



PORTLAND PUBLIC SCHOOLS

WILSON HIGH SCHOOL MODERNIZATION

Conceptual Master Plan Report

Submitted to Portland Public Schools
By IBI Group
January 27, 2020 **DRAFT**

ACKNOWLEDGMENTS

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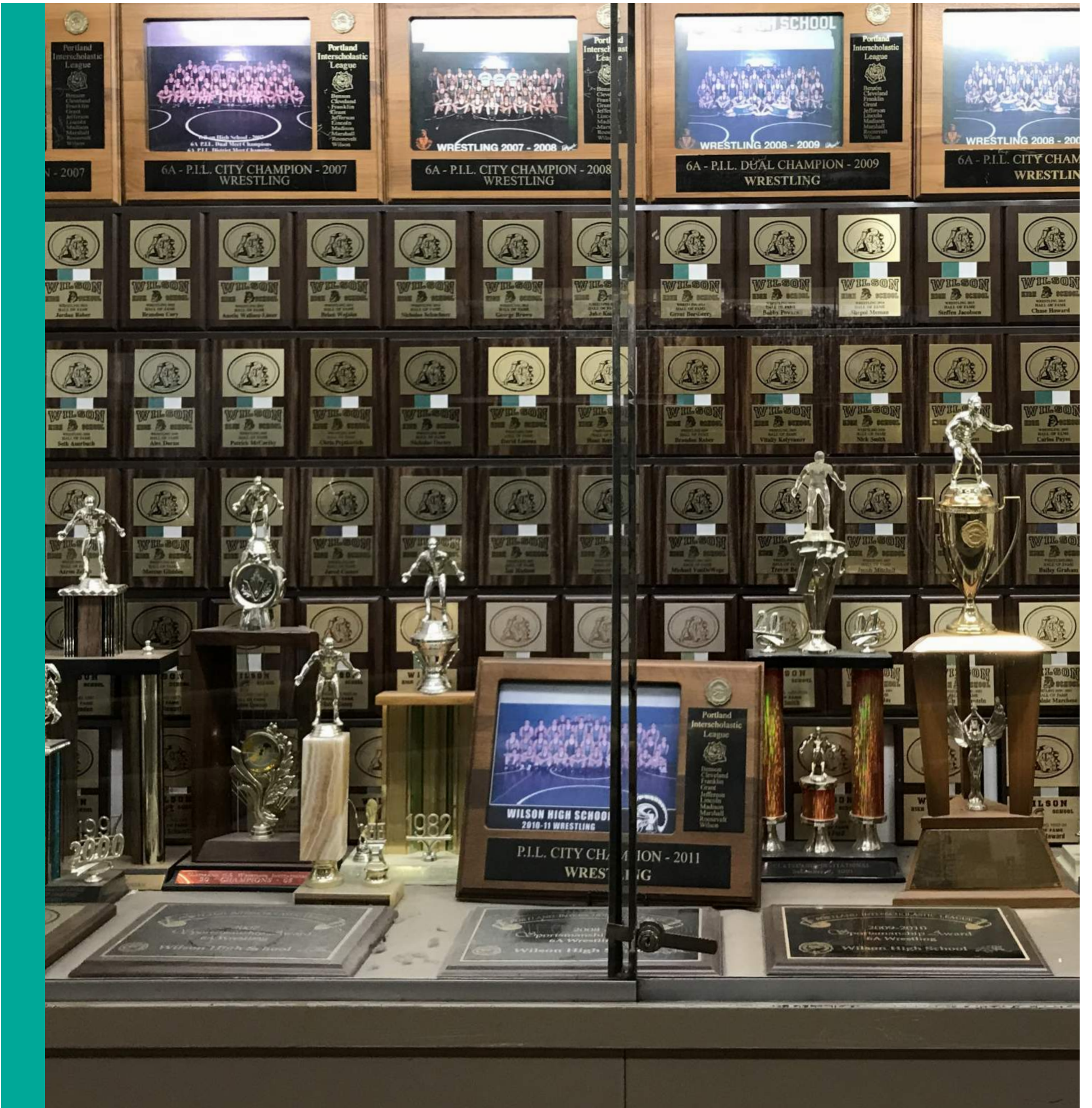
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EXECUTIVE SUMMARY

1 EXECUTIVE SUMMARY



GENERAL INFORMATION

In 2012, Portland Public Schools (PPS) passed a Facilities Improvement Bond consisting of multiple goals: to modernize three high schools (Franklin, Roosevelt and Grant); to rebuild a K-8 campus (Faubion); to develop master plans for three high schools (Benson, Lincoln and Madison); and to complete improvements at various other schools in the District.

In 2017, PPS passed a Health, Safety and Modernization Bond consisting of multiple goals: to modernize three high schools (Benson, Lincoln and Madison); to rebuild a middle school (Kellogg); to develop master plans for three high schools (Cleveland, Jefferson and Wilson); and to complete improvements at various other schools in the District.

Of the nine high schools in PPS, seven are comprehensive high schools and two are focus option high schools. Wilson High School (WHS) is a comprehensive high school and is one of the three remaining high schools to be modernized.

The WHS Conceptual Master Planning (CMP) project commenced in August 2019 and is expected to be completed in January 2020. The CMP process included four meetings with a Conceptual Master Planning Committee (CMPC), five Steering Committee meetings, a Community Design Forum in December 2019, and a Community Design Open House to be scheduled in early 2020. The schedule for the modernization of WHS has not been determined at this time and would be contingent on the passage of a future school building improvement bond.

The Conceptual Master Planning Committee (CMPC) expressed a strong preference for the modernization of WHS to include the demolition of the existing building and construction of a new building on the west side of the site. Construction of a new building allows for more options for modern facilities and educational spaces and supports the most efficient use of the site. The existing 26-acre site will include improved sports fields and parking as well as new pedestrian and bike circulation paths to provide universal access to the buildings and site features.

IBI Group (IBI) is pleased to present this summary of the findings of the initial CMP phase undertaken by our firm in collaboration with PPS.

Project Overview

Student Design Capacity: 1,700

New Building Area: Approximately 282,000 SF

Redeveloped Site Area: Approximately 26 acres

Full Replacement Cost E: \$TBD

Full Replacement Cost G: \$TBD

Renovation and Addition Cost: \$TBD

CONCEPTUAL MASTER PLAN BRIEF

The CMP brief for WHS included the following:

1. An Area Program meeting current PPS Comprehensive High School Education Specifications (Ed Specs).
2. Wire frame level massing models for the building organization and site development: three for preliminary consideration, one developed for a final CMP.
3. Master project schedule.
4. Coordination with PPS cost estimator Rider Levett Bucknall (RLB) for budgeting and to more accurately determine the cost estimate for historic modernization vs. the rebuilding.

The CMP information will help PPS in the planning of future capital improvement bonds.

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1 EXECUTIVE SUMMARY

KEY CHALLENGES AND OPPORTUNITIES

The Conceptual Master Planning Committee (CMPC) meetings highlighted several key challenges and opportunities for the future WHS.

IBI worked directly with the CMPC to ensure that the following concerns and aspirations were understood and considered.

Wilson Pool

- Owned and operated by Portland Parks & Recreation (PP&R).
- Located on PPS property with an agreement between PPS and PP&R.
- The only PP&R outdoor pool on the Westside of Portland.
- A community resource, not a school resource.
 - ▶ In operation during the summer months when school is not in session.
 - ▶ Students have zero interaction with the Pool during the school year. CMPC questioned how important the Pool is to our vision for the students of WHS?
 - ▶ Many summer memories have been made at the Pool.
 - ▶ Provides an opportunity for young future WHS students to connect with the school campus.
 - ▶ Piece of nostalgia and a connection to the community.
- Shares WHS facilities.
 - ▶ Uses WHS locker rooms, including restrooms and showers.
 - ▶ Uses WHS boilers.
 - ▶ If WHS is demolished, new locker rooms, including restrooms and showers, and heating will need to be provided for the pool to remain operational.
- Originally designed to be part of WHS and was planned to be enclosed and in operation year round.
- Physical barrier for current WHS to connect to fields.
- CMPC concern about PP&R commitment to maintaining and operating the pool long term.
- CMPC concern about voter's reaction to potential changes to the Pool facilities.
- CMPC preference is to maintain the footprint of the Pool and construct a new WHS that is no longer connected to it.

Based on the CMPC's recommendation to demolish the existing WHS and preserve the existing Pool, there will need to be capital improvements to the Pool that provide the necessary support facilities, including new locker rooms, restrooms, and mechanical equipment. The cost of these support facilities will be included as part of the overall PPS bond budget for the modernized Wilson. The exact layout of these support facilities will be incorporated into the CMP process for the modernized Wilson, with direct coordination between PPS and PP&R to plan for their use and design.

Community Use

- Maintain current community amenities on-site.
 - ▶ Wilson Pool
 - ▶ Farmers Market
 - ▶ SW Trails
- Provide access to more amenities for community use.
 - ▶ Theater
 - ▶ Main gym and auxiliary gym
 - ▶ Career Technical Education (CTE) spaces
 - ▶ Multnomah Health clinic
- Enhance connection to Hillsdale commercial center.
- Maintain current free access to park-like landscape and fields.
- Community access will need to be designed and coordinated with PPS Security.

Transportation of students to another site during construction

- Length of commute from SW to Marshal High School.
- Potential schedule conflict with the Cleveland High School modernization project. CMPC anticipates Cleveland students will need to be relocated to Marshal during construction.
- Cost of transportation for two years. Funds that could be directed towards the new building.
- Cost of portables for two years. Funds that could be directed towards the new building.
- Students would miss an opportunity to experience construction and exposure to the architecture, engineering, and construction industries.

Board member representation and engagement

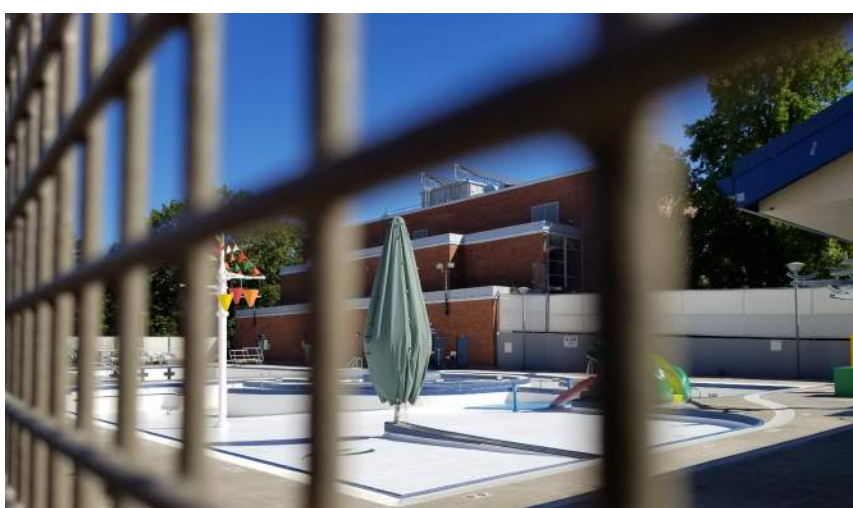
- Board member Andrew Scott was assigned to Wilson halfway through the CMPC process.
- Wilson's CMPC meetings on Tuesday evenings aligned with Board meetings so Andrew was not able to attend the CMPC meetings.
- CMPC want Andrew to feel the passion of the Wilson community and hear their thoughts about the future WHS.

Neighborhood impacts from the Track and Field facility

- Game day noise and bright night lights, and their proximity to residences, are the primary concern.
- Provide adequate parking on-site for events.
- Preference is to maintain the current or similar location for the Track and Field facility, close to Capital Highway and Rieke Elementary School, and away from residences.

WHS Modernization is not fully realized

- Not on next bond. Voter fatigue by the time it is included, and bond doesn't pass.
- Bond is exhausted before the project is fully realized and project is incomplete.
- Lack of funds compromise full modernization potential.



Exterior photo: Wilson Pool

1 EXECUTIVE SUMMARY



VISION STATEMENT

Developing a vision statement for the future WHS was the first engagement exercise the CMPC participated in. The Vision is their “why” and provides a clear image of their desired future. It aligns with their core values and represents what they believe in. The goal for the Vision Statement was to inspire, motivate, and excite the CMPC.

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Portland Public Schools Vision Statement

“A graduate of Portland Public Schools will be a compassionate critical thinker, able to collaborate and solve problems, and be prepared to lead a more socially just world.”

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Wilson High School Mission Statement

“Our mission is to educate young people in every capacity—mind, body and spirit. We prepare students to succeed in their various roles in society: as workers who are responsible, innovative and ready to compete at a world-class level; as citizens who are both loyal to our community’s democratic ideals and committed to the on-going work of forming a more perfect union in our heterogeneous society; and as adults who, in their private lives, balance the virtues of individualism, such as self-reliance, honesty, and personal initiative, with the cooperative ideals of justice, tolerance and compassion. In short, our goal is to foster in our students the core intellectual capacities and habits of the heart that will allow them to lead deeply engaged, productive and meaningful lives.”

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The New Wilson will...

... be a place of pride for the students, staff, and community where everyone feels positively connected to and influenced by the vibrant life of the school and the community it serves.

... be a place that encourages the highest levels of achievement, fosters a love of learning, inspires creativity, and promotes environmental stewardship.

... be a place where all are welcome in a school that provides for the social, emotional, and physical wellness of the people it serves in a safe and secure environment.

... meet student needs through equitable consideration of a diverse selection of student pathways with a focus on elevating educational outcomes and increasing student performance.

... meet future student needs by planning for growth, responding to future program needs, and adapting to a world not yet realized.

1 EXECUTIVE SUMMARY



Exterior photo: Underside of stadium seating at track and field

SUSTAINABILITY AND RESILIENCY

Sustainability Goals

PPS is recognized for its commitment to sustainability. Working with PAE Engineers, PPS established new performance targets and design standards around attainable sustainability goals. PAE reviewed current design best practices and previous project energy use reductions to identify a prioritized list of energy efficiency strategies and Energy Use Intensity (EUI) targets.

Beginning in 2020, all PPS projects will be required to meet an EUI of 25 for new construction and 35 for renovation/modernization. EUI is a building's energy use as a function of its size or other characteristics and is expressed as energy per square foot per year. It is calculated by dividing the total energy consumed by the building in one year (measured in kBtu or GJ) by the total gross floor area of the building. The PAE District EUI Targets and Efficiency Strategies memo, included in the Appendix, includes the parameters to tighten the building envelope and use more energy efficient HVAC equipment. The building envelope is the physical separator between the conditioned and unconditioned environment of a building.

The following Leadership in Energy and Environmental Design (LEED) certifications are required for all PPS projects.

- Renovation and Addition: LEED SILVER
- Full Replacement: LEED GOLD

The CMPC and Community Forum attendees voiced a strong desire and an obligation to design and build more energy efficient buildings. The future WHS will be in operation for 50-100 years and we must consider net-zero energy design, embodied energy of materials, carbon footprint, and climate change. The World Green Building Council definition of a net-zero carbon building is a building that is highly energy efficient and fully powered from on-site and/or off-site renewable energy sources.

Seismic Performance and Resiliency

The future WHS will be designed to meet current code (at the time that design services are performed) for Risk Category III buildings. The main gymnasium will be designed to Risk Category IV force level and Immediate Occupancy Performance, and will serve as an emergency refuge for the Wilson community.

Risk Category III is defined as "Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to: Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300."

Risk Category IV is defined as "Buildings and other structures designated as essential facilities, including but not limited to: Designated earthquake, hurricane or other emergency shelters."

CONCEPTUAL MASTER PLANNING APPROACH

In carrying out the WHS CMP process, IBI conducted high-level research and analysis that included studying existing drawings and reports provided to us by PPS. In addition, IBI spent time in the existing building to be able to provide a high level assessment of the existing conditions to assist in the development of CMP options and cost model analysis.

In partnership with community stakeholders on the CMPC we developed a series of foundational principles and key themes for the reimagining of WHS. These principles and themes informed the development of the recommended CMP design options. In addition to facilitating CMPC meetings, we participated in a Community Forum and Open House that provided input from students, staff, and community members over a period of six months.

This process has naturally fostered a spirit of teamwork, interest, ownership, and sense of investment in the preferred design direction. The process has built and capitalized on the significant sense of community, enthusiasm, and pride developed on the part of all involved. We have looked collectively and objectively at many big picture issues, which has enabled the design team to make realistic core decisions at an early stage that come directly from the needs, values, and interests of the Wilson community.

IBI closely partnered with the CMPC to identify and address key design issues related to the existing WHS campus. The existing campus issues shaped the new campus design themes. There was strong CMPC agreement in favor of the following themes:

- Demolish the existing WHS building to design and build a new school.
- Enable students to remain on-site during construction.
- Create a modern high school that meets and exceeds the needs of students for years to come.
- Maintain the existing Wilson Pool facility on-site.
- Provide closer proximity to Rieke Elementary School.
- Eliminate pass-through vehicular traffic.
- Provide facilities for community use.
- Maintain public access to site amenities, SW Trails connections through site, and open space for the Farmers Market.

The CMP design options were informed by the PPS Ed Specs and PPS Vision documents:

- PPS Comprehensive High School Ed Specs, dated September 2017.
- PPS Vision, Portland Public Schools reimagined, Preparing Our Students to Lead Change and Improve the World.

Additional information made available to the design team during this CMP phase included the following documents:

- Oregon Historic Site Form, dated October 14, 2009.
- Draft GRI Geotechnical Evaluation, dated October 29, 2019.
- First American Title Insurance Company, Lot Book Service, dated October 23, 2019.
- Draft Firwood Design Group Survey, dated November 18, 2019.

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1 EXECUTIVE SUMMARY



Exterior photo: South-facing classrooms



Interior photo: Corridor



Interior photo: Metal Shop

COST ESTIMATE BRIEF

The purpose of the CMP effort is to more accurately determine the potential costs for the modernization or the rebuilding of WHS. This information will help PPS in the planning of future capital improvement bonds.

Rider Levett Bucknall (RLB) will develop cost and schedule models to test different design options and schedule possibilities for PPS review. The preliminary cost models will consider the unknown time line for construction and potential varying construction market conditions.

PHYSICAL ASSESSMENT BRIEF

IBI completed a high-level review of the existing building to assess its current condition and determine where it is deficient in meeting today's building code standards. The high-level review was completed prior to meeting with the CMPC, and before we knew their preferred design direction. Based on site observations, it is the opinion of our design team that the existing building will need seismic, ADA, energy-efficiency and general building improvements to allow it to continue to serve the needs of the WHS community.

WHS is located at 1151 SW Vermont Street in the Hillsdale neighborhood of Southwest Portland. The WHS physical facility consists of one building totaling approximately 260,900 SF of built space on an approximately 26-acre site. The main building was built in 1956. WHS has not been extensively modified and retains much of its original historical integrity. The lone addition to the building consisted of a classroom addition to the north wing in 1960 and is barely discernible as it used similar materials and construction methods. Classrooms have been extended or re-fitted to reflect changes in instructional priorities, but these modifications are minor and do not diminish the building's most important character-defining features. The school therefore retains its integrity of design, materials, and workmanship. WHS is eligible for the National Register of Historic Places (NRHP).

The school has been serving the community for over 60 years. If the school is not demolished and rebuilt as recommended by the CMPC, significant improvements will be needed to modernize the building. Exterior envelope (masonry exterior wall, curtain wall glazing and roofing) upgrades are recommended to provide further longevity for the building and thermal comfort for occupants. The basic plan layout and spatial qualities of the common areas and classrooms would remain intact and reflect the historic character of the original construction. However, these interior finishes reveal their years of wear and tear and will require upgrades to allow them to continue to serve their programmatic function.

A full seismic upgrade will be required if the existing building is remodeled, to bring it into compliance with current code and PPS resiliency goals. To prepare for the intended student capacity as well as to ensure continued operational efficiency into the future, it is the recommendation of our team that new mechanical, plumbing, electrical, fire/life safety, and technology systems be provided.

To provide universal access to the buildings and site features on the WHS campus, improvements will need to address door clearances and hardware, floor level changes, elevators, restroom facilities, and site pathways.

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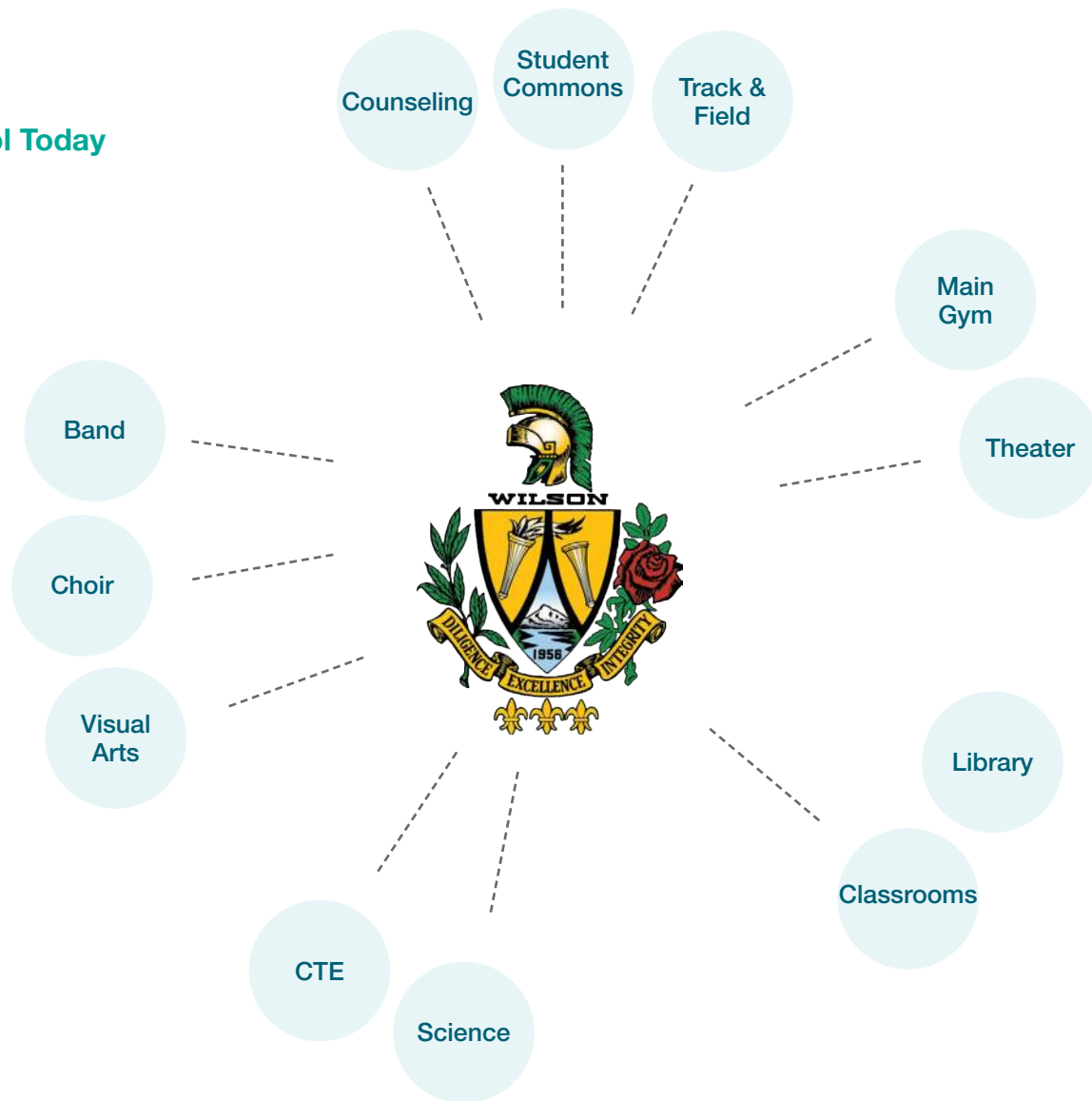


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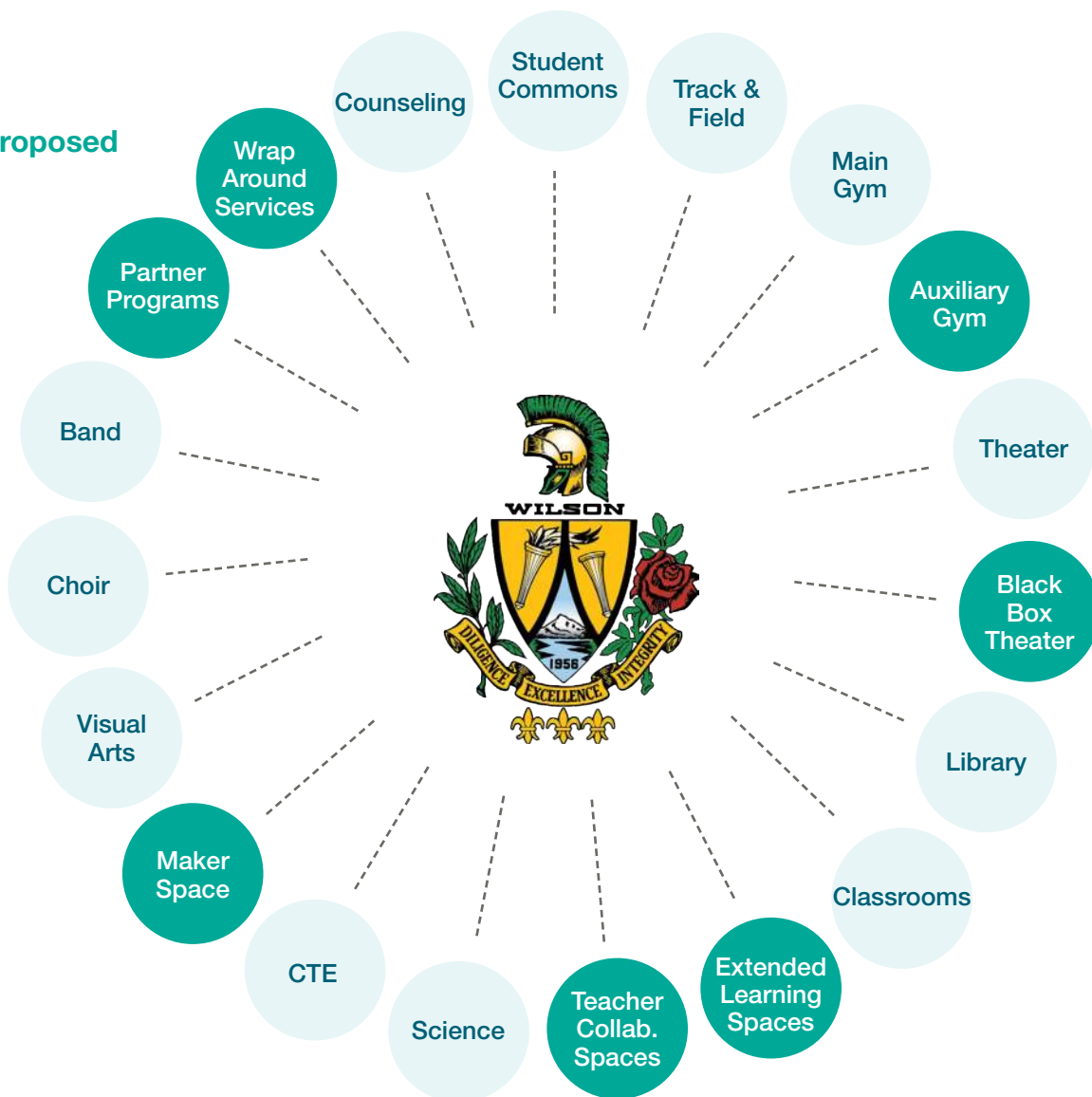
PROGRAM ASSESSMENT BRIEF

The CMP phase included a high-level review of the existing WHS education program and current use of spaces. IBI studied the as-built floor plans provided by PPS, master schedules provided by WHS, and verified use of the spaces during site visits with Erica Caldwell, WHS Business Manager. The diagrams below summarize the spaces and programs currently offered at WHS, and the spaces that would need to be added to WHS to offer programs that align with the Ed Specs.

Wilson High School Today



Wilson High School Proposed



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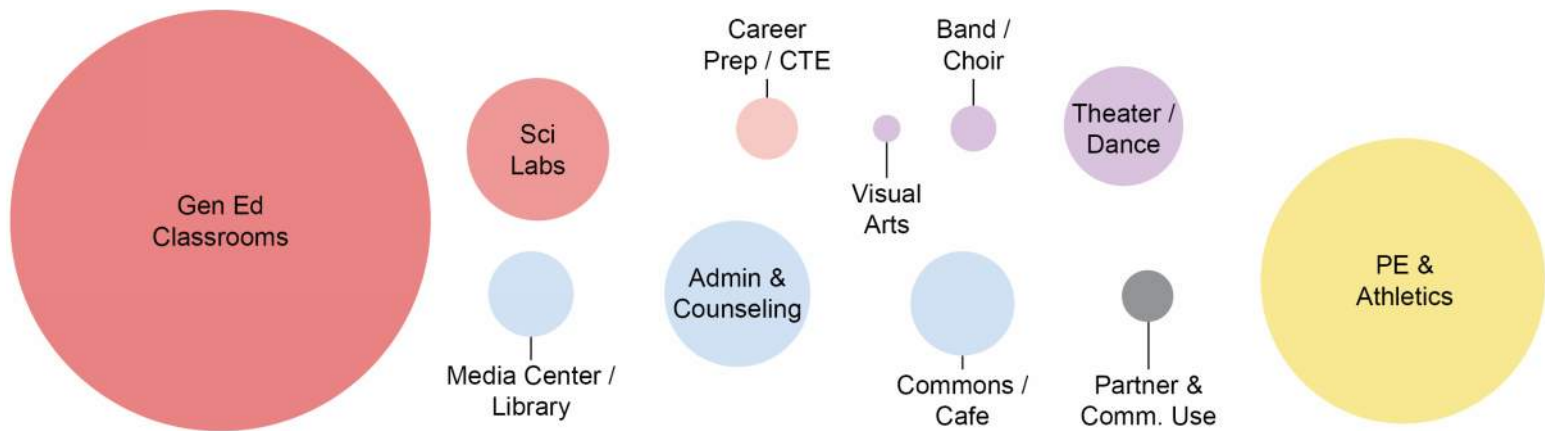


1 EXECUTIVE SUMMARY

IBI reviewed the PPS Ed Specs and compared them to the current WHS education program and use of spaces. The differences between the Ed Specs and the current WHS were summarized and presented to the CMPC in the second CMPC meeting. Overall, the consensus of the CMPC was to provide a new building designed to meet the Ed Specs, with a proposed square footage of approximately 282,000 SF.

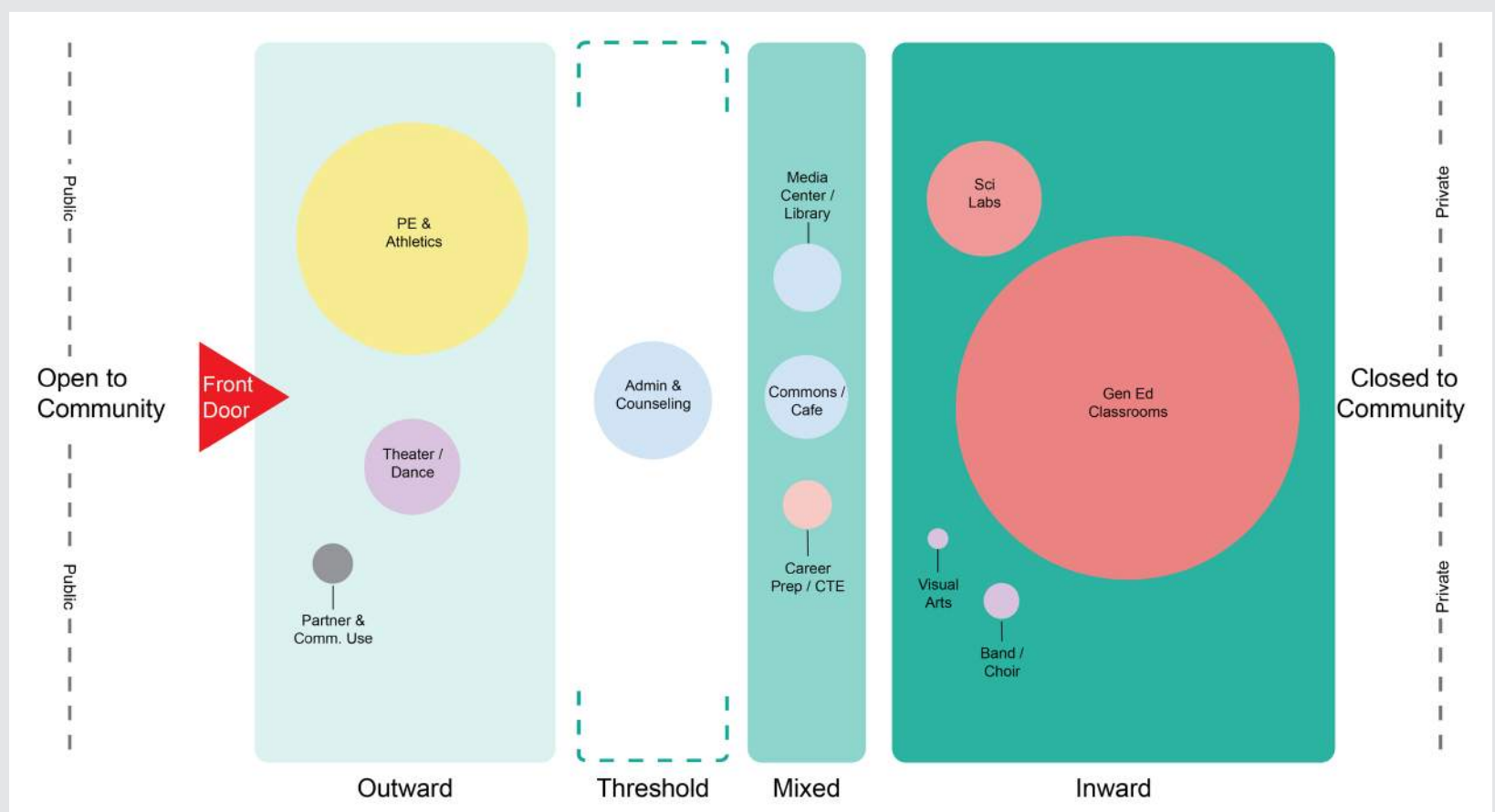
PPS Comprehensive High School(s) Area Program

PPS COMPREHENSIVE HIGH SCHOOL AREA PROGRAM					WILSON HS EXISTING					DIFFERENCE		
AREA ^{1,2}	RECOMMENDED		PREFERRED OPTIONAL		Total	AREA	WILSON HS EXISTING		Total	Quantity	Total	
	Quantity	SF/Room	Quantity	SF/Room			Quantity	SF/Room				
SUMMARY PPS ED SPEC					SUMMARY WILSON HS EXISTING							
COMPREHENSIVE HIGH SCHOOL PROGRAM - TEACHING STATIONS					COMPREHENSIVE HIGH SCHOOL PROGRAM - TEACHING STATIONS							
General Education (Gen-Ed) Classrooms	41				53,180	General Education (Gen-Ed) Classrooms	46		41,161	5	(12019)	
Science Labs	11				17,480	Science Labs	10		13,300	-1	(4180)	
Fine & Performing Arts (Drama, Theater)	4				21,150	Fine & Performing Arts (Drama, Theater)	7		32,398	3	11248	
Career Preparation/CTE ³	3				6,000	Career Preparation/CTE	9		12,231	6	6231	
Athletics (includes area for P.E. instruction)	3				35,580	Athletics (includes area for P.E. instruction)	4		32,580	1	(3000)	
Education Support ⁴	2				67,400	Education Support	0		46,156	-2	(21244)	
Sub-Total Recommended Teaching Stations	64				200,790	Sub-Total Teaching Stations	76		177,826	12	(22964)	
Community Partners ⁵					1,200	Community Partners			78		(1122)	
Wrap-Around Service Providers ⁵					4,700	Wrap-Around Service Providers			0		(4700)	
Sub-Total					5,900	Sub-Total			78		(5822)	
SUB-TOTAL COMPREHENSIVE HIGH SCHOOL REQUIRED AREA					206,690	SUB-TOTAL WILSON HIGH SCHOOL EXISTING NET AREA					177,904	(28786)
<i>Net to Gross Ratio of 36% ⁶</i>					74,408	<i>Net to Gross</i>					46.65%	
TOTAL COMPREHENSIVE HIGH SCHOOL REQUIRED					281,098	TOTAL WILSON HIGH SCHOOL GROSS AREA					260,900	(20198)



The colored circles above represent the total relative size of the different program groups listed in the PPS Ed Specs. The CMPC were asked to explore what programs should, or should not, be located near each other, and what programs should be open to the community (public spaces) or closed to the community (private spaces). The diagram below represents the preferred program adjacencies and relationships.

Program Adjacency (to be applied to Option E and G)



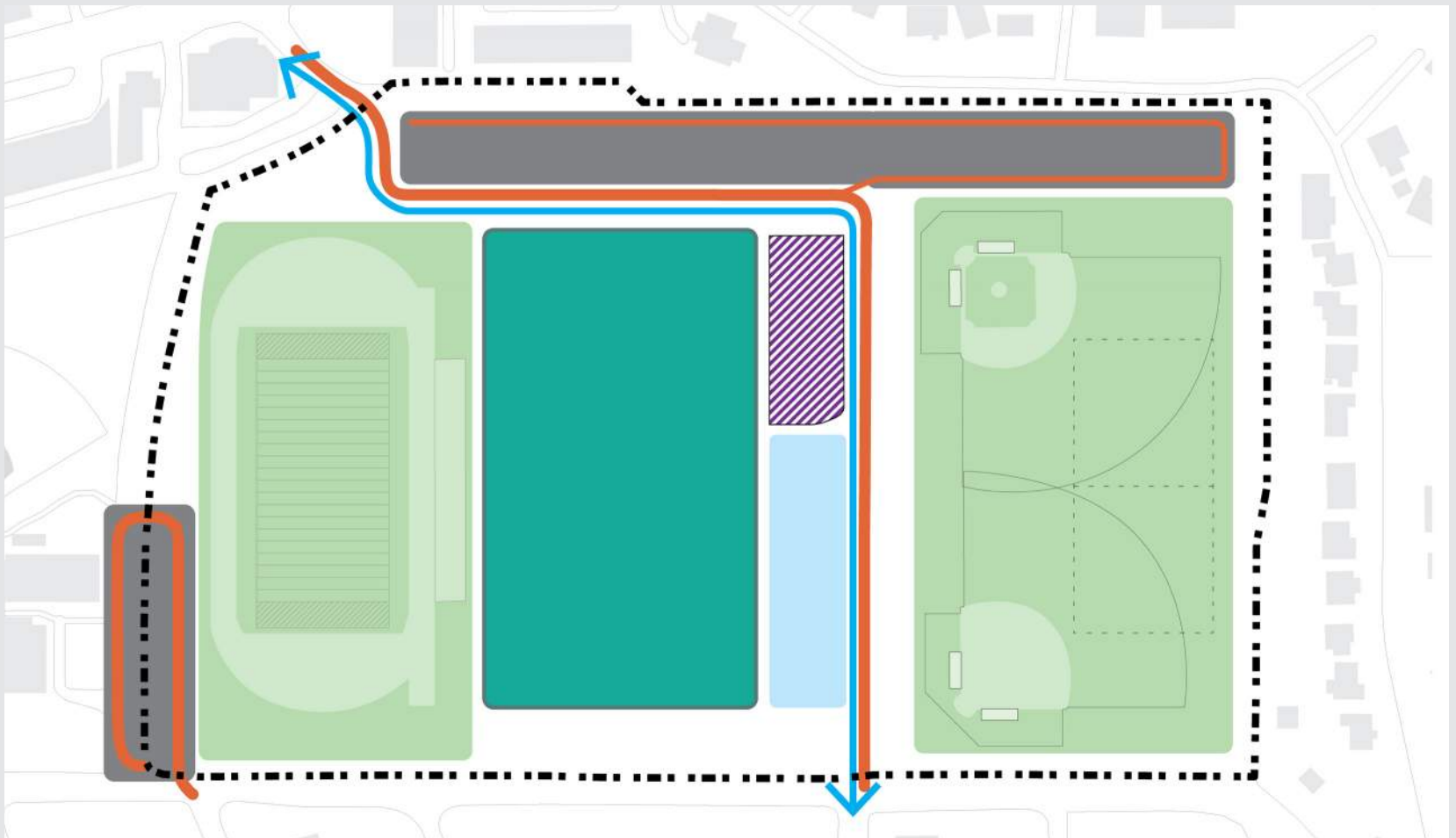
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1 EXECUTIVE SUMMARY

Two CMP design options were selected by the CMPC for concept development: Option E and Option G.

Preferred Conceptual Master Planning Design - Option E

Proposed New Building Location, CMPC meeting four on November 19, 2019



Concept Development - Program Adjacency, Community Forum on December 12, 2019

The program relationship and adjacency diagram was overlaid onto the new building location concept plan. The concept plan was updated from the fourth CMPC meeting to incorporate feedback IBI received in the meeting. The Program Adjacency Concept Plan was presented at the Community Forum event.

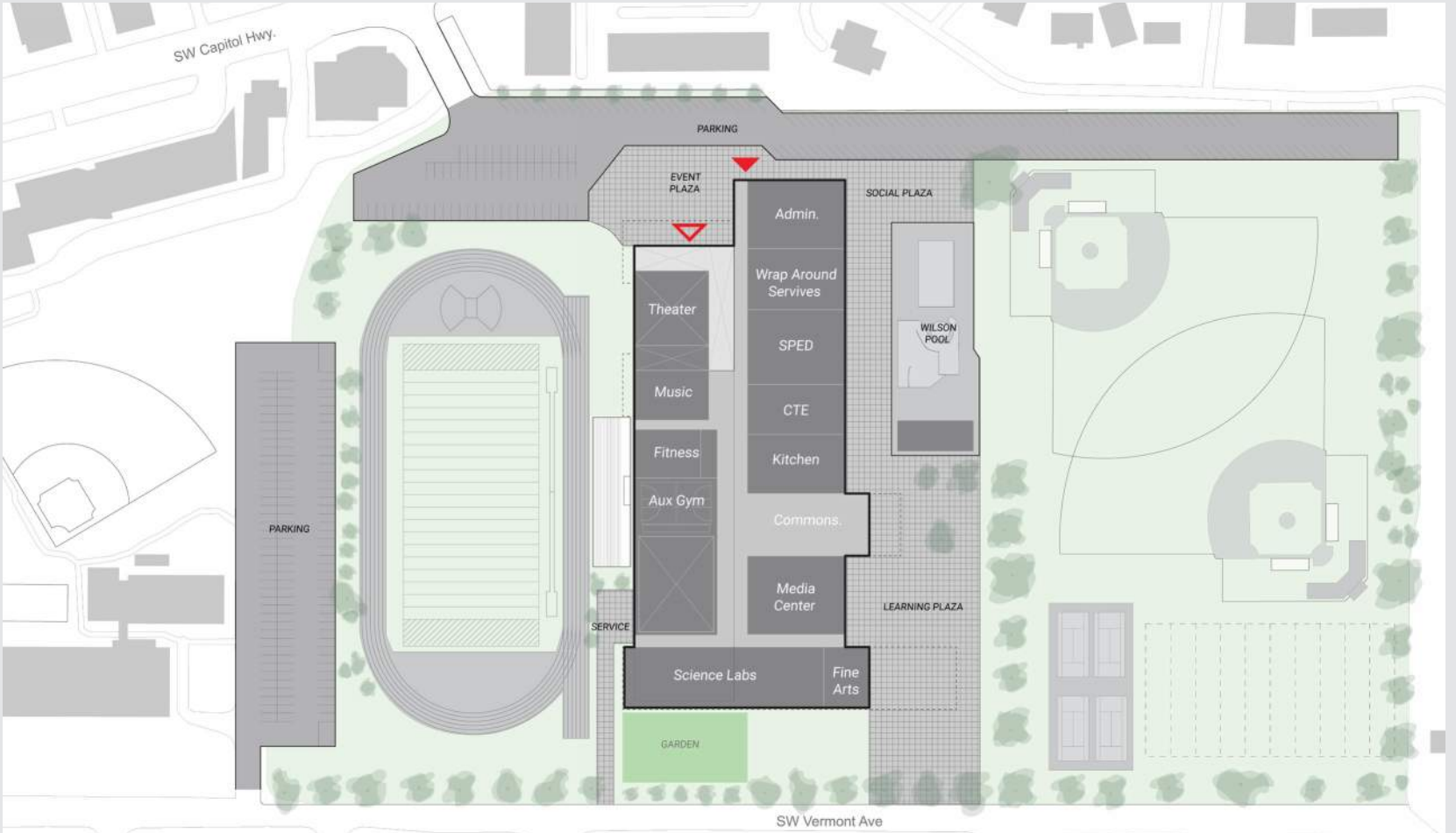


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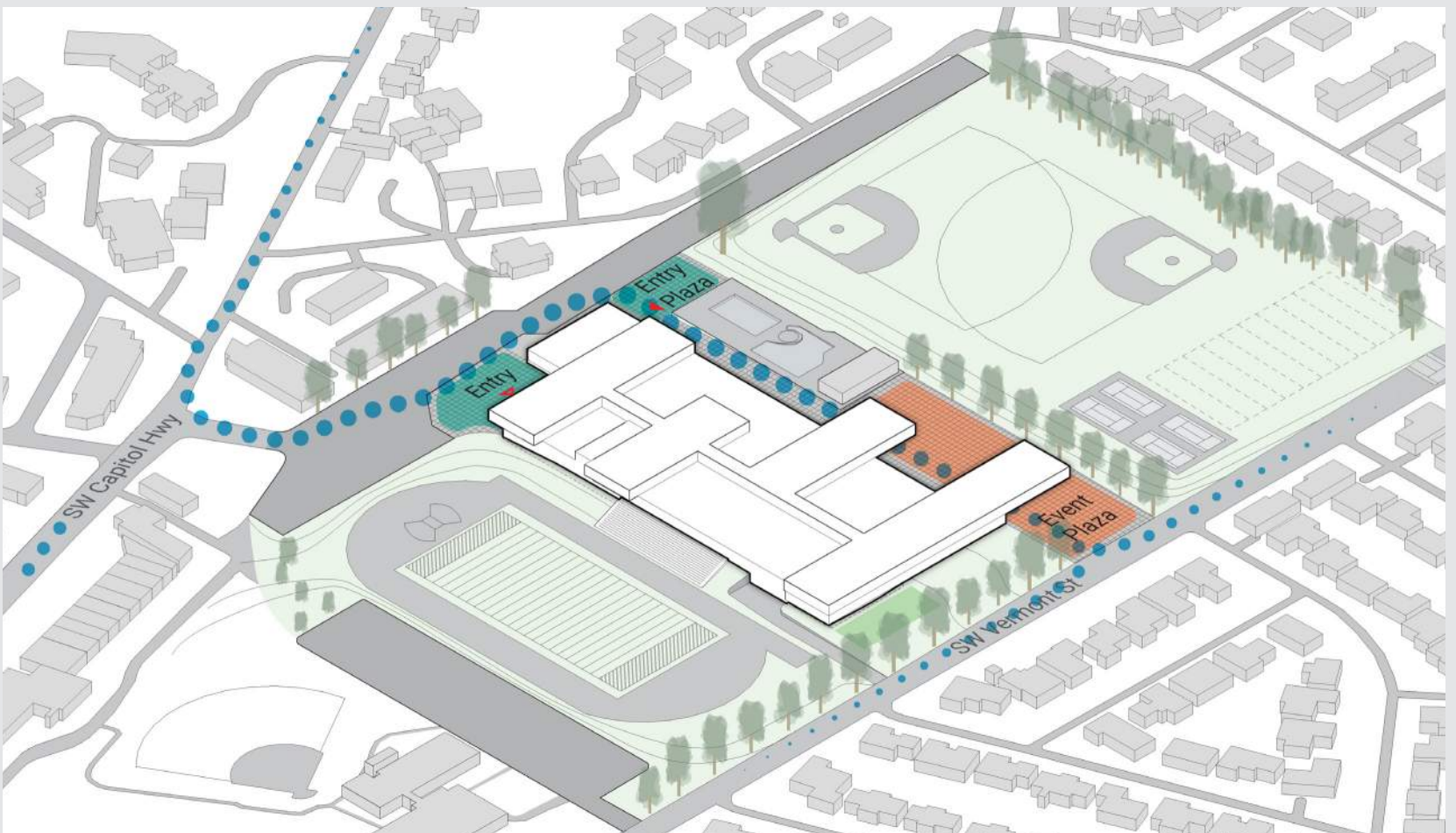
1 EXECUTIVE SUMMARY

Preferred Conceptual Master Planning Design - Option E

Concept Development - Site Plan, CMP Report, January 2020



Concept Development - Massing, CMP Report, January 2020

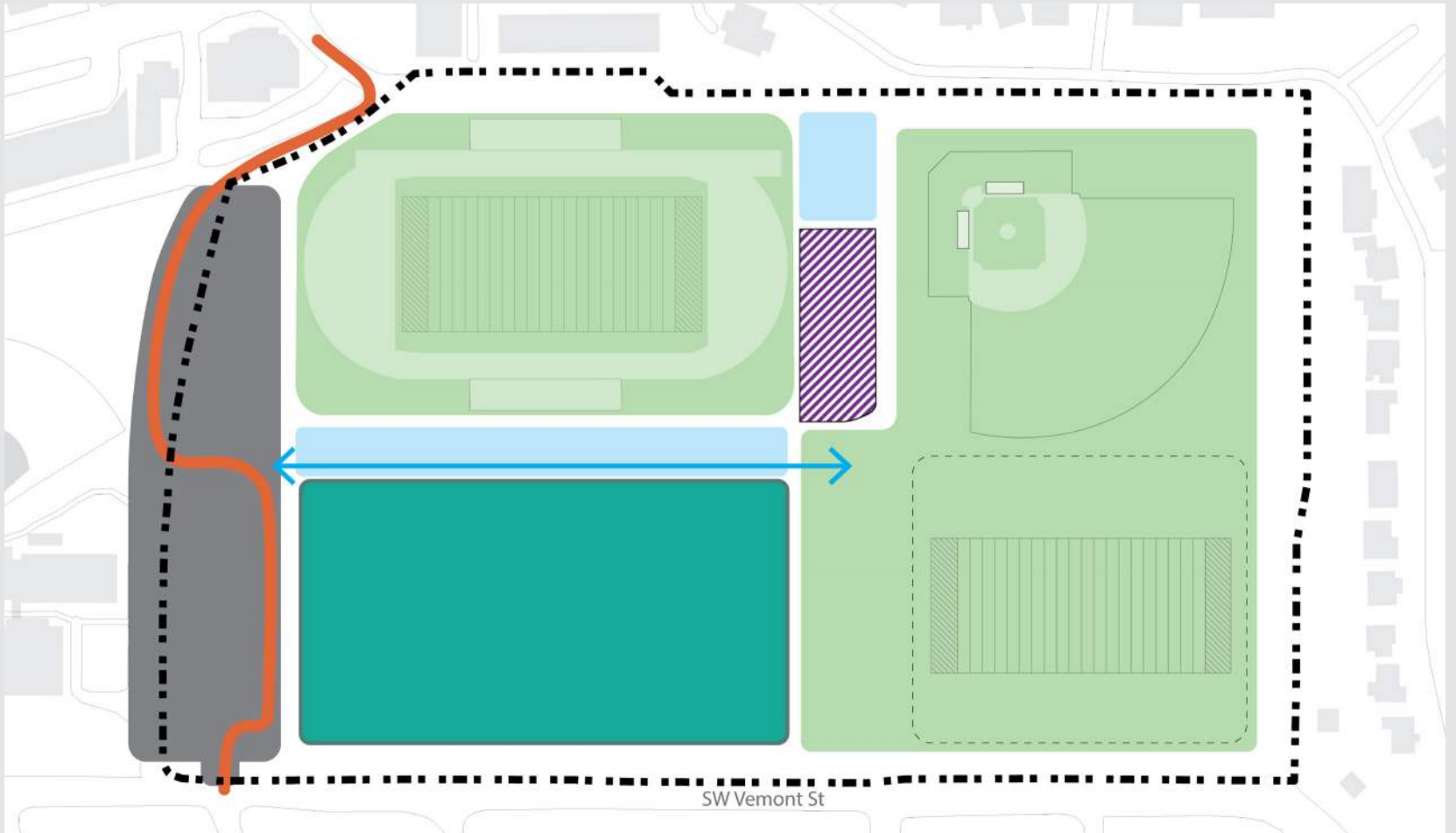


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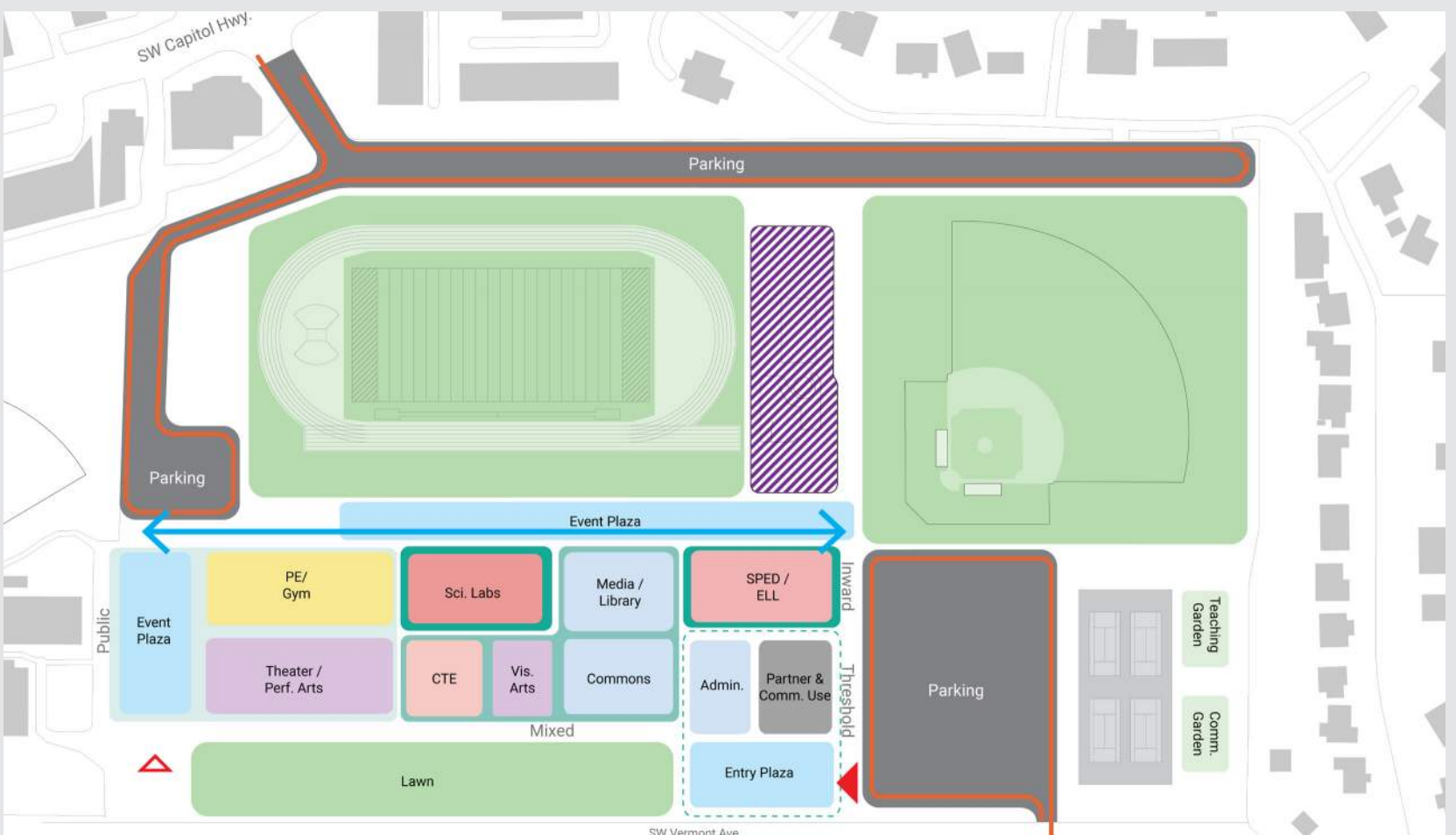
Preferred Conceptual Master Planning Design - Option G

Proposed New Building Location, CMPC meeting four on November 19, 2019



Concept Development - Program Adjacency, Community Forum on December 12, 2019

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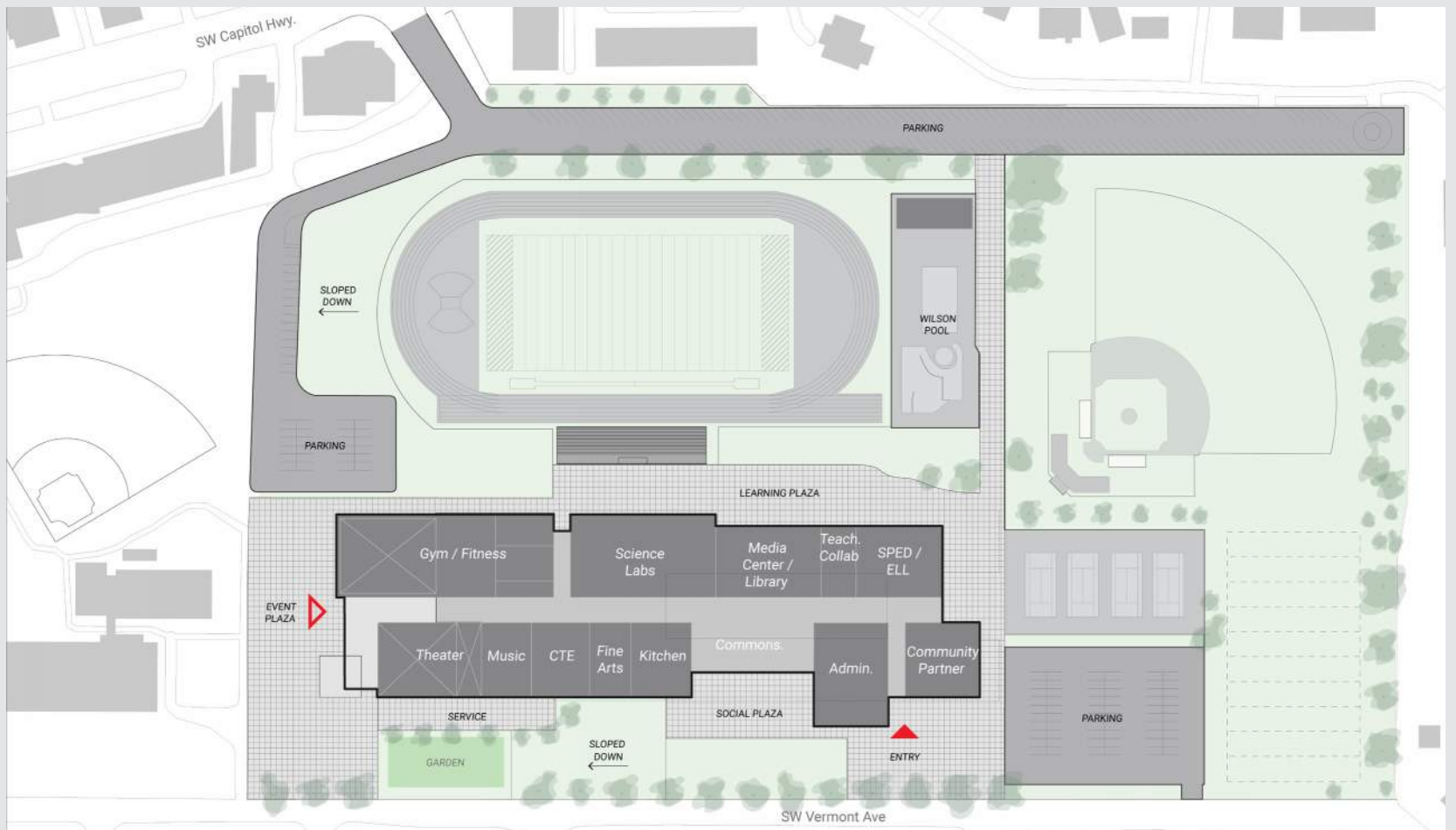


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Preferred Conceptual Master Planning Design - Option G

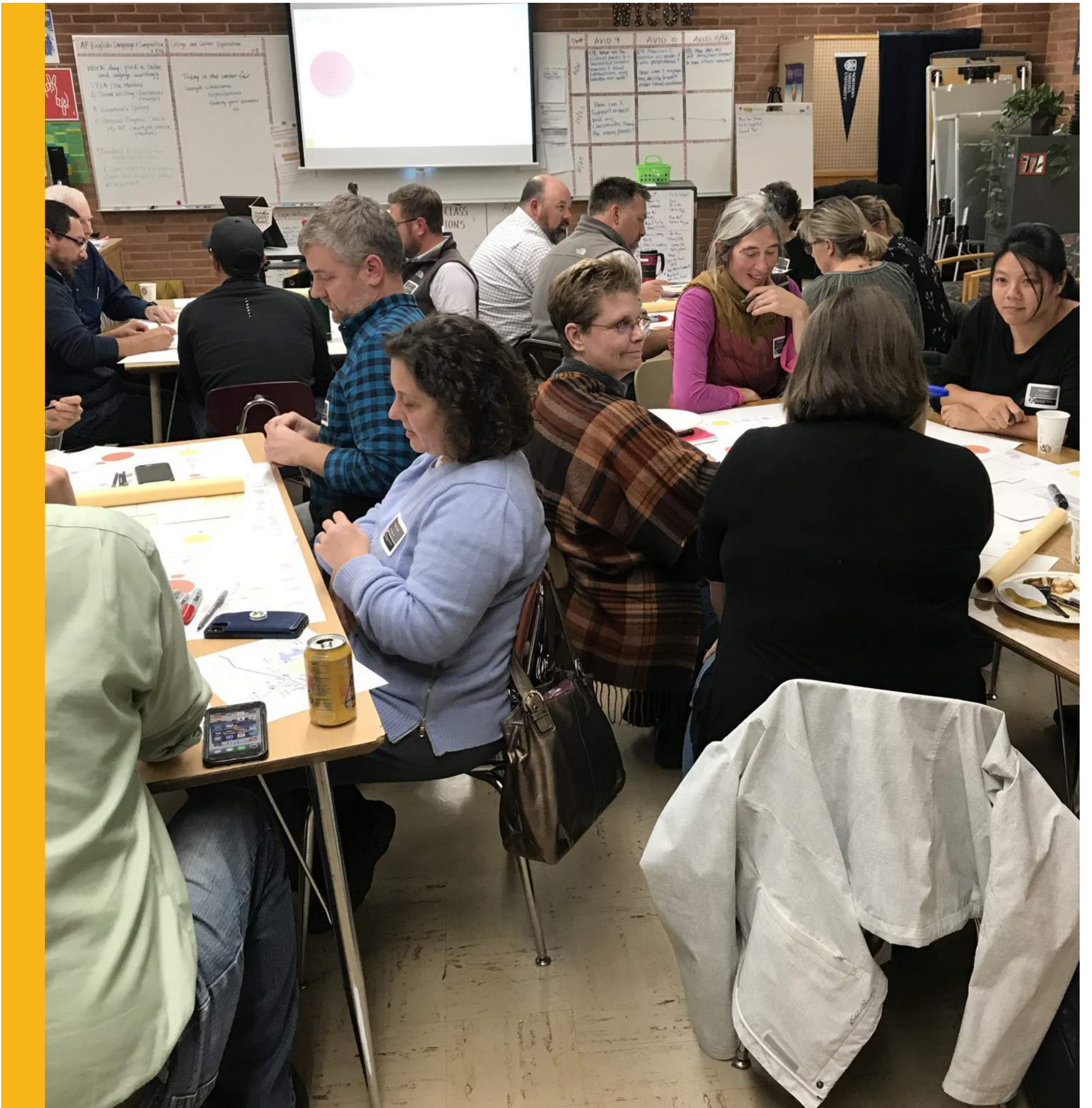
Concept Development - Site Plan, CMP Report, January 2020



Concept Development - Massing, CMP Report, January 2020



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COMMUNITY ENGAGEMENT PROCESS AND OUTCOMES

2

COMMUNITY ENGAGEMENT PROCESS AND OUTCOMES



CONCEPTUAL MASTER PLANNING COMMITTEE MEETINGS

The Conceptual Master Planning Committee (CMPC) at each of the high schools (Cleveland, Jefferson, Wilson) advised the District’s Project Team in developing a comprehensive, equitable, integrated and visionary school design with authentic school community engagement. The Project Team worked directly with each CMPC to ensure that their concerns and aspirations were understood and considered.

The Conceptual Master Planning (CMP) process determined each school’s overall program needs, site layout, and estimated costs for modernized or rebuilt facilities. The purpose of this early planning effort was to more accurately determine the cost estimates for the modernization or the rebuilding of that school. This information will help Portland Public Schools (PPS) in the planning of future capital improvement bonds.

There was an outreach and engagement effort by which community members aided in developing the conceptual master plans. Members of each high school community had the opportunity to join a CMPC which was part of a collaborative process with design teams and staff to develop a vision, program, and conceptual options for each school.

The CMPC consisted of parents, teachers, students, and community stakeholders who worked together to help provide feedback for the development of the conceptual master plans. CMPC members synthesized community-wide input and shared the evolving details of the project to others in the community.

STEERING COMMITTEE MEETINGS

Steering Committee (SC) meetings were held every two weeks in between the CMPC meetings. They provided an opportunity for all the project teams to gather as a group to report to the SC what we heard in the CMPC meetings and to request direction on critical issues.

The Steering Committee (SC) comprised of:

- PPS leadership, including the Office of School Modernization (OSM)
- Cleveland, Jefferson and Wilson High School Principals
- Cleveland and Wilson CMPC Chairpersons
- Cleveland, Jefferson and Wilson High School architects: Mahlum, Bora and IBI
- PPS cost estimator Rider Levett Bucknall (RLB)

COMMUNITY FORUM EVENT

The Community Forum events provided each of the school communities the opportunity to learn about the CMP process and provide feedback about this process as well as the capital improvement bond planning effort.

Members of the community had the opportunity to hear from members of the Project Team, the CMPC, the school principal, and the representative Board member, and share with them their own vision, interests and concerns. This input and feedback will be incorporated into the final version of this report.

OPEN HOUSE EVENT

The culmination of the CMPC meetings was the creation of recommended CMP options. At the Open House event, the public will be invited to provide valuable feedback to the Project Teams for the three high schools as these conceptual master plan options are formally presented to the School Board.

SCHEDULE OF MEETINGS AND EVENTS

- SC #1: October 4, 2019
- CMPC #1: October 10, 2019 - Vision and Goals
- SC #2: October 17, 2019
- CMPC #2: October 22, 2019 - Program and Analysis
- SC #3: October 31, 2019
- CMPC #3: November 5, 2019 - Concept Development
- SC #4: November 14, 2019
- CMPC #4: November 19, 2019 - Concept Refinement
- SC #5: December 5, 2019
- Community Forum Event: December 12, 2019
- Open House Event: To be scheduled early 2020

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COMMUNITY ENGAGEMENT PROCESS AND OUTCOMES

COMMUNITY ENGAGEMENT

Early in the CMP process IBI decided we didn't want to go with any preconceived ideas about what the future Wilson would be. We wanted to hear how the community felt about the existing school and what they thought the future Wilson could be with no input from us.

Authentic engagement is important to any community outreach effort and with only four CMPC meetings, each two hours long, IBI realized we needed to engage with the CMPC beyond the meetings themselves. Homework exercises were distributed in CMPC meetings one and two, and common themes were shared back in meetings two, three and four to create a continual feedback loop. The goal for the homework exercises was to engage with the CMPC at a deeper level. By allowing CMPC members to think about the site and building program at home they were able to formulate their thoughts without be influenced by other CMPC members.

Interactive activities in the CMPC meetings gave members the opportunity to play with site and building elements and engage in lively discussions about the benefits and trade-offs of different design options.

CMPC MEETING 1 - VISION AND GOALS

In the first CMPC meeting PPS outlined the CMPC process, schedule and charter expectations, and introduced IBI.

Exercise

To kick-off the community design process IBI facilitated a visioning exercise and asked three big picture questions about the future WHS.

1. What is your biggest fear?
2. What is your greatest aspiration?
3. And, how will we know if we are successful?

Homework Distribution - Site

CMPC members were asked to circle on a site map the places they believe serve the community.

1. What places does the community value and why?
2. Identify places of personal memory.
3. What are your favorite places and why?
4. Where is change necessary and why?



CMPC Chairperson Mike Nolan, WHS Principal Filip Hristic, and Andrew Scott Board Member at the Community Forum Event at WHS

CMPC MEETING 2 - PROGRAM AND ANALYSIS

In the second CMPC meeting IBI reviewed and compared the PPS Comprehensive High School Education Specifications (Ed Specs) to Wilson's current program.

Homework Report Back - Vision

IBI uploaded the visioning ideas from the first meeting to an online survey and CMPC members voted on the ideas at home so they couldn't be influenced by others votes. The voting exercise revealed what is most important to CMPC members and from that IBI created the WHS vision statement.

Exercise - Program

CMPC members completed two table group activities. In the first activity the groups considered site program elements. In the second activity the groups considered building program size. In both activities the table groups reported to the larger committee their thoughts and reactions to site program elements and building program size.

Homework Distribution - Program

CMPC members were asked to reflect on the future Wilson program sizes and preferred program adjacencies.

CMPC MEETING 3 - CONCEPT DEVELOPMENT

In the third CMPC meeting IBI asked the CMPC to decide the design path and direction for WHS.

Homework Report Back - Site

The site homework exercise from the first meeting informed the development of site organization options presented in the third meeting.

Exercise

During this meeting CMPC members shared their thoughts on what community is, and they were asked to vote on the four design paths. There was a clear preference for a new building that maintains the existing Wilson Pool.

CMPC MEETING 4 - CONCEPT REFINEMENT

In the fourth CMPC meeting IBI reviewed options for the location of the new WHS. There was intense discussion about relocating students off site during construction. At the end of the meeting a member called for a vote and the majority of the CMPC group agreed students should stay on-site during construction.

Homework Report Back - Program

IBI presented the program adjacency and size homework exercises from the second CMPC meeting. The responses were synthesized and common themes were established.

Exercise

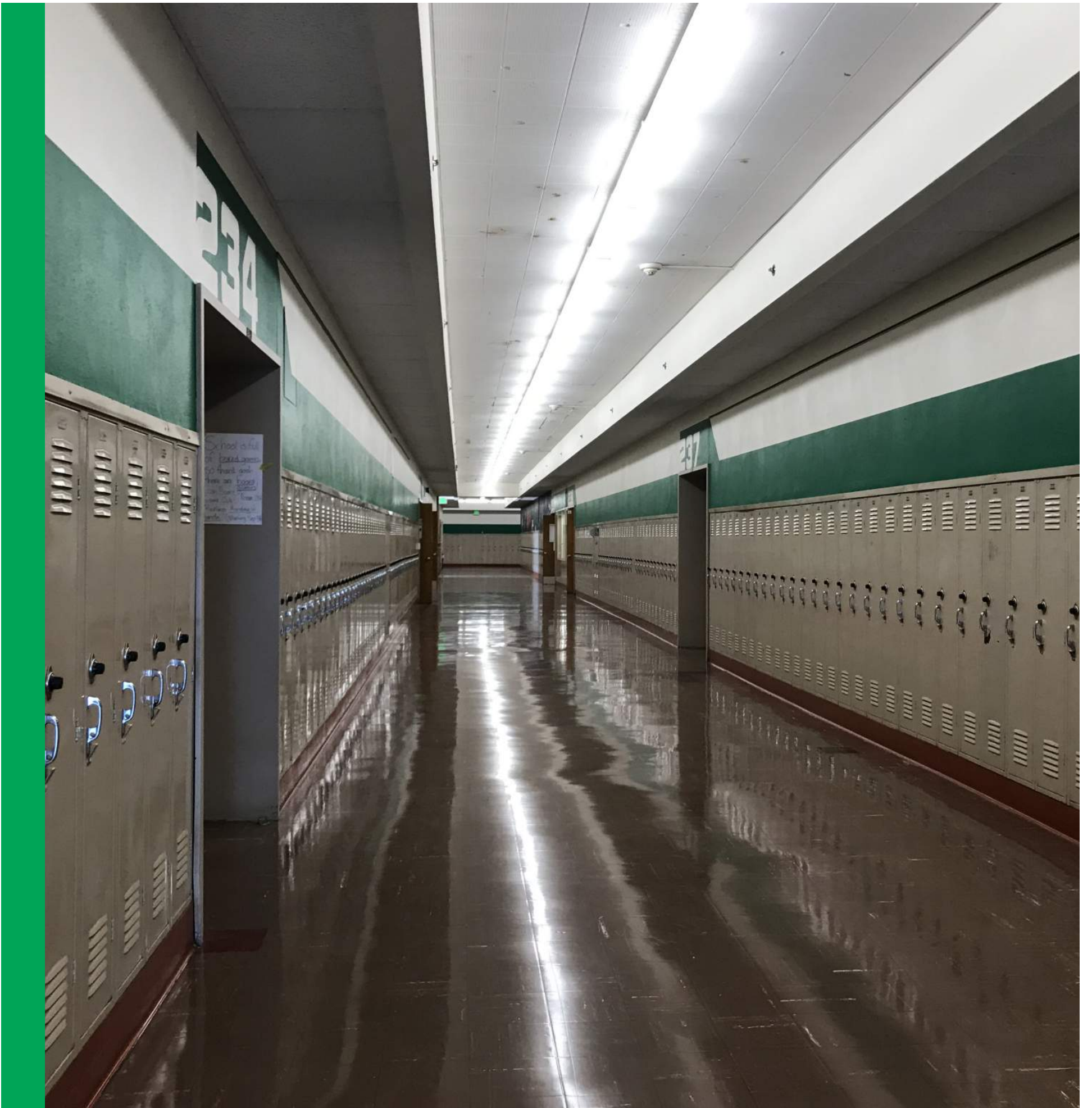
CMPC members shared their thoughts on potential Partner Community Use + Wrap around Services.

COMMUNITY FORUM EVENT

The Community Forum Event concluded the Community Outreach Effort with the CMPC.

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**ANALYSIS
OF EXISTING
CONDITIONS**

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ANALYSIS OF EXISTING CONDITIONS

EXISTING SITE OVERVIEW

Wilson High School (WHS) is located at 1151 SW Vermont Street in the Hillsdale neighborhood of Southwest Portland. The campus occupies an expansive rectangular shaped parcel that is bounded by SW Vermont Street to the south, SW Capitol Highway and SW Burlingame Avenue to the north, Rieke Elementary School to the west, and a residential development to the east. The school occupies the eastern half of the property with baseball, track and football fields to the west. The elevation change from the east side of the site to the west side of the site is approximately 60'-0". A fence-enclosed outdoor pool is located on the west side of the gymnasium. Development in the surrounding area consists primarily of single-family residences built between 1950 and 1990.

The WHS physical facility consists of one building totaling approximately 260,900 SF of built space on an approximately 26-acre site. The main building was built in 1956. WHS has not been extensively modified and retains much of its original historical integrity. The lone addition to the building consisted of a classroom addition to the north wing in 1960 and is barely discernible as it used similar materials and construction methods.

The school was home to 1,481 students for the 2018-2019 school year.

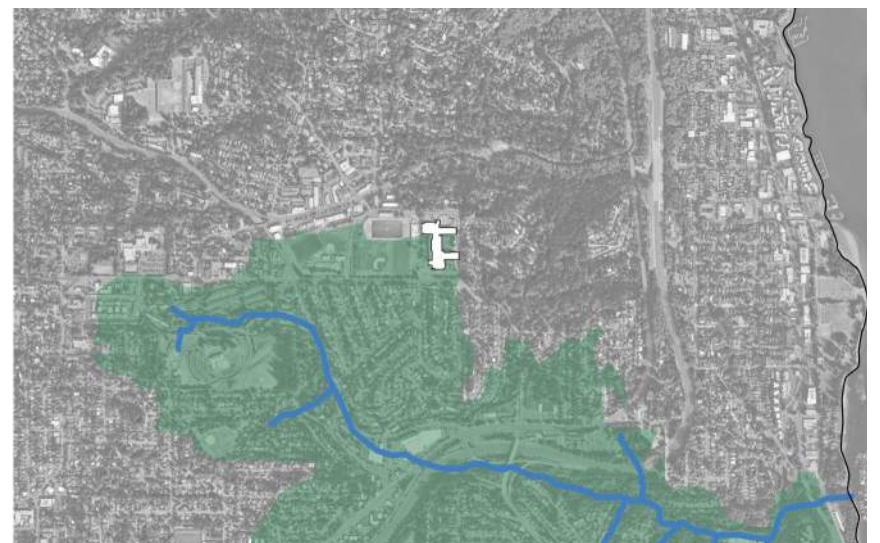
The existing WHS property has the following amenities on-site:

- Practice Field and Baseball Field
 - ▶ Grass; irrigation currently does not function
 - ▶ Batting cage
 - ▶ Bleachers and dugouts
 - ▶ Warm-up mounds
- Track and Field
 - ▶ Concrete uncovered grand stand
 - ▶ Track
 - ▶ Synthetic turf for football, soccer, lacrosse
 - ▶ Synthetic turf was updated by PPS and Nike in 2014 as part of the Great Fields Project
 - ▶ New Field House and Concessions
 - ▶ Field storage underneath grand stand (secure, not enclosed)
- Tennis Courts (2)
- Landscaped Courtyard
- Community Garden
- Softball on Rieke ES site
 - ▶ Share ES restrooms
 - ▶ HS after school practice conflicts with ES aftercare program
- Field on Rieke ES site
 - ▶ Owned and operated by Portland Parks & Recreation (PP&R)
 - ▶ Synthetic turf for soccer and lacrosse
 - ▶ Synthetic turf was updated 2017 with PP&R Parks Replacement Bond
- Wilson Pool
 - ▶ Owned and operated by PP&R
 - ▶ Students do not use Pool during school year
 - ▶ Share HS locker rooms and boilers
 - ▶ Food Carts at the intersection of SW Capitol Highway and SW Sunset Boulevard

Region Analysis



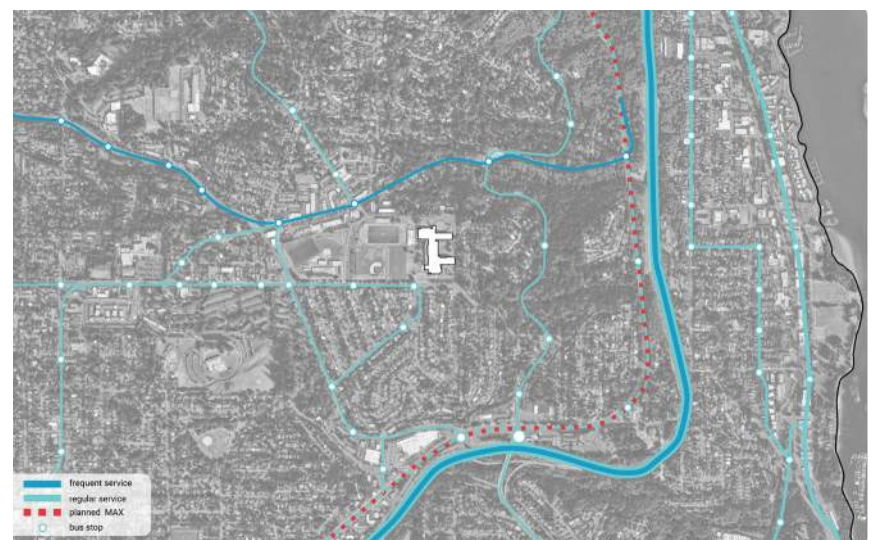
Attendance Area



Stephen's Creek



Major Roads



Transit Lines

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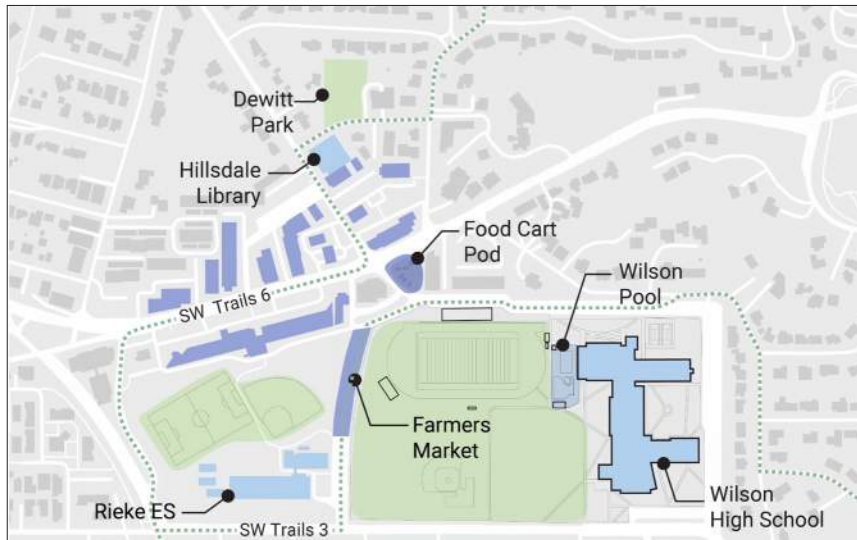
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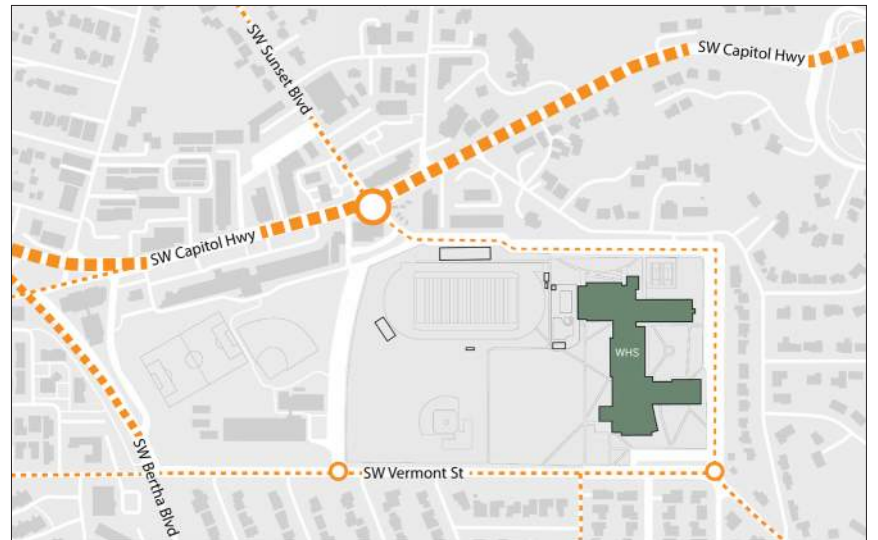
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ANALYSIS OF EXISTING CONDITIONS

Neighborhood Analysis



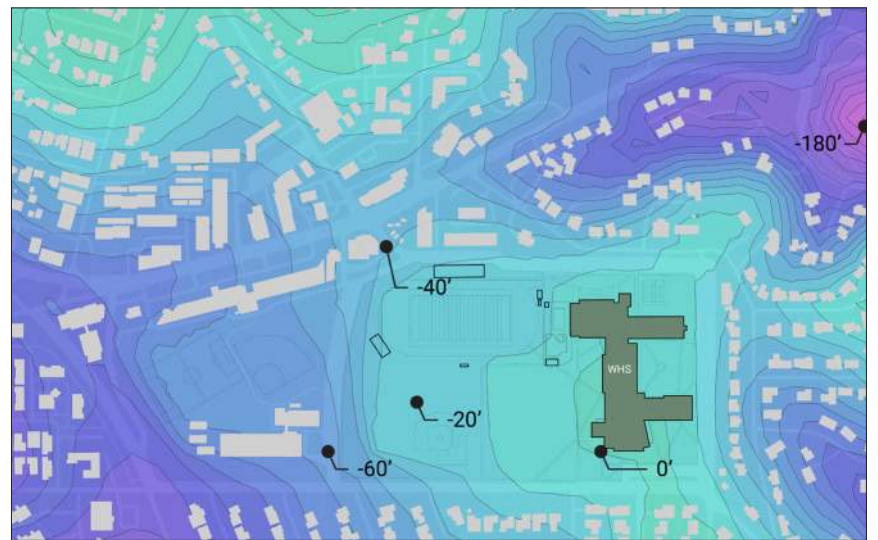
Amenities



Major Roads

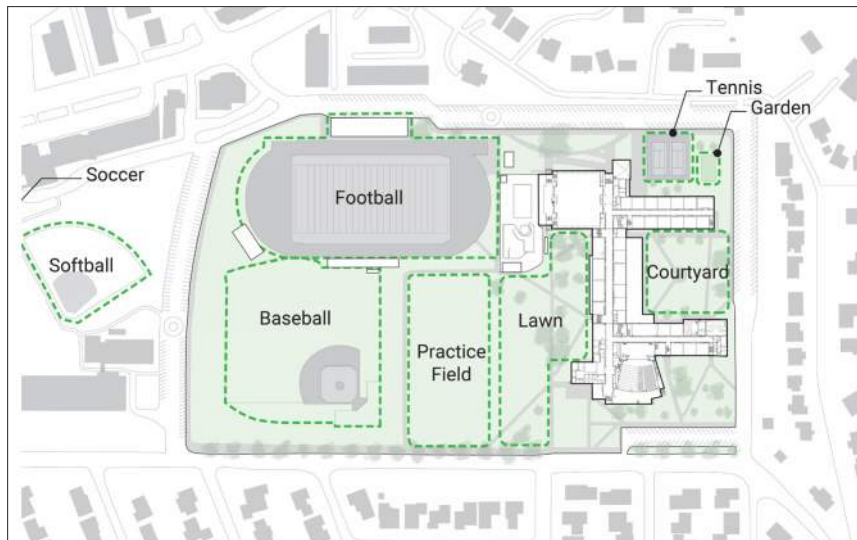


Transit Lines

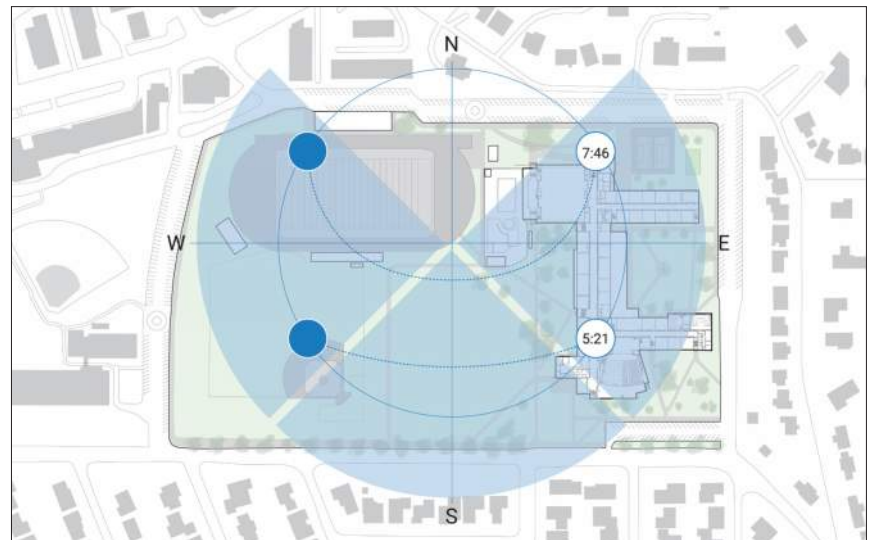


Topography

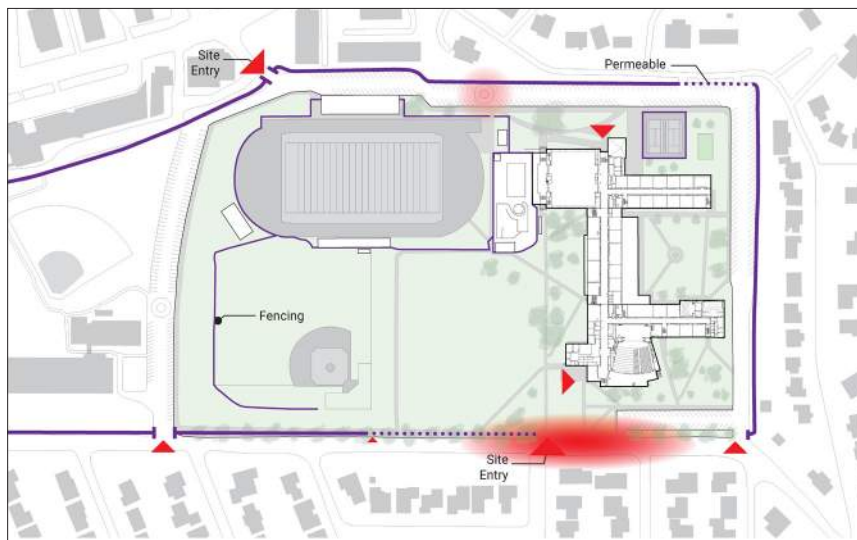
Site Analysis



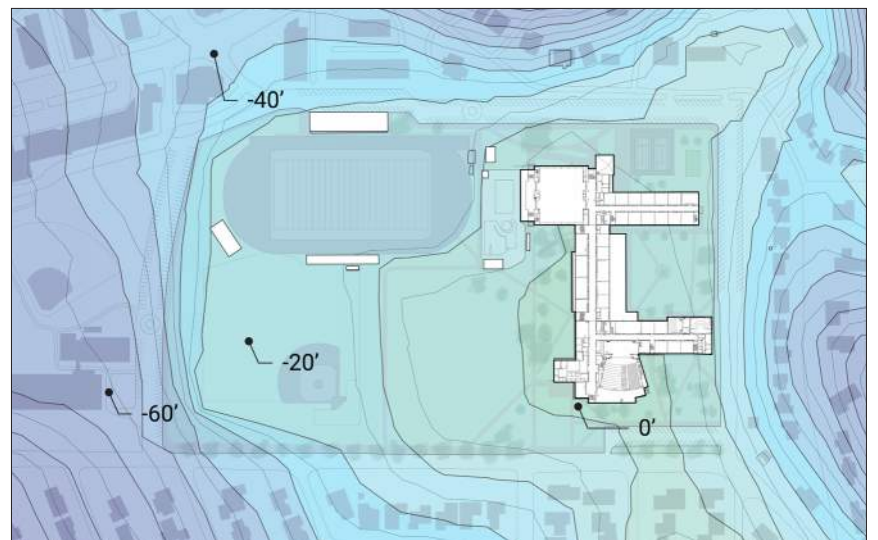
Site Zones



Sun Path



Site Access and Entrances



Topography

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ANALYSIS OF EXISTING CONDITIONS

EXISTING SITE OVERVIEW

At the first Conceptual Master Planning Committee (CMPC) meeting IBI distributed homework for the CMPC to reflect on their connection to the site and building. We collected the homework at the second CMPC meeting and presented a visual summary at the third meeting.

The goal for the homework exercises was to engage with the CMPC at a deeper level. Authentic engagement is important to any community outreach effort. With only four CMPC meetings, each two hours long, we realized we needed to engage with the CMPC beyond the meetings themselves. By allowing CMPC members to think about the site at home they were able to formulate their thoughts without being influenced by other CMPC members.

We asked the CMPC to think about the site from four perspectives:

1. What places does the community value and why?
2. Identify places of personal memory.
3. What are your favorite places and why?
4. Where is change necessary and why?

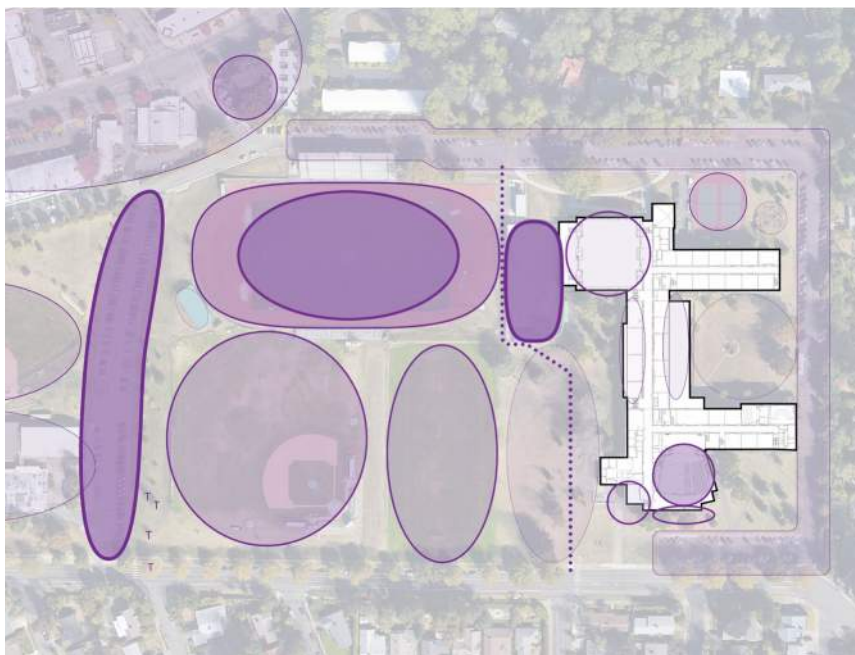
The four site components that received the highest quantity of feedback and the strongest responses were:

1. Wilson Pool
2. Track and Field
3. Farmers Market
4. Theater

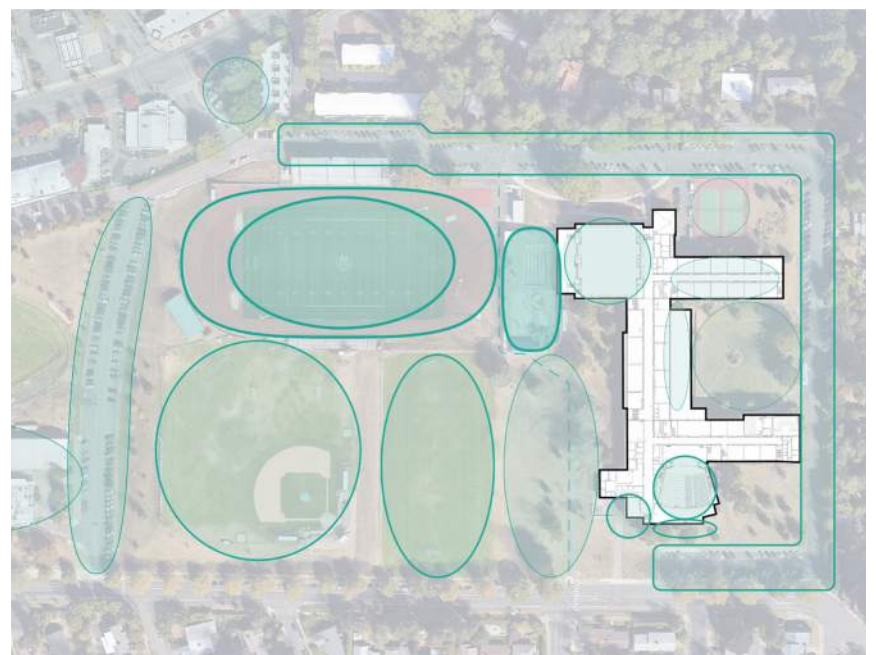
In the site diagrams below the intensity of color represents significant CMPC feedback. For example, a darker color indicates many strong responses were received. A lighter color represents fewer responses.

Wilson Pool, the Track and Field facility, Farmers Market, and Theater, all represent spaces, events and activities that hold significant value to the Hillsdale community. The Wilson campus is used frequently by community members outside of school hours and the community considers the campus to be an important community resource. They value the open access to and availability of the campus to all community members, not just families with children who attend WHS.

Site Homework



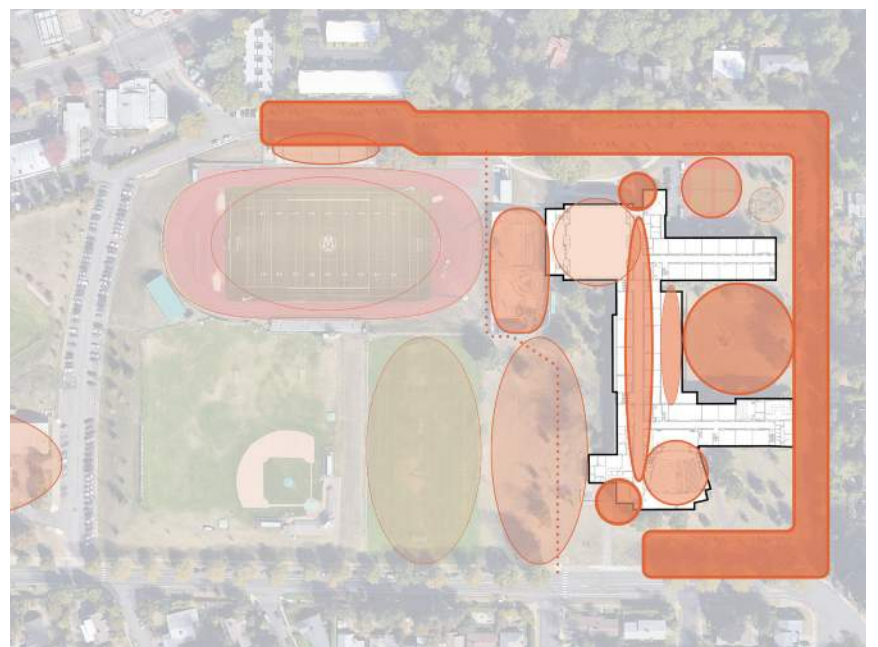
1 | Community Value



2 | Personal Memory



3 | Favorite Place

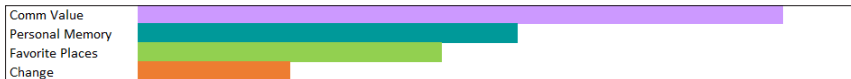


4 | Change

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ANALYSIS OF EXISTING CONDITIONS



Wilson Pool

Community Value

- “Wilson Pool is a community treasure”
- “Cool down and connect with friends”
- “A Hillsdale/Wilson staple”

Personal Memory

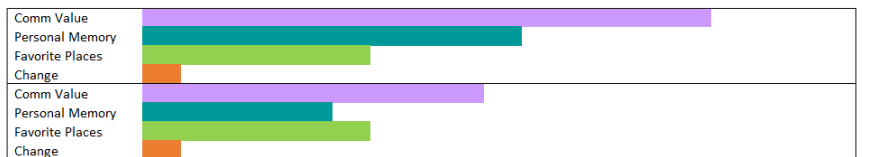
- “Lazy summer days with the family...”
- “Memories of the halcyon days of my kids’ childhoods”

Favorite Place

- “I’ve never had a bad visit to the pool”
- “Would never want to see the pool taken out”
- “Our favorite place to frequent during summer months”

Change

- “Needs to be seriously upgraded”
- “Vandalism to locker rooms”



Track and Field

Community Value

- “A safe place for many runners and walkers”
- “An opportunity to gather as a group/community”
- “More than just WHS sports”

Personal Memory

- “Proud parent memories”

Favorite Place

- “My daughter’s soccer league used the field”
- “Even if we have bad game, they are still fun to go to”

Change

- “Stadium stands are unsightly, especially from the back”



Farmers Market

Community Value

- “Supports local business”
- “It has grown to be an integral part of the community”

Personal Memory

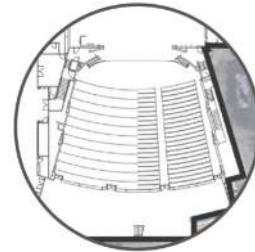
- “Meeting vendors, seeing friends, playing at Rieke after”

Favorite Place

- “We go every week!”

Change

- “Connection to Wilson HS is lacking”
- “Would be nice to have more attractive street”



Theater

Community Value

- “Celebrate student performers”
- “Plays that are always a pleasure to watch”

Personal Memory

- “My second home!”
- “Art shows in the foyer”

Favorite Place

- “Great size!”

Change

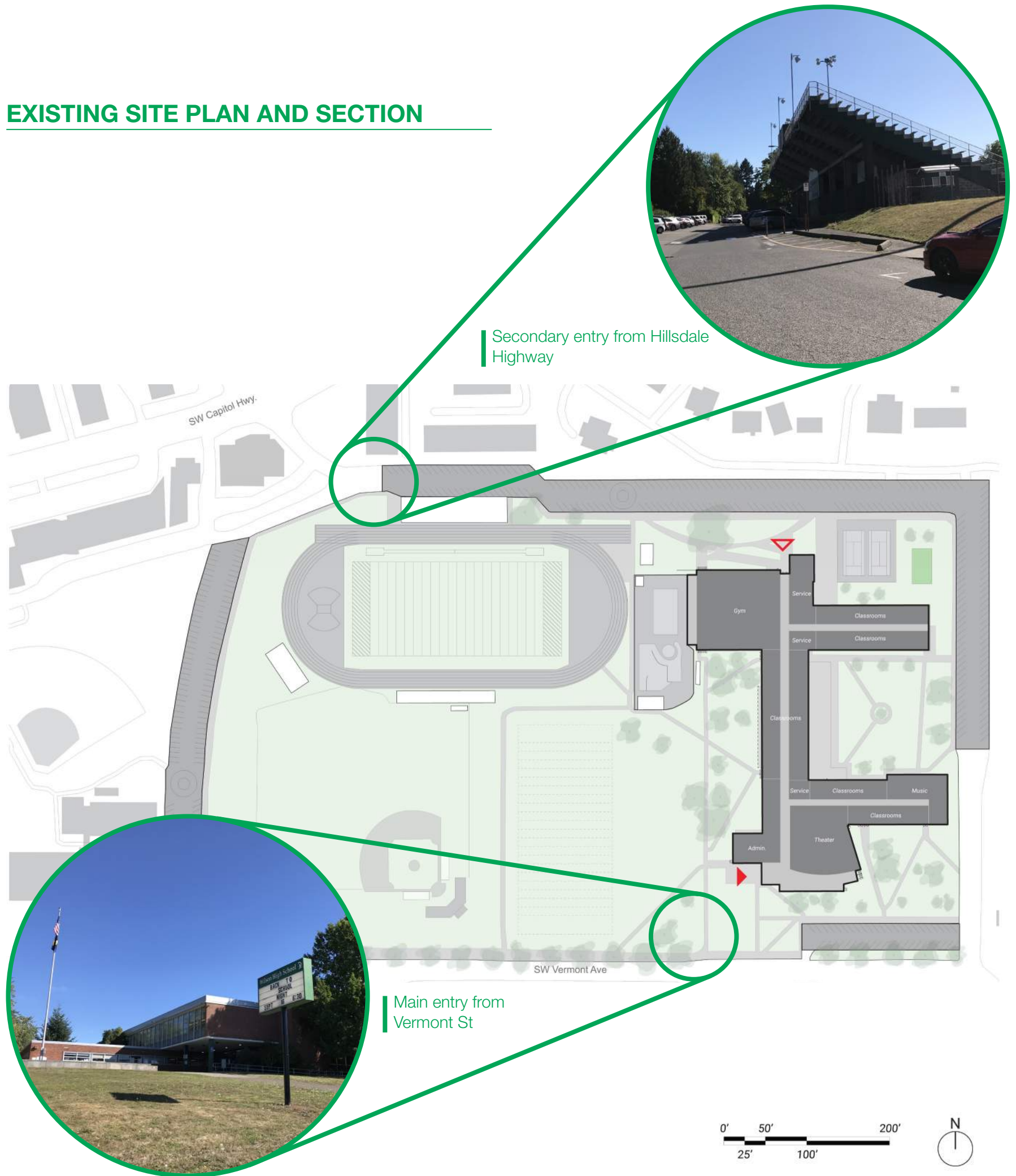
- “Space felt old and stuffy, like items stored in an attic”
- “A space for the orchestra pit would be nice”
- “Foyer too small”

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ANALYSIS OF EXISTING CONDITIONS

EXISTING SITE PLAN AND SECTION



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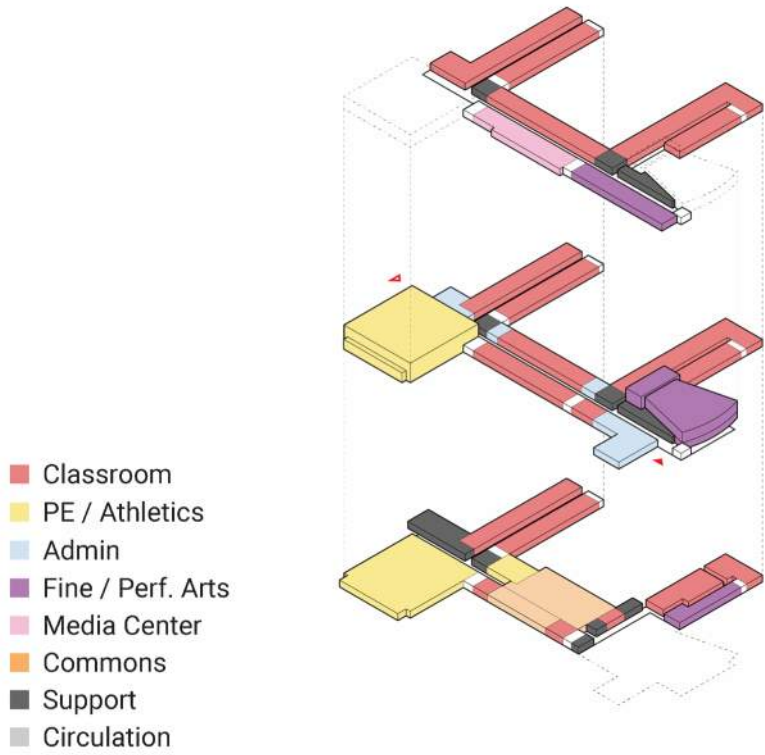
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ANALYSIS OF EXISTING CONDITIONS

EXISTING BUILDING PLANS

Building Axonometric

Total: 260,900 SF



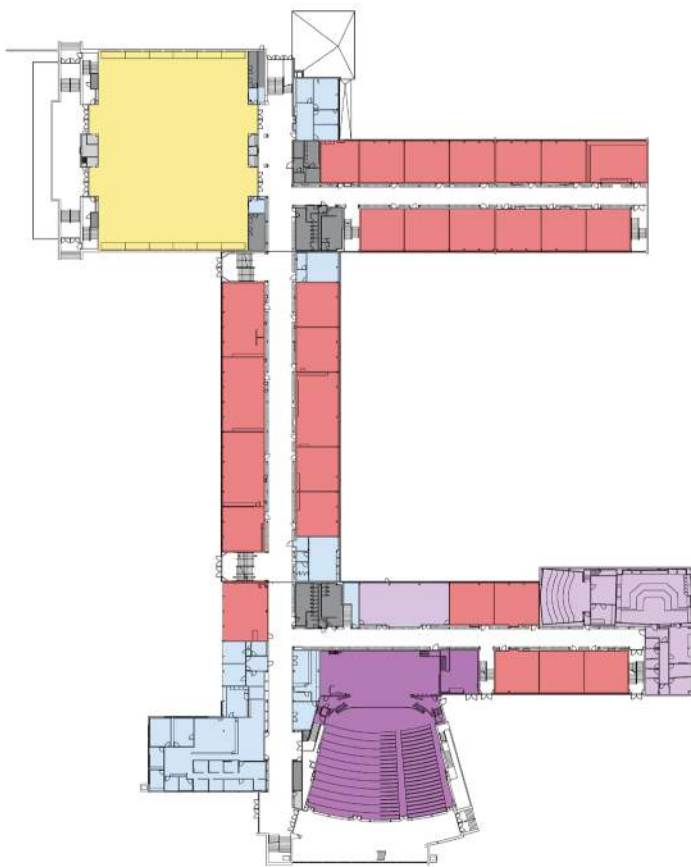
Basement Floor Plan

85,721 SF



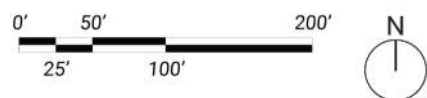
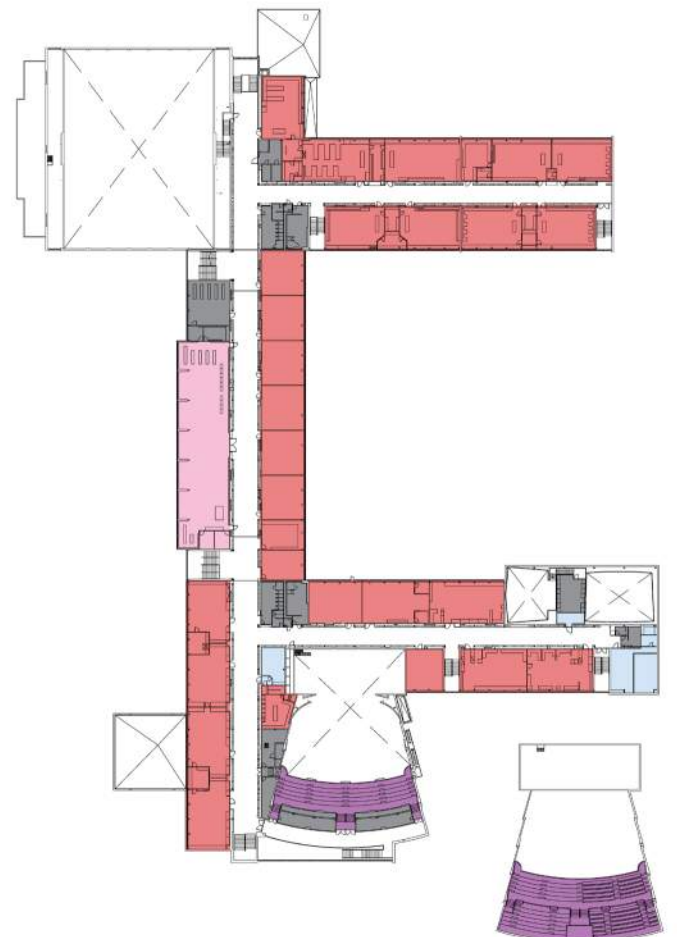
Level 1 Floor Plan

102,047 SF



Level 2 Floor Plan

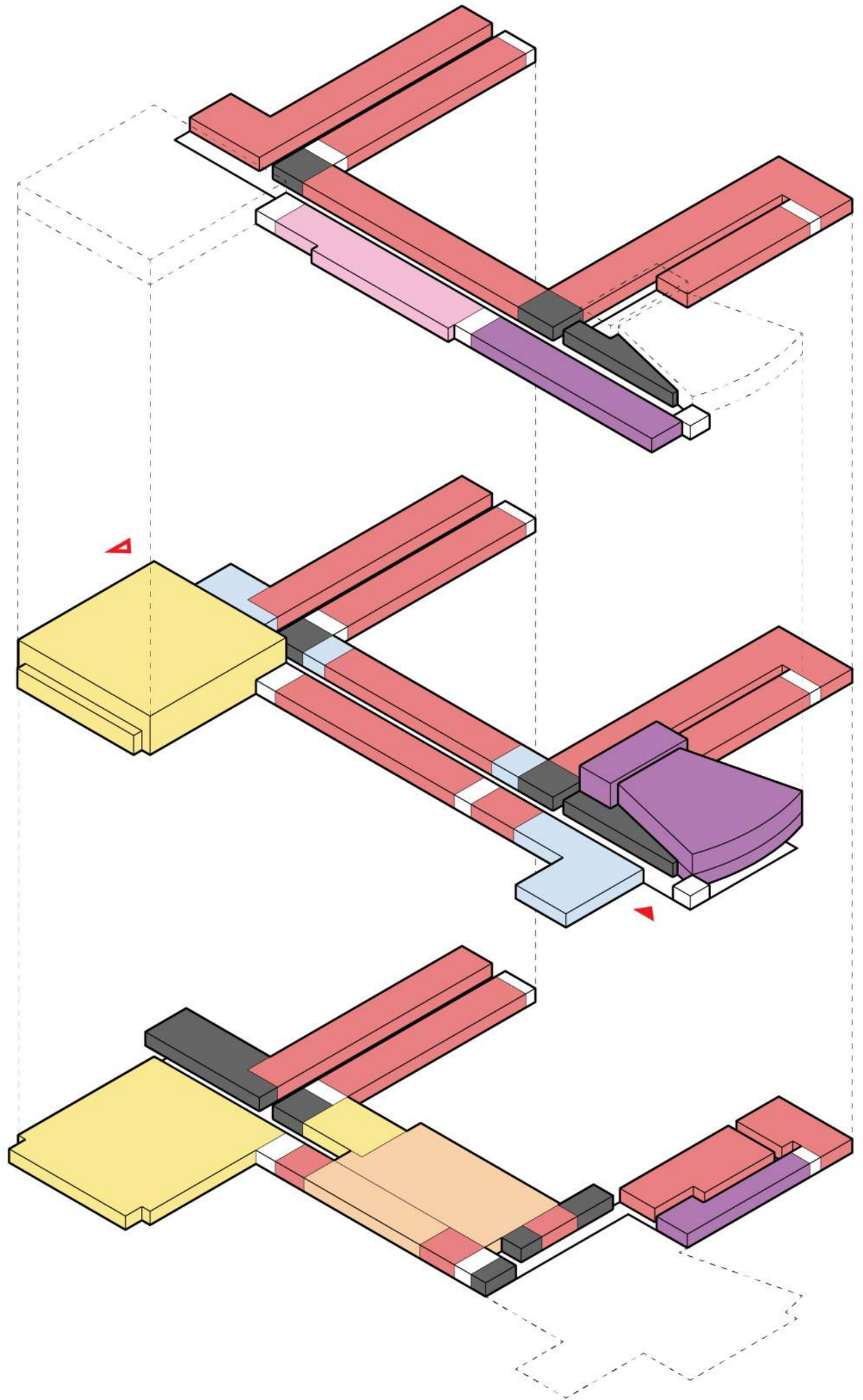
73,132 SF



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ANALYSIS OF EXISTING CONDITIONS

Building Axonometric



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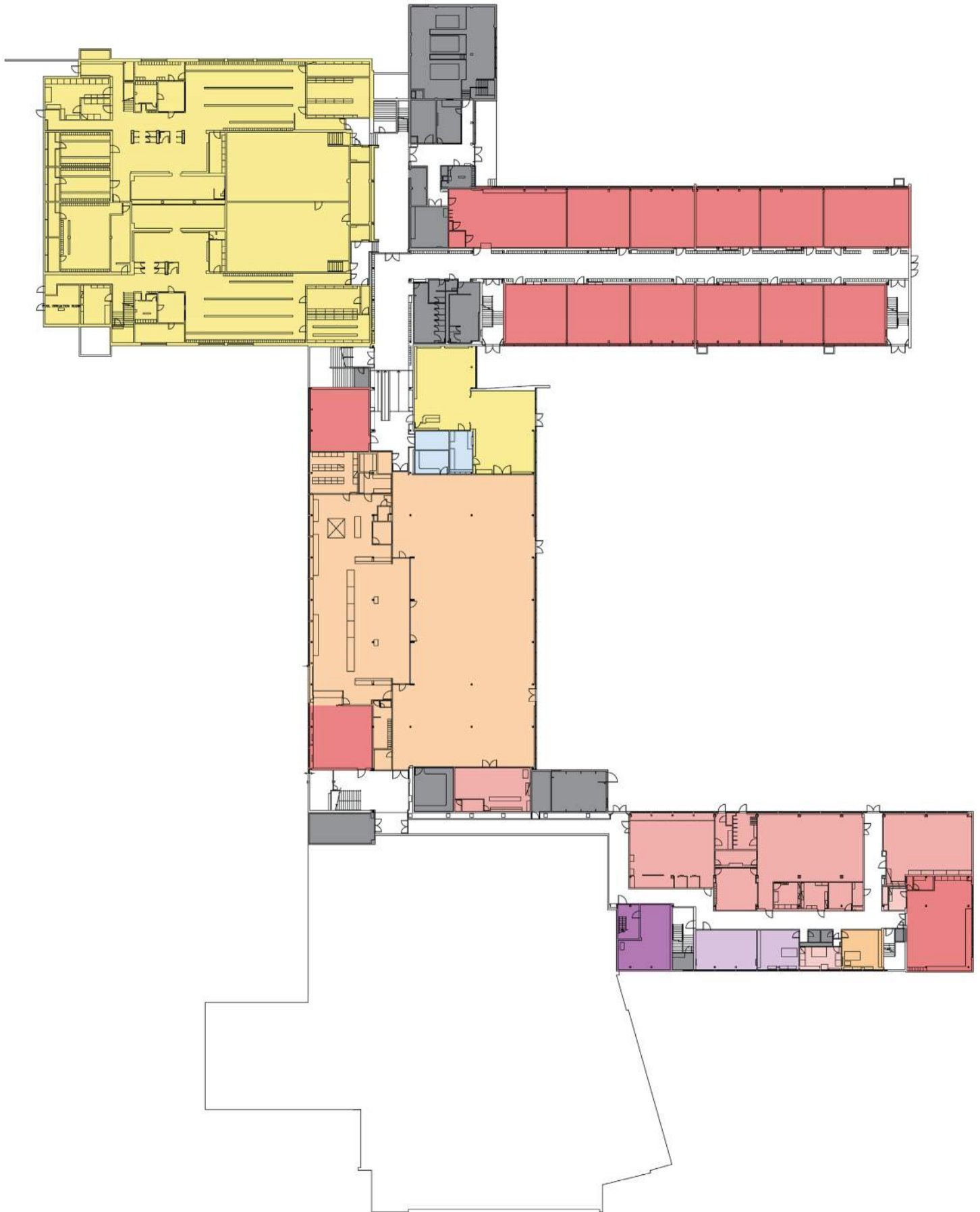
- Classroom
- PE / Athletics
- Admin
- Fine / Perf. Arts
- Media Center
- Commons
- Support
- Circulation



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ANALYSIS OF EXISTING CONDITIONS

Basement Floor Plan



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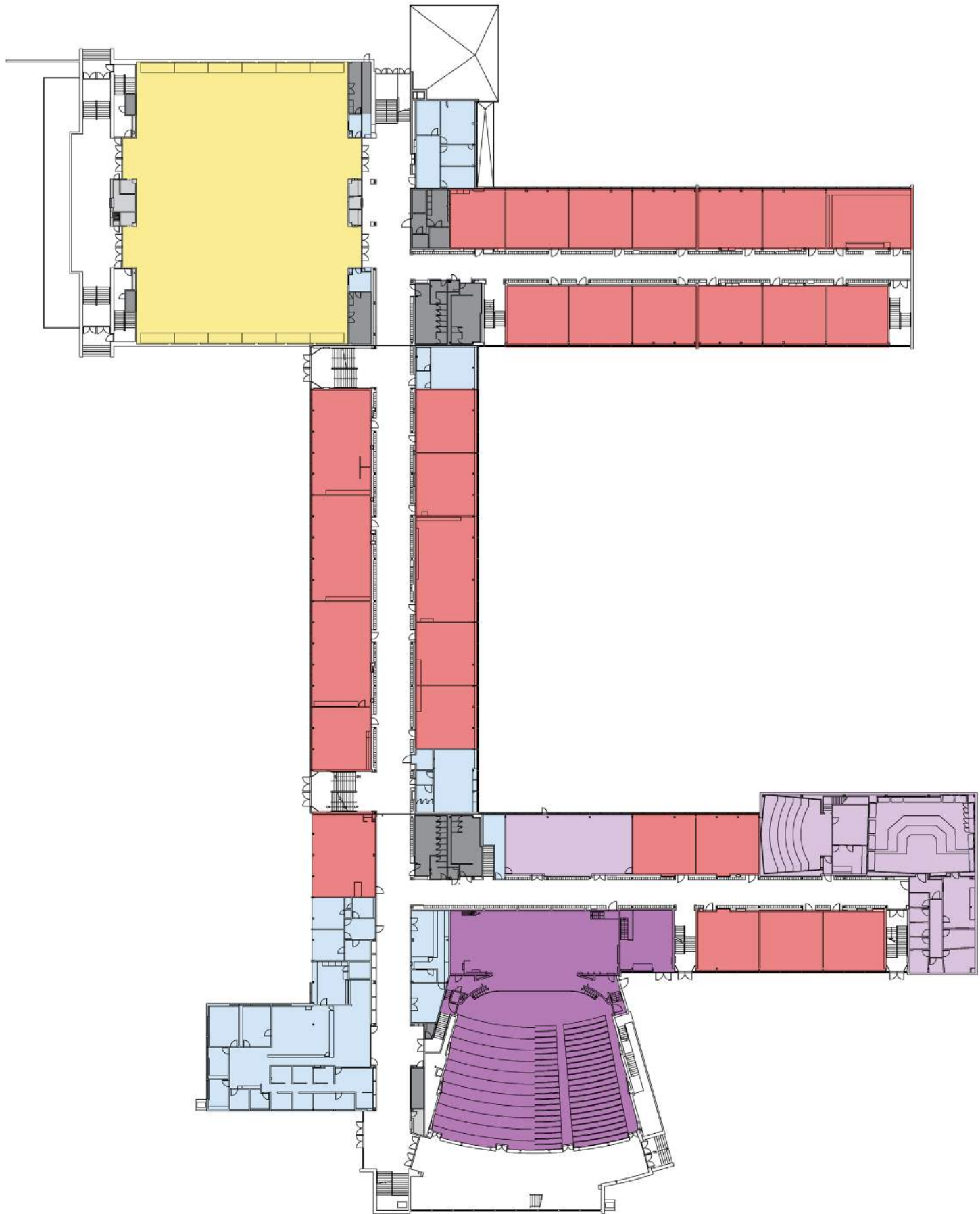
- Classroom
- PE / Athletics
- Admin
- Fine / Perf. Arts
- Media Center
- Commons
- Support
- Circulation



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ANALYSIS OF EXISTING CONDITIONS

Level 1 Floor Plan



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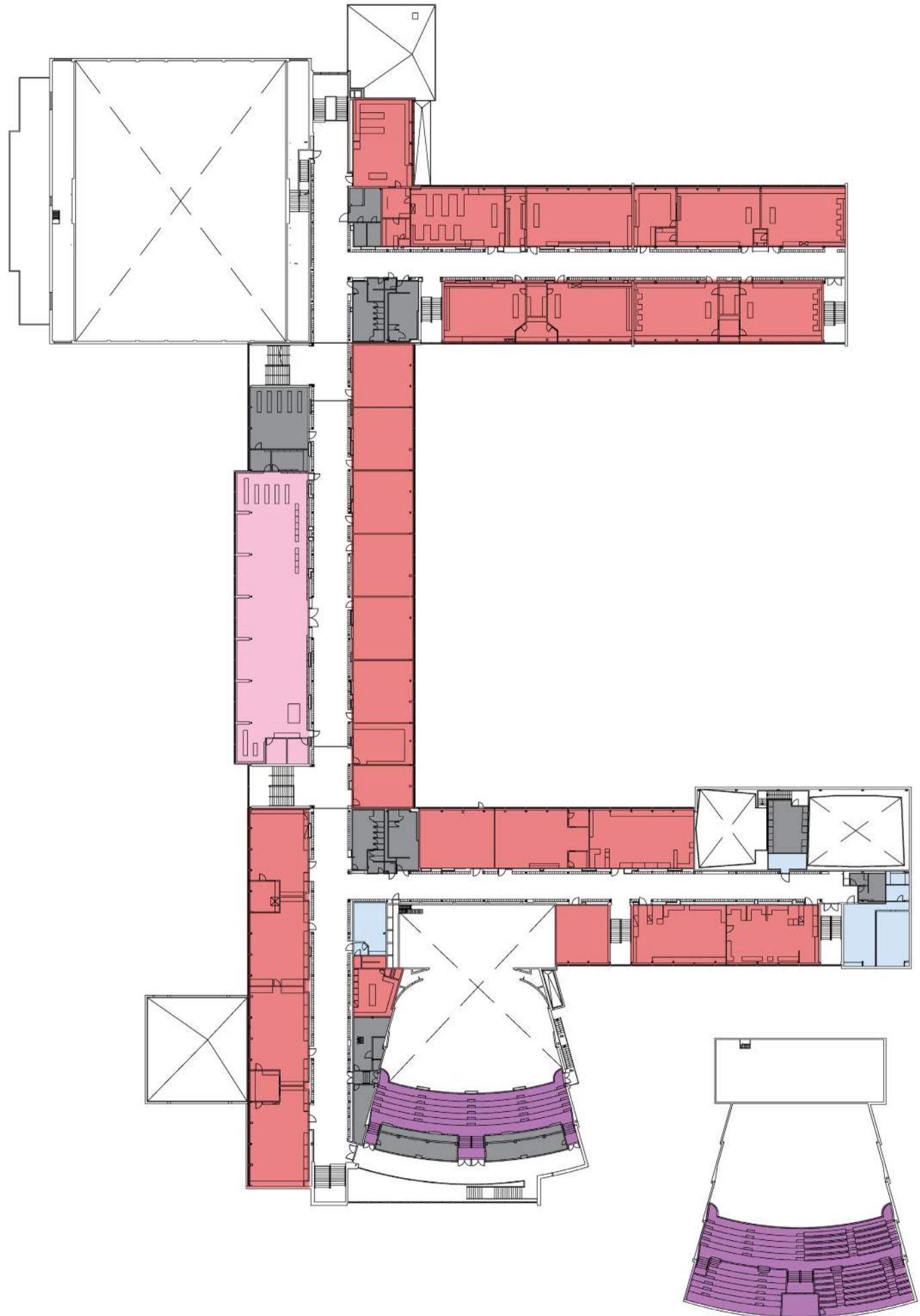
- Classroom
- PE / Athletics
- Admin
- Fine / Perf. Arts
- Media Center
- Commons
- Support
- Circulation



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ANALYSIS OF EXISTING CONDITIONS

Level 2 Floor Plan



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- Classroom
- PE / Athletics
- Admin
- Fine / Perf. Arts
- Media Center
- Commons
- Support
- Circulation



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ANALYSIS OF EXISTING CONDITIONS

HISTORIC OVERVIEW

Oregon Historic Site Form Summary

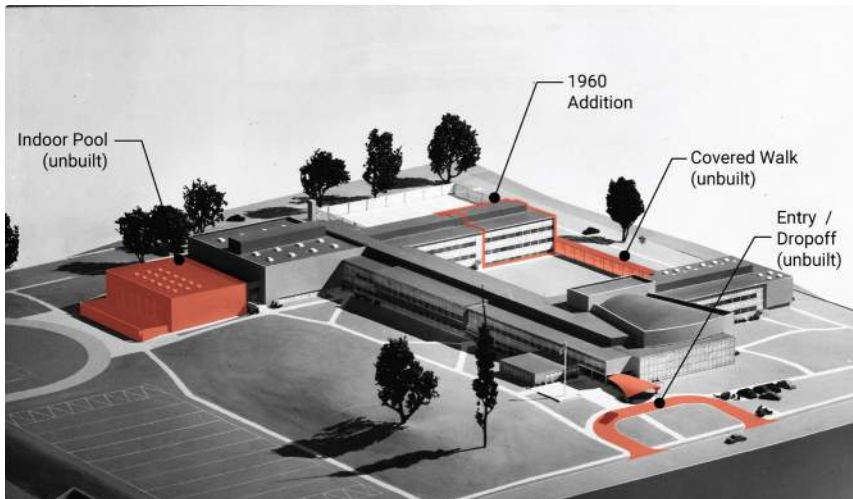
A copy of the complete Oregon Historic Site Form is included in the Appendix.

The two story, International Style school building is a U-shaped plan with the gymnasium, auditorium, and music wing all differentiated from the main classroom sections of the school by different building shapes, materials, and heights. The classroom sections of the building were constructed of “lifted” concrete slabs and the auditorium, gymnasium, and music wing were constructed using the more conventional tilt slab concrete. Most of the main classrooms feature a glazed curtain wall and the second floor library is cantilevered over the first floor.

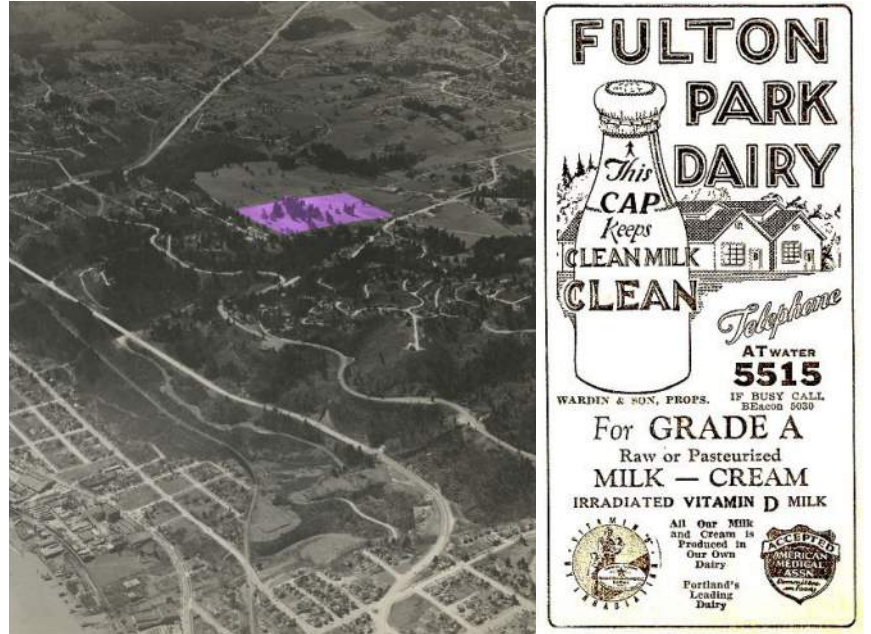


International style Bauhaus School by Walter Gropius Dessau, Germany

WHS has not been extensively modified and retains much of its original historical integrity. The lone addition to the building consisted of a classroom addition to the north wing in 1960. The addition is barely discernible as it used similar materials and construction methods. Classrooms have been extended or re-fitted to reflect changes in instructional priorities, but these modifications are minor and do not diminish the building’s most important character-defining features. The school therefore retains its integrity of design, association, location, setting, materials, feeling, and workmanship.



Architectural model of original 1956 design



Aerial view of site when it was Fulton Park Dairy Farm

Edmundson and Kochendoerfer and builder W. Burns Hoffman employed the first use of lift-slab construction in the Northwest region. Pioneered in Texas, this form of construction was rapidly gaining popularity in California and around the U.S. The economical means of building eliminated the need for extensive formwork by instead pouring each slab on the ground and lifting them, beginning with top floor, into place. The use of the steel frame to support the concrete slabs of the roof and floors enabled the architects to approach the exterior as a curtain wall. In addition to extensive glazing, the school featured porcelain glazed steel panels hung between the steel supporting columns. WHS remains one of the only post-war high schools that exhibit a near complete curtain wall composed of glass as well as a cantilevered second floor space. The unique design and construction of the school, which cost \$3.237 million dollars, drew structural engineers, “building men, and school architects from many parts of the country.” The school design was also published in the Architectural Record in 1953.



Original school sign above the entry

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ANALYSIS OF EXISTING CONDITIONS

DEDICATION PROGRAM *Woodrow Wilson High School Portland, Oregon*



Wednesday,
Nov. 7
1956

Cover of Dedication Program

Given the high level of integrity and the school's unique method of construction, WHS is eligible for the National Register of Historic Places (NRHP). As a resource eligible under NRHP Criterion A, the school is associated with the post-war suburban expansion of Portland's neighborhoods and the simultaneous need for larger educational facilities to accommodate the increased numbers of high school age students. The school is also eligible under Criterion C as an excellent example of how post-war schools utilized new structural forms to erect larger, more complex schools. The school reflects the design mastery of Edmundson and Kochendoerfer and the ability of builder W. Burns Hoffman to implement new forms of construction.

HAZARDOUS MATERIALS

PPS did not provide a hazardous materials report or complete a hazardous material assessment of WHS for the CMP phase. Based on the age of the building, with many of the original materials still in place, it is assumed that hazardous material abatement would be required. Whether the existing WHS building is demolished, or modernized, the scope and cost of abatement will need to be considered when developing cost estimates and project master schedules.



Interior Photo: Typical interior finishes

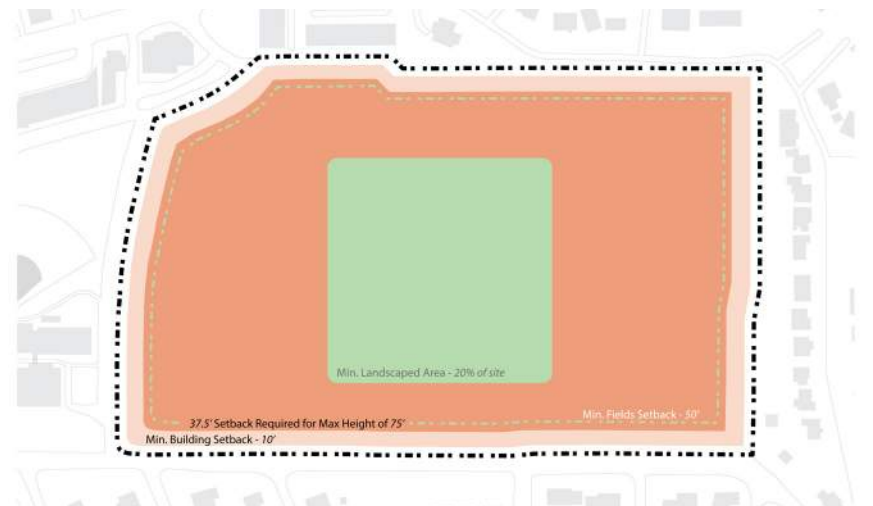
REGULATORY CONSIDERATIONS

An "early assistance" meeting with PPS and the City of Portland, including code analysis on the existing building, was outside of the scope for the CMP phase, and will be performed during the Comprehensive Master Planning and Due Diligence phase.

Meetings with Bureau of Development Services (BDS), Portland Bureau of Transportation (PBOT), Bureau of Environmental Services (BES), Urban Forestry, and Portland Water Bureau, are recommended to occur during the Comprehensive Master Planning and Due Diligence phase.

High-level zoning analysis was completed to confirm building setbacks and maximum height to inform conceptual design development.

- Maximum building height: 75' - 0"
- Minimum building set back: 10' - 0"
- Setback required for maximum building height: 37' - 6"
- Minimum landscape area: 20% of site



Exterior Photo: View of WHS across Vermont St

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ANALYSIS OF EXISTING CONDITIONS

PHYSICAL ASSESSMENT

Architectural Review

For the CMP phase, a high-level review of the building interior and exterior was conducted and is based on on-site observations.



Exterior photo: Main Entrance

Main Entry

The school's main entrance, located in the southwest corner of the building by the auditorium, is approached via a surface parking lot off SW Vermont Street. Additional surface parking is located to the east, west and north sides of the school. A second entrance, located in the northwest corner of the building by the gymnasium, is approached via a surface parking lot off Capital Highway. The main entry doors are not visible from the administration area and permit visitors' free access to the school. A second administration area was created at the second entrance. We observed a Vice Principal and campus security officer supervising the second entry and corridor activity from a table in the corridor by the gymnasium.



Interior photo: North-South corridor with Vice Principal supervising the second entrance and corridor

Circulation

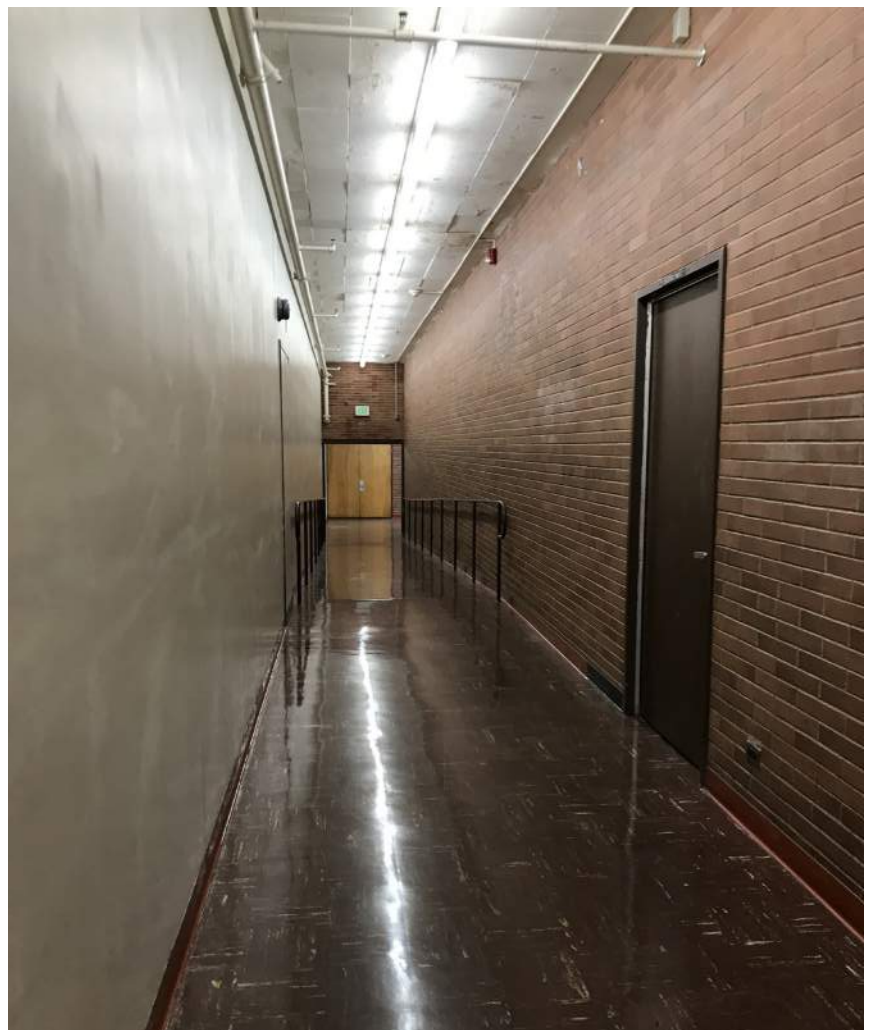
Interior double-loaded corridors form a U-shaped plan that creates a courtyard in the middle. Classroom wings extend east from the main north-south corridor. The interior double-loaded corridors are wide enough for students to circulate easily between periods and many students eat their lunch and socialize in the corridors during the lunch period. The corridors are long, have minimal access to natural daylight, and are lined with full height recessed lockers. There are no extended learning areas or breakout spaces, and no visual connection into classrooms. Over the years, successive renovations have continually added to the quantity of exposed utility piping and conduits. The corridors in the basement are difficult to supervise and behavioral issues have occurred down there.



Interior photo: Corridor with students eating lunch



Exterior photo: Courtyard



Interior photo: Basement corridor with exposed pipes and brick wall

The music wing projects northward from the south classroom wing and is differentiated from the other classrooms by its lack of windows, its projected volume, and by a series of round columns that support it. The cafeteria in the basement and library on the second floor, located along the main north-south corridor, connect the auditorium and gymnasium at either end. The southside of the high school is dominated by the auditorium and a large curtain wall of windows. The corridors and several classrooms feature exposed brick walls.

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ANALYSIS OF EXISTING CONDITIONS



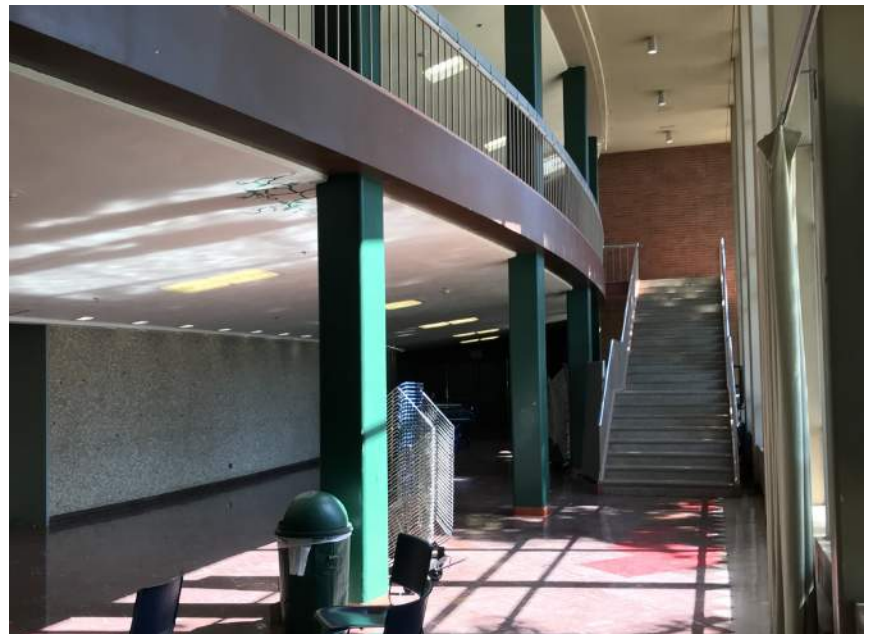
Interior photo: Classroom



Interior photo: View of house from stage



Interior photo: Classroom with old built-in cabinets



Interior photo: Double-height theater lobby

Classrooms

The interior finishes typically include vinyl floor tiles, painted walls, and glue-up acoustical tiles. Some classrooms feature built-in cabinets for programs that are no longer offered, such as home economics and drafting. Most of the classrooms are too small and are not equipped to support 21st century learning standards. Windows are large and allow for abundant daylight where they occur, however the single-pane glass has no insulating qualities and contributes to uncomfortable temperatures in the classrooms. Blinds were down in most classrooms in an attempt to minimize solar heat gain.



Interior photo: Drama classroom and black box theater performance space



Interior photo: Gymnasium

Gymnasium

The gymnasium is appropriately sized and features pull-out bleachers on both sides, with a hardwood floor and exposed structure. There is no auxiliary gym. There is a weights room, wrestling room and yoga room.

Theater

At 884 seats, the house is large compared to typical contemporary high school performance spaces. The theater does not comply with current building codes, ADA, and many recommended practices for contemporary educational performing arts facilities. We heard many WHS performances typically draw smaller audiences and when seated in the large theater it feels empty to the performers. The drama classroom has tried to create a black box theater space in a large classroom. It is not double-height and the abundant windows make it challenging to create darkened space. There is an established choir program.

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ANALYSIS OF EXISTING CONDITIONS



Interior photo: Wood Shop



Interior photo: Metal Shop

Career Technical Education

There is an established wood shop and metal shop. Both spaces do not have direct exterior access for deliveries and do not have a double-height space to work on larger projects. There is no maker space. A classroom, storage, and office space are located between the wood shop and metal shop. Both the classroom and office do not have access to natural daylight and are undersized.

Accessibility

Incremental accessibility upgrades have been made over time, with some meeting today's requirements and many falling short. There is one small elevator tucked away near the gym and several teaching spaces that are only accessible via stairs. The accessibility upgrades completed to date are not integrated into the original 1950's architectural design.

The elevation change from the east side of the site to the west side of the site is approximately 60'-0" and presents many steep grade challenges.

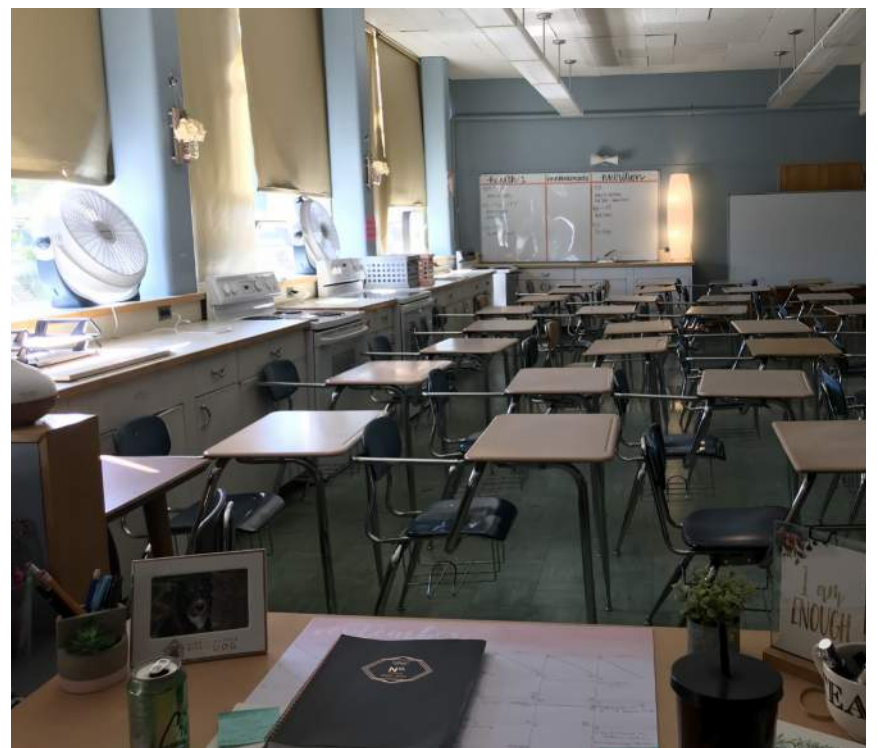
Universal barrier-free access will need to be addressed to provide equitable access to, and use of, WHS facilities.

BUILDING ENVELOPE

The building envelope is the physical separator between the conditioned and unconditioned environment of a building. There are two types of exterior materials present on the school: curtain wall glazing and brick.

Curtain wall glazing

Most classroom spaces feature a curtain wall composed of three-part plate-glass windows with an opaque panel below. The bottom plate is typically a functional hopper window. The glazing units are single pane and the classrooms on the south and west side of the school were observed to be very warm on a late summer afternoon in September. Teachers had the blinds down to minimize solar heat gain and multiple fans to circulate air. Both the teachers and students appeared to be uncomfortable in the classrooms. The second floor was significantly warmer than the first floor and the temperature increased significantly between the blinds and glazing. We recommend the existing curtain wall glazing system be removed and replaced with a new curtain wall glazing system to achieve PPS EUI targets for remodeled buildings.



Interior photo: Classroom with fans



Interior Photo: ADA ramp modification

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ANALYSIS OF EXISTING CONDITIONS



Exterior photo: Eastside of theater



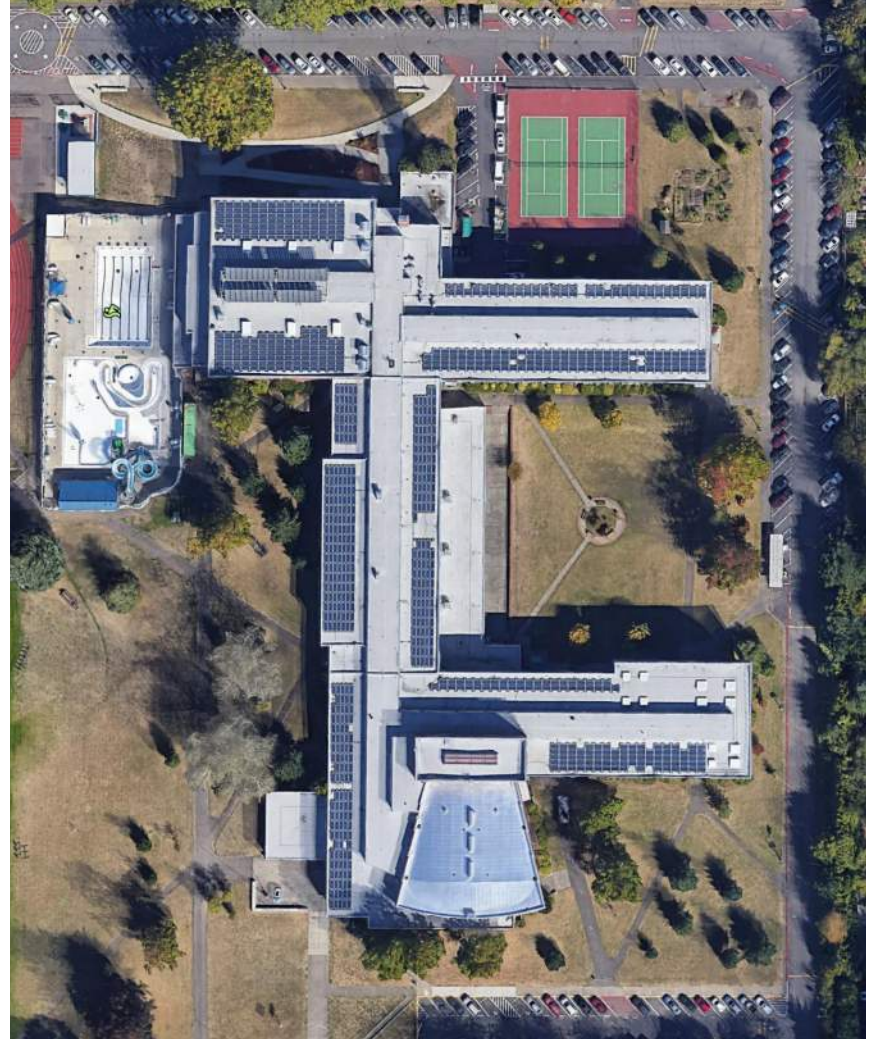
Exterior photo: Music wing cantilever

Brick

The remaining sections of the school—the auditorium, gymnasium, and music rooms—are sheathed with face bricks laid in an all stretcher bond. The brick appears to be in good condition.



Interior Photo: Mechanical mezzanine



Aerial Google Earth photo: Photovoltaic array

Roof

There are extensive photovoltaic arrays on the roof. We recommend further research into the use of the panels and any agreement between PGE and Portland Parks & Recreation.

MECHANICAL, PLUMBING, FIRE LIFE SAFETY, ELECTRICAL AND TECHNOLOGY SYSTEM REVIEW

WHS has been serving the community for over 60 years and the envelope has retained much of the original design integrity from the 1950's. Most classroom spaces feature a curtain wall with a functional hopper window. The glazing units are single pane and the classrooms on the south and west side of the school were observed to be very warm on a late summer afternoon in September. Teachers had the blinds down to minimize solar heat gain and multiple fans to circulate air and both the teachers and students appeared to be uncomfortable in the classrooms. Exterior envelope and roofing upgrades are recommended to provide further longevity for the building and thermal comfort for occupants. Wilson Pool shared use of the boiler presents problems for maintenance and compromises WHS use of the equipment. Electrical outlets and technology backbone support are both insufficient for current teaching and learning demands. Teachers and students all commented they did not have enough outlets to connect their devices. Electrical lights are typically florescent and lack controls to adjust what fixtures are on and off and lighting levels. To prepare for the intended student capacity as well as to ensure continued operational efficiency into the future, it is the recommendation of our team that new mechanical, plumbing, electrical, fire/life safety, and technology systems be provided.

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ANALYSIS OF EXISTING CONDITIONS

STRUCTURAL REVIEW

Based on the original structural drawings dated June 10, 1954, the building is mainly constructed of cast-in-place concrete. The main floor, second floor, and portions of the roof consist of 10” thick two-way reinforced flat slabs supported by steel columns. Based on the drawings, it appears these slabs were constructed utilizing the “lift slab method.” In this method, the slabs are cast on the ground and then lifted up into place once they have cured. The concrete slabs have embedded steel sleeves at each column, and once they are lifted to the proper elevation, they are welded to the steel columns. The concrete slabs are also supported by various concrete and double wythe brick walls at the perimeter and interior. Smaller areas of the floors utilized cast-in-place concrete slabs, beams, and joists once the flat slabs were in place. The foundation system consists of concrete spread footings and the ground floor is a 5” concrete slab on grade.

In 1960, there was a three-story addition that was added to the northeast classroom wing. The construction of this addition matched the existing building.

At the auditorium, the balcony and roof were constructed with steel trusses. The balcony trusses supported cast-in-place concrete risers and treads. At the auditorium roof, the trusses supported steel beams which support panels consisting of 2” of poured gypsum, inverted bulb-tees, and half-inch sheetrock form on the bottom. The gymnasium roof was also constructed with steel trusses. The gymnasium steel trusses support steel open-web joists which support a metal roof deck.

Seismic loads on the building are resisted by the interior and exterior concrete and brick walls. While the building appears to have a well-detailed lateral system with a continuous-load path, the building would not meet current code seismic requirements. Code-level seismic forces have more than doubled since the building was built. While the building may perform reasonably well in a minor seismic event, the building would likely have significant damage in a code-level earthquake.



Exterior photo: CTE spaces with band and choir rooms above



Exterior photo: Main entry with science classroom above



Interior photo: Commons



Interior photo: Brick wall

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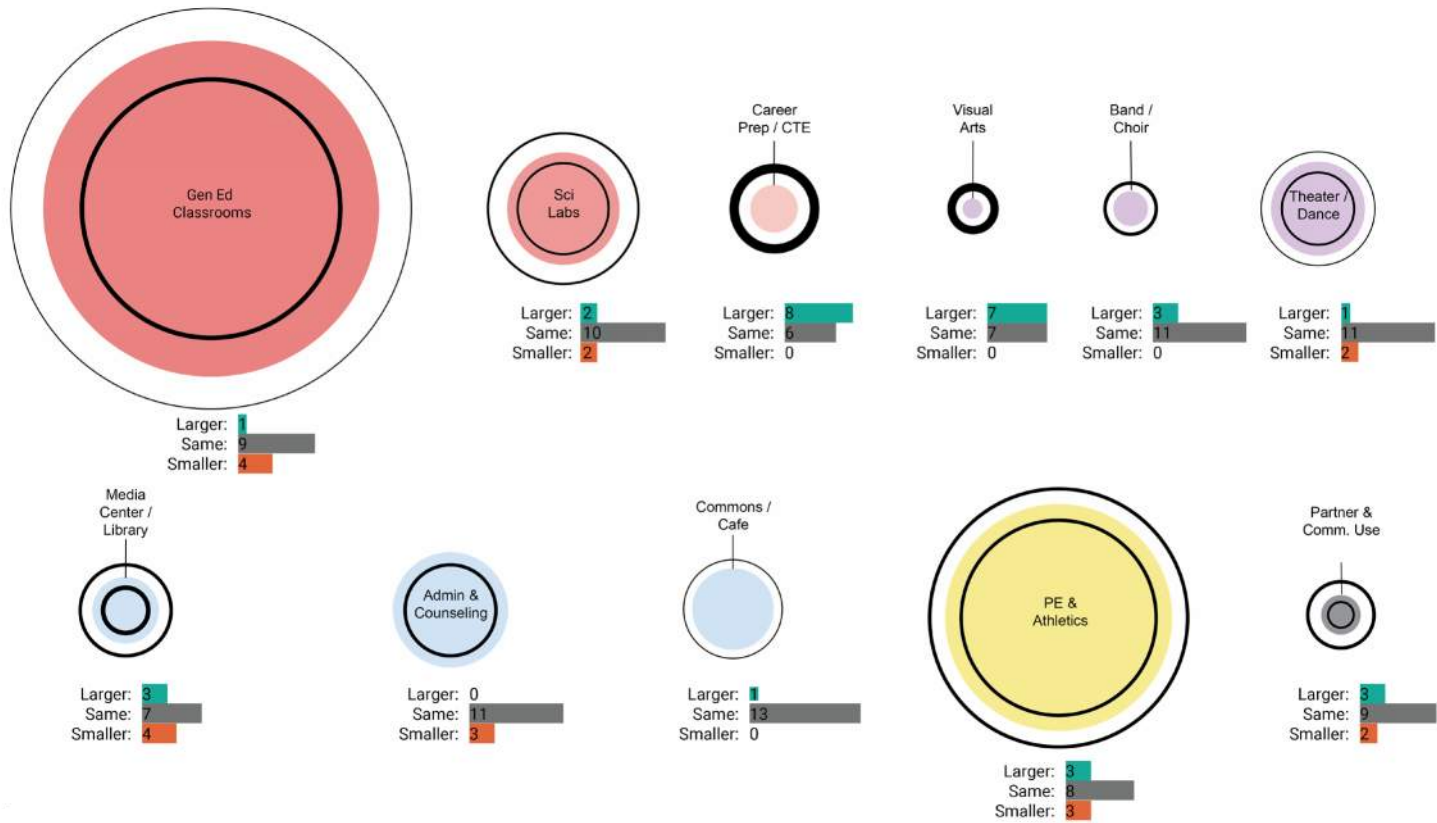
AREA SPACE PROGRAM

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AREA SPACE PROGRAM

COMPARISON TO COMPREHENSIVE HIGH SCHOOL EDUCATION SPECIFICATIONS

COMPARISON TO COMPREHENSIVE HIGH SCHOOL EDUCATION SPECIFICATIONS



The Conceptual Master Planning (CMP) phase included a high-level review of the existing Wilson High School (WHS) education program and current use of spaces. We studied the as-built floor plans provided by Portland Public Schools (PPS), master schedules provided by WHS, and verified use of the spaces during site visits with Erica Caldwell, WHS Business Manager.

We reviewed the PPS Comprehensive High School Education Specifications (Ed Specs) dated September 2017 and compared them to the current WHS education program and use of spaces. The differences between the Ed Specs and the current WHS were summarized and presented to the Conceptual Master Planning Committee (CMPC) in the second CMPC meeting.

The CMPC participated in a homework exercise where they reflected on the Ed Specs program square footage. They were asked to visually indicate if they thought the Ed Specs were sized correctly, undersized, or oversized. The image below with the colored circles is summary of this exercise. The colored circle represents the Ed Spec program size, the black lines inside and outside represent CMPC feedback indicating if it should be larger or smaller.

The consensus of the CMPC is to provide a new building designed to meet the Ed Specs with a proposed square footage of approximately 282,000 SF.

PPS Comprehensive High School(s) Area Program

PPS COMPREHENSIVE HIGH SCHOOL AREA PROGRAM	RECOMMENDED		PREFERRED OPTIONAL		Total	WILSON HS EXISTING			DIFFERENCE		
	Quantity	SF/Room	Quantity	SF/Room		AREA	Quantity	SF/Room	Total	Quantity	Total
SUMMARY PPS ED SPEC						SUMMARY WILSON HS EXISTING					
COMPREHENSIVE HIGH SCHOOL PROGRAM - TEACHING STATIONS						COMPREHENSIVE HIGH SCHOOL PROGRAM - TEACHING STATIONS					
General Education (Gen-Ed) Classrooms	41				53,180	General Education (Gen-Ed) Classrooms	46		41,161	5	(12019)
Science Labs	11				17,480	Science Labs	10		13,300	-1	(4180)
Fine & Performing Arts (Drama, Theater)	4				21,150	Fine & Performing Arts (Drama, Theater)	7		32,398	3	11248
Career Preparation/CTE ³	3				6,000	Career Preparation/CTE	9		12,231	6	6231
Athletics (includes area for P.E. instruction)	3				35,580	Athletics (includes area for P.E. instruction)	4		32,580	1	(3000)
Education Support ⁴	2				67,400	Education Support	0		46,156	-2	(21244)
Sub-Total Recommended Teaching Stations	64				200,790	Sub-Total Teaching Stations	76		177,826	12	(22964)
Community Partners ⁵					1,200	Community Partners			78		(1122)
Wrap-Around Service Providers ⁵					4,700	Wrap-Around Service Providers			0		(4700)
Sub-Total					5,900	Sub-Total			78		(5822)
SUB-TOTAL COMPREHENSIVE HIGH SCHOOL REQUIRED AREA					206,690	SUB-TOTAL WILSON HIGH SCHOOL EXISTING NET AREA			177,904		(28786)
Net to Gross Ratio of 36%⁶					74,408	Net to Gross			46.65%		
TOTAL COMPREHENSIVE HIGH SCHOOL REQUIRED					281,098	TOTAL WILSON HIGH SCHOOL GROSS AREA			260,900		(20198)

Notes:

- Area program for 1,700 student enrollment. Required program refers to the education program needed to meet graduation requirements. The area program includes spaces to accommodate course offerings reflected in credit hours typically taken by students.
- Areas identified in Area Program are more readily achieved in new construction; it is expected the area of rooms and spaces in existing buildings will vary from those of the area program to accommodate the floor plates and other structural limitations of existing buildings.
- Each Comprehensive High School will contain a minimum of 6,000 SF for career preparation/CTE/Maker Space.
- Includes Optional Teacher planning/collaboration areas.
- Assumptions based upon current average area of partners/providers in high schools.
- Gross area includes walls, corridors and circulation areas; 36% net to gross for new construction; ratio for modernization projects will vary depending on extent of work.



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AREA SPACE PROGRAM

COMPARISON TO COMPREHENSIVE HIGH SCHOOL EDUCATION SPECIFICATIONS

PPS Comprehensive High School(s) Area Program

PPS COMPREHENSIVE HIGH SCHOOL AREA PROGRAM	RECOMMENDED	PREFERRED OPTIONAL	
AREA	Quantity ⁷	SF/Room	Total
CORE PROGRAM⁷			
Career Preparation CTE⁸			
Classrooms		TBD per site	4,800
Specialized classrooms/labs			
Maker Space	1	1,200	1,200
Sub-Total Career Prep CTE			6,000
General Education Classrooms - Core Program Recommendations^{9,10,11,12}			
English	11	980	10,780
Math	8	980	7,840
Social Studies	8	980	7,840
Health	2	980	1,960
World Language	6	980	5,880
Electives ¹³	6	980	5,880
Sub-Total Gen Ed Classrooms	41		40,180
Specialized Classrooms - Core Program Recommendations			
Science Lab	11	1,500	16,500
Chemical Storage	1	180	180
Prep Rooms	4	200	800
Sub-Total Specialized Classrooms	11		17,480
Smaller Instructional Spaces ¹⁴		10	500
Flexible Learning Areas ¹⁴		8	1,000
Sub-Total Optional			13,000
Sub-Total Recommended Classrooms			63,660
SUB-TOTAL RECOMMENDED: CORE PROGRAM+FLEXIBLE LEARNING+SMALLER INSTRUCTION			76,660

Notes:

- ⁷ Bold italics text in quantity column indicates teaching station.
- ⁸ See "Career Preparation Spaces" and "STE(A)M" for a list of Career Preparation | CTE | STE(A)M spaces. Space devoted to classrooms and/or labs for career preparation above and beyond the area allocated for career preparation needs to be taken from the area for electives.
- ⁹ See Education support for computer labs, SPED Learning Resource Centers, and ELL classrooms. Programmatic needs for ELL and SPED Resource Centers may also be met in Smaller Instructional Spaces.
- ¹⁰ Classrooms greater than 1,000 SF require two exits.
- ¹¹ Advanced classes held in regular classrooms.
- ¹² Assumes general education classrooms could be used all periods. See classroom utilization in Program Development above.
- ¹³ "Electives" include core and non-core program subjects; some electives may require specialized classroom space which will make them unavailable for general education classroom space.
- ¹⁴ Smaller Instructional Spaces and Flexible Learning Areas as defined in room information sheet are optional. HOWEVER, the general requirements, functions, and location as defined in the room information sheet need to be considered during the design process and the spaces (not necessarily the area) provided to meet this function identified in the design. The sub-total area for Core Program + Flexible Learning Areas + Smaller Instructional Spaces needs to be maintained.

WILSON HS EXISTING			DIFFERENCE		
AREA	Quantity	SF/Room	Total	Quantity	Total
CORE PROGRAM					
Career Preparation CTE					
Classrooms	0		0		
Specialized classrooms/labs	0		0		
Maker Space	0		0		(1200)
ENGINEERING	1		1,242		
FINANCE/BUSINESS MANAGEMENT	2		2,204		
HEALTH SCIENCES	1		1,398		
MARKETING	3		1,240		
METAL SHOP	5		2,101		
WOOD SHOP	4		2,217		
SOUND ENGINEERING	2		708		
COMPUTER SCIENCE	1		1,121		
Sub-Total Career Prep CTE	9		12,231		6231
General Education Classrooms					
ENGLISH	11		10,402		
ENGLISH/AVID	1		1,164		
HEALTH	2		2,453		
HEALTH/MATH/FINANCE	1		822		
MATH	11		9,437		
MATH/COMPUTER SCIENCE	1		846		
SOCIAL STUDIES	10		8,353		
SOCIAL STUDIES / WORLD LANGUAGE	1		846		
STUDY HALL	1		1,194		
WORLD LANGUAGE	5		4,232		
WORLD LANGUAGE/ENGLISH	1		846		
WORLD LANGUAGE/VIRTUAL SCHOLAR	1		566		
Sub-Total Gen Ed Classrooms	46	895	41,161	5	981
Specialized Classrooms					
Science Lab	10		11,477	-1	(5023)
Chemical Storage	8		1,320	7	1140
Prep Rooms	3		503	-1	(297)
Sub-Total Specialized Classrooms	10		13,300	-1	(4180)
Smaller Instructional Spaces	0	0	0		
Flexible Learning Areas	0	0	0		
Sub-Total Optional	0	0	0		(13000)
Sub-Total Recommended Classrooms			66,692		3032
SUB-TOTAL RECOMMENDED: CORE PROGRAM+FLEXIBLE LEARNING+SMALLER INSTRUCTION			66,692		(9968)

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AREA SPACE PROGRAM

COMPARISON TO COMPREHENSIVE HIGH SCHOOL EDUCATION SPECIFICATIONS

PPS Comprehensive High School(s) Area Program

PPS COMPREHENSIVE HIGH SCHOOL AREA PROGRAM	RECOMMENDED		PREFERRED OPTIONAL		
AREA	Quantity	SF/Room	Quantity	SF/Room	Total
FINE & PERFORMING ARTS					
Fine & Visual Arts					
Art Room (2D)	1	1,200	1	1,700	1,200
Art Room (3D)	1	1,500	1	1,700	1,500
Kiln Room	1	100			100
Supply /Storage	1	160			160
Art Office(s)	1	120			120
Sub-Total Fine & Visual Arts					3,080
Band/Orchestra^{24, 27}					
Band Room	1	2,200	1	2,400	2,200
Large Instrument Storage Room	1	250			250
Music Library & Uniform Storage ²⁵	1	200			200
Small Equipment Storage	1	200			200
Large Practice Rooms/Music Lab	1	300	2	300	300
Small Practice Rooms	2	100	3	100	200
Band/Choir Office ²⁶	1	120			120
Sub-Total Band/Orchestra					3,470
Choir^{24, 27}					
Choir Room			1	1,500	
Equipment & Robe Storage			1	200	
Sub-Total Choir					0
Sub-Total Preferred					6,700
Sub-Total Optional					1,700
SUB-TOTAL RECOMMENDED FINE & PERFORMING ARTS Fine & Visual Arts					6,550

Notes:
²⁴ Separate band and orchestra spaces are preferred. If installed as a single space, it should be able to accommodate band, orchestra, and choir functions (if choir room not built separately).
²⁵ Single music library to serve any combination of band/orchestra/choir room(s).
²⁶ Single office space to serve any combination of band/orchestra/choir rooms.
²⁷ If separate choir room is not built, space for choir will be shared with band/orchestra.

WILSON HS EXISTING				DIFFERENCE	
AREA	Quantity	SF/Room	Total	Quantity	Total
FINE & PERFORMING ARTS					
Fine & Visual Arts					
Art Room (2D)	1		1,207	0	7
Art Room (3D)	1		1,032	0	(468)
Kiln Room	2		415	1	315
Supply /Storage	5		724	4	564
Art Office(s)	0		0	-1	(120)
PHOTOGRAPHY	3		1,807	3	1807
Sub-Total Fine & Visual Arts	2		5,185		2105
Band/Orchestra					
Band Room	1		1,770	0	(430)
Large Instrument Storage Room	1		161	0	(89)
Music Library & Uniform Storage	1		130	0	(70)
Small Equipment Storage	3		290	2	90
Large Practice Rooms/Music Lab	0		0	-1	(300)
Small Practice Rooms	4		212	2	12
Band/Choir Office	1		370	0	250
Sub-Total Band/Orchestra	1		2,933		(537)
Choir					
Choir Room	1		1,058	1	(442)
Equipment & Robe Storage	1		444	1	244
LARGE PRACTICE ROOM	1		314	1	314
CHOIR OFFICE	1		217	1	217
Sub-Total Choir	1		2,033		2033
SUB-TOTAL RECOMMENDED FINE & PERFORMING ARTS Fine & Vi				10,151	3601

PPS Comprehensive High School(s) Area Program

PPS COMPREHENSIVE HIGH SCHOOL AREA PROGRAM	RECOMMENDED		PREFERRED OPTIONAL		
AREA	Quantity	SF/Room	Quantity	SF/Room	Total
FINE & PERFORMING ARTS					
Theater/Dance²⁸					
Theater (500 seat)	1	5,000	1	6,000	5,000
Orchestra Pit	1	500			500
Stage	1	3,500			3,500
Drama Classroom/Black Box	1	1,600	1	2,600	1,600
Multi-Purpose Production Area ²⁹			1	1,500	
Laundry	1	150			150
Control Room	1	200			200
Sound Room	1	100			100
Office	1	70			70
Box Office/Tickets ²⁹	1	100			100
Concession Stand ³⁰	1	100	1	200	100
Scenery Construction/Production Storage	1	1,500			1,500
Equipment Storage	1	120			120
Lighting Storage	1	100			100
Costume Storage	1	400			400
Make-up Room	1	400			400
Boy's Dressing	1	250			250
Girl's Dressing	1	250			250
Girl's Toilet	1	130			130
Boy's Toilet	1	130			130
Green Room			1	400	
Sub-Total Preferred					8,800
Sub-Total Optional					1,900
SUB-TOTAL RECOMMENDED FINE & PERFORMING ARTS Theater/Dance					14,600

Notes:
²⁸ Dance accommodated in Mat/Wrestling/Dance room. See Physical Education/Athletics.
²⁹ If built, Multi-Purpose Production Area to include or be adjacent to shop, provide storage for equipment, lighting, costumes, make-up room, boy's and girl's dressing rooms and toilets and green room is required.
³⁰ Box office and concession stand to be located with other public venues when possible.

WILSON HS EXISTING				DIFFERENCE	
AREA	Quantity	SF/Room	Total	Quantity	Total
FINE & PERFORMING ARTS					
Theater/Dance					
Theater (884 seat, including balcony)	1		9,996	0	4996
Orchestra Pit	0		0	-1	(500)
Stage	1		2,607	0	(893)
Drama Classroom/Black Box	1		1,705	0	105
Multi-Purpose Production Area	0		0	0	0
Laundry	0		0	-1	(150)
Control Room	0		0	-1	(200)
Sound Room	0		0	-1	(100)
Office	1		223	0	153
Box Office/Tickets	0		0	-1	(100)
Concession Stand	0		0	-1	(100)
Scenery Construction/Production Storage	3		1,920	2	420
Equipment Storage	3		805	2	685
Lighting Storage	0		0	-1	(100)
Costume Storage	0		0	-1	(400)
Make-up Room	0		0	-1	(400)
Boy's Dressing	1		352	0	102
Girl's Dressing	1		367	0	117
Girl's Toilet	1		31	0	(99)
Boy's Toilet	1		31	0	(99)
Green Room	0		0	0	0
Lobby	2		4,210	2	4210
Sub-Total Theater/Dance	2		22,247		7647

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AREA SPACE PROGRAM

COMPARISON TO COMPREHENSIVE HIGH SCHOOL EDUCATION SPECIFICATIONS

PPS Comprehensive High School(s) Area Program

PPS COMPREHENSIVE HIGH SCHOOL AREA PROGRAM	RECOMMENDED		PREFERRED OPTIONAL		Total
	Quantity	SF/Room	Quantity	SF/Room	
PHYSICAL EDUCATION/ATHLETICS					
Gym (large; two teaching stations) ³¹	1	13,000	1	14,676	13,000
Mat/Wrestling/Dance ³²	1	2,750	1	3,500	2,750
Weight Room/Aerobics/Spinning	1	2,500	1	3,000	2,500
Office/Toilet/Shower/Lockers	1	300			300
Office/Toilet/Shower/Lockers	1	300			300
Boy's Locker Room/Shower ³³	1	1,900			1,900
Girl's Locker Room/Shower ³³	1	1,900			1,900
Multi-purpose Toilet/Shower	1	150			150
PE Storage	2	200			400
Training Room	1	580			580
School Team Room	1	800	1	800	800
Athletic Storage - Large	1	1,000			1,000
Athletic Storage - Small	1	500			500
Concessions ³⁴	1	100	1	200	100
Laundry Room	1	200			200
Uniform/Equipment Storage	1	1,000			1,000
Field Equipment Storage ³⁵	1	1,000			1,000
Gym (auxiliary - practice)	1	5,700	1	7,500	5,700
Auxiliary gym bleachers	1	1,000			1,000
Auxiliary gym storage	1	500			500
Sub-Total Preferred				28,876	
Sub-Total Optional				800	
SUB-TOTAL REQUIRED PHYSICAL EDUCATION/ATHLETICS					35,580

Notes:

³¹ Elevated running track is optional.

³² Optional size should be used with two mats; storage for dance included in area.

³³ Locker rooms to use stacked baskets not individual lockers.

³⁴ Concession area to be combined with and in proximity to other public venues.

³⁵ Field Equipment Storage to be located outside of building. See "Site Requirements" for requirements related to outdoor athletic/recreational facilities.

WILSON HS EXISTING	WILSON HS EXISTING			DIFFERENCE	
	Quantity	SF/Room	Total	Quantity	Total
PHYSICAL EDUCATION/ATHLETICS					
Gym (large; two teaching stations)	1	13,819		0	819
Mat/Wrestling/Dance	1	1,892		0	(858)
Weight Room/Aerobics/Spinning	1	1,826		0	(674)
Boy's Office/Toilet/Shower/Lockers	4	599		3	299
Girl's Coaches Office/Toilet/Shower/Lockers	3	395		2	95
Boy's Locker Room/Shower	2	3,258		1	1358
Girl's Locker Room/Shower	3	3,290		2	1390
Multi-purpose Toilet/Shower	0	0		-1	(150)
PE Storage	9	1,074		7	674
Training Room	1	261		0	(319)
School Team Room	6	2,810		5	2010
Athletic Storage - Large	0	0		-1	(1000)
Athletic Storage - Small	9	1,263		8	763
Concessions	1	104		0	4
Laundry Room	0	0		-1	(200)
Uniform/Equipment Storage	2	541		1	(459)
Field Equipment Storage (under bleachers)	0	0		-1	(1000)
Gym (auxiliary - practice)	0	0		-1	(5700)
Auxiliary gym bleachers	0	0		-1	(1000)
Auxiliary gym storage	0	0		-1	(500)
YOGA ROOM	1	1,448		1	1448
Sub-Total Physical Education/Athletics			4		
SUB-TOTAL REQUIRED PHYSICAL EDUCATION/ATHLETICS			32,580		(3000)

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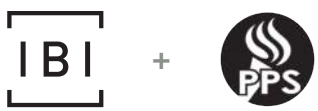
AREA SPACE PROGRAM

COMPARISON TO COMPREHENSIVE HIGH SCHOOL EDUCATION SPECIFICATIONS

PPS Comprehensive High School(s) Area Program

PPS COMPREHENSIVE HIGH SCHOOL AREA PROGRAM		RECOMMENDED		PREFERRED OPTIONAL		WILSON HS EXISTING			DIFFERENCE		
AREA	Quantity	SF/Room	Quantity	SF/Room	Total	AREA	Quantity	SF/Room	Total	Quantity	Total
EDUCATION SUPPORT						EDUCATION SUPPORT					
Administration						Administration					
Reception/Lobby	1	400			400	Reception/Lobby	1		611		
Waiting Areas	1	100			100	Waiting Areas	0		0		
Principal's Office	1	200			200	Principal's Office	1		281		
Principal's Secretary	1	125			125	Principal's Secretary	0		0		
Vice Principal's Office	2	150			300	Vice Principal's Office	3		663		
Vice Principal's Secretary	2	120			240	Vice Principal's Secretary	1		276		
Dean of Students	1	120			120	Dean of Students	1		178		
Teacher Planning/Collaboration Area ³⁶			10	980	0	Teacher Planning/Collaboration Area	0		0		
Attendance	1	120			120	Attendance	1		226		
Bookkeeper	1	120			120	Bookkeeper	1		202		
Resource Officer/Campus Monitor ³⁷	1	200			200	Resource Officer/Campus Monitor	2		269		
Camera Monitors ³⁷	1	100			100	Camera Monitors	0		0		
Restrooms	2	60			120	Restrooms	0		0		
Records Storage	1	200			200	Records Storage	0		0		
Office Storage	1	125			125	Office Storage	2		139		
Business Manager	1	120			120	Business Manager	1		148		
Health Office	1	120			120	Health Office	1		113		
Sick Room	1	150	2	150	150	Sick Room	1		101		
Sick Toilet	1	100			100	Sick Toilet	1		15		
Student Support/Mediation Office	1	700			700	Student Support/Mediation Office	0		0		
Student Support/Mediation Support	1	300			300	Student Support/Mediation Support	0		0		
Workroom/Mail/Delivery Process Center	1	300			300	Workroom/Mail/Delivery Process Center	3		1,029		
Staff Room	1	400			400	Staff Room	0		0		
Conference Rooms	2	150			300	Conference Rooms	2		350		
Parent Volunteers/Family Resource/PTA/Boosters/Alumni Room	1	500			500	Parent Volunteers/Family Resource/PTA/Boosters/Alumni Room	0		0		
Sub-Total Optional					10,100	PRAYER ROOM	1		70		
Sub-Total Administration					5,460	OFFICES	2		801		
Sub-Total Admonition + Teacher Planning/Collaboration Areas ³⁶					15,260	Sub-Total Administration + Teacher Planning	25		5,472		(9788)
Counseling/Career						Counseling/Career					
Counseling Offices	5	120			600	Counseling Offices	5		516		
Counseling Secretary/Waiting	1	400			400	Counseling Secretary/Waiting	1		131		
Drug/Alcohol Counselor Office	1	125			125	Drug/Alcohol Counselor Office	0		0		
Conference Room (large)	1	240			240	Conference Room (large)	1		263		
Conference Room (medium)	1	150			150	Conference Room (medium)	0		0		
Career Center	1	700	1	980	700	Career Center	1		517		
Career Center Office	1	120			120	Career Center Office	1		69		
Career Counselor	1	100			100	Career Counselor	0		0		
Secure Records Storage	1	180			180	Secure Records Storage	0		0		
Restroom	2	60			120	Restroom	0		0		
Sub-Total Counseling/Career					2,735	Sub-Total Counseling/Career	9		1,496		(1239)
<p>Notes:</p> <p>³⁶ Teacher planning/collaboration areas as defined in room information sheet are optional. HOWEVER, the general requirements, functions, location, and relationships as defined in the room information sheet need to be considered during the design process and the spaces (not necessarily the area) provided to meet this function identified in the design. Teacher planning/collaboration areas should be sized and located for potential use as instructional space as needed. The sub-total area for administration needs to be maintained.</p> <p>³⁷ Resource officer and campus monitor to be in separate rooms; camera monitors to be located in main office.</p>											

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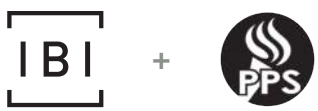
AREA SPACE PROGRAM

COMPARISON TO COMPREHENSIVE HIGH SCHOOL EDUCATION SPECIFICATIONS

PPS Comprehensive High School(s) Area Program

PPS COMPREHENSIVE HIGH SCHOOL AREA PROGRAM					WILSON HS EXISTING			DIFFERENCE			
AREA	RECOMMENDED		PREFERRED OPTIONAL		Total	AREA	WILSON HS EXISTING		DIFFERENCE		
	Quantity	SF/Room	Quantity	SF/Room			Quantity	SF/Room	Total	Quantity	Total
EDUCATION SUPPORT					EDUCATION SUPPORT						
Student Activities					Student Activities						
	Athletic Director	1	150		150		Athletic Director	2	495		
	AD Support Staff	1	120		120		AD Support Staff	0	0		
	Sub-Total Student Activities				270		Sub-Total Student Activities		495		225
Technology Access ³⁸					Technology Access						
	Computer Lab (dedicated)	4	1,100		4,400		Computer Lab (dedicated)	0	0		
	Computer Lab (non-specialized)	1	1,100		1,100		Computer Lab (non-specialized)	0	0		
	Sub-Total Student Testing				5,500		Sub-Total Student Testing		0		(5500)
Special Education (SPED)					Special Education (SPED)						
	Sensory Support Room	1	900		900		Sensory Support Room	3	2,653		
	Learning Resource Center	3	900		2,700		Learning Resource Center	3	2,098		
	Intensive Skills Classes ³⁹						Intensive Skills Classes	4	2,449		
	Low Intensity Classroom (includes kitchen)	2	600		1,200		Low Intensity Classroom (includes kitchen)	1	508		
	Storage	1	100		100		Storage	0	0		
	Reception	1	100		100		Reception	0	0		
	Conference	1	120		120		Conference	0	0		
	Office(s)	1	100		100		Office(s)	1	141		
	Special Needs Toilet	1	200		200		Special Needs Toilet	0	0		
	Itinerants						Itinerants	2	343		
	Speech Pathologist offices	2	120		240		Speech Pathologist offices	0	0		
	Psychologist Offices	2	120		240		Psychologist Offices	4	785		
	Sub-Total SPED				5,900		Sub-Total SPED	18	8,977		3077
Emerging Language Learning (ELL)					Emerging Language Learning (ELL)						
	Emergent Bi-Lingual Classroom ⁴⁰	1	800		800		Emergent Bi-Lingual Classroom	0	0		
	Sub-Total ELL				800		Sub-Total ELL				(800)
Student Center					Student Center						
	students	1	7,800		7,800		Student Center/Commons: One lunch @ 600 st	1	7,056		
	Main Servery	1	1,700	1	1,800	1,700	Main Servery	1	1,462		
	Food Prep/Kitchen	1	1,500		1,500		Food Prep/Kitchen	1	2,718		
	Dish Washing	1	200		200		Dish Washing	0	0		
	Dry Storage/Cart Storage	1	500		500		Dry Storage/Cart Storage	1	441		
	Cooler	1	200		200		Cooler	1	136		
	Freezer	1	200		200		Freezer	2	131		
	Office	1	120		120		Office	1	93		
	Staff Lockers/Dressing Rooms	1	150		150		Staff Lockers/Dressing Rooms	2	191		
	Table Storage	1	250		250		Table Storage	0	0		
	Sub-Total Student Center				12,620	1,800	Sub-Total Student Center		12,228		(392)
Notes:											
³⁸ Dedicated computer labs support specific programs/ curriculum within each school. Non-specialized computer labs provide school wide technology access and assessment capabilities where required.											
Number of Life Skills classrooms dependent on number of students in each school needing life skills and/or medical support.											
³⁹ medical support.											
⁴⁰ Assumes more ELL instruction in classrooms (push-in pedagogy).											

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AREA SPACE PROGRAM

COMPARISON TO COMPREHENSIVE HIGH SCHOOL EDUCATION SPECIFICATIONS

PPS Comprehensive High School(s) Area Program

PPS COMPREHENSIVE HIGH SCHOOL AREA PROGRAM						WILSON HS EXISTING			DIFFERENCE		
AREA	RECOMMENDED		PREFERRED OPTIONAL		Total	AREA	Quantity SF/Room		Total	Quantity	Total
	Quantity	SF/Room	Quantity	SF/Room			Quantity	SF/Room			
EDUCATION SUPPORT											
Media Center/Library ⁴¹											
Library	1	8,000	1	4,500	8,000	Library	1	4,546			(3454)
Office	2	120			240	Office	2	236			
Workroom	1	200			200	Workroom	1	173			
Text Storage	1	750			750	Text Storage	1	822			
Collaboration Space	1	400			400	Collaboration Space	0	0			
Multi-use Rooms	3	150			450	Multi-use Rooms	1	103			
IT Repair/Tech Coordinator	1	180			180	IT Repair/Tech Coordinator	0	0			
Library Classroom			1	980		Library Classroom	0	0			
Sub-Total Media Center				980	10,220	Sub-Total Media Center		5,880			(4340)
Student Space											
Student Government Room/Office ⁴²	1	200			200	Student Government Room/Office		0			(200)
Sub-Total Student Space					200	Sub-Total Student Space		0			(200)
Custodial											
Custodial Office	1	250			250	Custodial Office	1	229			
Custodial Rooms	10	100			1,000	Custodial Rooms	11	429			
Building Storage	1	2,000			2,000	Building Storage	6	841			
Material Storage	1	500			500	Material Storage	3	541			
Flammable Storage	1	100			100	Flammable Storage	0	0			
						CUSTODIAL LUNCH ROOM	1	337			
Sub-Total Custodial					3,850	Sub-Total Custodial		2,377			(1473)
Notes:											
⁴¹ Size of media center presumes renovation of existing larger space (auditorium in older structures). Optional space size is for new construction. Preference is to locate Media Center adjacent to Student Center/Commons to allow efficiencies of collaboration/breakout spaces.											
⁴² Student government areas should be located near Counseling/Career Center.											

PPS Comprehensive High School(s) Area Program

PPS COMPREHENSIVE HIGH SCHOOL AREA PROGRAM						WILSON HS EXISTING			DIFFERENCE		
AREA	RECOMMENDED		PREFERRED OPTIONAL		Total	AREA	Quantity SF/Room		Total	Quantity	Total
	Quantity	SF/Room	Quantity	SF/Room			Quantity	SF/Room			
EDUCATION SUPPORT											
Miscellaneous											
Lobby	1	2,000			2,000	Lobby	0	0			
Student Lockers ⁴³	850	1			850	Student Lockers	0	0			
Student Toilets	12	250			3,000	Student Toilets	10	3,530			
Gender Neutral Toilet ⁴⁴	1	60	1	64	60	Gender Neutral Toilet	1	82			
Gender Neutral Shower	1	100			100	Gender Neutral Shower	0	0			
Boiler Room	1	2,000			2,000	Boiler Room	2	2,267			
MDF	1	180			180	MDF	1	66			
IDF	5	80			400	IDF	3	159			
Main Electrical Room	1	240			240	Main Electrical Room	1	489			
Sub Electrical Room	5	75			375	Sub Electrical Room	1	183			
Restroom (teacher planning/collaboration)	10	70			700	Restroom (teacher planning/collaboration)	0	0			
Riser Room	1	60			60	Riser Room	2	99			
Elevator Room	1	80			80	Elevator Room	1	57			
Mechanical Fan Rooms ⁴⁵			1	2,000		Mechanical	1	426			
Corridors ⁴⁶		Variable				Corridors					
						PUMP ROOM	1	1,160			
						WATER HEATER	1	18			
						POOL/IRRIGATION ROOM	1	269			
						TOILETS	5	426			
Sub-Total Miscellaneous					10,045	Sub-Total Miscellaneous	31	9,231			(814)
Sub-Total Preferred Educational Support 1,864											
Sub-Total Optional Educational Support 3,830											
EDUCATIONAL SUPPORT 67,400											
SUB-TOTAL RECOMMENDED EDUCATIONAL SUPPORT 46,156 (21244)											
Notes:											
⁴³ Half size, double-stacked lockers are at the discretion of each school administration.											
⁴⁴ Provide at least one gender neutral restroom on each floor and near gym facilities. Also ensure at least one gender neutral and one accessible restroom are included within each area to be accessed outside regular school hours.											
⁴⁵ Preference is to locate mechanical fan rooms within building; otherwise mechanical fans should be located on roof.											
⁴⁶ See Corridor Characteristics.											

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AREA SPACE PROGRAM

COMPARISON TO COMPREHENSIVE HIGH SCHOOL EDUCATION SPECIFICATIONS

PPS Comprehensive High School(s) Area Program

PPS COMPREHENSIVE HIGH SCHOOL AREA PROGRAM					WILSON HS EXISTING			DIFFERENCE		
AREA	RECOMMENDED		PREFERRED OPTIONAL		Total	AREA	WILSON HS EXISTING		Quantity	Total
	Quantity	SF/Room	Quantity	SF/Room			Quantity	SF/Room		
PARTNER & COMMUNITY USES ⁴⁷					PARTNER & COMMUNITY USES					
Partner Program Office			1	150		Partner Program Office	0			
Pantry			1	200		Pantry	1	78		
Clothing/Food Closet	1	1,200	1	2,000	1,200	Clothing/Food Closet	0	0		
After School Instruction ⁴⁸			4	500		After School Instruction	0	0		
Sub-Total Preferred					2,000				78	
Sub-Total Optional Educational Support					850					
SUB-TOTAL COMMUNITY & PARTNER USES					1,200	SUB-TOTAL COMMUNITY & PARTNER USES			78	(1122)
WRAP AROUND SERVICE PROVIDERS ⁴⁸					WRAP AROUND SERVICE PROVIDERS					
Health Clinic	1	1,600			1,600	Health Clinic		0		
Teen Parent Services						Teen Parent Services				
Infant Room ⁴⁹	1	500	1	50	500	Infant Room		0		
Breastfeeding Room			1	50		Breastfeeding Room				
Toddler Room	1	500			500	Toddler Room		0		
Crawler Room	1	500			500	Crawler Room		0		
Toilet	1	50			50	Toilet		0		
Changing Area	1	50			50	Changing Area		0		
Nap Area	1	200			200	Nap Area		0		
Storage/Kitchen	1	300			300	Storage/Kitchen		0		
Sub-Total Teen Parent Services					2,100	Sub-Total Teen Parent Services		0		
Office Space Social Service Providers (Includes SUN, STEP UP and ESL)			5	200		Office Space Social Service Providers (Includes SUN, STEP UP and ESL)				
Classroom(s)	2	500			1,000	Classroom(s)		0		
SUB-TOTAL WRAP AROUND SERVICE PROVIDERS					4,700	SUB-TOTAL WRAP AROUND SERVICE PROVIDERS			0	
SUB-TOTAL COMPREHENSIVE HIGH SCHOOL RECOMMENDED AREA					206,690	SUB-TOTAL WILSON HIGH SCHOOL EXISTING NET AREA			177,904	
Net to gross ratio of 36% ⁵⁰					281,098	Net to gross			46.65%	(20198)
COMPREHENSIVE HIGH SCHOOL TOTAL RECOMMENDED AREA						TOTAL WILSON HIGH SCHOOL GROSS AREA			260,900	(68438)
TOTAL PREFERRED AREA			48,240							
TOTAL OPTIONAL AREA			8,230							
TOTAL RECOMMENDED + PREFERRED			329,338							
Notes:										
⁴⁷ See Appendix A for an assessment of space needs for service providers and community partners.										
⁴⁸ Number of afterschool instructional spaces to be determined in conjunction with program provider and PPS Facilities and Asset Management.										
⁴⁹ May be used as a Breastfeeding room for school employees and students. If used for this purpose, space should be built to the preferred size. Breastfeeding room should be a separate walled space.										
⁵⁰ Gross area includes walls, corridors and circulation areas; 36% net to gross for new construction; ratio for modernization projects will vary depending on extent of work.										

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AREA SPACE PROGRAM DETERMINATION OF NET TO GROSS MULTIPLIER

DETERMINATION OF NET TO GROSS MULTIPLIER

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5 PLANS AND STUDIES

SITE ORGANIZATION PLAN

Site organization was developed in collaboration with the Conceptual Master Planning Committee (CMPC). Exercises and interactive activities in the CMPC meetings and homework assignments provided a continuous feedback loop of information that shaped the organization options.

Key Primary Decisions

In their third meeting, the CMPC were asked to make two key decisions regarding the status of the existing school building and pool facility. These decisions were pivotal to determining the design path and direction for the future WHS building and site.

- Build new **OR** Renovate and Modernize with an Addition
- Wilson Pool to remain on-site **OR** move off-site

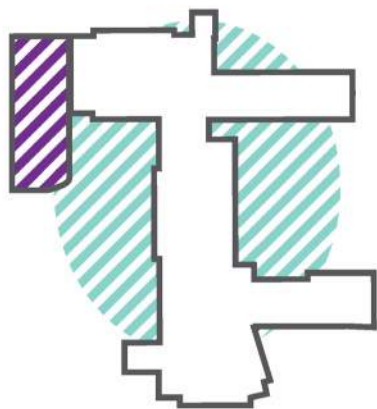
After discussing the opportunities and challenges for different site organization options, CMPC members were asked to vote on four potential design paths.

We tallied the voting results in the CMPC meeting and presented them to the group for further discussion. The lowest score represents the preferred option because 1 = first choice and 4 = fourth choice.

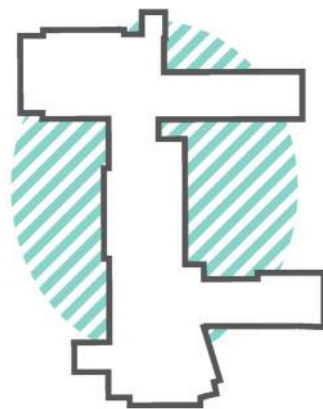
1. New with Pool - 45 total
2. New without Pool - 60 total
3. Remodel with Pool - 65 total
4. Remodel without Pool - 80 total

The votes revealed a clear preference for a new building, and provided us with direction to move forward with CMP design options.

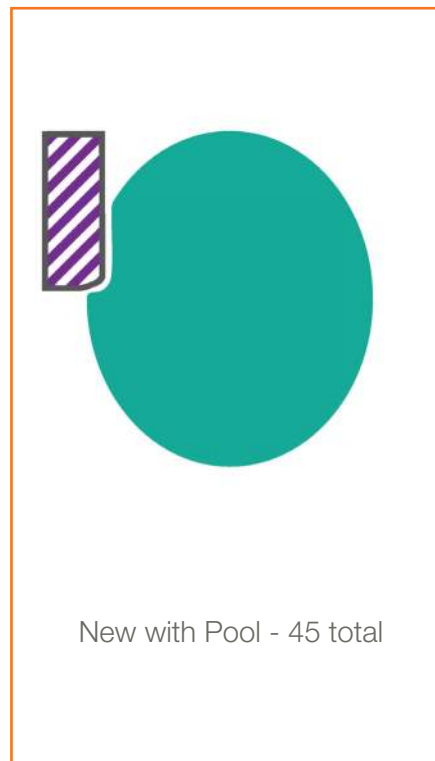
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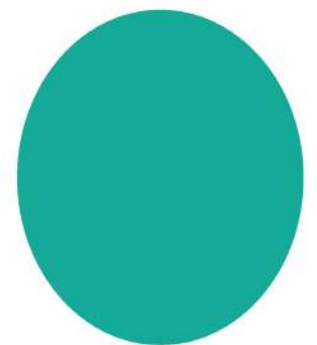
Remodel with Pool - 65 total



Remodel without Pool - 80 total



New with Pool - 45 total

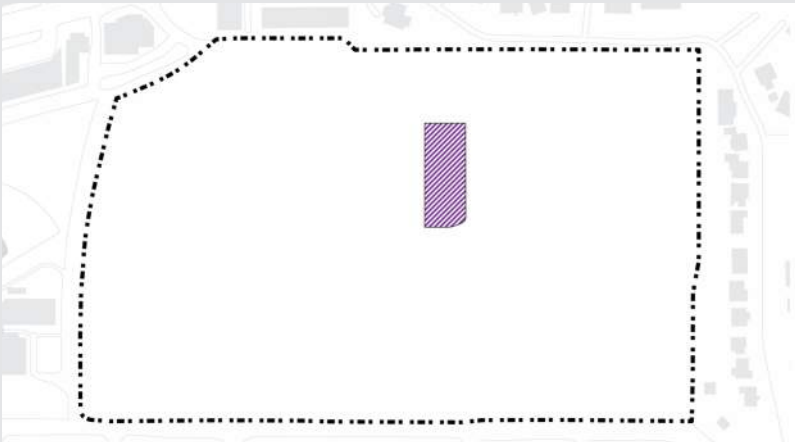


New without Pool - 60 total

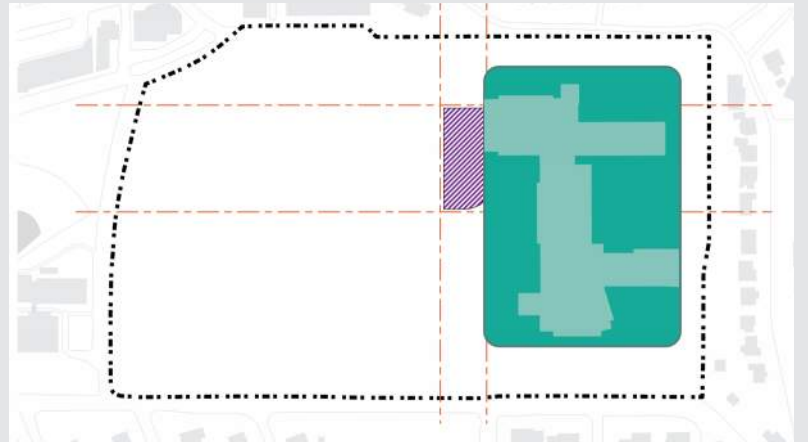
Key Secondary Decisions

- Where should the new building go?
 - ▶ Where is the front door?
 - ▶ Where should the community connection be?
 - ▶ Do we connect to Rieke Elementary School?
- Where should the fields go?
- How should traffic patterns change on-site?
 - ▶ Vehicular traffic patterns?
 - ▶ Pedestrian traffic patterns?
 - ▶ Edges vs the middle?
 - ▶ Remove vehicular connection through site?

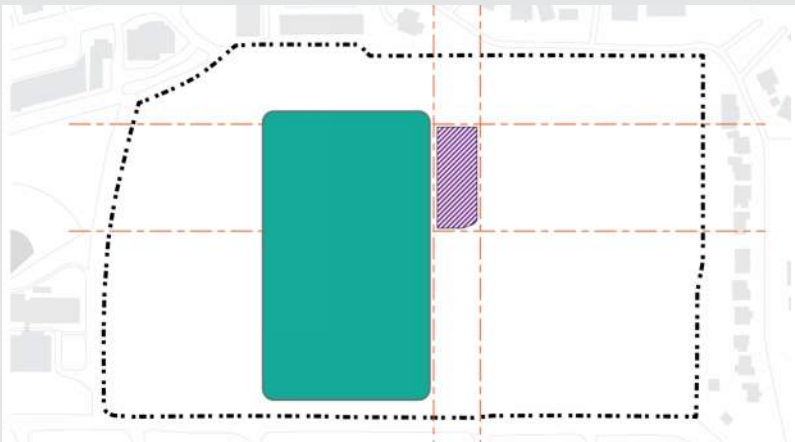
The diagrams below were used as visual aids to discuss the location of the building and fields, and site traffic patterns.



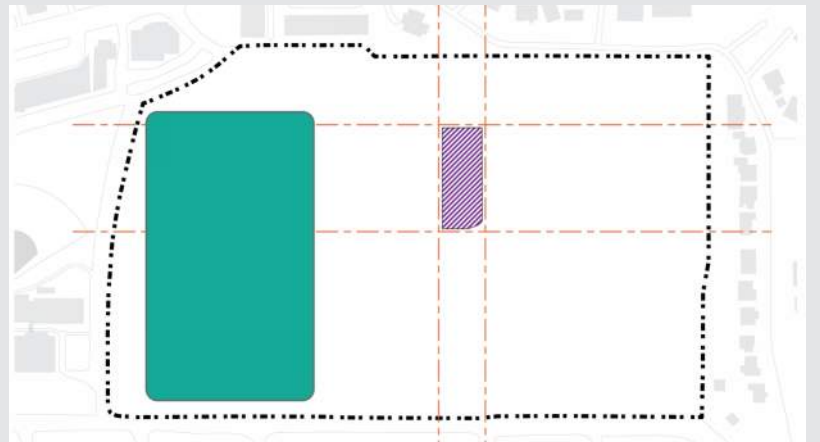
Existing pool footprint



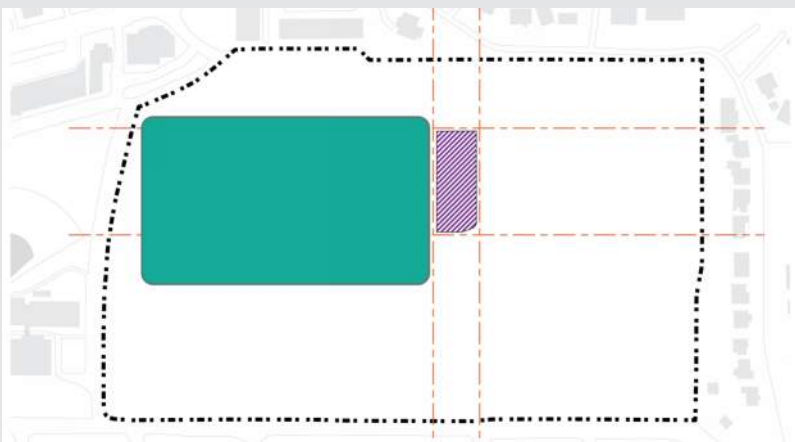
Existing building footprint and potential new building location



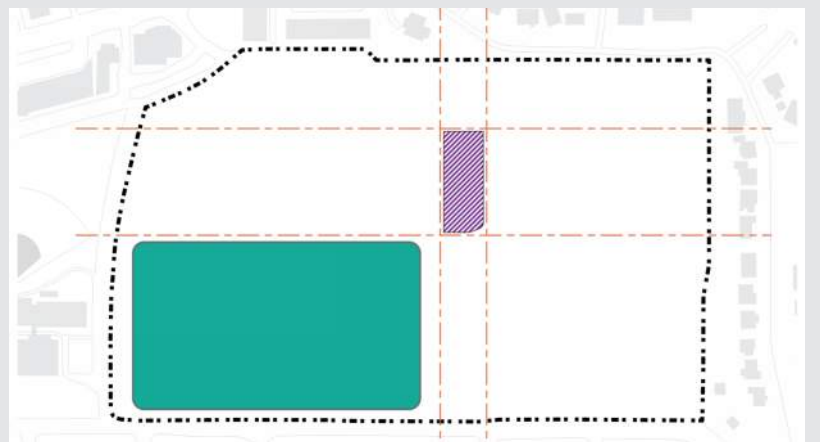
Potential new building location



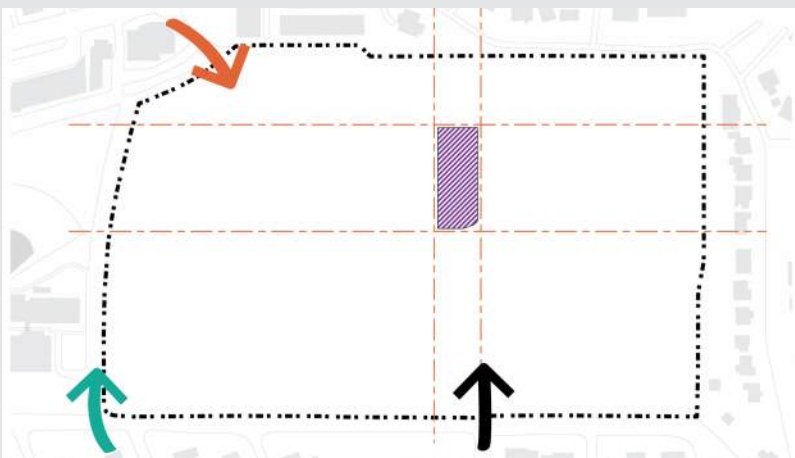
Potential new building location



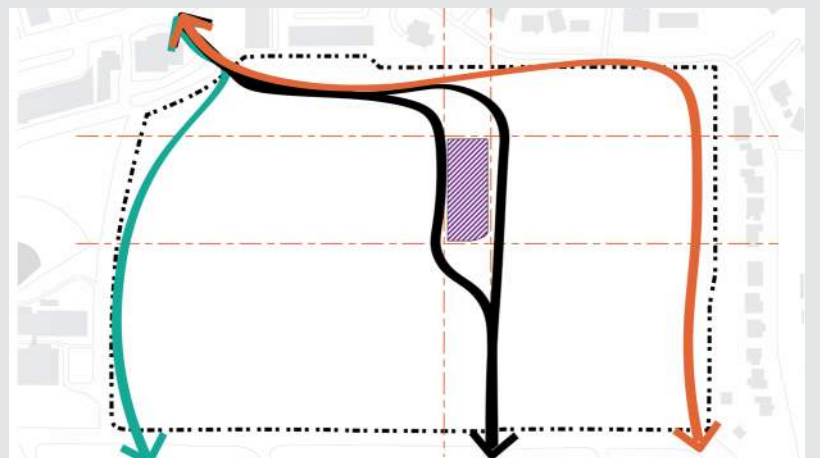
Potential new building location



Potential new building location



Perimeter only traffic access



Traffic flows through site

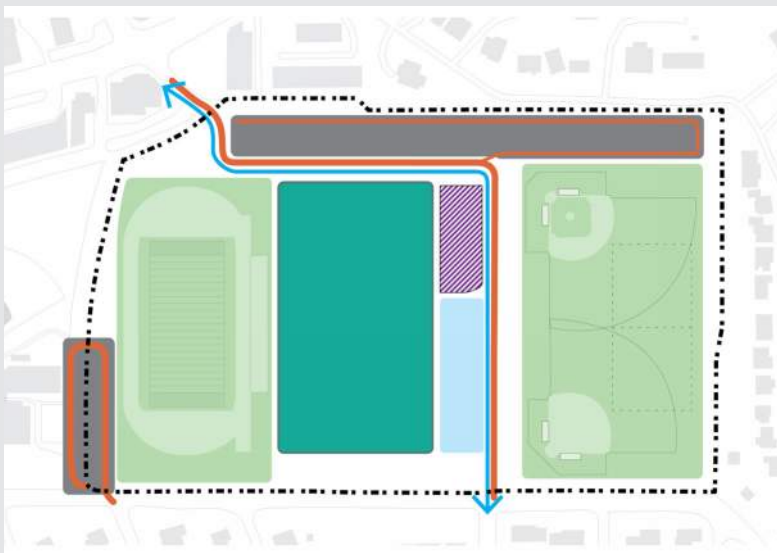
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PREFERRED OPTIONS

The discussion in the fourth CMPC meeting focused on-site organization options E and G as the preferred schemes.

- New building located on the west side of the site. Students to remain on-site during construction in existing WHS building. When new building is complete, the existing building will be demolished.
- Parking on the perimeter, close to fields and pool.
- No vehicular flow-through traffic.
- Separate WHS and Rieke Elementary School traffic flows and parking lots.
- Maintain SW Trails and provide enhanced pedestrian and bicycle connections.
- Center community activities around Pool.
- Front door could face Vermont Street or Capitol Highway.
- New building should be prominent and visible from the street.
- Maintain track and field proximity to commercial area and away from residential area.

Option E



1

- Maintains Farmers Market at current location or relocate to a new plaza space.

2

- New building is in the “heart” of the site.

3

- Rotates track and field to optimal north-south orientation.
- Fields are separated.

4

- Visibility from both Vermont Street and Capitol Highway/ Hillsdale commercial center.

5

- Multiple options for drop-off and pick-up.

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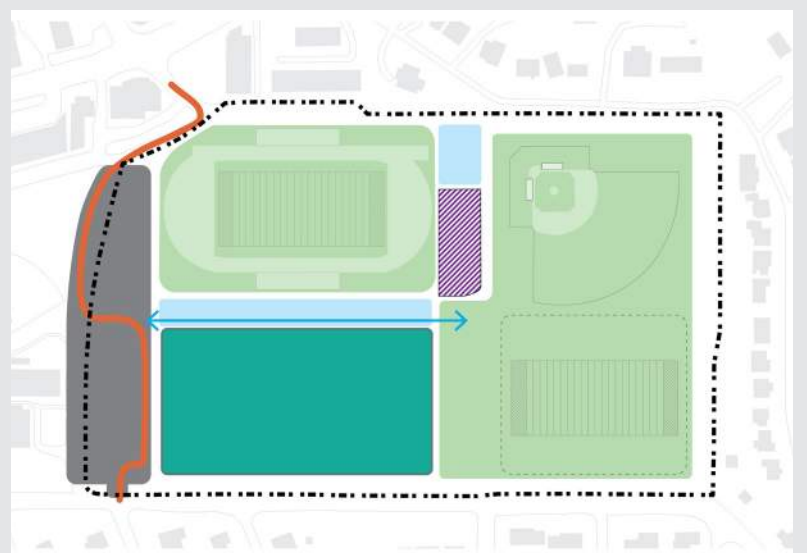
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Option G



- New building is closer to Rieke.

- Keeps track and field in current location. Opportunity to renovate and reuse existing facilities.

- Fields are connected.

- Strong connection to residential neighborhood on Vermont Street.

BUILDING ORGANIZATION PLAN

Building organization was developed in collaboration with the CMPC. Exercises and interactive activities in the CMPC meetings and homework assignments provided a continuous feedback loop and an iterative discussion process with opportunities to reflect and discuss.

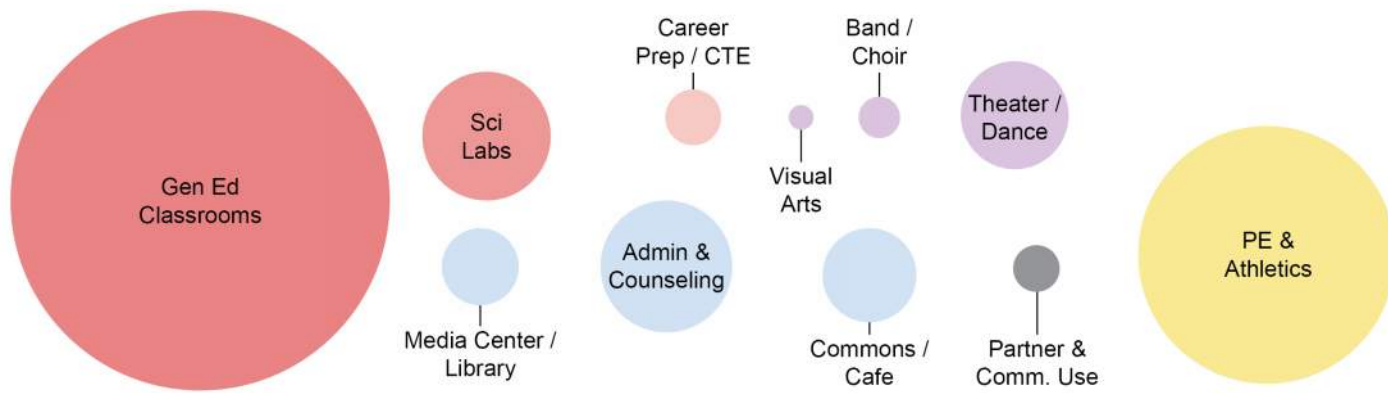
The goal for the homework exercises was to engage with the CMPC at a deeper level. Authentic engagement is important to any community outreach effort. With only four CMPC meetings, each two hours long, we realized we needed to engage with the CMPC beyond the meetings themselves. By allowing CMPC members to think about the building program at home they were able to formulate their thoughts without be influenced by other CMPC members.

At the second meeting we distributed homework for the group to reflect on program adjacencies, relationships and size. We collected the homework at the third meeting and presented a visual summary at the fourth meeting.

We asked the CMPC to think about the building program from two perspectives:

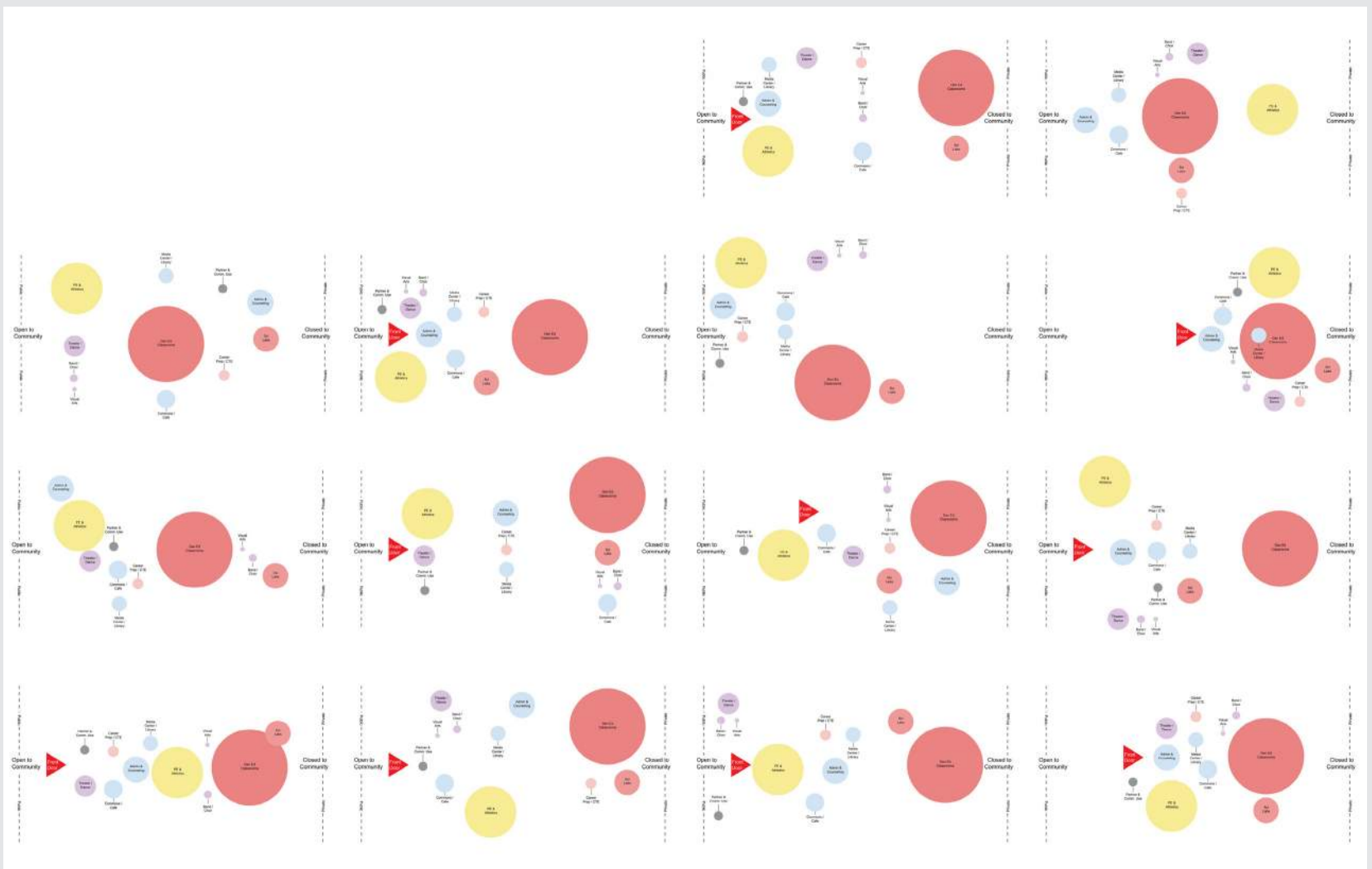
1. What program relationships are important and why?
2. What programs are important and why?

They were asked to indicate graphically on a spectrum of Public/Open to the Community to Private/Closed to the Community where the program spaces should go.



Program Adjacencies, and Relationships Summary

IBI received fourteen homework responses for the program adjacency and relationship exercise. The colored circles represent the total relative size of the different program groups listed in the PPS Comprehensive High School Education Specifications. The CMPC was asked to explore what programs should, or should not, be located near each other, and what programs should be open to the community (public spaces) or closed to the community (private spaces).



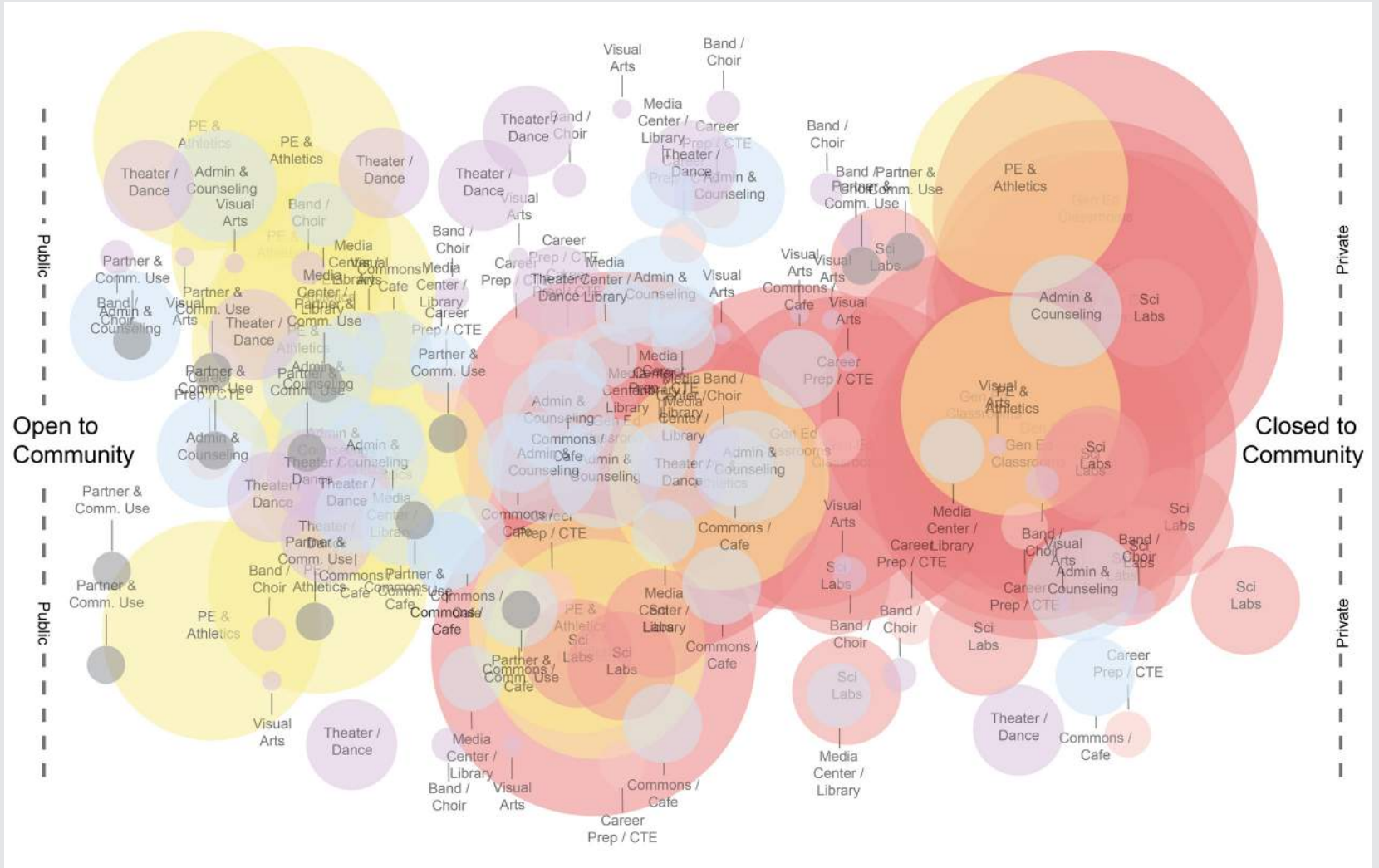
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PLANS AND STUDIES BUILDING ORGANIZATION PLAN

Program Adjacencies and Relationships Summary

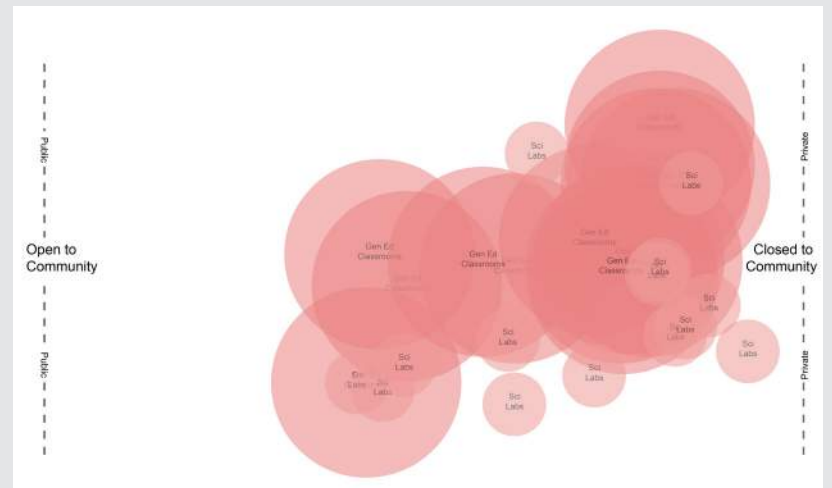
To establish common themes, IBI overlaid the fourteen program adjacency and relationship homework responses to create one visual summary.



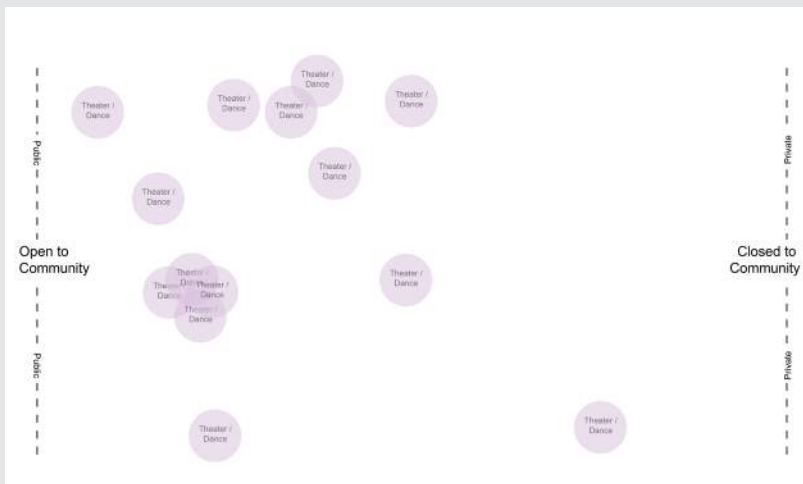
IBI isolated program groups to see if they trended towards open to the community (public space) or closed to the community (private space).



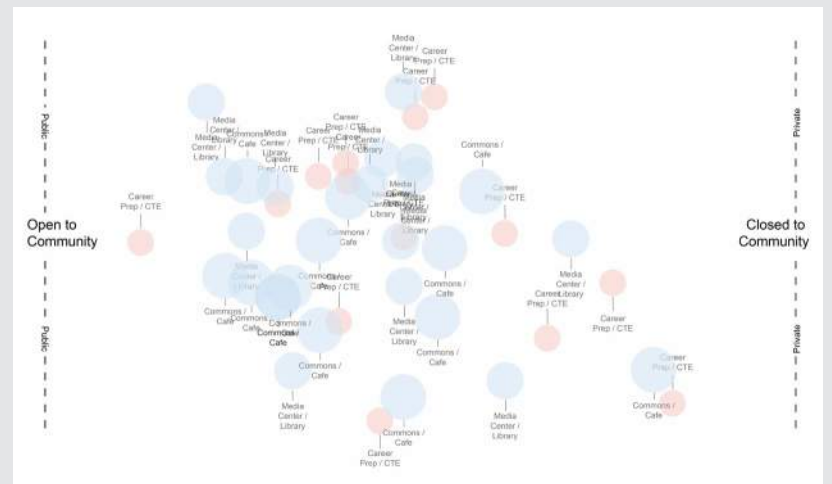
1 | General Education Classrooms and Science Labs



2 | P.E. and Athletics



3 | Theater and Dance



4 | Media Center, Commons, Career Prep and CTE

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PLANS AND STUDIES BUILDING ORGANIZATION PLAN



Extended Learning, Sandy High School, IBI Group



Career Technical Education Classroom, Sandy High School, IBI Group

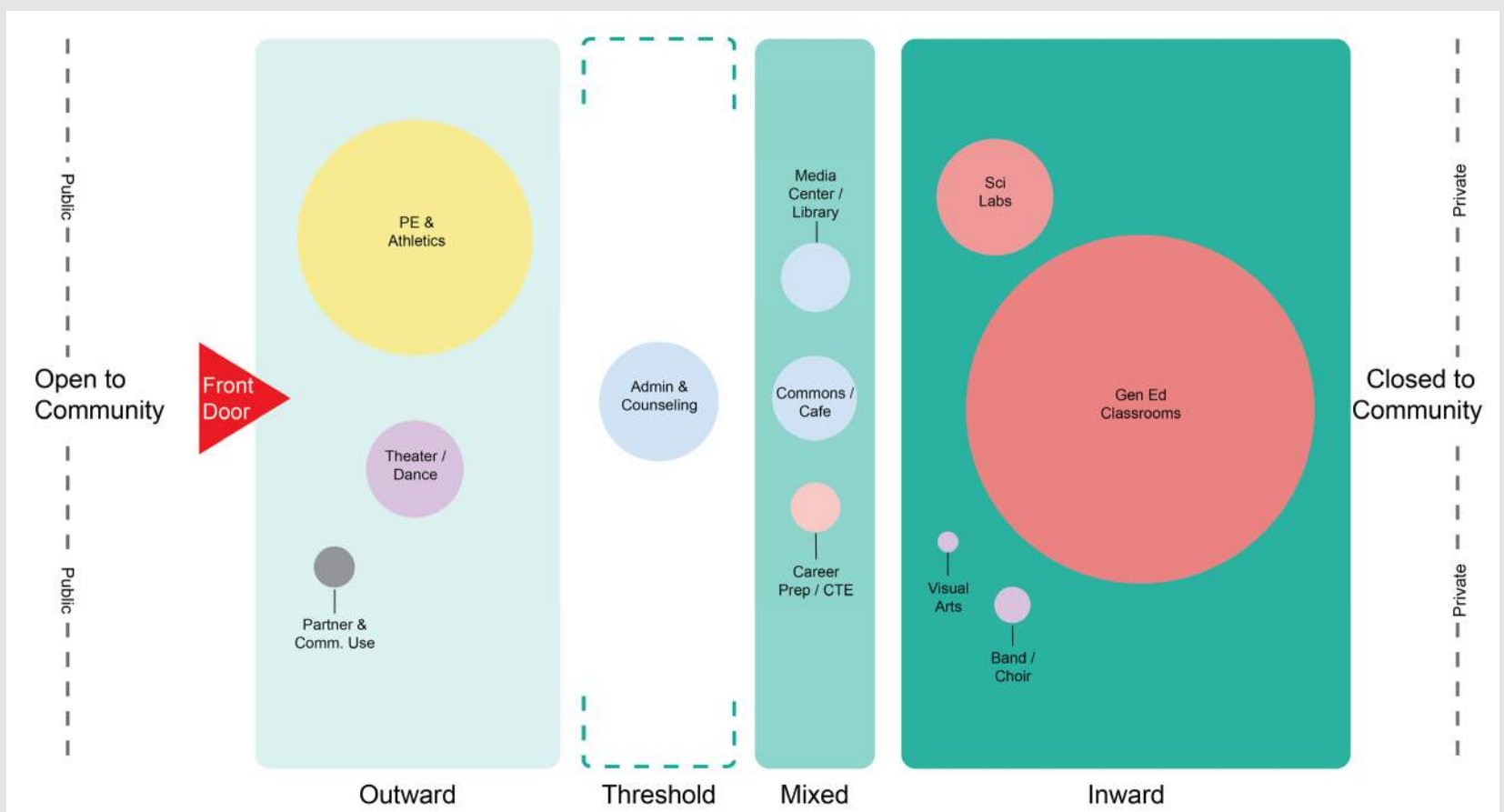
From the homework responses, IBI generated a program relationship and adjacency diagram that organizes the program groups into four categories:

1. Outward - open to the community (public space)
2. Threshold - the transition space between open to the community (public space) and closed to the community (private space)
3. Mixed - both open to the community (public space) and closed to the community (private space)
4. Inward - closed to the community (private space)

The following key themes emerged:

- More Career Technical Education (CTE) and career preparation spaces and options, engage with community partners
- Less general education spaces
- More flexible science labs to promote STEM
- More spaces for students to hang out – library/media center, cafeteria/commons, extended learning
- Theater and gymnasiums open to community for community use, symbol of pride for students and neighbors
- More partner programs

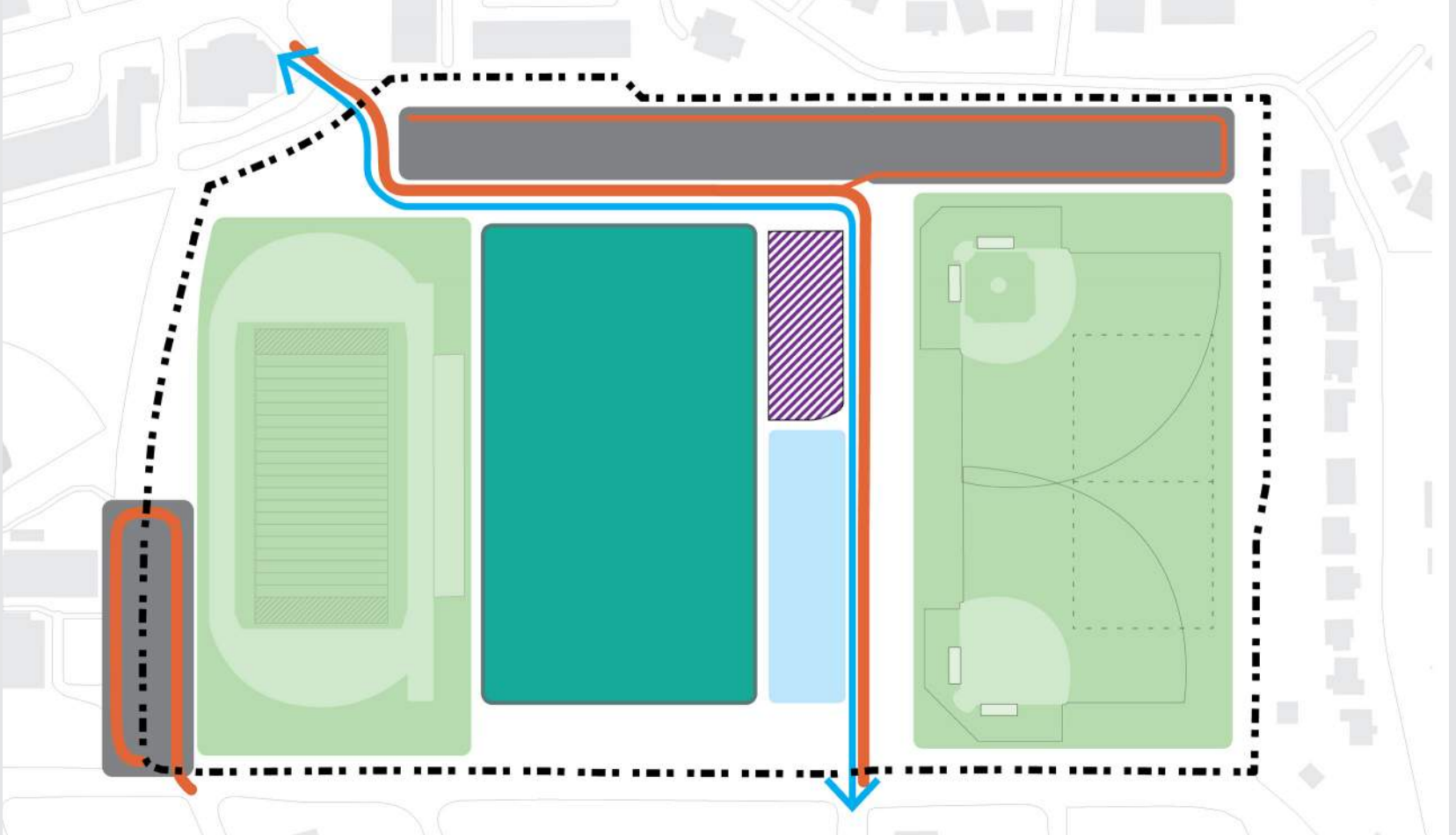
Program Adjacency (to be applied to Option E and G)



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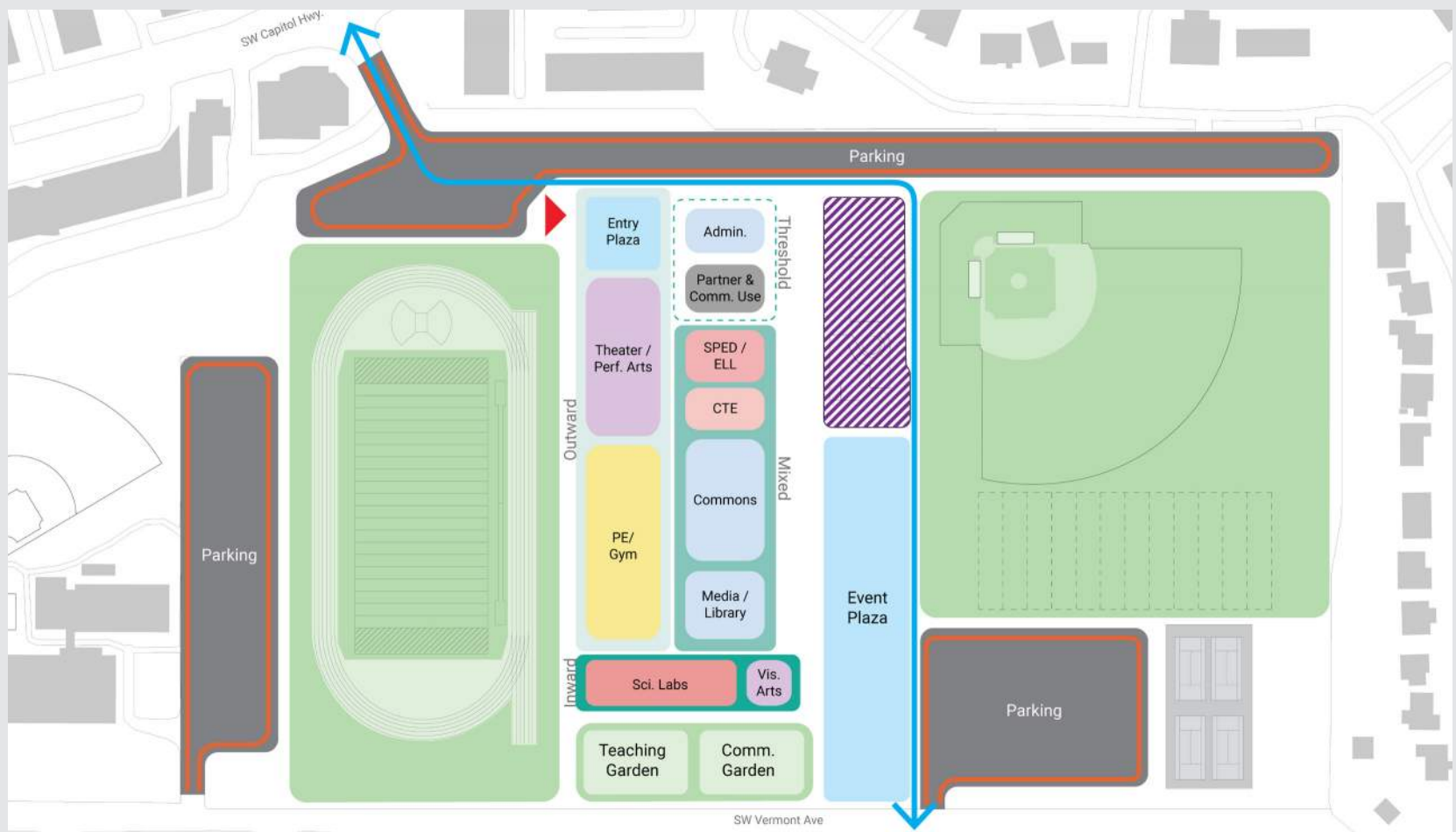
Preferred Conceptual Master Planning Design - Option E

Proposed New Building Location, CMPC meeting four on November 19, 2019



Concept Development - Program Adjacency, Community Forum on December 12, 2019

The program relationship and adjacency diagram was overlaid onto the new building location concept plan. The concept plan was updated from the fourth CMPC meeting to incorporate feedback IBI received in the meeting. The Program Adjacency Concept Plan was presented at the Community Forum event.

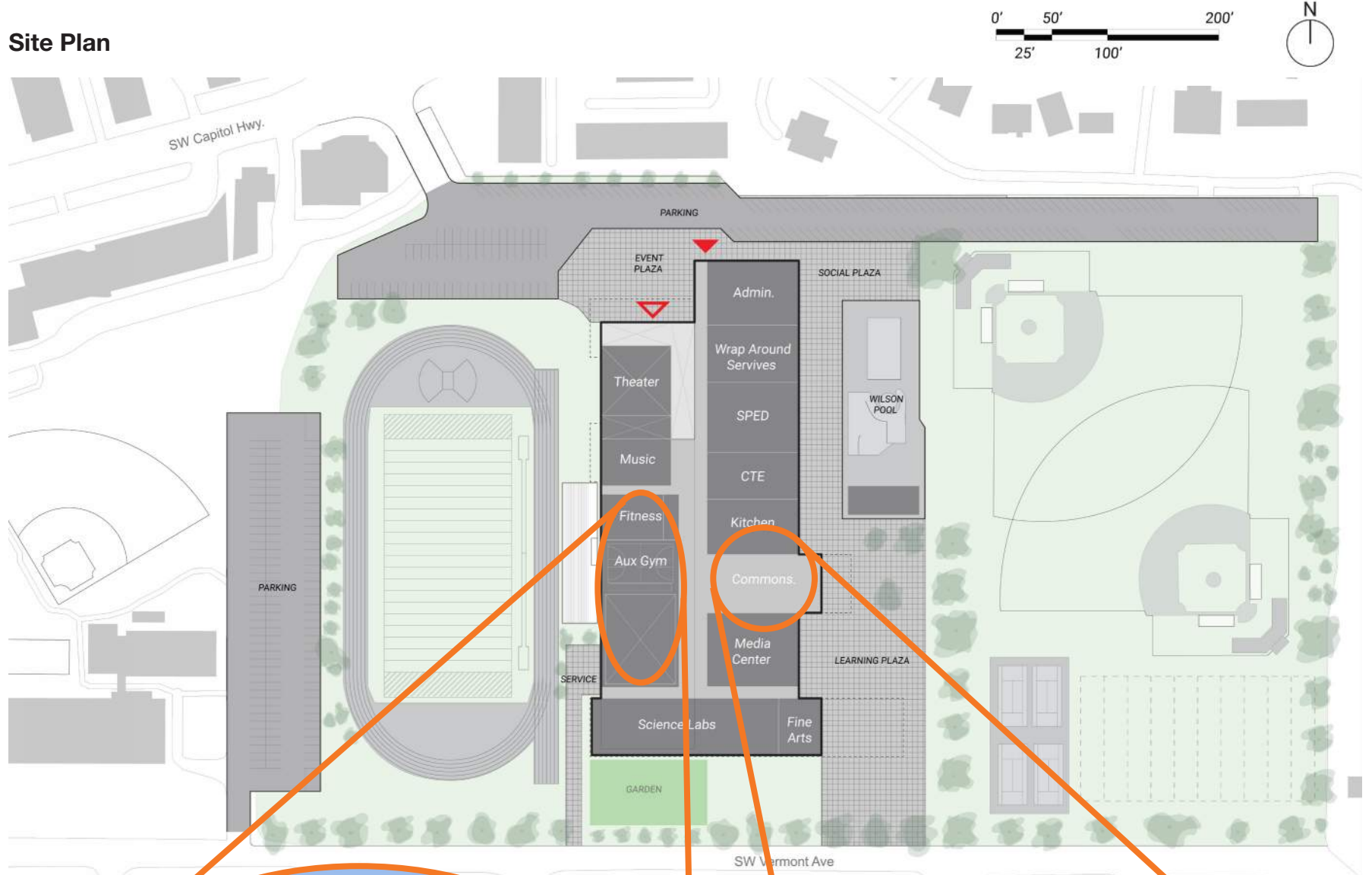


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PLANS AND STUDIES OPTION E - SITE ORGANIZATION PLAN

Site Plan



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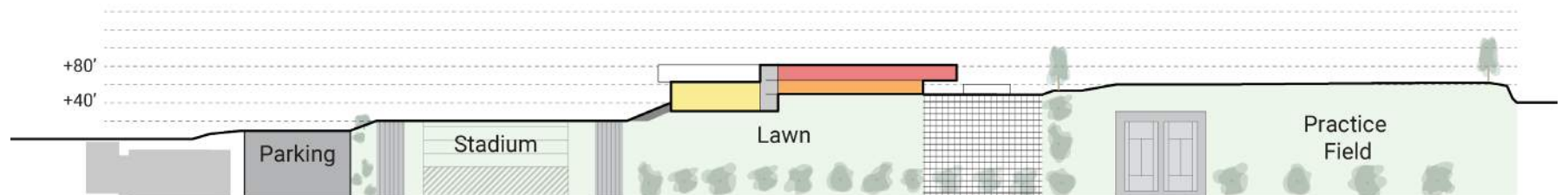
Example of connecting physical education spaces to fields
Franklin High School, IBI Group

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Example of mixing circulation with student gathering
Reeds Spring Middle School, Dake Wells Architecture

Section



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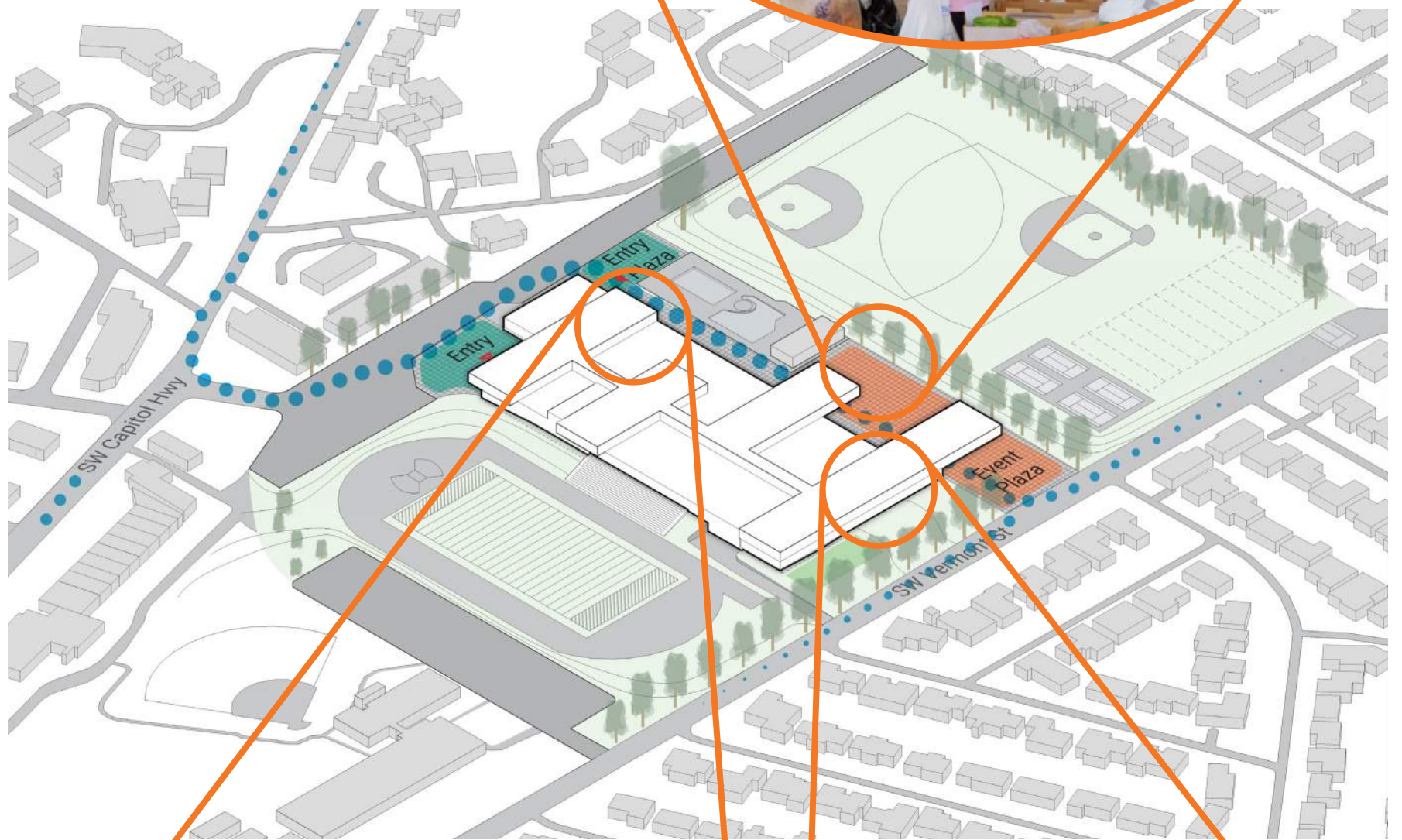
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PLANS AND STUDIES OPTION E - BUILDING MASSING

Example of a covered farmers market
Covington Farmers Market, design/buildLAB



Building Massing



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Example of courtyard
Central Catholic High School, Bora

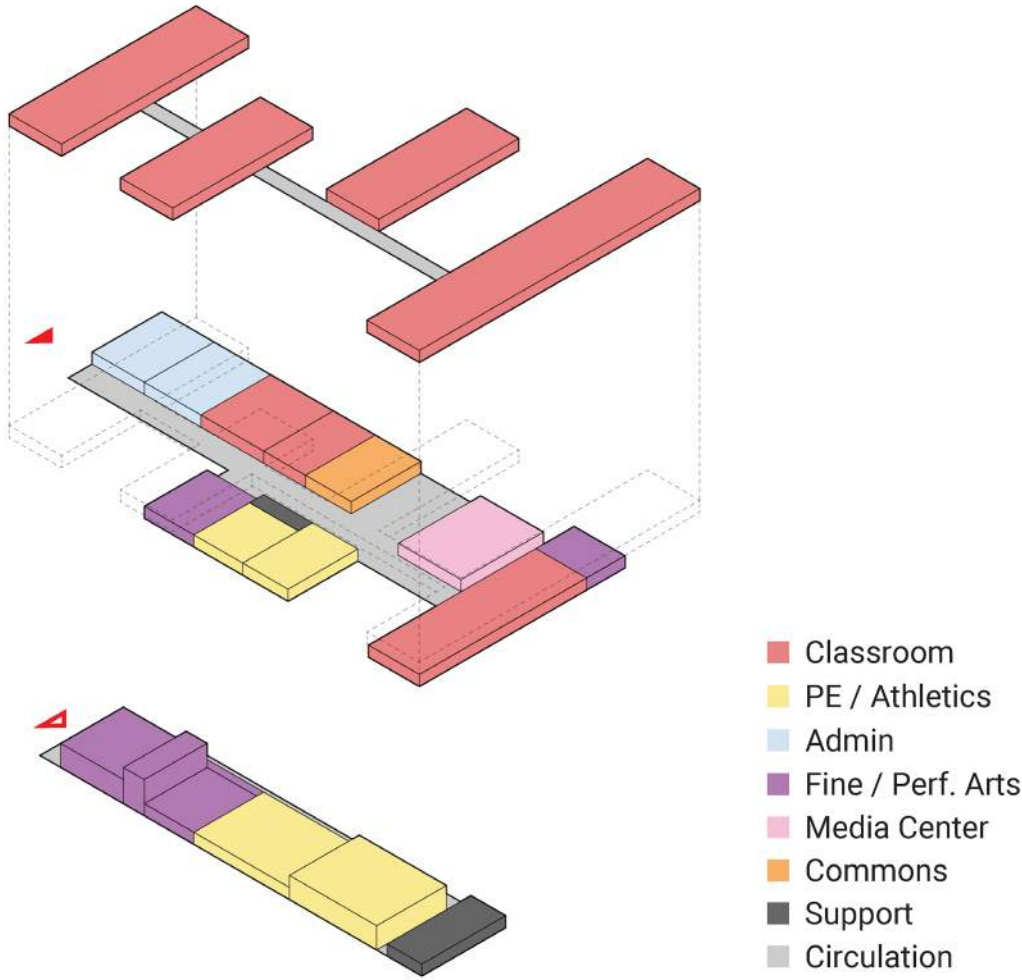


Example of a Classroom with views of nature
Sandy High School, IBI Group

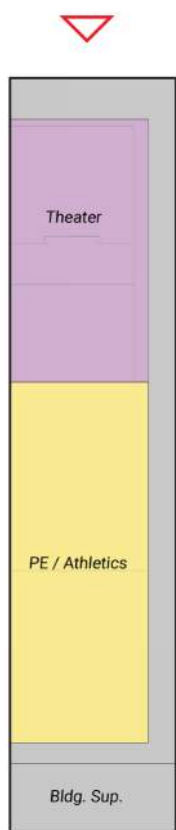


BUILDING PLANS

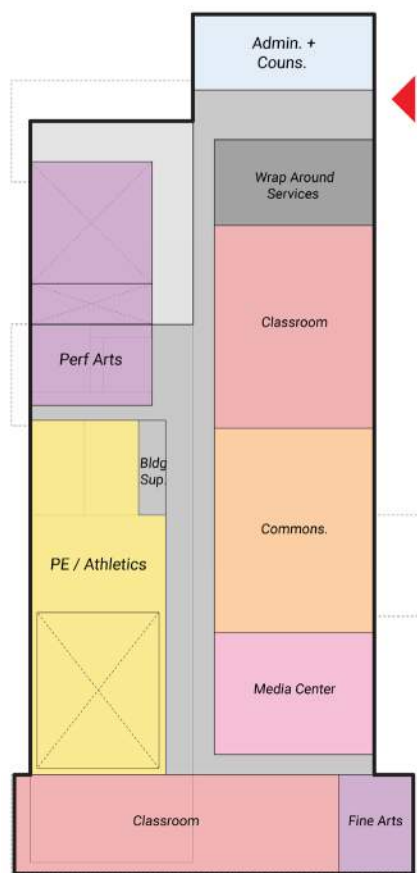
Building Axon
TOTAL: 287,000 SF



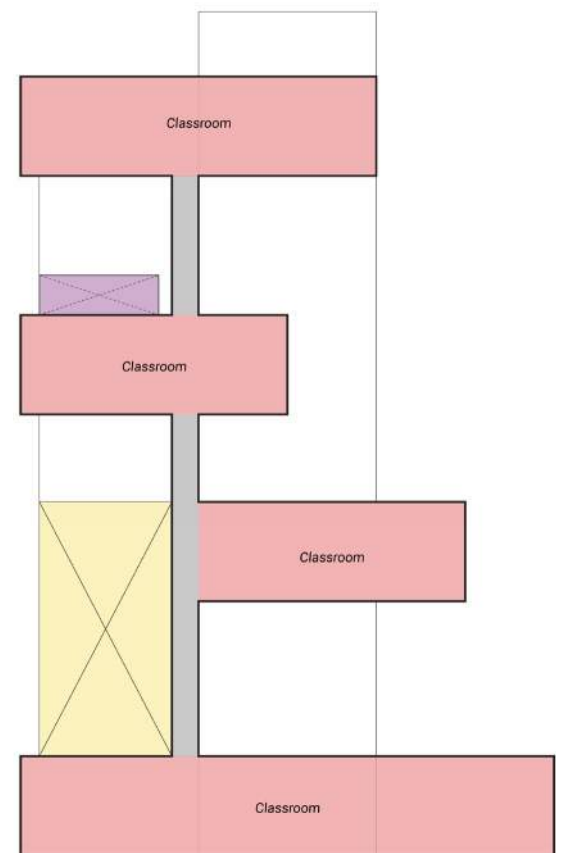
Level 1 Floor Plan
65,000 SF



Level 2 Floor Plan
135,000 SF



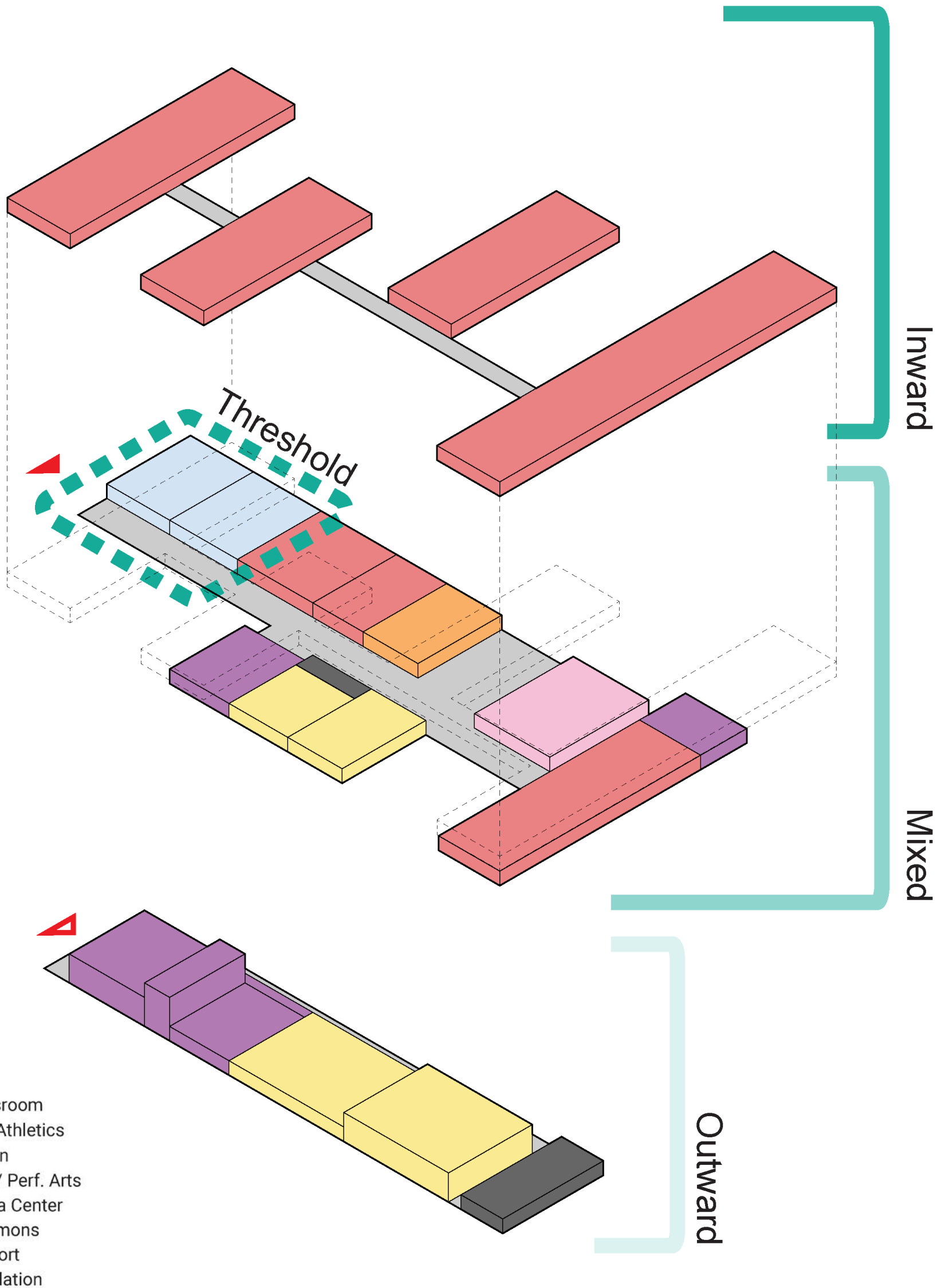
Level 3 Floor Plan
87,000 SF



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PLANS AND STUDIES OPTION E - BUILDING PLANS

Building Axon

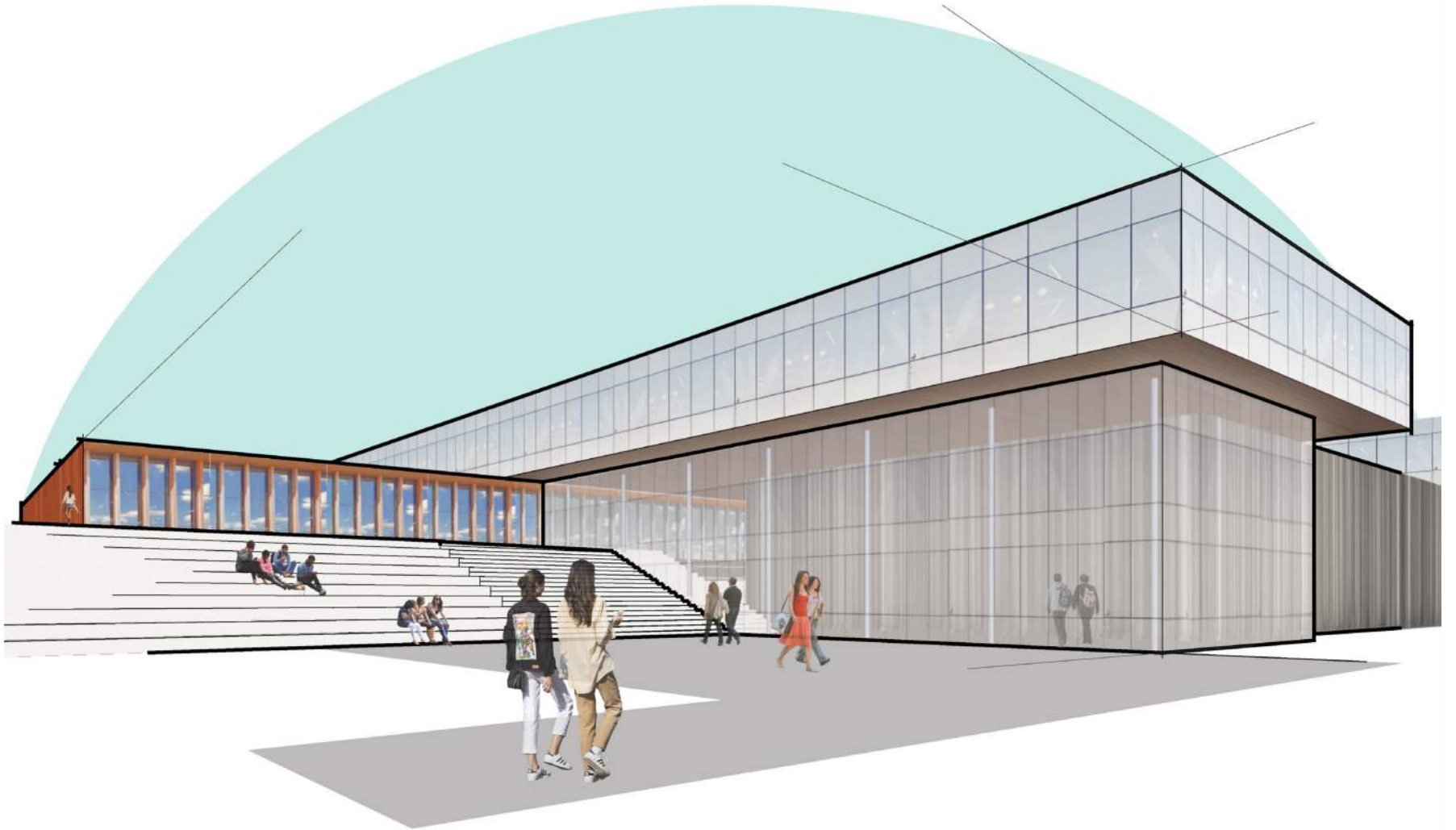


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PLANS AND STUDIES OPTION E - CONCEPT IMAGES



View of event entry from northwest

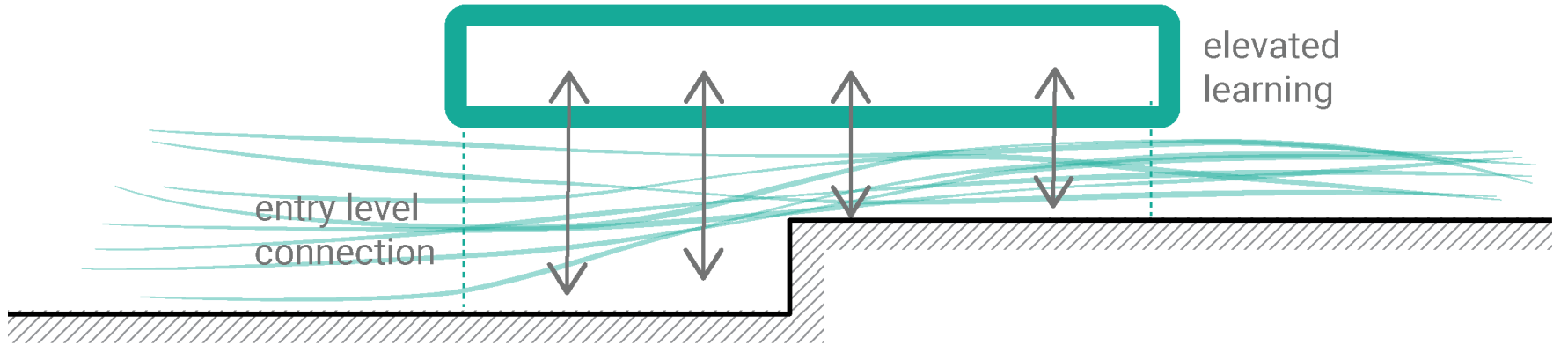


View of event plaza from SW Vermont St.

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PLANS AND STUDIES OPTION E - DIAGRAMS



Example of the building connecting with the landscape
Sandy High School, IBI Group



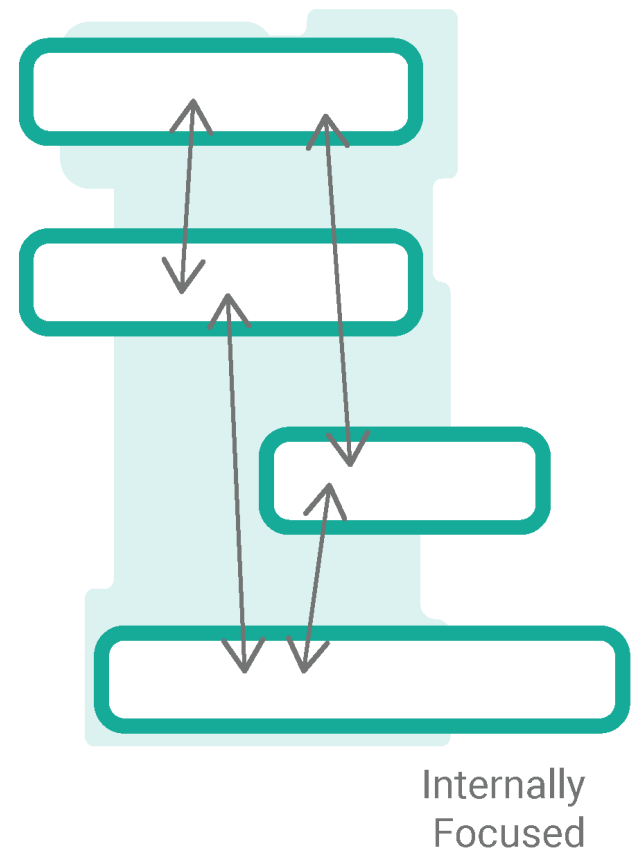
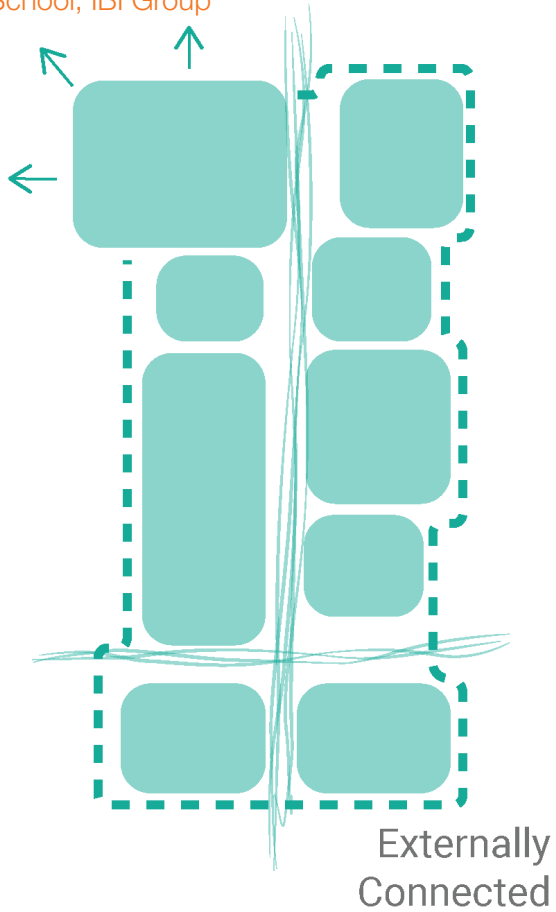
Example a lower level entry space
Reeds Spring Middle School, Dake Wells Architecture



Example of interior connections and views into spaces
Sandy High School, IBI Group



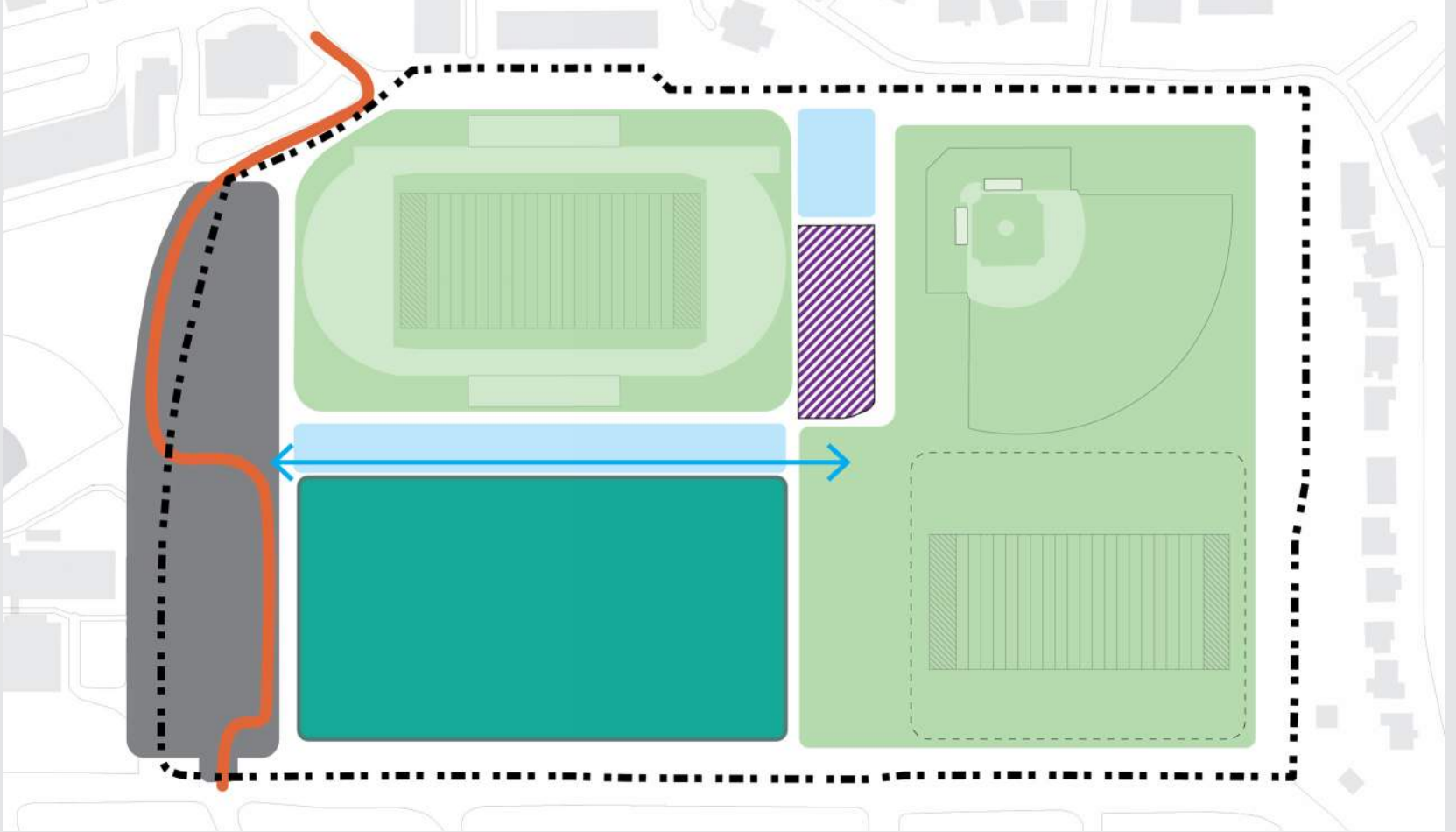
Example of classrooms over entry level spaces
Reeds Spring Middle School, Dake Wells Architecture



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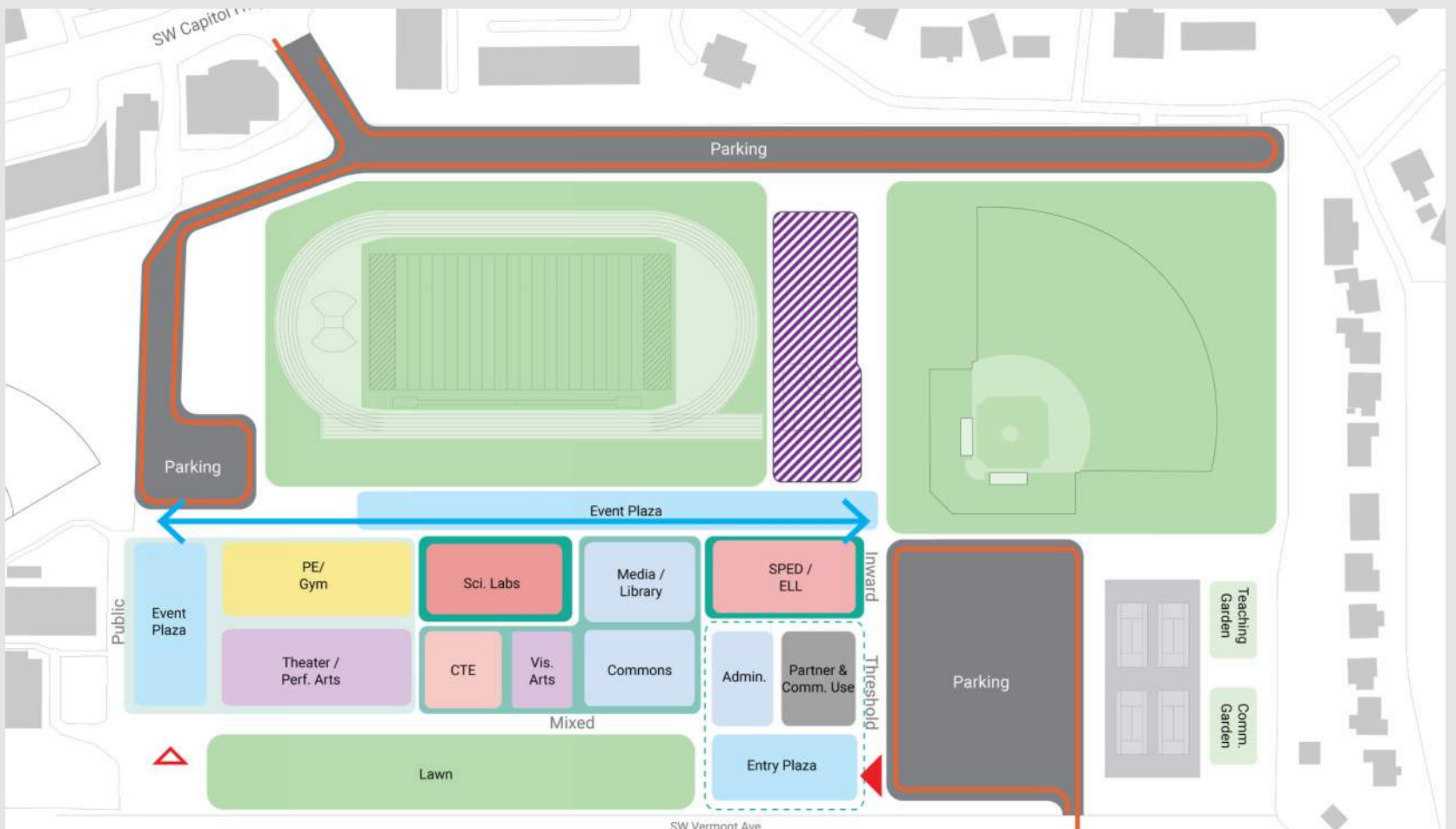
Preferred Conceptual Master Planning Design - Option G

Proposed New Building Location, CMPC meeting four on November 19, 2019



Concept Development - Program Adjacency, Community Forum on December 12, 2019

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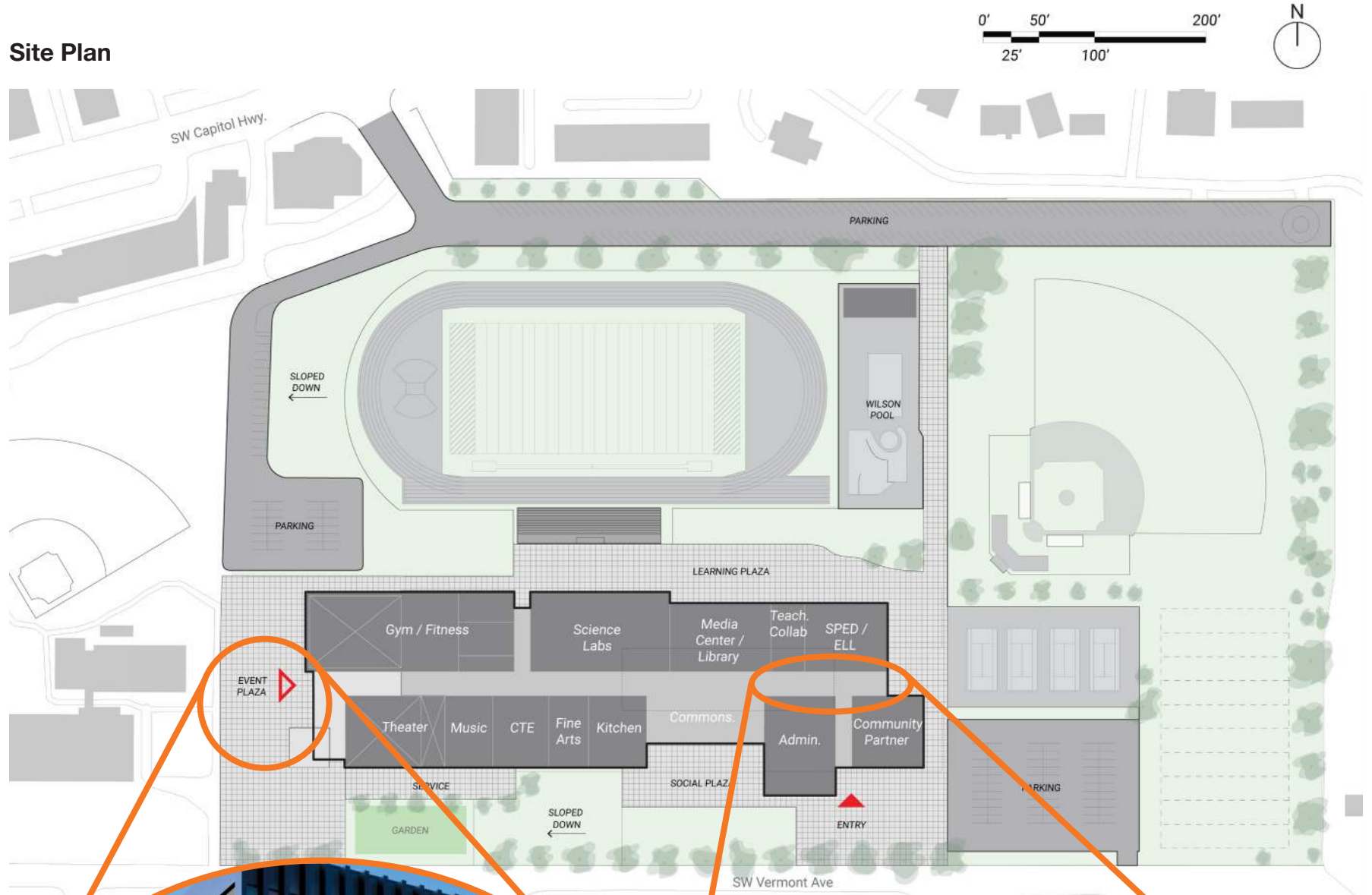


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PLANS AND STUDIES OPTION G - SITE ORGANIZATION PLAN

Site Plan



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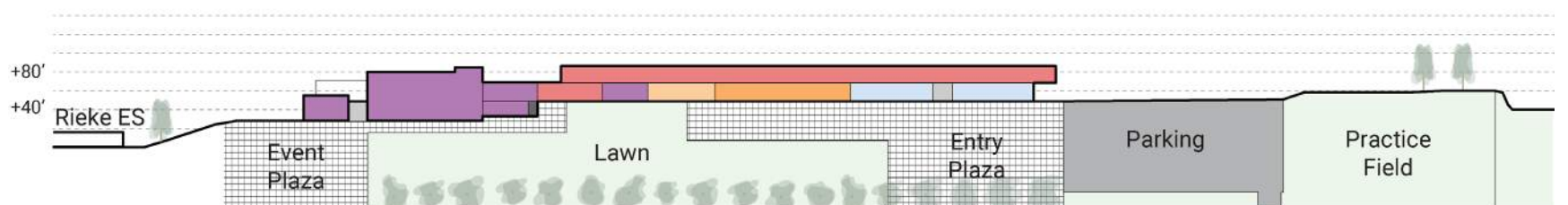
Example of a performing arts lobby
University of Michigan Museum of Art, Allied Works Architecture

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Example of a student centered entry
Franklin High School, IBI Group

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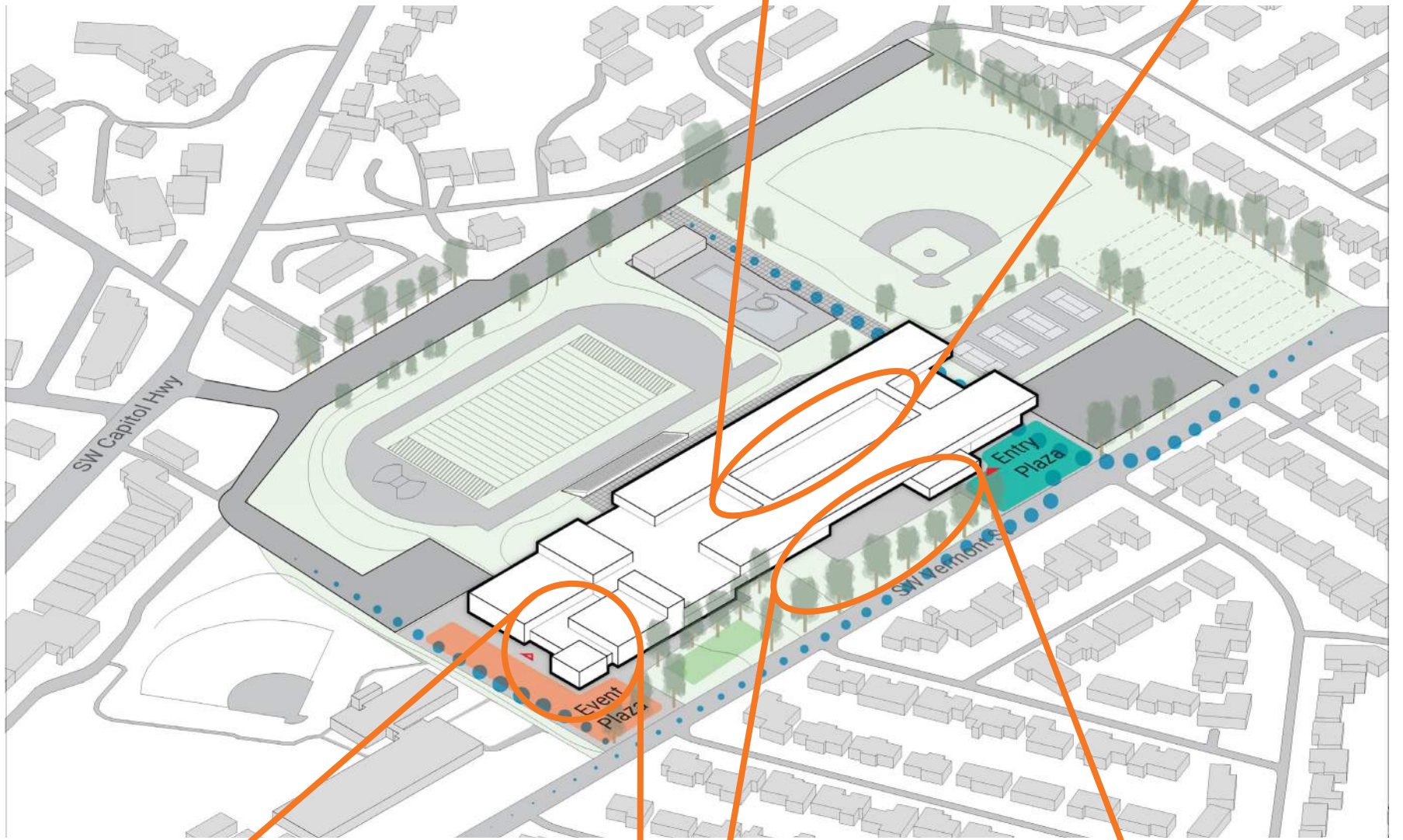
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PLANS AND STUDIES OPTION G - BUILDING MASSING



Example of a courtyard
Sandy High School, IBI Group

Building Massing



Example of a black box theater
Franklin High School, IBI Group



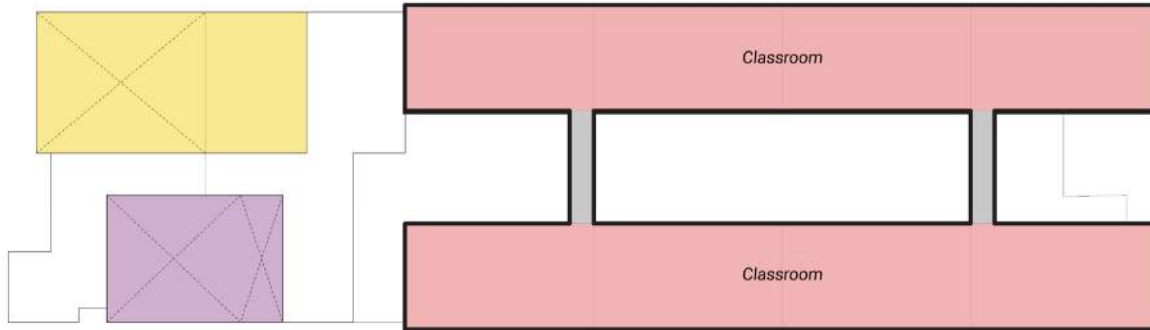
Example of exterior materials and building
relationship to the landscape
Trumpf Smart Factory Chicago, Barkow Leibinger

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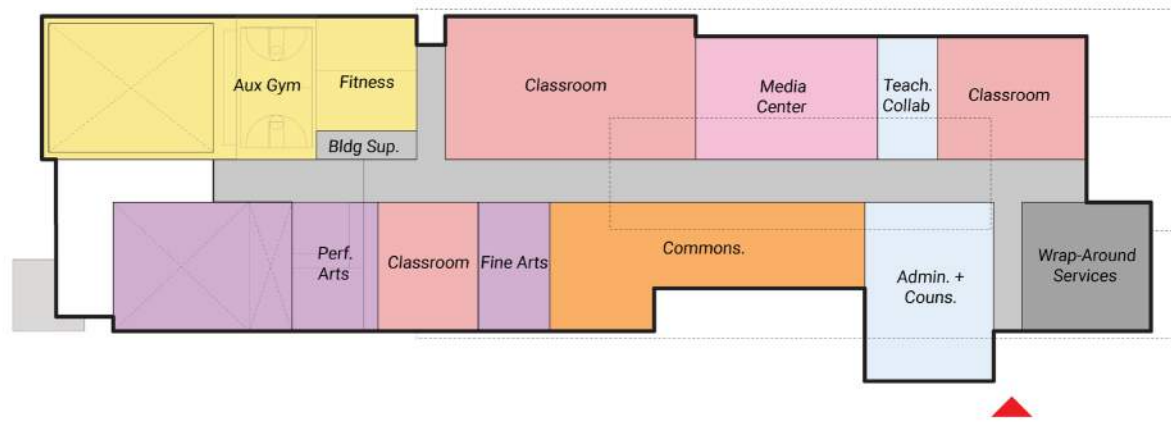
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PLANS AND STUDIES OPTION G - BUILDING PLANS

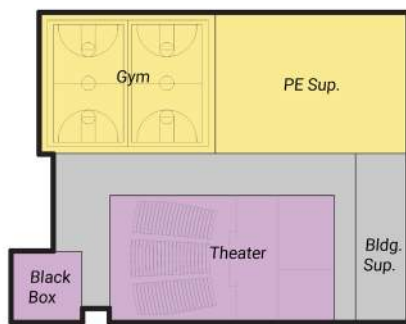
Level 3
104,000 SF



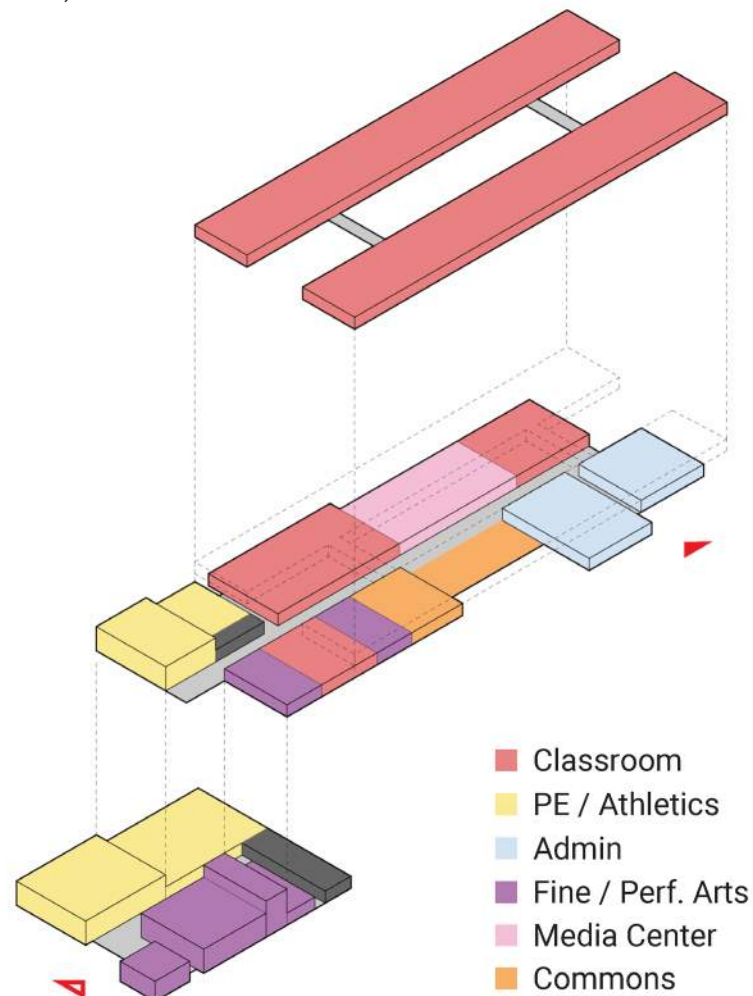
Level 2
124,000 SF



Level 1
58,000 SF

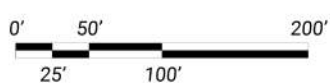


Building Axon
TOTAL: 286,000 SF



- Classroom
- PE / Athletics
- Admin
- Fine / Perf. Arts
- Media Center
- Commons
- Support
- Circulation

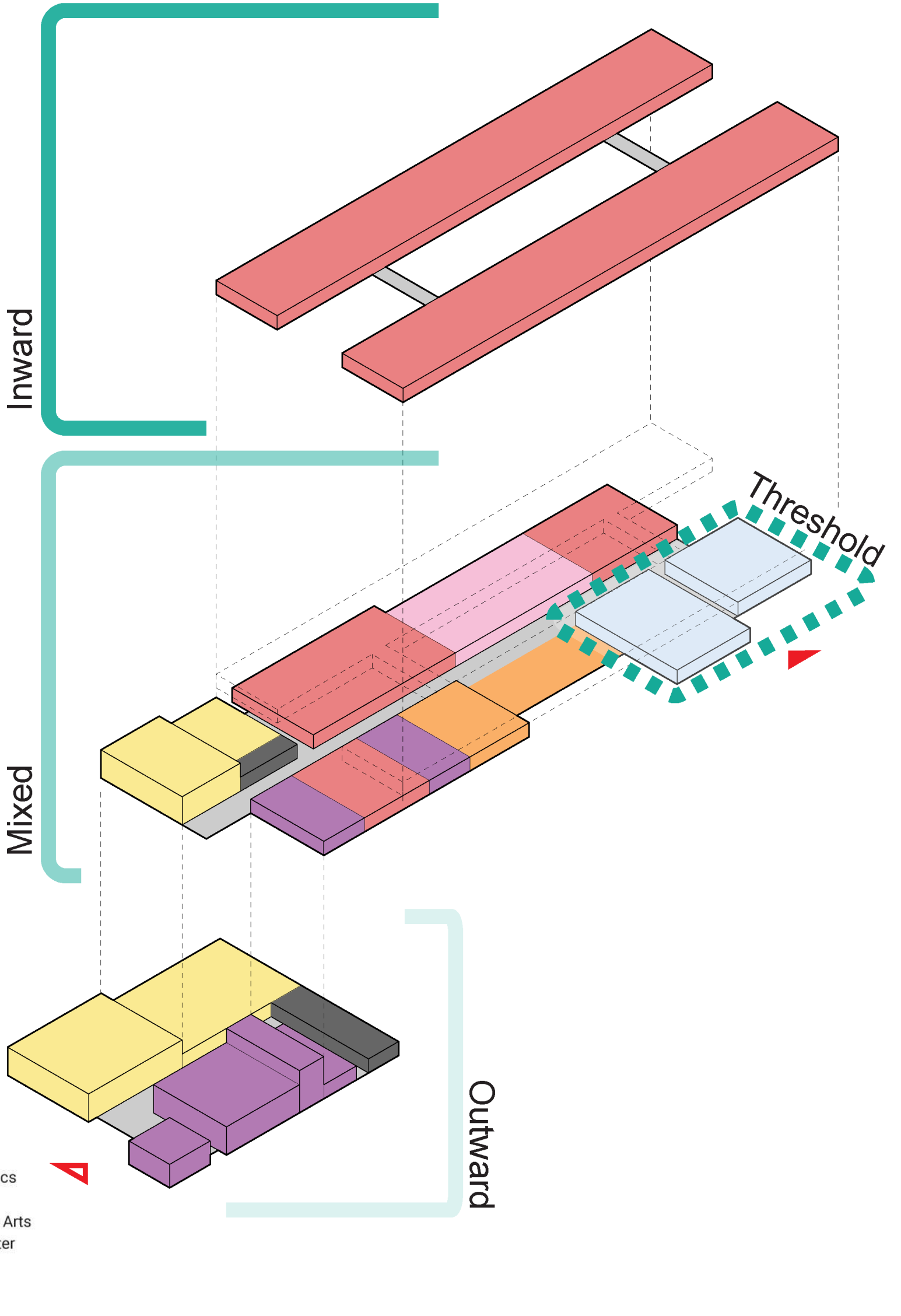
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PLANS AND STUDIES OPTION G - BUILDING PLANS

Building Axon

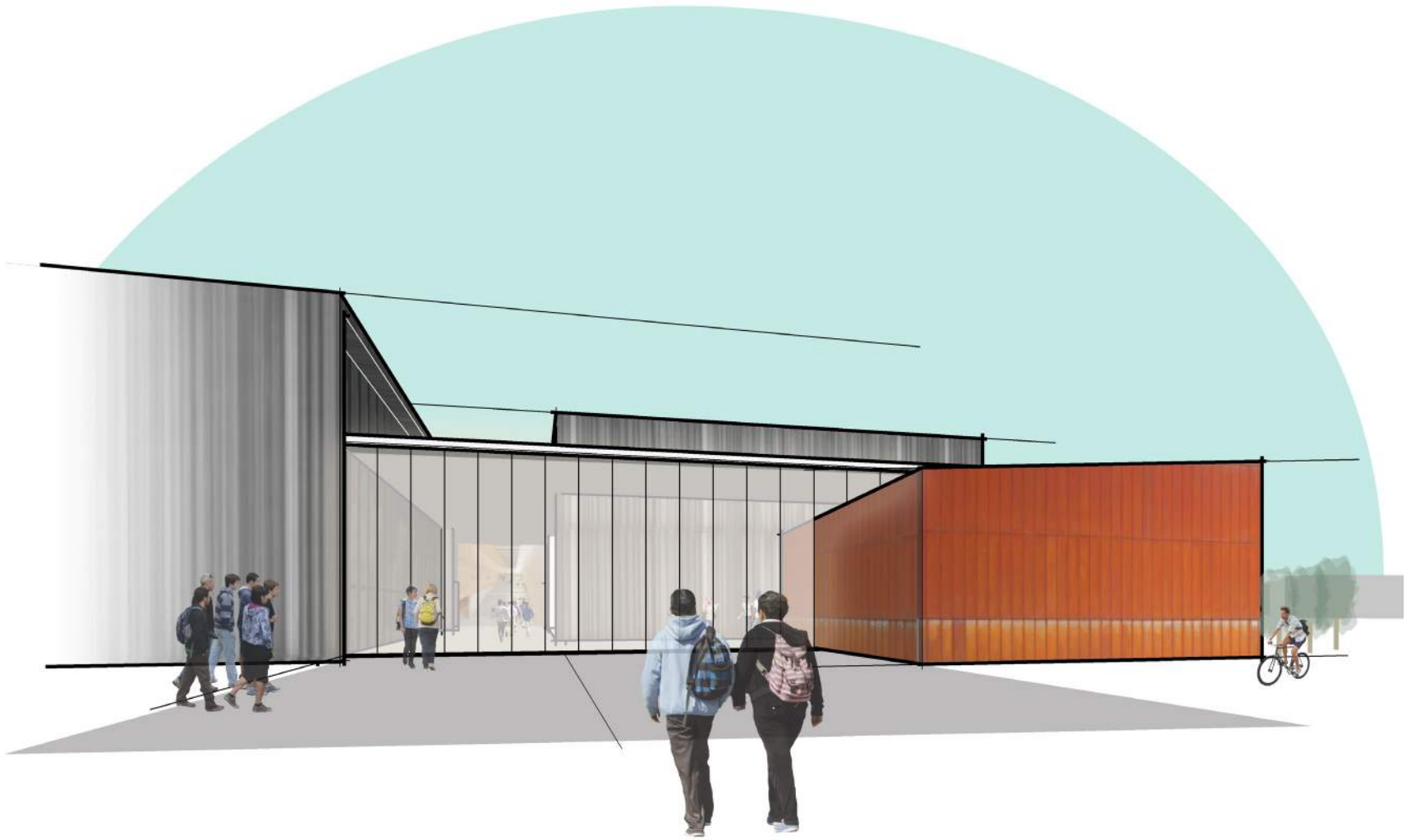


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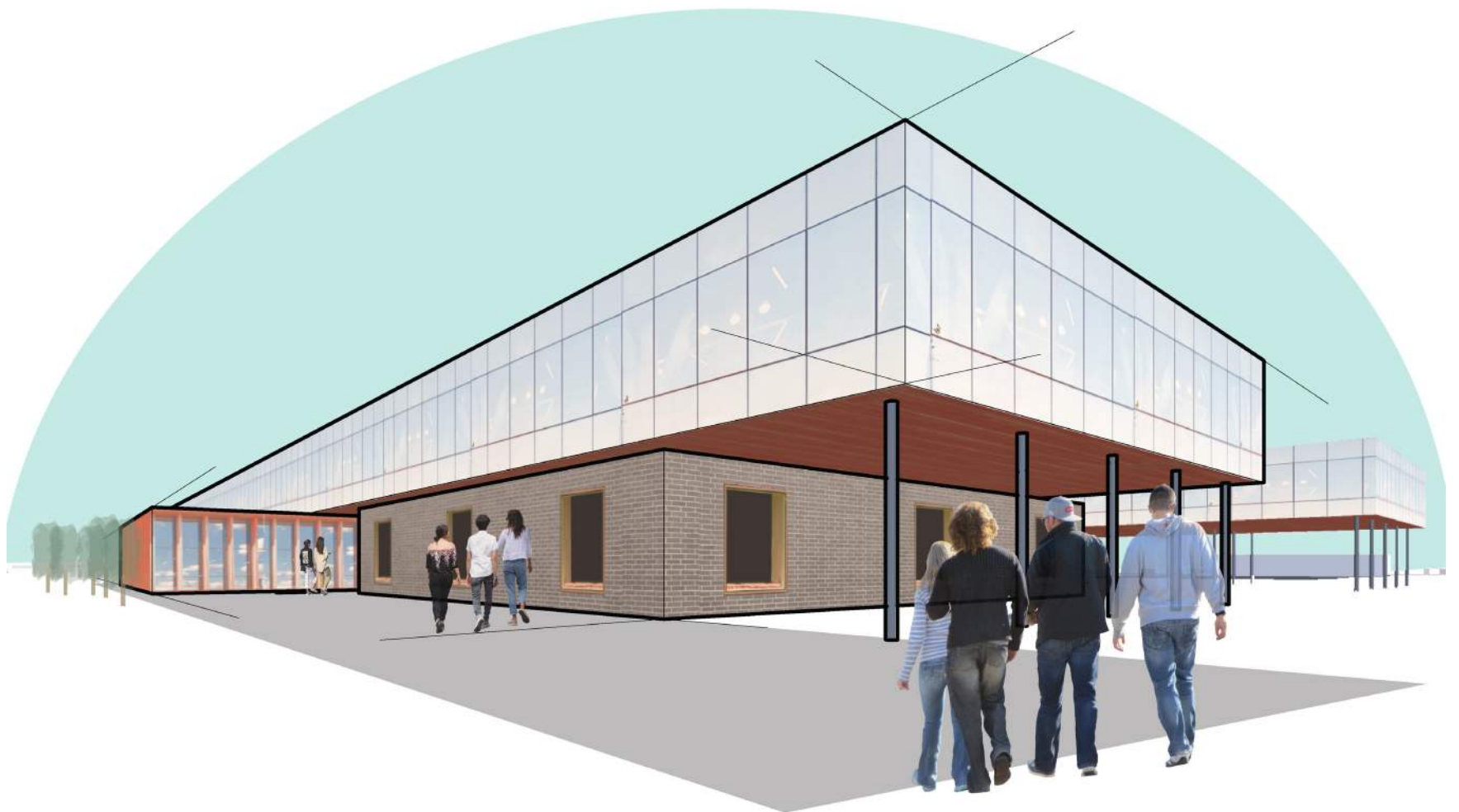


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PLANS AND STUDIES OPTION G - CONCEPT IMAGES



View of entry at event plaza from Rieke Elementary School



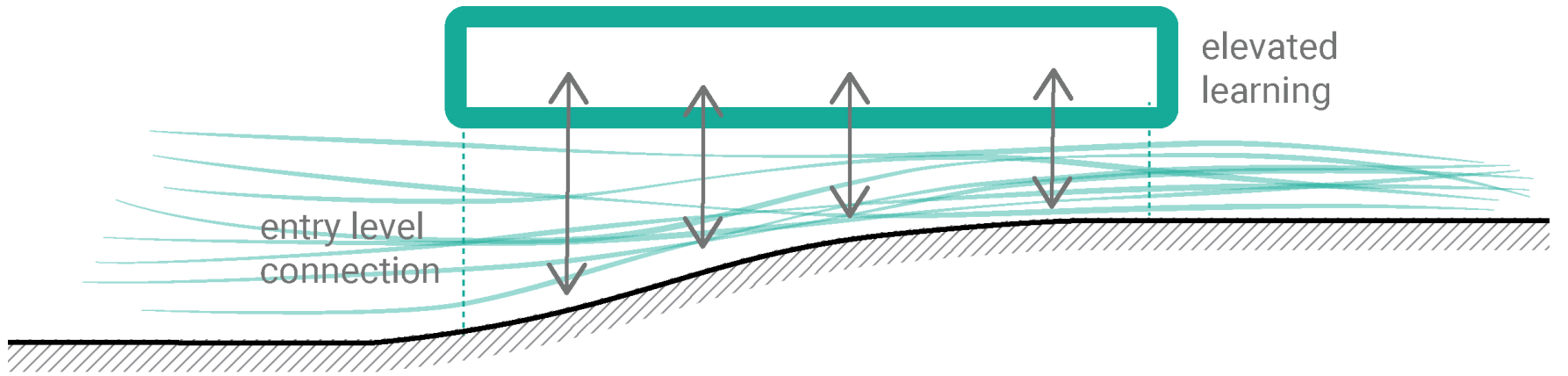
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View of main entry from SW Vermont St.



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PLANS AND STUDIES OPTION G - DIAGRAMS



Example of the view from one building across the landscape to another building
Sandy High School, IBI Group

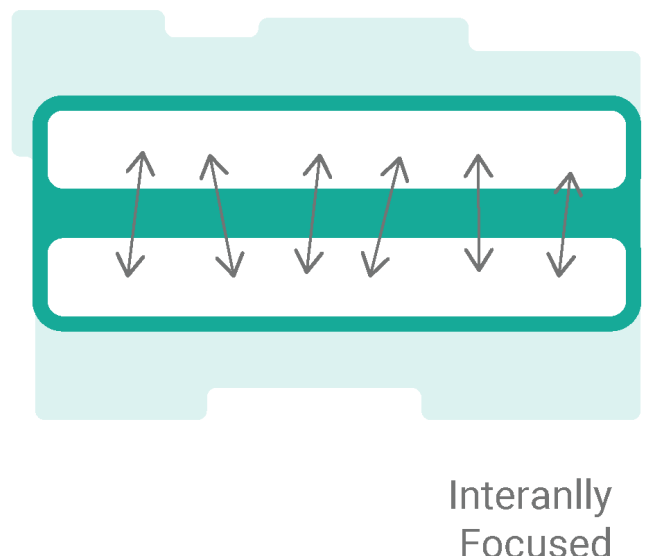
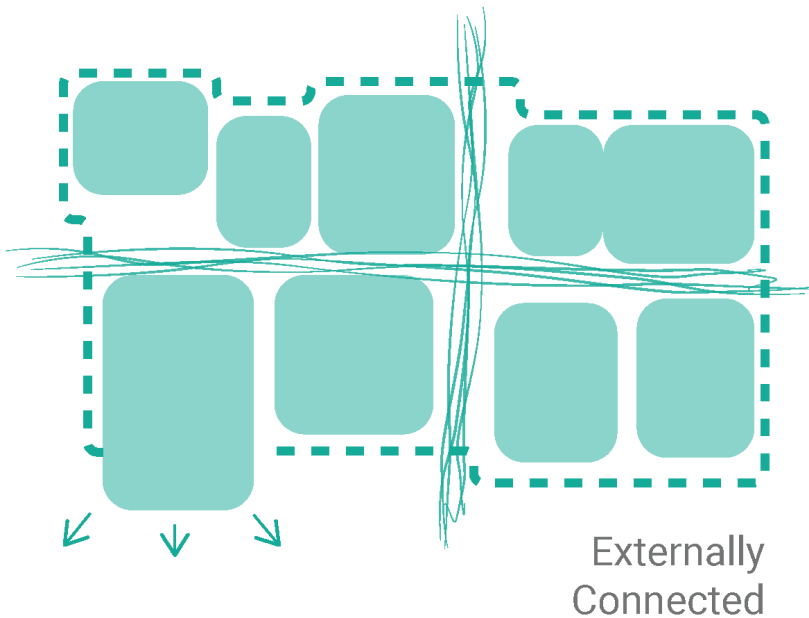


Example of the view from the classroom to extended learning
Sandy High School, IBI Group



Example of a building stretching across the landscape
Lewis and Clark Overlook, Allied Works Architecture

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BUDGET SUMMARY

6

BUDGET SUMMARY

Pending content from PPS/RLB.

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MASTER PROJECT SCHEDULE

7

MASTER PROJECT SCHEDULE

Pending content from PPS/RLB.

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8
**ALTERNATES FOR
EACH PROJECT
CONCEPT**

8

ALTERNATES FOR EACH PROJECT CONCEPT

ALTERNATE 1: REMODEL AND MODERNIZE EXISTING BUILDING WITH AN ADDITION IN LIEU OF NEW CONSTRUCTION (OPTIONS E AND G)

260,900 SF existing building

- Demolish:
 - ▶ Curtain wall
 - ▶ Mechanical, plumbing, electrical, technology, and fire/life safety systems
 - ▶ Non-structural walls
 - ▶ Interior finishes, including lockers
- Preserve:
 - ▶ Exterior and interior structural brick walls
 - ▶ Concrete slabs
 - ▶ Columns
 - ▶ Stairs
- Provide new:
 - ▶ Curtain wall to match original exterior design
 - ▶ Mechanical, plumbing, electrical, technology, and fire/life safety systems
 - ▶ Non-structural walls to create spaces that align with Ed Specs and 21st Century learning environments
 - ▶ Interior finishes, including lockers

Seismic Upgrade:

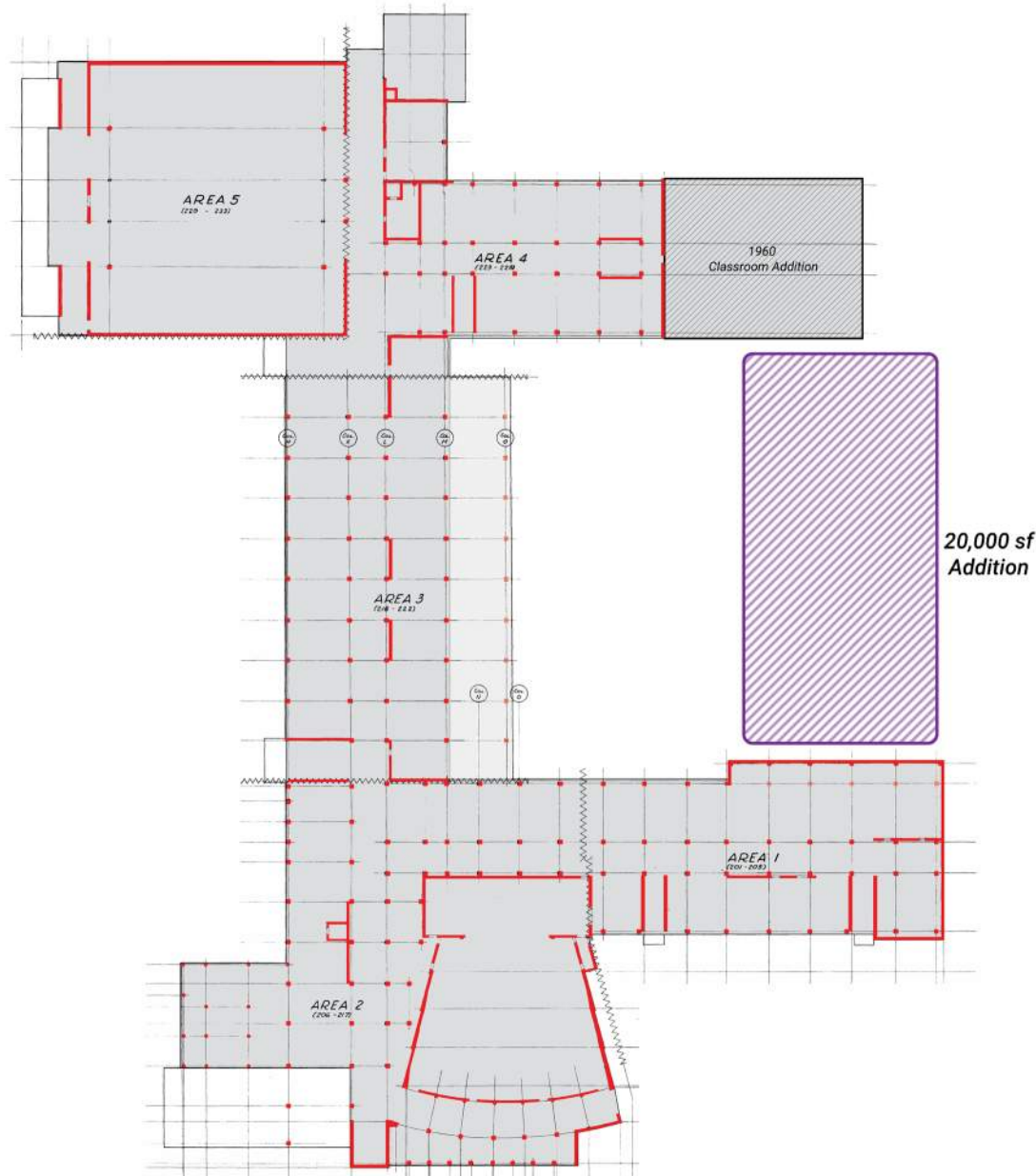
- ▶ Add concrete shear walls full height at selective areas throughout the building
- ▶ Add new foundations under the new shear walls
- ▶ Add shotcrete to the inside face of some brick walls
- ▶ Strengthen connection of concrete slabs to concrete and masonry walls with steel angles and epoxy bolts
- ▶ Replace auditorium gypsum roof panels with metal roof deck

20,000 SF addition

- New construction to match original exterior design
 - ▶ Curtain wall
 - ▶ Reinforced concrete structure
 - ▶ Brick
- Location to be studied during Comprehensive Master Planning

Major program elements currently not provided in WHS

- Maker Space
- Auxiliary Gym
- Black box Theater



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ALTERNATES FOR EACH PROJECT CONCEPT

ALTERNATE 2: OPTION G, REMODEL EXISTING STADIUM IN LIEU OF A NEW STADIUM

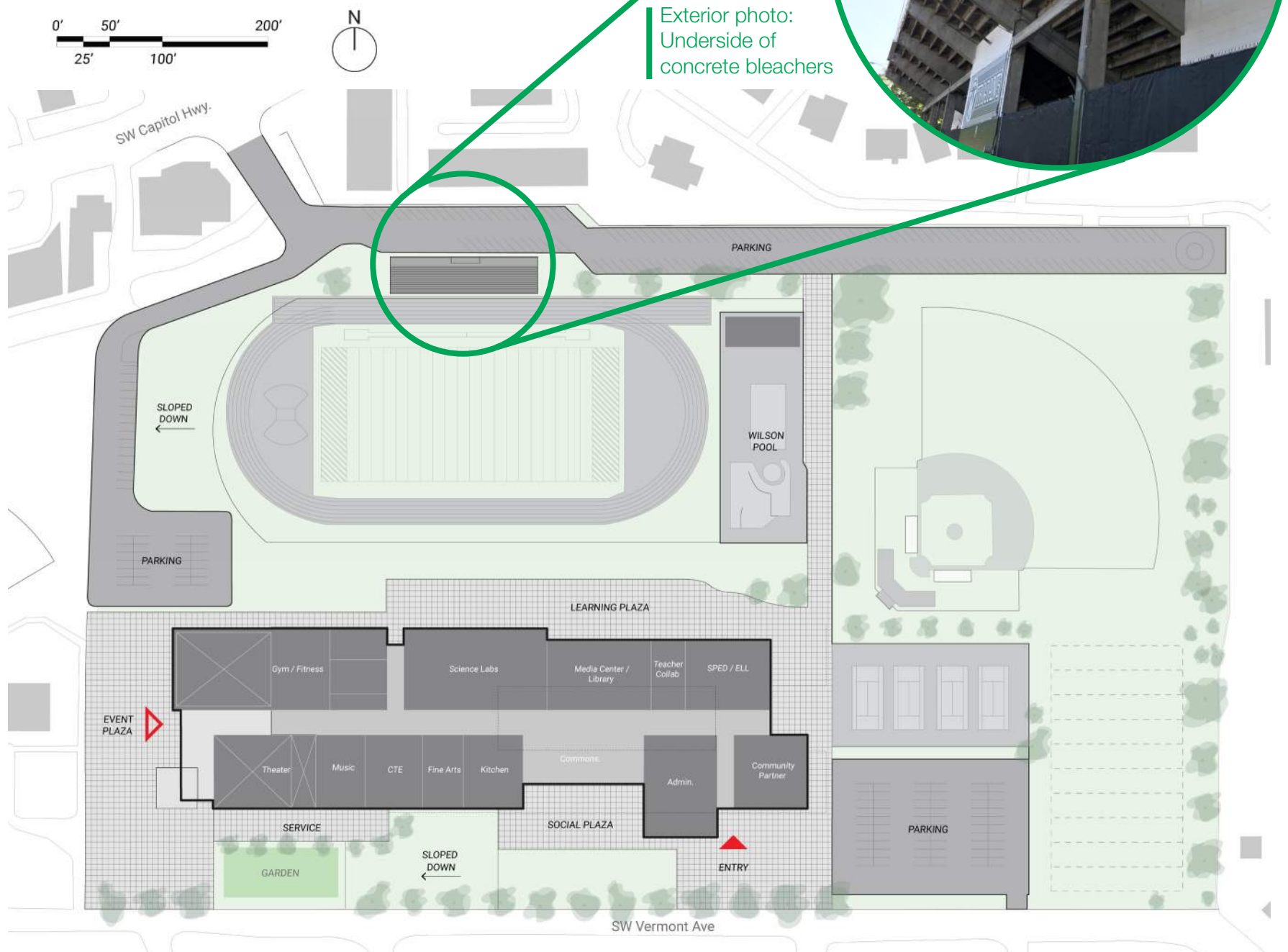
The existing stadium consists of cast-in-place concrete construction; however, no existing drawings are available. Based on observations, the stadium appears to consist of concrete raker beams supported on concrete columns. The raker beams support cast-in-place concrete seating risers. The stadium is likely founded on concrete spread footings.

Based on observations, the stadium is in fair condition for its age. The concrete columns and raker beams have only minor cracking. However, the concrete seating risers have significant cracking and spalling, especially on the bottom. It appears areas on the bottom of the risers have been repaired in the past. Water is likely leaking down through cracks in the seating risers from above.

Because of its age the stadium would likely not meet current code seismic requirements. The major deficiency would be lateral bracing at the high end of the stadium. In addition, columns of that age likely do not have adequate ties around the vertical bars.

The following are recommended upgrades and repairs to make the stadium code compliant:

- Add a new 30-foot long concrete shear wall at the back end of the stadium. This wall could replace the existing Concrete Masonry Unit (CMU) wall. Provide a new footing under this wall. Tie the wall to the existing structure with epoxy dowels.
- Encased all columns with an additional 3" of concrete on all sides, with reinforcing ties at 4" on center and vertical bars at each corner.
- Chip out and repair all cracked and loose concrete on the underside of the seating risers. Replace any corroded reinforcing steel. Repair small cracks with epoxy injection.
- Apply a waterproofing membrane on top of all the seating risers to protect the concrete below.



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**PARKING LOT
OF IDEAS**

9

PARKING LOT OF IDEAS

Section not applicable to Wilson High School. This page is left intentionally blank.

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