B. MSBA Reviews
   1. PSR Review and District Response *
   2. PDP Review and District Response

*** Updated 02/18/2020**

This document has been updated by LPA|A with comments for the purpose of preparing a coordinated response from the District, OPM and LPA|A. Coordinated responses to specific MSBA comments are in red with 11-point Gothic A1 font.

ATTACHMENT A
MODULE 3 – PREFERRED SCHEMATIC REPORT REVIEW COMMENTS

District: City of Worcester
School: Doherty Memorial High School
Owner's Project Manager: AECOM Tishman
Designer Firm: Lamoureux Pagano Associates
Submittal Due Date: January 2, 2020
Submittal Received Date: December 31, 2019
Review Date: December 31, 2019 – January 24, 2020
Reviewed by: C. Forde and J. Jumpe

MSBA REVIEW COMMENTS

The following comments[1] on the Preferred Schematic Report ("PSR") 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.

3.3 PREFERRED SCHEMATIC REPORT

Overview of Preferred Schematic Submittal	Complete	Provided; *Refer to comments following each section*	Not Provided; *Refer to comments following each section*	Receipt of District's Response; *To be filled out by MSBA Staff*
OPM Certification of Completeness and Conformity	☒	☐	☐	☐
Table of Contents	☒	☐	☐	☐
3.3.1 Introduction	☒	☐	☐	☐
3.3.2 Evaluation of Existing Conditions	☒	☐	☐	☐
3.3.3 Final Evaluation of Alternatives	☐	☒	☐	☐
3.3.4 Preferred Solution	☐	☒	☐	☐
3.3.5 Local Actions and Approval Certification	☒	☐	☐	☐

[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.

3.3.1 INTRODUCTION

	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	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	☒	☐	☐	☐
2	Summary of updated project schedule, including				
	a) Projected MSBA Board of Directors Meeting for approval of Project Scope and Budget Agreement	☒	☐	☐	☐
	b) Projected Town/City vote for Project Scope and Budget Agreement	☒	☐	☐	☐
	c) Anticipated start of construction	☒	☐	☐	☐
	d) Target move in date	☒	☐	☐	☐
3	Summary of the final evaluation of existing conditions	☒	☐	☐	☐
4	Summary of final evaluation of alternatives	☒	☐	☐	☐
5	Summary of District's preferred solution	☒	☐	☐	☐
6	A copy of the MSBA Preliminary Design Program project review and corresponding District response	☒	☐	☐	☐

MSBA Review Comments:

No review comments for this section.

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	☒	☐	☐	☐
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	☒	☐	☐	☐

MSBA Review Comments:

No 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	☒	☐	☐	☐
	b) Building footprint(s)	☒	☐	☐	☐
	c) Athletic fields	☒	☐	☐	☐
	d) Parking areas and drives	☒	☐	☐	☐
	e) Bus and parent drop-off areas	☒	☐	☐	☐
	f) Site access and surrounding site features.	☒	☐	☐	☐
2	Evaluation of the potential impact that construction of each option will have on students and measures recommended to mitigate impact	☐	☒	☐	☐
3	Conceptual architectural and site drawings that satisfy the requirements of the education program	☒	☐	☐	☐
4	An outline of the major building structural systems	☒	☐	☐	☐
5	The source, capacities, and method of obtaining all utilities	☒	☐	☐	☐
6	A narrative of the major building systems	☒	☐	☐	☐
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)	☒	☐	☐	☐
8	Permitting requirements and associated approval schedule	☒	☐	☐	☐
9	Proposed project design and construction schedule including consideration of phasing	☒	☐	☐	☐
10	Completed Table 1 – MSBA Summary of Preliminary Design Pricing spreadsheet	☒	☐	☐	☐

MSBA Review Comments:

2) Provide the following information in the District's Schematic Design submission:

- *Clearly describe and illustrate the separation, safety provisions, and possible construction laydown areas that will be applied during construction on the occupied site for the Preferred Schematic.*

  LPA|A Response: This will be provided in the SD submission.

- *Describe and illustrate future expansion of the building design.*

  LPA|A Response: This will be provided in the SD submission.

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				
	a) Summary of key components and how the preferred solution fulfills the educational program	☐	☒	☐	☐
	b) Design responses including desired features and/or layout considerations	☒	☐	☐	☐
	c) Proposed variances to, and benefits of, any changes to the current grade configuration (if any) and a related transition plan	☐	☐	☐	☐
2	Preferred Solution Space Summary				
	a) Updated MSBA Space Summary spreadsheet	☐	☒	☐	☐
	b) Itemization and explanation of variations from the initial space summary (and MSBA review) included in the Preliminary Design Program	☒	☐	☐	☐
3	Preliminary NE-CHPS or LEED-S scorecard	☒	☐	☐	☐
4	Conceptual floor plans of the preferred solution, in color that are clearly labeled to identify educational spaces	☐	☒	☐	☐
5	Clearly labeled site plans of the preferred solution including, but not limited to:				
	a) Structures and boundaries	☒	☐	☐	☐
	b) Site access and circulation	☒	☐	☐	☐
	c) Parking and paving	☒	☐	☐	☐
	d) Zoning setbacks and limitations	☒	☐	☐	☐

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*
	e) Easements and environmental buffers	☐	☐	☒	☐
	f) Emergency vehicle access	☐	☐	☒	☐
	g) Safety and security features	☐	☐	☒	☐
	h) Utilities	☒	☐	☐	☐
	i) Athletic fields and outdoor educational spaces (existing and proposed)	☐	☒	☐	☐
	j) Site orientation	☒	☐	☐	☐
6	An overview of the Total Project Budget and local funding including the following:				
	a) Estimated total construction cost	☒	☐	☐	☐
	b) Estimated total project cost	☒	☐	☐	☐
	c) Estimated funding capacity	☒	☐	☐	☐
	d) List of other municipal projects currently planned or in progress	☒	☐	☐	☐
	e) District's not-to-exceed Total Project Budget	☐	☐	☒	☐
	f) Brief description of the local process for authorization and funding of the proposed project	☐	☒	☐	☐
	g) Estimated impact to local property tax, if applicable	☐	☐	☒	☐
	h) Completed MSBA Budget Statement	☒	☐	☐	☐
7	Updated Project Schedule including the following projected dates:				
	a) Massachusetts Historical Commission Project Notification Form	☐	☐	☒	☐
	b) MSBA Board of Directors meeting for approval to proceed into Schematic Design	☒	☐	☐	☐
	c) MSBA Board of Directors meeting for approval of project scope and budget agreement and project funding agreement	☒	☐	☐	☐
	d) Town/City vote for project scope and budget agreement	☒	☐	☐	☐
	e) Design Development submittal date	☒	☐	☐	☐
	f) MSBA Design Development Submittal Review (include required 21-day duration)	☒	☐	☐	☐
	g) 60% Construction Documents submittal date	☒	☐	☐	☐
	h) MSBA 60% Construction Documents Submittal Review (include required 21-day duration)	☒	☐	☐	☐
	i) 90% Construction Documents submittal date	☒	☐	☐	☐

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*
	j) MSBA 90% Construction Documents Submittal Review (include required 21-day duration)	☒	☐	☐	☐
	k) Anticipated bid date/GMP execution date	☒	☐	☐	☐
	l) Construction start	☒	☐	☐	☐
	m) Move-in date	☒	☐	☐	☐
	n) Substantial completion	☒	☐	☐	☐

MSBA Review Comments:

Provide responses to the following items as part of the District's updated Preferred Schematic Report.

1a) Provide the following information:

- *The MSBA's science facility guidelines call for classroom laboratory spaces that can support investigations and analysis at any time and not just during scheduled double periods. Describe the reasons for the current schedule and how this this approach can be supported by the seven-period strategy.*

  District Response: We concur that investigations and analysis can be supported at any time and not just during scheduled double periods. With the exception of the Advanced Placement courses that are governed by the College Board, we do not have double periods for science classes and have not since 2002. Rather, we utilize a seven-period day with 47-minute classes. This districtwide schedule has proven to be suitable for investigations in classroom lab spaces and has allowed students throughout the district to participate in Early College Worcester and dual enrollment initiatives at many of our local colleges and universities.

  Throughout the district, science educators, facilitated by the curriculum liaison, have reviewed and updated curriculum resources for science classes. This includes creating a repository of model learning activities, including laboratory investigations that have been vetted by veteran educators from across the city. As all schools utilize a common schedule, these learning activities and laboratory investigations are designed to fit within this schedule.

- *The information provided indicates that students are assigned to clusters alphabetically. Please note this can result in cultural linguistic segregation because of ethnic surnames. Has the District considered alternate assignment procedures?*

DMHS Response: To clarify, Doherty students are divided among and assigned to one of four administrators based on an alphabetical system. Students are not clustered alphabetically for the purposes of teaming or assigned to classes alphabetically nor are there any plans to do so. The only exception to the alphabetical system for distribution among the administrators is that all students who are members of the Engineering and Technology Academy are assigned to the same administrator. All administrator assignments remain consistent and follow the same students for all of their four years of high school in order to support relationships.

- *As previously noted in MSBA's PDP Review Comments, the information provided indicates that science classes range from 24 to 27 students. The MSBA's science lab guidelines are written to accommodate no more than 24 students per lab. The District's response to MSBA's PDP Review Comments stated that, "The Worcester Public Schools contract designates a maximum teacher load of 125 students, and all teachers are assigned five teaching periods, resulting in 25 students per class. All classes will be scheduled with safety recommendations in mind." Please confirm.*

  District Response: Confirmed.

- *Provide additional information that describes more specifics regarding the curriculum, external partnering opportunities, scheduling, and staffing associated with the Advanced Academy in Biotechnology program. Please clarify how the District intends to integrate this program with other disciplines (ex. Social Studies, Ethics, English, etc.) in terms of curriculum and building adjacencies.*

  District Response: Students in the Advanced Academy at Doherty will utilize the Project Lead the Way, (PLTW), curriculum for Biomedical Science each year and will participate in Advanced Placement coursework. In order to build external partners, we are forming an advisory council comprised of community members including higher education representatives. We will strengthen our partnership with Worcester Polytechnic Institute, (WPI), with whom we already work closely with respect to the Engineering and Technology Academy. WPI is a local training site for PLTW coursework, in addition to having a strong biotechnology and bioengineering department.

  These students will be scheduled in two groups as a part of a grade 9 interdisciplinary team, which will provide opportunities to integrate the study of ethics. There is an ethics component in the curriculum of the current Biotechnology course. In addition, bioethics is a

theme woven throughout the four-year PLTW Biomedical Science curriculum. These students will be scheduled together for all four grades in order to complete the PLTW sequence. Staff for the Advanced Academy will be hired in advance of the opening of the proposed new building opening of fall 2024 to ensure appropriate cross-curricular planning.

- *Further describe the proposed layout of the auditorium and how it can be accessed by adjacent programs/spaces. Has the District considered alternate locations within the building and/or relocating the stage to the opposite side of the auditorium to allow increased flexibility and sharing of the stage with the makerspaces?*

  LPA|A Response: The auditorium has desirable adjacencies to programs under the Drama and Art & Music categories. While it is understood that the maker space could benefit from a direct adjacency to the stage, a higher programmatic priority is a location suitable for joint use of all three departments. The role of the "The Arts" Maker Space is to be a multi-department resource, not exclusive to set building and the Theater/Performing Arts. The current location is ideal for these additional reasons:

  A. Its current location promotes connectivity to the Main Building Courtyard where large 3d art, among other media types are envisioned to be made and easily transported to the courtyard or main lobby.

  B. Throughout any given year, only a handful of theater sets need to be constructed. It is envisioned that the primary means for materials to be delivered is through the building receiving area, which will have a loading dock. Materials would be carted to the set storage space. The set storage space allows for raw materials to be stored and unfinished components to be stored. It is envisioned that the stage be the primary assembly area (as it is now), where school wide resources are used to prepare components. The arts maker space allows for the theater department a safer and more properly equipped space to prepare theater set components. Collaboration between Art, Music, and Theatrical Departments is envisioned with respect to the Arts Maker Space.

- *Please confirm the basis of design used by the District in programming and designing spaces for its proposed new and existing Chapter 74 programs including the proposed number of hours to deliver the curriculum, the number of students for each program and any planned partnering programs. Please discuss the District's ongoing review of the Construction Craft Labor space and how this may affect the size, location or adjacency of this proposed space. Please discuss the District's plan including the timing to add three new programs into the new building including any plans to begin developing curriculum for these programs, hiring staff and introducing the program within the existing building.*

District Response: While the week-on, week-off approach is common in many vocational schools, Doherty students will engage in vocational curriculum and related theory coursework for two periods, out of our seven -period schedule, each day throughout the year. This corresponds to 135 hours in their shop class and 135 hours in a shop-related class each year, for a total of 1080 hours in which students are engaging with the curriculum. This schedule applies to the three new programs: Marketing, Management and Finance; Construction Craft Laborer; and Programming and Web Development.

Using the student to staff ratios outlined in the respective Framework, Doherty is planning for two sections for each grade within each program. For example, in grade nine there will be two sections of Programming and Web Development with 20 students each (20:1 ratio), for a total of 40 grade nine students in the vocational program. In total, 160 students will be enrolled in this trade. Similarly, Marketing, Management and Finance outlines a 20:1 ratio for an expected total enrollment of 160 students. Construction Craft Laborer outlines a 15:1 ratio for an expected total enrollment of 120 students.

The Engineering Technology vocational program is established: there is a four-year curriculum currently in place supported by four teachers.

An advisory council has been established for each additional vocational program, and the board's role, in part, is to facilitate the design of the space, identify industry-standard hardware and software, as well as to align curriculum to industry-standard practices. In addition, WPS and LPA representatives have visited numerous schools and trade programs across the region in order to explore and gain insight about the implementation of their respective vocational programming. These visits are continuing into 2020.

There is currently a CTE program offered within the Marketing Framework within the existing building. Doherty's course offerings include Marketing I and Marketing II, and new for the 2019-2020 school year, Doherty offered Accounting I and Introduction to Business courses. Doherty has a vocationally licensed Marketing teacher, and hired another teacher for the 2019-2020 school year who is currently in the process of earning similar licensure. These staff members, in collaboration with the advisory board and current vocational teachers within the district, are aligning our current coursework and identifying additional courses to provide 4 years of vocational instruction.

There are currently several courses offered that align with and support the Framework for Programming and Web Development. These include an introductory course in Computer Programming, as well as Advanced Placement Computer Science Principles and Advanced Placement Computer Science A. At this time, there is not a formal CTE pathway within this

Framework, but Doherty will expand and align its course offerings to establish a CTE Programming pathway. At this time, there are several licensed (non-vocational) staff members within the department. These staff members, in collaboration with the advisory board and current vocational teachers within the district, are aligning our current coursework and identifying additional courses to, (1) establish the CTE program, and then (2) outline four years of vocational instruction. Vocationally licensed staff will be hired for this Chapter 74 program in advance of the proposed new school opening.

The district continues the development of the Construction Craft Laborer (CCL) program. As mentioned, representatives from the Worcester Public Schools and Lamoureux Pagano Associates have visited numerous schools and training programs across Massachusetts and Rhode Island. Since the PSR submission, the project team has also toured the New England Laborer's Labor Management Cooperation Trust facility in Hopkinton, MA. During each visit, the design team is clarifying the optimal size and layout of the proposed space. The design team believes the net square footage (NSF) and staff allocated to this program are sufficient. The conversations now are focusing on the type, number and layout of the equipment and architectural features needed to deliver the curriculum. The current proposed space is on grade level providing easy exterior access, and is adjacent to the Engineering Technology program so as to engage collaboratively and share resources as needed.

Unlike the other two proposed programs, due to a lack of space in the current facility, it is unlikely that students will be able to participate in the CCL program until the proposed opening of the new facility in 2024. As outlined at length within the CVTE submission and the PDP, there is a demonstrable need for the proposed additional Chapter 74 programs within the district and the central Massachusetts region. Staff will be hired in advance of the 2024 opening in order to ensure the prompt and effective implementation of this program with guidance from the advisory board and our vocational partners.

2a) Please refer to 'Attachment B' for detailed review comments.

4) Provide the following information:

- *Illustrate how students will:*
  - *transition into the school from the drop off areas;*
  - *transition from the classrooms to the cafeteria; and*
  - *exit the school at time of dismissal.*

LPA|A Response: Refer to the attachments:

- Vehicular Circulation Diagram

- Building Circulation Diagrams
- Pedestrian Flow Diagram

- *Provide the same information for an individual that is physically challenged. Please note the intent is to understand how students will be traveling through the building on a daily basis.*

  LPA|A Response: Refer to the attached "Building Circulation Diagram".

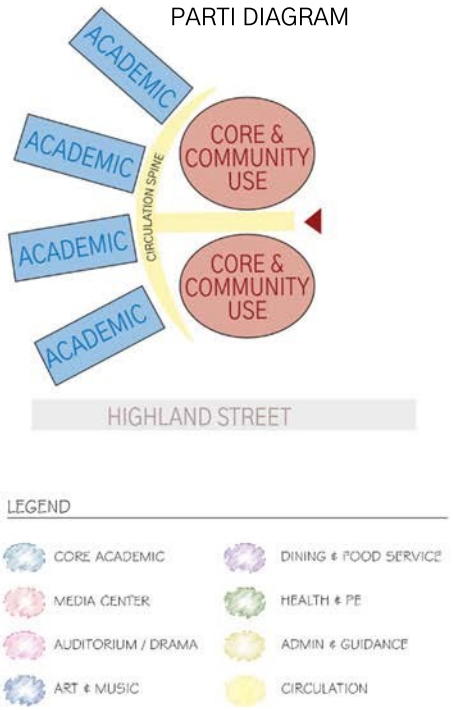
- *Describe how students will circulate through the building and confirm that the design and location of the elevators is adequate to meet the needs of the students.*

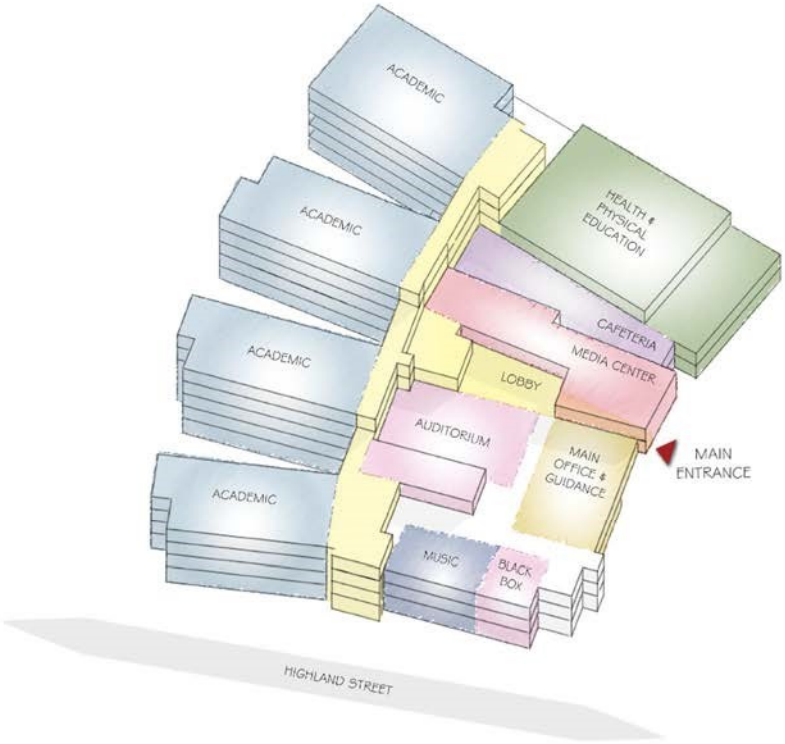
  LPA|A Response: Refer to the attached "Building Circulation Diagram". The elevators are strategically located to provide equitable access to all levels of the school, and will be sized accordingly in the Schematic Design Phase.

- *If the building is intended to be used by the community, please describe how the building:*
  - *will be used by the community;*
  - *will be secured and monitored; and*
  - *how the community will enter the building.*

  LPA|A Response: The overall building design and organization lends itself to be a community resource. Various flexible barrier measures will be implemented to allow for individual or joint use of key community spaces. The following spaces are being considered for community use:
  - Auditorium
  - Black Box Theatre
  - Cafeteria
  - Gymnasium
  - Weight Room
  - Adaptive PE Space
  - Alternate PE: Wellness / Multi-Purpose Gym studio
  - PE classrooms
  - Media Center
  - Multi-Media Maker Space (Adjacent to Media Center (separate from Arts Maker Space)
  - Arts Maker Space (Adjacent to the Art, Music and Drama Department Spaces, separate from Multi-Media Maker Space)

Each of these spaces will be directly accessible off the main "tee" circulation corridors. The entrance to each academic pod on every floor will be locked off. Additional security barriers will isolate spaces to prevent access to other parts of the building while maintaining required egress routes. The building will be fully monitored via cameras throughout. The City of Worcester implements a welcoming but fully secure and monitored environment in all its schools. Additionally, refer to the Parti diagram, Building Program Distribution diagram and updated Floor Plans.





PROGRAM DISTRIBUTION DIAGRAM

- *Describe how the District intends to secure entrances of the proposed building for student and visitor access during the school day.*

  LPA|A Response: The proposed building will have a singular main entrance/control point on the Main Level, adjacent to the Main Office. At the beginning and end of the school day, both vestibule doors will be open, to facilitate the flow of students. Aside from these time periods, it is expected the doors will be locked, and visitors will be required to use the Video Entrance System (controlled by the main office staff) for access into the Vestibule, and then into the Main Office. All visitors and tardy students will be required to check in at the main office prior to being allowed or escorted through the balance of the school. Other doorways

to the building will be accessible by staff through the use of a fob or key card, and will not serve as entrances for the students. While certain program spaces require exterior access, these will be considered "exit only" and will not be utilized as student entrances. Refer to "Section P" of the Educational Program for additional information. Additional meetings with the school and district security personnel and police/ fire representatives will take place during the Schematic Design Phase.

- *Further describe and illustrate how the academic pods will be organized to align with the educational program. Also, provide diagrams that illustrate the flexibility the layout offers and the types of academic configurations that the District will be able to adapt to in the future. Also, describe and illustrate how students will circulate throughout the building.*

  LPA|A Response: The academic pods have been initially organized to reflect one of many configurations that support the educational program. Where the current ed plan calls for 9th grade teams, alliances with Math and Science, Social Studies and English, and Language for core academics. Additionally, there are alliances and clustering between Art & Music with Drama, Language with the Media Center, Construction Craft Laborer with the Engineering Technology Academy. As currently shown, each of these departments generally occupy one floor of two pods. The overall design intent is to provide as much flexibility with general classroom configuration and fit up to allow for additional organizational principles as the curriculum delivery methods may change over the years in the future. Refer to "Academic Organization Diagrams" for an illustration for additional simulations of classroom assignments are attached to highlight the areas that are flexible and how it can align with the educational program as well as adapt over time toward different goals. Also, refer to the attached "Building Circulation Diagrams" in regards to anticipated student circulation patterns.

5) Provide the following information:

- *As previously noted in MSBA's PDP Review Comments, "The information provided calls for outdoor workspaces adjacent to art classrooms. Ensure that any outdoor spaces provided are fully accessible to uses with mobility impairments. Please provide additional information that illustrates how these outdoor spaces will be designed as part of the District's Schematic Design submission.*

  LPA|A Response: All exterior spaces will be universally accessible for students, staff and faculty. The plaza space on the east at the lobby/ makerspace/ art wing elevation will be a combined flexible space for outdoor art programs, displays of student work and breakout space for students extending from the interior atrium space. This open space is

conceptualized as connecting the view towards the east through the core of the building visible from the entry drop off on the west. Seating, hardscape plaza, and landscaping is being studied as part of the exterior programming. Plaza space will be closed off from the service drive area with a fence and planted slope separating the bus/service drive physically from the 543' elevation plaza. Additionally, a gated maintenance and emergency exit pathway will be provided at this location.

- *Please describe opportunities for further development of the landscape design and how the proposed curriculum could be integrated with the outdoors and access Olmsted Park as part of this project.*

  LPA|A Response: The building and landscape design are envisioned to be as visually porous as possible to allow views to the adjacent park and woodland stitching the site into the landscape. The choice of materials, plants and design elements will support the connection to Newton Hill and the Olmsted history as much as feasible. Physical access to the trail system can be provided at Level 2 with doors from the gymnasium wing, and accessway to the southern end of the existing parking lot (to remain). This area is the trail head for the trail system in the park and the health access way loop. Opportunities to use the park for athletic /wellness training, curriculum living laboratory, and strengthened urban connections is anticipated. Pedestrian circulation throughout the site will be provided in a holistic manner linking paths to various destinations developing a campus-feel. The chapter 74, construction craft laborer (CCL) will likely have the capability to do trail improvements, sidewalks, and other park improvements at Newton Hill, Elm Park, and as reviewed with the City/Parks department.

- *Describe the process for further developing the site design, specific to the proposed paved surfaces including the number of parking spaces.*

  LPA|A Response: The overall goal of the landscape design is to create a contextual, pedestrian-oriented campus meeting the circulation and programmatic requirements appropriate for a high school of this size. Surface parking and vehicular circulation is being developed since the PSR phase to maximize efficiency while minimizing impervious surfaces and site walls. Universal pedestrian access will be provided to the main entry from the parking area and Highland Ave sidewalks. Outdoor dining and plaza areas will be accessible from building doors supporting adjacent programs.

Daily access to the athletic fields will be provided by a walkway from the gym south doors adjacent to the locker rooms running south of the parking lot to eliminate any conflicting circulation between pedestrians and vehicular circulation. A plaza, amenity building (restrooms, storage and field use) and bleachers are being developed and blend with the hillside.

The primary access walkway to the main entry bisects the parking lot and connects to the field plaza. This will be a material change from the parking lot with clear delineation of pedestrian use, lined with trees to provide shade and highlight the access.

Surface parking is being developed to be between 250-270 spaces and 110- 120 spaces located in a parking garage below the building. The required number of parking spaces was reviewed with the School and City, weighing the required number of teachers and staff, as well as the senior students who will need cars to get to work and athletics after school.

Both car and van handicap accessible spaces will be located in the main parking lot, adjacent to the south entry and in the parking garage. Electric car charging stations will also be located in the garage and main parking lot. Compact spaces to be provided to further maximize parking while keeping the paving to a minimum.

The streetscape along Highland Ave. will be an area that develops with flowing circulation, fieldstone walls and large shade trees to acknowledge the feel of the original streetscape. All plant material will be hardy to the region and meet the requirements of the Asian Long-Horned Beetle restrictions.

5e) Provide an updated site plan that identifies any easements and environmental buffers.

LPA|A Response: No known environmental resource areas or associated buffer zones are present on or adjacent to the site. A utility easement might exist to facilitate maintenance of the electric switch gear located adjacent to the eastern-most access drive. The presence of this easement will be confirmed during the Schematic Design phase. There are no plans to have development at the existing switchgear. No new easements are anticipated to facilitate the project, except for the new primary electric line to the new facility (as typical of all new construction projects).

5f) Provide a diagram that identifies emergency vehicle access of the Preferred Schematic.

LPA|A Response: Refer to the "Emergency Vehicle Access Diagram".

5g) Describe and illustrate the proposed safety and security features of the Preferred Schematic.

LPA|A Response: Emergency vehicle access is provided around the full perimeter of the building. Although there is one primary building entrance, there are several emergency egress locations around the perimeter of the building, including one exit from the Medical Suite designed for direct and discrete access for an ambulance. Bus and Parent vehicular traffic loops are separated, and organized to limit crossing of the primary pedestrian access path to the fields. Additional meetings with the school and district security personnel with police/ fire representatives will take place during the Schematic Design Phase. The site design will be advanced to include additional security features, such as landscape features that double as traffic buffers, access control, exterior lighting and surveillance cameras. Additionally, the parking garage will be restricted to Staff only, and will be accessible only via a key fob. Refer to Section P of the Educational Program for additional information. Refer to the "Security & Access Control Diagram" for additional illustration and information.

5i) The information provided in the PSR submission indicates several off-site improvement projects. Provide additional information that clarifies whether the scope and costs associated with these improvements are separate from the school building project. Additionally, as part of the Schematic Design submission describe the proposed site drainage design and measures being considered to ensure that ground water and water run off does not enter the building. Please acknowledge.

LPA|A Response: The proposed off-site improvement projects outlined in PSR Section 3.3.3.D.3 will be funded, designed, scheduled and constructed separate from the Doherty Memorial High School Project, and the district understands this work would not be considered reimbursable by MSBA. The existing site drainage features, the slope behind the site, are known to the design team, and site drainage measures will be addressed in the Schematic Design Submission. Geotechnical borings are planned and the engineer will report on required measures to mitigate ground water conditions, again to be addressed in the schematic design submission.

6e) Provide the District's not-to-exceed Total Project Budget.

City of Worcester Response: Refer to Updated Preferred Solution section 3.3.4.F.1

6f) Describe the local process for funding the proposed project.

City of Worcester Response: Refer to Updated Preferred Solution section 3.3.4.F.1

6g) Provide a narrative that describes the estimated impact to local property tax.

City of Worcester Response: Refer to Updated Preferred Solution section 3.3.4.F.1

7a) As part of the District's Schematic Design submission include the timeline associated with filing with the Massachusetts Historical Commission ("MHC") and obtaining MHC approval prior to construction bids. The District should keep the MSBA informed of any decisions and/or proposed actions and must confirm that the proposed project is in conformance with Massachusetts General Law 950, CRM 71.00. Please acknowledge.

Response: Acknowledged.

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.	☒	☐	☐	☐
2	Signed Local Actions and Approvals Certification(s):				
	a) Submittal approval certificate	☒	☐	☐	☐
	b) Grade reconfiguration and/or redistricting approval certificate (if applicable)	☐	☐	☐	☐
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	☐	☐	☐	☐
	b) A list of associated public meeting dates, agenda, attendees and description of the presentation materials	☐	☐	☐	☐
	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	☐	☐	☐	☐
	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.				

MSBA Review Comments:

No review comments for this section.

Additional Comments:

- *The MSBA issues project advisories from time to time, as informational updates for Districts, Owner's Project Managers ("OPM"), 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. As part of the District's updated Preferred Schematic Report, please confirm that the District's consultants have reviewed all project advisories and they have been incorporated into the proposed project as applicable.*

  LPA|A Response: Acknowledged

- *The MSBA offers the following information to assist the District and its OPM in completing the total project budget template that is required as part of its Schematic Design Submittal.*

  - *The District must include negotiated costs for OPM and Designer fees for the remainder of the project as part of their Total Project Budget. The fees must be listed separately by the applicable line items that are included in the MSBA's Total Project Budget Template. As part of the District's updated Preferred Schematic Report, please confirm that the District and its consultants will negotiate fees for the remainder of the project that are to be included in the District's Schematic Design documents to the MSBA.*

    Response: Acknowledged

  - *The PSR submission indicates District is targeting MSBA approval of its proposed project scope and budget at the August 26, 2020 Board of Director's meeting. The District's reimbursement rate before incentives for calendar year 2020 is 80.00%. Please note that the MSBA updates district reimbursement rates annually and applies the reimbursement in effect at the time the MSBA Board of Directors approves a district's proposed project scope and budget. The reimbursement rate is established based on statutory requirements and information provided by the Departments of Revenue and Elementary and Secondary Education.*

  - ***Maintenance** (0-2) –1.43%. This value is based on MSBA review of district provided materials regarding routine and capital maintenance programs during Eligibility Period at which time the value is finalized.*

  - ***CM@Risk** (0 or 1) – Because the District received an invitation into Eligibility Period on January 1, 2017 or later, this incentive point does not apply.*

- ***Newly Formed Regional School District*** *(0-6) – The District is not a newly formed or expanded regional school district as a result of working with the MSBA, therefore these incentive points do not apply.*
- ***Major Reconstruction or Reno/Reuse*** *(0-5) – The District's Preferred Schematic is for new construction therefore these incentive points do not apply.*
- ***Overlay Zoning 40R & 40S*** *(0 or 1) – Refer to Module 4, appendix 4E to review documentation requirements and to determine if this incentive point may be applicable. Please note that the proposed project must be located within the smart growth zoning district to comply with this additional incentive and required authorizations must be documented prior to MSBA approval of the District's proposed project scope and budget to be eligible to receive this incentive point.*
- ***Overlay Zoning 100 units or 50% of units for 1, 2 or 3 family structures*** *(0 or 0.5) – Refer to Module 4, appendix 4E to review documentation requirements and to determine if this incentive point may be applicable. Please note that required authorizations must be documented prior to MSBA approval of the District's proposed project scope and budget to be eligible to receive this incentive point.*
- ***Energy Efficiency*** *– "Green Schools" (0 or 2) – The PSR submission indicates the District's intent to achieve the 2% additional reimbursement through the MSBA Green School Program. Please note, subject to the District's intention to meet certain energy efficiency sustainability requirements for the Proposed Project, the MSBA will provisionally include two (2) incentive points, however if the District does not ultimately qualify for some or all of these incentive points the MSBA will adjust the District's reimbursement rate, accordingly.'*

  Response: Acknowledged.

End