIEW COMMENTS

3.3.2 EVALUATION OF EXISTING CONDITIONS

Provide the following Items		Complete; No response required	Provided; District's response required	Not Provided; District's response required	Receipt of District's Response; To be filled out by MSBA Staff
1	A narrative of any changes resulting from new information that informs the conclusions of the evaluation of the existing conditions and its impact on the final evaluation of alternatives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	If changes are substantive, provide an updated Evaluation of Existing Conditions and identify as final. Identify additional testing that is recommended during future phases of the proposed project and indicate when the investigations and analysis will be completed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

1) The updated existing conditions report (data and voice communications systems) notes that the second floor main distribution frame room is the centralized management point for all data communications for the high school, the school district and the town. Describe whether this district/town function will continue in the proposed new facility, and how these MDF space(s) are accounted for in the space summary spreadsheet. **This area is the main data distribution hub for the High School, it also serves as the connection point for the High School to the entire School District system. The Town network system incorporates redundant systems for continuity of operations, this connection serves as one of those redundant points, it is not the management point for the entire system.**

No further review comments for this section.

3.3.3 FINAL EVALUATION OF ALTERNATIVES

Include at least three potential alternatives, with at least one renovation and/or addition option. Include the following for each alternative where appropriate:

Provide the following Items		Complete; No response required	Provided; District's response required	Not Provided; District's response required	Receipt of District's Response; To be filled out by MSBA Staff
1	An analysis of each prospective site including:				
	a) Natural site limitations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Building footprint(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Athletic fields	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) Parking areas and drives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A. PSR REVIEW COMMENTS

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District's response required</i>	Not Provided; <i>District's response required</i>	Receipt of District's Response; <i>To be filled out by MSBA Staff</i>
	e) Bus and parent drop-off areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	f) Site access and surrounding site features.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Evaluation of the potential impact that construction of each option will have on students and measures recommended to mitigate impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Conceptual architectural and site drawings that satisfy the requirements of the education program	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	An outline of the major building structural systems	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	The source, capacities, and method of obtaining all utilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	A narrative of the major building systems	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	A proposed total project budget and a construction cost estimate using the Uniformat II Elemental Classification format (to as much detail as the drawings and descriptions permit, but no less than Level 2)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Permitting requirements and associated approval schedule	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Proposed project design and construction schedule including consideration of phasing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Completed Table 1 – MSBA Summary of Preliminary Design Pricing spreadsheet	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

3) As noted above, the District has narrowed the scope of the study to the 7-12 grade configuration options (designated in the submittal as grade configuration “C”) based on the district-wide capacity analysis of the various schools in the district. The submitted feasibility study includes a base repair option with a project cost of \$111.5m, three addition/renovation options ranging in project costs of \$302.1- \$307.3m, and a new building option with a project cost of \$293.8m.

The submittal includes the following in the final evaluation of options:

- Option C.1 (base repair) is 257,120 total sf; no new construction
- Option C.2.1 (add/reno) is 451,800 total sf; 47.0% new construction, 53.0% renovation
- Option C.2.3 (add/reno) is 451,800 total sf; 85.6% new construction, 14.4% renovation
- Option C.2.4 (add/reno) is 451,800 total sf - 86.2% new construction, 13.8% renovation
- Option C.3.1 (new construction) is 422,925 total sf; all new

3.3.6 PSR REV. 1/ DOCUMENTS

A. PSR REVIEW COMMENTS

The three addition/renovation options are indicated as being the same overall building size, and vary in proportion of renovated vs new area. All are 4-stories, and exceed MSBA spaces guidelines by 84,649 gross sf using a 1.5 grossing factor:

- *Option C.2.1 (\$302.1m project cost) includes additions to meet the educational programmed area, and renovations to the existing spaces to remain in place. The existing field house, gym, lockers, pool and auditorium are renovated. The kitchen, cafeteria, media center, and some educational spaces are relocated. The new upper 2-stories are located on top of the existing 2-story structure. Multi-height spaces are limited.*
- *Option C.2.3 (\$307.3m project cost) includes renovation of the existing field house, gym, lockers and pool spaces. All other spaces are replaced with new construction. The design includes a new auditorium and black box theater. A relatively narrow glass-covered 4-story atrium lobby space extends the full length of the building with upper level crossing bridges and single-loaded corridor/balconies for circulation.*
- *Option C.2.4 (\$307.2m project cost) is a plan variation to Option C.2.3, differing in the configuration of the central atrium lobby space and connecting circulation. One of the three central lobby areas is covered with a green roof over the third floor; the other two are covered with a glass roof structure over the fourth floor.*

The new construction Option C.3.1 is also 4 stories in height. It does not include the existing field house and pool provided in the three add/reno options above, and exceeds MSBA space guidelines by 55,774 gsf. Because the proposed new building is located adjacent to the existing building with no overlapping area, the construction sequence does not require multiple construction phases of areas occupied by students.

Provide a response to each of the following comments:

The (existing building) 2-story Base Repair Option C.1 is noted as too small to meet the described educational program for a 7-12 facility. However; as a 9-12 / 1,470 student grade configuration, the existing building is only 6,000 gsf smaller or 2% less than current MSBA space standards. Describe any discussions and the evaluation process relating to the potential for a base repair option for the existing building as 9-12 facility, as a comparison to the 7-12 options.

*MSBA notes that a space summary was provided only for the preferred option C.2.4. The three add/reno options are shown as having the same total sf, although the extent of internal circulation and multi-height spaces vary greatly for each design. Note that, because of the separation of classroom wings in the preferred option and resulting increase in circulation area, the preferred option floor plan shows five stairs that connect all four floors, two stairs that connect two floors, and one stair that connects three floors. Verify that the sf indicated for each option and resulting construction costs are accurate and that no option will exceed the maximum allowable grossing factor of 1.5. Confirm that the space summary provided reflects the preferred solution. **Each alternative option was designed to the net program as defined by the Town of Belmont using the MSBA Educational Space Summary Template. Each project was also designed to not exceed the project allowable grossing factor of 1.5. These two variables allowed the Belmont Building Committee to evaluate multiple options based on their educational values, site strategies and architectural characteristics.***

A. PSR REVIEW COMMENTS

Option 2.C.1 is roughly \$5m less project cost and has the same programmed areas compared to the other two add/reno options (although it is \$8m more than the new building option). It has half the new construction area, four times the existing renovated area, and requires a significantly lower percent of demolition of the existing building compared to the other add/reno options. This option appears to have a more efficient circulation layout, resulting in a lower grossing factor. Given these advantages, describe why this option is not preferred over the other add/reno options. This option was carefully reviewed by the Community, Building Committee, School Committee, Selectman and other town constituents. The drawbacks of this option fall into two primary categories: academic and logistical impacts. It was determined that Option C2.1 would require multiple construction phases resulting in significant academic disruption and a longer construction duration. Multiple phases will impact exterior athletic use, parking, and traffic, and circulation. In addition, the complex multi-phased renovation project would require the students to move multiple times during their High School experience. The quality of the academic environment in this compressed site would be compromised due to disruption from noise, abatement, dust, odors and additional construction traffic. The educational impacts are as follows; administration was not located near the front door to reinforce security measures, major shared public spaces are on opposite ends of the facility making lock-down and after hours use difficult and circulation/pre-function inefficient. The exterior athletic program would be severely reduced though the elimination of a major multi-use field. This option C2.1 requires horizontal expansion which increases the already long path of travel through the facility making travel time between classes too long. The sprawling layout does not facilitate interdisciplinary activities between department for 21st Century Learning. The Town of Belmont has made a serious commitment to the goals and objectives of Net-Zero and this option would compromise these goals because the existing brick skin is not easily retrofitted to a high performing thermal vapor barrier. In addition, the horizontal layout of the facility gives it a highly inefficient skin to volume ratio. It is unclear if the existing bar joist roof structure could support the weight of the photo voltaic system. The team studied the issues around resilience and determined that the site is anticipated to continue to flood during storm events putting the future investment in the building and student health at risk.

- As noted elsewhere in this review, the District's preferred option C.2.4 is currently 83,757 gsf over MSBA space guidelines, and approximately 32,000 gsf over guidelines exclusive of the existing field house and pool areas. Confirm that the District understands the impact this additional square footage has on the total project budget, and the District's share of the project cost. Based on the Town's responses and in subsequent phases of the study, the MSBA will review the proposed project for conformance with the MSBA guidelines and programmatic needs that may vary from the guidelines. Acknowledged, the District and its consultants are continuing to review ways to reduce program and accessory areas as well as any and all cost reduction measures.*

The proposed new building option is 55,774 gsf over MSBA space guidelines for a 2,215 student, 7-12 school using a grossing factor of 1.5. This excess area represents approximately \$31m in construction costs using the proposed \$556/sf construction cost for this option (including this excess area, this new building option is still \$13.3m lower in project costs than the District's preferred option). Given the MSBA's goal to support educationally-appropriate, flexible, sustainable, and cost-effective public school facilities, and expressed local concern for the proposed cost of this project noted in the

3.3.6 PSR REV. 1/ DOCUMENTS

A. PSR REVIEW COMMENTS

submittal, describe the benefits of the preferred solution and why the MSBA should support an addition/renovation project that is higher in cost than a more efficient, new building that more closely aligns with MSBA space standards. The Belmont High School Building Committee (BHSBC), Design Team, OPM, Selectman, School Committee, along with the Belmont residents in attendance, discussed in detail the pros and cons of the alternatives presented to them over a series of public meetings as noted and outlined in the schedule provided to the MSBA. A major component of the discussions, revolved around site planning, circulation, traffic, parking, pedestrian and bike circulation, access and views to the pond, as well as the impact to the residential neighbors located on Concord Avenue and Channing Road. It was determined that the preferred solution (C2.4) had the least impact to the neighbors on Channing Road and Concord Avenue. The conversation focused on the scale, height and massing of all of the building solutions (renovation only, renovation/addition and new construction). The Preferred solution was set back from both Channing Road and Concord Avenue and presented the least impact to the neighborhood while embracing the pond to capitalize on the public space and views from the academic spaces. Further analysis determined that there would be no shadows cast by the massing of the preferred option to the neighbors. In addition, the building siting of the preferred solution created a greater buffer/ set back from the train located on the North side of the site (except where the existing gymnasium is located) this new building siting would contribute to a reduction of noise and reverberation into the academic areas by the train. The new construction prompted a great deal of discussion from the Community due to the perceived negative impact the scale and height had on the residences located along Concord Avenue. The scale of the four-story massing along Concord Avenue was an untenable solution to the Community and created one of the primary concerns regarding the New Construction alternative.

In addition to the siting and massing of the options, there were clear deviations of the educational program from the C2.4 and B3.1 alternatives. C2.4 had distinct advantage to the community due to the continuance and reuse of the existing field house, small gym, locker rooms, and pool. There were many conversations with the community and committee around the need for these programs at the Belmont High School. More information regarding the need for these critical spaces can be found in the PDP, PSR, PSR Revised 1 and Response to the MSBA PSR letter. The new construction eliminated these essential spaces for teaching and learning and health and wellness. The preferred option included the essential educational program spaces that supported the goals and aspirations of the Belmont Community. It was a clear consensus after a cost benefit analysis was taken that the additional square footages were essential to the Belmont High School Program and there was an understanding that there would be a correlation of additional costs for this Preferred Option.

6) MSBA notes that the \$111.5m “Base Repair” Option C.1 includes replacing the existing HVAC system with a ground loop geo-exchange system to attempt zero net energy, similar to the addition/renovation and new building options in the evaluation. Although this system is not itemized in the cost estimates, based on other similar projects, 400 wells of 450’ depth could cost roughly \$7-8m in construction costs. Describe the extent of the discussion and analysis used to compare the benefits, liabilities of construction and operating cost of the geo-thermal system to a more typical energy efficient system (also refer to comment #10 below). Please confirm that the proposed cost estimates provided include these costs as well as all of the sustainable design features needed to achieve net zero facility for all of the options and if it is included within the \$544/sf for the District’s preferred solution. The cost for the geo-exchange system and the PV array as well as supporting terminal systems were included in the base cost for all Renovation/Addition options except for the Base Repair only option. The cost benefit analysis and detailed energy modeling to evaluate the narrative of these

A. PSR REVIEW COMMENTS

systems is ongoing and will be included in the Schematic Design Submission. Test wells and whole building energy modeling are ongoing and will be evaluated during SD and DD.

7) *Provided; refer to the summary comments on page 1 of this review regarding the proposed total project budget and construction cost for the proposed options.*

8) *The submittal notes that “the Town of Belmont has exercised its rights under the Dover Amendment for all of its previous school projects and will continue this practice for the High School Project.” In the response to this review, describe any Town zoning or planning requirements that require exemption using the Dover Amendment, and any proposed scheduling milestones for the preferred solution regarding these approvals. This information should be included in future project schedules. The District has met with and will continue to meet with the Belmont regulatory officials including the Zoning Enforcement Office and Planning Board Director. Public meeting and hearings have been scheduled with the Planning Board and the dates are noted in the attached schedule.*

10) *Confirm that the cost estimates and budgets provided for each option in the Preliminary Design Pricing spreadsheet include all costs associated with the targeted Net Zero level of energy efficiency, most notably (but not limited to) the geothermal system, as well as all the proposed sustainable systems. The cost for the geo-exchange system and the PV array are as well as supporting terminal systems were include in the base cost for all Renovation/Addition options except for the Base Repair only option. The cost benefit analysis and detailed energy modeling to evaluate the narrative of these systems is ongoing and will be included in the Schematic Design Submission. Test wells and whole building energy modeling are ongoing and will be evaluated during Schematic Design and Design Development.*

The area indicated for the preferred option in the Preliminary Design Pricing Table is 892 gross square feet greater than the area indicated in the space summary. Please confirm which value should inform the basis of the District’s Preferred Solution. The values used in the Preliminary Design Pricing Table should be used, however, MSBA should look to the current MSBA Educational Space Summary included in the PSR Revision 1.

No further review comments for this section.

3.3.4 PREFERRED SOLUTION

Provide the following Items		Complete; No response required	Provided; District’s response required	Not Provided; District’s response required	Receipt of District’s Response; To be filled out by MSBA Staff
1	Educational Program				

3.3.6 PSR REV.1/ DOCUMENTS

A. PSR REVIEW COMMENTS

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District's response required</i>	Not Provided; <i>District's response required</i>	Receipt of District's Response; <i>To be filled out by MSBA Staff</i>
	a) Summary of key components and how the preferred solution fulfills the educational program	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Design responses including desired features and/or layout considerations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Proposed variances to, and benefits of, any changes to the current grade configuration (if any) and a related transition plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Preferred Solution Space Summary				
	a) Updated MSBA Space Summary spreadsheet	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Itemization and explanation of variations from the initial space summary (and MSBA review) included in the Preliminary Design Program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Preliminary NE-CHPS or LEED-S scorecard	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Conceptual floor plans of the preferred solution, in color that are clearly labeled to identify educational spaces	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Clearly labeled site plans of the preferred solution including, but not limited to:				
	a) Structures and boundaries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Site access and circulation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Parking and paving	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) Zoning setbacks and limitations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e) Easements and environmental buffers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	f) Emergency vehicle access	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	g) Safety and security features	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	h) Utilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	i) Athletic fields and outdoor educational spaces (existing and proposed)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	j) Site orientation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	An overview of the Total Project Budget and local funding including the following:				
	a) Estimated total construction cost	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Estimated total project cost	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A. PSR REVIEW COMMENTS

Provide the following Items		Complete; <i>No response required</i>	Provided; <i>District's response required</i>	Not Provided; <i>District's response required</i>	Receipt of District's Response; <i>To be filled out by MSBA Staff</i>
	c) Estimated funding capacity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) List of other municipal projects currently planned or in progress	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e) District's not-to-exceed Total Project Budget	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	f) Brief description of the local process for authorization and funding of the proposed project	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	g) Estimated impact to local property tax, if applicable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	h) Completed MSBA Budget Statement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Updated Project Schedule including the following projected dates:				
	a) Massachusetts Historical Commission Project Notification Form	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	b) MSBA Board of Directors meeting for approval to proceed into Schematic Design	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) MSBA Board of Directors meeting for approval of project scope and budget agreement and project funding agreement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) Town/City vote for project scope and budget agreement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e) Design Development submittal date	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	f) MSBA Design Development Submittal Review (include required 21-day duration)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	g) 60% Construction Documents submittal date	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	h) MSBA 60% Construction Documents Submittal Review (include required 21-day duration)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	i) 90% Construction Documents submittal date	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	j) MSBA 90% Construction Documents Submittal Review (include required 21-day duration)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	k) Anticipated bid date/GMP execution date	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	l) Construction start	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	m) Move-in date	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
n) Substantial completion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

MSBA Review Comments:

3.3.6 PSR REV. 1/ DOCUMENTS

A. PSR REVIEW COMMENTS

1a) Note the following comments relating to the Educational Program:

- The Educational Program confirms the Belmont School Committee approval of the administrations recommendation to reconfigure Belmont HS to a 7-12 school (no response required).
 - Provide a more detailed description of the District responses given for the following MSBA PDP review comments:
- Focus of the plan is on the “special” curriculum. Revisit with the focus of explaining how the core academics (English, math, science, social studies) work. The 7/8 grade core academic model is a traditional middle school team model. Science, Social Studies, English and Math are all core classes. World language is within the 7/8 side but not scheduled “on Team”. All electives are off Team. Special education is embedded in and around each Team and grade. The District is planning a hybrid model for grade 9 where this cohort of students is positioned in a manner that allows for deeper personal relationships to be formed and where all students are “known” to at least one adult. The District will maintain the 9th grade students’ ability to access higher level classes and programming. The 10-12 students will be served by Departments that are located strategically allowing educators to continue to explore cross disciplinary work and projects. This work has been ongoing at Belmont High School and the goal and desire is to use the building, the space and its adjacencies as a tool in the teaching, learning and collaborating of both teachers and students.
- Further explain the proposed digital graphic design/computer animation program. This program will include instruction in graphic design, computer animation and related topics. It will include a digital lab with large monitors for both the student and staff, software that will allow easy screen sharing and lighting that will prevent screen glare. Emphasis will be on the processes involved in creation of animation stressing teamwork, storyboarding, creating character, stage design and sound design.

The classes will consist of demonstrations, viewing of related works, hands-on experimentation, and critique. Programs in digital art/graphic design are a part of the National Standards for Art Education (“Contemporary Art Forms”), and the past two BPS Curriculum Review cycles have indicated this as a current area of deficiency. Level 1 courses are designed to provide students with broad skills in this medium and involve a high level of creativity in terms of art-making while also addressing the organizational and commercial applications of Graphic Design. In 2018-19 the District will run two sections of Digital Art/Graphic Design 1, and two sections of Animation 1. Both courses are fully enrolled in the first year of implementation. A Level 2 Digital Art course will be offered in 2019-20.

A. PSR REVIEW COMMENTS



- *Further explain the health program, nursing suite, and counseling areas with the mentioned understanding/focus of whole child and social/emotional well-being in mind. The guidance areas for 7/8 will be embedded in the grade / Team areas. The guidance counselor moves to the grade with the students and will change offices after each year to follow the grade cohort of students. The guidance staff in grades 9-12 will remain in a traditional department-based model. The mental health spaces will be provided to current employees who provide psychological testing and services.*

The Social Emotional initiative is one that is embedded in every aspect of the school – not just through mental health providers. Teachers, aides, administrators and all staff are trained in skills to engage and interact with children in a way that builds relationships and a feeling of safety for students. This is done through curriculum, teaching practices and intentional and strategic work to focus on school culture.

The medical suite will be a dual space that serves 7/8 on one side and 9-12 on the other. The middle space allows for efficient staffing and use of common medical areas, equipment and supplies.

- *Describe how the proposed project rooms differ in design and use from regular general classroom, and why a general classroom can't be scheduled for project-based learning activities. While Project Based Learning (PBL) can and will take place in classrooms, there are certain specialized projects which require a larger workspace than a typical desk, and require specialized equipment such as laser cutters, fume hoods, and 3D printers. In addition, there will be projects that are developed over a period of several days or even weeks, so space is required for them. In the 7/8 grade spaces the project rooms will function as open learning spaces for student group work, small group instruction, presentation spaces and learning by doing.*

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A. PSR REVIEW COMMENTS

- *Describe how the proposed innovation labs and maker spaces differ in design and use from a science lab, and why a science lab can't be scheduled for use as an innovation lab / maker space. The Innovation Labs will be used for specialized design, engineering and construction, such as robotics. Science labs will be used for science. The maker spaces in the 7/8 wing will be used as project rooms (see above questions #2) The 9-12 maker spaces will be used for robotics, coding, physics and engineering classes, as well as hands on learning for art and drama. Students in grades 7-12 will have access to these spaces during elective and non- elective blocks. The science labs at the high school level are themed by the type of science programming and will be shared by the science staff. No teacher will have his/her own room, resulting in high utilization rates. Set up, lab preparation, projects and materials will be specific to the lesson of any given unit and period of time. This would make it difficult to dismantle science materials for the use by a non-science teacher / program for a different function.*
- *How often and for what purpose would the proposed project rooms, innovation labs and maker spaces be used? Provide specific scheduling information and anticipated utilization. The Belmont public schools are committed to supporting building essential college and career skills for all our students. 9-12 innovation spaces are used for specific course and program use. These spaces will also serve 7/8 students as elective courses. These 9-12 spaces will be used by an instructor that will be an integral part of scheduling of courses within the BHS program of studies. The 7/8 spaces will be used as project rooms that will also be part of the media function. These spaces will be highly used in a scheduled and ad-hoc manner and scheduled by the Team of teachers to support their classwork, Team work, and interdisciplinary work. Spaces in the 7/8 model will be scheduled for a majority of the day and used informally and /or as necessary for the remainder of the day.*

Specifically, the district is focused on creating opportunities for students to learn and practice collaboration, creativity, critical thinking, and communication skills. Best practices for teaching these skills in each of the curricular areas are through direct instruction, frequent student practice, and in the moment feedback. Each subject area teacher will utilize the innovation spaces to support this skills-based work through the application of content knowledge. This work focuses on opportunities for students to grapple with ideas as they design, create, synthesize, and make meaning of content that is both meaningful and relevant to curious and engaged students. The District continually creates more opportunities for students to show mastery of skills and content through real world problem solving, inquiry-based investigation or creation of a product to meet a design challenge. Some examples of the way teachers will be using innovation spaces on a daily basis run the gamut from space for small groups to work through a problem to space for large, interdisciplinary learning opportunities. Here are some examples of work currently done with students:

- Economic Summit where students learn and practice communication, critical thinking and creative problem-solving skills by engaging in a real-world application of content through an interactive simulation. During the simulation, 75+ students negotiate trade

A. PSR REVIEW COMMENTS

deals while managing trade barriers, tariffs and financial limitations to execute a pre-determined list of imports

- Inquiry circles where students practice critical thinking, collaboration and communication skills by investigating a driving question and creating a product to answer it in a small group
 - Video production where: Foreign Language students use authentic resources to demonstrate their communication skills by creating a presentation; ELA and Social Studies students use their knowledge of ancient history to demonstrate their critical thinking, creativity, and collaboration skills by creating a historical skit which connects the literature standards of Greek and Roman myths to historical content
 - Presentations where students practice their communication skills (English and foreign language) to demonstrate content knowledge
 - Interdisciplinary and thematic art projects where 50 + students practice their creativity, critical thinking and collaboration skills by working in groups to explore how art can be a driver for social change and then create their own art work to drive change in our community
 - Trials where: English students learn about specific aspects of our legal system and put characters from literature on trial, engaging with the themes of the novel in an authentic way; Social Studies students reenact historical trials to apply content knowledge and practice communication and critical thinking skills
 - Debates and Socratic Seminars where large groups of students debate and discuss issues related to content standards and practice communication and critical thinking skills
 - Social Entrepreneurship UN conference where students create a social business project to solve a global challenge, team up to collaborate on writing a social business plan and then pitch their business to an audience who chooses which business to invest in.
-
- *Describe why the project includes the interdisciplinary spaces listed above if the school is organized (and functions) by department, and how the facility organization can support the interdisciplinary program suggested in the Vision for Teaching and Learning section in the future, if applicable. On the 7/8 side, the District plans to further the existing interdisciplinary work as stated above. This is the current model. The 9-12 departments are piloting cross curricular work and have been pushing for flexible space for this purpose. Teacher planning areas are close to one another providing central gathering areas for teachers to discuss curriculum, instruction and cross over as an outcome of our vision work. The 9-12 area will start departmentalized and the new spaces and adjacencies will yield educator collaboration*

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and cross curricular work. This will allow staff to create a definition of project-based learning that is more about proving a “guiding question” to students and allowing them to research, analyze, and show their learning in different ways in different disciplines.

- *The Educational Program indicates three lunch periods; two for grades 7-8 and two for grades 9-12. Are all grades mixed in one of the three periods? Two lunches for 7/8 and up to three for 9-12 students will be provided. Kitchen and serving space continues to be reviewed with the Food Service Director.*
- *The Educational Program notes that, because of overcrowding at the current Chenery Middle School, not all middle students have a locker close to their home room. Since this is identified as a concern in the existing building, describe how the District intends to address this concern in the proposed building. Because of the cluster configuration at the 7-8 grades, it is anticipated that two tier, 15” wide lockers will be used which can be located in corridors proximate to the cluster in which the child attends.*
- *Confirm use and distribution of lockers in the high school portion of the school as some other districts have found them to go unused. 9-12 students have been surveyed about lockers. We found that 50% of our students state they would like to have lockers for the following needs: coats, book bags, storing items of value such as musical instruments, sports equipment, texts and school supplies. Lockers will therefore be provided for 50% of the High School population.*
- *Given the extent of digital arts in the program, describe the need for a photographic dark room and two kilns (consider consolidating or sharing kilns and other underutilized spaces to the extent possible). Provide specific scheduling information and anticipated utilization for these spaces and describe anticipated chemical and hazardous materials storage and related safety protocols. The District has begun to consolidate its program offerings at BHS in light of the addition of Digital Art to the curriculum. For many years four levels of Ceramics and two levels of Sculpture have been run. Beginning in 2018-19, these two programs (Ceramics & Sculpture) have been combined into one course of study called “3D Art”. This course combines aspects of both ceramics and sculpture and will increase kiln usage on a regular basis.*

The District currently employs the use of four kilns for Grades 7-12 (two at Chenery Middle School and two at Belmont High School). There is no anticipated drop-off in the amount of kiln use needed for Grades 7-8 or 9-12. In 2018-19 the district will run five sections of courses at BHS that will require regular kiln use. In addition, 7th and 8th Grade art classes will also require routine access to kilns. The District does not anticipate the addition and growth of the digital art program to pull many students away from the 3D Art (ceramics) program. The Digital Art/Graphic Design and Animation programs appeal to a different type of art student than would typically enroll in a Ceramics class. The technology-based art programs are designed to serve students who are not currently enrolled in visual art programs at BHS.

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The traditional photography program at BHS has been *overenrolled*. In 2018-19 over six fully enrolled sections of Photography (three levels) are provided, and there will be dozens of students who will unfortunately not be granted a seat in these classes due to enrollment constraints. All of this is with the addition of Digital Art coursework. Traditional photography, while seemingly out of date to casual photographers who snap photos with smartphones, is incredibly vibrant and expressive art form in our society. The skills and techniques that go into it, from safe handling of chemicals, careful attention to every detail in lighting, and the patience and precision required to develop prints are aspects the District believes will always have a place in its curriculum.

- *Provide the anticipated number and grades of students in the METCO program. The proposed program includes a separate METCO classroom. Please describe the need for a separate classroom as this runs counter to the METCO philosophy of making these students a fully integrated part of the school community and receiving services (individually designed) from the same professionals and in the same groupings as any other student. There are currently 43 High School level and 16 grade 7-8 METCO students. The designated METCO classroom has been eliminated and replaced with a group instruction room that will provide a before and after school area for student support (open to all students). The total METCO enrollment for Belmont Public Schools is 102 students. METCO students across the district are included, scheduled, and engaged with all other students. At the high school level, students have a “free period” and students choose to gather in various parts of the building including: the cafeteria during and not during lunch, the student center / library, the hallways and or in teaches rooms. METCO students as well as non-METCO students also utilize a small space to gather to study, get tutoring and to relax given their long day of getting to school, going through a full school day and after school and getting home. The breakdown by grade is the following*

Kindergarten - 8 students	Grade 1 – 1 student	Grade 2 – 6 students	Grade 3 – 7 students	Grade 4 – 7 students	Grade 5 – 10 students
Grade 6 – 4 students	Grade 7- 9 students	Grade 8 – 7 students	Grade 9 – 11 students	Grade 10 – 10 students	Grade 11 – 12 students
Grade 12 – 10 students		Total 102			

- *Are the current and proposed media center / learning commons staffed by professional full-time librarians, and are the two learning commons separately and fully staffed or does staff split their time on these spaces? Who reviews, and curates, materials, software and website content? How will the Chenery Middle School library be staffed after grades 7 and 8 relocate to the high school? Media spaces at the 7/8 level will be staffed by the media specialist and the team teachers (and teacher assistants who work with students). Any and all media equipment, materials, software and technology will be supervised primarily by the*

3.3.6 PSR REV. 1/ DOCUMENTS

A. PSR REVIEW COMMENTS

media specialist and secondarily by the Team teachers/ staff. The Chenery Middle School media specialist will be moved to the new building. The 4,5,6 Upper Elementary School will utilize rotating library staff who work with elementary children.

- *Describe the extent that middle school students mix with the older high school students; describe shared spaces and separate spaces, and how the District determined this approach. Provide any information regarding community feedback regarding this decision. The school is anticipated to operate as two distinct “schools within a school,” one for Grades 7-8 and one for grades 9-12. There will be separate entrances and administrations for the two schools. All students will share the pool, fieldhouse, nursing, music, technology, and commons areas. The two schools will have separate bell schedules. The High School students will have an open campus approach, as they do now, while the 7-8 students will not. The community has overwhelmingly supported this approach. The School Committee voted unanimously to support the 7-12 grade configuration. The extent of mixing will be primarily during the time when 7/8 students go out to elective classes. Joint courses will be provided where appropriate. During the 7 full day Visioning sessions with educators and community members (including students) discussions took place regarding the clear need for careful separation of 7/8 and 9-12 students while allowing opportunities to take advantage of the unique connections that can be achieved with teacher to teacher planning across grades and scheduling and utilizing specialized spaces for students to use. This is the special aspect of the 7-12 program, if not for this combination of grades, 7/8 students may not have access to some of these great teaching spaces and programs. Also, the 7-12 building is a great opportunity to have educators collaborate across grade levels and across disciplines as they reside in the same building.*

2a) Refer to Attachment B for MSBA space summary review comments. As noted above, the area indicated in the space summary is 892 gross square feet less than the area indicated for the preferred option in the Preliminary Design Pricing Table. Please confirm which value should inform the basis of the District’s Preferred Solution. Please refer to the PSR revision 1 for an updated Educational Space Program which clarifies all educational spaces.

3) The submittal references using the LEED V4 2010 ASHRAE 90.1 baseline for energy efficiency. Note that MSBA energy standards are based on the current MA building code which uses 2015 IECC, and the 2013 ASHRAE 90.1 energy standards. Confirm that the project will use the correct baseline standards to model proposed energy efficiency. Confirmed with the Design Team Engineers that we will be using the 2013 ASHRAE 90.2 Energy Standards.

The District has indicated intent to achieve the 2% additional reimbursement through the MSBA Green School Program. The submittal indicates a total goal of 54 points using USGBC LEED-V4, including 8 points in the Energy & Atmosphere “Optimize Energy Performance” category. Note that 54 points in LEED-V4 reaches the minimum required for all MSBA core projects. However, in order

A. PSR REVIEW COMMENTS

to receive the additional 2% reimbursement in the current MSBA green policy, the District and design team must also exceed the MA state energy code by at least 20% using the current 2015 International Energy Conservation Code. Eight points in this category exceeds the energy code by approximately 14%.

If the District intends that MSBA provide a grant that includes the 2% additional reimbursement in the following project Scope and Budget phase of the study, the District must provide a revised scorecard indicating that intent (either in response to this review or in the following submittal). Refer to MSBA Project Advisory #41 "Update to the MSBA's Sustainable Building Design Policy" for more information. Acknowledge and confirm the District's intent and that the proposed project will be designed to meet or exceed the criteria set forth in project Advisory #41. **The Belmont High School project intends to secure the 2% additional reimbursement by exceeding the State Energy Code by at least 20%. The LEED ENA "optimized energy performance" will reflect the required state energy code performance. The revised and required LEED Scorecard will be submitted in the Schematic Design Submittal.**

Confirm the District's intent to target a Net Zero level of energy efficiency, and that the cost estimates and budgets provided for the preferred option include all costs associated with the proposed sustainable systems. **The District continues to target a Net Zero level of energy efficiency, the cost estimates include the associated costs for this.**

5b) MSBA understands that the site circulation configuration at preferred schematic phase is still under development; however, note the following issues for further consideration in the schematic design phase:

- The proposed site plan does not indicate accessible parking locations and a continuous accessible route to the building entrances, and the nearest parking areas appear to be remote to both entrances. **Accessible parking and routes will conform with ADA and MAAB requirements.**
- The site plan (both offsite and onsite) does not currently indicate alternative transportation walkways such as sidewalks for pedestrians and bicycles, or bicycle storage areas. **These items will be shown on future submissions.**
- Pedestrian routes from the parking areas to the building entrances appear to require crossing through the drop-off loops. **Pedestrian routes will be reviewed and revised as necessary.**

Confirm that the loading area will be provided with adequate delivery truck and refuse truck space and turn-around areas, refuse & recycling dumpster locations, raised loading areas, adequate equipment and material access routes from the loading area to the kitchen and custodial storage areas, support staff and kitchen staff parking, etc. Food deliveries appear to require passage through public/student corridors to the kitchen. **The above noted design elements will be reviewed with facilities management staff.**

-

Review offsite and onsite sidewalks, walkways, bicycle storage, crossing situations, accessible parking locations and the loading area for the following submittal. Confirm these functional design requirements will be reviewed with facilities management staff. **Acknowledged, the above noted design elements will be reviewed with facilities management staff.**

3.3.6 PSR REV.1/ DOCUMENTS

A. PSR REVIEW COMMENTS

5c) The Educational Program notes eight school buses for the proposed school. Describe the distribution of buses for the lower & upper school entrances and confirm each bus loop is adequate length for the appropriate number of buses. **It is anticipated that the district will require 9 busses at the time of project completion. The bus drop off and pick up will be at the middle school entrance. High School student use of busses is very limited. The middle school drive loop will accommodate 15 busses.**

6c) The Budget Overview notes that the proposed project will be funded in part by a town voter approved debt exclusion (no response required).

6d) The submittal notes that the skating/hockey rink project is among the several planned municipal projects in Belmont. This project, which is on the high school campus, is noted as occurring either immediately before or after construction of the high school. Confirm that scope of work for the Belmont High School project (construction costs and project costs) does not include work of any kind on the existing skating rink building, including surrounding amenities, associated site-work, parking, and demolition of the 1910/1932 White Memorial field house. **Demolition of the White Field house is necessary in order to replicate all existing school related sports fields on the property, the parking area adjacent to the skating rink is needed for teacher and student parking, it will also serve the needs of the skating rink during non-school hours. Renovations to the skating rink are not a part of this project.**

6e) The submittal notes that the District’s anticipated budget of the high school project is \$300-\$315m (the design team currently estimates the project cost to be \$307,161,440), and that the final not-to-exceed budget will be established as a part the following submittal. Refer to Module 4 “Appendix 4C Schematic Design Submittal Notification Template” for information describing the MSBA process to ensure that the following submittal conforms to the District’s established budget. Please confirm. **The Schematic Design Submittal Notification Template will be used.**

7a, 7e-j, 7m) For the following submittal, provide a project schedule that includes all milestone dates indicated in Modules 3 and 4. **See project schedule attached.**

No further review comments for this section.

3.3.5 LOCAL ACTIONS AND APPROVALS

Provide the following Items		Complete; No response required	Provided; District’s response required	Not Provided; District’s response required	Receipt of District’s Response; To be filled out by MSBA Staff
1	Certified copies of the School Building Committee meeting notes showing specific submittal approval vote language and voting results, and a list of associated School Building Committee meeting dates, agenda, attendees and description of the presentation materials.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Signed Local Actions and Approvals Certification(s):				

A. PSR REVIEW COMMENTS

Provide the following Items		Complete; No response required	Provided; District's response required	Not Provided; District's response required	Receipt of District's Response; To be filled out by MSBA Staff
	a) Submittal approval certificate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Grade reconfiguration and/or redistricting approval certificate (if applicable)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Provide the following to document approval and public notification of school configuration changes associated with the proposed project:				
	a) A description of the local process required to authorize a change to the existing grade configuration or redistricting in the district	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) A list of associated public meeting dates, agenda, attendees and description of the presentation materials	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Certified copies of the governing body (e.g. School Building Committee) meeting notes showing specific grade reconfiguration and/or redistricting, vote language, and voting results if required locally	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) A certification from the Superintendent stating the District's intent to implement a grade configuration or consolidate schools, as applicable. The certification must be signed by the Chief Executive Officer, Superintendent of Schools, and Chair of the School Committee.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSBA Review Comments:

2,3) All Local Action and Approval items and grade reconfiguration documents were provided in response to the February 26, 2018 MSBA cursory review (no response required).

No further review comments for this section.

The MSBA issues project advisories from time to time, as informational updates for Districts, Owner's Project Managers, and Designers in an effort to facilitate the efficient and effective administration of proposed projects currently pending review by the MSBA. The advisories can be found on the MSBA's website. In response to these review comments, please confirm that the District's consultants have reviewed all project advisories and they have been incorporated into the proposed project as applicable.

End

3.3.6 PSR REV.1/ DOCUMENTS

B. PSR SPACE SUMMARY REVIEW

ATTACHMENT B MODULE 3 – PREFERRED SCHEMATIC SPACE SUMMARY REVIEW

District: *Town of Belmont*
School: *Belmont High School*
Owner's Project Manager: *Daedalus Projects, Inc.*
Designer Firm: *Perkins+Will*
Submittal Due Date: *February 21, 2018*
Submittal Received Date: *February 21, 2018*
Review Date: *February 21-March 26, 2018*
Reviewed by: *A. Waldron, KBrown*

The Massachusetts School Building Authority (the “MSBA”) has completed its review of the proposed space summary of the preferred alternative as produced by Perkins + Will and its consultants. This review involved evaluating the extent to which the Belmont High School’s proposed space summary conforms to the MSBA guidelines and regulations.

The MSBA considers it critical that the Districts and their Designers aggressively pursue design strategies to achieve compliance with the MSBA guidelines for all proposed projects in the new program and strive to meet the gross square footage allowed per student and the core classroom space standards, as outlined in the guidelines. The MSBA also considers its stance on core classroom space critical to its mission of supporting the construction of successful school projects throughout the Commonwealth that meet current and future educational demands. The MSBA does not want to see this critical component of education suffer at the expense of larger or grander spaces that are not directly involved in the education of students.

While the MSBA recognizes the benefits and the challenges associated with saving or renovating existing spaces, please note that any spaces in new construction or substantially renovated spaces must be compliant with MSBA space standards for both allotted area and room quantity unless otherwise approved in writing by the MSBA.

The area included in the preferred option in the Preliminary Design Pricing Table is different than the area indicated in the space summary. Please confirm which value should inform the basis of the District’s Preferred Solution. The review comments below use the information provided in the space summary and are based on the submitted addition and/or renovation construction project option with an agreed upon design enrollment of 2,215 students in grades 7-12. **PSR REVISION 1 includes a revised space summary that is correlated with the cost estimate. Refer to the document in the PSR REVISION 1 submission for all clarifications to the educational program.**

The MSBA review comments are as follows:

- **Core Academic** – The District is proposing a total of 112,750 net square feet (nsf) which exceeds the MSBA guidelines by 7,640 nsf. The area in this category

B. PSR SPACE SUMMARY REVIEW

has not changed since the Preliminary Design Program submittal. *MSBA notes the following:*

- *The proposed program includes 10 additional classrooms, one extra science lab, and two 1,000 nsf ELL rooms over guidelines. The MSBA notes that the utilization rate below is 80% whereas the MSBA guidelines target 85% inclusive of Art, Vocations and Technology classrooms. The MSBA encourages the District and its consultants to seek additional efficiencies in the proposed program. **The District and its consultants will continue to review the proposed schedules to ensure a 85% utilization rate.***
- *The submittal indicates roughly half the standard MSBA nsf for science lab prep rooms and the chemical storage room; verify that the proposed area is sufficient to meet the educational needs (refer to the MSBA high school science lab guidelines for additional information). **The PSR REVISION 1 uses the High School Science Classroom Standard of 1,440 sf and Middle School Science Classroom Standard of 1,200. The Prep Rooms associated with the High School Science Classrooms are adjusted to 400 sf per two Science Classrooms. The Middle School Prep Rooms will remain at 200 sf per two Science Classrooms***
- *The MSBA will review the proposed project for conformance with the MSBA guidelines and programmatic needs that may vary from the guidelines in the subsequent Project Scope and Budget phase of the study, and may consider some of the area in this category as ineligible for MSBA reimbursement.*
- **Special Education** – The District is proposing a total of 26,510 net square feet (nsf) which exceeds the MSBA guidelines by 4,360 nsf. The area in this category has not changed since the Preliminary Design Program submittal. *The project includes 7,690 nsf of LABBB Collaborative spaces (without which, the Special Education category would be 3,300 nsf under guidelines). Note that the Special Education program is subject to approval by the Department of Elementary and Secondary Education (DESE). The District should provide this information for this submittal with the Schematic Design Submittal. Formal approval of the District's proposed Special Education program by the DESE is a prerequisite for executing a Project Funding Agreement with the MSBA. **The DESE submittal will be provided with the Schematic Design Submittal***

Art and Music/ Voc-Tech – The District is proposing a combined total of 33,710 nsf which is 1,815 nsf below the MSBA guidelines. The area in this category has not changed since the Preliminary Design Program submittal. *The MSBA accepts this variation to the guidelines.*

Health and Physical Education – The District is proposing a total of 54,942 nsf which exceeds the MSBA guidelines by 26,338 nsf. The area in this category has decreased by 595 nsf since the Preliminary Design Program submittal. *The MSBA notes the following:*

3.3.6 PSR REV.1/ DOCUMENTS

B. PSR SPACE SUMMARY REVIEW

- *In order for the MSBA to consider reimbursement of any area beyond that included in the guidelines detailed scheduling information that demonstrates additional teaching stations are required beyond the five stations included in the MSBA guidelines (four included in the 12,000 nsf gymnasium and one 3,000 nsf P.E. alternative physical education). The Belmont Public Schools started with the assumption that the high school schedule and middle school schedule would remain the same as it is presently working today. This would result in a complex balance of supporting the student body of 2,215 who will be sharing spaces for elective courses like physical education and wellness. The increase teaching stations for physical education would be a key component of our ability to provide programmatic equity and operationally, provide a “class” for students to attend during their elective block. The District has increased staff in this department at both levels over the last two years with the goal of reducing the amount of “frees” at the high school and study halls for 7/8 grades students. The District will have over 8.0 FTEs of wellness and PE teacher positions with the possible need for more staff due to future enrollment projections. These teaching spaces will be well utilized throughout the day by students and educators.*
- *The MSBA does not object to including this area in the proposed project, however area beyond that required to deliver the P.E. curriculum will be considered ineligible for MSBA reimbursement. Refer to the MSBA policy memorandum regarding auditorium and gym spaces beyond those included in the guidelines included with the Preliminary Design Review Comments.*
- **Media Center** – The District is proposing a total of 13,744 nsf which meets the MSBA guidelines. The area in this category has not changed since the Preliminary Design Program submittal. *No further action required.*
- **Auditorium/ Drama** - The District is proposing a total of 14,200 nsf which exceeds the MSBA guidelines by 3,800 nsf. The area in this category has not changed since the Preliminary Design Program submittal. *This overage is due to the addition of a 3,000 nsf black box and a stage that is 800 nsf larger than guidelines. As noted in the previous review comments, all area in excess of the guidelines in this category will be considered ineligible for reimbursement.*
- **Dining and Food Service** – The District is proposing a total of 16,698 nsf which meets the MSBA guidelines. The area in this category has not changed since the Preliminary Design Program submittal. *No further action required.*
- **Medical** – The District is proposing a total of 2,140 nsf which exceeds the MSBA guidelines by 430 nsf. The area in this category has not changed since the Preliminary Design Program submittal. *The MSBA encourages the District and its consultant to seek opportunities to improve efficiencies to align with MSBA guidelines. The MSBA does not object to the additional area being included in*

B. PSR SPACE SUMMARY REVIEW

the proposed project, however area beyond that included in the guidelines will be deemed ineligible.

- **Administration and Guidance** – The District is proposing a total of 10,062 nsf which exceeds the MSBA guidelines by 2,521 nsf. The area in this category has not changed since the Preliminary Design Program submittal. *The MSBA encourages the District and its consultant to seek opportunities to improve efficiencies to align with MSBA guidelines. The MSBA does not object to the additional area being included in the proposed project, however area beyond that included in the guidelines will be deemed ineligible.*
- **Custodial and Maintenance** – The District is proposing a total of 3,437 nsf which exceeds the MSBA guidelines by 150 nsf. The area in this category has not changed since the Preliminary Design Program submittal. *The MSBA encourages the District and its consultant to seek opportunities to improve efficiencies to align with MSBA guidelines. The MSBA does not object to the additional area being included in the proposed project, however area beyond that included in the guidelines will be deemed ineligible..*
- **Other** - The District is proposing a total of 12,412 nsf which exceeds the MSBA guidelines by 12,412 nsf. The area in this category has not changed since the Preliminary Design Program submittal. *The MSBA offers the following:*
 - *District technology spaces (750 nsf), District Food Service Director and District Nurse administrative offices (300 nsf). These District spaces will be considered ineligible for MSBA reimbursement.*
 - *BEA office; 150 nsf. Although it is not identified in the submittal, the BEA office (“Belmont Education Association”) will be considered ineligible for MSBA reimbursement.*
 - *School Store; 125 nsf. This space will be considered ineligible for MSBA reimbursement unless the designer is able to accommodate this space as an “Other Occupied Room” within the Non-Programmed Category of spaces while maintaining a grossing factor of 1.5 or less.*
 - *Unidentified 900 nsf space. Describe the function of this space, how it is staffed, and which spaces within the Other category this space is associated (if any). We request that you refer to the PSR REVISION 1 for an updated Space Program which clarifies all unidentified spaces in the Belmont High School Facility.*
- *METCO Classroom, 850 nsf. Refer to Attachment A for additional information. Given the intent of the METCO program and the overall utilization of the proposed program please describe the need for this additional classroom. There are currently 43 METCO students at the High School level and 16 in Grades 7-8. The METCO classroom has been eliminated and replaced with a group instruction room that will provide a before and after school area for student support (open to all students). The total METCO enrollment for Belmont Public Schools is 102 students. METCO students across the district are included,*

3.3.6 PSR REV.1/ DOCUMENTS

B. PSR SPACE SUMMARY REVIEW

scheduled, and engaged with all other students. At the high school level, students have a “free period” and students choose to gather in various parts of the building including: the cafeteria, the student center / library, the hallways and or in teacher’s rooms. METCO and non-METCO students currently utilize a small space to gather to study, get tutoring and to relax given their long day of getting to school, going through a full school day and after school and getting home. The breakdown by grade is the following

Kindergarten - 8 students	Grade 1 – 1 student	Grade 2 – 6 students	Grade 3 – 7 students	Grade 4 – 7 students	Grade 5 – 10 students
Grade 6 – 4 students	Grade 7- 9 students	Grade 8 – 7 students	Grade 9 – 11 students	Grade 10 – 10 students	Grade 11 – 12 students
Grade 12 – 10 students		Total 102			

- METCO Office 150 nsf, In subsequent submittals continue to carry this within the “Other” category. This space will be considered eligible for MSBA reimbursement.
 - Resource Officer; 120 nsf. This space will be considered eligible for MSBA reimbursement.
 - Existing pool and associated locker rooms (renovated); 9,067 nsf. As previously noted, all costs associated with the pool and support spaces and systems must be itemized in each cost estimate moving forward in the MSBA process and will be considered ineligible for reimbursement.
- **Total Building Net Floor Area** – The District is proposing a total of 300,605 nsf which exceeds the MSBA guidelines by 55,838 nsf. The area has decreased by 595 nsf since the Preliminary Design Program submittal. Refer to the comments in each space category above. MSBA will continue to evaluate eligibility of area in the subsequent Project Scope and Budget submittal.
 - **Total Building Gross Floor Area** – The District is proposing a total of 450,908 gsf which exceeds the MSBA guidelines by 83,757 gsf using the maximum allowable grossing factor of 1.5. The area has decreased by 892 gsf since the Preliminary Design Program submittal. In the following space summary submittal, provide the “existing to remain” gross square footage and the new gross square footage separately from the total. Eligibility of gross square feet will be determined by the eligible net square feet determined in the Project Scope and Budget phase multiplied by a grossing factor of up to 1.5 (in no case shall the grossing factor for new construction exceed a grossing factor of 1.5). As discussed in a telephone conversation with the MSBA staff, the entire building will meet the grossing factor of 1.5. The new construction portion will also meet the 1.5 grossing factor by including a credit of 31,604 s.f. for the P.E. spaces.

B. PSR SPACE SUMMARY REVIEW

Note that upon moving forward into subsequent phases of the proposed project, the Designer will be required to provide, with each submission, a signed, updated space summary that reflects the design and demonstrates that the design remains, except as agreed to in writing by the MSBA, in accordance with the guidelines, rules, regulations and policies of the MSBA. Should the updated space summary demonstrate changes to the previous space summary include a narrative description of the change(s) and the reason for the proposed changes to the project.

3.3.6 PSR REV.1/ DOCUMENTS

C. COST ESTIMATE / OPM REV.1



Belmont High School
Preferred Schematic Option Selection Study
Belmont, MA

April 10, 2018

PSR Option Rev1 Estimate



Architect:

Perkins+Will
225 Franklin St,
Boston, MA 02110
(617) 478-0300

Owner's Project Manager:

Daedalus Projects, Inc.
1 Faneuil Hall Marketplace
South Market Bldg, Suite 4195
Boston, MA 02109
(617) 451 2717

C. COST ESTIMATE / OPM REV.1



INTRODUCTION

Project Description:

Analysis and comparison of Schematic Design Belmont High School Selection Study Options:

- hazardous material abatement
- partial or entire demolition of existing school building
- renovations, addition, and new construction
- new site utility infrastructure and improvements

PSR Option Rev 1: Minor Renovations and Major Addition, phased

Configuration of School Program applied to Renovation and Addition option:

7-12 High School for 2,215 Students; 445,100gsf

Project Particulars:

Schematic Design Documents received from Perkins+Will

Site Plan and Building Plan Diagrams for Option 1 received April 5, 2018

Detailed quantity takeoffs where possible from design documents and reports

Daedalus Projects, Inc. site visits

Daedalus Projects, Inc. experience with similar projects of this nature

Project Assumptions:

The project will be managed and built by a Construction Manager under a CM at Risk single prime contract

Our costs assume that there will be at least three subcontractors submitting unrestricted bids in each filed sub-trade

Unit rates are escalated to mid-point of construction duration and utilizing prevailing wage labor rates

Operation during normal working hours

Lay-down/storage area, jobsite shed and trailers, and construction site entrance will be located adjacent to Project area

Noise and vibration disturbances are anticipated and will be minimized or avoided during normal business hours

Phasing and logistics will be required where existing school is open and operational

Temporary electrical and water site utility connections will be available. General Conditions value includes utility connections and consumption costs

Existing water pressure is adequate for servicing the new building

Subcontractor's markups are included in each unit rate. These markups cover field and home office overhead and subcontractor's profit

Design and Pricing Contingency markup is an allowance for unforeseen design issues, design detail development and specification clarifications during the design period

Remainder of General Conditions covers general facilities to support Project, and site office overheads that are not attributable to the direct trade costs

Project Requirements value covers winter conditions, scaffolding, staging and access, temporary protection, and cleaning

Fee markup is calculated on a percentage of direct construction costs

Anticipated start of construction April 2020

Escalation allowance has been calculated at a rate of 3½% per year

3.3.6 PSR REV.1/ DOCUMENTS

C. COST ESTIMATE / OPM REV.1



Belmont High School

Preferred Schematic Option Selection Study

INTRODUCTION

Construction Cost Estimate Exclusions:

- Work beyond the boundary of the site
- Winter conditions
- Pre-construction services
- Unforeseen Conditions Contingency
- Architectural/Engineering; Designer and other Professional fees, testing, printing, surveying
- Owner's administration; legal fees, advertising, permitting, Owner's insurance, administration, interest expense
- Project costs; utility company back charges prior to construction, construction of swing space and temporary facilities, program related phasing, relocation
- Owner furnished and installed products; computer networking, desks, chairs, furnishings, equipment, artwork, loose case goods and other similar items
- Utility company back charges during construction
- Third Party testing & commissioning
- Wetlands protection or restoration
- Police details and street/sidewalk permits

C. COST ESTIMATE / OPM REV.1



Belmont High School

Preferred Schematic Option Selection Study

GRADES 7-12 MAIN SUMMARY

ELEMENT			PSR OPTION REV1 Minor Reno/Major Add 445,100 GSF 42 MTH	
Direct Trade Costs Details			\$162,612,267	\$365.34
Building Demolition			\$1,637,185	\$8.50
Hazardous Material Abatement			\$7,100,000	\$27.61
Concord Ave. Traffic Mitigation			\$2,000,000	\$4.49
Direct Trade Details SubTotal			\$173,349,452	\$389.46
Design and Pricing Contingency			\$17,335,000	\$38.95
Direct Trade Cost Total			\$190,684,452	\$428.41
Staffing, Supervision and Management			\$8,190,000	\$18.40
Remainder of General Conditions, Project Requirements			\$5,460,000	\$12.27
Phasing and Logistics			\$2,860,300	\$6.43
General Liability Insurance			\$2,193,000	\$4.93
Performance and Payment Bonds			\$1,907,000	\$4.28
GMP Contingency			\$9,535,000	\$21.42
Fee			\$6,198,000	\$13.92
Estimated Construction Cost Total			\$227,027,752	\$510.06
Escalation from now to start of Construction			\$17,088,000	\$38.39
Estimated Construction Cost at Start of Construction			\$244,116,000	\$548.45

PSR REV 1 / DOCUMENTS 3.3.6

PSR REV.1/ 3.3.4 REVISED 3.3.7

3.3.6 PSR REV.1/ DOCUMENTS

C. COST ESTIMATE / OPM REV.1



Belmont High School

Preferred Schematic Option Selection Study

GRADE 7-12 DIRECT TRADE COST SUMMARY

ELEMENT			PSR OPTION REV1 Minor Reno/Major Add 445,100 GSF	
A10 Foundations			\$14,216,828	\$31.94
A SUBSTRUCTURE			\$14,216,828	\$31.94
B10 Superstructure			\$15,862,672	\$35.64
B20 Exterior Closure			\$24,323,016	\$54.65
B30 Roofing			\$9,532,434	\$21.42
B SHELL			\$49,718,122	\$111.70
C10 Interior Construction			\$14,351,188	\$32.24
C20 Stairs			\$790,000	\$1.77
C30 Interior Finishes			\$12,401,525	\$27.86
C INTERIORS			\$27,542,713	\$61.88
D10 Conveying			\$430,000	\$0.97
D20 Plumbing			\$5,341,200	\$12.00
D30 HVAC			\$24,029,500	\$53.99
D40 Fire Protection			\$2,191,970	\$4.92
D50 Electrical			\$18,373,400	\$41.28
D SERVICES			\$50,366,070	\$113.16
E10 Equipment			\$1,862,750	\$4.19
E20 Furnishings			\$4,541,295	\$10.20
E EQUIPMENT & FURNISHINGS			\$6,404,045	\$14.39
G1010 Site Clearing, Site Preparation			\$685,272	\$1.54
G1020 Building Demolition			\$1,637,185	\$3.68
G1020 Site Demolition, Selective Demolition			\$1,070,647	\$2.41
G1030 Earthwork			\$513,184	\$1.15

C. COST ESTIMATE / OPM REV.1



Belmont High School

Preferred Schematic Option Selection Study

GRADE 7-12 DIRECT TRADE COST SUMMARY

ELEMENT	PSR OPTION REV1	
	Minor Reno	Major Add
G1040 Hazardous Material Abatement	\$7,100,000	\$15.95
G10 SITE PREPARATION	\$11,006,288	\$24.73
G2010 Paving and Surfacing	\$6,648,712	\$14.94
G2040 Site Improvements	\$305,660	\$0.69
G2050 Plantings, Soft Landscaping	\$659,831	\$1.48
G20 SITE IMPROVEMENTS	\$7,614,203	\$17.11
G3010 Water Supply and Distribution	\$417,850	\$0.94
G3020 Sanitary Sewer System	\$349,500	\$0.79
G3030 Stormwater Management System	\$2,366,184	\$5.32
G4010 Site Electrical Utilities	\$1,347,650	\$3.03
G30 SITE MECHANICAL UTILITIES	\$4,481,184	\$10.07
Direct Trade Details SubTotal	\$171,349,452	\$384.97

PSR REV 1 / DOCUMENTS 3.3.6

PSR REV.1/ 3.3.4 REVISED 3.3.7

3.3.6 PSR REV.1/ DOCUMENTS

C. COST ESTIMATE / OPM REV.1



Belmont High School

Preferred Schematic Option Selection Study

GRADE 7-12 DIRECT TRADE COST DETAILS

ELEMENT	UNIT	UNIT RATE	PSR OPTION REV1	
			Minor Reno	Major Add
			QUANTITY	COST
10		<i>Total</i>	445,100	GSF
11		<i>Renovation</i>	64,510	GSF
12		<i>New Construction / Addition</i>	380,590	GSF
13		<i>Building Demolition</i>	192,610	GSF
14				
15	A SUBSTRUCTURE			
16				
17	A10 Foundations			
18	<i>Reinforced concrete pile caps, structural steel piles, structured slab</i>			
19	steel pile, 50-ton; assume 25'long	LF	\$75.00	102,750 \$7,706,250
20	concrete pile; 8x8x4 at clusters, 2x2x2 at single pile	EA	\$5,340.00	590 \$3,150,600
21	grade beam at perimeter; 5' deep	LF	\$590.00	2,070 \$1,221,300
22	grade beam at slab on grade; assume 60'oc grid	LF	\$590.00	600 \$354,000
23	12" structured slab on grade, 6#/sf reinforcing, vapor barrier, 2" rigid insu	SF	\$12.00	119,300 \$1,431,600
24	compacted granular structural fill; assume 12"	CY	\$40.00	4,639 \$185,578
25	<i>New brace frames in existing to renovation areas</i>			
26	demo sog for new pile, patch and repair after install	LOC	\$4,000.00	9 \$36,000
27	install new pile and pile cap	EA	\$8,700.00	9 \$78,300
28	demo sog for new tie beam, patch and repair after install	LF	\$190.00	280 \$53,200
29	<i>New building over Level 2 for Level 3 additions</i>			
30	demo sog for new pile, patch and repair after install	LOC	\$4,000.00	
31	install new pile and pile cap	EA	\$8,700.00	
32	demo sog for new tie beam, patch and repair after install	LF	\$190.00	
33	A10 Foundations Total			\$14,216,828
34				
35				
36	B SHELL			
37				
38	B10 Superstructure			
39	<i>New brace frames in existing to renovation areas</i>			
40	addition of brace frames; assume 2#/sf face area	TNS	\$5,000.00	
41	new masonry shear wall at existing building	SF	\$25.00	
42	Anchor un-reinforced masonry walls to floor & roof structure	EA	\$150.00	477 \$71,550
43	Reinforce existing roof diaphragms to resist uplift loads; assume 1#/covera	TNS	\$5,000.00	23 \$116,328
44	<i>New building over Level 2 for Level 3 additions</i>			
45	new columns from Level 1 up per floor	EA	\$2,500.00	
46	Structural steel floor framing - 13#/gsf allowance provided	TNS	\$3,900.00	
47	15#/gsf allowance provided	TNS	\$3,900.00	1,933 \$7,539,626
48	above multi-purpose rooms & PE space; 18#/gsf	TNS	\$3,900.00	311 \$1,211,652
49	Structural steel roof framing - 13#/gsf allowance provided	TNS	\$3,900.00	718 \$2,799,401
50	15#/gsf @ Gym & mechanical zone/low roof; add 2#/gsf	TNS	\$4,680.00	22 \$103,428
51	5/2" LWT slab on composite metal deck, fireproofing; upper slabs	SF	\$12.50	257,765 \$3,222,063
52	low roof; assume 20% of roof area	SF	\$12.50	22,100 \$276,250

C. COST ESTIMATE / OPM REV.1



Belmont High School
Preferred Schematic Option Selection Study

GRADE 7-12 DIRECT TRADE COST DETAILS

ELEMENT	UNIT	UNIT RATE	PSR OPTION REV1	
			Minor Reno/Major Add QUANTITY	COST
53 1½" Type B metal roof deck	SF	\$3.75	119,300	\$447,375
54 5½" LWT slab on metal deck; mech zone assume 5% of roof area	SF	\$12.50	6,000	\$75,000
55 3" Type NA acoustic metal roof deck; Gym	SF	\$7.50		
56 B10 Superstructure Total				\$15,862,672
57				
58 B20 Exterior Closure				
59 Existing exterior façade to remain; repair, repoint, clean	SF	\$40.00	29,385	\$1,175,416
60 remove and replace glazed openings; assume 20%	SF	\$105.00	5,880	\$617,400
61 New façade; masonry, glass, doors	SF	\$140.00	160,930	\$22,530,200
62 B20 Exterior Closure Total				\$24,323,016
63				
64 B30 Roofing				
65 Demo roof for new floor deck	SF	\$15.00		
66 Roofing; assume TPO	SF	\$25.00	110,430	\$2,760,750
67 premium for green roof/teaching area - allowance agreed	AL	\$500,000.00	1	\$500,000
68 add low roof/canopy	AL	\$100.00	20,800	\$2,080,000
69 mechanical zone and screen - qty provided	LF	\$750.00	1,200	\$900,000
70 soffits, fascia	LF	\$425.00	2,175	\$924,184
71 Replace existing roofing w/new	SF	\$30.00	56,000	\$1,680,000
72 Skylight - qty provided	SF	\$125.00	5,500	\$687,500
73 B30 Roofing Total				\$9,532,434
74				
75				
C INTERIORS				
76				
77				
78 C10 Interior Construction				
79 Renovate existing school	GSF	\$32.50	64,510	\$2,096,575
80 Partitions	GSF	\$20.00	377,065	\$7,541,300
81 Doors	GSF	\$4.50	377,065	\$1,696,793
82 Storefront; assume 2% of interior walls	GSF	\$1.75	377,065	\$659,864
83 Specialties	GSF	\$6.25	377,065	\$2,356,656
84 C10 Interior Construction Total				\$14,351,188
85				
86 C20 Stairs				
87 Upgrade existing stair; assume replace railings	FLT	\$15,000.00	1	\$15,000
88 New stairs	FLT	\$35,000.00	11	\$385,000
89 Monumental/Open stair, allow	FLT	\$65,000.00	6	\$390,000
90 C20 Stairs Total				\$790,000
91				
92 C30 Interior Finishes				
93 Renovate existing school	GSF	\$30.00	64,510	\$1,935,300
94 <i>New School Building Construction</i>	GSF		380,590	
95 wall finishes	GSF	\$6.75	380,590	\$2,568,983

3.3.6 PSR REV.1/ DOCUMENTS

C. COST ESTIMATE / OPM REV.1



Belmont High School

Preferred Schematic Option Selection Study

GRADE 7-12 DIRECT TRADE COST DETAILS

ELEMENT	UNIT	UNIT RATE	PSR OPTION REV1	
			Minor Reno/Major Add QUANTITY	COST
96 flooring	GSF	\$10.75	380,590	\$4,091,343
97 ceiling finishes	GSF	\$10.00	380,590	\$3,805,900
98 C30 Interior Finishes Total				\$12,401,525
99				
100				
101 D SERVICES				
102				
103 D10 Conveying				
104 Elevator; demo and disposal	EA	\$50,000.00	1	\$50,000
105 Elevator; new	EA	\$190,000.00	2	\$380,000
106 D10 Conveying Total				\$430,000
107				
108 D20 Plumbing				
109 Plumbing	GSF	\$12.00	445,100	\$5,341,200
110 D20 Plumbing Total				\$5,341,200
111				
112 D30 HVAC				
113 HVAC	EA	\$45.00	445,100	\$20,029,500
114 Geothermal wells; 6" dia borehole @ 20'oc grid x400' deep	EA	\$10,000.00	400	\$4,000,000
115 D30 HVAC Total				\$24,029,500
116				
117 D40 Fire Protection				
118 Sprinkler Coverage	GSF	\$4.70	445,100	\$2,091,970
119 Fire Pump	EA	\$100,000.00	1	\$100,000
120 D40 Fire Protection Total				\$2,191,970
121				
122 D50 Electrical				
105 Interior Electrical	GSF	\$34.00	445,100	\$15,133,400
124 Roof borne PV system - qty provided	SF	\$36.00	90,000	\$3,240,000
125 D50 Electrical Total				\$18,373,400
126				
127				
128 E EQUIPMENT & FURNISHINGS				
129				
130 E10 Equipment				
131 Renovate existing school	GSF	\$2.50	64,510	\$161,275
105 existing pool; new equipment - allowance agreed	AL	\$750,000.00	1	\$750,000
133 New Construction / Addition	GSF	\$2.50	380,590	\$951,475
134 E10 Equipment Total				\$1,862,750
135				
136				
137 E20 Furnishings				
138 Renovate existing school	GSF	\$5.50	64,510	\$354,805

C. COST ESTIMATE / OPM REV.1



Belmont High School
Preferred Schematic Option Selection Study

GRADE 7-12 DIRECT TRADE COST DETAILS

ELEMENT	UNIT	UNIT RATE	PSR OPTION REV1	
			Minor Reno/Major Add QUANTITY	Minor Reno/Major Add COST
139 New Construction / Addition	GSF	\$11.00	380,590	\$4,186,490
140 E20 Furnishings Total				\$4,541,295
141				
142				
143 G10 SITE PREPARATION				
144				
145 G1010 Site Clearing, Site Preparation				
146 Clearing and grubbing	ACRE	\$4,000.00	40	\$160,000
147 Construction fence	LF	\$12.00	11,017	\$132,204
148 Double construction gate	PR	\$2,800.00	4	\$11,200
149 Strip and stockpile existing topsoil; assume avg. 6"	CY	\$8.00	13,383	\$107,064
150 Temporary construction entrance including maintenance	EA	\$9,000.00	4	\$36,000
151 Temp signs	LS	\$1,800.00	2	\$3,600
152 Wash down/re-fueling	SF	\$2.00	6,000	\$12,000
153 Protection of existing to remain	LS	\$35,000.00	1	\$35,000
154 Temporary parking lot	AL	\$15,000.00	1	\$15,000
155 Dewatering	LS	\$35,000.00	1	\$35,000
156 Erosion control barrier	LF	\$12.00	11,017	\$132,204
157 Erosion control barrier at temporary construction period soil stockpile	AL	\$3,500.00	1	\$3,500
158 Inlet protection	AL	\$2,500.00	1	\$2,500
159 G1010 Site Clearing, Site Preparation Total				\$685,272
160				
161 G1020 Building Demolition				
162 Building structure demolition, phased	GSF	\$8.50	192,610	\$1,637,185
163 Building structure demolition	GSF	\$5.75		
164 G1020 Building Demolition Total				\$1,637,185
165				
166 G1020 Site Demolition, Selective Demolition				
167 Selective Site Demolition				
168 saw cut existing pavement	LF	\$12.00	150	\$1,800
169 asphalt pavement	SF	\$1.20	181,037	\$217,244
170 concrete pavement	SF	\$1.75	46,573	\$81,503
171 Cut, cap and remove existing utility	AL	\$50,000.00	1	\$50,000
172 Misc. demolition other than above	AL	\$75,000.00	1	\$75,000
173 Existing school program interior selective demolition	GSF	\$10.00	64,510	\$645,100
174 G1020 Site Demolition, Selective Demolition Total				\$1,070,647
175				
176 G1030 Earthwork				
177 Cut and fill for parking lot	CY	\$11.00	8,284	\$91,124
178 concrete pavement	CY	\$11.00	4,460	\$49,061
179 remainder of site grades	CY	\$10.00	7,519	\$75,191
180 Rough and fine grading	SF	\$0.50	595,617	\$297,809
181 G1030 Earthwork Total				\$513,184

3.3.6 PSR REV.1/ DOCUMENTS

C. COST ESTIMATE / OPM REV.1



Belmont High School

Preferred Schematic Option Selection Study

GRADE 7-12 DIRECT TRADE COST DETAILS

ELEMENT	UNIT	UNIT RATE	PSR OPTION REV1	
			QUANTITY	Minor Reno/Major Add COST
182 G1040 Hazardous Material Abatement				
183 Removal and disposal of all ACM, PCB and other hazardous materials	AL	\$7,100,000.00	1	\$7,100,000
184 G1040 Hazardous Material Abatement Total				\$7,100,000
185				
186				
187 G20 SITE IMPROVEMENTS				
188				
189 G2010 Paving and Surfacing				
190 Asphalt paving at bus drop-off, deliveries, parent drop-off and parking lot	SF	\$3.15	178,934	\$563,642
191 gravel base to asphalt pavement	CY	\$32.00	7,290	\$233,280
192 paint crosswalk	AL	\$2,500.00	1	\$2,500
193 parking stall	EA	\$35.00	6	\$210
194 HC parking stall	EA	\$85.00	424	\$36,040
195 misc. pavement marking	AL	\$5,000.00	1	\$5,000
196 Patching to existing paving at street	LS	\$5,000.00	1	\$5,000
197 Concrete sidewalk	SF	\$7.25	32,368	\$234,668
198 Intergenerational walking path	SF	\$3.50	16,350	\$57,225
199 Sport walk	SF	\$7.50	3,084	\$23,130
200 curb cut	EA	\$380.00	12	\$4,560
201 Cement concrete entrance	SF	\$30.00	70,443	\$2,113,290
202 Loading dock	SF	\$15.00		
203 Gravel base to concrete pavement	CY	\$30.00	3,529	\$105,870
204 Curbing	LF	\$38.00	9,853	\$374,414
205 <i>Baseball and Softball field:</i>	SF		82,881	
206 Rough/fine grading	SF	\$0.75	82,881	\$62,161
207 Cut and fill	CY	\$12.00	3,592	\$43,104
208 8" Stone base	CY	\$70.00	2,251	\$157,570
209 Sand base	CY	\$80.00	563	\$45,040
210 Underdrain	GSF	\$1.75	82,881	\$145,042
211 Infield surfacing	SF	\$2.50	40,076	\$100,190
212 Sod	SF	\$1.50	42,805	\$64,208
213 Irrigation	SF	\$0.75	42,805	\$32,104
214 Base plate	EA	\$450.00	12	\$5,400
215 Removable foul poles	EA	\$2,500.00	6	\$15,000
216 Removable soccer goal posts	EA	\$1,400.00	3	\$4,200
217 Backstop	SF	\$10.00	3,660	\$36,600
218 <i>Football/Rugby, Lacrosse 01, Soccer field:</i>	SF		282,489	
219 Rough/fine grading	SF	\$0.75	282,489	\$211,867
220 Cut and fill	CY	\$12.00	12,241	\$146,892
221 8" Stone base	CY	\$70.00	7,673	\$537,110
222 Sand base	CY	\$80.00	1,918	\$153,440
223 Underdrain	GSF	\$1.75	282,489	\$494,356
224 Sod	SF	\$1.50	282,489	\$423,734

C. COST ESTIMATE / OPM REV.1



Belmont High School
Preferred Schematic Option Selection Study

GRADE 7-12 DIRECT TRADE COST DETAILS

ELEMENT	UNIT	UNIT RATE	PSR OPTION REV1	
			Minor Reno/Major Add QUANTITY	COST
225 Irrigation	SF	\$0.75	282,489	\$211,867
226 G2010 Paving and Surfacing Total				\$6,648,712
227				
228 G2040 Site Improvements				
229 Bioretention terraces	SF	\$35.00	3,836	\$134,260
230 Flag pole w/ foundation	EA	\$7,500.00	1	\$7,500
231 Bench	AL	\$15,000.00	1	\$15,000
232 Bike racks	AL	\$3,500.00	1	\$3,500
233 Metal trash receptacles	EA	\$800.00	8	\$6,400
234 Concrete fill steel bollard	AL	\$12,000.00	1	\$12,000
235 Misc. site improvement other than above	LS	\$100,000.00	1	\$100,000
236 Traffic signs	AL	\$12,000.00	1	\$12,000
237 Building sign	AL	\$15,000.00	1	\$15,000
238 G2040 Site Improvements Total				\$305,660
239				
240 G2050 Plantings, Soft Landscaping				
241 Respread topsoil	CY	\$10.00	13,383	\$133,830
242 Topsoil for planting beds, shrubs and perennials	CY	\$28.00	278	\$7,778
243 Mulch	CY	\$50.00	46	\$2,315
244 Lawn	SF	\$0.40	284,352	\$113,741
245 Sod - Outdoor classroom	SF	\$1.75		
246 New trees	AL	\$156,000.00	1	\$156,000
247 Gardens	SF	\$8.00	29,521	\$236,168
248 Groundcovers	AL	\$10,000.00	1	\$10,000
249 G2050 Plantings, Soft Landscaping Total				\$659,831
250				
251				
G30 SITE MECHANICAL UTILITIES				
252				
253 G3010 Water Supply and Distribution				
254 8" T & S & G.	EA	\$4,200.00	1	\$4,200
256 4" Gate	EA	\$1,200.00	1	\$1,200
257 Hydrant and gate	EA	\$2,800.00	4	\$11,200
258 4" CLDI domestic water	LF	\$65.00	50	\$3,250
259 6" CLDI Fire	LF	\$80.00	200	\$16,000
260 8" CLDI fire service and loop	LF	\$95.00	4,000	\$380,000
261 Thrust blocks	LS	\$2,000.00	1	\$2,000
262 G3010 Water Supply and Distribution Total				\$417,850
263				
264 G3020 Sanitary Sewer System				
265 Relocate existing sewer	AL	\$250,000.00	1	\$250,000
266 SMH	EA	\$4,000.00	10	\$40,000
267 1,500 Grease trap	EA	\$7,500.00	1	\$7,500

3.3.6 PSR REV.1/ DOCUMENTS

C. COST ESTIMATE / OPM REV.1



Belmont High School
Preferred Schematic Option Selection Study

GRADE 7-12 DIRECT TRADE COST DETAILS

ELEMENT	UNIT	UNIT RATE	PSR OPTION REV1	
			Minor Reno/Major Add	QUANTITY COST
268 Pump station	LS	\$30,000.00		
269 3" HDPE sewer force main	LF	\$125.00		
270 8" sewer drain	LF	\$65.00		
271 6" PVC sewer	LF	\$50.00	1,040	\$52,000
272 G3020 Sanitary Sewer System Total				\$349,500
273				
274 G3030 Stormwater Management System				
275 Temporary utilities to cover phasing and logistics - allowance agreed	AL	\$150,000.00	1	\$150,000
276 Bioretention	SF	\$24.00	24,266	\$582,384
277 Bioretention zone	SF	\$5.00	45,015	\$225,075
278 Stormwater base in pavement area	GSF	\$5.00	281,745	\$1,408,725
279 G3030 Stormwater Management System Total				\$2,366,184
280				
281				\$2,216,184
282 G40 SITE ELECTRICAL UTILITIES				
283				
284 G4010 Site Electrical Utilities				
285 <i>Primary and Secondary Service</i>				
286 Utility co. back charges	LS	\$30,000.00	1	\$30,000
287 Electrical primary service riser	LS	\$1,500.00	1	\$1,500
288 Primary ductbank 2-5" ductbank, empty; from East boundary	LF	\$145.00	1,750	\$253,750
289 Transformer by utility company				By Utility Co.
290 Transformer pad	EA	\$3,000.00	1	\$3,000
291 3000A secondary service	LF	\$850.00	60	\$51,000
292 2500A secondary service	LF	\$710.00	290	\$205,900
293 <i>Communications</i>				
294 Communications pole riser	EA	\$1,500.00	1	\$1,500
295 Telecom ductbank 4-4" empty	LF	\$152.00	1,750	\$266,000
296 Site CCTV (Security)	LS	\$35,000.00	1	\$35,000
297 Sport field lighting; baseball, softball	AL	\$200,000.00	1	\$200,000
298 Site lighting and circuitry	LS	\$300,000.00	1	\$300,000
299 G4010 Site Electrical Utilities Total				\$1,347,650
300				
301				
302				



3.3.6 PSR REV.1/ DOCUMENTS

D. COST ESTIMATE / DESIGN TEAM REV.1



PSR Estimate - Revision 1

**Belmont High School
Design Options - GRADES 7-12**

Belmont, MA

FINAL LEVEL 2 ESTIMATE

PM&C LLC
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Prepared for:

Perkins + Will Architects, Inc.

April 10, 2018

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
 Design Options - GRADES 7-12
 Belmont, MA

10-Apr-18

PSR Estimate - Revision 1

MAIN CONSTRUCTION COST SUMMARY

		Gross Floor Area	\$/sf	Estimated Construction Cost
PSR OPTION REVISION 1				
RENOVATIONS TO EXISTING SCHOOL		64,510	\$218.60	\$14,101,622
ADDITIONS		380,590	\$331.35	\$126,107,592
DEMOLISH EXISTING SCHOOL - PARTIAL (phased)		192,610	\$8.00	\$1,540,880
REMOVE HAZARDOUS MATERIALS				\$7,100,000
TRAFFIC MITIGATION at CONCORD AVE				\$2,000,000
SITework				\$14,001,188
SUB-TOTAL		445,100	\$370.37	\$164,851,282
DESIGN AND PRICING CONTINGENCY	10%			\$16,485,128
ESCALATION	12%			\$21,760,369
SUB-TOTAL		445,100	\$456.29	\$203,096,779
GENERAL CONDITIONS (42 MTHS SCHEDULE)				\$8,400,000
GENERAL REQUIREMENTS	4.00%			\$8,123,871
BONDS	0.75%			\$1,523,226
INSURANCE	1.10%			\$2,234,065
PERMIT				Waived
CM FEE	3%			\$6,092,903
CM/GMP CONTINGENCY	2%			\$4,061,936
PHASING PREMIUM	2.0%			\$4,061,936
TOTAL OF ALL CONSTRUCTION		445,100	\$533.80	\$237,594,716

PSR REV 1 / DOCUMENTS 3.3.6

PSR REV.1/ 3.3.4 REVISED 3.3.7

3.3.6 PSR REV.1/ DOCUMENTS

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
Design Options - GRADES 7-12
Belmont, MA

10-Apr-18

PSR Estimate - Revision 1

This PSR cost estimate was produced from drawings, narratives and other documentation prepared by Perkins + Wills Architects Inc. and their design team received April 07, 2018. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, construction manager's overhead, fee and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding under Chapter 149a of the Massachusetts General Laws to pre-qualified construction managers, and pre-qualified sub-contractors, open specifications for materials and manufactures.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

- Relocation of Town wide fiber system
- Land acquisition, feasibility, and financing costs
- All professional fees and insurance
- Site or existing conditions surveys investigations costs, including to determine subsoil conditions
- All Furnishings, Fixtures and Equipment
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items as indicated in the estimate
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)
- Construction contingency (GMP Contingency is included)
- Contaminated soils removal

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
Design Options - GRADES 7-12
Belmont, MA

10-Apr-18

PSR Estimate - Revision 1

GFA 64,510

CONSTRUCTION COST SUMMARY					
<i>BUILDING SYSTEM</i>		<i>SUB-TOTAL</i>	<i>TOTAL</i>	<i>\$/SF</i>	<i>%</i>
NEW OPTION RENOVATION					
A10 FOUNDATIONS					
A1010	Standard Foundations	\$35,000			
A1020	Special Foundations	\$0			
A1030	Lowest Floor Construction	\$75,000	\$110,000	\$1.71	0.8%
B10 SUPERSTRUCTURE					
B1010	Upper Floor Construction	\$0			
B1020	Roof Construction	\$50,000	\$50,000	\$0.78	0.4%
B20 EXTERIOR CLOSURE					
B2010	Exterior Walls	\$1,083,000			
B2020	Windows/Curtainwall	\$589,164			
B2030	Exterior Doors	\$58,796	\$1,730,960	\$26.83	12.3%
B30 ROOFING					
B3010	Roof Coverings	\$1,471,400			
B3020	Roof Openings	\$10,000	\$1,481,400	\$22.96	10.5%
C10 INTERIOR CONSTRUCTION					
C1010	Partitions	\$580,590			
C1020	Interior Doors	\$322,550			
C1030	Specialties/Millwork	\$390,777	\$1,293,917	\$20.06	9.2%
C20 STAIRCASES					
C2010	Stair Construction	\$0			
C2020	Stair Finishes	\$0	\$0	\$0.00	0.0%
C30 INTERIOR FINISHES					
C3010	Wall Finishes	\$387,060			
C3020	Floor Finishes	\$709,610			
C3030	Ceiling Finishes	\$516,080	\$1,612,750	\$25.00	11.4%
D10 CONVEYING SYSTEMS					
D1010	Elevator	\$0	\$0	\$0.00	0.0%
D20 PLUMBING					
D20	Plumbing	\$774,120	\$774,120	\$12.00	5.5%
D30 HVAC					
D30	HVAC	\$2,902,950	\$2,902,950	\$45.00	20.6%
D40 FIRE PROTECTION					
D40	Fire Protection	\$303,197	\$303,197	\$4.70	2.2%
D50 ELECTRICAL					
D5010	Electrical Systems	\$2,193,340	\$2,193,340	\$34.00	15.6%
E10 EQUIPMENT					
E10	Equipment	\$366,040	\$366,040	\$5.67	2.6%

PSR REV 1 / DOCUMENTS 3.3.6

PSR REV 1 / 3.3.4 REVISED 3.3.7

3.3.6 PSR REV.1/ DOCUMENTS

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
 Design Options - GRADES 7-12
 Belmont, MA

10-Apr-18

PSR Estimate - Revision 1

GFA 64,510

CONSTRUCTION COST SUMMARY					
<i>BUILDING SYSTEM</i>		<i>SUB-TOTAL</i>	<i>TOTAL</i>	<i>\$/SF</i>	<i>%</i>
NEW OPTION RENOVATION					
E20 FURNISHINGS					
E2010	Fixed Furnishings	\$64,510			
E2020	Movable Furnishings	NIC	\$64,510	\$1.00	0.5%
F10 SPECIAL CONSTRUCTION					
F10	Special Construction	\$750,000	\$750,000	\$11.63	5.3%
F20 SELECTIVE BUILDING DEMOLITION					
F2010	Building Elements Demolition	\$468,438			
F2020	Hazardous Components Abatement	\$0	\$468,438	\$7.26	3.3%
TOTAL DIRECT COST (Trade Costs)			\$14,101,622	\$218.60	100.0%

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
Design Options - GRADES 7-12
Belmont, MA

10-Apr-18

PSR Estimate - Revision 1

GFA 64,510

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
NEW OPTION RENOVATION							
GROSS FLOOR AREA CALCULATION							
	First Floor				52,550		
	Second Floor				11,960		
TOTAL GROSS FLOOR AREA (GFA)					64,510 sf		
A10 FOUNDATIONS							
A1010 STANDARD FOUNDATIONS							
	Repair cracks and resurface exposed concrete foundations	1	ls	35,000	35,000		
SUBTOTAL						35,000	
A1020 SPECIAL FOUNDATIONS							
	No work in this section						
SUBTOTAL							
A1030 LOWEST FLOOR CONSTRUCTION							
	Cutting and patching for MEP	1	ls	15,000.00	15,000		
	New slab at bathrooms and shower areas	3,000	sf	20.00	60,000		
SUBTOTAL						75,000	
TOTAL - FOUNDATIONS							\$110,000
B10 SUPERSTRUCTURE							
B1010 FLOOR CONSTRUCTION							
SUBTOTAL						-	
B1020 ROOF CONSTRUCTION							
	Support framing for new MEP systems	1	ls	50,000.00	50,000		
SUBTOTAL						50,000	
TOTAL - SUPERSTRUCTURE							\$50,000
B20 EXTERIOR CLOSURE							
B2010 EXTERIOR WALLS							
	Repair and repoint exterior walls- brick; assume 100%	25,200	sf	32.00	806,400		
	Repairs to precast concrete panels, fins and banding	1	ls	75,000.00	75,000		
	Clean all exterior walls; includes staging	25,200	sf	8.00	201,600		
SUBTOTAL						1,083,000	
B2020 WINDOWS/CURTAINWALL							
	Replace existing translucent panels	6,798	sf	80.00	543,840		
	Backer rod & double sealant	3,777	lf	9.00	33,993		
	Wood blocking at openings	3,777	lf	3.00	11,331		
SUBTOTAL						589,164	
B2030 EXTERIOR DOORS							
	Replace exterior single door	3	ea	2,100.00	6,300		
	Replace exterior double door	4	pr	4,000.00	16,000		
	Replace overhead doors; 8'x8'	2	ea	7,040.00	14,080		
	Replace overhead doors; 12'x15'	1	ea	19,800.00	19,800		
	Backer rod & double sealant	218	lf	9.00	1,962		

3.3.6 PSR REV.1/ DOCUMENTS

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
Design Options - GRADES 7-12
Belmont, MA

10-Apr-18

PSR Estimate - Revision 1

GFA 64,510

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
NEW OPTION RENOVATION							
58	Wood blocking at openings	218	lf	3.00	654		
59	SUBTOTAL					58,796	
TOTAL - EXTERIOR CLOSURE							\$1,730,960
B30 ROOFING							
B3010 ROOF COVERINGS							
67	Replace existing roofing systems	52,550	sf	28.00	1,471,400		
68	SUBTOTAL					1,471,400	
B3020 ROOF OPENINGS							
71	Replace roof ladders/hatches etc.	1	ls	10,000.00	10,000		
72	SUBTOTAL					10,000	
TOTAL - ROOFING							\$1,481,400
C10 INTERIOR CONSTRUCTION							
C1010 PARTITIONS							
80	Allowance to modify existing walls and add new walls	64,510	gsf	6.00	387,060		
81	Seismic upgrades	64,510	gsf	3.00	193,530		
82	SUBTOTAL					580,590	
C1020 INTERIOR DOORS							
85	Adjust door openings, install new door frame to meet code requirements (door carried below)	64,510	gsf	5.00	322,550		
86	SUBTOTAL					322,550	
C1030 SPECIALTIES / MILLWORK							
89	Toilet Partitions and accessories	64,510	gsf	0.80	51,608		
90	New markerboards/tackboards	64,510	gsf	1.00	64,510		
91	Replace athletic lockers - allowance	1	ls	25,000.00	25,000		
92	New guardrail at Fieldhouse bleachers	150	lf	200.00	30,000		
93	Allowance for miscellaneous specialties; wall protection, fire extinguishers etc	1	ls	10,000.00	10,000		
94							
95	055000 MISCELLANEOUS METALS						
96	Miscellaneous metals throughout building	64,510	sf	1.50	96,765		
97							
98	061000 ROUGH CARPENTRY						
99	Rough blocking	64,510	sf	0.15	9,677		
100							
101	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
102	Miscellaneous sealants throughout building	64,510	sf	1.25	80,638		
103							
104	101400 SIGNAGE						
105	Code compliant signage	64,510	sf	0.35	22,579		
106	SUBTOTAL					390,777	
TOTAL - INTERIOR CONSTRUCTION							\$1,293,917
C20 STAIRCASES							
C2010 STAIR CONSTRUCTION							
114	SUBTOTAL					-	

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
 Design Options - GRADES 7-12
 Belmont, MA

10-Apr-18

PSR Estimate - Revision 1

GFA 64,510

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
NEW OPTION RENOVATION							
116	C2020 STAIR FINISHES						
117	SUBTOTAL					-	
118	TOTAL - STAIRCASES						
119	C30 INTERIOR FINISHES						
120							
121	C3010 WALL FINISHES						
122	Allowance for wall finishes	64,510	gsf	6.00	387,060		
123	SUBTOTAL					387,060	
124	C3020 FLOOR FINISHES						
125	Allowance for floor finishes	64,510	gsf	11.00	709,610		
126	SUBTOTAL					709,610	
127	C3030 CEILING FINISHES						
128	Allowance for ceiling finishes	64,510	gsf	8.00	516,080		
129	SUBTOTAL					516,080	
130	TOTAL - INTERIOR FINISHES						
131							\$1,612,750
132	D10 CONVEYING SYSTEMS						
133							
134	SUBTOTAL					-	
135	TOTAL - CONVEYING SYSTEMS						
136	D20 PLUMBING						
137							
138	D20 PLUMBING, GENERALLY						
139	Plumbing allowance	64,510	gsf	12.00	774,120		
140	SUBTOTAL					774,120	
141	TOTAL - PLUMBING						
142							\$774,120
143	D30 HVAC						
144							
145	D30 HVAC, GENERALLY						
146	HVAC allowance; full AC	64,510	gsf	45.00	2,902,950		
147	SUBTOTAL					2,902,950	
148	TOTAL - HVAC						
149							\$2,902,950
150	D40 FIRE PROTECTION						
151							
152	D40 FIRE PROTECTION, GENERALLY						
153	New fire protection system	64,510	sf	4.70	303,197		
154	SUBTOTAL					303,197	
155	TOTAL - FIRE PROTECTION						
156							\$303,197
157	D50 ELECTRICAL						
158							
159	D5010 ELECTRICAL WORK						
160	Complete electrical systems	64,510	gsf	34.00	2,193,340		
161	SUBTOTAL					2,193,340	

PSR REV 1 / DOCUMENTS 3.3.6

PSR REV 1 / 3.3.4 REVISED 3.3.7

3.3.6 PSR REV.1/ DOCUMENTS

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
Design Options - GRADES 7-12
Belmont, MA

10-Apr-18

PSR Estimate - Revision 1

GFA 64,510

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
NEW OPTION RENOVATION							
180	TOTAL - ELECTRICAL						\$2,193,340
181							
182							
183	E10 EQUIPMENT						
184							
185	E10 EQUIPMENT, GENERALLY						
186	Gym wall pads	1	ls	20,000.00	20,000		
187	Basketball backstops; swing up; electric operated	6	loc	10,000.00	60,000		
188	Gymnasium dividing net; electrically operated; 60 lf	4	ea	30,000.00	120,000		
189	Volleyball net and standards	1	ls	5,000.00	5,000		
190	Score boards in Gym & Fieldhouse	2	loc	15,000.00	30,000		
191	Telescoping bleachers, electronic retracting (1008 seats)	1	ls	131,040.00	131,040		
192	SUBTOTAL					366,040	
193							
194	TOTAL - EQUIPMENT						\$366,040
195							
196							
197	E20 FURNISHINGS						
198							
199	E2010 FIXED FURNISHINGS						
200							
201	123553 CASEWORK						
202	Allowance for new casework throughout	64,510	gsf	1.00	64,510		
203	SUBTOTAL					64,510	
204							
205	E2020 MOVABLE FURNISHINGS						
206	All movable furnishings to be provided and installed by owner						
207	SUBTOTAL					NIC	
208							
209	TOTAL - FURNISHINGS						\$64,510
210							
211							
212	F10 SPECIAL CONSTRUCTION						
213							
214	F10 SPECIAL CONSTRUCTION						
215	Pool upgrades	1	ls	750,000.00	750,000		
216	SUBTOTAL					750,000	
217							
218	TOTAL - SPECIAL CONSTRUCTION						\$750,000
219							
220							
221	F20 SELECTIVE BUILDING DEMOLITION						
222							
223	F2010 BUILDING ELEMENTS DEMOLITION						
224	Remove exterior glazing	6,798	sf	6.00	40,788		
225	Remove roofing	52,550	sf	2.00	105,100		
226	Interior demolition	64,510	gsf	4.00	258,040		
227	Temporary enclosures/protection	64,510	sf	1.00	64,510		
228	SUBTOTAL					468,438	
229							
230	F2020 HAZARDOUS COMPONENTS ABATEMENT						
231	See summary						
232	SUBTOTAL						
233							
234	TOTAL - SELECTIVE BUILDING DEMOLITION						\$468,438
235							

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
Design Options - GRADES 7-12
Belmont, MA

10-Apr-18

PSR Estimate - Revision 1

GFA 380,590

CONSTRUCTION COST SUMMARY					
<i>BUILDING SYSTEM</i>		<i>SUB-TOTAL</i>	<i>TOTAL</i>	<i>\$/SF</i>	<i>%</i>
NEW OPTION ADDITION					
A10	FOUNDATIONS				
A1010	Standard Foundations	\$2,333,425			
A1020	Special Foundations	\$7,500,375			
A1030	Lowest Floor Construction	\$2,868,983	\$12,702,783	\$33.38	10.1%
A20	BASEMENT CONSTRUCTION				
A2010	Basement Excavation	\$0			
A2020	Basement Walls	\$0	\$0	\$0.00	0.0%
B10	SUPERSTRUCTURE				
B1010	Upper Floor Construction	\$11,573,184			
B1020	Roof Construction	\$4,886,355	\$16,459,539	\$43.25	13.1%
B20	EXTERIOR CLOSURE				
B2010	Exterior Walls	\$8,971,819			
B2020	Windows	\$6,286,665			
B2030	Exterior Doors	\$73,680	\$15,332,164	\$40.29	12.2%
B30	ROOFING				
B3010	Roof Coverings	\$4,600,920			
B3020	Roof Openings	\$752,500	\$5,353,420	\$14.07	4.2%
C10	INTERIOR CONSTRUCTION				
C1010	Partitions	\$8,372,980			
C1020	Interior Doors	\$1,902,950			
C1030	Specialties/Millwork	\$3,653,098	\$13,929,028	\$36.60	11.0%
C20	STAIRCASES				
C2010	Stair Construction	\$834,000			
C2020	Stair Finishes	\$75,446	\$909,446	\$2.39	0.7%
C30	INTERIOR FINISHES				
C3010	Wall Finishes	\$2,283,540			
C3020	Floor Finishes	\$4,186,490			
C3030	Ceiling Finishes	\$3,805,900	\$10,275,930	\$27.00	8.1%
D10	CONVEYING SYSTEMS				
D1010	Elevator	\$400,000	\$400,000	\$1.05	0.3%
D20	PLUMBING				
D20	Plumbing	\$4,567,080	\$4,567,080	\$12.00	3.6%
D30	HVAC				
D30	HVAC	\$21,126,550	\$21,126,550	\$55.51	16.8%
D40	FIRE PROTECTION				
D40	Fire Protection	\$1,888,773	\$1,888,773	\$4.96	1.5%
D50	ELECTRICAL				

PSR REV 1/ DOCUMENTS 3.3.6

PSR REV.1/ 3.3.4 REVISED 3.3.7

3.3.6 PSR REV.1/ DOCUMENTS

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
 Design Options - GRADES 7-12
 Belmont, MA

10-Apr-18

PSR Estimate - Revision 1

GFA 380,590

CONSTRUCTION COST SUMMARY					
<i>BUILDING SYSTEM</i>		<i>SUB-TOTAL</i>	<i>TOTAL</i>	<i>\$/SF</i>	<i>%</i>
NEW OPTION ADDITION					
D5010	Complete System	\$16,940,060	\$16,940,060	\$44.51	13.4%
E10 EQUIPMENT					
E10	Equipment	\$1,774,200	\$1,774,200	\$4.66	1.4%
E20 FURNISHINGS					
E2010	Fixed Furnishings	\$4,423,619			
E2020	Movable Furnishings	NIC	\$4,423,619	\$11.62	3.5%
F10 SPECIAL CONSTRUCTION					
F10	Special Construction	\$0	\$0	\$0.00	0.0%
F20 HAZMAT REMOVALS					
F2010	Building Elements Demolition	\$25,000			
F2020	Hazardous Components Abatement	\$0	\$25,000	\$0.07	0.0%
TOTAL DIRECT COST (Trade Costs)			\$126,107,592	\$331.35	100.0%

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
Design Options - GRADES 7-12
Belmont, MA

10-Apr-18

PSR Estimate - Revision 1

GFA 380,590

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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NEW OPTION ADDITION

GROSS FLOOR AREA CALCULATION

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Ground Floor	118,565
First Floor	101,825
Second Floor	96,100
Third Floor	64,100

TOTAL GROSS FLOOR AREA (GFA)	380,590 sf
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A10 FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Grade beams; 5ft x 12"	524	cy	700.00	366,800
Grade tie beams; 5ft x 12"	446	cy	700.00	312,200
Pile caps	1,327	cy	800.00	1,061,600
Allowance for misc. pile caps, grade beams etc. including E+B	118,565	sf	5.00	592,825

SUBTOTAL 2,333,425

A1020 SPECIAL FOUNDATIONS

Driven piles mobilization and testing	1	ls	150,000.00	150,000
Steel piles	86,475	vlf	85.00	7,350,375

SUBTOTAL 7,500,375

A1030 LOWEST FLOOR CONSTRUCTION

<u>New Structural Slab, 12" thick</u>	118,565	sf		-
Ordinary Fill, 6"	2,196	cy	16.00	35,136
Crushed stone, 6"	2,196	cy	35.00	76,860
Rigid insulation; 40 psi	118,565	sf	2.15	254,915
Vapor barrier	118,565	sf	0.80	94,852
Compact existing sub-grade	118,565	sf	0.55	65,211
Formwork	778	lf	12.00	9,336
Rebar, 6#/SF	711,390	lbs	1.20	853,668
Concrete - 12" thick; 4,000 psi	4,611	cy	120.00	553,320
Placing concrete	4,611	cy	90.00	414,990
Finishing and curing concrete	118,565	sf	3.00	355,695

Miscellaneous

Patch slab at foundations in existing building				W/Reno
New Elevator pit	2	ls	50,000.00	100,000
New loading dock	1	ls	40,000.00	40,000
Equipment pads	1	ls	15,000.00	15,000

SUBTOTAL 2,868,983

TOTAL - FOUNDATIONS	\$12,702,783
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A20 BASEMENT CONSTRUCTION

A2010 BASEMENT EXCAVATION

No Work in this section

SUBTOTAL -

A2020 BASEMENT WALLS

No Work in this section

SUBTOTAL -

3.3.6 PSR REV.1/ DOCUMENTS

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
Design Options - GRADES 7-12
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PSR Estimate - Revision 1

GFA 380,590

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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NEW OPTION ADDITION

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TOTAL - BASEMENT CONSTRUCTION

B10 SUPERSTRUCTURE

		14.69	lbs/sf		-		
B1010	FLOOR CONSTRUCTION	2,795	tns		-		
	<u>Floor Structure - Steel:</u>						
	Steel beams and columns to new addition; 15#/SF	1,965	tns	3,800.00	7,467,000		
	Premium for HSS	491	tns	300.00	147,300		
	Shear studs	52,405	ea	2.50	131,013		
	<u>Floor Structure</u>						
	2" 18 Ga. Metal galvanized floor Deck	262,025	sf	3.75	982,594		
	WWF reinforcement	301,329	sf	0.80	241,063		
	Concrete Fill to metal deck; 6" Light Weight	6,114	cy	160.00	978,240		
	Place and finish concrete	262,025	sf	2.00	524,050		
	Rebar to decks	78,608	lbs	1.20	94,330		
	Misc. angles	262,025	sf	0.50	131,013		
	<u>Miscellaneous</u>						
	Fire proofing to columns and beams	262,025	sf	2.25	589,556		
	Intumescent paint	1	ls	25,000.00	25,000		
	Fire stopping floors	262,025	sf	1.00	262,025		
	SUBTOTAL					11,573,184	

B1020 ROOF CONSTRUCTION

	<u>Roof Structure - Steel:</u>						
	Steel beams and columns to new addition; 14#/SF	830	tns	3,800.00	3,154,000		
	Premium for HSS	208	tns	300.00	62,400		
	Exposed steel	1	ls	50,000.00	50,000		
	<u>Roof Structure</u>						
	Acoustic deck allowance	8,000	sf	7.00	56,000		
	3" 20 Ga. galvanized Metal Roof Deck	110,565	sf	4.00	442,260		
	<u>Miscellaneous</u>						
	Premium for overhangs; 15 lbs per SF	113	tns	5,000	565,000		
	Steel at rooftop screens	21	tns	5,000	105,000		
	Concrete under RTU's	15,000	sf	8.00	120,000		
	Fire proofing to columns, beams and deck	110,565	sf	3.00	331,695		
	SUBTOTAL					4,886,355	

TOTAL - SUPERSTRUCTURE \$16,459,539

B20 EXTERIOR CLOSURE

B2010	EXTERIOR WALLS						
	Exterior Wall Area - Solid Assume 70%	110,406	sf				
	<u>MASONRY</u>						
	Brick veneer, 3 color; 75% of solid area	82,805	sf	40.00	3,312,200		
	Staging to exterior wall	110,406	sf	4.00	441,624		
	<u>MISC. METALS</u>						
	Stainless steel sign at main entrance	1	ls	15,000.00	15,000		

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
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GFA 380,590

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST	
NEW OPTION ADDITION								
110	070001 WATERPROOFING, DAMPPROOFING AND CAULKING							
111	Air barrier	110,406	sf	6.50	717,639			
112	Air barrier/flashing at windows	27,834	lf	6.25	173,963			
113	Miscellaneous sealants to closure	110,406	sf	1.00	110,406			
114								
115	072100 THERMAL INSULATION							
116	Insulation	110,406	sf	2.25	248,414			
117								
118	076400 CLADDING							
119	Metal panel; 25% of solid area	27,602	sf	75.00	2,070,150			
120								
121	092900 GYPSUM BOARD ASSEMBLIES							
122	6" metal stud backup	110,406	sf	11.00	1,214,466			
123	Gypsum Sheathing	110,406	sf	2.75	303,617			
124	Drywall lining to interior face of stud backup	110,406	sf	3.30	364,340			
125								
126	SUBTOTAL					8,971,819		
127								
128	B2020 WINDOWS							
129	Exterior Wall Area - Glazed Assume 30%	47,317	sf					
130								
131	061000 ROUGH CARPENTRY							
132	Wood blocking at openings	27,834	lf	14.00	389,676			
133								
134	070001 WATERPROOFING, DAMPPROOFING AND CAULKING							
135	Backer rod & double sealant	27,834	lf	8.50	236,589			
136								
137	080001 METAL WINDOWS							
138	Windows, double glazed; 20% of glazed area	9,463	sf	90.00	851,670			
139	Curtainwall, double glazed; 80% of glazed area	37,854	sf	120.00	4,542,480			
140	Sunshades; horizontal	1	ls	250,000.00	250,000			
141								
142	089000 LOUVERS							
143	Louvers	250	sf	65.00	16,250			
144	SUBTOTAL					6,286,665		
145								
146	B2030 EXTERIOR DOORS							
147	Glazed entrance doors including frame and hardware; double door	8	pr	8,000.00	64,000			
148	HM doors, frames and hardware- Double	4	pr	2,000.00	8,000			
149	Backer rod & double sealant	240	lf	4.00	960			
150	Wood blocking at openings	240	lf	3.00	720			
151	SUBTOTAL					73,680		
152								
153	TOTAL - EXTERIOR CLOSURE						\$15,332,164	
154								
155								
156	B30 ROOFING							
157								
158	B3010 ROOF COVERINGS							
159	New roofing complete	118,565	sf	20.00	2,371,300			
160	Roof equipment screen; 10 ft high	4,170	sf	65.00	271,050			
161	Green roof/Terrace	13,102	sf	35.00	458,570			
162	Roof soffits/canopies	15,000	sf	100	1,500,000			
163	SUBTOTAL					4,600,920		
164								
165	B3020 ROOF OPENINGS							
166	Skylights, allow	1	ls	750,000.00	750,000			
167	Roof hatch	1	loc	2,500.00	2,500			

PSR REV 1 / DOCUMENTS 3.3.6

PSR REV 1 / 3.3.4 REVISED 3.3.7

3.3.6 PSR REV.1/ DOCUMENTS

D. COST ESTIMATE / DESIGN TEAM REV.1



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PSR Estimate - Revision 1

GFA 380,590

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST	
NEW OPTION ADDITION								
168	SUBTOTAL					752,500		
169								
170	TOTAL - ROOFING							\$5,353,420
171								
172								
173	C10 INTERIOR CONSTRUCTION							
174								
175	C1010 PARTITIONS							
176	Miscellaneous partitions/glazed partitions/borrowed lights/blocking etc.	380,590	gsf	22.00	8,372,980			
177	SUBTOTAL					8,372,980		
178								
179	C1020 INTERIOR DOORS							
180	Interior doors, frames and hardware	380,590	gsf	5.00	1,902,950			
181	SUBTOTAL					1,902,950		
182								
183	C1030 SPECIALTIES / MILLWORK							
184	Toilet Partitions and accessories	380,590	gsf	0.80	304,472			
185	Backer panels in electrical closets	1	ls	1,000.00	1,000			
186	Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms	380,590	sf	1.00	380,590			
187	Room Signs	380,590	gsf	0.40	152,236			
188	Fire extinguisher cabinets	127	ea	350.00	44,450			
189	Lockers	380,590	gsf	1.60	608,944			
190	Janitors Work Shop Accessories	1	ls	1,500.00	1,500			
191	Janitors Closet Accessories	3	rms	300.00	900			
192	<i>Media</i>							
193	Reception desks	4	loc	25,000	100,000			
194	Railings to open to below areas; glass railings	1,913	lf	380	726,940			
195	Library shelving at perimeters 7' Tall				F,F & E			
196	Library shelving at perimeters 3' Tall				F,F & E			
197	Miscellaneous wood trim	380,590	gsf	0.50	190,295			
198	Display cases	380,590	gsf	0.25	95,148			
199	Miscellaneous metals throughout building	380,590	sf	1.50	570,885			
200	Miscellaneous sealants throughout building	380,590	sf	1.25	475,738			
201	SUBTOTAL					3,653,098		
202								
203	TOTAL - INTERIOR CONSTRUCTION							\$13,929,028
204								
205								
206	C20 STAIRCASES							
207								
208	C2010 STAIR CONSTRUCTION							
209	Metal pan stair; egress stair	12	flt	25,000.00	300,000			
210	Main staircase	2	flt	250,000.00	500,000			
211	Commons steps	2	loc	5,000.00	10,000			
212	Concrete fill to stairs	12	flt	2,000.00	24,000			
213	SUBTOTAL					834,000		
214								
215	C2020 STAIR FINISHES							
216	High performance coating to stairs including all railings etc.	12	flt	3,000.00	36,000			
217	Rubber tile at stairs - landings	1,200	sf	10.00	12,000			
218	Rubber tile at stairs - treads & risers	1,440	lft	19.06	27,446			
219	SUBTOTAL					75,446		
220								
221	TOTAL - STAIRCASES							\$909,446
222								
223								
224	C30 INTERIOR FINISHES							

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
Design Options - GRADES 7-12
Belmont, MA

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PSR Estimate - Revision 1

GFA 380,590

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
NEW OPTION ADDITION							
225	C3010 WALL FINISHES						
226	Wall finishes	380,590	sf	6.00	2,283,540		
228	SUBTOTAL					2,283,540	
229	C3020 FLOOR FINISHES						
230	Floor finishes	380,590	sf	11.00	4,186,490		
232	SUBTOTAL					4,186,490	
233	C3030 CEILING FINISHES						
234	Ceiling finishes	380,590	sf	10.00	3,805,900		
235	SUBTOTAL					3,805,900	
236							
237							
238	TOTAL - INTERIOR FINISHES						\$10,275,930
239							
240							
241	D10 CONVEYING SYSTEMS						
242							
243	D1010 ELEVATOR						
244	New four stop elevator	1	ea	180,000.00	180,000		
245	New four stop freight elevator	1	ea	220,000.00	220,000		
246	SUBTOTAL					400,000	
247	TOTAL - CONVEYING SYSTEMS						\$400,000
248							
249							
250	D20 PLUMBING						
251							
252	D20 PLUMBING, GENERALLY						
253	Plumbing allowance	380,590	gsf	12.00	4,567,080		
254	SUBTOTAL					4,567,080	
255	TOTAL - PLUMBING						\$4,567,080
256							
257							
258							
259	D30 HVAC						
260							
261	D30 HVAC, GENERALLY						
262	HVAC allowance for Geothermal wells; based 400 wells each 400 ft deep	1	ls	4,000,000.00	4,000,000		
263	HVAC allowance; full AC	380,590	gsf	45.00	17,126,550		
264	SUBTOTAL					21,126,550	
265	TOTAL - HVAC						\$21,126,550
266							
267							
268							
269	D40 FIRE PROTECTION						
270							
271	D40 FIRE PROTECTION, GENERALLY						
272	Fire pump	1	ls	100,000.00	100,000		
273	Fire protection system	380,590	gsf	4.70	1,788,773		
274	SUBTOTAL					1,888,773	
275	TOTAL - FIRE PROTECTION						\$1,888,773
276							
277							
278							
279	D50 ELECTRICAL						
280							
281							
282	D5010 ELECTRICAL WORK						
283	Allowance for PV systems	1	ls	4,000,000.00	4,000,000		
284	Complete electrical systems	380,590	gsf	34.00	12,940,060		
285	SUBTOTAL					16,940,060	
286							

3.3.6 PSR REV.1/ DOCUMENTS

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
Design Options - GRADES 7-12
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GFA 380,590

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
NEW OPTION ADDITION							
TOTAL - ELECTRICAL							\$16,940,060
E10 EQUIPMENT							
E10 EQUIPMENT, GENERALLY							
	Theatrical Equipment Stage curtains, rigging and controls (Auditorium & Lecture Hall)	1	ls	350,000.00	350,000		
	Theatrical AV allowance (Auditorium & Lecture Hall)	1	ls	200,000.00	200,000		
	Black box allowance	1	ls	100,000.00	100,000		
	Kitchen equipment	1	ls	550,000.00	550,000		
	Fume hoods	9	ea	15,000.00	135,000		
	Kiln	1	ea	5,000.00	5,000		
	Allowance for new manual operable partitions in Cafeteria & Classrooms	356	lf	700.00	249,200		
	Allowance for miscellaneous equipment; projection screens, residential appliances, loading dock equipment, wood workshop etc	1	ls	150,000.00	150,000		
	Loading dock equipment	1	ls	20,000.00	20,000		
	Electrically operated projection screens	1	loc	15,000.00	15,000		
	SUBTOTAL					1,774,200	
TOTAL - EQUIPMENT							\$1,774,200
E20 FURNISHINGS							
E2010 FIXED FURNISHINGS							
	Entry mats & frames - recessed with carpet/rubber strips	500	sf	55.00	27,500		
	Window blinds	47,317	sf	7.00	331,219		
	Auditorium seats	740	seat	350.00	259,000		
	Lecture hall seats	150	seat	250.00	NR		
	Counters, base cabinets, tall storage in classrooms and other rooms	380,590	gsf	10.00	3,805,900		
	SUBTOTAL					4,423,619	
E2020 MOVABLE FURNISHINGS							
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
TOTAL - FURNISHINGS							\$4,423,619
F10 SPECIAL CONSTRUCTION							
F10 SPECIAL CONSTRUCTION							
	No items in this section						
	SUBTOTAL						
TOTAL - SPECIAL CONSTRUCTION							
F20 SELECTIVE BUILDING DEMOLITION							
F2010 BUILDING ELEMENTS DEMOLITION							
	Demolition to make connection to existing building	1	ls	25,000.00	25,000		
	SUBTOTAL					\$25,000	
F2020 HAZARDOUS COMPONENTS ABATEMENT							
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL						

D. COST ESTIMATE / DESIGN TEAM REV.1



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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NEW OPTION ADDITION

343

TOTAL - SELECTIVE BUILDING DEMOLITION							\$25,000
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PSR REV 1 / DOCUMENTS 3.3.6

PSR REV.1/ 3.3.4 REVISED

3.3.7

3.3.6 PSR REV.1/ DOCUMENTS

D. COST ESTIMATE / DESIGN TEAM REV.1



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITWORK NEW OPTION							
G SITEWORK							
G10 SITE PREPARATION & DEMOLITION							
	Site construction fence/barricades	8,200	lf	12.00	98,400		
	Site construction fence gates/entrance	2	ea	15,000.00	30,000		
	Pavement/curbing removal, crush and re-use for sub-base	200,000	sf	1.00	200,000		
	Walkways	1	ls	30,000.00	30,000		
	Miscellaneous demolition	1	ls	150,000.00	150,000		
	<u>Site Earthwork</u>						
	Strip Topsoil and remove; 6" thick	22,222	cy	12.00	266,664		
	Fine grading	1,000,000	sf	0.20	200,000		
	Cut and Fill; assumed AV 2ft; balanced site	74,074	cy	8.00	592,592		
	Silt fence/erosion control, wash bays, stock piles	8,200	lf	12.00	98,400		
	Silt fence maintenance and monitoring	1	ls	60,000.00	60,000		
	<u>Hazardous Waste Remediation</u>						
	Dispose/treat contaminated soils					NIC	
	SUBTOTAL						1,726,056
G20 SITE IMPROVEMENTS							
	<u>Asphalt Paving; parking lot and roadway</u>						
	gravel base; 12" thick	220,000					
	gravel base; 12" thick	8,148	cy	40.00	325,920		
	asphalt; 4" thick	24,444	sy	25.00	611,100		
	VGC	9,100	lf	38.00	345,800		
	Road markings/signage	1	ls	30,000.00	30,000		
	<u>Pedestrian Paving</u>						
	Concrete paving						
	gravel base; 8" thick	1,117	cy	35.00	39,095		
	4" concrete paving	45,000	sf	7.00	315,000		
	<u>Concrete pavers</u>						
	Concrete pavers						
	sand bedding; 1" thick	148	cy	40.00	5,920		
	Precast concrete pavers	50,000	sf	16.00	800,000		
	gravel base; 8" thick	1,241	cy	35.00	43,435		
	concrete base; 4" thick	50,000	sf	5.00	250,000		
	<u>Site Improvements</u>						
	Flag pole 50' high	1	ea	6,500.00	6,500		
	Concrete retaining walls					Assumed not required	
	6' chain-link fence	8,200	lf	50.00	410,000		
	Double gates	1	ea	2,500.00	2,500		
	Wood screen privacy fence 8'	50	lf	100.00	5,000		
	Double gates	1	ea	2,500.00	2,500		
	Benches	15	ea	2,800.00	42,000		
	Bike racks	1	ls	30,000.00	30,000		
	Ornamental trash/recycling receptacles	10	ea	800.00	8,000		
	Monumental signage	1	ls	40,000.00	40,000		
	Way finding signage	1	ls	60,000.00	60,000		
	Other site improvements; walls, fences etc.	1	ls	1,500,000	1,500,000		
	<u>Multi-purpose fields</u>						
	Crushed stone - 12" thick	11,111	cy	40.00	444,440		
	Sports seeding	300,000	sf	0.50	150,000		
	Line markings - Allowance	1	ls	15,000.00	15,000		
	Football goals	2	loc	3,000.00	6,000		
	Soccer goals (movable) - Allowance	3	loc	10,000.00	30,000		
	20' sports netting	1	ls	50,000.00	50,000		
	Baseball/softball fields	3	loc	100,000.00	300,000		
	Baseball/softball backstop	3	loc	40,000.00	120,000		
	SUBTOTAL						5,988,210
	<u>Landscaping</u>						
	Topsoil -modify existing topsoil	22,222	cy	26.00	577,772		
	Lawn - loam & seed	700,000	sf	0.25	175,000		

D. COST ESTIMATE / DESIGN TEAM REV.1



Belmont High School
Design Options - GRADES 7-12
Belmont, MA

10-Apr-18

PSR Estimate - Revision 1

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITework NEW OPTION							
62	Planting allowance	1	ls	300,000.00	300,000		
63	Courtyard allowance	2	loc	100,000.00	200,000		
64	Irrigation at sports fields	300,000	sf	1.00	300,000		
65	Allowance for new well	1	ls	150,000.00	150,000		
66	SUBTOTAL					1,702,772	
67	G30 CIVIL MECHANICAL UTILITIES						
68	<u>Utilities - Enabling</u>						
69	Allowance for temporary utilities etc.	1	ls	150,000.00	150,000		
70	<u>Water supply; Pricing includes E&B and bedding</u>						
71	New DI piping; 8"	200	lf	100.00	20,000		
72	New DI piping; 8" Fire	4,300	lf	100.00	430,000		
73	Connect to existing	1	loc	10,000.00	10,000		
74	FD connection	1	ea	2,000.00	2,000		
75	Gate valves	8	ea	750.00	6,000		
76	Fire hydrant	14	ea	5,000.00	70,000		
77	Fire hydrant; relocate existing	1	ea	3,500.00	3,500		
78	<u>Sanitary; Pricing includes E&B and bedding</u>						
79	Manholes	4	ea	4,000.00	16,000		
80	Grease trap	1	ea	15,000.00	15,000		
81	8" PVC	300	lf	60.00	18,000		
82	Connect to existing drain	1	ea	3,000.00	3,000		
83	Relocate existing sewer system	1	ls	250,000	250,000		
84	<u>Storm water; Pricing includes E&B and bedding</u>						
85	Allowance to modify existing drainage systems	1	ls	2,450,000	2,450,000		
86	Perforated pipe @ recharge systems and crushed stone base under fields	300,000	sf	4.00	NR		
87	<u>Gas service</u>						
88	E&B trench for new gas pipe - install by plumbing	250	lf	25.00	6,250		
89	SUBTOTAL					3,449,750	
90	G40 ELECTRICAL UTILITIES						
91	<u>Power</u>						
92	Utility co. backcharges, allow	1	ls	30,000.00	30,000		
93	Connections at existing manhole					Utility co.	
94	Manhole	1	ls	8,500.00	8,500		
95	Connections in manhole	1	ls	3,500.00	3,500		
96	Primary ductbank 2-5" ductbank, empty, allow	1700	lf	120.00	204,000		
97	Transformer by utility company					By Utility Co.	
98	Transformer pad	1	ea	2,500.00	2,500		
99	Secondary service	60	lf	1,100.00	66,000		
100	<u>Communications</u>						
101	Connection at riser pole, allow	1	ea	1,500.00	1,500		
102	Telecom ductbank 4-4", allow	1700	lf	152.00	258,400		
103	<u>Site Lighting</u>						
104	Varsity baseball sports lighting (allow)	1	ls	120,000.00	120,000		
105	Softball sports lighting (allow)	1	ls	90,000.00	90,000		
106	Site Parking lighting (allow)	1	ls	350,000.00	350,000		
107	SUBTOTAL					1,134,400	
108	TOTAL - SITE DEVELOPMENT						\$14,001,188

PSR REV 1 / DOCUMENTS 3.3.6

PSR REV.1/ 3.3.4 REVISED

3.3.7

3.3.6 PSR REV.1/ DOCUMENTS

E. PRELIMINARY DESIGN PRICING REV.1

DPI – Belmont HS PSR R1 Sections
4/10/2018

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (cost*/SF)	Square Feet of New Construction (Cost*/SF)	Site, building, Takedown, HazMat, Costs	Estimated Total Construction** (Cost*/SF)	Estimated Total Project Costs
Option 2.1	451,800 SF	239,354 SF	212,446 SF	\$43,669,665	\$243,754,957	\$304,693,696
Major Renovation/ Minor Addition		438.16 SF	477.02 SF		\$539.52	
Option 2.3	451,800 SF	65,050 SF	386,750 SF	\$39,130,389	\$248,934,228	\$311,167,785
Minor Renovation/ Major Addition		310.93 SF	490.18 SF		\$550.98	
Option 2.4	451,800 SF	62,300 SF	389,500 SF	\$39,786,263	\$248,154,913	\$309,045,915
Minor Renovation/ Major Addition		315.61 SF	484.48 SF		\$549.26	
Option 2.4R1 ***	445,100 SF	64,510 SF	380,590 SF	\$35,520,163	\$237,594,715	\$295,824,264
Minor Renovation/ Major Addition		315.64 SF	477.45 SF		\$533.80	
Option 3.1	422,925 SF	0 SF	422,925 SF	\$38,370,733	\$237,382,493	\$296,728,118
New Construction		0 SF	470.56 SF		\$561.29	

* Marked Up Construction Costs

** Does not include Construction Contingency

*** **District's Preferred Solution**

F. PSR OPTIONS RECONCILIATION REV.1

BELMONT HIGH SCHOOL
PMC/DPI PSR Options Reconciliation

4/10/2018

	PMC	DPI	Delta	% delta
Option 1 Repair Only*	\$89,192,523	\$85,541,000	\$3,651,523	4.27%
Option 2.1 Major Reno/Minor Add*	\$241,676,851	\$255,251,000	-\$13,574,149	-5.32%
Option 2.3 Minor Reno/Major Add*	\$245,805,461	\$237,959,000	\$7,846,461	3.30%
Option 2.4 Minor Reno/Major Add*	\$245,770,440	\$246,429,000	-\$658,560	-0.3%
Option 2.4R1 Minor Reno/Major Add**	\$237,594,716	\$244,116,000	-\$6,521,284	-2.7%
Option 3.1 New Construction*	\$235,060,852	\$228,978,000	\$6,082,852	2.66%

Based on PMC PSR Estimate February 9 and 12, 2018*

Based on DPI PSR Estimate February 14, 2018*

Based on PMC PSR Estimate April 10, 2018 **

Based on DPI PSR Estimate April 10, 2018 **

PSR REV 1/ DOCUMENTS

3.3.6

PSR REV.1/ 3.3.4 REVISED

3.3.7

3.3.6 PSR REV.1/ DOCUMENTS

G. MEETING MINUTES / BHSBC

BELMONT HIGH SCHOOL BUILDING COMMITTEE
FINAL MEETING MINUTES

February 13, 2018
Chenery Middle School
7:00 PM

RECEIVED
TOWN CLERK
BELMONT, MA
2018 MAR -6 AM 9:40

Meeting #39

Committee Members Attending:

Chair Lovallo; Members: Adam Dash, John Phelan (left at 8:12 p.m.), Tom Caputo, Pat Bruschi, Phyllis Marshall, Bob McLaughlin, Joel Mooney, Diane Miller, Chris Messer, Emma Thurston, Jamie Shea

From Daedalus: Tom Gatzunis

From Perkins+Will: Brooke Trivas, Patrick Cunningham, Rick Kuhn

BHSBC Members Absent: Joe DeStefano, Dan Richards, Mike McAllister

School Committee Members Attending: Catherine Bowen, (Tom Caputo), Susan Burgess-Cox

Board of Selectmen Attending: Chair Jim Williams, Adam Dash
[Chair Williams called the BOS to order at 7:04 p.m.]

One citizen was in attendance at this meeting.

I. Call to Order

The meeting was called to order at 7:04 p.m. by Chair Lovallo. He reviewed the evening's agenda and turned to the first item.

II. Minutes of Previous Meetings

Mr. McLaughlin moved: To approve the Minutes of 2/1/18.
The motion passed unanimously.

III. Treasurer's Report

Ms. Marshall informed the Committee that the following Invoices are ready for their approval:

Invoice 1: Daedalus \$23,910.33 (a portion of the feasibility study and a portion of the geo-technical service)

Mr. McLaughlin moved: To approve the Invoice of \$23,910.33.
The motion passed unanimously.

Invoice 2: Perkins + Will \$101,102.73

Mr. McLaughlin moved: To approve the Invoice of \$101,102.73.

FINAL

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G. MEETING MINUTES / BHSBC

The motion passed unanimously.

Invoice 3: Minutes Recording 12 Hours \$360.00

Mr. McLaughlin moved: To approve the Invoice of \$360.00.
The motion passed unanimously.

Chair Lovallo then reviewed the amount submitted to the MSBA as well as the amount that has been reimbursed (at a rate of 36.89%).

IV. Comments from Belmont Residents

No comments this evening.

V. Discussion of Preferred Schematic Report (PSR) Submission

Chair Lovallo explained that four section drafts of the PSR have been issued to the BHSBC, via email, for its review. He then reviewed the four sections and noted where feedback was submitted from the MSBA. Chair Lovallo touched on the response to new design Option 2.1.a (section 3.3.1). The reasons why this design option was not tenable were briefly reviewed.

Regarding section 2, he noted that part of this section pertains to traffic. Chair Lovallo noted he and Ms. Brusch met with the Traffic Advisory Committee last week and that the Traffic Advisory Committee will meet again on March 8 to discuss the traffic conditions in and around the school building project. He added that he and Ms. Brusch also met with the Planning Board (PB) last week and will meet again with the PB.

The third section, he noted, contains an update on the project's cost as well as cost estimates for the building's sustainability components. The BHSBC briefly discussed Zero Net Energy (ZNE) and its impact on the building project. Mr. Mooney explained the next steps of the geotechnical and environmental testing at the footprint of the new building. Testing will consist of a series of borings where the soil characteristics will be evaluated, including the environmental characteristics of the samples. Work on site is expected to occur in March so that information can be provided to the design team by April. This information will include site-specific parameters for geothermal wells.

The next section, Chair Lovallo explained, reviews the site, the fields, etc. Option of C2.4. Mr. Cunningham explained some of the images that look at the inside of the building (section studies). Mr. Phelan discussed potential layouts for the 7-12 grade configuration, e.g., 7-9 together and 10-12 together, or 7-8 and 9-12, etc. He is currently soliciting feedback from the staff on this topic.

Chair Lovallo explained a bit about geothermal energy and air distribution (chilled beam).

The last section was briefly reviewed, e.g., the letter to Ms. Diane Sullivan (with a listing of the BHSBC meetings).

VI. Approval Action of PSR Submission to MSBA

Chair Lovallo reviewed the wording for the motion.

3.3.6 PSR REV.1/ DOCUMENTS

G. MEETING MINUTES / BHSBC

Mr. McLaughlin moved: To approve action on the PSR submission to the MSBA.
The motion passed unanimously.

The Board of Selectman passed the same motion.

VII. Next Full Building Committee Meeting

Chair Lovallo noted that the BHSBC has now completed its efforts on Module 3. He thanked the Committee as well as Perkins+Will (the design team) and Daedalus (the OPM). Schematic Design (Module 4) is the next phase that the Committee will undertake.

Next meetings: March 6 (Tuesday) and March 22 (Thursday) 2018 at 7:30 a.m.

Chair Lovallo noted that some topics that will need to be addressed (in Module 4) include: construction contract procurement, site flooding, system resiliency, visual imaging, types of lockers, athletic/music storage space, bathrooms/equality, teacher spaces, etc.

VIII. Designing the Future Ready School

Chair Lovallo noted that we do know the purpose of the building, the use of the spaces, the sizes of the spaces, and their adjacencies, however what the building will look like is not yet known.

Ms. Trivas reviewed a presentation concerning the design of the *Future Ready School*. She reviewed the following concepts:

- *who* is the school being designed for?
- *what* we know and *what* we don't know about the future
- *where* are we designing this space and *where* does learning occur?
- *when* – the *when* is now, and she finished by asking:
- *how* will we plan for and inspire the next generation of students?

Chair Lovallo noted that this undertaking is a good stepping-stone for preparing students for higher education. The BHCBC briefly discussed the concepts presented by Ms. Trivas. Ms. Shea offered her perspective as a BHS teacher. She spoke to the benefits of flexible spaces for teaching.

BOS Chair Williams raised the topic of what this new building will be named, given that it combines middle and high school. Chair Lovallo stated that a name has not yet been identified but that this issue will continue to be further explored. He noted that the project will be a focal point for the community. The School Department, he added, will definitely continue to explore an appropriate name for the 7-12 building.

Chair Lovallo thanked the Board of Selectmen and the School Committee for joining in the last several months of Joint meetings. Ms. Shea thanked Chair Lovallo on behalf of the BHSBC.

IX. Other/New Business

Chair Lovallo stated that there is no new business.

X. Related Meeting Documents

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G. MEETING MINUTES / BHSBC

1. PSR Introduction District Response
2. Daedalus Concept Cost Summary
3. Daedalus Total Project Cost Summary
4. C2.4 Site Plan Images
5. Letter to Ms. Diane Sullivan (a listing of BHSBC meetings)

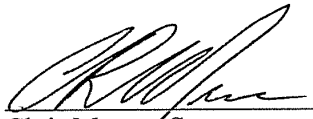
XI. End Meeting

The meeting ended at 8:38 p.m. by Mr. McLaughlin.

Respectfully submitted by:

Lisa Gibalerio

Approved:


Chris Messer, Secretary

3/6/18
Date

A True Copy, Attest
Ellen O'Brien Ashman
Town Clerk of Belmont, MA

3.3.6 PSR REV.1/ DOCUMENTS

G. MEETING MINUTES / BHSBC

**BELMONT HIGH SCHOOL BUILDING COMMITTEE
FINAL MEETING MINUTES
March 6, 2018
Homer Building Gallery
7:30 AM**

RECEIVED
TOWN CLERK
BELMONT, MA

2018 APR -5 PM 2:50

Meeting #40

Committee Members Attending:

Chair Lovallo; Members: Adam Dash, John Phelan (left at 8:27 a.m.), Mike McAllister, Tom Caputo, Phyllis Marshall, Bob McLaughlin, Joe DeStefano (left at 9:06 a.m.), Diane Miller, Chris Messer, Emma Thurston, and Jamie Shea

From Daedalus: Tom Gatzunis, Richard Marks, and Shane Nolan

From Perkins+Will: Brooke Trivas, Patrick Cunningham, Christopher Karlson, and Rick Kuhn

BHSBC Members Absent: Pat Brusch, Joel Mooney, Dan Richards,

I. Call to Order

The meeting was called to order at 7:33 a.m. by Chair Lovallo. He then reviewed the agenda, welcomed Mr. Mike McAllister (Principal of the Chenery Middle School) to the BHSBC table, and turned to the first item on the agenda.

II. Minutes of Previous Meetings

Mr. McLaughlin moved: To approve the Minutes of 2/13/18.
The motion passed unanimously.

III. Treasurer's Report

Ms. Marshall informed the Committee that there are no Invoices ready for approval this morning. She briefly reviewed what has been spent and what has been submitted for reimbursement at this point. The unencumbered value is approximately \$82,736, and it is expected that some encumbered funds will be released due to less scope for website design and visioning from Frank Locker. This is estimated to be about \$13,000, bringing the total unencumbered value to approximately \$95,000.

IV. Update on PSR Report Submission

Chair Lovallo reviewed the next steps on the PSR submission. Mr. Nolan provided some details on the MSBA process with regard to the schematic design. Ms. Trivas also weighed in on the MSBA's role, at this point, in the process. She noted that there is an upcoming presentation with the MSBA as well as a conference call. The MSBA's comments on the PSR report will be helpful, she said, and this feedback will be factored into the presentation. It is during this phase that the MSBA begins to dive more deeply into the details of the design. Ms. Trivas noted that preferred options and critical adjacencies are being worked on and that other data regarding traffic and the pond are also being looked at.

G. MEETING MINUTES / BHSBC

Superintendent Phelan explained that while the community seems to feel connected in to the BHSBC process, the educators need to be brought in as well. A working group of 19 teachers will begin meeting every other week to explore issues relating to the 7-12 grade configuration. Other groups of teachers will also be brought together to explore the BHS project.

Chair Lovallo noted that site analysis (pertaining to the soil) will occur this month. Superintendent Phelan provided a brief ice rink update. The incinerator site is being explored as a potential rink location. There is another space on campus that works well for the rink, but it impacts the JV baseball field, which will likely need to be relocated off site.

Mr. McLaughlin noted that a report (from about 10 years ago) does exist; this report concluded that a rink cannot be placed on the Incinerator Site due to financial challenges with the construction complexities.

V. Comments from Belmont Residents

Ms. Amy Tannenbaum, 21 Goden Street, spoke to her neighborhood's concerns on traffic. The neighborhood is not feeling particularly heard. Having Goden Street as an entry/exit way for the new high school is not feasible. Goden Street is already a traffic mess. She reviewed the many reasons why Goden Street is not appropriate for the entry/exit way. She asked – Is this the best option? Who is exploring the other alternatives for an entry/exit way to the high school? What will be done to make the street safe for walkers, bikers, and those who live on Goden Street?

Chair Lovallo noted that there are many discussions on traffic happening. The high school project is five-years out – what, he asked, will happen to address traffic congestion in the meantime? He noted that he was at a recent Traffic Advisory Committee (TAC) presentation to hear their thoughts on traffic issues across town. This Thursday, TAC is holding a public forum and residents will be able to express their traffic concerns. Many issues relating to traffic will continue to be explored and have been explored. He assured Ms. Tannenbaum that the Goden Street concerns have been heard, and in fact, have been imparted to the TAC.

Ms. Tannenbaum followed up with a comment focused on the exploration of other viable entry/exit options. She stated that she would like to see *evidence* that other options are being thoroughly studied.

The BHSBC briefly discussed issues relating to traffic and its impact on the schematic design phase. Chair Lovallo reiterated that the TAC is looking to come up with a holistic approach to address the town's traffic issues as a whole. Traffic can't be addressed neighborhood by neighborhood. To do so just pushes the traffic around without solving any of the issues.

VI. Public Relations (PR) Update

Ms. Shea reviewed the five areas that the PR group has been focusing on:

1. community uses of the new building
2. 21st Century Learning
3. the design concepts
4. abutter concerns (traffic, rats, shading)
5. virtual tours

3.3.6 PSR REV.1/ DOCUMENTS

G. MEETING MINUTES / BHSBC

She suggested that these topics could be grouped together and explored at community forums. She described ways in which the community can be more fully engaged in the process and in the above noted discussion points.

Mr. McLaughlin noted that the *cost* of the project should be included among the five items she outlined above. Furthermore, the project needs to be referred to as something other than the new “high school”. It is now encompassing more than a traditional high school. Mr. Gatzunis noted that the MSBA will continue to refer to this project as the Belmont High School project. It will be up to the community to re-brand the name to include that this project is actually encompassing *two* buildings.

Superintendent Phelan added that considerable thought has been given to the naming of the project - given that the configuration will be grades 7-12. One possibility is to call the building the “Belmont Academy” with an upper and lower school distinction. He then spoke to the advantages of the 7-12 grade configuration. The naming of the school is not the responsibility of the Building Committee and is the responsibility of the School Department and School Committee.

The BHSBC discussed issues relating to what the new project will be called – in order to encompass the grade 7-12 model. The BHSBC also discussed how the cost issue can be addressed, e.g., that it is costly to build in Massachusetts, that the building will encompass grades 7-12, and that the *alternatives* to this project to address enrollment (e.g., building a new elementary school, adding an addition to the Chenery Middle School) will likely cost more money as they lack MSBA reimbursement.

VII. Schematic Design Schedule

Chair Lovallo reviewed the timeline over the next several months, e.g., budget submission, schematic design, etc.

VIII. Construction Contract Procurement Chapter 149 versus 149A

Chair Lovallo introduced Mr. Richard Marks (Daedalus President and Project Executive) who will lead the Construction Contract Procurement discussion. Mr. Marks explained the distinction between hiring the Construction Manager At Risk (Ch. 149A.) as opposed to Design-Bid-Build (Ch. 149).

He reviewed the pros and the cons of each method. He noted that CM at Risk tends to have more benefits (efficiency and procedurally) especially for projects that cost over \$100 million dollars. CM at Risk change orders tend to be less than Design-Bid-Build. He also reviewed other CM at Risk projects across the state.

Chair Lovallo added that CM at Risk seems to be the option he is seeing on public projects across the state. This method is more rigorous and the detailed accounting process is helpful throughout the building process. He stated that it is beneficial to be able to select the construction team. He noted that CM at Risk is also better for the phasing of the building.

Both Chair Lovallo and Mr. Marks expressed their support for the Ch. 149A option. Ms. Trivas agreed and stated her support for and the benefits of the CM at Risk option. Both Mr. McLaughlin and Mr. DeStefano concurred and expressed their support for this option, however, both added that obtaining the *right* CM personnel will be key. Mr. Marks explained the process for obtaining the CM at Risk, e.g., submitting an RFQ – which begins the bidding process.

G. MEETING MINUTES / BHSBC

Chair Lovallo further outlined the process of obtaining the CM at Risk as well as what follows for their scope at Schematic Design: estimating the cost of the project, finalizing the schedule, developing detailed site and construction logistics plans, and value engineering. He said a subcommittee will need to be formed once the CM at Risk option is approved.

Mr. McLaughlin moved: To pursue the CM at Risk option (Chapter 149A) and to proceed immediately on this.

The motion passed unanimously.

Chair Lovallo requested that a subcommittee be formed.

Mr. McLaughlin moved: To form a CM at Risk subcommittee that Chair Lovallo will appoint. The motion passed unanimously.

Chair Lovallo thanked Mr. Marks. He also noted that the appropriate “conflict of interest forms” for himself and Mr. Mooney will be signed and submitted.

IX. Design Resiliency 101

Ms. Trivas introduced her colleague, Mr. Chris Karlson, who has been involved in the “visioning” process.

Mr. Cunningham reviewed the concept of resilient design, which pertains to stressors and shocks (e.g., storms, power outages, extreme temperatures, extreme rainfall, flooding – from sea level rise) that will potentially stress the building and its inhabitants. He explained each stressor’s impact on the building/inhabitants and noted that these stressors are happening more frequently. The building can be designed in a more resilient way to mitigate the community’s vulnerability. He discussed the available options to make the building more resilient and he explored various mechanical contingencies that can be put in place, e.g., generator backup, a place to hold people and serve food, etc.

X. Visioning Recap – this item will be postponed to the next meeting

XI. Next Full Building Committee Meeting

Thursday, March 22, 2018 (21st Century Learning) 7:00 p.m., location TBD

XII. Other/New Business

None.

XIII. Related Meeting Documents

1. Design-Bid Build versus CM at Risk
2. Approved Construction Manager-at-Risk list per Inspector General
3. BHS Total Project Cost Summary
4. Meeting agenda

XIV. Adjournment

FINAL

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3.3.6 PSR REV.1/ DOCUMENTS

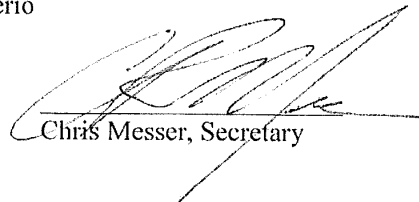
G. MEETING MINUTES / BHSBC

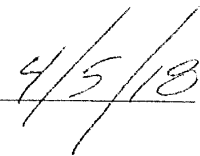
The meeting ended at 9:35 a.m. by Mr. McLaughlin.

Respectfully submitted by:

Lisa Gibalerio

Approved:


Chris Messer, Secretary


Date

G. MEETING MINUTES / BHSBC

RECEIVED
TOWN CLERK
BELMONT, MA

BELMONT HIGH SCHOOL BUILDING COMMITTEE
FINAL MEETING MINUTES
March 22, 2018
Beech Street Center
7:00 PM

2018 APR -5 PM 2:51

Meeting #41

Committee Members Attending:

Chair Lovallo; Members: John Phelan, Tom Caputo, Pat Bruschi, Phyllis Marshall, Bob McLaughlin, Joe DeStefano, Joel Mooney, Diane Miller, Chris Messer, Emma Thurston, Jamie Shea

From Daedalus: Tom Gatzunis, Shane Nolan

From Perkins+Will: Brooke Trivas, Patrick Cunningham, Rick Kuhn, Chris Karlson

BHSBC Members Absent: Adam Dash, Mike McAllister, Dan Richards

There were about 25 residents in attendance.

1. Call to Order

The meeting was called to order at 7:05 p.m. by Chair Lovallo. He reviewed the evening's agenda and then turned to the first item.

2. Visioning Recap

Mr. Karlson noted that several "Visioning" sessions (pertaining to the new building) have taken place over the six past months. He reviewed highlights of the components of the common workshop activities: visual listening, K-12 educational trends, defining core spaces, and exploring "adjacency" diagrams. He summarized the most positive visual reactions to the options presented in the workshops, which include: an abundance of natural light, outdoor access, open space, and greenery. He also reviewed highlights of feedback from the faculty (both high and middle school levels) as well as feedback from the community engagement workshops held last fall. Art integration, diverse learning spaces, and sustainability were favored aspects overall.

3. Belmont's Vision for 21st Century Learning

Ms. Shea recapped last fall's community survey. There were about 1,800 responses – 45% of which were high school students. Enrollment challenges were among the top priorities in designing the new building from both the community and faculty perspectives, while students valued the arts and athletics. Transparency and community engagement were also top priorities.

Superintendent Phelan spoke to the fact that the new building will need to address the operational needs of the entire town. District-wide enrollment challenges will be met by creating a grade 7-12 building; doing so will free up space in other schools which will be made available for lower grades – which are facing burgeoning enrollment. He reviewed the role of the education and the top six skills that our students will need to master for future employment. He then reviewed his vision for teaching and learning in the 21st century: rigorous academic content, social/emotional development – as well as

FINAL

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PSR REV 1/ DOCUMENTS

PSR REV.1/ 3.3.4 REVISED

3.3.6

3.3.7

3.3.6 PSR REV.1/ DOCUMENTS

G. MEETING MINUTES / BHSBC

the ability to design, create, synthesize, and make meaning of content.

Ms. Shea offered her perspective, as a former middle school teacher and a current high school teacher (BHS/Social Studies), on what is needed to support the educational vision, with real world application. She briefly summarized the research in the field as it relates to the educational vision. She reviewed examples (in science, social studies, English, etc.) that are moving toward this vision, but are limited by the current building's constraints. She reviewed the kinds of spaces that would support the educational vision, e.g., break out spaces, maker spaces, project rooms, etc.

Superintendent Phelan added that kids are spilling over into the hallways throughout the district, not just at BHS. Space is needed and the capacity for space will be created across the district, as a result of the 7-12 configuration.

Chair Lovallo noted that a lot of input has gone into and continues to go into the *design* of the new building.

4. Comments from Belmont Residents

Mr. Daryl King, Pct. 1, reiterated that the survey highlighted that the issue of sustainability was a top priority among the kids. It's the kids who will have to deal with the operating costs of an inefficient building, down the road.

Mr. McLaughlin noted that, while the 21st Century vision sounds terrific, he requested to hear the cost impacts of these visioning concepts. Chair Lovallo replied that this analysis would come, but not necessarily at tonight's meeting.

5. Design Update

Ms. Trivas noted that the Preferred Schematic Design report was submitted in February. She reviewed some of the design priorities, e.g., biking/walking safety, traffic mitigation issues, upper/lower school entrances, "massing" and how it relates to Concord Ave., and parking lot placement. She noted that the further development of the project is continuing to occur on a daily basis.

Mr. Kuhn reviewed the Media Terrace and the Pinwheel organizational designs. Mr. Cunningham reviewed the level 1 and 2 plans of the Pinwheel. He then explained the organizational diagram of the Media Terrace for the lower and upper school.

Ms. Trivas explained the Hybrid design option that is also under consideration. The Hybrid option combines the favored aspects of the Pinwheel and the Media Terrace. This option is likely to be more efficient and cost effective. Mr. Kuhn explained the main components of the Hybrid: contiguous central space, collocated science wing, singular scale on pond, etc. Mr. Cunningham reviewed the floor plan of the Hybrid as well as the positive aspects of the Media Terrace and Pinwheel that were retained to create the Hybrid option. Ms. Trivas added that this plan is very preliminary and has not been thoroughly vetted.

The BHSBC briefly discussed the Hybrid option. Mr. Phelan stated that the practical programmatic needs of the students have been incorporated into this model. He spoke favorably of this new option. From an educational perspective, he said, it is an effective use of the space.

G. MEETING MINUTES / BHSBC

6. Comments from Belmont Residents

Ms. Mary Lewis stated that the public really needs to hear what is currently missing with the current building. This needs to be better communicated to the community as there is a lot of misinformation out there. The cost of the building is a concern to the community. She suggested that a version of tonight's presentation needs to go to the PTA/PTOs.

Mr. Bill Anderson asked about the district's projected enrollment capacity in six years, when the doors open to the new building. Chair Lovallo noted that enrollment studies have been undertaken and the district's enrollment will likely continue to climb. He spoke to the issue of capacity and design enrollment. Mr. Phelan noted that he feels comfortable with the 7-12 grade configuration option, given the enrollment projections for the district.

Ms. Trivas asked for the BHSBC's feedback on the three options: Pinwheel, Media Terrace, and Hybrid. More detailed dimensions of the buildings, she said, will be available at the next meeting.

Feedback (via thumbs up, thumbs neutral, and thumbs down) was provided on the three options.

Mr. Phelan stated that the overall building's scheduling, travel spaces, flow of student traffic, and shared spaces are concepts that are being considered and discussed at this time. Chair Lovallo then explained possibilities around potential construction and phasing options. He and Ms. Trivas noted some of the work that is currently happening around the high school, e.g., borings, surveying, etc.

7. Minutes of Previous Meetings

Ms. Shea moved: To approve the Minutes of 3/6/18.
The motion passed unanimously.

8. Treasurer's Report

Ms. Marshall informed the Committee that the following Invoices are ready for their approval:

Invoice 1: Mr. Frank Locker, Educational Consultant (Visioning Work)

Mr. Mooney moved: To approve the Invoice of \$3,000.
The motion passed unanimously.

Invoice 2: Perkins+Will (Schematic Design Work)

Mr. McLaughlin moved: To approve the Invoice of \$120,000.
The motion passed unanimously.

Invoice 3: Lisa Gibalerio (Minutes Recording)

Mr. Mooney moved: To approve the Invoice of \$825.00.
The motion passed unanimously.

9. CMR Procurement Schedule

3.3.6 PSR REV.1/ DOCUMENTS

G. MEETING MINUTES / BHSBC

Chair Lovallo explained that the subcommittee will meet regarding the CM at Risk procurement. Mr. Nolan added details to the selection process. This is a two-phase process:

1. RFQ - Request for Qualifications
2. RFP – Request for Proposal

He reviewed the schedule of what will happen at upcoming meetings, leading up to the issuing of the RFP. He explained the ranking process and the reviewing of the proposals. In early May, a shortlist of firms will be interviewed, and around May 9, a firm should be on board.

Chair Lovallo clarified that the bid will be for the *cost of the CMR services*; the bid is not for the total cost/price of the building.

10. Traffic Solutions Work Plan

Chair Lovallo reviewed a 10-step process to develop a Traffic Solutions Work Plan – which includes a list of upcoming meeting dates.

11. Schematic Design Meeting

Chair Lovallo outlined the next set of meetings concerning the BHSBC’s schematic design phase.

12. Next Full Building Committee Meetings

Wednesday, March 28, 2018 at 7:30 a.m.

Wednesday, April 11, 2018 at 7:30 a.m.

13. Other/New Business

None.

14. Related Meeting Documents

1. Perkins+Will handout on the design options
2. Schematic Design Traffic Solutions Work Plan
3. The Role of Schools
4. Schematic Design Public Meeting Summary
5. Projected CMR Timeline & Schedule

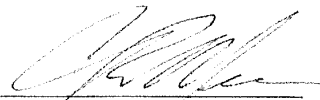
15. Adjournment

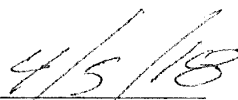
The meeting ended at 8:57 p.m. by Mr. McLaughlin.

Respectfully submitted by:

Lisa Gibalerio

G. MEETING MINUTES / BHSBC

Approved: 
Chris Messer, Secretary


Date

3.3.6 PSR REV.1/ DOCUMENTS

G. MEETING MINUTES / BHSBC

BELMONT HIGH SCHOOL BUILDING COMMITTEE

FINAL MEETING MINUTES

March 28, 2018

Homer Building Gallery

8:30 AM

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BELMONT, MA

2018 APR 11 PM 2:11

Meeting #42

Committee Members Attending:

Chair Lovallo; Members Adam Dash, John Phelan, Mike McAllister, Tom Caputo, Pat Brusch, Phyllis Marshall, Bob McLaughlin, Joe DeStefano, Joel Mooney, Diane Miller, Chris Messer, Jamie Shea

From Daedalus: Tom Gatzunis

From Perkins+Will: Brooke Trivas, Patrick Cunningham, Rick Kuhn

BHSBC Members Absent: Emma Thurston, Dan Richards

I. Call to Order

The meeting was called to order at 8:30 a.m. by Chair Lovallo. He reviewed the morning's agenda and then turned to the first item.

II. Design Update

Chair Lovallo noted that there has been a lot of discussion concerning the three design options. This morning gives the committee an opportunity to continue discussing the options.

Ms. Trivas agreed that this is a great time for the BHSBC to offer its thoughts, issues, and concerns. Mr. DeStefano expressed his concern for the height between floor levels. He said 18 feet seems very high. Ms. Trivas explained why heights between floor levels and particularly at the first floor are high, which has to do with the programs offered on the first floor, e.g., band, chorus, etc. Ceiling height and issues related to the proposed building height were explored. Concerns were expressed with the floor-to-floor heights shown as 18 feet, 14 feet, 14 feet and 16 feet for floor levels from first to roof. The space needed for "mechanicals" was therefore explained: there needs to be at least 4 feet between the top of the ceiling and the floor above to accommodate the mechanicals (wires, pipes, vents, etc.); this is separate from the floor-to-ceiling height (for which the typical MSBA target is 10 feet); thus, for example, a floor-to-ceiling proposal of 14-10-10-12 feet for four floors might actually imply a floor-to-floor proposal of 18-14-14-16 feet. Mr. Cunningham noted that some inches could be shaved off, which will impact the overall cost of the project. However, it could create costs and issues in other areas. It's a balancing act, Mr. Gatzunis offered. He agreed that there are diminishing advantages to cutting the floor-to-floor height, as doing so will have an impact elsewhere.

Ms. Brusch added a point about lighting via natural daylight. What works on paper, she said, is not always what works in reality. Natural light was a priority at the Wellington, but window shades often need to be drawn in order to see the Smart Board and the computer screens.

Mr. Phelan spoke to the size of the classrooms as it relates to the height of the ceilings. He advocated for the higher ceilings, as it makes the classrooms feel more spacious. Mr. Cunningham noted that the

G. MEETING MINUTES / BHSBC

MSBA looks for typical classroom ceiling heights to be in the 10-foot range, which is what P+W is targeting for this project.

Ms. Shea agreed that screens are hard to see with natural light, however, she said that students will be using the hallway space to learn and meet and small groups and hallway spaces should be bright, open and comfortable. She then explained why she liked the Hybrid design (innovation spaces, ability to collaborate with other teaches, etc.).

Mr. McAllister spoke to the potential space as it supports existing programs. He raised the point of small spaces being exchanged for larger spaces. He also brought up his experience with the spiral staircase at the Chenery; specifically the issue of projectiles being tossed around. Mr. Phelan summarized how the space needed (in terms of overall square footage) supports the number of students, the programs, and the practicality and usefulness of the space. The hybrid model pulls together the best points of the three design options. There is no “extra space”, he said – it is all accounted for with teachers, students, and programs. The square-footage will continue to be analyzed, added Chair Lovallo, in terms of volume, effectiveness, purpose, light, etc. We are trying to achieve consensus around which design to move forward with, he said.

Ms. Miller asked about the potential for *community-wide* uses for the new building. Mr. Phelan explained ways in which the public can use various spaces in the building. The space will offer rental opportunity as well, he said. Selectman Dash expressed his support for the Hybrid design. He added that this may be his last meeting as a Board of Selectman representative and he thanked the BHSBC for its work on the project.

IV. Minutes of Previous Meetings

Ms. Brusich moved: To approve the Minutes of 3/22/18.
The motion passed unanimously.

V. Treasurer’s Report

Ms. Marshall informed the Committee that the following Invoice is ready for their approval:

Invoice 1: Daedalus \$33,720

Ms. Marshall moved: To approve the Invoice of \$33,720
The motion passed unanimously.

VI. Next Full Building Committee Meeting

Wednesday, April 11, 2018 at 7:30 a.m. Homer Municipal Building, 3rd Floor Gallery
(bathrooms and lockers will be discussed)

III. Comments from Belmont Residents

There were no residents in attendance.

II. Design Update (continued)

3.3.6 PSR REV.1/ DOCUMENTS

G. MEETING MINUTES / BHSBC

Ms. Shea spoke to the community uses of the building.

VII. Other/New Business

Chair Lovallo provided a quick MSBA update. The PSR report was submitted last month. The MSBA has requested a design update. The Education plan will be re-submitted again, as well. At the end of June, there is an MSBA Board meeting.

XIII. Related Meeting Documents

1. Perkins+Will design handout

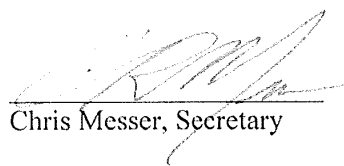
IX. Adjournment

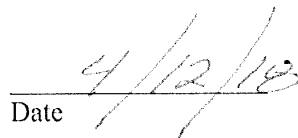
The meeting ended at 9:15 a.m. by Ms. Shea.

Respectfully submitted by:

Lisa Gibalerio

Approved:


Chris Messer, Secretary


Date

G. MEETING MINUTES / Sub Committee

BELMONT HIGH SCHOOL BUILDING COMMITTEE

COMMUNICATIONS SUBCOMMITTEE

MEETING MINUTES

February 26, 2018

Burbank Conference Room

7:45am

Meeting #4

Subcommittee members attending:

Jamie Shea, Tom Caputo, Chris Messer, Diane Miller

Subcommittee members absent: none

In attendance: Hannah Fischer

1. Call to Order – the meeting was called to order at 7:47am by Jamie Shea.
2. Discussion of the communications calendar – we discussed planning 5 more community forums over the next several months (March through June) – possible topics to include community uses; 21st century learning and educational visioning; design workshop; abutters concerns; and tours (existing conditions video and VR walkthrough).
3. Discussion of website – Chris still working with Matt
4. Date of next subcommittee meeting – Monday 3/5 at 7:45am, Burbank Conference Room
5. New business-none
6. End meeting – The meeting ended at 8:52am by Jamie Shea.

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2018 MAR 19 AM 9:06

PSR REV 1/ DOCUMENTS

3.3.6

PSR REV.1/ 3.3.4 REVISED

3.3.7

3.3.6 PSR REV.1/ DOCUMENTS

G. MEETING MINUTES / Sub Committee

BELMONT HIGH SCHOOL BUILDING COMMITTEE

COMMUNICATIONS SUBCOMMITTEE

MEETING MINUTES

March 5, 2018

Burbank Conference Room

7:45am

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BELMONT, MA

2018 MAR 28 AM 9:13

Meeting #5

Subcommittee members attending:

Jamie Shea, Tom Caputo, Chris Messer, Diane Miller

Subcommittee members absent: none

In attendance: Hannah Fischer

1. Call to Order – the meeting was called to order at 7:50am by Jamie Shea.
2. Approval of minutes
3. Discussion of website – Chris still working with Matt
4. Planning community forums – we discussed further details about the potential community forums
5. Date of next subcommittee meeting – Monday 3/19 at 7:45am, Burbank Conference Room
6. New business-none
7. End meeting – The meeting ended at 8:45am by Jamie Shea.

G. MEETING MINUTES / Kitchen



April 10, 2018
Belmont High School

MEETING MINUTES

DATE OF MEETING: April 4, 2018

SUBJECT: Foodservice Kick-off Review Meeting

ATTENDING: Bill Maidment Crabtree McGrath Associates, Inc.
 Brooke Trivas Perkins+Will
 Dustin O'Brian Belmont Public Schools, Foodservice Director

Please contact Crabtree McGrath with any additional comments or corrections.

1. Discussed the location of the kitchen and how it relates to truck delivery access and how delivers make their way to the kitchen area
2. For grades 7-12 the population will be 2,215
3. Students are served in blocks. Dustin expects there will be five blocks in the future but that decision will be made in the future.
4. Dustin expressed that a much greater space is need to serve the population. A conversation about MSBA calculated size for school kitchens and serverys was given by Brooke. Dustin said that due to USDA dietary standards we would likely need to have two serving areas to separate 7-8 and 9-12 students. Dustin to confirm this with DESE.

Kitchen Requirements

1. Dish room - Washable trays will not be used by the students so there is no need for a dish room to be adjacent to the servery.
2. If there are trays they will be compostable. Severing utensils will be compostable too.
3. Dustin would like a conveyor type dish machine that accepts more than one rack per load.
4. Need adequate space for monthly commodity deliveries
 - a. The school receives 25-30 cases of frozen product

F O O D F A C I L I T I E S P L A N N E R S

161 West Main Street, Georgetown, Massachusetts 01833 phone: 978.352.8500 fax: 978.352.8588
mail@crabtree-mcgrath.com

3.3.6 PSR REV.1/ DOCUMENTS

G. MEETING MINUTES / Kitchen

April 10, 2018

Page 2 of 2

Kitchen Requirements

5. Delivery schedule:
 - a. Grocery, once per week
 - b. Paper, once per week
 - c. Milk, twice per week
 - d. Bread, Twice per week
 - e. Produce, once per week
 - f. Commodities, once per month
6. Office must have room for two people
7. Further discussion of kitchen equipment will completed once the kitchen plan has been defined. Dustin will provide input for the types of equipment required.

Bill Maidment

H. LOCAL ACTIONS APPROVALS CERTIFICATION REV.1



TOWN OF BELMONT
OFFICE OF THE BOARD OF SELECTMEN
455 CONCORD AVENUE
BELMONT, MASSACHUSETTS 02478

Selectmen@belmont-ma.gov

455 CONCORD AVENUE
BELMONT, MA 02478-2573
PHONE (617) 993-2610
FAX (617) 993-2611

BOARD OF SELECTMEN
JAMES R. WILLIAMS, Chair
MARK A. PAOLILLO, Vice Chair
ADAM DASH, Selectman

TOWN ADMINISTRATOR
PATRICE GARVIN

ASSISTANT TOWN ADMINISTRATOR
PHYLLIS L. MARSHALL

April 11th, 2018

Ms. Diane Sullivan
Senior Capital Program Manager
40 Broad Street
Boston, Massachusetts 02109

Dear Ms. Sullivan:

The Town of Belmont School Building Committee ("SBC") has completed its review of the Feasibility Study *Preferred Schematic Report **Revision 1*** for the Belmont High School project (the "Project"), and on April 11th, 2018, the SBC voted to approve and authorize the Owner's Project Manager to submit the Feasibility Study related materials to the MSBA for its consideration. A certified copy of the SBC meeting minutes, which includes the specific language of the vote and the number of votes in favor, opposed, and abstained, are attached.

Since the MSBA's Board of Directors invited the District to conduct a Feasibility Study on November 09, 2016, the SBC has held thirty (33) meetings regarding the proposed project, in compliance with the state Open Meeting Law. These meetings include:

1. School Building Committee meeting #10 held at the Homer Municipal Building, Belmont MA at 7:30am on December 08, 2016
2. School Building Committee meeting #11 held at Belmont Town Hall, Belmont MA at 4:30pm on December 22, 2016
3. School Building Committee meeting #12 held at the Homer Municipal Building, Belmont MA at 7:30am on January 05, 2017
4. School Building Committee meeting #13 held at the Homer Municipal Building, Belmont MA at 7:30am on February 02, 2017
5. School Building Committee meeting #14 held at the Homer Municipal Building, Belmont MA at 7:30am on February 17, 2017

3.3.6 PSR REV.1/ DOCUMENTS

H. LOCAL ACTIONS APPROVALS CERTIFICATION REV.1

6. School Building Committee meeting #15 at the Homer Municipal Building, Belmont MA at 7:30am on March 01, 2017
7. School Building Committee meeting #16 at the Beech Street Center, Belmont MA at 7:00pm on April 06, 2017
8. School Building Committee meeting #17 held at the Homer Municipal Building, Belmont MA at 7:30am on April 13, 2017
9. School Building Committee meeting #18 held at the Homer Municipal Building, Belmont MA at 7:30am on April 20, 2017
10. School Building Committee meeting #19 held at the Beech Street Center, Belmont MA at 6:00pm on May 04, 2017
11. School Building Committee meeting #20 held at the Homer Municipal Building, Belmont MA at 7:30am on June 15, 2017
12. School Building Committee meeting #21 held at the Homer Municipal Building, Belmont MA at 7:30am on July 20, 2017
13. School Building Committee meeting #22 held at the Homer Municipal Building, Belmont MA at 7:30am on August 10, 2017
14. School Building Committee meeting #23 held at the Homer Municipal Building, Belmont MA at 7:30am on August 24, 2017
15. School Building Committee meeting #24 held at the Homer Municipal Building, Belmont MA at 7:30am on September 14, 2017
16. School Building Committee meeting #25 held at the Homer Municipal Building, Belmont MA at 7:30am on October 5, 2017
17. School Building Committee meet #26 (joint meeting with School Committee) held at the Homer Municipal Building, Belmont MA at 7:30am on October 19, 2017
18. School Building Committee meeting #27 (joint meeting with Board of Selectmen and School Committee) held at the Wellington Middle School, Belmont MA at 6:30pm on November 2, 2017
19. School Building Committee meeting #28 (joint meeting with Board of Selectmen and School Committee) held at Belmont High School, Belmont MA at 6:30pm on November 16, 2017
20. School Building Committee meeting #29 (joint meeting with Board of Selectmen and School Committee) held at the Wellington Elementary School, Belmont MA at 6:30pm on November 30, 2017
21. School Building Committee meeting #30 (joint meeting with Board of Selectmen and School Committee) held at the Wellington Elementary School, Belmont MA at 6:30pm on December 07, 2017
22. School Building Committee meeting #31 (joint meeting with Board of Selectmen and School Committee) held at the Chenery Middle School, Belmont MA at 6:30pm on December 12, 2017
23. School Building Committee meeting #32 (joint meeting with Board of Selectmen and School Committee) held at the Belmont High School, Belmont MA at 7:00pm on December 14, 2017

H. LOCAL ACTIONS APPROVALS CERTIFICATION REV.1

24. School Building Committee meeting #33 (joint meeting with Board of Selectmen and School Committee) held at the Belmont High School, Belmont MA at 7:00pm on January 9th, 2018
25. School Building Committee meeting #34 held at the Wellington Elementary School, Belmont MA at 6:30pm on January 11th, 2018
26. School Building Committee meeting #35 (joint meeting with Board of Selectmen and School Committee) held at the Chenery Middle School, Belmont MA at 7:00pm on January 16th, 2018
27. School Building Committee meeting #36 held at the Homer Municipal Building, Belmont MA at 7:30am on January 18th, 2018
28. School Building Committee meeting #37 (joint meeting with Board of Selectmen and School Committee) held at the Wellington Elementary School, Belmont MA at 7:00pm on January 23rd, 2018
29. School Building Committee meeting #38 (joint meeting with Board of Selectmen and School Committee) held at the Wellington Elementary School, Belmont MA at 7:00pm on February 1st, 2018
30. School Building Committee meeting #39 (joint meeting with Board of Selectmen and School Committee) held at the Chenery Middle School, Belmont MA at 7:00pm on February 13th, 2018
31. School Building Committee meeting #40 held at the Homer Municipal Building, Belmont MA at 7:40am on March 6, 2018
32. School Building Committee meeting #41 held at the Beech Street Center, Belmont MA at 7:00pm on March 22, 2018
33. School Building Committee meeting #42 held at the Homer Municipal Building, Belmont MA at 7:40am on March 28, 2018

In addition to the SBC meetings listed above, the District held four (4) public meetings, which were posted in compliance with the state Open Meeting Law, at which the Project was discussed. These meetings include:

1. New Belmont High School public presentation #2 held Chenery School Belmont MA at 7:00pm on September 19, 2017
2. New Belmont High School public presentation #3 held Beech Street Center, Belmont MA at 1:15pm on October 13, 2017
3. New Belmont High School public presentation #4 held at Belmont High School, Belmont MA at 10am October 28th, 2017
4. New Belmont High School public presentation #5 and interactive design discussion held at Belmont High School, Belmont MA at 7:00pm on December 14th, 2017

The presentation materials for each meeting, meeting minutes, and summary materials related to the Project are available locally for public review at:

1. <http://www.belmont.k12.ma.us/bps/Committee>
2. <http://www.belmont-ma.gov/belmont-high-school-building-committee>
3. <http://www.belmont-ma.gov/belmont-high-school-building-project>

3.3.6 PSR REV.1/ DOCUMENTS

H. LOCAL ACTIONS APPROVALS CERTIFICATION REV.1

To the best of my knowledge and belief, each of the meetings listed above complied with the requirements of the Open Meeting Law, M.G.L. c. 30A, §§ 18-25 and 940 CMR 29 *et seq.*

If you have any questions or require any additional information, please contact Thomas Gatzunis, Daedalus Projects Inc. tgatzunis@dpi-boston.com or (617) 451 2717.

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.



By:

Title: Chief Executive Officer

Date: 4/11/18

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

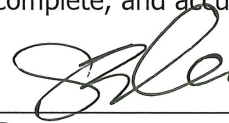


By:

Title: Superintendent of Schools

Date: 4/11/18

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.



By:

Title: Chair of the School Committee

Date: 4-11-18

3.3.7 PSR REV.1 / 3.3.4 REVISION

EDUCATIONAL PROGRAM REV.1 A

PREFERRED SOLUTION SPACE SUMMARY REV.1 B

PREFERRED SOLUTION SPACE SUMMARY COMMENTS REV.1 C

SUSTAINABILITY DOCUMENTS / SCORE CARD REV.1 D

BUILDING PLANS REV.1 E

SITE PLANS REV.1 F

BUDGET REV.1 G

BUDGET STATEMENT REV.1 H

UPDATED PROJECT SCHEDULE REV.1 I

3.3.7 - PSR REV.1/ 3.3.4 REVISION

A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning



03.22.2018 BUILDING COMMITTEE MTG
BELMONT HIGH SCHOOL

01/ VISIONING RECAP
BELMONT HIGH SCHOOL

VISIONING RECAP

09.19.2017 2-DAY BHS VISIONING SESSION

12.13.2017 BHS FACULTY WORKSHOP 01

12.14.2017 COMMUNITY ENGAGEMENT

01.08.2018 CMS FACULTY WORKSHOP

01.31.2018 BHS FACULTY WORKSHOP 02

VISIONING RECAP : COMMON WORKSHOP ACTIVITIES

VISUAL LISTENING	K-12 TRENDS	DEFINE CORE SPACES	ADJACENCY DIAGRAMS
<p>To gauge feedback from key stakeholders through a selection of varying graphic images intended to describe certain feelings/spacial constructs that could describe potential educational space for this new project.</p> <p>Images are grouped into nine key categories :</p> <p>Arts, Environmental Stewardship, Outdoor Learning, Personal Reflection, Socialization, Emotional Response, Athletic+Wellness, Group Learning, and Space for Making</p> 	<p>A short discussion that brings the group up-to-date and summarizes innovative educational thinking through the lenses of educational experts that might redefine how new school space supports and responds to a future ready environment. Desired outcomes include:</p> <ul style="list-style-type: none"> • Develop guiding principles • Move educational thinking • Build consensus around future pedagogy • Support new behaviors 	<p>To brainstorm with stakeholder groups on how to define core academic programs that will inform the new school design. The group is asked to call out attributes, ideas, and innovative thoughts that they would like to see in the new school. Examples:</p> <ul style="list-style-type: none"> • How do you define outdoor learning? • How have we emerged from the traditional library? • How do you see the new cafe commons being used? 	<p>The stakeholder group is prompted to define “How can traditional and non-traditional placement of educational spaces support teaching and learning in new ways?” Participants are broken up into working groups to prepare adjacency diagrams with major educational spaces.</p> <p>Each group arranges printed spaces and tapes to a board to create a diagram, then is asked to present their arrangement and ideas that support their argument.</p> 

3.3.7 - PSR REV.1/ 3.3.4 REVISION

A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning



09.19.2017 BHS VISIONING SESSION

BELMONT HIGH SCHOOL

VISIONING RECAP

09.19.2017

2-Day Belmont High School Visioning Session

ASPIRATIONS OF BHS

- **Flexibility:** Spaces that support wide range of teaching/learning
- **Environment:** Use of Natural Surroundings, Light, Utilize Roof
- **Social Emotional Learning:** Mindful, Comfortable, Safe, Empathy
- **Community:** Commitment to Collaboration and Serving/Partnering with surrounding Belmont area
- **Professional Development:** Project-based learning, learn from failure, mentorship, outside influence

STORYTELLING SYNOPSIS

- **Learning Outside the Classroom**
- **Collaboration in the Classroom**
- **Critical of Conventional Outlooks**
- **Encourage Risk-Taking/Failure**
- **Authentic Learning - Not Fabricated**

LEARNING POINTS

- **Anticipate Unknown:** Design for Interconnected, Multiple Disciplines
- **Inclusive Design:** Diversity on Display
- **Increase Wellness and Activity**
- **Convergence:** Merging of Approaches and Insights from distinct disciplines
- **Technology:** Determine how technology can support the right pedagogy/ purpose, not other way around.
- **Blended Learning:** Every student has different learning needs - Personalize, build passion.
- **Gen Alpha:** Planning for a generation raised on interactive/interconnected technology - 65% will end up with jobs not yet invented in new economy.
- **Future Student:** Ability to relearn, be creative, be tenacious, be curious, be flexible, take risks and communicate effectively

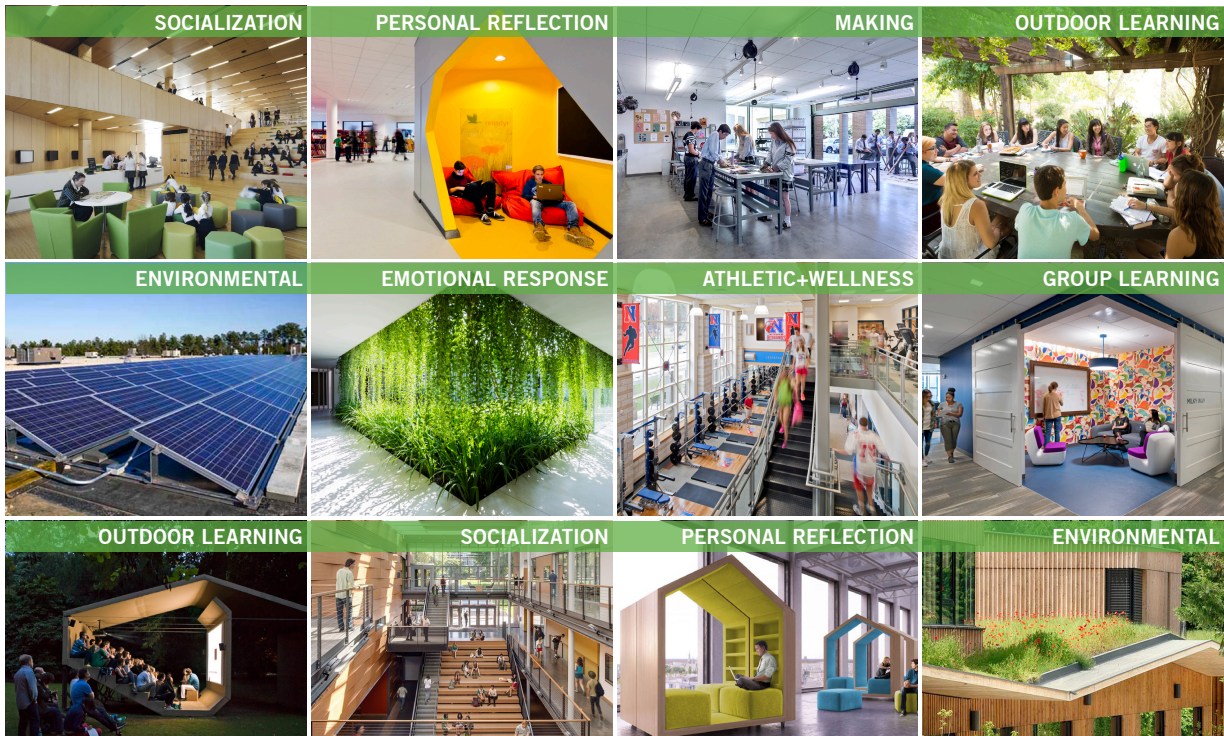
- **Arts:** 'Studio Thinking' teaches how to Observe, Envision, Critique, Express, Explore, Engage, Improve Emotion, Learn from Others
- **SEL:** Reduces Emotional Distress and Negative Behaviors and develops Interpersonal + Intrapersonal skills

CREATING A SENSE OF PLACE, PRIDE, AND CULTURE

- **Events:** 'Band-A-Rama', 'String-A-Rama', and 'Sing-A-Rama', Lillian Blacker Prize
- **Environment:** Claypit Pond, Surrounding Area
- **Activities:** School Trips, Pep Rallies, Activity Fairs, Volunteering, Sports
- **Diversity:** Unity March, Community, ELL
- **Art:** Showcase-Murals, HS Musical
- **Freedom:** Free Periods, Open Campus
- **History:** Farming Community

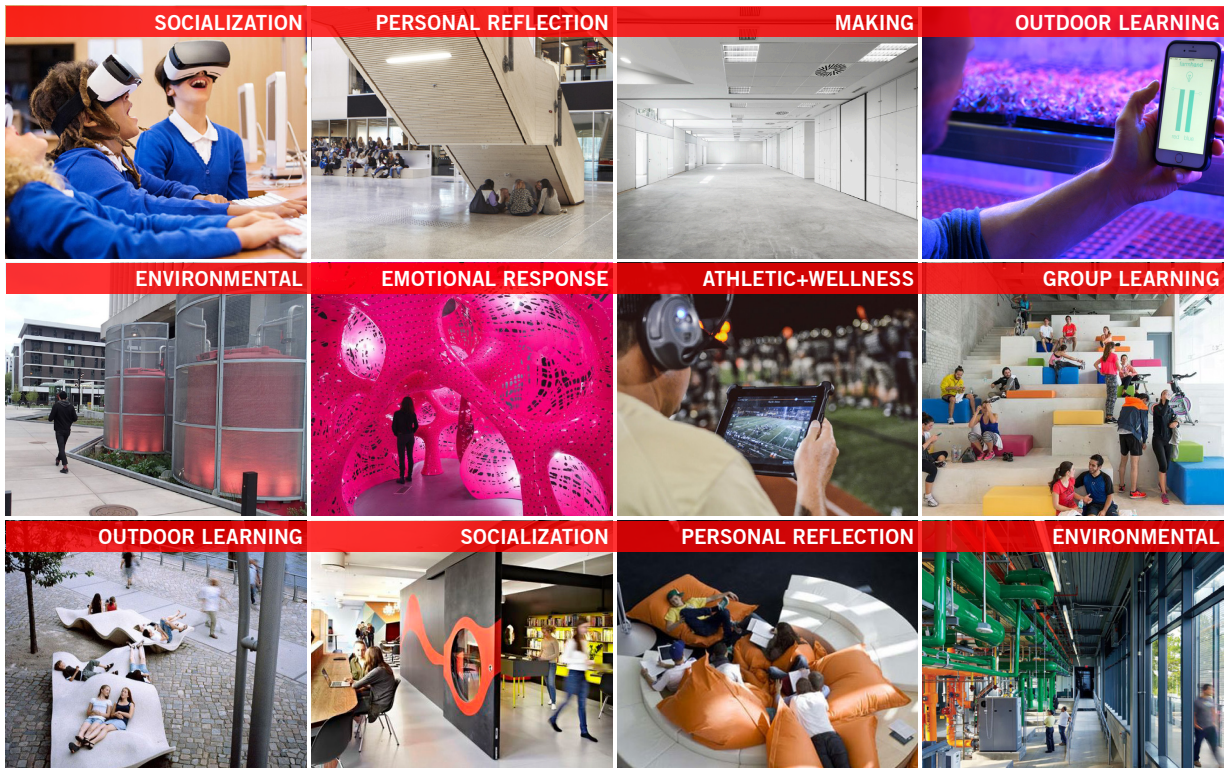
A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning
VISIONING RECAP : MOST POSITIVE VISUAL REACTIONS
 2-Day Belmont High School Visioning Session

09.19.2017



VISIONING RECAP : MOST NEGATIVE VISUAL REACTIONS
 2-Day Belmont High School Visioning Session

09.19.2017



3.3.7 - PSR REV.1/ 3.3.4 REVISION

A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning



12.13.2017 BHS FACULTY WORKSHOP 1

BELMONT HIGH SCHOOL

PROMPT : PROVIDE FEEDBACK ON THE FOLLOWING SPACES

12.13.2017

Belmont High School Faculty Workshop 01

LEARNING COMMONS

- Student Display Space
- Furniture that is flexible in the Learning Commons
- Furniture that allows students to plug in their tech devices
- Availability of books
- Air Conditioning
- Low bookshelves on wheels – Flexible
- Civic Use : Space for community meetings with outside access
- Used by faculty – faculty workspace
- Screen for daily announcements
- Separate quiet spaces for students & teachers
- Natural light
- Diversity of spaces (quiet rooms, small group, large group, etc.)
- Ample & secure storage/lockers for student gear
- Direct connection / easy access to outdoor spaces

CIVIC COMMONS / CAFE

- Not a 500 seat space in one area
- Includes smaller spaces / breakout spaces
- High ceilings – better natural lighting
- A space used more than just to eat in
- Better recycling
- Available Composting
- Stage in Commons for performances
- More than one entrance for food servery
- Better ventilation in space
- Multi-use/big corridor with tables out at lunch time, then for other uses
- Growing food – Farm to Table (Roof Gardens?)
- Better traffic patterns

COLLABORATION SPACE

- Private, but visible to students
- Small private spaces for individual work - quiet spaces (soundproof)
- Some individual area / thinking (me) space
- Mental health spaces that allow for group work
- Confidential / private meetings with students
- Flexible space
- Soft seating furniture available
- Big table space - Space to spread out
- Space where you can leave ongoing projects/work
- Departmental collaborative space with space available for interdisciplinary collaboration between departments
- Music in collaboration space - Bluetooth audio
- Everyone to get “own” desk

A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning

PROMPT : PROVIDE FEEDBACK ON THE FOLLOWING SPACES (CONT.)

12.13.2017

Belmont High School Faculty Workshop 01

OUTDOOR SPACES

- Separate teacher bike parking
- Outdoor classroom space
- Places to eat
- Ropes course
- Art rooms opening to the outside
- Greenhouse / Butterfly Garden
- Provide outdoor basketball courts
- Outdoor Amphitheater
- Lighting needed – Practice fields and parking lots
- Large courtyards – Protected spaces
- Marching band practice space
- Sidewalk chalk areas

- Display on the walls – student work
- Movable walls - Garage doors
- Acoustically separated spaces - soundproof
- Whiteboard / writing surfaces
- Flexible Furniture - Allow students to move and change spaces
- Stand or sit spaces – students need to move around (wellness)
- Soft flooring
- Large spread out space
- Need backpack storage in class – students barely use corridor lockers
- Centralized storage/locker space in school
- Balance – with screening for privacy
- Provide window shades – views can be distracting to students
- One-on-one spaces
- Special ventilation in art / maker spaces

CLASSROOM SPACE

- Need bigger rooms / spaces
- Technology in work spaces
- Desks for lefties
- How do we fit the needs of Belmont?



VISUAL LISTENING : PLACE A GREEN DOT ON YOUR LIKE & RED DOT ON YOUR DISLIKE

12.13.2017

Belmont High School Faculty Workshop 01



● Like
● Dislike

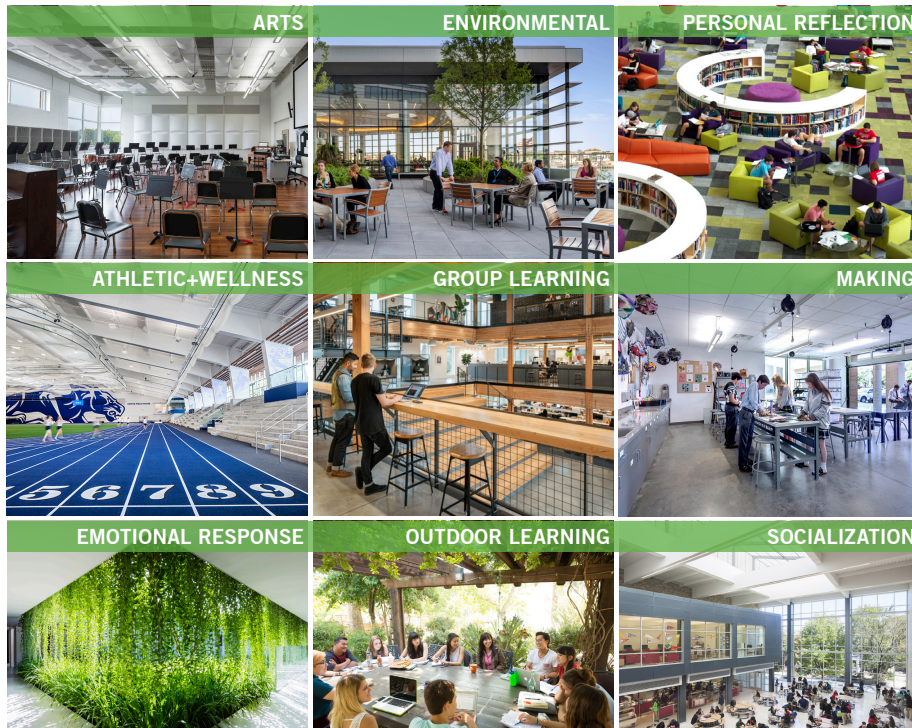
3.3.7 - PSR REV.1/ 3.3.4 REVISION

A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning

VISIONING RECAP : MOST POSITIVE VISUAL REACTIONS

Belmont High School Faculty Workshop 01

12.13.2017

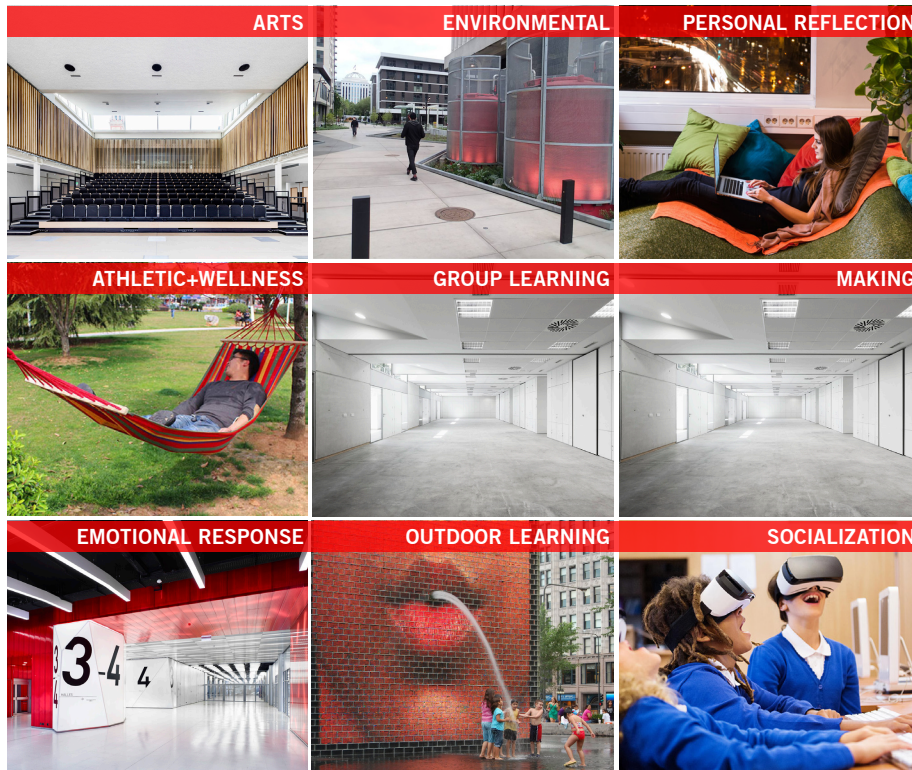


Like

VISIONING RECAP : MOST NEGATIVE VISUAL REACTIONS

Belmont High School Faculty Workshop 01

12.13.2017



Dislike

A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning



12.14.2017 COMMUNITY ENGAGEMENT

BELMONT HIGH SCHOOL

PROMPT : PROVIDE FEEDBACK ON THE FOLLOWING SPACES

12.14.2017

Community Engagement Workshop

LEARNING COMMONS

- Ability to connect – Network/Internet connectivity
- No dark spaces
- Some individual spaces / learning spaces
- A diversity of learning spaces
- More collaborative spaces
- Large conference room
- Area for tutoring
- Project team spaces
- Books and variety of other media/ materials
- Variety of media spaces
- Different seating furniture & variety for different learning styles
- Café space
- Media/Editorial spaces and technology
- Movable walls – flexible spaces
- Allow writing on walls
- Lots of natural light

- Extending space to the outside – integrate the outdoors
- Mentoring space
- Not one big space, break-up / distribute areas
- Connectivity to personal devices
- Some space for quiet individual learning
- Some larger collaborative spaces
- Current hours (library): 7:30am – 3:30pm, think about extending hours for afterschool homework, activities
- Project team space with places to make thinking visible – white boards, smart boards
- Include all multimedia: computers, books, cameras, art
- Community space – outside experts and community meetings where students can participate

COLLABORATION SPACE

- Small “low tech” spaces – meeting spaces that are quiet, focused and private - no connectivity with technology
- Informal spaces for people to spontaneously work together, spaces off corridors
- Cross-disciplinary space – large hybrid space for departments to meet/collaborate
- Ability to combine classrooms
- Movable walls
- Flexible & movable furniture
- Places for HS students to work with/ mentor MS students
- Small private spaces for teachers to work one-on-one with students
- Multiple ways to connect spaces and move around the building
- Opportunity for community engagement with students
- Meditative space

3.3.7 - PSR REV.1/ 3.3.4 REVISION

A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning

PROMPT : PROVIDE FEEDBACK ON THE FOLLOWING SPACES (CONT.)

12.14.2017

Community Engagement Workshop

OUTDOOR SPACE

- Connect the outside to school curriculum – learn about sustainability, science, art, ecosystems, etc.
- Promotes health & wellness with walking paths and meditative retreats
- Integration with the Community Path
- Use and take advantage of the existing pond
- Multiple access points to outdoors, easy accessibility for classes
- Create spaces in environment - Outdoor classrooms
- Greenhouse spaces – learning tool
- Sustainable thinking - View building and site as a complete system
- Beautiful / inspiring landscape design
- Allow students to become stewards of their own environment
- Purposeful gardens – Grow food for Café/Food Pantry, Curriculum
- Recycling and Composting programs

- Expose the utilities – make systems visible for education
- Interior courtyards – protected and allow natural light
- Green roofs

CIVIC COMMONS / CAFE

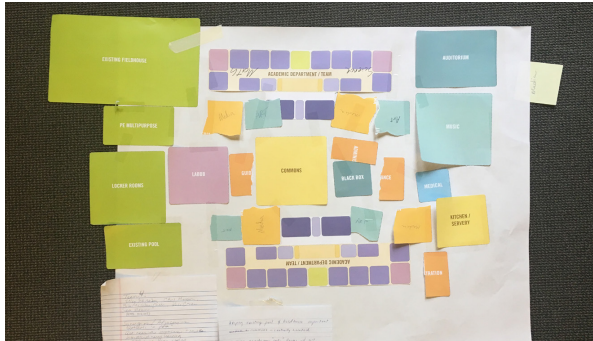
- Café / coffee house style for small group collaborations
- Hierarchy of multiple spaces - not one large (massive) space
- Good acoustic treatment – sound absorbing materials
- Social space (throughout the entire day)
- Maybe one large space – Need large space for big events (multi-use space)
- Small (multiple) performance spaces
- Natural light - Lots of windows
- Connection to outdoors - Outdoor space & seating
- Collaborative space
- Exhibit space



PROMPT : CREATE AN ASPIRATIONAL ADJACENCY DIAGRAM TO ENHANCE EDUCATION

12.14.2017

Community Engagement Workshop



A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning

ADJACENCY DIAGRAMS : REPORTING BACK

12.14.2017

Community Engagement Workshop

GROUP 01

- Learning Commons - Centrally Located
- Important to keep existing gym and pool
- Mix academic 'only' spaces and core classrooms with art, music, and media
- Multiple locations for Administration and Guidance

GROUP 02

- Assume keep Fieldhouse and Pool
- Art program adjacent to science labs and courtyards (natural light)
- LABBB near arts and science for academic opportunities
- Music programs near Auditorium
- As much outdoor space as possible between major spaces
- Commons and Auditorium in good position for after school use

GROUP 03

- Keep Athletics together
- Commons are thought of as "student living lounge" – open late for students that spend 16 hours a day at school.
- Wellness and medical are key programs

- "Lounge Learning" spaces make the physical space as comfortable as possible – can be breakout spaces (along corridors).

GROUP 04

- LABBB program needs direct access to outdoors / van drop-off access
- Need separation between upper and lower schools
- Art/Music near science labs
- Varying/hierarchy of big spaces/major programs
- Media/Commons are varying spaces that are broken up throughout building.
- Private / focus spaces near classrooms
- Ability to expand Auditorium into Commons
- Guidance more integrated, not adjoined to admin - more distributed
- Distribute Media Center
- Not long corridors in Academic 'pods'

GROUP 05

- Art is near everything
- Varying Media areas

- Kitchen/Cafeteria connects to greenhouse and outdoors

- Foreign language near commons

GROUP 06

- Commons and Administration: A more integrated student and admin space relationship – create better relationships, chance encounters. Gives the admin a better chance of getting a pulse of the school.
- Commons are where students are most open and relaxed
- Commons and Academic departments: Creates informal meeting spaces, commons could be green spaces (indoor or outdoor)
- Green space/Commons could be prime connector of upper and lower schools
- Guidance is not a silo, thought of as wellness program, related to Art (art therapy) – but needs some privacy for students
- Outdoor spaces near academic program

VISUAL LISTENING : PLACE A GREEN DOT ON YOUR LIKE & RED DOT ON YOUR DISLIKE

12.14.2017

Community Engagement Workshop

SOCIALIZATION

OUTDOOR LEARNING

ENVIRONMENTAL STEWARDSHIP

ATHLETIC + WELLNESS

EMOTIONAL RESPONSE

PERSONAL REFLECTION

SPACE FOR MAKING

GROUP LEARNING

ARTS

● Like
● Dislike

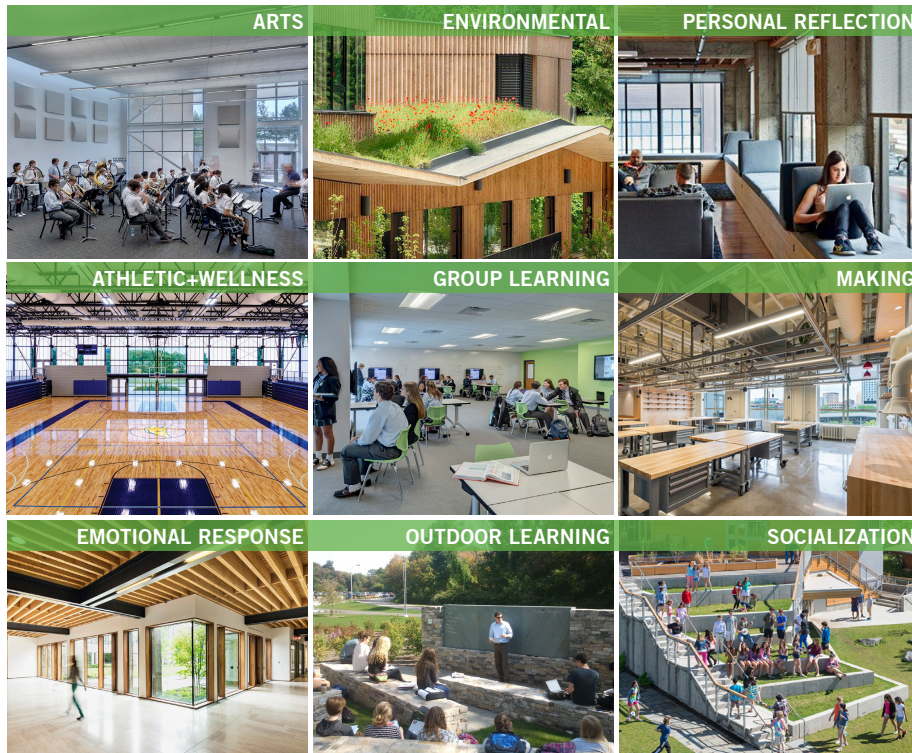
3.3.7 - PSR REV.1/ 3.3.4 REVISION

A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning

VISIONING RECAP : MOST POSITIVE VISUAL REACTIONS

Community Engagement Workshop

12.14.2017



Like

VISIONING RECAP : MOST NEGATIVE VISUAL REACTIONS

Community Engagement Workshop

12.14.2017

* Not enough information to separate by categories



Dislike

A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning



01.08.2018 CMS FACULTY WORKSHOP

BELMONT HIGH SCHOOL

PROMPT : PROVIDE FEEDBACK ON THE FOLLOWING SPACES

01.08.2018

Chenery Middle School Faculty Workshop

LEARNING COMMONS

- Still need Books, E-Books
- Use Carts, Mobile (currently)
- Teach small groups/classes 4-5 people (quiet) - Collaborate
- Not too much glass – distracting
- Audio Recording, Writing by Audio/ Speaking
- Video Production, Green Screen
- More Small Spaces – Safe place for 7-8 people
- Classrooms, Small Group Spaces, Diversity of Space
- Comfy Furniture, Standing Desks, Variety
- Monitor of Space? Dedicated Staff? Supervised? After Hours? Secure
- Space for Books
- Tech Spaces with Acoustic Separation
- Video Production Room
- More Small Spaces for MS Students

CIVIC COMMONS / CAFE

- Too Big, Too Loud (currently)
- No Corridors, Need Acoustic Treatment
- Variety of Space to Serve Food
- Cozy Areas, Monitored/Supervised
- Flex Seating/ Bench, Booth Seating
- Recycling programs needed
- Smaller spaces to focus
- Better Accessibility

OUTDOOR SPACE

- Garage Doors – Art ok, Not great otherwise – distracting in classroom
- One Outdoor Space Per Team, Access to Outside
- Courtyard – Outdoor, Secure
- Roof Garden – Not ideal, Danger, Need Enough Protection – Greenhouse Better with Weather
- Working Space Defined – To Write, Think, etc.

- Better Protection for Roofs
- Greenhouse on Roof

CLASSROOMS

- Less Glass in Class for MS Students – Distracting!
- Diversity of Organization of Classroom – Flex of Use, Furniture
- Merge Classrooms Together a Possibility
- Moving Partitions that are Acoustic
- Natural Light, Operable Windows, A/C
- Can't Think When it's Too Hot
- Need Control of Natural Light – Glare (Movies, etc.)
- Safe, Efficient Emergency Exit / Process
- Connecting Doors Between Classes
- Differences in Team Classrooms for Flexibility
- Operable Walls
- Window Treatments for Less Distraction

3.3.7 - PSR REV.1/ 3.3.4 REVISION

A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning

VISUAL LISTENING : PLACE A GREEN DOT ON YOUR LIKE & RED DOT ON YOUR DISLIKE
 Chenery Middle School Faculty Workshop

01.08.2018



KEY TAKEAWAYS : VISUAL LISTENING

Chenery Middle School Faculty Workshop

01.08.2018



A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning

KEY TAKEAWAYS : VISUAL LISTENING

Chenery Middle School Faculty Workshop

01.08.2018

* Not enough information to separate by categories



Dislike

PSR REV 1/ DOCUMENTS

3.3.6

PSR REV.1/ 3.3.4 REVISED

3.3.7



01.31.2018 BHS FACULTY WORKSHOP

BELMONT HIGH SCHOOL

3.3.7 - PSR REV.1/ 3.3.4 REVISION

A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning

PROMPT : CREATE AN ASPIRATIONAL ADJACENCY DIAGRAM TO ENHANCE EDUCATION

01.31.2018

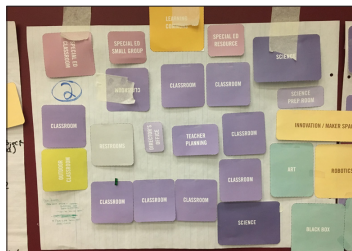
Belmont High School Faculty Workshop



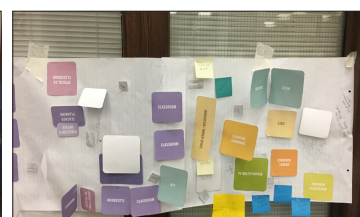
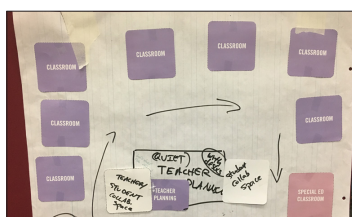
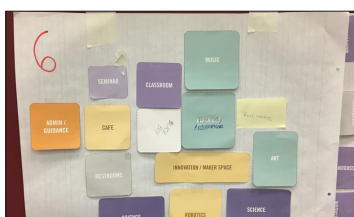
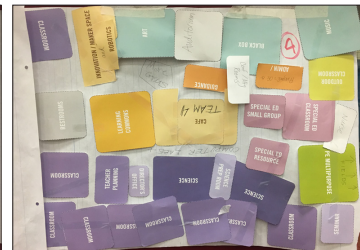
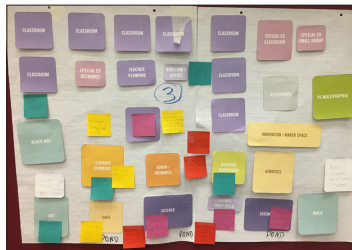
PROMPT : CREATE AN ASPIRATIONAL ADJACENCY DIAGRAM TO ENHANCE EDUCATION

01.31.2018

Belmont High School Faculty Workshop



Some science subjects together w/ Technology and art together
 1) Directors' offices in / next dept. nearby
 2) Teacher planning areas should be by subject (but location doesn't matter)
 3) A common workspace for teachers of all subjects - in addition to dept/ subject offices
 4) Health Clinic / Student / Admin / Rec. Area



A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning

ADJACENCY DIAGRAMS : REPORTING BACK

Belmont High School Faculty Workshop

01.31.2018

GROUP 01

- Classrooms should be surrounded by teacher planning spaces.
- Administration and Library Common spaces centrally located in school

GROUP 02

- Department Directors' offices should be in/next to department offices (same subject)
- Teacher planning areas should be by subject (location does not matter)
- A common workplace for teachers of all subjects (in addition to dept. / subject offices)
- Interdisciplinary work / Innovation space should be open to surrounding school.
- Administration spaces should be near health/wellness/medical/psych. spaces.
- Technology spaces near Art spaces could create interesting projects and ideas.
- Science of same subject should be located together - to share resources / equipment

GROUP 03

- U-shaped classroom configuration
- Science and Art facing pond/nature
- Cafeteria commons has connection to pond
- Quiet spaces for students to focus
- Kiln needed for Arts programs
- Protected Bike racks
- More space for restrooms and teacher planning

GROUP 04

- Art spaces near Robotics could create dynamic projects
- Buffer the acoustics of Art spaces with surrounding school
- Have nurse space near the outdoors - access to athletics
- Administration and Guidance do not need to be together - spread out throughout the school

GROUP 05

- Maintain current departmental system for academic spaces
- Need Tennis Courts, Daycare
- Administration spaces should be near Guidance and Medical spaces.
- PE spaces should be located near outdoors
- Science Labs to be located together

GROUP 06

- Keep current academic Departmental Model
- Teachers need desks/storage in classrooms
- Integrate Science Labs with the Arts

ADJACENCY DIAGRAMS : REPORTING BACK

Belmont High School Faculty Workshop

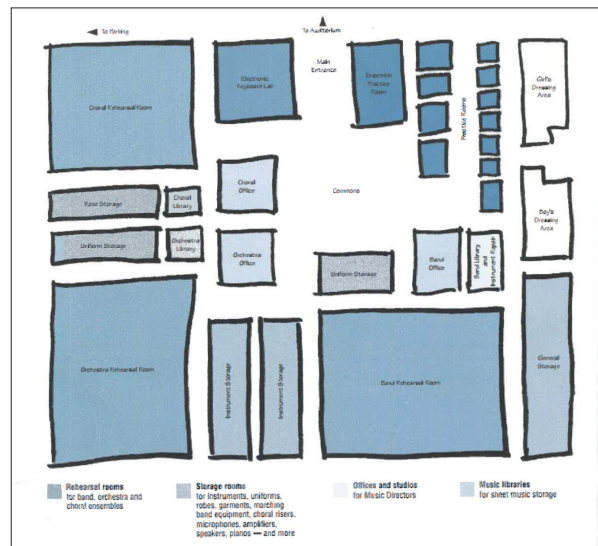
01.31.2018

GROUP 07

- Cafeteria Commons can mix with the Learning Commons
- Have event spaces near parking for high volume outside participation / visiting
- Create 'fun' display spaces
- Need a highly flexible / multi-functional space in core of the school
- Recreational space (golf?) on roof terraces
- What recreational do we not have? Outdoor Basketball

GROUP 08

- Create an ideal / dynamic theater area (see diagram to right)
- Need more storage / changing rooms for Music spaces
- Create a shared Common space on ground level
- Devote one building level to Science / Labs



Idea theater / Arts area layout (provided by group 08)

3.3.7 - PSR REV.1/ 3.3.4 REVISION

A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning



SUMMARY CHENERY MIDDLE SCHOOL WORKSHOP

“Middle-level learners need more than just a “watered-down” version of a high school (the philosophy behind a ‘junior high’ model); they need a building that is crafted around the unique needs of students at this age (the philosophy behind a ‘middle school’ model)”. Those needs include :

1. **Teams** academic organization (over departments)
2. **Safety** (especially the ability to easily supervise the spaces)
3. **Functionality** (giving teachers - if possible - the ability to have control over light, sound, heating/cooling, etc)
+ Prioritizing functionality of the building over beauty, when given the choice
4. **Limited Distractions** (less stimuli overall; especially when it comes to large glass walls)
+ A sensitivity to the social awkwardness and anxiety of middle-level learners (open spaces and a lot of glass in spaces like bathrooms, hallways, recording studios, etc may make them feel like they are ‘on display)
5. **Limited Mixing** with the high school students

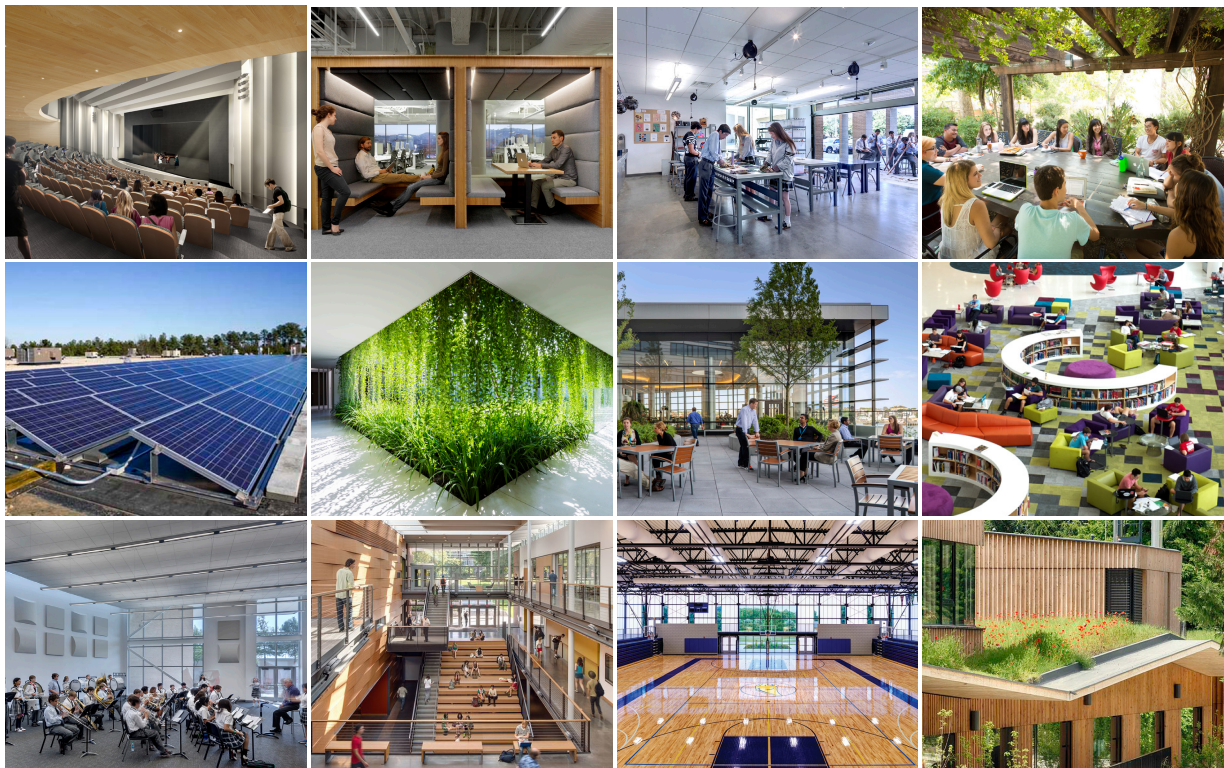
A. EDUCATIONAL PROGRAM REV.1/ BHS Visioning

SUMMARY BELMONT HIGH SCHOOL WORKSHOP

The High School should have its own identity, own entry and environment reflective of the age group. Flexible spaces to learn, think and create. The Big Ideas from the Workshops include :

1. **Flexibility** : Furniture, Classrooms, Movable Walls, Sit/Stand Desks
2. **Connection to Outdoors** : Pond, Roof Gardens, Outdoor Classrooms, Promenade
3. **Teacher Planning Rooms** : Central to Classrooms, Open to Seminar Rooms, Collaboration, Private
4. **Art Integration** : Student Art / Display Space throughout Building
5. **Technology Accessibility** : Seamless Technology throughout Building
6. **Environmental Stewards** : Natural Light, NZE Attitude, Recycling/Compost Programs, Vegetable Gardens
7. **Media Center** : Central locations, Area for MS and HS, Books, Project Rooms, Variety of Seating
8. **Multiple Learning Styles** : Spaces for Collaboration, 'Me' Space, Groups, Private Meeting
9. **Distribution of Faculty** : Distribute Director offices, Assistant Principals, Guidance offices
10. **Hybrid Planning Model** : Allow for Departmental or Interdisciplinary Approach

SUMMARY VISUAL LISTENING : MOST POSITIVE



3.3.7 - PSR REV.1/ 3.3.4 REVISION

B. PREFERRED SOLUTION SPACE SUMMARY REV.1

Revised Date: 4/10/2018 Preferred Schematic Report

ROOM NFA ¹	# OF RMS	area totals	Comments
1,200	8	25,600	Assumed size: 50% Population - 5 times/week
2,000	8	16,000	Assumed size: 50% Population - 5 times/week
12,000	1	12,000	
3,000	1	3,000	
300	1	300	
12,404	1	12,404	6.6 student total
500	1	500	
150	1	150	
250	1	250	
13,744	1	13,744	
13,744	1	13,744	
7,500	1	7,500	50 Enrichment @ 15.00 Seat - 250 seats MAX
1,600	1	1,600	
500	1	500	
300	2	600	
200	1	200	
10,400	1	10,400	
25,600	8	25,600	

PROPOSED/ GRADES 7-12

Existing to Remain/Renovated		New		Total	
ROOM NFA ¹	# OF RMS	area totals	# OF RMS	ROOM NFA ¹	area totals
0		19,400			19,400
1,200	1	1,200	1	1,200	1,200
1,200	1	1,200	1	1,200	1,200
1,200	1	1,200	1	1,200	1,200
1,200	1	1,200	1	1,200	1,200
1,200	1	1,200	1	1,200	1,200
1,200	1	1,200	1	1,200	1,200
1,000	1	1,000	1	1,000	1,000
1,840	1	1,840	1	1,840	1,840
1,840	2	3,680	2	1,840	3,680
1,840	1	1,840	1	1,840	1,840
1,000	1	1,000	1	1,000	1,000
1,000	1	1,000	1	1,000	1,000
1,840	1	1,840	1	1,840	1,840
45,217	1	45,217			45,217
30,183	1	30,183		30,183	30,183
3,000	1	3,000	1	3,000	3,000
300	2	600	2	300	600
8,430	1	8,430	1	3,975	12,405
900	1	900	1	100	1,000
150	1	150	1	150	150
150	2	300	2	150	300
0		0		0	0
0		0		0	0
0		0		0	0
250	2	500	2	250	500
800	1	800	1	800	800
5,704	1	5,704		5,704	5,704
13,744	1	13,744	1	13,744	13,744
13,744	1	13,744			13,744
0		0			0
7,500	1	7,500	1	7,500	7,500
2,400	1	2,400	1	2,400	2,400
500	1	500	1	500	500
300	2	600	2	300	600
200	1	200	1	200	200
3,000	1	3,000	1	3,000	3,000
14,200	1	14,200			14,200
13,744	1	13,744	1	13,744	13,744
14,200	1	14,200			14,200
7,500	1	7,500	1	7,500	7,500
2,400	1	2,400	1	2,400	2,400
500	1	500	1	500	500
300	2	600	2	300	600
200	1	200	1	200	200
3,000	1	3,000	1	3,000	3,000

GRADES 7-12/ 2,215 STUDENTS

ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals
VOCAIONS & TECHNOLOGY			0
Tech Cim. - (E.G. Drafting, Business)			
Tech Cim. - Maker/Innovation-7			
Tech Cim. - Maker/Innovation-7			
Tech Cim. - Maker/Innovation-8			
Tech Cim. - Maker/Innovation-8			
Tech Cim. - Digital Arts			
Tech Cim. - Electronic Music Classroom			
Tech Cim. - Coding			
Tech Shop - (E.G. Consumer, Wood)			
Tech Shop - Robotics			
Tech Shop - Engineering/ Maker (1 MS + 1 HS)			
Tech Shop - Video Production			
Tech Shop - Maker/Physics			
Tech Shop - World Language Lab			
Tech Shop - Theater Arts			
MIDDLE SCHOOL		2	
Tech Ed			
HEALTH & PHYSICAL EDUCATION			65,007
Gymnasium - (4 teaching stations and full size competition court)	30,183	1	30,183
PE Alternatives - (Weight Room)	1,632	1	1,632
Gym Storeroom	465	4	1,860
Locker Rooms - Boys / Girls w/ Toilets	5,386	2	10,772
Phys. Ed. Storage	157	11	1,720
Athletic Director's Office	467	1	467
Health Instructor's Office w/ Shower & Toilet - 1 male, 1 female	209	3	628
PE Alternatives (Multi-purpose dance, yoga, cheer/lebel)	1,632	1	1,632
PE Alternatives (Wrestling 1.5 mats)	1,632	1	1,632
Officials Rooms (8 male/8 female/ shower locker, toilet)			
Trainers Room			
PE Multipurpose (MS) Reuse Small Gym Existing	5,704	1	5,704
First Aid Office / Pool	71	1	71
Small Gym/ Reuse for PE Multipurpose (MS) - 2 teaching stations	5,704	1	5,704
Trainer	228	1	228
Weight Classroom	605	2	1,209
Team Uniforms	555	1	555
Equipment Storage	380	1	380
Willa Field House			
Trainer Room	100	1	100
Locker Room	2,000	1	2,000
Storage	920	1	920
Coach Offices	100	2	200
Toilet rooms (men + women)	300	1	300
MIDDLE SCHOOL			
Health Classroom		2	
MEDIA CENTER			6,641
Media Center / Reading Room	6,184	1	6,184
Computer Lab	457	1	457
AUDITORIUM / DRAMA			11,447
Auditorium	7,888	1	7,888
Stage	2,762	1	2,762
Auditorium Storage			
Make-up / Dressing Rooms	385	1	385
Controls / Lighting / Projection	27	1	27
Black Box			

*Changes from PSR to PSR Rev.1 highlighted in yellow.



3.3.7 - PSR REV.1/ 3.3.4 REVISION

C. PREFERRED SOLUTION SPACE SUMMARY / COMMENTS REV.1

The OPM, Design Team, the office of the Superintendent, faculty, and administration have been conducting an ongoing review of the educational program and space summary in order to create efficiencies in as many areas as possible and reduce overall building square footage. The discussions include looking at the utilization of all spaces in the space summary to ensure the need relative to the educational program.

The below summarizes the spaces that deviate from the PSR submission to the PSR REVISION 1 submission dated 4.12.2018.

CORE ACADEMIC SPACES:

PSR: 112,750 SF
PSR REVISED 1: 111,280 SF

TEACHER PLANNING (HIGH SCHOOL):

PSR: 6 rooms @ 500 SF= 3,000 SF
PSR REVISED 1: 7 rooms @ 550 SF= 3,850 SF

After further review of the program it was determined to consolidate Teacher Work room into the Teacher Planning Rooms. One additional Teacher planning space was added to accommodate the 7 departments. The Administration carefully reviewed the amount of teacher planning stations provided to the BHS staff. It was determined that 77 teacher planning stations were required. Each 9-12 faculty member would be provided an area to work, store materials and files in the teacher planning. The Work Room of 1,108 sf was partially distributed into the teacher planning areas.

MIDDLE SCHOOL SCIENCE CLASSROOMS:

PSR: 8 rooms @ 1,440 SF= 11,520 SF
PSR REVISED 1: 8 rooms @ 1,200 SF= 9,600 SF

After further review of the program it was determined that the BHS would follow the MSBA Middle School science guidelines of 1,200 sf per Science Classroom from the High School standards of 1,440 sf.

HIGH SCHOOL PREP ROOMS:

PSR: 6 rooms @ 200 SF= 1,200 SF
PSR REVISED 1: 6 rooms @ 400 SF= 2,400 SF

After an initial reduction from the MSBA standards in the PDP it was determined that compliance to MSBA standards was necessary to maintain prep room functions. Two Science Classrooms will share 1/ 400 sf prep room.

CENTRAL CHEMICAL STORAGE ROOM:

PSR: 1 rooms @100 SF= 100 SF
PSR REVISED 1: 1 rooms @ 200 SF= 200 SF

After an initial reduction from the MSBA standards in the PDP it was determined that compliance to MSBA standards was necessary to maintain central chemical storage room functions.

HIGH SCHOOL PREP ROOMS:

PSR: 6 rooms @ 200 SF= 1,200 SF
PSR REVISED 1: 6 rooms @ 400 SF= 2,400 SF

After an initial reduction from the MSBA standards in the PDP it was determined that compliance to MSBA standards was necessary to maintain prep room functions. Two Science Classrooms will share 1/ 400 sf prep room.

C. PREFERRED SOLUTION SPACE SUMMARY / COMMENTS REV.1

SPECIAL EDUCATION SPACES:

PSR:	26,510 SF
PSR REVISED 1:	23,310 SF

The Special Education Director, Middle School Principal, High School Principal, Superintendent, OPM, and Educational Planner reviewed each special education space need in order to reduce program. The largest reductions of square footages are noted in the current middle school LABBB program spaces. The district in the PDP planned on moving the Middle School LABBB spaces to the Belmont High School. It was determined that these spaces will remain at its current location at Chenery Middle School. The type of service delivery for this LABBB student population is not “grade specific” in nature. This decision was jointly made by Belmont Public Schools Special Education Department, Superintendent, Principal and LABBB Director and Chenery LABBB Program Director. Further details on the Special Education program can be found in the PSR REVISED 1 Educational Program.

ART AND MUSIC: NO CHANGE

PSR:	16,150 SF
PSR REVISED 1:	16,150 SF

HEALTH AND PHYSICAL EDUCATION

PSR:	54,942 SF
PSR REVISED 1:	54,642 SF

HEALTH INSTRUCTORS OFFICE:

PSR:	4 rooms @ 150 SF
PSR REVISED 1:	2 rooms @ 150 SF

In order to reduce square footage and gain efficiencies the Belmont Administration and Athletic Director determined that the Health Instructor's office could be reduced to one male and one female area to monitor the boys and girls locker room facilities.

MEDIA CENTER: NO CHANGE

PSR:	13,744 SF
PSR REVISED 1:	13,744 SF

AUDITORIUM / DRAMA: NO CHANGE

PSR:	14,200 SF
PSR REVISED 1:	14,200 SF

DINING AND FOOD SERVICE: NO CHANGE

PSR:	16,978 SF
PSR REVISED 1:	16,978 SF

3.3.7 - PSR REV.1/ 3.3.4 REVISION

C. PREFERRED SOLUTION SPACE SUMMARY / COMMENTS REV.1

MEDICAL: NO CHANGE

PSR:	2,140 SF
PSR REVISED 1:	2,140 SF

ADMINISTRATION AND GUIDANCE

PSR:	10,062 SF
PSR REVISED 1:	8,200 SF

CAREER CENTER:

PSR:	1 rooms @ 704 SF
PSR REVISED 1:	Program put into the media center square footage

It was determined by the review committee that the Career Center square footage would be put into the 13,744 sf square footage as a way to reduce total net square footage.

TEACHER'S WORK ROOM:

PSR:	1 rooms @ 1,108 SF
PSR REVISED 1:	Line deleted and some sq. footage appropriated to Teacher Planning.

An extensive analysis was conducted to determine the quantity of faculty members teaching grades 9-12 who would require a work area in the teacher planning room. The faculty members who have an office noted in the program and the middle school teachers who have their own classroom were not in this formula. It was determined that 77 people would require a dedicated area in the teacher planning rooms. The 7 teacher planning spaces were increased from 500 sf to 550 sf to accommodate this need.

DIRECTOR OFFICES:

PSR:	6 rooms @ 200 SF
PSR REVISED 1:	7 rooms @ 200 SF

Upon reviewing the program for the PSR REVISION 1 it was determined that one additional Director's office was needed to accommodate the seven programs verses six that was indicated in the earlier educational program.

ACCOUNTING:

PSR:	1 rooms @ 250 SF
PSR REVISED 1:	Removed from the program

In order to reduce net square footage Belmont removed this program from the Belmont Program.

C. PREFERRED SOLUTION SPACE SUMMARY / COMMENTS REV.1

CUSTODIAL AND MAINTENANCE:

PSR:	3,437 SF
PSR REVISED 1:	3,437 SF

OTHER:

PSR:	12,412 SF
PSR REVISED 1:	12,532 SF

STORAGE FOR EMERGENCY CENTER

PSR:	NONE
PSR REVISED 1:	1 @ 120 SF

After a meeting with Boston Emergency management agency it was determined that a storage room would be required to accommodate some of the Belmont residents in the event of a natural or man-made disaster.

3.3.7 - PSR REV.1/ 3.3.4 REVISION

D. SUSTAINABILITY REV.1

Per Project Advisory #41, all MSBA Core Program projects must be registered with USGBC LEED-S Version 4 or MA CHPS. The Belmont School Building Committee has chosen to move forward with LEED-S Version 4 and intends to achieve 2% additional reimbursement by achieving a min. of “certified” within that rating system and by exceeding the level of energy efficiency required in the current Massachusetts (base) energy code by 10%

The Design Team advanced the sustainability goals in the Feasibility Stage in order to allow it equal emphasis with the many other design challenges, and embed the chosen strategies into the overall design to create a more unified whole.

The Design Team needed to first understand where the Town’s priorities lay. To better understand this, a meeting was arranged with members of the Building Committee with sustainable expertise and interest in the sustainability component of the high school design.

In its first presentation to the building committee the Design Team introduced the core concepts of sustainability and showed how they might become integral to student life at the high school, as well as providing long term benefits to the district, defining sustainability as a concept supported by a triad of concerns: the social, the environmental, and the economic.

The idea of sustainability having a social component aligns with the educational programming vision established by the District, whereby creating a shared sense of community and opportunity for curriculum integration parallel the interdisciplinary, shared learning environment the District is creating for the new high school.

The environmental aspects of sustainability are perhaps self evident, addressing CO² emissions, natural habitat, responsible resource use, safe materials, and watershed impact.

Economically, sustainability presents a multitude of issues. The up front capital costs of implementing sustainable strategies can add significantly to project budgets while simultaneously providing long term payback in the form of energy and/or water savings. Other issues to be addressed include maintenance costs, space requirements, adaptability, and ease of maintenance.

During the ensuing discussions it came to light that building efficiency was a prime concern for the community, and should be considered among the highest priorities of any sustainable strategy.

The Design Team prioritized energy and water use as those likely to have the most potential payback and relevance to the community, respectively. Material health, ecosystem health, sustainable infrastructure and building resilience were also presented and discussed as project priorities. The strategies for achieving these goals are outlined as follows:

ENERGY

- A LEED V4 ASHRAE 2010 baseline model will be created to set an appropriate benchmark for system evaluation with the understanding that the building form and exact size may evolve through the subsequent design phases.
- A number of alternative building systems will be modeled so that relative energy savings can be compared to system first costs in the upcoming phase of design pricing. Energy use intensities (EUI) and estimated operating costs will be determined for these systems.
- Additional stand-alone energy saving strategies will be evaluated and shortlisted as potentially viable options. Each will be further evaluated against their first cost in the SD phase.

WATER

- A LEED V4 baseline water demand estimate will be created in early schematic design to set an appropriate benchmark for water conservation strategy evaluation with the understanding that the building use and exterior demand may evolve through the subsequent design phases.
- Water conservation strategies were outlined and the percent reduction values were estimated per strategy to set project goals for water use reduction.
- A model will be created in early schematic design to evaluate building water demand vs available rainfall over the course of the year. A cistern size that allows for increased water reduction through a rainfall harvesting system will be evaluated and sized with diminished return considered

The energy modeling will consider four scenarios, divided between high performing, high efficiency systems and more conventional high efficiency systems. a Since the MSBA requires the project to attain LEED-S certification at a minimum, that will be established as the baseline for comparison.

The scenarios are as follows:

D. SUSTAINABILITY REV.1

1. LEED BASELINE

- Conventional gas-fired hot water boilers
- Water-cooled chiller with cooling tower
- Variable air volume systems serving the classrooms
- Outside air energy recovery for VAV systems where required by ASHRAE 90.1
- Code whole building lighting watt density or 0.99 w/sf.
- Code wall, roof, and fenestration U-values and SHGC.

3. FAN COIL UNITES (HIGH EFFICIENCY)

- Gas-fired condensing hot water boilers
- High efficiency evaporative-cooled chiller
- Fan coil units in the classrooms
- High efficiency 100% outside air energy recovery ventilation units
- Whole building lighting watt density 0.70 w/sf.
- High efficiency wall, roof, and fenestration U-values and SHGC.

2. GROUND SOURCE HEAT PUMP (HIGH PERFORMANCE)

- Vertical ground loop system
- Central water-to water heat pump chillers
- Displacement induction units in the classrooms
- High efficiency 100% outside air energy recovery ventilation unit
- Whole building lighting watt density 0.20 w/sf.
- High efficiency wall, roof, and fenestration U-values and SHGC.

4. CLASSROOM PARTIAL COOLING

- Gas-fired condensing hot water boilers
- Fan coil units in the classrooms
- High efficiency 100% outside air energy recovery ventilation unit w/DX cooling
- Whole building lighting watt density 0.20 w/sf.
- High efficiency wall, roof, and fenestration U-values and SHGC.

The scenario modeling will result in Building Simulation Reports, which will be used for comparison.

NEXT STEPS

A pricing narrative will be formed for each major conservation strategy and the evaluation matrix illustrated in the presentation will be filled in to help the design team and client make decisions based on the overall sustainable goals. The matrix will be updated as energy models and strategies are refined so that sustainable energy and water strategies are executed efficiently. Non-energy and water related sustainable measures will be a focus of early SD conversations.

3.3.7 - PSR REV.1/ 3.3.4 REVISION

D. SUSTAINABILITY REV.1 / LEED Checklist



LEED v4 for BD+C: Schools

Project Checklist

Belmont High School

8-Feb-18 / Revised 12-Apr-18

Y ? N

1	0	0	Credit 1	Integrative Process	1
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7	3	5	Location and Transportation		Possible Points: 15
		15	Credit 1	LEED for Neighborhood Development Location	15
1			Credit 2	Sensitive Land Protection	1
		2	Credit 3	High Priority Site	2
2		3	Credit 4	Surrounding Density and Diverse Uses	5
4			Credit 5	Access to Quality Transit	4
	1		Credit 6	Bicycle Facilities	1
	1		Credit 7	Reduced Parking Footprint	1
	1		Credit 8	Green Vehicles	1

3	6	3	Sustainable Sites		Possible Points: 12
Y			Prereq 1	Construction Activity Pollution Prevention	Required
Y			Prereq 2	Environmental Site Assessment	Required
1			Credit 1	Site Assessment	1
		2	Credit 2	Site Development--Protect or Restore Habitat	2
1			Credit 3	Open Space	1
	3		Credit 4	Rainwater Management	3
	2		Credit 5	Heat Island Reduction	2
	1		Credit 6	Light Pollution Reduction	1
		1	Credit 7	Site Master Plan	1
1			Credit 8	Joint Use of Facilities	1

5	3	4	Water Efficiency		Possible Points: 12
Y			Prereq 1	Outdoor Water Use Reduction	Required
Y			Prereq 2	Indoor Water Use Reduction	Required
Y			Prereq 3	Building-Level Water Metering	Required
1	1		Credit 1	Outdoor Water Use Reduction	2
3		4	Credit 2	Indoor Water Use Reduction	7
1	1		Credit 3	Cooling Tower Water Use	2
	1		Credit 4	Water Metering	1

19	7	2	Energy and Atmosphere		Possible Points: 31
Y			Prereq 1	Fundamental Commissioning and Verification	Required
Y			Prereq 2	Minimum Energy Performance	Required
Y			Prereq 3	Building-Level Energy Metering	Required
Y			Prereq 4	Fundamental Refrigerant Management	Required
6			Credit 1	Enhanced Commissioning	6
11	2		Credit 2	Optimize Energy Performance	16
1			Credit 3	Advanced Energy Metering	1
		2	Credit 4	Demand Response	2
	3		Credit 5	Renewable Energy Production	3
	1		Credit 6	Enhanced Refrigerant Management	1
1	1		Credit 7	Green Power and Carbon Offsets	2

D. SUSTAINABILITY REV.1 / LEED Checklist



LEED v4 for BD+C: Schools

Project Checklist

Belmont High School

8-Feb-18 / Revised 12-Apr-18

4	0	9	Materials and Resources		Possible Points:	13
Y			Prereq 1	Storage and Collection of Recyclables		Required
Y			Prereq 2	Construction and Demolition Waste Management Planning		Required
		5	Credit 1	Building Life-Cycle Impact Reduction		5
1		1	Credit 2	Building Product Disclosure and Optimization - Environmental Product Declarations		2
		2	Credit 3	Building Product Disclosure and Optimization - Sourcing of Raw Materials		2
1		1	Credit 4	Building Product Disclosure and Optimization - Material Ingredients		2
2			Credit 5	Construction and Demolition Waste Management		2

9	6	1	Indoor Environmental Quality		Possible Points:	16
Y			Prereq 1	Minimum Indoor Air Quality Performance		Required
Y			Prereq 2	Environmental Tobacco Smoke Control		Required
Y			Prereq 3	Minimum Acoustic Performance		Required
2			Credit 1	Enhanced Indoor Air Quality Strategies		2
2	1		Credit 2	Low-Emitting Materials		3
1			Credit 3	Construction Indoor Air Quality Management Plan		1
2			Credit 4	Indoor Air Quality Assessment		2
0	1		Credit 5	Thermal Comfort		1
2			Credit 6	Interior Lighting		2
	3		Credit 7	Daylight		3
	1		Credit 8	Quality Views		1
		1	Credit 9	Acoustic Performance		1

1	6	0	Innovation		Possible Points:	6
	1		Credit 1	Innovation		1
	1		Credit 2	Innovation		1
	1		Credit 3	Innovation		1
	1		Credit 4	Innovation		1
	1		Credit 5	Innovation		1
	1		Credit *	Innovation		1
				Innovation		1
				Innovation		1
1			Credit 6	LEED Accredited Professional		1

3	0	2	Regional Priority		Possible Points:	4
1			Credit 1	Regional Priority: Specific Credit	Optimized Energy (8 points)	1
		1	Credit 2	Regional Priority: Specific Credit	Building Life-cycle Impact (2 points)	1
		1	Credit 3	Regional Priority: Specific Credit	Site Development-protect and restore (2 points)	1
1			Credit 4	Regional Priority: Specific Credit	Access to Quality Transit	1
1			Credit 5	Regional Priority: Specific Credit	Renewable Energy Production	1
			Credit 6	Regional Priority: Specific Credit		

52	31	26	Total		Possible Points:	110
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Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

3.3.7 - PSR REV.1/ 3.3.4 REVISION

D. SUSTAINABILITY REV.1 / Acknowledgement

PERKINS+WILL

April 12 , 2018

Ms. Jess Deleconio
Senior Project Coordinator
Massachusetts School Building Authority
40 Broad Street, Suite 500
Boston, MA 02109

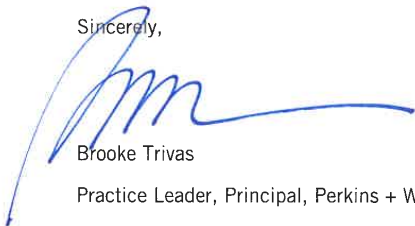
Re: MSBA High Efficiency Green School Program

Dear Ms. Deleconio,

This is an acknowledgement that the Belmont High School District has identified a goal of 2% additional reimbursement from the MSBA High Efficiency Green School Program. As their Designer, I have submitted a completed LEED scorecard showing all prerequisites and 52 attempted points, which will meet that goal.

The scope of work for this project will include the construction elements and performance tasks to achieve that goal, and all subsequent documents, including but not limited to, specifications, drawings, and cost estimates will match the scope of work indicated in the submitted scorecard.

Sincerely,



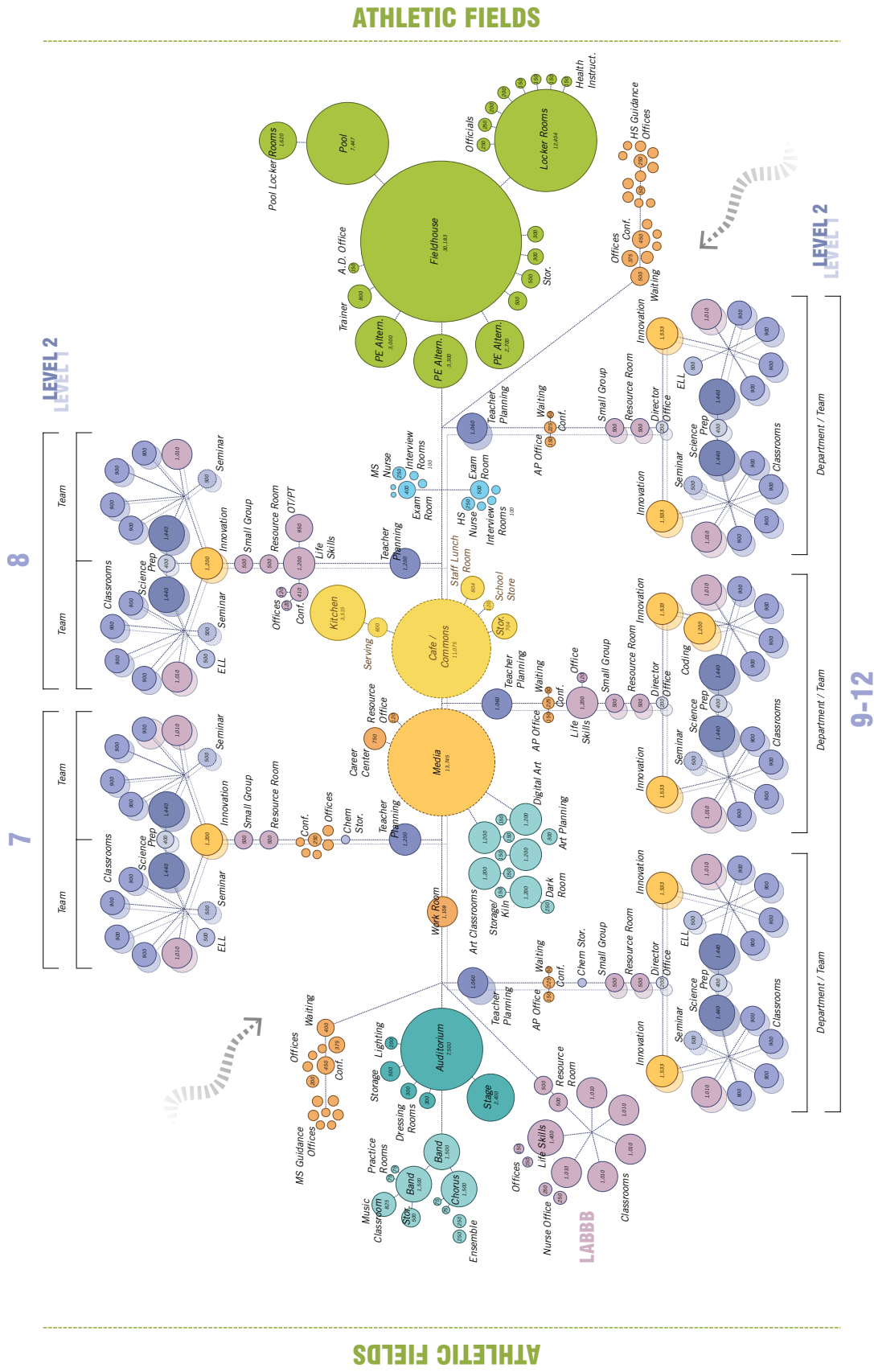
Brooke Trivas

Practice Leader, Principal, Perkins + Will



PROGRAM ADJACENCY

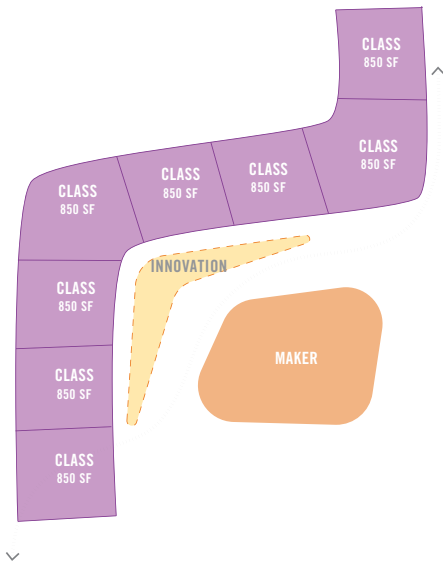
E. BUILDING PLANS REV.1 / Program Adjacency



3.3.7 - PSR REV.1/ 3.3.4 REVISION

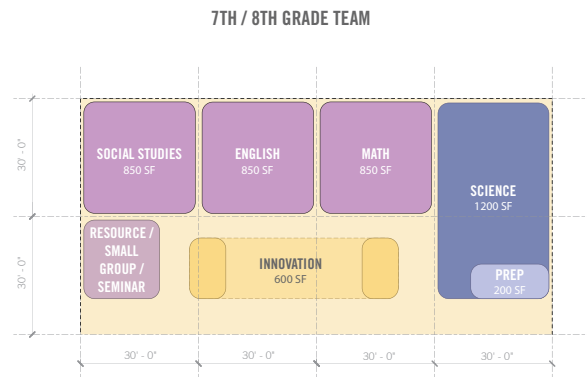
E. BUILDING PLANS REV.1 / Middle School Team and High School Department Module

HIGH SCHOOL



FLEXIBLE RIBBON

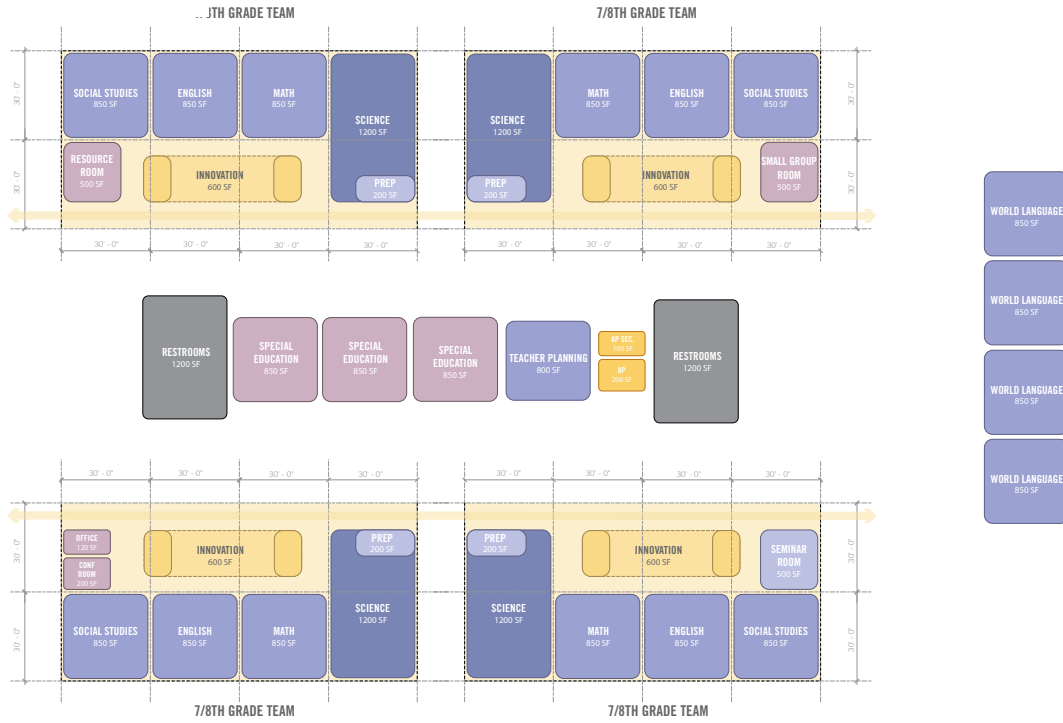
MIDDLE SCHOOL



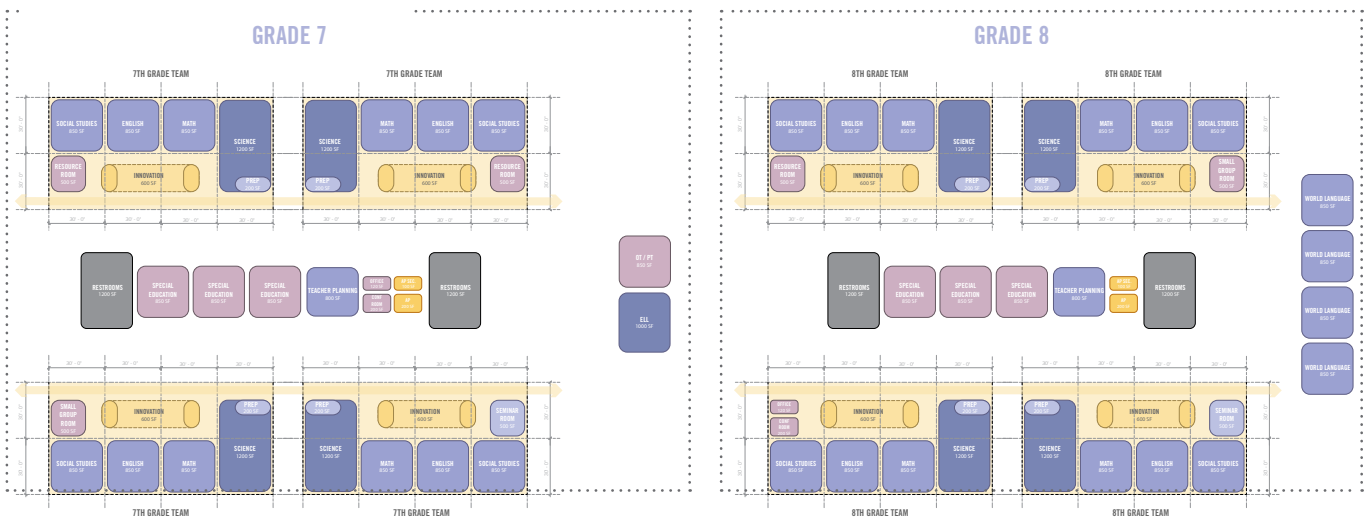
TEAM CLUSTER

E. BUILDING PLANS REV.1 / Middle School Team Diagrams

7/8TH GRADE PROGRAM



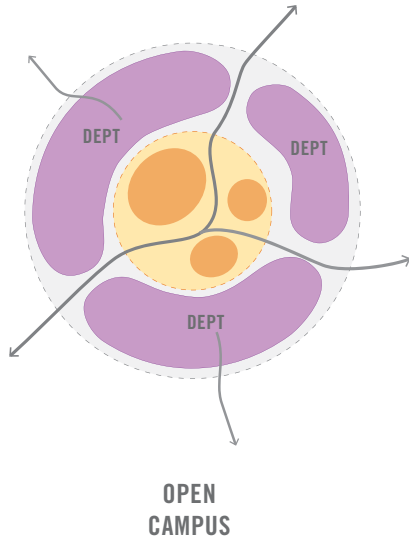
MIDDLE SCHOOL PROGRAM



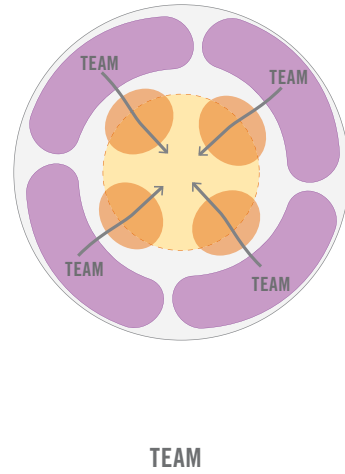
3.3.7 - PSR REV.1/ 3.3.4 REVISION

E. BUILDING PLANS REV.1 / Conceptual Diagrams

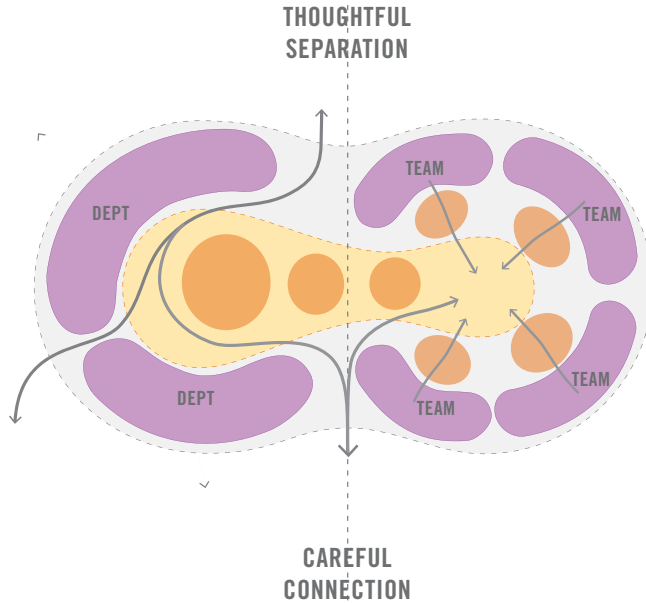
HIGH SCHOOL



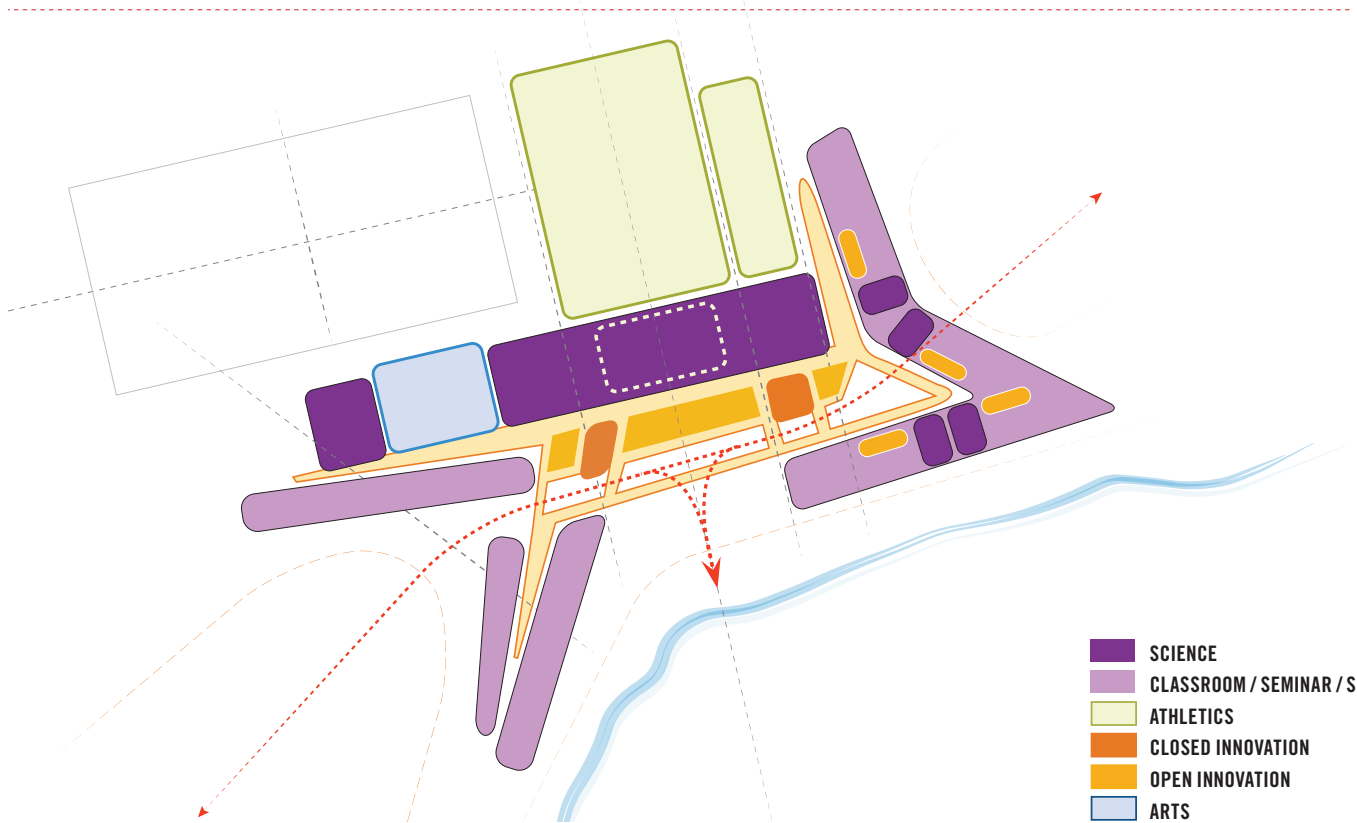
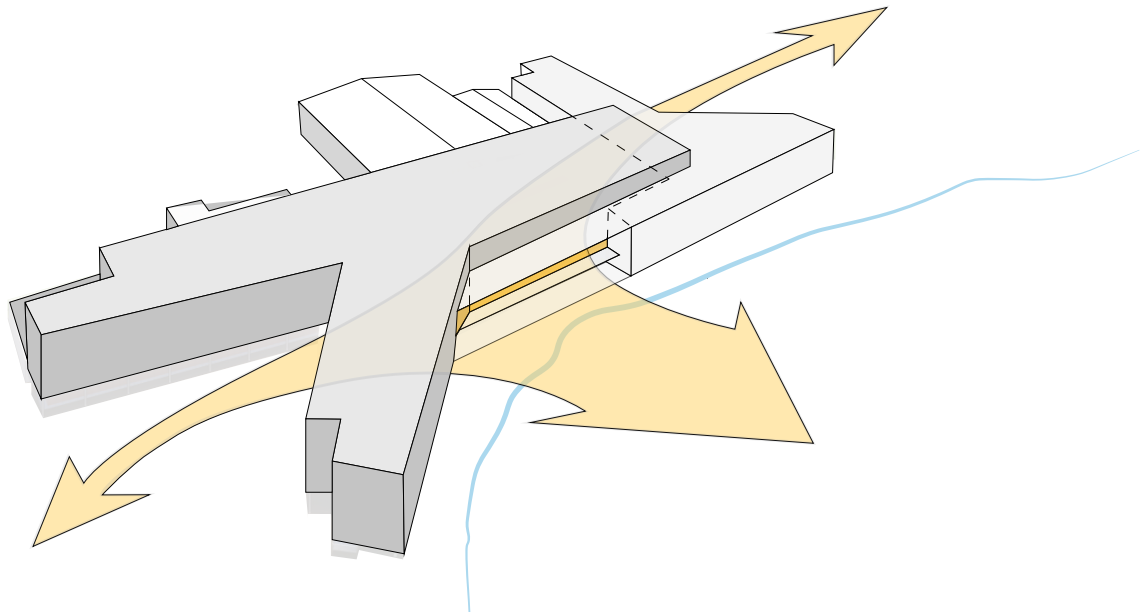
MIDDLE SCHOOL



HIGH SCHOOL

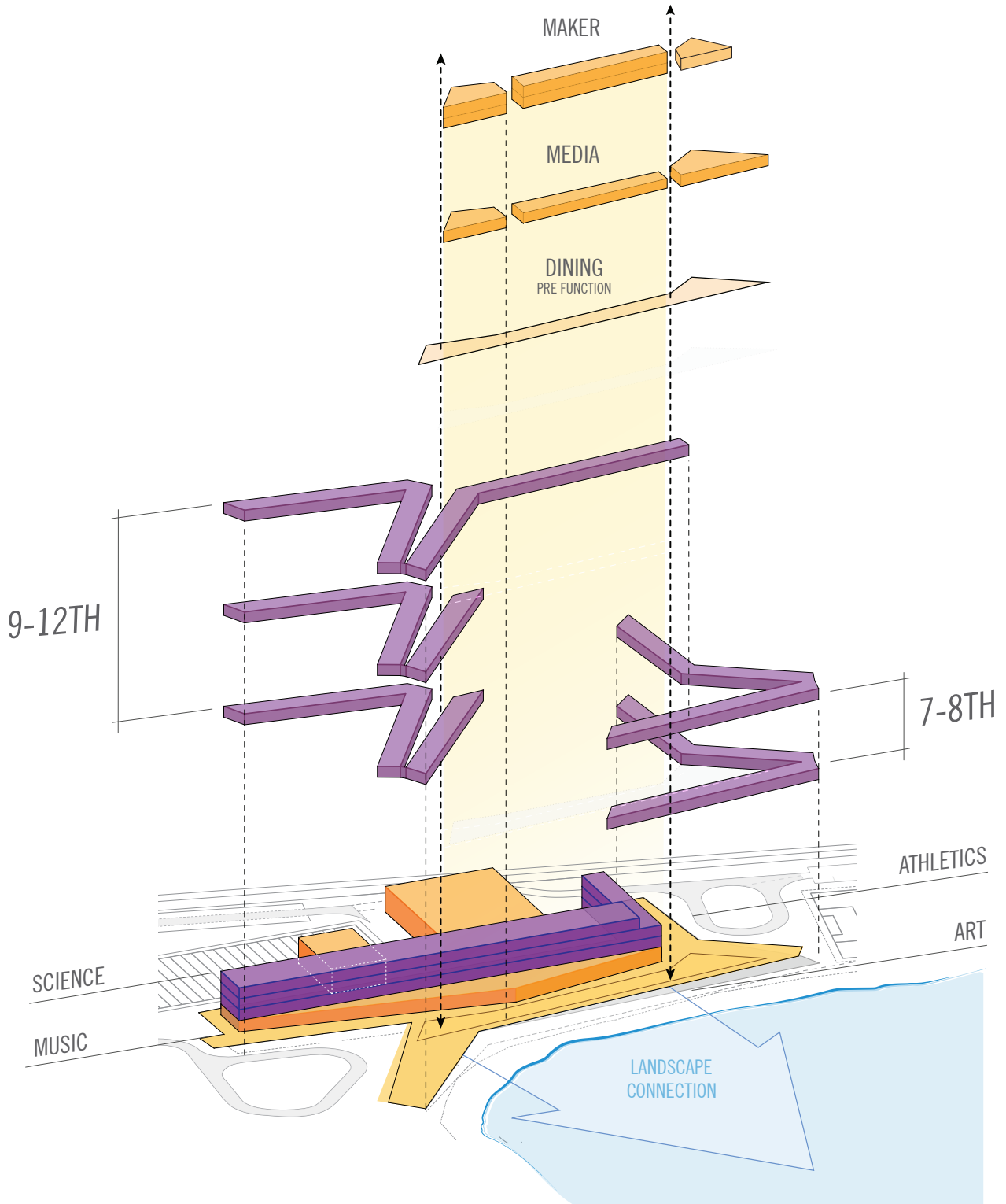


E. BUILDING PLANS REV.1 / Module & Parti

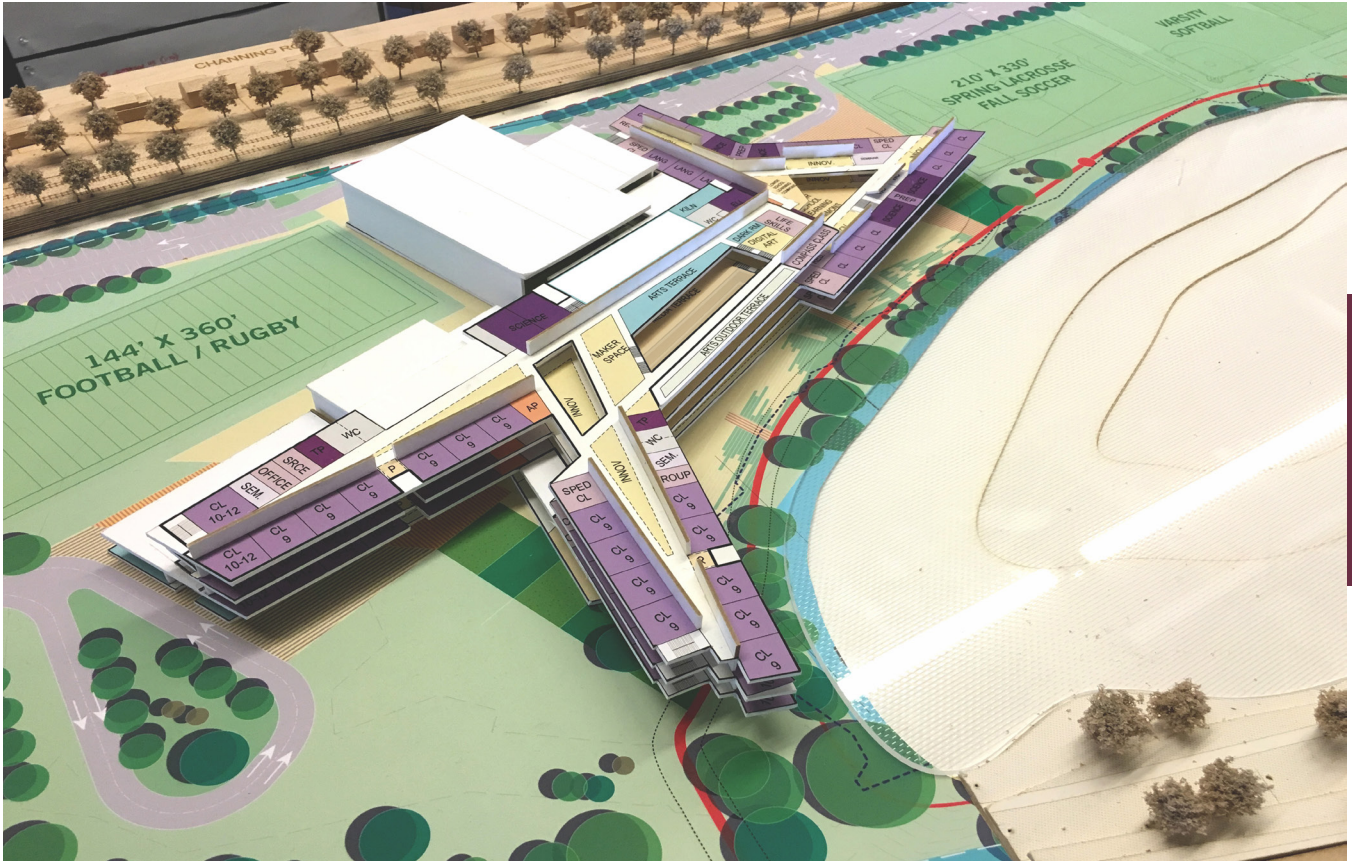


3.3.7 - PSR REV.1/ 3.3.4 REVISION

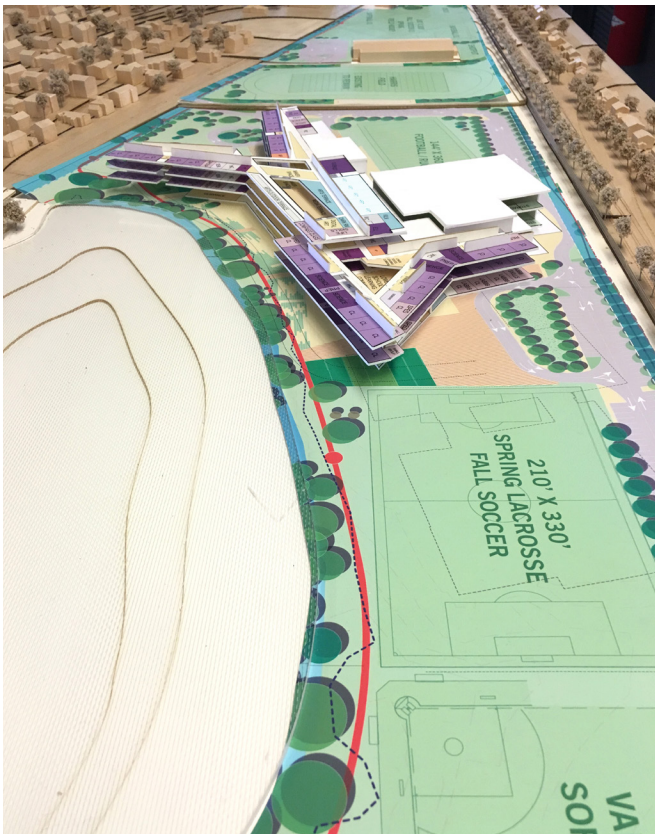
E. BUILDING PLANS REV.1 / Program Diagram



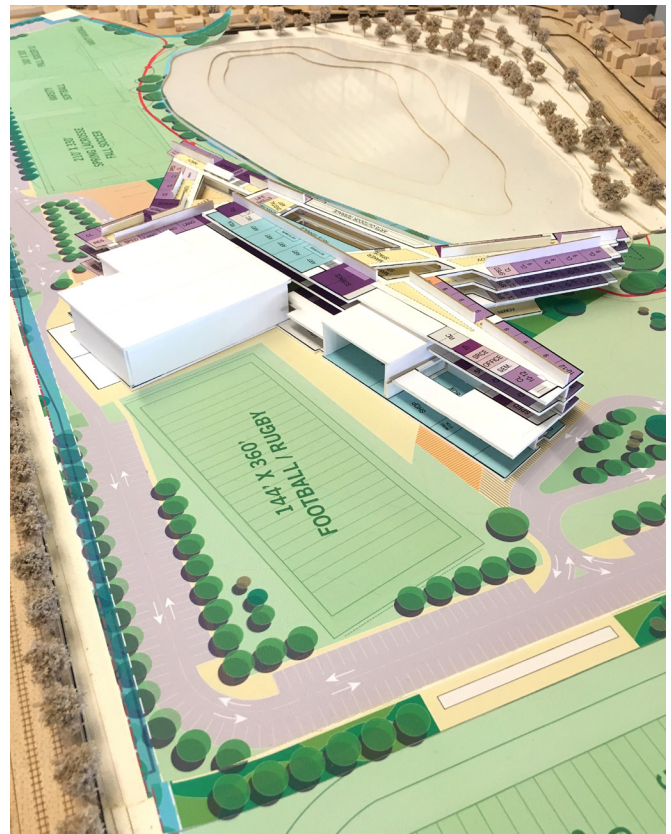
E. BUILDING PLANS REV.1 / Physical Model



VIEW TOWARDS HIGH SCHOOL ENTRY



VIEW FROM EAST FIELDS



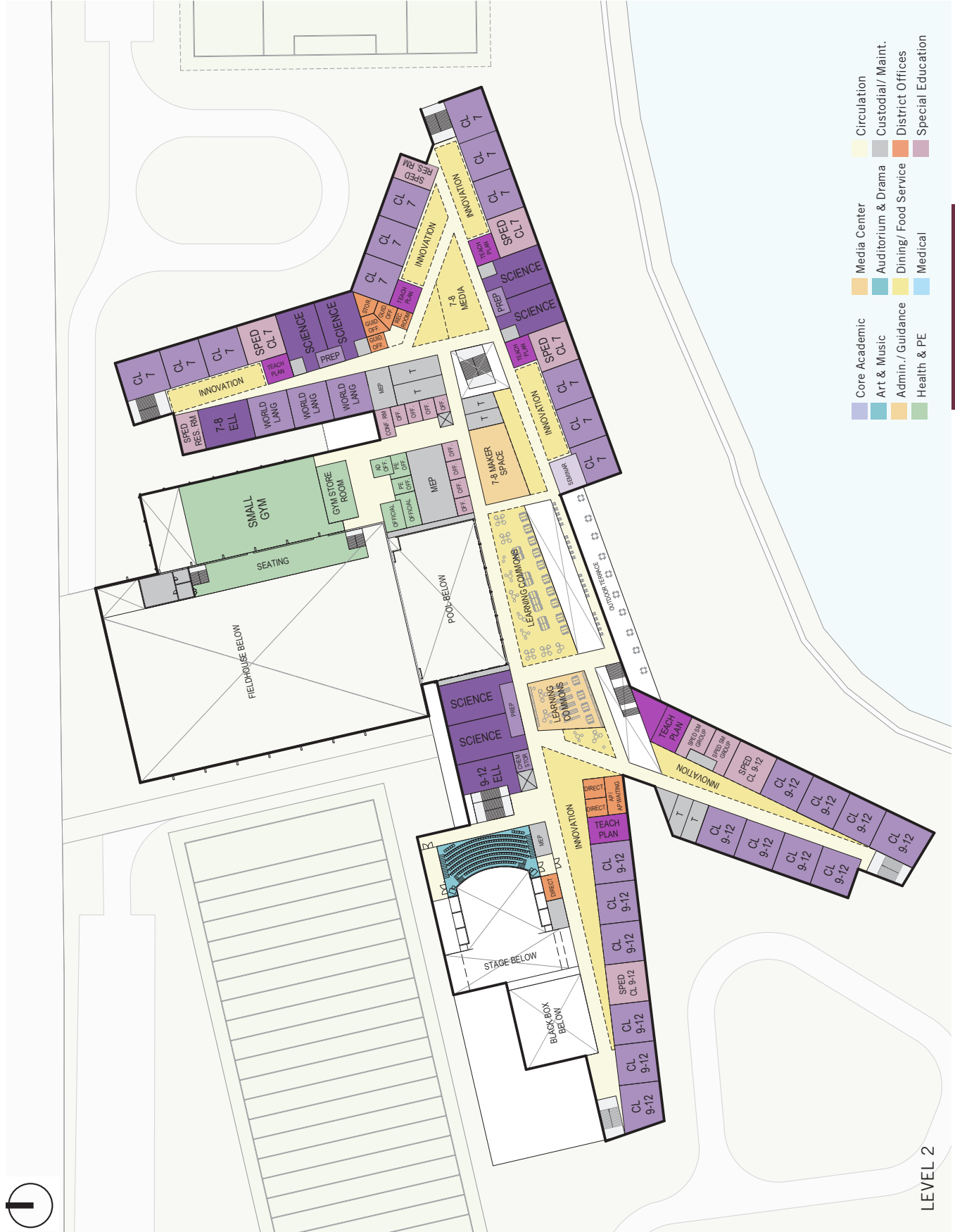
VIEW LOOKING SOUTH

3.3.7 - PSR REV.1/ 3.3.4 REVISION

E. BUILDING PLANS REV.1 / Level 1



E. BUILDING PLANS REV.1 / Level 2

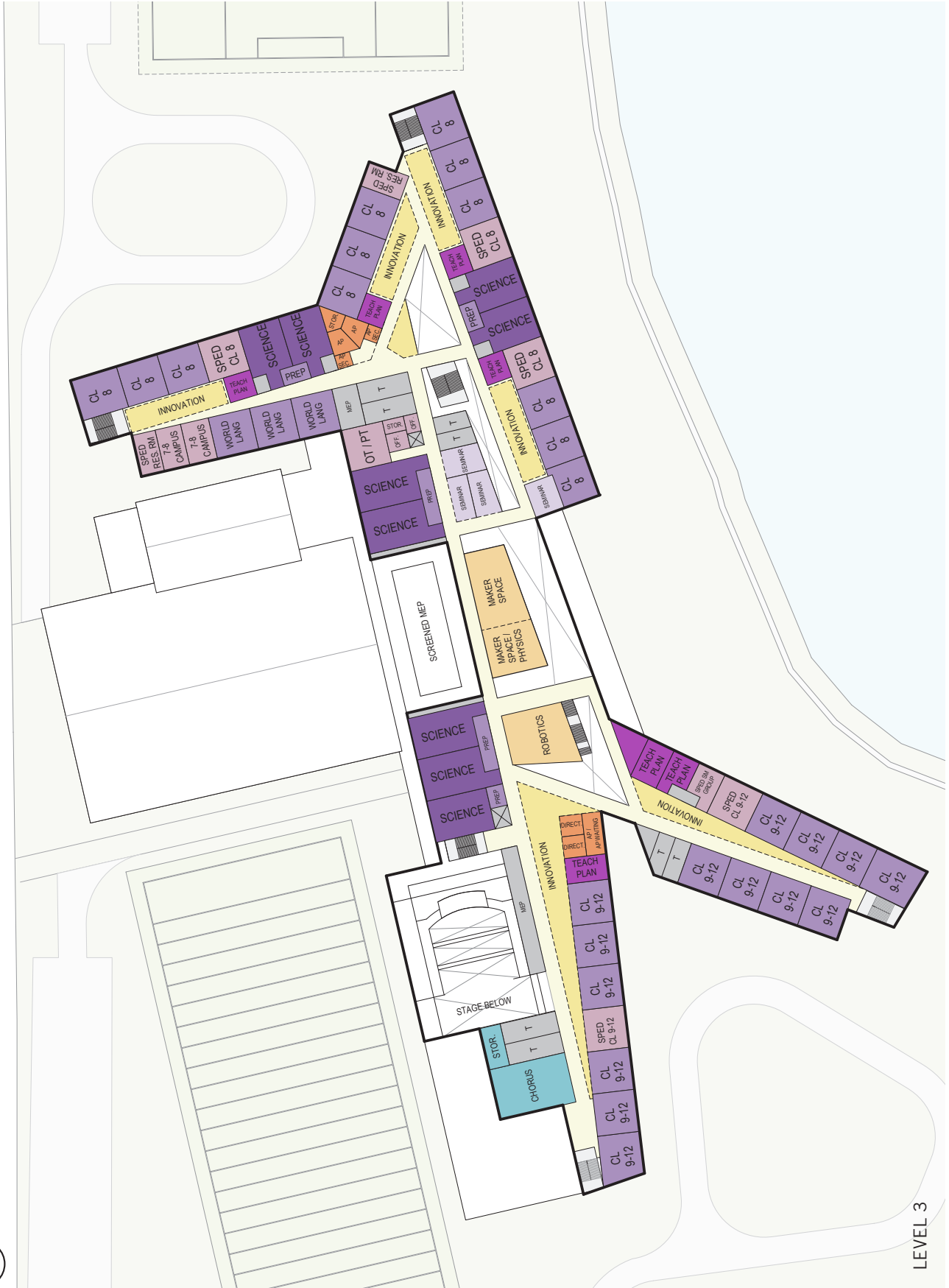


LEVEL 2

PSR REV.1/ 3.3.4 REVISED
 PSR REV 1/ DOCUMENTS
 3.3.7

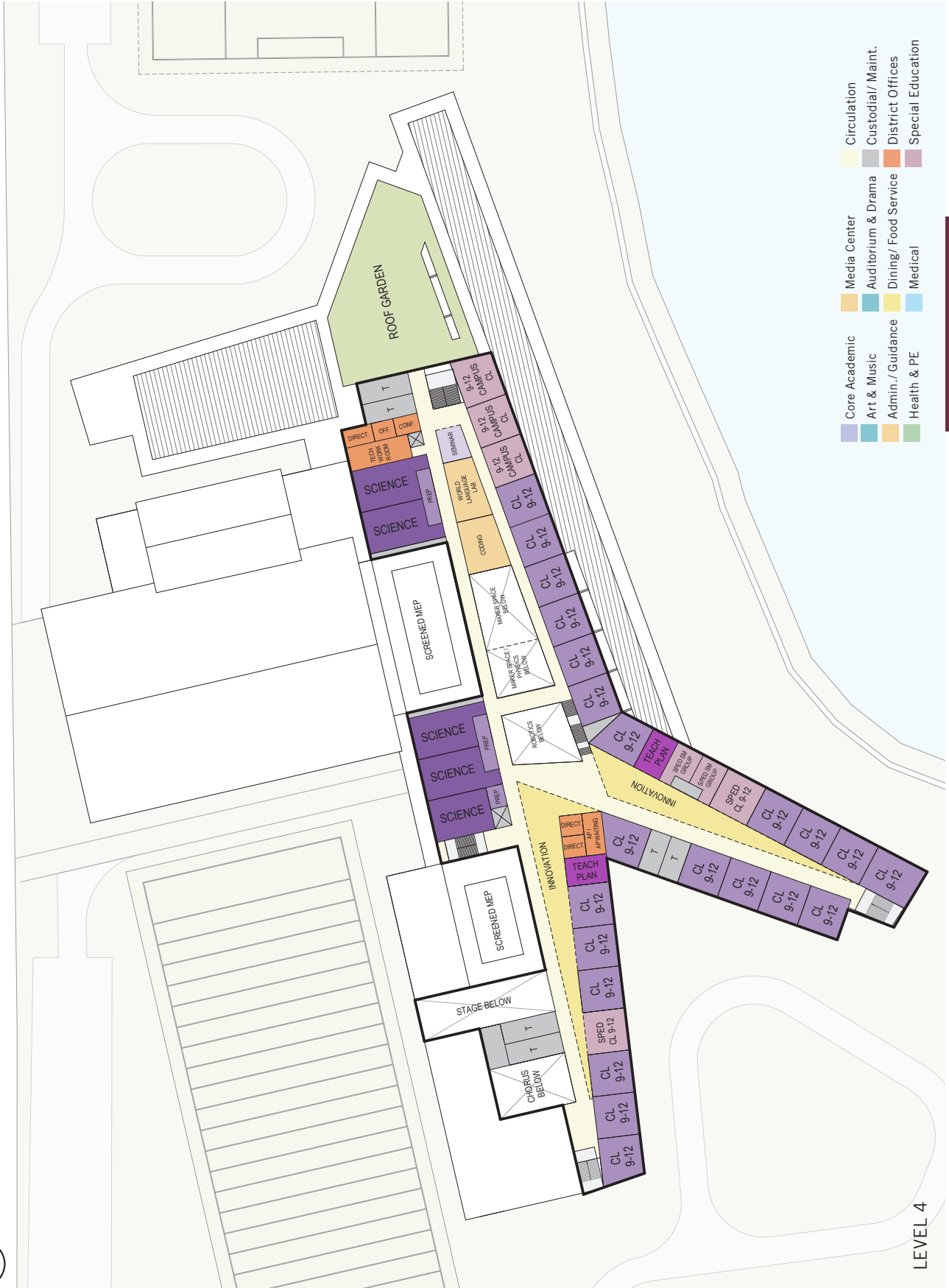
3.3.7 - PSR REV.1/ 3.3.4 REVISION

E. BUILDING PLANS REV.1 / Level 3



LEVEL 3

E. BUILDING PLANS REV.1 / Level 4



- Core Academic
- Art & Music
- Admin./ Guidance
- Health & PE
- Media Center
- Auditorium & Drama
- Dining/ Food Service
- Medical
- Circulation
- Custodial/ Maint.
- District Offices
- Special Education

LEVEL 4

PSR REV.1/ 3.3.4 REVISED

PSR REV 1/ DOCUMENTS

3.3.7

3.3.6

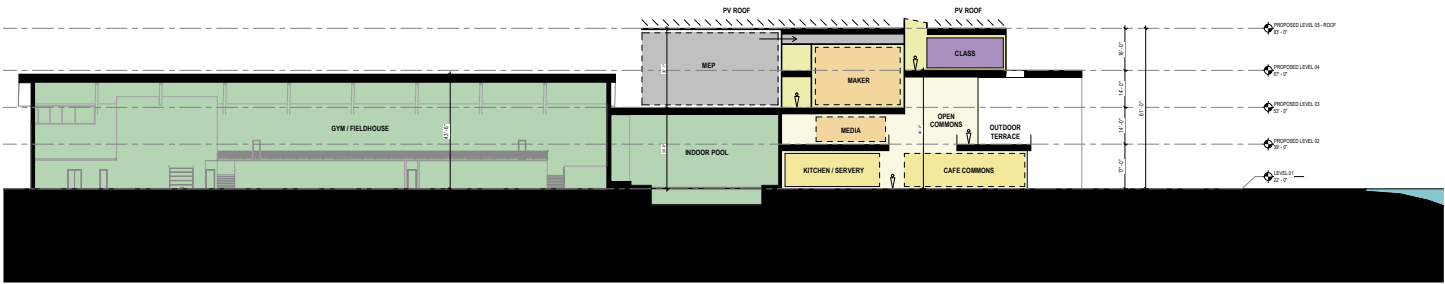
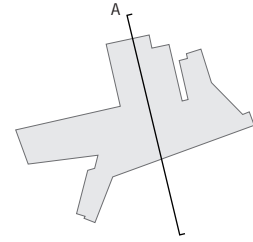
3.3.7 - PSR REV.1/ 3.3.4 REVISION

E. BUILDING PLANS REV.1 / Section

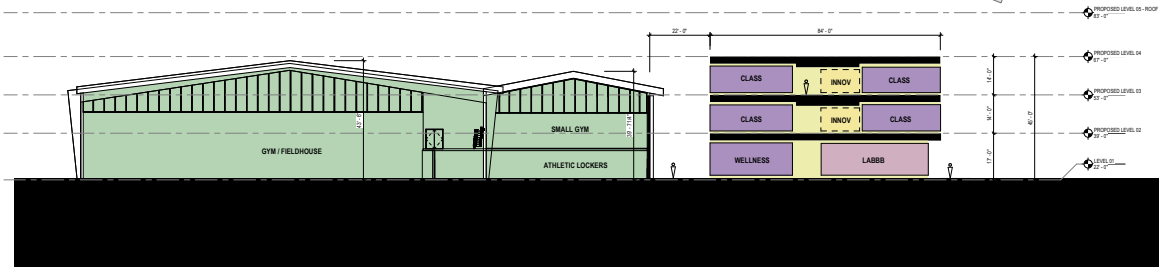
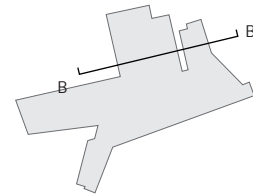


ROOF PLAN

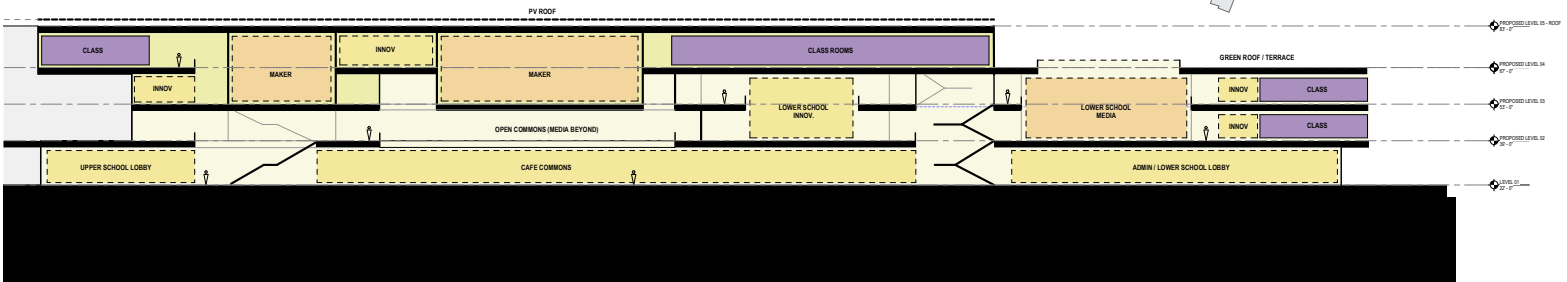
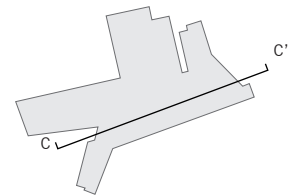
E. BUILDING PLANS REV.1 / Section



NEW SECTION A-A'



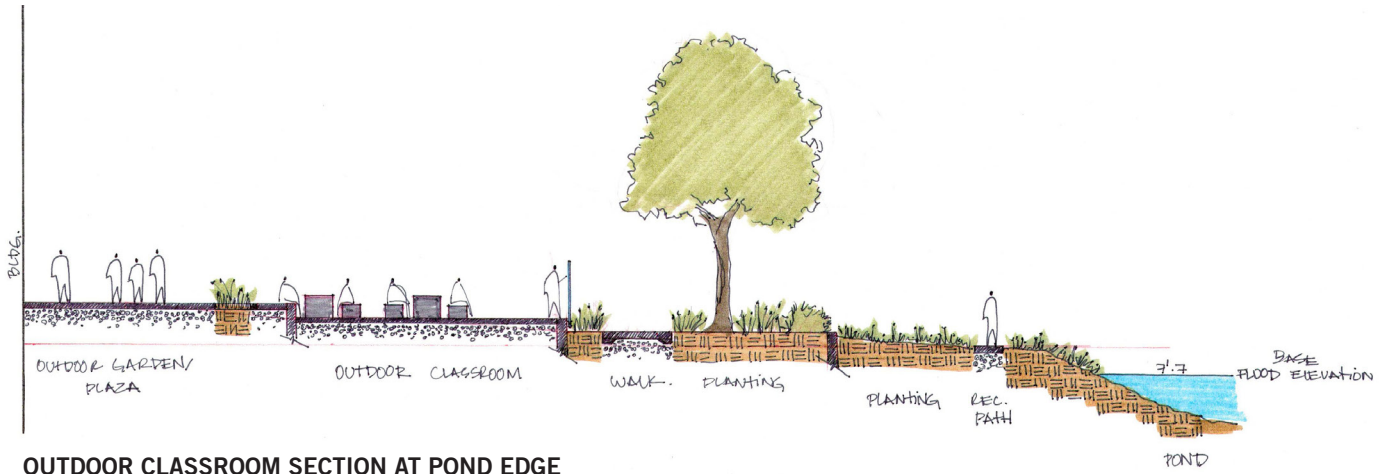
NEW SECTION B-B'



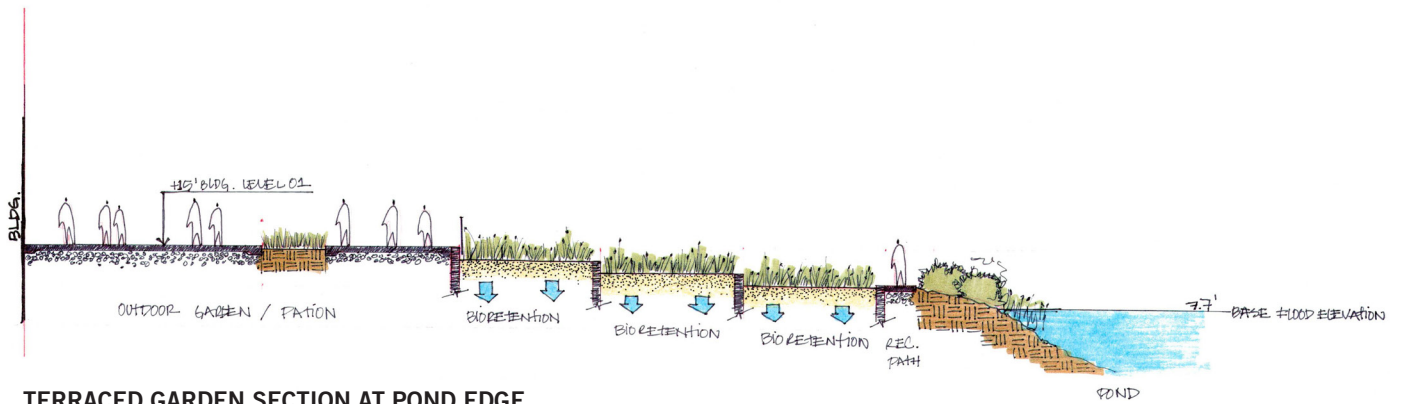
NEW SECTION C-C'

3.3.7 - PSR REV.1/ 3.3.4 REVISION

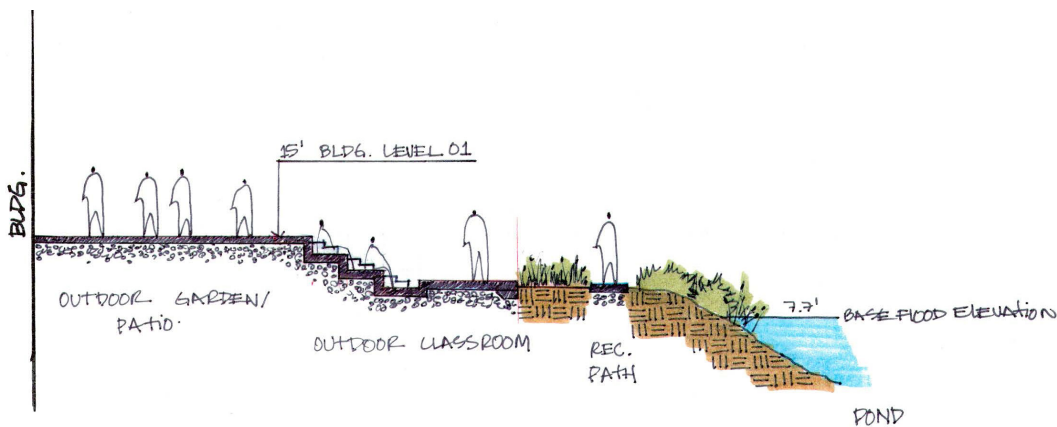
F. SITE PLAN REV.1 / Site Concept Sections



OUTDOOR CLASSROOM SECTION AT POND EDGE

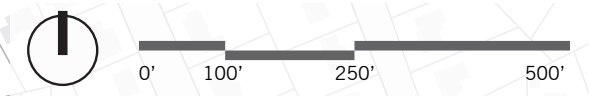


TERRACED GARDEN SECTION AT POND EDGE



STEPPED SEATING SECTION AT POND EDGE

F. SITE PLAN REV.1



PSR REV.1/ 3.3.4 REVISED

PSR REV 1/ DOCUMENTS 3.3.7

3.3.7 - PSR REV.1/ 3.3.4 REVISION

F. SITE PLAN REV.1



F. SITE PLAN REV.1 / Studies



VIEW TOWARDS CIVIC AND LEARNING COMMONS



VIEW TOWARDS CONNECTING STAIR TO CORE SPACES



EAST VIEW TOWARDS ENCLOSED LEARNING COMMON

PSR REV.1/ 3.3.4 REVISED

3.3.6

PSR REV 1/ DOCUMENTS

3.3.7

3.3.7 - PSR REV.1/ 3.3.4 REVISION

G. BUDGET REV.1

PSR 3.3.4 G BUDGET OVERVIEW

Perkins and Will's consultant PM&C prepared a detailed cost estimate for the preferred schematic Option 2.4R1. Daedalus Projects prepared an independent cost estimate. The spread between these two estimates was less than 3%.

ESTIMATED TOTAL CONSTRUCTION COST

\$237.6 M

ESTIMATED TOTAL PROJECT COST

\$295.8 M

ESTIMATED FUNDING CAPACITY

The Town of Belmont intends to issue General Obligation Bonds to fund the Town's share of the total project cost for the new school. The Town's debt limit is \$325,574,620 based on recently released 2016 EQV amounts. The Town has \$79,871,739 in debt outstanding currently, of which \$50,803,723 is self-supporting debt funded by user charges not the tax levy. The Town has an additional \$4,977,489 in authorized and unissued debt. The Town is operating sufficiently below the debt limit so will be able to adequately cover the anticipated bonding needs resulting from an approved project which will be funded through a voter approved debt exclusion.

LIST OF OTHER MUNICIPAL PROJECTS UNDERWAY

As well as the proposed Belmont High School project the Town's Capital Project List includes the following potential projects: Belmont Public Library, Belmont Police Station, Belmont Department of Public Works and the Hockey Rink. Some of these projects are expected to move in the near future. The Library is in the process of forming a building committee and will have a Schematic Design completed in the summer or fall of 2018. This project will be funded by a combination of private fund raising and a Debt Exclusion (with a target date for construction to begin in 2021 or 2022).

A building committee has been formed to plan for interim renovations to the Police Station and the Department of Public Works. The construction for this should begin in 2019 and will most likely be funded by short term borrowing. A plan for full replacement of both of these

facilities is also underway and that construction is planned to happen in about 8 - 10 years (2026 or 2028). The most likely funding source for these two facilities will also be a debt exclusion.

The hockey rink is going to be funded privately and will occur either just before or just after the construction for Belmont High School (both facilities are on the same campus).

DISTRICT'S NOT-TO-EXCEED TOTAL PROJECT BUDGET

It is anticipated that the total project budget for the Preferred Schematic Option 2.4R1 will be in the range of \$290 – 300 M.

The final not to exceed project budget will be established during the Schematic Design Phase prior to the debt exclusion vote.

LOCAL PROCESS FOR FUNDING PROJECT

The borrowing authorization for the new Belmont High School will be through a debt exclusion ballot vote. This debt exclusion ballot is anticipated to occur in November 2018 or April 2019 and requires a simple majority vote for approval.

ESTIMATED IMPACT TO LOCAL PROPERTY TAX

Moody's investment service has assigned an AAA bond rating to the Town of Belmont's outstanding debt.

The Town has provided an analysis of the tax impact to the Residents based on an anticipated Town cost of \$231.8 M. The illustration below shows the impact on the real estate property tax based on a 30-year equal principal bond at a rate of 4.0%.

Principal	\$231.8M
Rate	4.0%
Term	30 years
Per 100k Assessed Value	\$184.00
Cost on \$1.0M (average assessed home value)	\$1,840.00 per year

G. BUDGET REV.1

A more detailed analysis of the tax impact to the Town will be conducted when the Total Project Budget is established.

CAPITAL BUDGET WORKSHEET

The required Capital Budget Statement worksheet is included in this section.

3.3.7 - PSR REV.1/ 3.3.4 REVISION

H. BUDGET STATEMENT REV.1 / Expenditures

Budget Statement for Preferred Schematic - Expenditures Belmont High School

February 12, 2018

Category	2015-2016		2016-2017		2017-2018		Change from Previous Year		Post-Construction Budget		New Facility vs. Current Budget	
	Staff (FTE)	Budget	Staff (FTE)	Budget	Staff	Budget	Staff (FTE)	Budget	Staff	Budget	Staff (FTE)	Budget
Salaries												
Administration	4.00	176,995	4.00	179,100	4.00	182,738	0.00	3,637	4.00	182,738	0.00	-
Assistant Principal	3.01	338,848	3.01	352,225	3.28	396,254	0.27	44,029	3.28	396,254	0.00	-
Business Office	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Curriculum Director/Coord.	3.68	382,504	3.68	406,462	3.68	423,594	0.00	17,132	3.68	423,594	0.00	-
Custodians/Maintenance Staff	4.75	282,301	4.80	238,244	4.80	254,464	0.30	16,219	8.15	432,014	3.35	177,550
Executive Secretary	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Facilities Manager	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Guidance	8.00	584,770	9.50	731,536	9.50	726,961	0.00	(4,676)	9.50	726,961	0.00	-
Health Services	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Instructional Counselor	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Guidance Counselors	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Guidance Director	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Legal	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Nurse	2.70	205,482	2.80	228,101	2.80	244,639	0.00	16,738	2.80	244,639	0.00	-
Other	4.88	145,477	4.88	147,965	3.23	110,085	-1.65	(37,880)	3.23	110,085	0.00	-
Principal	0.99	114,299	0.99	118,536	1.12	137,954	0.13	19,117	1.12	137,954	0.00	-
Special Education Admin	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Superintendent/Asst. Superintendent	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Technology	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Treasurer	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Total Administration	32.01	2,220,673	33.36	2,402,469	32.41	2,476,786	-0.95	74,317	35.76	2,654,337	3.35	177,550
Instruction - Teaching Services												
Arts	6.90	778,380	7.30	822,525	7.05	860,917	-0.25	38,383	7.05	860,917	0.00	-
Business	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Communications	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Coping Instructor	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Courtesy/Arts	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
ELL	4.80	308,772	4.50	294,900	5.00	363,257	0.50	68,357	5.00	363,257	0.00	-
English Language	17.60	1,431,596	18.25	1,491,139	18.00	1,517,475	-0.25	26,336	18.00	1,517,475	0.00	-
Family Consumer Services	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Foreign Language	14.05	1,151,737	14.25	1,216,651	14.25	1,225,258	0.00	8,607	14.25	1,225,258	0.00	-
Health Services	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
History & Social Science	19.60	1,960,684	19.35	1,610,027	19.30	1,702,309	0.25	92,282	19.30	1,702,309	0.00	-
Instructional Assistant/Paraprofessionals	2.90	135,261	2.65	148,716	2.49	148,230	-0.16	(286)	2.49	148,230	0.00	-
Mathematics	18.60	1,481,366	19.00	1,470,268	19.00	1,538,553	0.00	68,285	19.00	1,538,553	0.00	-
MCAS	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Music	4.92	420,911	4.92	438,007	4.92	455,855	0.00	17,847	4.92	455,855	0.00	-
Other	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Physical Education	4.73	350,227	5.28	396,111	4.43	358,287	-0.85	(27,824)	4.43	358,287	0.00	-
Reading	1.00	92,401	1.00	95,752	1.00	98,319	0.00	4,567	1.00	98,319	0.00	-
School Adjustment Counselor	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Science	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Biology	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Botany	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Chemistry	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Geology	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Physics	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Special Education	32.88	1,908,624	36.72	2,077,557	36.23	2,088,011	-0.48	10,454	36.23	2,088,011	0.00	-
Substitute Teachers	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Technology	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Vocational Tech.	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	-
Total Instruction - Teaching Services	148.82	11,174,543	153.15	11,754,683	152.11	12,075,276	-1.04	320,593	152.11	12,075,276	0.00	-
Total Salaries Administration & Instruction	178.83	13,395,216	186.51	14,157,153	184.52	14,552,063	-1.99	394,910	187.87	14,729,613	3.35	177,550
Employee Benefits												
All employee-related fringe (health insurance, retirement etc)	-	-	-	1,525,700	-	1,879,503	-	153,806	-	1,679,505	-	-
Materials & Services												
Materials												
Audio-Visual Materials	-	-	-	1,250	-	1,000	(250)	-	-	1,000	-	-
Culinary Arts Materials	-	-	-	63,895	-	63,595	(290)	-	-	63,595	-	-
General Office Supplies	-	-	-	-	-	-	-	-	-	-	-	-
Information Technology	-	-	-	-	-	-	-	-	-	-	-	-
Hardware	-	-	-	-	-	-	-	-	-	-	-	-
Software	-	-	-	-	-	-	-	-	-	-	-	-
Library Materials	-	-	-	-	-	-	-	-	-	-	-	-
Non info-tech equipment	-	-	-	5,500	-	5,000	(500)	-	-	5,000	-	-
Testing Materials & Supplies	-	-	-	-	-	-	-	-	-	-	-	-
Textbooks	-	-	-	33,120	-	30,950	(2,170)	-	-	30,950	-	-
Vocational Program Materials	-	-	-	-	-	-	-	-	-	-	-	-
Total Materials		92,683		105,675		100,505	(3,170)			100,505		-

H. BUDGET STATEMENT REV.1 / Revenues

February 12, 2018

Budget Statement for Preferred Schematic - Revenue Belmont High School

As reported on the school district's most recent three End of Year Pupil and Financial Reports schedule 1, please update to the 3 latest fiscal year periods and report sources of revenue in the fields below.

	FY15 End of Year Financial Report					FY16 End of Year Financial Report					FY17 End of Year Financial Report											
	Regular Day	Special Education	Occupational Day	Adult Education	Other Programs	Un-distributed	Total	Regular Day	Special Education	Occupational Day	Adult Education	Other Programs	Un-distributed	Total	Regular Day	Special Education	Occupational Day	Adult Education	Other Programs	Un-distributed	Total	
A. Revenue from Local Sources																						
Assessments received by Regional Schools																						
Edo Fund Appropriations																						
Tuition from Other Districts in Comm.																						
Tuition from Other Districts in Other States																						
Previous Year Unexpended Encumbrance (Carry Forward)																						
Transportation Fees																						
Events																						
Rental of School Facilities																						
Other Revenue																						
Medical Care and Assistance																						
Non Revenue Receipts																						
Total Revenue From Local Sources							44,995							44,995								15,034
B. Revenue from State Aid																						
School Aid (Chapter 70)																						
Mass School Building Authority - Construction Aid																						
Mass School Building Authority - Construction Aid																						
Pupil Transportation (Ch. 71, 71A, 71B, 71C)																						
Charter School Reimbursements & Charter Facilities Aid																						
Charter Breaker																						
Foundation Reserve																						
Total Revenue From State Aid							7,621,742							7,621,742								15,034
C. Revenue from Federal Grants																						
ESSE Administered Grants																						
Direct Federal Grants																						
Total Revenue Federal Grants							103,550							103,550								15,034
D. Revenue from State Grants																						
ESSE Administered Grants																						
Other State Grants																						
Total Revenue From State Grants							629,711							629,711								15,034
E. Revenue - Revolving & Special Funds																						
Athletic Receipts																						
Athletic Receipts																						
Tuition Receipts - School Choice																						
Tuition Receipts - Other																						
Other Local Receipts																						
Other Local Receipts																						
Total Revenue Revolving & Special Funds							181,973							181,973								15,034
Total Revenue All Sources							11,009,306							11,009,306								15,034

