



FACILITIES MASTER PLAN

MAY 2018

MAINE TOWNSHIP HIGH SCHOOL DISTRICT 207



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FACILITIES MASTER PLAN

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prepared by



May 2018

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PART 1
EXECUTIVE SUMMARY

- INTRODUCTION
- PROCESS
- EVALUATION
- FINDINGS

INTRODUCTION



The “**WHY**” and “**What**” of Facilities Master Planning

- 1 Maintain Capital Investments 
- 2 Support Curriculum Evolution 
- 3 Maximizing Current & Future Resources 

Every school district - and particularly districts with older buildings, such as Maine 207 - faces the challenge of maintaining and updating schools in a fiscally responsible manner, preserving the schools’ value as community assets and meeting ever-evolving educational needs.

Maintaining and updating school buildings requires a great deal of thoughtful and continual planning. Knowing when and where to enact improvements requires a thorough understanding of the issues driving potential changes. Having a framework and long-range vision to guide the decision-making process can help guide the timely allocation of limited financial resources for the greatest positive impact. This Master Planning Document is designed to serve in that capacity.

School buildings are evaluated through two lenses. The first is Building Systems and Materials. This category includes such items as mechanical systems, exterior components/finishes and interior finishes; work that is needed to keep the building(s) operational in their current state. The

second lens is Curriculum Modernization. This includes identifying and implementing ways to reorganize, arrange and equip existing and new spaces in order to support current and future best practices in education programming. For clarity, prior to 2017, District 207 had gathered and categorized some information through this first lens that was and is used to identify yearly maintenance work. This document folds that information (primarily related to infrastructure elements and systems) into the overall recommendations, supplements it with a thorough analysis of the mechanical, electrical or plumbing systems and then combines it with recommendations to modernize the building footprint for Curriculum Modernization . Together they provide a comprehensive view of the District facilities and the opportunities that lie within each.

PROCESS

Similar to how this report is organized, the process evolved under two distinct methods running concurrent with each other. Engineers from Elara, with the assistance of building maintenance personnel, analyzed mechanical, electrical and plumbing (M.E.P.) systems and equipment throughout the buildings. Information was gathered through site visits, staff interviews and review of existing documentation. Systems and components were then analyzed through additional research, best practices and technical data provided by industry sources. Each component/system was further rated, its remaining useful life given and potential cost to replace or repair these items identified. Costs are synthesized into the final recommended budget numbers and itemized so that dollar figures/costs were not doubled up with the improvement approaches. The results of this intensive study are broken down by discipline and arranged per building under part 2 of this report so that repair/replacement costs could be thoroughly understood and tracked within the overall anticipated project budget independently as stand-alone work items.

Curriculum Modernization followed a separate but parallel path. To help guide this iterative part of the assignment, two separate groups were created. The Advisory Group (comprised of Dr. Ken Wallace, Mary Kalou, David Ulm and members of the design team) met periodically to establish guiding principles and uncover issues that may have an impact on the evolving planning work. A second group, called the Core Team (Building Leadership Personnel & members of the Core Team), convened at key milestone dates during the process to review data findings and provide feedback on the developing floor plans.

The process kicked-off on May 20, 2017 with a three-hour, Visioning Session at East High School. Attendees participated in a group conversation to specifically uncover potential opportunities and identify challenges at each on their campuses. During the subsequent 12 months, a combination of site visits, staff & student surveys and department interviews provided the necessary data to explore several improvement approaches for each school. The results of this data collection follows in the next section.

Overall, four themes emerged as the process unfolded. The desire for technology-infused **collaboration zones** (featured by a student learning commons), **flexible instructional environments** with mobile furnishings, **improvements to health and wellness spaces** and upgraded **environmental/energy systems** continually resonated with students and staff alike. Tying these ideas together was the need to maintain and advance, where possible, security measures in the schools as well as promote and achieve facility parity across in the District.

Several planning options were then developed for each building using the information gleaned from these exercises. Ultimately, the Board of Education selected two of these approaches for potential refinement and community feedback: A Comprehensive Approach (which honored many of the priorities articulated by building leadership) and a Scaled-back Approach (which achieved many of the major and more impactful changes contemplated in the previous approach but in a less complete way in each facility). Budget recommendations accompany these diagrams to help inform District leadership in their efforts to decide on next steps, if any, in implementing the contemplated improvements.

EVALUATION

- SURVEYS
- BENCHMARKING
- FACILITY TOURS



SURVEY QUESTIONS

- During the course of this school year, will you participate in at least one after school club, organization, music or theatrical performance? Select all that apply.
- Rate your perception of the physical “look” or “image” of your high school spaces.
- The ability to learn and perform class work may be improved by well equipped physical space. Answer this question by thinking of your overall experience in a day across all the classrooms you use. Select the factors that ENHANCE your ability to be engaged and productive.
- The ability to learn and perform class work may be diminished by a poorly equipped physical space. If you agree with this statement, consider your overall experience in a day across all the classrooms you use. Select the factor that most LIMIT your ability.
- How would you rate the following elements on average across the classrooms you use?
- With your current CLASSROOMS in mind, how easily does the physical environment allow you to work with other students?
- With you current LIBRARY in mind, how easily does the physical environment allow you to work with other students?
- How often do you leave your lunch period to use school resources (Library, Tutor Resource Centers, Student Services)?
- What resources would prompt you to go to the Library more often?
- What resources would prompt you to visit the student Service Center more?
- On average, across all your classes how often do use spaces other than the assigned classroom for class time?
- For those that use non-classroom space for class time, what drives that need?
- Would it be useful to have learning/studying/project spaces outside of traditional classroom environment? If yes, choose the option below:
- When I am in class, I prefer to sit in:

Concurrent with the work done to rate each buildings’ systems and components, the collection and synthesis of data related to educational programs and the supportive nature of District facilities occurred through multiple techniques. Surveys, benchmarking, facility tours and interviews were conducted to inform the creation of the proposed improvement plans at each school. Each of these techniques occurred sequentially over the school year and then reviewed with the Advisory and Core Teams for their feedback.

SURVEYS

Staff and students were asked to voluntarily participate in an online survey regarding their perceptions of the learning environments they use on a daily basis. In all, 855 students (an equal distribution across all grade levels) and 289 staff members graciously responded to the survey request. To the left is the list of survey questions that respondents were asked to address. A sample graphic depiction of the results is shown to the far left. The full compliment of results is contained in the appendix of this document. Across the District, spaces that rated the highest were the Auditoriums, Science Labs and Libraries. Locker Rooms, Dining Facilities and General Instruction Rooms scored the lowest. Temperature fluctuations and furniture flexibility were most often sited as limiting factors to engagements levels.



Naperville Central High School



Addison Trail High School



Stevenson High School



New Trier High School



New Trier High School

BENCHMARKING

Making comparison to other schools is difficult given the fact that every community, School District, and school building is unique in nature. There still is, however, a value to understanding how certain objective information like sf/student, room data, as well as capacity and enrollment trends match up with peer Districts and, in some cases, industry recommended standards. For this portion of the study, Wight & Co. used information gleaned from New Trier, Adlai E. Stevenson and Naperville Central High Schools to begin shaping the conversation of specific spaces within the Maine Township High School District schools. Although space types and their adequacy may be reasonably inferred when comparing numeric data, that metric was not specifically addressed in this portion of the study. The tabulations found at the end of this document begin to “paint a picture” of potential opportunities and challenges at East, South, and West High Schools.

FACILITY TOURS

Lastly, a series of school tours was undertaken by members of the Core Team Group to experience and analyze program spaces that the District may be targeting for improvements in their facilities. New Trier HS (library/dining commons), Stevenson HS (the Q/library/food service areas), Naperville Central HS (dining commons/library and fine & performing arts) and Addison Trial/Willowbrook HS (athletic/pe spaces and student commons) were the focus of these tours. Each facility was photographically documented and will serve as a reference for future design exercises.

FINDINGS

- BUILDING PRIORITIES
- ATTRIBUTES, OPPORTUNITIES AND CHALLENGES

MAINE EAST HIGH SCHOOL

1. Expand Dining
2. Create Commons/Collaboration Areas
3. Boys Locker Room
4. Library Location
5. Classroom Improvements - Furniture, Technology, Electrical, Finishes
6. Isolated Spec Ed Needs - Sensory, C108 Kitchen, Office, Additional Classroom
7. Toilet Rooms
8. Fitness Center - Weight, Cardio, Dance/Yoga, Swim
9. Administration Office - Aps, Meeting Spaces, Prof Dev, Deans
10. CTE - Incubator/Maker Spaces
11. Student Services - Conference Room, Commons Spaces
12. Locate Foreign Language Together
13. Greenhouse For Science

MAINE SOUTH HIGH SCHOOL

1. Expand Dining
2. Create Commons
3. Main Entry To Display School Accomplishments
4. Fitness Center
5. Pool Renovation And/Or Additional Contest Gym
6. Classroom Improvements - Furniture, Technology, Electrical, Finishes
7. Fine Arts Improvement - Practice Rooms, Larger Band Room, Storage And Acoustics For Choir & Orchestra, Larger Art Studios
8. CTE Improvements - Remake Autos, Geo Building, Incubator/Presentation Rooms
9. Science - Upgraded Rooms
10. SPS Student Services - Nurse And College/Career Resource Center
11. Special Education Office
12. Combined Departmental Offices
13. Building And Grounds Aesthetic Upgrades And ADA Access To Athletics

MAINE WEST HIGH SCHOOL

1. Fieldhouse
2. Commons/Collaboration in conjunction with Student Services
3. Classroom Improvements - Furniture, Technology, Electrical, Finishes
4. Administration Offices
5. Toilet Rooms
6. Update Locker Rooms
7. CTE - Create Commercial Foods Lab
8. Tutoring Space For All Departments
9. Fine Arts - Create a Midi Lab
10. Fine Arts - Create a Black Box Theatre
11. Front Entry Remodel Including Site Work
12. Athletics - Additional Field Turf Field

BUILDING PRIORITIES

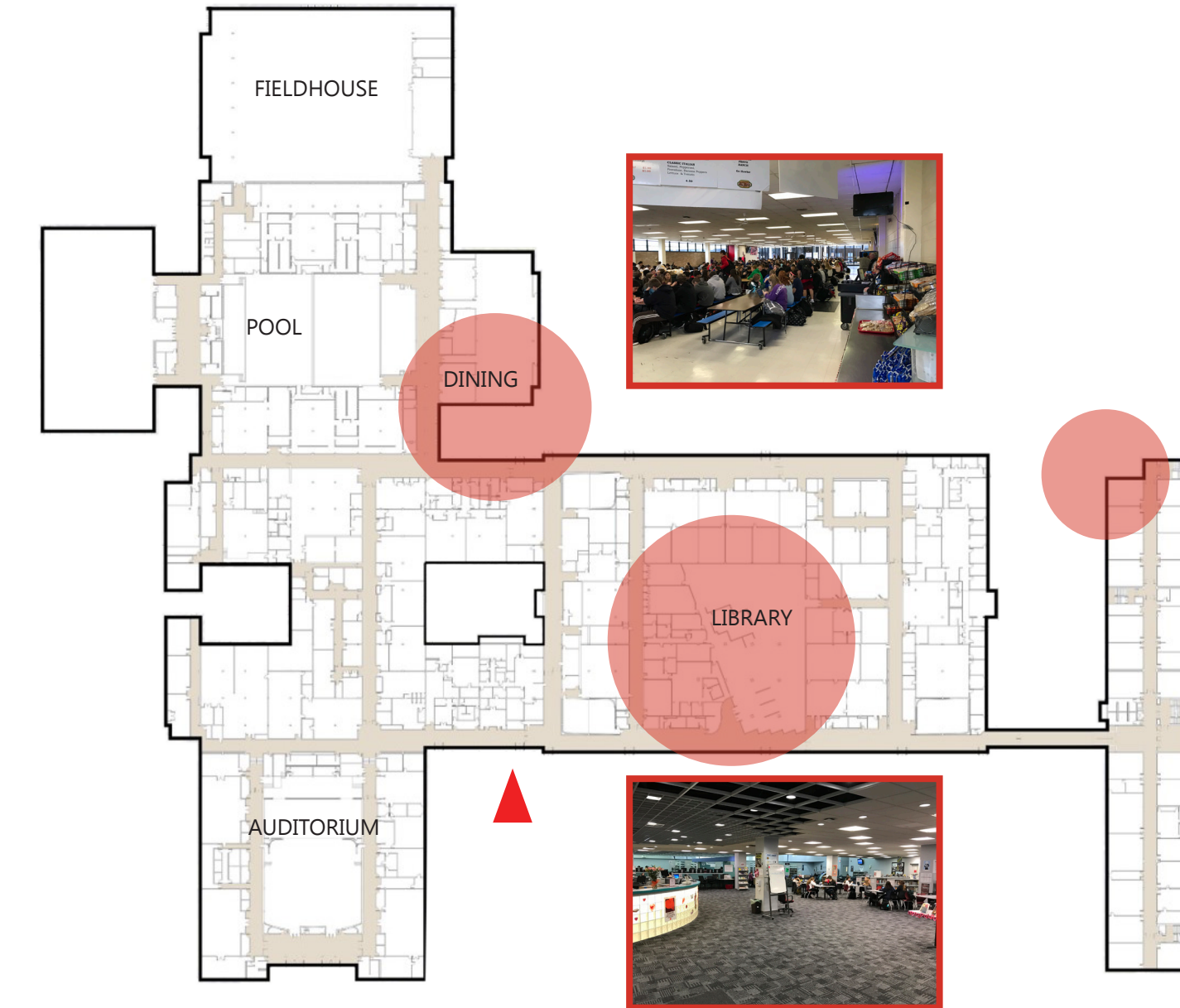
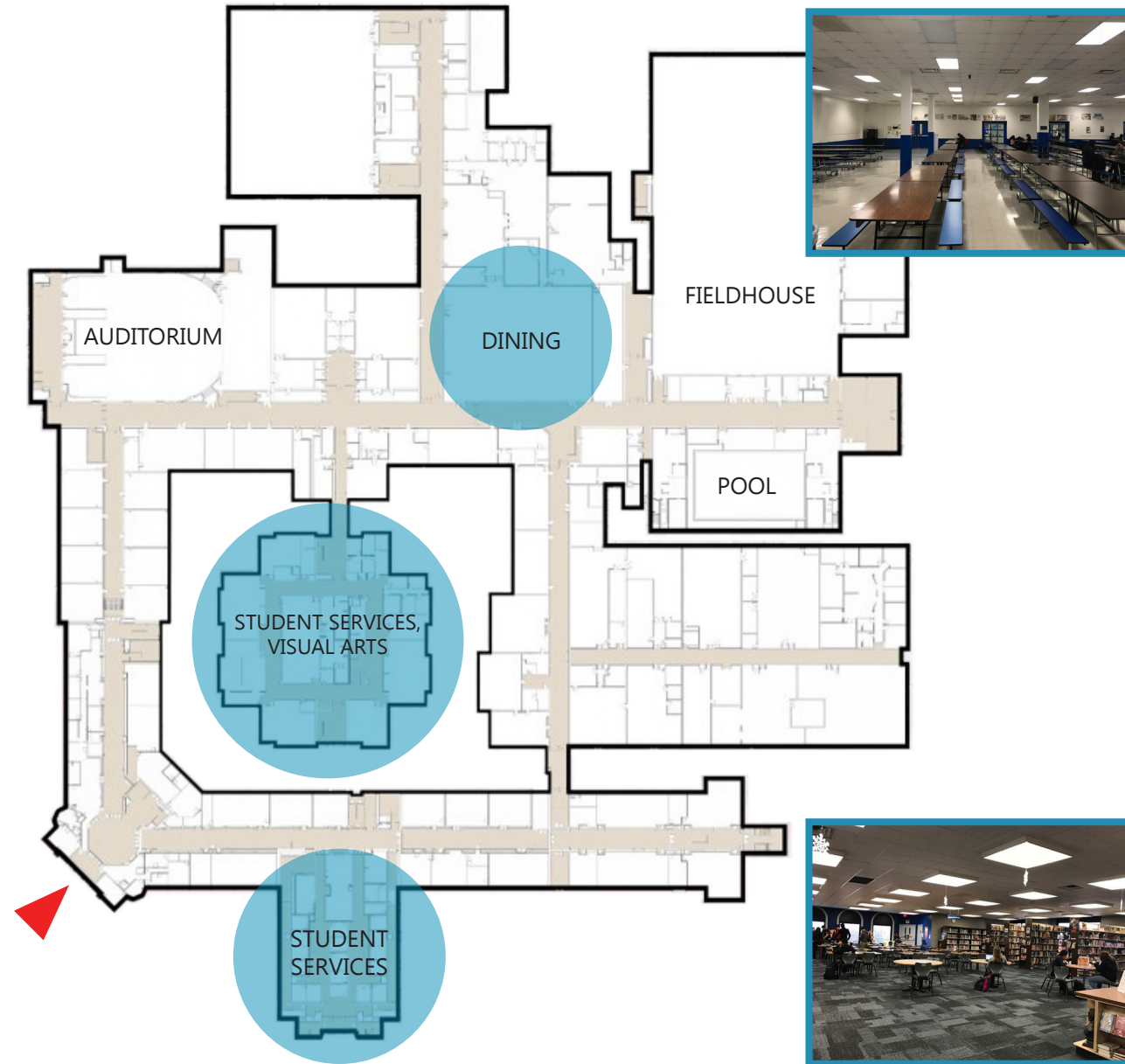
As survey results were tallied, the design team, under the guidance of building leadership personnel, conducted three, full-day sessions of department interviews and tours – one day per school. As a general rule, the big picture items expressed in the survey work were confirmed in more detail, with greater explanations. The extent of those conversations is captured in meeting minutes included in the appendix part of this document. Building priority lists were subsequently generated for each facility. Needs and wants were itemized, highest to lowest. These lists served as a reference “check list” during the development of planning diagrams that followed.

EXECUTIVE SUMMARY

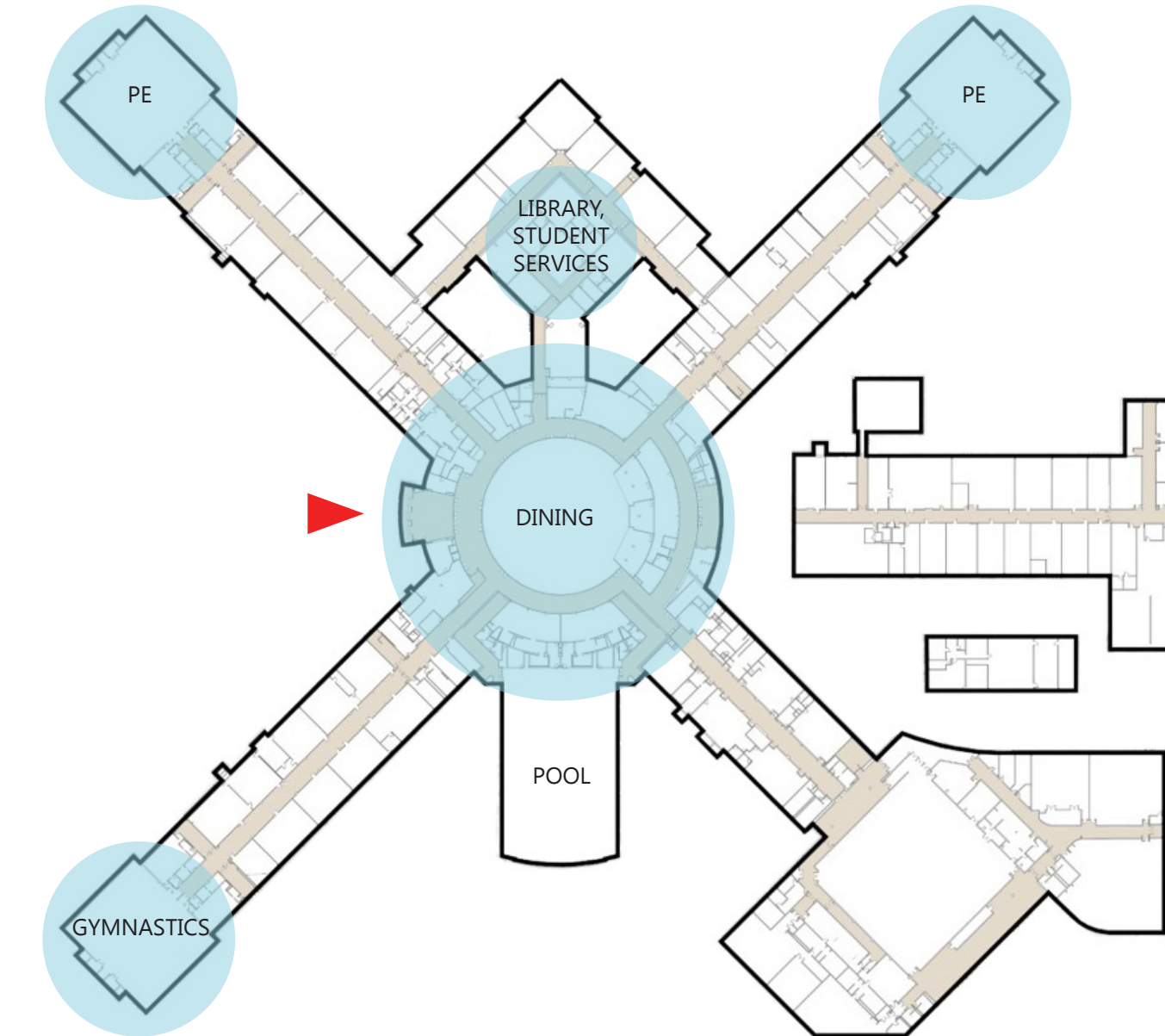
FINDINGS

ATTRIBUTES	OPPORTUNITIES	CHALLENGES
<ul style="list-style-type: none"> Building character History & heritage Significant "recent" infrastructure improvements 	<ul style="list-style-type: none"> Re-imagine dining/food service Re-purpose center court Increased security enhancements 	<ul style="list-style-type: none"> Accessibility Building age Way finding

ATTRIBUTES	OPPORTUNITIES	CHALLENGES
<ul style="list-style-type: none"> Abundance of natural light Courtyards Accessibility 	<ul style="list-style-type: none"> Image of entry Pockets of under-utilization Increased security enhancements 	<ul style="list-style-type: none"> Extended walking distance from one end of facility to the other Mosaic department organization A-wing access



ATTRIBUTES	OPPORTUNITIES	CHALLENGES
<ul style="list-style-type: none"> Abundance of natural light Strong building geometry, organization, circulation PE/Athletic program spaces 	<ul style="list-style-type: none"> Increased security enhancements Available SF to reconfigure Develop the impact of the library media center 	<ul style="list-style-type: none"> Unsecured access to CTE program spaces Under-signed classrooms Extensive infrastructure improvements needed



In addition to the building priorities identified on the preceding pages, the design team listed a series of attributes, opportunities, and challenges specific to each school facility. Although, not limited to these items, the list provides a point for further design development and planning activities as the District moves forward with any implementation plans.