## mahlum studio petretti architecture



**VOLUME 1** 

## PPS CLEVELAND HIGH SCHOOL

**COMPREHENSIVE PLAN** 

17 APRIL 2024



1878 Map of Portland, E.S. Glover

#### LAND ACKNOWLEDGEMENT

The Portland Metro area rests on traditional village sites of the Multnomah, Wasco, Cowlitz, Kathlamet, Clackamas, Bands of Chinook, Tualatin, Kalapuya, Molalla, and many other tribes who made their homes along the Columbia River. Indigenous people have created communities and summer encampments to harvest and enjoy the plentiful natural resources of the area for the last 11,000 years.

We want to recognize that Portland today is a community of many diverse Native peoples who continue to live and work here. We respectfully acknowledge and honor all Indigenous communities—past, present, future—and are grateful for their ongoing and vibrant presence.

We also acknowledge the systemic policies of genocide, relocation, and assimilation that still impact many Indigenous/Native American families today. As settlers and guests on these lands, we respect the work of Indigenous leaders and families, and pledge to make ongoing efforts to recognize their knowledge, creativity, and resilience. Within the Cleveland community we also acknowledge how we have systematically failed native students, and commit to ensuring a better future for the Indigenous and Native students and families who have continued to contribute to bettering our community despite our failings.

This land acknowledgement was written by Cleveland High School students. We use it to ground our perspective and impact our process.

MAHLUM | Studio Petretti

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The Mahlum | Studio Petretti team reflects PPS's goal of achieving race and gender equity within its contracting processes. The District specifically encourages larger and smaller firms to partner. As an 80+ person firm, Mahlum provides the resources and experience to support a project at this scale. As a nine-person, woman-owned firm, Studio Petretti has added their nimble approach to finding strategic solutions. The sub-consultant team includes many emerging, woman-owned, or minority-owned businesses. For this phase, the design team's total Certified Business participation is 51%.

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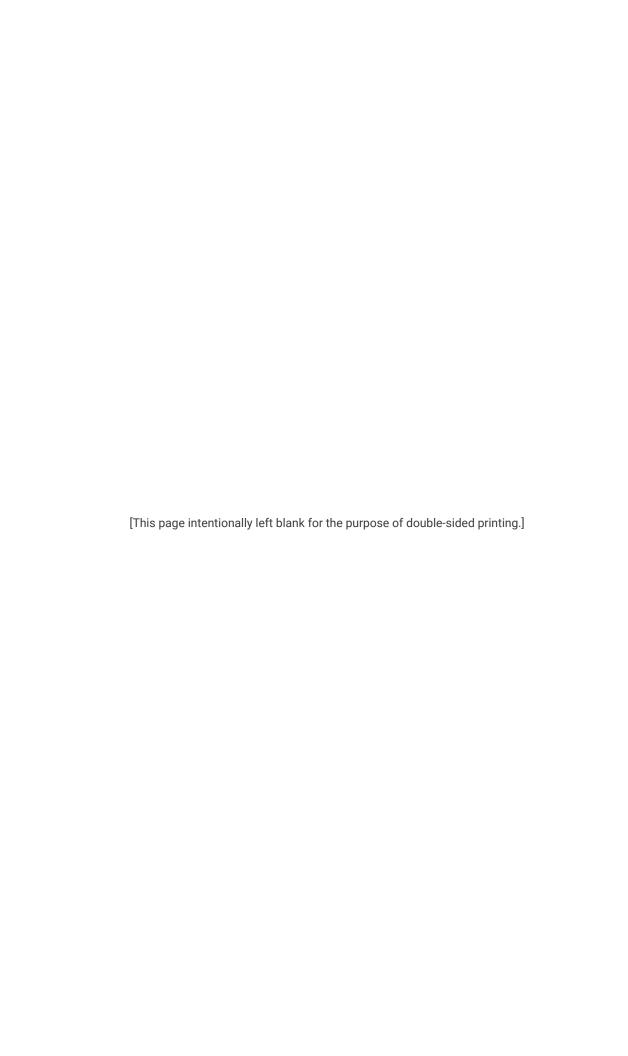
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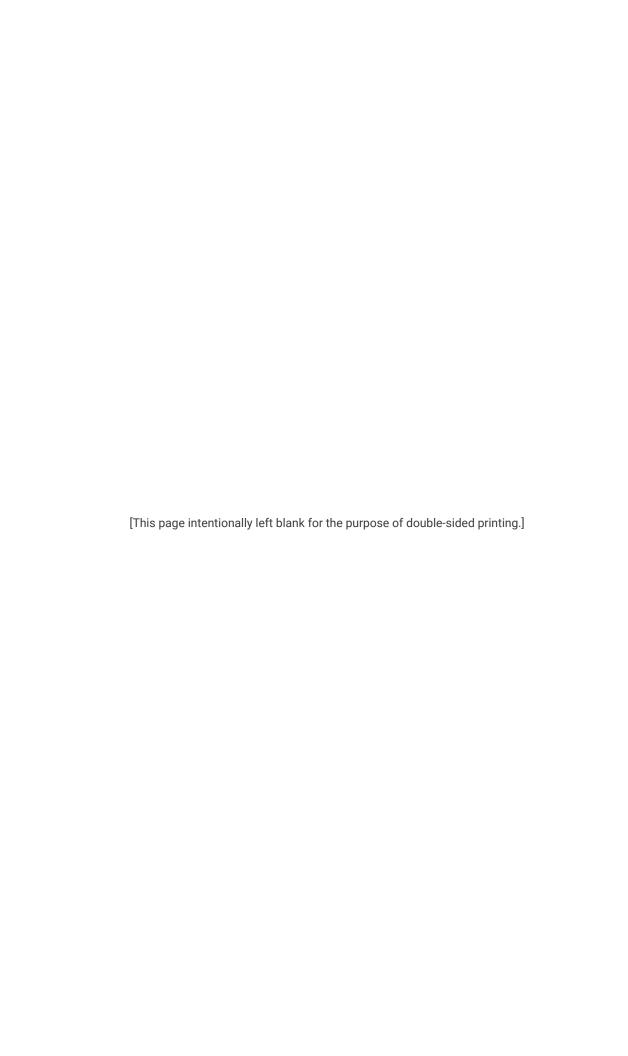
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PART 1

# **EXECUTIVE SUMMARY**





#### **CLEVELAND HIGH SCHOOL MODERNIZATION**

## PROJECT INTRODUCTION

This document summarizes the Comprehensive Planning (CP) process for a modernized Cleveland High School (CHS). This plan is the first phase of the Portland Public Schools (PPS) process for transforming a comprehensive high school to meet the PPS High School Education Specification (Ed Spec). It was preceded by a Conceptual Master Plan (published in 2020) and will be followed by a second phase of design and documentation.

The design team is co-led by Mahlum Architects and Studio Petretti and supported by a team of experts. Through in-depth site analysis, coordination with District-provided standards, and broad community engagement, the design team has developed a recommended option for CHS: an all-new structure consolidated on the current CHS block.

#### **OPTIONS**

The design team explored many options for utilizing the PPS-owned sites,

including placing the school on the track site. Once it was determined there was no suitable alternative for relocating the track, the team focused on four concepts utilizing the main and parking lot properties. See Volume 1.1 for more detail.

- > 01: Consolidated / Partial Existing
- > 02: Consolidated / All New
- > 03: Distributed / Partial Existing
- > 04: Distributed / All New

Through rigorous evaluation and community feedback, the recommended option is based on "02: Consolidated / All New" for the following reasons:

- > Keeps students primarily on one property during the school day, fostering a sense of community and safety
- Accommodates the PPS Ed Spec by creating taller, more compact structures than the existing building
- > Allows large outdoor space for students
- > Lowest-cost option with the least project risk
- > Preserves space for CHS staff to park

The recommended option will require a City of Portland land use process, including requested adjustments to the height limit and lot coverage. These topics are outlined in the Winterbrook memo located in Volume 3: Appendix.

The design team will continue to study concept "04: Distributed / All New." The challenges of a distributed campus concept will need to be weighed against the potential advantages:

- "Release valve" for the design process on one of the smallest and least contiguous PPS High School campuses.
- Potential cost savings resulting from simplified construction type for a 4-story structure in-lieu of a 5-story structure.
- Potential risk to student and staff safety if more on-grade crossings on SE 26th Avenue are needed.
- > Risk of skybridge over SE 26th Avenue not being approved, added construction costs, and operational management.

See Volume 1.1 for more detail.

#### **VISION & GOALS**

With extensive community input, the design team developed a vision statement and seven project goals. These statements served as guiding principles for creating the Comprehensive Plan approach.

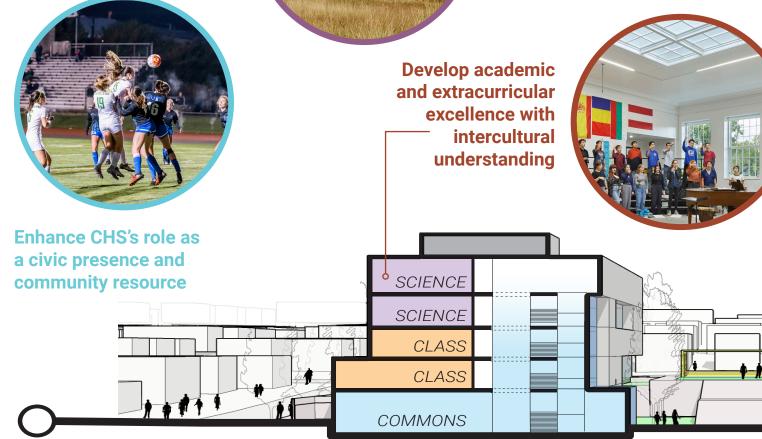
The graphic below shows the seven goal statements overlaid on a section drawing of the recommended option. The goals are paired with precedent images that suggest ways in which the site and building design might fulfill the vision. Actual design solutions will be developed during the Phase Two portion of the CHS modernization.

The Modernized CHS will draw inspiration from its context to create a vibrant campus that centers students and staff.

The design will celebrate the school's role as the heart of the CHS community, a vital part of the neighborhood, and an enduring presence in SE Portland.



Acknowledge the Indigenous legacy of the site







Create a welcoming, inclusive environment that supports students and staff

Be good stewards of local taxpayer dollars and balance district-wide facility needs



GYMNASIUM

BLK BOX

Improve student safety in and around the site

Promote health, wellness, and climate resiliency

RR



NS Section looking east through site

WEIGHTS

#### SITE CONNECTIVITY

The overall layout of the main site intentionally connects the three CHS properties. Visitors and staff will often arrive on the west side at the parking lot. The team will explore adding a mid-block crosswalk and enhancing the existing crossing at SE Franklin Street and SE 26th Avenue. A person approaching the school from the east will be able to visually orient themselves to the classroom wing and larger gathering areas (cafeteria, auditorium, gyms). The exact entry location, fencing, and gates will be developed as the design

progresses.

The gymnasium will have exit points on the east side of the block, near SE 28th Avenue and the start of Waverleigh Boulevard. This placement will encourage the visual and physical connections between the main property and the track property. The design proposal includes improvements to the crossings at SE 28th Avenue, SE 28th Place, SE 29th Avenue, and SE 31st Avenue.

The track property will maintain the current track location and better support

athletes and events. An entry plaza, aligned with the Waverleigh Boulevard approach will greet people as they arrive. The existing stadium will be enhanced, adding restrooms and a new field house building that will house team rooms, storage, and a multi-purpose space. The remaining open areas on the west side of the track site will be improved to accommodate multiple athletic practices.

PPS is proposing a plan to Portland Parks and Recreation to make improvements to Powell Park, including adding a softball field.





**Site Diagram** 



#### SCHOOL BUILDING

The recommended option is developed from Option 02: Consolidated / All New construction. The refined option organizes the school program into two main volumes: a classroom wing and a gymnasium/arts wing.

These two primary academic wings are connected by an elevated volume above the central courtyard containing the library, counseling, and administration functions. This configuration creates a large, secure outdoor courtyard at the heart of the school. The protected open space will serve several functions: main entry, event entry, and key student learning and social spaces. The exact layout and character of these spaces will be developed in schematic design.

As the design approach emerged during CPC 05 and Public Workshop 03, the team shared an interactive model of the site. When shown the option to place the taller classroom wing to the south or north of the site, most people responded positively to the north position. The reasons were based on adjacencies, view, and scale. There was a sense that Powell Boulevard, with more noise, faster speeds and taller buildings, was a better location for the

gymnasium and theater. These large volumes do not need many windows and could be designed with strategically placed glass walls that act as signifiers for the activities within. By contrast, the classroom wing will feature many smaller windows, each closer in scale to the residences that line SE Franklin and SE 28th streets. The participants were interested in the classrooms looking out over the tree canopy to the north and the new courtyard to the south. Initial studies indicate that a four-to-five story classroom wing can be located on the north side of the site and maintain substantial solar access to the residences along SE Franklin Street. The team will continue to study the exact building placement and height in the next phase.

The proposed building will be optimized for solar orientation. Most windows will face north and south, where sun angles can be more easily addressed (compared to the east and west, where its angles are nearly horizontal). Windows to the north receive primarily diffused sunlight and require little shading or glare control. Windows to the south receive direct sunlight, which can be managed with exterior shading and blinds.

The ground floor of the classroom

## Major Anticipated Building Features:

- > 323,700 gsf\*
- > Mass Timber Construction
- North AcademicWing with CommonsSpace
- > Connector: Library + Administration
- > South Athletics + Performing Arts
- > Central Outdoor Gathering

wing will feature the student commons (cafeteria). Above this level, most of the rooms are smaller, regular-sized rooms, such as classrooms and offices. The classroom building is shown with a regular 30-foot by 35-foot grid. This rigorous layout is intentional, as it sets the proper framework for the use of mass timber construction.

Material and system assumptions are expanded on in Volume 1.1.

A building program summary is shown below. An expanded building program is included in Volume 1.1.

**TOTAL BUILDING GROSS AREA (SF)** 

\*As the project heads into schematic design, the team will look for ways to increase efficiency and refine the **PPS Education Recommended CMP Difference** program for a target building area of (2024 CMP vs. **Specification Program** Program\* 315,000 square feet. (2024)2017 Ed. Spec.) (2017)Net Teaching **Total Net** Teaching **Total Net** Teaching Square Stations Square Feet Stations Square Feet Stations Feet (total nsf) (total nsf) (#) (#) (# **\D**) Difference **Core Academic Programs** TOTAL: Core Academic Programs 55 76,660 63 91,450 14,790 **Fine & Performing Arts TOTAL: Fine & Performing Arts** 4 21,150 6 30,370 9,220 **Physical Education & Athletics TOTAL: Physical Education & Athletics** 35,580 40,656 5,076 **Educational Support** TOTAL: Educational Support 2 67,400 70,335 2,935 Partner & Community Uses TOTAL: Partner & Community Uses 1,200 350 1,550 **Wrap-Around Service Providers TOTAL: Wrap-Around Service Providers** 4,700 4,700 **SUMMARY** TOTAL ASSIGNABLE AREA 64 206,690 74 239,061 10 32,371 Unassignable Area Building Support (Circulation & Walls) 74,408 10,231 84,639

281,098

323,700

42,602

#### **PROCESS**

The comprehensive planning for Cleveland High School was rooted in community-based engagement. The design team worked with three distinct audiences: school-based groups (such as students, athletics, and specialized programs), the general public (via Design Workshops and a survey) and focused community engagement (such as affinity groups and community-based organizations that support CHS families). The team brought data, options, and analysis from these interactions to the Comprehensive Planning Committee (CPC).

The CPC's role was to evaluate the information presented and provide input and recommendations to PPS. PPS, in turn, provided updates on the process through the CHS Bond website and in meetings with the four adjacent Neighborhood Associations.

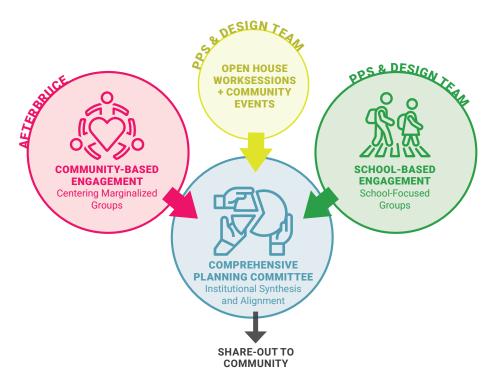
## COMPREHENSIVE PLANNING COMMITTEE

#### **KEY MEETINGS:**

> CPC Meetings (6)

**PPS High School Tours** 

- > Grant High School
- > Lincoln High School



#### **SCHOOL-BASED ENGAGEMENT**

#### **SCHOOL-BASED GROUPS**

- > District-level Athletics
- > District-level Climate Response and Resiliency

#### **KEY MEETINGS:**

- > CHS Leadership and CARE Leadership classes (approximately 60 students)
- > CHS Career Learning session (approximately 400 students)
- > CHS Staff (2 meetings)

#### **GENERAL PUBLIC**

- > Public Design Workshops (3)
- > PPS Survey (over 1400 respondents)
- > Open House (Forthcoming)

#### COMMUNITY BASED ENGAGEMENT LED BY AFTERBRUCE

#### **KEY-INSIGHT GROUPS:**

- > Principal
- > Special Education Lead
- > Native Student Union Advisor/College Coordinator
- > Advisors from affinity groups
- > School Social Worker
- > Immigrant and Refugee Community Organization (IRCO)

#### **COMMUNITY LISTENING SESSIONS:**

- > Special Education (SPED)
- > Teachers, paraeducators and staff
- > Community Based Organization leaders working with CHS Community

#### **CHS AFFINITY GROUPS**

- > Students and families of Color
- Broader community from intergenerational families
- > Teachers and staff of Color
- > Student English Language Learners

## COMPREHENSIVE PLANNING COMMITTEE

The throughline of the PPS
Comprehensive planning process is the
CPC. This group of citizens met with
the design team six times between
October 2023 and March 2024. A portion
of this group also toured the recently
modernized Lincoln and Grant High
School campuses. The CPC meetings
represent the progression of inquiry
during the planning process, from CPC
01, where sites other than the PPSowned sites were considered, to CPC
06, where the design team presented
the recommendation to pursue the
Consolidated / All New option.

An overview of each meeting is located in Volume 2: Appendix.

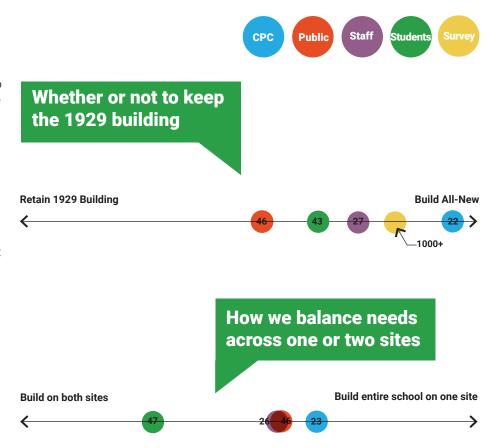
#### **PREVIOUS** CURRENT PROCESS **FUTURE** Phase 2 Design Conceptual Phase 1 Construction Master Plan Comprehensive (Spring 2024) (Timeline TBD) (2019)Plan We are here Modernized CHS! -(Comprehensive Plan published)

#### CRITICAL QUESTIONS

Mid-way through the CPC process, two critical questions emerged: "Retain the 1929 building or build all new?" and "Build on one site or two?" The graphic to the right shows the mathmatical average answer from four audiences.

PPS brough the first question to the entire CHS community via a digital survey. Over 80% of respondents indicated a preference for building an all-new school.

The CPC continued to explore the question of building on one site or two at CPC 05. After stuying updated options, there was sufficient interest to establish the Alternate Option (see Volume 2: Appendix).



Numbers in circles indicate total number of votes from group



#### CPC BUILDING TOURS

The design team and CPC members toured Grant High School (existing building reuse) and Lincoln High School (new construction). The CPC's comments were highly favorable towards the types of spaces and features at Lincoln: the new theater, the large commons at the heart of the school, the robotics and culinary labs. The CPC was more favorable towards the look and feel of the interior spaces at Grant: soft lighting, use of wood, scale of hallways, reuse of historic features.



#### **DESIGN WORKSHOPS**

Over 140 neighbors, staff, future students and other members of the CHS community attended three public workshops during this phase. Attendees learned about the engagement process, PPS building standards, and the CHS site options. At meeting 01, attendees shared hopes and dreams that shaped the vision and goals for the project. At meeting 02, they evaluated the four options in context of these goals. At the final meeting, the community was able to interact with a physical model and learn about mass timber and sustainable strategies.



#### STUDENT FEEDBACK

In addition to the four students embedded in the CPC, the team solicited voices from: two Leadership Classes, the CARE Leadership class, lunchtime guests (with pizza!) and during an all-day set of presentations that were attended by over 400 students. Feedback ranged from strong support of a two-site option with a skybridge to thinking the consolidated/all-new option was the best use of space. Students strongly support daylight and windows, outdoor areas, and a different type of cafeteria. The team will get more detailed feedback in the next phase.

Marginalized communities are especially interested in how they can be part of placemaking

How can design normalize a culture of pause and rest?

Co-create opportunities to include students and families in design decisions that will most impact them

Designing for a range of differences (beyond just compliance) will better serve all communities

## COMMUNITY-BASED ENGAGEMENT

The design team consultant for community engagement, After Bruce, conducted an extensive outreach to historically marginalized groups. Their findings are collected into a report in Appendix 3. The insights informed the project vision and goals and have set up themes that will drive Phase Two of the design process.

## THEMES FROM LISTENING SESSIONS:

- History matters in the way it invisibilizes: Students and families from underrepresented and marginalized communities do not see themselves represented in the legacy and history of CHS or in the spaces within the building. The engaged audiences have little connection to the building itself but are especially interested in how their communities can be part of placemaking moving forward.
- Center the voices of those who have been underrepresented: The modernization process is an opportunity to institutionalize community power by thoughtfully and intentionally co-creating opportunities to include students and families in design decisions, particularly for the spaces that will most impact these groups.
- > Create spaces that invite pause can alleviate stigma: Students would feel less isolated and stigmatized if there were more comfortable, well lit, and inviting spaces for them to sit. Currently, the designated shared spaces for sitting, gathering, or "hanging out" further exacerbate class stigmatization and overwhelm.
- > Design for the most impacted: The modernized CHS should seek to not just accommodate but consider the full range of differences and needs within the student population. In addition to intentionally designing for students in Special Education, the design needs to acknowledge less visible challenges due to mental health, Post-Traumatic Stress Disorder, and undiagnosed learning needs and seek to identify solutions that improve the student experience.

#### **COST SUMMARY**

One of the goals of the Comprehensive Planning Phase is to develop a budget for the overall CHS modernization project. In partnership with PPS, the design team has developed the draft project budget contained in the adjacent table which reflected the recommended option. The design team anticipates several variables that will further influence the construction cost: refined project schedule, additional logistics, planning, market-induced inflation/cost escalation, and availability of specialized labor. Forecasting construction costs will continue to be a focus of the design process from Schematic Design through Construction Documents. The project will prioritize stewardship of public funds and building long-term value for the School District while crafting inspiring spaces for students and staff.

The Comprehensive Plan recommended option has been evaluated in parallel by two cost estimating consultants: DCW Cost Managers and KJF Cost Studio. The purpose of obtaining two conceptual cost estimates at this stage is to have a robust perspective on the key cost drivers in the absence of a selected General Contractor. Gamut Project Solutions also provided constructability and construction scheduling input, to ground cost estimates in the real-world challenges of construction on a space constrained campus with an aggressive schedule for completion.

The conceptual cost estimates were developed based on Comprehensive Planning level documentation for the recommended option.

Reference Volume 1.1 for the site design concept, preliminary program diagrams and PPS Ed Spec alignment, and narrative systems assumptions.

Additional variables were priced as additive or deductive alternates. Prices are escalated to the 3rd quarter of 2027, the anticipated mid-point of construction.



Project Storyline Workshop. March 1, 2024

Reference cost summary information on the following page.

#### **CHS Project Budget**

COMPONENT	COMMENTS	TOTAL
Construction Hard Cost	Building and Site Work, Estimate provided by professional cost estimators Gamut/KJF.	\$377,654,178
Green Energy Technology 1.5%	Required by State of Oregon	\$5,664,813
Subtotal		\$383,318,991
Owner Direct Hard Costs	Off Site Improvements, utility costs not included above	\$1,650,000
Total Hard Costs		\$384,968,991
Soft Costs	Approx. 8.6% of Hard Costs	\$33,155,000
Fixtures, Furniture & Equipment	Approx. \$28/SF	\$8,700,000
Swing Space/Temp Facilities		\$500,000
Contingency	10% of Total Costs not including 5% included in Hard Cost Estimate	\$41,320,859
Escalation	Included in Hard Cost Estimate	N/A
Total Project Budget		\$468,644,850
Deduct 2020 Bond Budget for Planning and Design		-\$20,000,000
Remaining Budget Funding Requirement		\$448,644,850

#### ALTERNATES:

- 1. Distributed Building option (two sites) with tuck-under parking: Adds \$34,000,000. (Includes construction, tuck-under parking and schedule acceleration.)
- 2. Athletic improvements at Powell Park including new softball, baseball, and multi-purpose fields. Added cost range is between \$11,000,000 and \$15,000,000.

## SCHEDULE & NEXT STEPS

Once approved by the PPS School Board, the design team will move into the Schematic Design Phase. The design team intends to study the following major elements in the next phase:

- > Reduce building size: The 323,700sf space program in this document represents the first round of input from PPS based on experiences with their recent modernization projects. The District has set a goal of 315,000sf for the final space program.
- Confirm building massing and placement: Explore interest in moving building program onto the parking lot site in order to reduce the building height or create more on-site exterior space for students.
- > Sustainability and Resiliency: The team will develop more detailed solar studies to determine the final location of the buildings on the site. A comprehensive approach to sustainability and resilience, which was outlined in Phase One, will be built upon to achieve the right response to carbon, energy use, responsible landscapes, material and system selection, and forecasting the campus'

response to future events.

- > Entry, Exit, and Loading points: The concept plans show preliminary ideas for the front entry and loading points. All these assumptions will be reviewed and studied in the context of the existing school patterns, public bus stops, bicycle routes, etc.
- > Community Engagement: The initial listening sessions conducted by After Bruce highlighted the need to think deeply about physical accessibility, socio-emotional health, identity, and representation. The design process will continue to engage marginalized communities and center the voices of those who have not traditionally been represented.
- > Look and Feel: The Comprehensive Planning process touched briefly on the concept of what a civic institution should look like. The team will explore how materials, like brick, and other design elements, such as window size and placement and salvaged ornament from the 1929 building might be incorporated into the modernized CHS.

The Schematic Design Phase is the start of a design process that will bring the modernization of CHS closer to realization.

Key milestones for project success include:

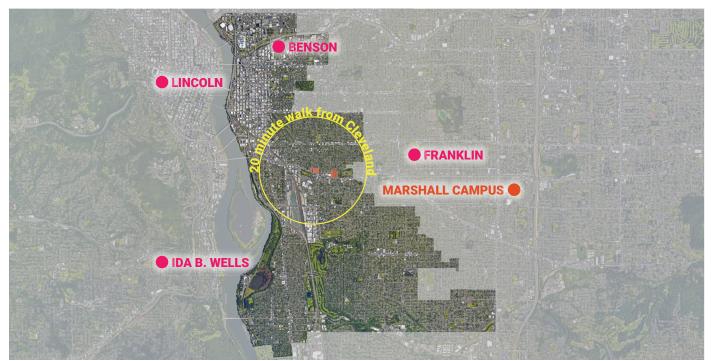
- Engaging with students, staff, and District groups
- > Engaging with marginalized communities
- > Hiring a general contractor
- > Passing a bond to fund the construction process
- > Completing the design and documentation process
- > Obtaining land use and building permits
- > Relocating CHS students to the Marshal campus during construction
- > Opening the modernized school

Concurrent with the CHS modernization process, PPS is developing two other PPS comprehensive high school modernizations: Jefferson HS and Ida B Wells HS. The timeline for key CHS project milestones may be impacted by factors outside of the design team's or the School District's control. The Mahlum + Studio Petretti team will lead the design team with a focus on achieving project success and endeavor to position PPS to deliver an inspired Cleveland High School modernization on time and on budget.



PART 2

# RECOMMENDED SITE + BUILDING OPTION



#### Diagram: CHS catchment area

#### **SITE CONTEXT**

#### SITE HISTORY

#### PRECOLONIAL

The CHS site, which is located in the Portland metro area, is situated on the traditional village sites of the Multnomah, Wasco, Cowlitz, Kathlamet, Clackamas, Bands of Chinook, Tualatin, Kalapuya, Molalla and other tribes who have made their homes along the Columbia River for the last 11,000 years.

#### COLONIAL

In 1860, pioneer Clinton Kelly donated the CHS property to the Multnomah County School District for educational purposes. In 1893, PPS annexed the property and constructed the Clinton Kelly School of Commerce. Between 1910 and 1912 the building was expanded, but it was deemed unsafe in the 1920's. In 1928, Architect George Jones designed a new, three story school for the site in the classical revival style. In 1929, construction began, and the new school was completed and opened in 1930. In 1939, funds from the Works Progress Administration were used to

improve the Cleveland field property, located a few blocks east of the school.

In 1948, the school was renamed Grover Cleveland High School. To keep up with the growing population, the school was expanded to include a new gymnasium (1957), a shop addition (1958), and a classroom addition (1968). These additions were built on the remaining outdoor space on the site, so further additions were not possible. In the following years, the school underwent several minor renovations that reconfigured interior spaces but did not significantly alter the school layout.

In 2009, the building was assessed by ENTRIX, Inc. to determine the Historical Significance and Building Integrity of the existing school. The portions of the building which were built in 1929 were found to be contributing to historic significance, while the additions from the 1950's and 60's were found to be noncontributing.

In 2012, PPS began an effort to modernize the city's high schools.

#### NEIGHBORHOOD CONTEXT

The CHS site is located at the intersection of four neighborhoods in inner southeast Portland: Hosford Abernethy, Richmond, Brooklyn and Creston-Kenilworth. These neighborhoods are largely made up of single family homes with some pockets of commercial and multifamily buildings.

The catchment area for the school stretches north to the Lloyd Neighborhood, south to Sellwood, and east to Brentwood Darlington. It is bounded on the west by the Willamette River

## EXISTING SITE CONDITIONS

#### PPS PARCELS

PPS owns three parcels that form the CHS site: (1) main site, where the existing CHS is located, (2) the parking lot site, located across SE 26th Avenue, and (3) the track site, which is four blocks east. The main site and track sites are bordered to the south by SE Powell Boulevard, a state highway with two lanes of traffic in each direction and a history of pedestrian, bicycle, and vehicular crashes. The other streets surrounding the sites are smaller and connect to the Richmond and Hosford-Abernethy neighborhoods. The main site and parking lot site are separated by SE 26th Avenue. The City considers SE 26th Avenue a "major emergency response street," and is opposed to closing it, even for short periods during the school day.

Powell Park, located south of SE
Powell Boulevard and west of SE 26th
Avenue, belongs to Portland Parks and
Recreation. PPS has use agreements
with Parks for the baseball field.

The parking lot serves as staff and

teacher parking during the day and event parking on evenings and weekends. While there is street parking available, the perception from neighbors, students, and staff is that the quantity is limited.

The existing tree cover is limited on the parking lot and track sites. A staff member noted there is an extensive collection of native plants that has been installed and maintained over forty years by teachers, parents, and students and is part of the curriculum for the International Baccalaureate Environmental Science class.

The design team has studied alternate locations for a track and field and has concluded that there is no viable option for relocating the track within the area surrounding CHS. Therefore, the only viable sites for the CHS building program are the existing main building and

parking lot sites.

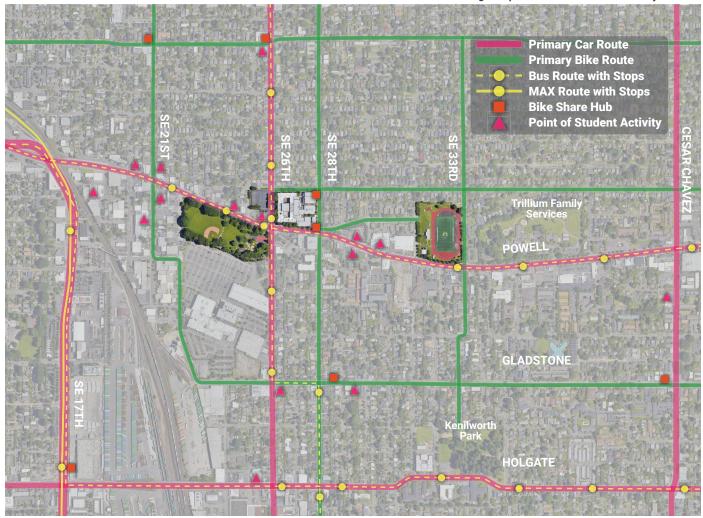
#### **BUILDING COVERAGE**

The existing CHS building occupies 73% of the main site and its configuration leaves minimal outdoor space for student use. The outdoor spaces that remain are a network of narrow alleyways that are difficult to supervise and unpleasant to inhabit. These conditions do not provide safe locations for students to gather when they are not in class, which forces them to seek gathering spaces off-site.

#### SAFETY

CHS is the only PPS high school that does not have a field immediately adjacent to the school. Students must walk several blocks to reach the CHS track site.

Diagram: public circulation in the vicinity of CHS



The CHS site is bounded on the south by SE Powell Boulevard, a state highway with constant busy traffic. It is bounded on the west by SE 26th Avenue, which is a neighborhood collector, Service Truck, and Transit Access Street. The community has been united in their concern for student safety as they navigate dangerous intersections on a daily basis.

The school's entry faces SE 26th Avenue, and the steps leading up to the front doors begin immediately at the sidewalk. This condition does not provide any space for student gathering or buffer from the busy transit street.

#### ZONING

The site is currently zoned as R2.5 with an Institutional Campus (IC) overlay. The City of Portland has indicated the site will change to IR (Instutitional Residential) zoning at a future date. The existing building already exceeds several standards for the R2.5 zone, like building coverage and maximum floor area ratio. When the change to IR occurs, it will soften these standards, as well as increase allowable building height and reduce landscape coverage requirements.

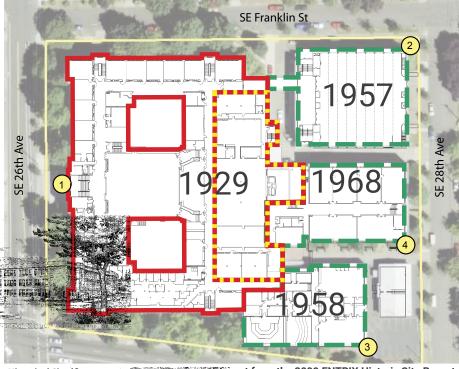
On SE 26th Avenue and SE Powell Boulevard, the 1929 existing building's placement exceeds the required maximum setbacks. The outdoor space that is leftover along these streets is exposed to loud traffic and fumes, and does not contribute to a safe, pleasant outdoor student space on the CHS site:

#### SITE SLOPE

The land on the site sees into southeast by about 22 feet in building resolves this slope with a variety of floor level changes and staircases. A series of ramps have been added over the life of the building, but they have been located in alleys and back of house spaces, creating accessibility and equity challenges throughout the school.



Aerial image of CHS properties



Historical Significance Excerpt from the 2009 ENTRIX Historic Site Report and Building Integrity

## EXISTING CONDITIONS

#### BUILDING

The current CHS structure is made up of buildings from 1929-1968 and a portable structure. The 1958 and 1968 additions were not considered for modernization. Previous analysis by the District has confirmed that these mid-century additions hold too many challenges: location on site, seismic status, poor energy use, mis-aligned floor plates, etc. The design team studied the 1929 building to better understand the possibility of renovating it and any tradeoffs between renovation and new construction. The 1929 building represents 70% of the existing school.

The design team created a full test-fit layout of a modernized school which retains portions of the existing building. See Appendix Volume 2 for details. The test fit is based on retaining approximately 22% of the existing CHS building, or 55,000sf. The balance of the school program, 260,000sf, would need to be configured around this portion of the existing building.

The following table summarizes key findings related to retaining portions of the existing building in the modernization versus replacing the school with all new construction.















Photos showing the existing conditions on the main CHS site

#### ANALYSIS OF BUILDING RE-USE OPTIONS

	MODERNIZATION	ALL NEW CONSTRUCTION
	(Retain 55,000sf of the 1929 building and add ballance of school program as new construction 260,000sf)	
ACCOMMODATING BUILDING SQUARE FOOTAGE	Possible with four to five story construction; challenges to provide daylight to all instructional spaces due to overall site constraints.	Possible with four to five story construction.
MASSING AND ACCESS TO DAYLIGHT	Retaining the 1929 building dictates the orientation and placement of the new buildings. Existing three-story wing faces west and would wrap a taller section of classrooms. The density of this new wing would limit natural light at the centralized shared flexible areas.	New construction opens up more options to orient the buildings optimally (long sides and windows facing north or south). Shared flexible areas are located along exterior walls with windows.
MEETING CLASSROOM STANDARDS	The 1929 portion of the building would be best suited for classrooms. However, the existing structural column line would result in most rooms being longer and thinner. This proportion provides balanced daylighting but is not ideal for sight lines and classroom technology.	Maximum flexibility for classroom configuration.
SEISMIC CONDITION	The old wing can be upgraded to meet Seismic Category IV by adding shear walls to the inside of the existing exterior walls and reinforcing the existing concrete structure with steel connections and collector elements.	Baseline lateral structural system will be built to Seismic Category IV.
ACCESSIBILITY	There is one accessible entry to the 1929 building. All other existing entries are separated from the adjacent floor by half a story and involve interior or exterior stairways. Due to limited space on the exterior of the building to add ramps, a modernization would require relocating most entry points or significantly altering the existing exterior facade.	A new structure will meet or exceed all standards for accessibility.
EXTERIOR FACADE SUSTAINABILITY UPGRADES	All windows would be replaced to meet current energy standards. Insulation would be added from the interior. The existing bricks are in good condition and would only need minor repair.	New windows, exterior insulation.
AUDITORIUM	The existing auditorium can be modified to better reflect the PPS standards. The seating capacity would be reduced from 1379 to approximately 800. The location of the proscenium creates a more constrained stage. A modernization would require adding catwalk space and lighting positions. The biggest challenge is the location of the auditorium: with the constrained site, it would limit how the rest of the school can be organized on the site. This limits possibilities for open space.	Performing arts staff prefer the features that can be provided in an all new theater, such as the one at Lincoln HS. Note: new theater capacity per PPS standard is 500 seats.
BUILDING EXPRESSION (DESIGN)	1929 wing is part of the neighborhood context. It represents a Classical Revival style and 20th century European notion of civic architecture.	An all new construction is an opportunity to envision a new approach to civic architecture.
TREES	Retaining the 1929 wing increases the likelihood of retaining existing mature trees on the west half of the site.	To optimize the site, an all new building would be placed closer to the west and south property lines, resulting in the removal of mature trees.

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Diagram: Recommended Scheme
Aerial view of the developed consolidated, all new construction scheme



#### **OPTION 02: RECOMMENDED OPTION**

How does the recommended scheme address the constraints on the CHS sites?

The new Cleveland High School will be an all new construction building, consolidated on the main CHS site. The project will also include updates to the parking lot site and the track site, as well as study adding a softball field to Powell Park.

#### **BUILDING FOOTPRINT**

The square footage of the modernized CHS will be 25% larger than the existing school. A primary goal of the modernization is to provide safe, student focused outdoor space on the main CHS site.

In order to build a larger school and provide the currently absent outdoor space, the modernized school will need

to be five stories tall. The proposed design is organized around a large courtyard which stretches across the site from east to west. This courtyard will be flanked on the north and south by two building masses, connected in the center of the site by an elevated volume which allows the landscape to pass continuously beneath.

#### SAFETY

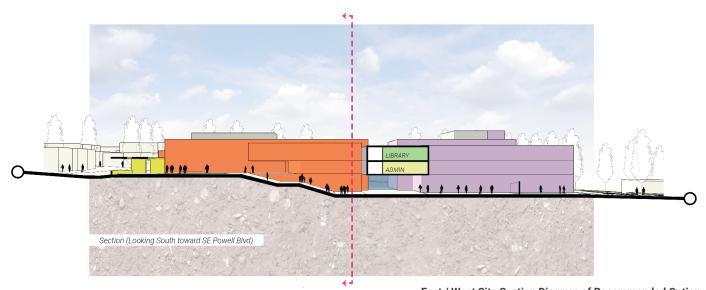
The courtyard at the center of the site will provide a safe gathering space for students outside of class. It will be secured to ensure the public does not wander in, and will provide covered outdoor space beneath the bridge volume for use during inclement weather.

The new school's entry will be located on the east side of the courtyard, facing SE 28th Avenue (a residential street and location of the school bus drop off). It will be set back from the sidewalk by approximately 100 feet to provide space for student gathering and buffer from the public right of way.

The building mass on the south side of the site will provide a buffer between SE Powell Boulevard and the interior of the site and the north building mass. The south building mass will host the theater and gymnasium, neither of which need operable windows. The north building mass houses classrooms, which are acoustically sensitive and will benefit from the option to open windows further away from the noise and fumes of SE Powell Boulevard.

Given the detached nature of the three CHS sites, the design team has considered options that would improve pedestrian and bicycle safety in and around the sites. These improvements would take place in the public right-of-way and are subject to City and, in the case of SE Powell Boulevard, State approval. Due to cost, risks, and unknown conditions, the proposed alterations are limited to:

- > Improved sidewalks around the CHS sites
- > Improved surface-level crossings at SE 26th and SE 28th Avenues.



East / West Site Section Diagram of Recommended Option

> Improved pedestrian connections along SE Waverleigh Boulevard, between the main site and the track site.

Additional studies, including bridging over or tunnelling under SE 26th Avenue and SE Powell Boulevard, are included in Volume 2: Appendix.

#### ZONING

An analysis of the processes to change the zoning of the site from R2.5 to IR indicated that it would be easier to request adjustments to the R2.5 zone requirements than to undergo the zoning change during the course of the modernization.

At a minimum, adjustments will be required for allowable height, maximum floor area ratio, maximum building coverage and minimum landscaped area. Because the city already has plans to make the zone change to IR, it is anticipated that the jurisdiction will be amenable to these adjustments.

The building will still need to observe minimum setbacks on SE Franklin Street

and SE 28th Avenue. The new school will also need to comply with maximum setbacks on SE Powell Boulevard and SE 26th Avenue. Doing so will reclaim previously unusable outdoor area which can be devoted to the central courtyard.

#### SITE SLOPE

The new building will utilize the site's slope by locating storage, mechanical spaces, and locker rooms below grade on the east side of the site where the grade is highest. The central courtyard will slope in order to provide an accessible connection between the lowest grade on SE 26th Avenue and the highest grade on SE 28th Avenue. Elevators will be provided within both of the main building masses to ensure all levels of the school are accessible even after hours.

#### ORIENTATION

The building is organized to ensure the majority of student spaces face north or south, which is the ideal orientation for controlling solar heat gain and glare. Due to the grade change, the south building

mass will be three stories tall on the west end of the site and only two stories tall on the east end of the site. This lower building height will allow more sunlight into the courtyard, and ensure the lower floors of the north building mass have access to daylight.

## PARKING LOT SITE, TRACK SITE, AND POWELL PARK

As part of the recommended option, the parking lot site will be updated to meet current landscaping requirements. This change may result in a slight reduction of parking capacity from the existing condition.

The track site is proposed to be updated with a new field house and expanded bleachers with increased capacity.

Additionally, restrooms will be added, along with a practice field and a small parking lot for staff. More information about the track site is provided later in this section.

As part of this project, the District will also discuss options to add a softball field to Powell Park, for use by CHS students.

#### **ALTERNATE OPTION**

While Option 02 was developed into the main concept for the CHS Comprehensive Plan, there is sufficient interest to look at a partially Distributed / All New scheme. In this option, which is similar to Option 04, a portion of the classroom building would be located on the parking lot site. There are tradeoffs associated with this option, which will be studied further in schematic design.

#### **OPPORTUNITIES**

Locating some spaces on the parking lot site would allow the building on the main site to get smaller in two ways:

- Reducing the building's footprint, allowing more outdoor space for student use:
- > Reducing the building's height, improving solar access and providing a building scale that is more in harmony with the surrounding residential neighborhood.

#### **CHALLENGES**

The safety and security concerns of crossing SE 26th Avenue would need to be addressed by adding a skybridge to connect the buildings. The skybridge would require City Council approval, which is not guaranteed.

Student and staff experience would need to be explored with relation to isolating certain programs on the second site or causing bottlenecks as students move through the skybridge.

Cost estimates have predicted that building on two sites with a skybridge would cost approximately \$34 million more than the baseline of building on only one site. These cost and schedule impacts would need to be balanced by savings on the main site.

Parking capacity would be reduced on if a portion of the school were to be built there. The exact counts would need to be validated. The following page shows three parking lot options.



An option to relocate a portion of the building on the main site to the parking lot site.



An option to relocate the fifth floor of the building on the main site to the parking lot site.

## PARKING LOT SITE STUDIES

The design team studied three parking options to demonstrate the impacts of locating a building on the parking lot site.

## 1. SURFACE PARKING OPTION FOR RECOMMENDED OPTION

This baseline option would be paired with a scheme where the CHS main site would host the entire school building. The design would include updating this lot to meet current landscaping requirements

This configuration provides approximately 100 spaces.

## 2. PARTIAL SURFACE PARKING OPTION FOR ALTERNATE OPTION This option locates an approximately

This option locates an approximately 60,000sf building on the parking lot site.

This configuration would provide approximately 53 surface spaces and space for the Childcare Center Play.

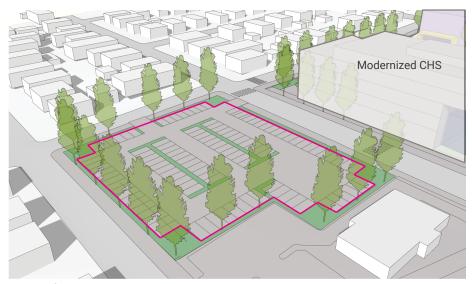
#### 3. PARTIAL SURFACE PARKING, TUCK-UNDER PARKING OPTION FOR ALTERNATE OPTION

This option locates an approximately 60,000sf building on the parking lot site, the bottom floor of which would be dedicated to parking.

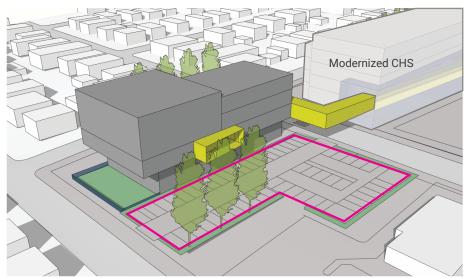
This configuration provides approximately 44 surface spaces and 34 tuck-under spaces (78 total), and space for the Childcare Center Play.

#### **TAKEAWAY**

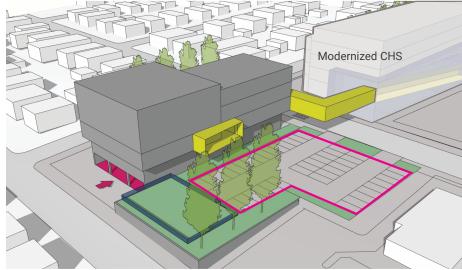
Relocating a portion of the school to the parking lot site will need to be studied further to ensure the benefits to the student experience are not outweighed by the potential challenges and added cost.



1. All Surface Parking



2. Partial Surface Parking



3. Partial Surface Parking, Tuck-under Parking Below Classroom Building





Photo of 1929 brick detailing on Cleveland High School

#### **BUILDING PROGRAM**

The proposed building program was developed based upon the 2017 PPS Education Specifications, the PPS Climate Crisis Response Policy, various lessons learned from previous high school modernizations, and considerations of Cleveland High School's specific program needs. These modifications from the Ed Spec are tracked on the following pages.

The 2017 Ed Spec calls for a minimum required gross building area of 281,000 square feet. Taking into account the PPS Climate Crisis Response Policy and lessons learned from previous modernizations, an additional 30,000 to 40,000 square feet is needed to meet District requirements. The current area program developed for CHS totals approximately 323,700 square feet. During Schematic Design the Project Team will look at ways to increase efficiency and refine program needs for a target building area of 315,000 square feet.

02-12

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#### **BUILDING PROGRAM**

MAIN HIGH SCHOOL BUILDING

	PPS E	Specification P (2017)	'rogram	Recommended CMP Program* (2024)				<b>Difference</b> (2024 CMP vs. 2017 Ed. Spec.)		
	Teaching Stations (#)	Room Quantity (#)	Net Square Feet per Room (nsf/rm)	Total Net Square Feet (total nsf)	Teaching Stations (#)	Room Quantity (#)	Net Square Feet per Room (nsf/rm)	Total Net Square Feet (total nsf)	Teaching Net Stations (# Δ)	Square Fee Difference (nsf Δ
Core Academic Programs										
Career Preparation & CTE Specialized Classroom / Lab	3			4,800				0	-3	-4,800
CTE - Culinary Arts Classroom / Lab	3			4,000	1	1	2,350	2,350	1	2,350
CTE - Digital Media				0	1	1	1,500	1,500	1	1,500
Silkscreen Lab CTE Mass Communication				0	1	0 1	400 1,500	0 1,500	1	1,500
Darkroom				Ö		i	800	800	'	80
Photo Lab				0		1	400	400		40
Support CTE - Construction / Woodshop				0	1	1	4,000	0 4,000	1	4,00
Shop Storage				0		0	400	4,000	'	4,000
CTE - Marketing				0	1	1	1,200	1,200	1	1,20
Other CTE? - Business Management? STEM/Robotics Lab?				0	2	2	1,500	3,000	2	3,000
Maker Space		1	1,200	1,200	2	1	1,200	1,200	2	3,000
Subtotal: Career Preparation & CTE	3 t	eaching stat		6,000	7 te	eaching stat		15,950	4 teaching stations	9,950
Constantion Classes										
General Education Classrooms English	11	11	980	10,780	11	11	980	10,780		
Math	8	8	980	7,840	8	8	980	7,840		
Social Studies	8	8	980 980	7,840	8 2	8	980 980	7,840		
Health World Language	2 6	2	980 980	1,960 5,880	6	2 6	980 980	1,960 5,880		
Electives	6	6	980	5,880	9	9	980	8,820	3	2,940
Subtotal: General Education Classrooms	41 t	eaching sta	tions	40,180	44 te	eaching stat	ions	43,120	3 teaching stations	2,940
Specialized Classrooms										
Science Lab	11	11	1,500	16,500	12	12	1,500	18,000	1	1,500
Chemical Storage		1	180	180		1	180	180		
Prep Room Subtotal: Specialized Classrooms	11 t	4 eaching stat	200	800 17,480	12 to	6 eaching stat	200	1,200 19,380	1 teaching stations	400 <b>1,90</b> 0
		Judining State	10113	17,400	72 11	acimiy stat	10113	17,500	r teaching stations	1,500
Extended Learning Small Instruction Space		10	500	5,000		10	500	5,000		
Flexible Learning Areas		8	1,000	8,000		8	1,000	8,000		
Subtotal: Extended Learning	0 t	eaching stat		13,000	0 te	eaching stat		13,000	0 teaching stations	0
TOTAL: Core Academic Programs	55 t	eaching sta	tions	76,660	63 teaching stations 9			91,450	8 teaching stations	14,790
Fine & Performing Arts										
Fine & Visual Arts							4.500			
Fine & Visual Arts Art Room (2D)	1	1	1,200 1,500	1,200	2	2	1,500 1,500	3,000 1,500	1	1,800
Fine & Visual Arts	1 1	1 1 1	1,200 1,500 100	1,200 1,500 100	2 1	2 1 1	1,500 1,500 200	3,000 1,500 200	1	
Fine & Visual Arts Art Room (2D) Art Room (3D) Kiln Room Supply/Storage		1	1,500 100 160	1,500 100 160		1	1,500 200 160	1,500 200 480	1	100
Fine & Visual Arts Art Room (2D) Art Room (3D) Kiln Room Supply/Storage Art Office	1	1 1 1 1	1,500 100 160 120	1,500 100 160 120	1	1 1 3 1	1,500 200 160 120	1,500 200 480 120		100 320
Fine & Visual Arts Art Room (2D) Art Room (3D) Kitl Room Supply/Storage	1	1	1,500 100 160 120	1,500 100 160	1	1 1	1,500 200 160 120	1,500 200 480	1 teaching stations	100 320
Fine & Visual Arts Art Room (2D) Art Room (3D) Kiln Room Supply/Storage Art Office Subtotal: Fine & Visual Arts Band & Orchestra	1 2 t	1 1 1 1 eaching stat	1,500 100 160 120 tions	1,500 100 160 120 3,080	3 to	1 1 3 1 eaching stat	1,500 200 160 120 ions	1,500 200 480 120 5,300		100 320 <b>2,220</b>
Fine & Visual Arts Art Room (2D) Art Room (3D) Killn Room Supply/Storage Art Office Subtotal: Fine & Visual Arts Band & Orchestra Band Room	1	1 1 1 1 <u>1</u> eaching stat	1,500 100 160 120 tions	1,500 100 160 120 3,080	1	1 1 3 1 eaching stat	1,500 200 160 120 ions	1,500 200 480 120 5,300		100 320 <b>2,220</b>
Fine & Visual Arts Art Room (2D) Art Room (3D) Kiln Room Supply/Storage Art Office Subtotal: Fine & Visual Arts Band & Orchestra	1 2 t	1 1 1 1 eaching stat	1,500 100 160 120 tions	1,500 100 160 120 3,080 2,200 250 200	3 to	1 1 3 1 eaching stat	1,500 200 160 120 ions 2,800 250 200	1,500 200 480 120 5,300 2,800 250 200		100 320 <b>2,220</b>
Fine & Visual Arts  Art Room (2D)  Art Room (3D)  Kiln Room  Supply/Storage  Art Office  Subtotal: Fine & Visual Arts  Band & Orchestra  Band Room  Large Instrument Storage  Music Library & Uniform Storage  Small Equipment Storage	1 2 t	1 1 1 1 eaching state 1 1 1	1,500 100 160 120 tions 2,200 250 200 200	1,500 100 160 120 3,080 2,200 250 200 200	3 to	1 1 3 1 eaching stat 1 1 1	1,500 200 160 120 ions 2,800 250 200 200	1,500 200 480 120 <b>5,300</b> 2,800 250 200 200		600
Fine & Visual Arts  Art Room (2D)  Art Room (3D)  Kiln Room  Supply/Storage  Art Office  Subtotal: Fine & Visual Arts  Band & Orchestra  Band Room  Large Instrument Storage  Music Library & Uniform Storage  Small Equipment Storage  Small Equipment Storage  Large Practice Room / Music Lab	1 2 t	1 1 1 1 eaching stat 1 1 1 1 1	1,500 100 160 120 <b>tions</b> 2,200 250 200 200 300	1,500 100 160 120 3,080 2,200 250 200 200 300	3 to	1 1 3 1 eaching stat 1 1 1 1 2	1,500 200 160 120 ions 2,800 250 200 200 300	1,500 200 480 120 5,300 2,800 250 200 200 600		2,226 600
Fine & Visual Arts Art Room (2D) Art Room (3D) Kiln Room Supply/Storage Art Office Subtotal: Fine & Visual Arts  Band & Orchestra Band Room Large Instrument Storage Music Library & Uniform Storage Small Equipment Storage	1 2 t	1 1 1 1 eaching state 1 1 1	1,500 100 160 120 tions 2,200 250 200 200	1,500 100 160 120 3,080 2,200 250 200 200	3 to	1 1 3 1 eaching stat 1 1 1	1,500 200 160 120 ions 2,800 250 200 200	1,500 200 480 120 <b>5,300</b> 2,800 250 200 200		100 320 <b>2,220</b>
Fine & Visual Arts Art Room (2D) Art Room (3D) Art Room (3D) Kilin Room Supply/Storage Art Office Subtotal: Fine & Visual Arts  Band & Orchestra Band Room Large Instrument Storage Music Library & Uniform Storage Small Equipment Storage Large Practice Room / Music Lab Small Practice Rooms	2 f	1 1 1 1 eaching state 1 1 1 1 1 1	1,500 100 160 120 150 150 250 200 200 200 300 100 120	1,500 100 160 120 3,080 2,200 250 200 200 300 200	3 to	1 1 3 1 eaching stat 1 1 1 1 2 3	1,500 200 160 120 ions 2,800 250 200 200 300 100 120	1,500 200 480 120 5,300 2,800 250 200 200 600 300		10i 32i <b>2,220</b> 60i 30i 10i
Fine & Visual Arts Art Room (2D) Art Room (3D) Kiln Room Supply/Storage Art Office Subtotal: Fine & Visual Arts  Band & Orchestra Band Room Large Instrument Storage Music Library & Uniform Storage Small Equipment Storage Large Practice Room / Music Lab Small Practice Rooms Band/Choir Office Subtotal: Band & Orchestra  Choir	2 f	1 1 1 1 1 eaching state 1 1 1 1 1 1 2	1,500 100 160 120 120 120 250 200 200 300 100 120	1,500 100 160 120 3,080 2,200 250 200 200 200 200 120 3,470	3 to	1 1 3 1 eaching stat 1 1 1 2 3 1 eaching stat states	1,500 200 160 120 ions 2,800 250 200 200 300 100 120	1,500 200 480 120 5,300 2,800 250 200 600 300 120 4,470	1 teaching stations 1 teaching stations 0 teaching stations	100 320 2,220 600 300 100
Fine & Visual Arts Art Room (2D) Art Room (3D) Kilin Room Supply/Storage Art Office Subtotal: Fine & Visual Arts  Band & Orchestra Band Room Large Instrument Storage Music Library & Uniform Storage Small Equipment Storage Large Practice Room / Music Lab Small Practice Rooms Band/Choir Office Subtotal: Band & Orchestra  Choir Choir Room	2 f	1 1 1 1 1 eaching state 1 1 1 1 1 1 2	1,500 100 160 120 150 150 250 200 200 200 300 100 120	1,500 100 160 120 3,080 2,200 250 200 200 300 200 120 3,470	3 to	1 1 3 3 1 eaching state 1 1 1 2 3 3 1 eaching state 1 1 1 1 2 2 3 3 1 eaching state 1 1	1,500 200 160 120 ions 2,800 250 200 200 100 120 ions	1,500 200 480 120 5,300 2,800 250 200 200 600 300 120 4,470	1 teaching stations	100 320 2,226 600 300 1,000
Fine & Visual Arts  Art Room (2D)  Art Room (3D)  Kiln Room  Supply/Storage Art Office  Subtotal: Fine & Visual Arts  Band & Orchestra  Band Room  Large Instrument Storage  Music Library & Uniform Storage  Small Equipment Storage  Large Practice Room / Music Lab  Small Practice Rooms  Band/Choir Office  Subtotal: Band & Orchestra  Choir  Choir Room  Choir Office	2 f	1 1 1 1 1 eaching state 1 1 1 1 1 1 2	1,500 100 160 120 120 250 250 200 300 100 120	1,500 100 160 120 3,080 2,200 250 200 200 200 120 3,470	3 to	1 1 3 1 eaching stat 1 1 1 2 3 1 eaching stat states	1,500 200 160 120 2,800 250 200 300 100 100 1,500	1,500 200 480 120 5,300 2,800 250 200 600 300 120 4,470	1 teaching stations 1 teaching stations 0 teaching stations	100 320 2,220 600 300 1,000 1,500
Fine & Visual Arts Art Room (2D) Art Room (3D) Kilin Room Supply/Storage Art Office Subtotal: Fine & Visual Arts  Band & Orchestra Band Room Large Instrument Storage Music Library & Uniform Storage Small Equipment Storage Large Practice Room / Music Lab Small Practice Rooms Band/Choir Office Subtotal: Band & Orchestra  Choir Choir Room	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 eaching state 1 1 1 1 1 1 2	1,500 100 100 160 120  tions  2,200 250 200 200 300 100 120  1,500 200	1,500 100 160 120 3,080 2,200 250 200 200 300 200 120 3,470	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 3 3 1 eaching state 1 1 1 2 3 3 1 eaching state 1 1 1 1 2 2 3 3 1 eaching state 1 1	1,500 200 160 120 ions 2,800 250 200 300 100 120 ions	1,500 200 480 120 5,300 2,800 250 200 200 600 300 120 4,470	1 teaching stations 1 teaching stations 0 teaching stations	100 320 2,220 600 300 1,000 1,500 1,500 200

200 1,000 1,500

<sup>100</sup> 

 $<sup>\</sup>ensuremath{^\star}$  See previous page for explanation of target program area.

	PPS E	Specification P (2017)	rogram	Re		ded CMP Progr (2024)	<b>Difference</b> (2024 CMP vs. 2017 Ed. Spec.)			
	Teaching Stations (#)	Room Quantity (#)	Net Square Feet per Room (nsf/rm)	Total Net Square Feet (total nsf)	Teaching Stations (#)	Room Quantity (#)	Net Square Feet per Room (nsf/rm)	Total Net Square Feet (total nsf)	Teaching Neg Stations (# Δ)	t Square Fee Difference (nsf Δ
Theater & Dance	-								-	
Theater (500 seats) Orchestra Pit		1 1	5,000 500	5,000 500		1 1	6,000 500	6,000 500		1,000
Stage Follow Spot		1	3,500	3,500 0		1	3,500 200	3,500 200		-4,800 2, <del>3</del> 96
Drama Classroom / Black Box	1	1	1,600	1,600	1	1	2,600	2,600		2,396 1,996 1,500
Multi-Purpose Production Area Laundry		1	1,500 150	0 150		1	1,500 150	1,500 150		1,500 1,500
Control Room		1	200	200		1	200	200		800
Sound Room Office		1 1	100 70	100 70		1	100 70	100 70		400
Box Office/Tickets		1	100	100		1	100	100		4,000 100
Concession Stand Scenery Construction/Production Storage		1 1	100 1,500	100 1,500		1 1	200 1,500	200 1,500		1,200
Equipment Storage		1	120	120		1	120	120		1,200
Lighting Storage Costume Storage		1 1	100 400	100 400		1 1	100 400	100 400		
Make-Up Room		1	400	400		1	400	400		9,950
Boy's Dressing Girl's Dressing		1 1	250 250	250 250		1 1	250 250	250 250		
Girl's Toilet		1	130	130		1	130	130		
Boy's Toilet Green Room		1	130 400	130 0		1	130 400	130 400		400
Subtotal: Theater & Dance	1 t	eaching sta	tions	14,600	1 t	eaching sta	ations	18,800	0 teaching stations	4,200
TOTAL: Fine & Performing Arts	4 t	eaching sta	tions	21,150	6 t	eaching sta	ations	30,370	2 teaching stations	9 <u>,</u> 220 2,940
Physical Education & Athletics										
Physical Education & Athletics										400
Main Gym Auxiliary Gym (Practice Gym)	2	1 1	13,000 5,700	13,000 5,700	2	1	14,676 5,700	14,676 5,700		11,96010
Auxiliary Gym Bleachers		1	1,000	1,000		1	1,000	1,000		
Auxiliary Gym Storage Mat/Wrestle   Dance		1 1	500 2,750	500 2,750		1	500 3,500	500 3,500		75
Mat Storage Room				0		1	500	500		500
Weight Room/Aerobics/Spinning Training Room	1	1 1	2,500 580	2,500 580	1	1	3,000 580	3,000 580		500 <b>14,79</b> 0
Team Room - Large		1	800	800		2		1,400		60
Boy's PE Coaches Office/Toilet/Shower/Lockers Girl's PE Coaches Office/Toilet/Shower/Lockers		1 1	300 300	300 300		1	300 300	300 300		
Boy's Locker Room/Shower		1	1,900	1,900		1	1,900	1,900		
Girl's Locker Room/Shower Multipurpose Toilet/Shower		1 1	1,900 150	1,900 150		1	1,900 150	1,900 150		
PE Storage		2	200	400		2	200	400		1,800
Athletic Storage - Large Athletic Storage - Small		1	1,000 500	1,000 500		1	1,000 500	1,000 500		
Uniform/Equipment Storage		1	1,000	1,000		1	1,000	1,000		10
Field Equipment Storage		1	1,000	1,000		1	2,000	2,000		320 1,000
Concessions Laundry Room		1	100 200	100 200		1 1 eaching sta	150 200	150 200		2,226
Subtotal: Physical Education & Athletics  TOTAL: Physical Education & Athletics		eaching sta eaching sta		35,580		eaching sta		40,656	0 teaching stations 0 teaching stations	600
TOTAL Physical Education & Authences	3 0	eaching sta	uons	33,300	3 (	eaching sta	ations	40,030	v teaching stations	
Educational Support										300 100
Administration Reception/Lobby		1	400	400		1	400	400		1,000
Waiting Area		1	100	100		1	100	100		1.50
Principal's Office Principal's Secretary		1 1	200 125	200 125		1	200 125	200 125		1,500 100
Vice Principal's Office		2	150	300		3		450		26
Vice Principal's Secretary Dean of Students		2	120 120	240 120		2 1	120 120	240 120		1,800
Teacher Offices (10 staff/office) Attendance		10 1	980 120	9,800 120		10 1	980 120	9,800 120		1,00
Bookkeeper		1	120	120		1	120	120		1,00
Resource Officer / Campus Monitor Camera Monitors		1	200 100	200 100		1	200 100	200 100		20
Restroom		2	60	120		2		120		1,00
Records Storage		1	200 125	200 125		1	200	200 125		1,50
Office Storage Business Manager		1 1	120	120		1	125 120	120		
Health Office		1	120	120		1	120	120		15
Sick Room Sick Toilet		1 1	150 100	150 100		2 1		300 100		15
Student Support/Mediation Office		1	700	700		1	700	700		10
Student Support/Mediation Support Workroom/Mail/Delivery Process Center		1 1	300 300	300 300		1	300 300	300 300		
Staff Room		1	400	400		1	400	400		
Conference Room Parent Vol./Family Resource/PTA/Boosters/Alumni Subtotal: Administration	0 t	2 1 eaching sta	150 500 tions	300 500 <b>15,260</b>	0 t	2 1 eaching sta	500	300 500 <b>15,560</b>	0 teaching stations	300
Counseling & Career		_								
Counseling Office Counseling Secretary/Waiting		5 1	120 400	600 400		5 1	120 400	600 400		40
Drug/Alcohol Counselor Office		1	125	125		1	125	125		4,200
Conference Room - Large		1	240	240 150		1	240 150	240 150		9,220
		1	150							
Conference Room - Medium Career Center		1	150 700	700		1		980		
Conference Room - Medium						1 1 1	120	980 120 100		
Conference Room - Medium Career Center Career Center Office		1	700 120	700 120		1	120	120		280

	PPS E	PPS Education Specification Program (2017)				Recommended CMP Program* (2024)				<b>Difference</b> (2024 CMP vs. 2017 Ed. Spec.)	
	Teaching Stations (#)	Room Quantity (#)	Net Square Feet per Room (nsf/rm)	Total Net Square Feet (total nsf)	Teaching Stations (#)	Room Quantity (#)	Net Square Feet per Room (nsf/rm)	Total Net Square Feet (total nsf)	Teaching Stations (# Δ)	Net Square Differe (ns	
Educational Support Cont.											
Student Activities		_	450			_	450	450			
Athletic Director AD Support Staff		1 1	150 120	150 120		1 1	150 120	150 120		-4	
Subtotal: Student Activities	0 t	eaching sta		270	0 1	teaching stat		270	0 teachi	ng stations 2	
Technology Access											
Computer Lab (dedicated) Computer Cart Storage and Management		4	1,100	4,400 0		0	1,100 80	0 240		-4	
Computer Lab (non-specialized)		1	1,100	1,100		1	1,100	1,100			
Subtotal: Technology Access	0 t	eaching sta	tions	5,500	0 1	teaching stat	tions	1,340	0 teachi	ng stations -4 4	
Special Education (SPED)										1	
Sensory Support Room Learning Resource Center		1	900 900	900 2,700		1	900 900	900 2,700		'	
ife Skills				1.000	1			1.000			
Intensive Skills Classroom (includes kitchen) Storage	1	2 1	600 100	1,200 100	1	2 1	600 100	1,200 100		9,	
Reception Conference		1 1	100 120	100 120		1 1	100 120	100 120			
Office		1	100	100		1	100	100			
Special Needs Toilet Sensory Support Room (quiet room?)		1	200	200 0		1 0	200 80	200 0			
tinerants											
Speech Pathologist Office Psychologist Office		2	120 120	240 240		2	120 120	240 240		2	
Subtotal: Special Education (SPED)	1 t	eaching sta		5,900	1 1	teaching stat		5,900	0 teachi	ng stations 2	
merging Language Learning (ELL)											
mergent Bilingual Classroom	1	1	800	800	1	1	800	800			
Subtotal: Emerging Language Learning (ELL)	1 t	eaching sta	tions	800	1 1	teaching stat	tions	800	0 teachi	ng stations	
Student Center		_	7.000	7.000				7.000		1	
Student Center/Commons (1 lunch @ 600 students)  Main Servery		1 1	7,800 1,700	7,800 1,700		1 1	7,800 1,700	7,800 1,700			
ood Prep/Kitchen		1	1,500	1,500		1	1,500	1,500			
Dish Washing Dry Storage/Cart Storage		1 1	200 500	200 500		1 1	200 500	200 500			
Cooler		1	200	200		1	200	200		14	
Freezer Office		1 1	200 120	200 120		1 1	200 120	200 120			
Staff Lockers/Dressing Room		1	150 250	150 250		1	150 500	150 500			
Table Storage Subtotal: Student Center	0 t	eaching sta		12,620	0 1	teaching stat		12,870	0 teachi	ng stations	
Media Center & Library											
Library		1	8,000	8,000		1	4,500	4,500		-3	
Office Norkroom		2 1	120 200	240 200		2 1	120 200	240 200			
Text Storage		1	750	750		1	750	750		-	
Collaboration Space Multi-Use Room		1	400 150	400 450		1	400 150	400 450		2	
T Repair/Tech. Coordinator		1	180	180		1	400	400		-4	
Library Classroom Subtotal: Media Center & Library	0 t	eaching sta	980 tions	10,220	0 1	1 teaching stat	980 tions	980 <b>7,920</b>	0 teachi	ng stations -2	
Nordent Course		-				-					
Student Space Student Government Room/Office		1	200	200		1	200	200			
Subtotal: Student Space	0 t	eaching sta	tions	200	0 1	teaching stat	tions	200	0 teachi	ng stations	
Custodial											
Custodial Office Custodial Staff Office		1	250	250 0		1 1	250 300	250 300		1	
reight/Receiving				0		1	500	500			
Custodial Laundry Building Furniture Storage				0		1 1	150 1,000	150 1,000			
Custodial Room		10	100	1,000		10	150	1,500			
Building Storage Material Storage		1 1	2,000 500	2,000 500		1 1	2,000 1,500	2,000 1,500		1	
lammable Storage		1	100	100		1	100	100	0.4	ng stations	
ubtotai. Custodiai	0 1	eaching sta	uons	3,850	0 1	teaching stat	tions	7,300	U teachi	ng stations	
										-	
										4	

**9,220** 980 -**2,300** 

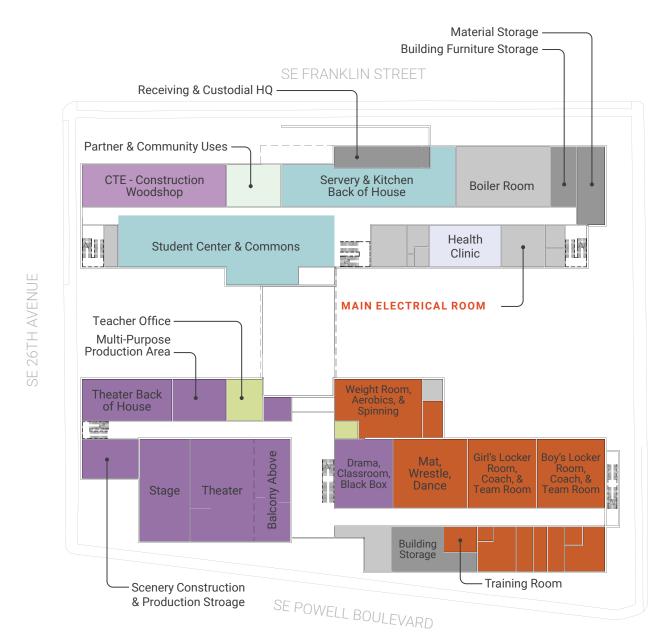
	PPS Education Specification Program (2017)				Recommended CMP Program* (2024)				<b>Difference</b> (2024 CMP vs. 2017 Ed. Spec.)		
	Teaching Stations (#)	Room Quantity (#)	Net Square Feet per Room (nsf/rm)	Total Net Square Feet (total nsf)	Teaching Stations (#)	Room Quantity (#)	Feet per Room	Total Net Square Feet (total nsf)	Teaching Ne Stations (# Δ)	t Square Fee Differenc (nsf Δ	
Miscellaneous					·						
Lobby		1	2,000	2,000		1		2,000			
Student Lockers Student Toilets		850 12	1 250	850 3,000		1 12	850 250	850 3,000		-4,80	
Gender Neutral Toilet		1	60	60		1	60	60		2,35	
Staff Toilet (at teacher offices)		10	70 100	700 100		10 1	85 100	850 100		1,56	
Gender Neutral Shower Individual Wellness Room		1	100	0		1	120	120		1 12	
Boiler Room		1	2,000	2,000		1	4,000	4,000		1,56 2,86	
MDF IDF		1 5	180 80	180 400		1 10	180 100	180 1,000		40 60	
Main Electrical Room		1	240	240		10	1,200	1,200			
Sub Electrical Room		5	75	375		8	100	800		4,86 42	
Emergency Electrical Room				0 0		1	300 200	300 200		1, <b>2</b> 6	
Water Entry Satellite Water				0		1		120		12	
Riser Room		1	60	60		1	60	60			
Elevator Room		1	80	80		4	80	320		9,9 <del>3</del> 5	
Mechanical Fan Rooms Subtotal: Miscellaneous	0 tea	ching stati	2,000 ions	10,045	0 t	eaching sta	ations	15,160	0 teaching stations	5,11	
		-									
TOTAL: Educational Support	2 tea	ching stati	ons	67,400	2 t	eaching sta	ations	70,335	0 teaching stations	2,93	
Partner & Community Uses										2,94	
Partner & Community Uses										2,94	
Partner Program Office		0	150	0		1	150	150		15	
Pantry		0	200	0		1	200	200		1,50	
Clothing/Food Closet After School Instruction		1 0	1,200 500	1,200 0		1 0	1,200 500	1,200 0		40	
Subtotal: Partner & Community Uses	0 tea	ching stati		1,200	0 t	eaching sta		1,550	0 teaching stations		
TOTAL: Partner & Community Uses	0 tea	ching stati	ons	1,200	0 t	eaching sta	ations	1,550	0 teaching stations		
Wrap-Around Service Providers										14,79	
Wrap-Around Service Providers											
Health Clinic Teen Parent Center		1	1,600	1,600 2,100		1	1,600	1,600 2,100			
Infant Room		1	500	2,100		1	500	2,100			
Breastfeeding Room		0	50			0					
Toddler Room Crawler Room		1 1	500 500			1 1	500 500			1,80	
Toilet		1	50			1	50				
Changing Area		1 1	50			1	50			10 32	
Nap Area Storage/Kitchen		1	200 300			1	200 300			0.	
Office-Social Service Providers (SUN, STEP UP, ESL)		0	200	0		0	200	0		2,22	
Classroom Subtotal: Wrap-Around Service Providers	0 tea	2 ching stati	500	1,000 <b>4,700</b>	0 t	2 eaching sta	500	1,000 <b>4,700</b>	0 teaching stations	<b>.</b>	
TOTAL: Wrap-Around Service Providers		ching stati		4,700		eaching sta		4,700	0 teaching stations	60	
										30	
SUMMARY										1,00	
TOTAL ASSIGNABLE AREA	64 tea	ching stati	ons	206,690	74 t	eaching sta	ations	239,061	10 teaching stations	32,37	
Unassignable Area Building Support (Circulation & Walls)			26.5%	74,408			26.1%	84,639		1,50 10 10, <b>2</b> 8	
TOTAL BUILDING GROSS AREA (SF)				281,098				323,700		1,80 42,60	
Building Efficiency % (net/gross)				73.5%				73.9%		1,00	
										20	
										1,00 1,50	

400 **4,200** 

100

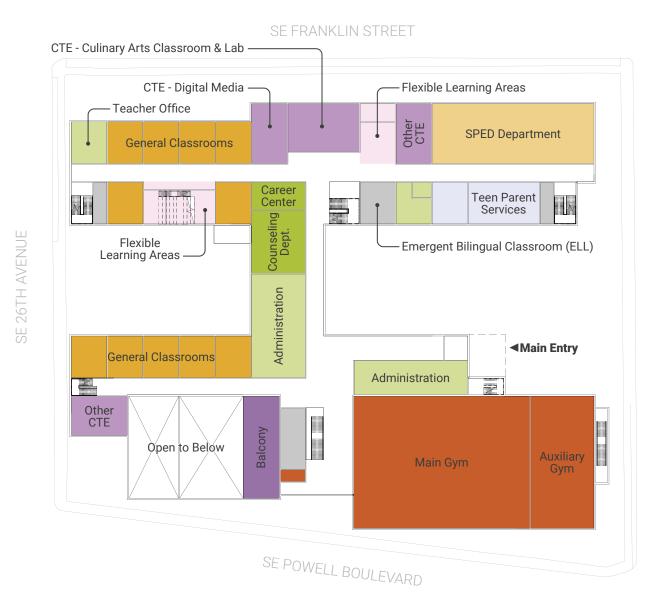
9,220

L01 PLAN (WEST GROUND FLOOR)



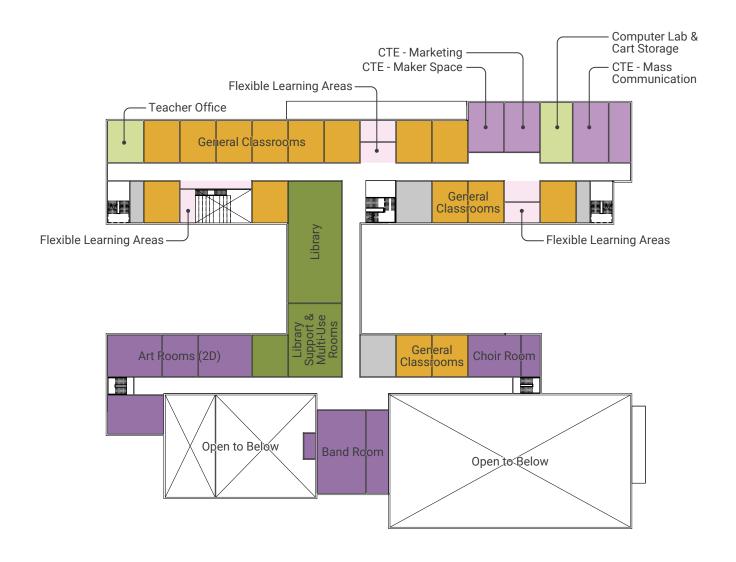


L02 PLAN (EAST GROUND FLOOR)

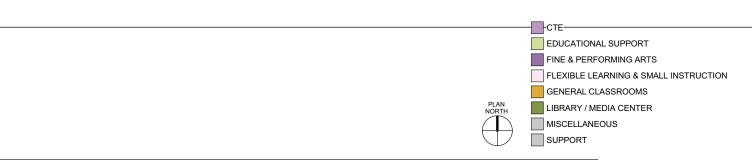


# COUNSELING / CAREER CTE EDUCATIONAL SUPPORT FINE & PERFORMING ARTS FLEXIBLE LEARNING & SMALL INSTRUCTION GENERAL CLASSROOMS MISCELLANEOUS PHYSICAL EDUCATION / ATHLETICS SPECIAL EDUCATION (SPED) SUPPORT WRAP-AROUND SERVICE PROVIDERS

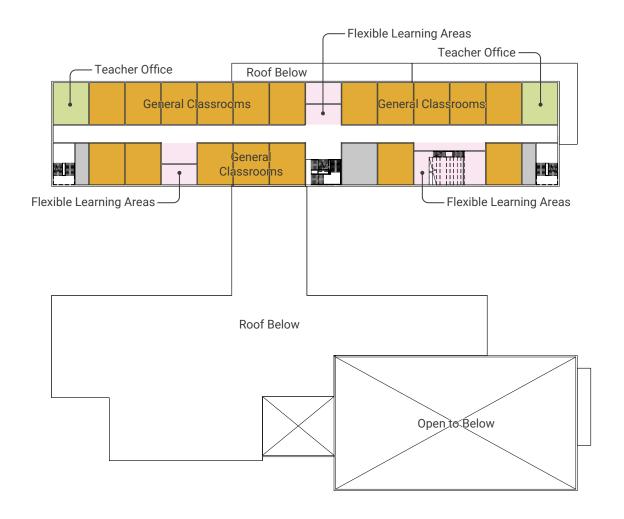
L03 PLAN



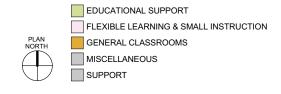
#### mahlum STUDIO PETRETTI



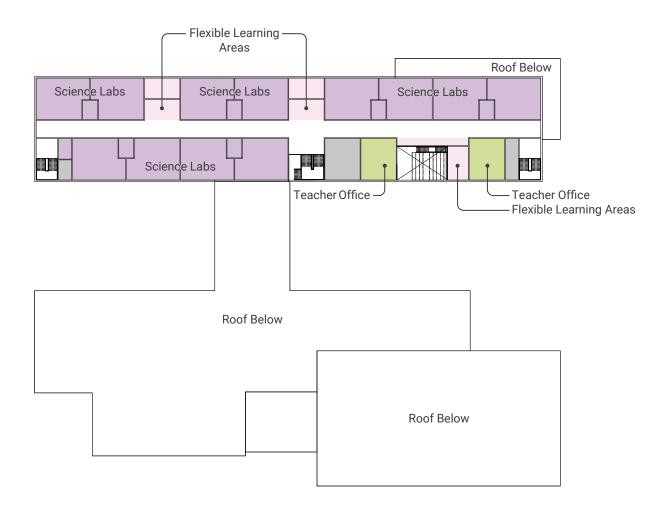
L04 PLAN



mahlum STUDIO PETRETTI



L05 PLAN



mahlum STUDIO PETRETTI ARCHITECTURE

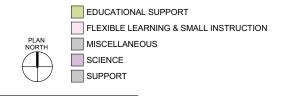






Photo inside existing field house

#### ATHLETICS PROPERTY PROGRAM

The Cleveland Track and Field site is unique in the district in that it is separated from the main high school site by four blocks.

At most PPS high schools, athletes can use the team rooms and restrooms associated with the main building during practices and games. In addition, spectators can utilize large banks of restrooms inside the main buildings. Due to the distance between the main building and track, there is a need for additional support spaces at the track site.

The proposed field house and athletics site building program was developed based upon the 2017 PPS Education Specification, as well as input from PPS to accomodate this site's unique aspects. Some of this program is duplicative of spaces in the main building to provide simlar ammenities to those activities that take place on this site.

02-23

In addition to the field house, the track site will also have bleachers with increased capacity, restrooms to accomodate large events, a practice field, and a small parking lot for event staff.

The program and site layout shown in this report is at a Pre-Design level and further refinement will occur during the Schematic Design phase based on outreach with the athletics department and other stakeholders.

The building diagram on the following pages shows one option for the field house organization. This version locates all program elements on one level, accessible from a plaza area. In addition to this structure, restrooms would be added to the back of the existing bleachers.

The site diagram later in this section shows one possible configuration for the field house, plaza, bleachers, and practice fields.

The design team will continue to study additional options during the Schematic Design phase, in conjunction with the PPS Athletics department and members of the CHS community.

#### **BUILDING PROGRAM**

#### FIELD HOUSE AND ATHLETICS SITE

#### **Recommended CMP Program**

(2024)

	Teaching Stations (#)	Room Quantity (#)	Net Square Feet per Room (nsf/rm)	Total Net Square Feet (total nsf)
Track and Field Athletics				
Field House				
Field House		1	1 500	1 500
Combined Team Room and Locker Area (home team)		1	1,500	1,500
Team Room / Teaching Space (away team - no lockers)		1	800	800
Changing Rooms		2	200	400
Toilet (only) rooms		5	30	150
Lav/sink area		5	15	75
Multipurpose Toilet/Shower		5 2	60 200	300
PE Storage		_		400
A Field Favings and Standard		1	500 2.000	500 2.000
Field Equipment Storage		1	,	,
Batting cage / multi-purpose PE athletics space		1	3,000	3,000
Building Services MDF		1	00	00
Main Electrical Room		1	80 80	80
Main Electrical Room  Mechanical Room		1		80
		1	100	100
Custodial Room			50	50
Subtotal: Physical Education & Athletics	Ut	eaching sta	tions	9,435
Miscellaneous				
Coaches Box		1	100	100
Press Box		1	100	100
Concessions		1	150	150
Event-use toilets		33	63	2,079
Subtotal: Miscellaneous	0 t	eaching sta	tions	2,429
TOTAL: Physical Education & Athletics	0 t	eaching sta	tions	11,864 nsf

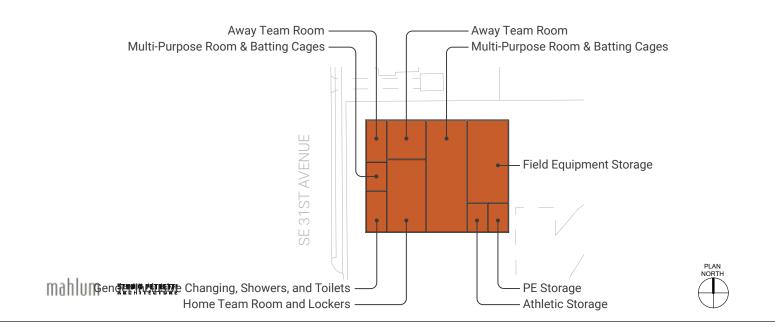
#### SUMMARY

TOTAL ASSIGNABLE AREA

0 teaching stations

11,864 nsf

FIELD HOUSE PLAN

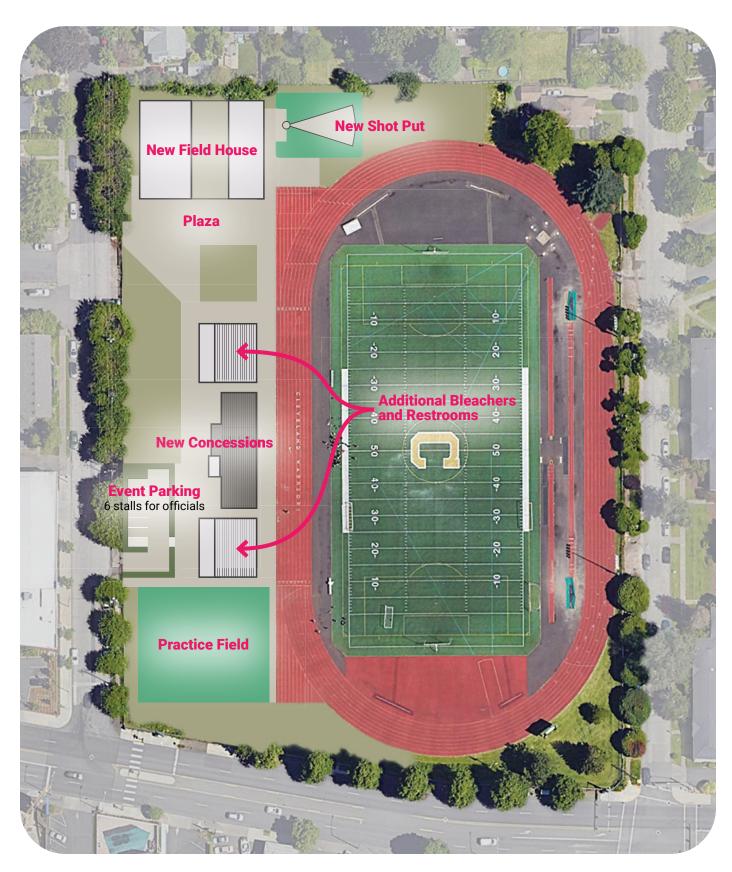




MAHLUM | Studio Petretti

#### **CONCEPT SITE PLAN**

TRACK AND FIELD SITE





#### SUSTAINABILITY

#### DESIGINING FOR PPS CLIMATE CRISIS POLICY

#### **PPS POLICY**

02-27

The PPS Climate Crisis Response,
Climate Justice and Sustainable
Practices Policy provides sustainability
metrics and requirements for new and
remodeled buildings within the school
district. The new Cleveland High School
will be designed to meet or exceed these
requirements. Some of the Pillars of this
policy relate to building construction,
and some relate to general operations.
Below are some of the pillars that will be
directly influencing the design of the new
school.

#### LEED

The new school will be LEED Gold certified. LEED is a points-based system to encourage sustainable practices in buildings.

#### **ENERGY AND CARBON**

Fossil fuel infrastructure for everyday use in buildings systems will not be used. The new building will not have a natural gas connection, and all building systems will be electric to take advantage of the decarbonization of the grid over the life span of the building. Oregon state law says the grid should be fully decarbonized by 2040. Additional study will be done to see if it is feasible to eliminate fossil fuels in emergency generators.

> To reduce operational carbon emissions, the building will have an Energy Use Intensity (EUI) of 30 or less. This metric refers to the energy use per square foot of the building, which allows for the comparison of buildings of different sizes. An EUI of 30 is approximately a 25% building efficiency improvement

- over Oregon energy code. This Pillar will be achieved through a tighter building envelope than is required by building code and using more efficient building mechanical systems. More specifically:
- > The walls and roof will have additional insulation.
- > The exterior envelope will be air sealed to a tighter standard than code requires to improve interior air quality and improve efficiency.
- > Oregon requires that the project allocate 1.5% of the budget on Green Energy Technology (GET) to reduce building power consumption. The design team will use photovoltaic solar panels, envelope upgrades, and other strategies to meet the GET requirements.
- The windows will be high efficiency with coatings tuned to balance solar heat gain and daylighting.

#### SCHEMATIC SITE PLAN

TRACK AND FIELD SITE





- > Building orientation will be designed to maximize daylighting from the north and south, and reduce solar heat gain from the east and west. Exterior solar shades will be provided on the south side to reduce glare.
- > Efficient light fixtures will be used, along with smart lighting controls and an efficient layout to reduce energy use.
- > All office and kitchen equipment will be Energy Star rated.

Refrigerants will be minimized and carefully used. Packaged heat pumps with hydronic distribution, as well as packaged hot water heat pumps will be used to reduce the risk of high global warming potential refrigerants leaking into the atmosphere.

To reduce embodied carbon within the building, the new Cleveland High School will prioritize reduced carbon building materials where possible. The building is being designed to cost effectively use hybrid-mass timber for the building structure. This system not only has a lower embodied carbon impact than

02-28

steel or concrete construction (up to 34%), but it also reduces the need for interior finishes and promotes local Oregon material extraction and manufacturing. Where steel is required in the system, steel produced with electric arc furnaces that produce fewer emissions will be specified.

Where concrete is required in foundations and site hardscaping, low carbon mixes will be prioritized.

Materials will be prioritized that avoid "red list" ingredients, have reduced health and environmental impacts throughout the product life cycle, and reduce or eliminate VOC emissions.

Recycling and reduction of waste building materials created during construction will be reduced. PPS construction standards target a minimum of 75% of construction and demolition materials to be recycled or diverted from a landfill.

#### RESILIENCY

The new school will use various strategies to be resilient in a climate related emergency. Operable windows, optimized daylighting, and a robust thermal envelope will ensure the building is comfortable and ventilated during power outages. Mechanical systems will be fitted with MERV 14 filters to provide excellent indoor air quality.

In addition, the structure will be designed to the same seismic standards as essential facilities like hospitals and emergency services (Seismic Category IV). After an earthquake covered in this standard, the building would likely be ready for immediate reoccupancy.

## MATERIAL & SYSTEM ASSUMPTIONS

The following sytems are currently proposed as the basis of design for the modernization of CHS. Some alternatives have also been included for consideration as the design develops and costs of each system become more clear.

#### STRUCTURE

The proposed structure for the modernized CHS is mass timber and steel hybrid. This structural system is in alignment with PPS's sustainability goals to reduce the project's carbon footprint. Floor decks, columns, and beams are intended to be constructed of mass timber while lateral resisting elements and long span roof structure for the gymnasium will be constructed of steel. Concrete will be used for the foundations and the below grade walls on the east side of the site.

#### **EXTERIOR MATERIALS**

The primary cladding material is proposed to be masonry veneer, with potential secondary cladding materials of composite cement panels, metal panels or stucco. Window openings will vary between smaller punched openings and larger expanses of glass at entries, the commons, and some of the extended learning areas.

It is proposed that the modernization will salvage and reuse existing materials like terra cotta ornament and marble window sills from the existing building.

The roof system is proposed to be primarily SBS Modified Bituminous Roofing. Solar panels are proposed to be located on the gymnasium, theater, and north classroom wing roofs. Solar panels are also proposed as a roof canopy system for the bike shelter.

Some areas of the roof are proposed to be green roofs, specifically over the connector building between the north and south wings.

#### **HEATING SYSTEMS**

The design proposes five 180-Ton air to water heat pumps with back up, two 1320 kW electric boilers for backup heating. An alternate option for a Ground Source Heat Pump with a supplemental cooling tower and boilers is also being considered. This would be comprised of (175) 350-ft deep vertical bores to account for 50% of the peak building cooling load.

#### **VENTILATION SYSTEMS**

Air handlers of various sizes will be used for the gym, theater, commons, classrooms, and administration areas. An alternate option to provide mixed mode ventilation for the gym and commons is also proposed, where automatic operable openings would be provided for natural ventilation and passive cooling.

#### FACILITY POWER GENERATION

Emergency and Optional Standby power will be provided by a 750KW diesel powered generator. The generator will be exterior mounted with a weatherproof, sound attenuated housing and built in base fuel tank.

#### Precedent images and diagrams of potential features



**Vertical Structure** 



Vertical, horizontal, and bracing structure



Vertical, horizontal, and bracing and CLT structure





## ELECTRICAL SERVICE AND DISTRIBUTION

The main building will be served from four 4000A, 480/277V, 3ph, 4W services. The track site will be served from one 800A, 208/120V, 3ph, 4W service. Each service will be fed from a pad vault mounted utility transformer.

#### **INTERIOR SYSTEMS**

Interior partitions will be steel-framed. Interior relites are proposed to be used extensively in the building to provide visual transparency and security. These relites are proposed to have wood frames.

Acoustical suspended ceilings will be limited in use. Typical ceilings will be Acoustic Dowell Laminated Timber or Cross Laminated Timber with direct applied acoustic panels or suspended acoustic 'clouds'.

In some spaces, perforated gypsum board ceilings or wood slat ceilings are also proposed.

All teaching stations will have markerboards, and tackboard will be provided in classrooms and corridors. All classrooms will be outfitted with a laptop and video connections at front of room.

All interior paint will be low-VOC. Ceramic tile will be provided at all restroom walls and floors. Restroom blocks will be comprised of stalls separated by full height walls with tile wall finishes and dedicated exhaust fans.

Polished concrete will be used at the ground floor spaces, and at the upper floors if a concrete topping slab is used. If gypcrete topping is used at the upper floors, linoleum will be used in lieu of concrete. Resilient sports flooring will be provided at the wrestling and weight rooms, and athletic wood floor will be used at the gymnasiums. A stage wood floor will be provided at the theater. Carpeting will be used at the band room and media center.

#### **ELEVATORS**

Three or four elevators will be provided to serve the two wings of the building and ensure that the theater and gymnasiums can be used independently from the rest of the school.

#### LANDSCAPE

The landscape will feature separate zones for student use throughout the site. Synthetic turf field spaces will be provided at the east and west ends of the central courtyard. In the center of the courtyard a series of ramps will negotiate the site's grade change with boulders and concrete benches provided for informal seating.

An open, flat paved area will be located outside the commons with seating provided for outdoor lunches.

A new synthetic turf practice field is proposed for the field site, along with a concrete plaza for pedestrian and service vehicle use.

The entire field site will be enclosed within a six foot tall fence, and most unusable sloped areas will be flattened and retained with concrete walls.

#### Precedent images of potential features







# mahlum studio petretti architecture



PART 3

# ANALYSIS + PROCESS



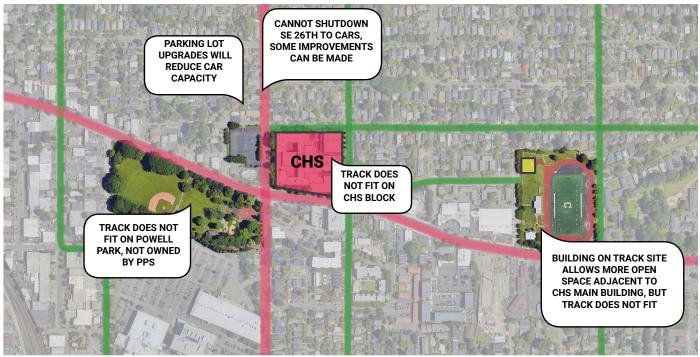


Diagram: Study of options for track relocation

## SITE LAYOUT OPTIONS

# THE DESIGN TEAM STUDIED MULTIPLE OPTIONS DURING THE COMPREHENSIVE PLAN PROCESS.

The first question that the Comprehensive Planning Committee (CPC) asked were about alternate site options. Many community members have been interested in exploring other sites (such as the Kroger property that sits south of Powell Park). News shared at the time indicated that the site was not available for purchase and therefore this path was not explored further during this process.

At CPC 02, the committee explored the option of building on the CHS track site. However, building on the track site would require relocating the track and field. The design team studied alternate locations for a track and field and has

03-3

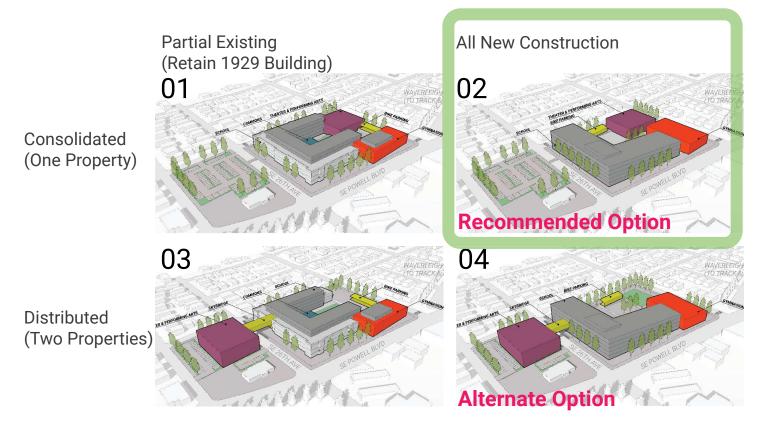
concluded that there is no viable option for relocating the track within the area surrounding CHS. The following two studies demonstrate why the track cannot be relocated.

Study 1: The team showed a diagram of the track on the current main building site; it would have to extend over SE 26th Avenue and onto the parking lot site. The City considers SE 26th Avenue a "major emergency response street," and is opposed to closing it, even for short periods during the school day.

Study 2: This study explored locating a track on Powell Park (owned by Portland Parks & Recreation). This option does not work for multiple reasons. The park dimensions are too tight to allow a competition track and grandstands.

There are two heritage trees in the park (one on the north side, one on the south side) that would interfere with a track. A track would also compromise existing uses at the park. Furthermore, PPS prefers to locate school tracks on land owned and maintained by PPS.

Once it was determined that there was no suitable alternative for locating the track, the team focused on four options to utilizing the main and parking lot sites. The following pages describe the inquiry and feedback process that led to the recommendation to construct an all-new school for the CHS modernization.



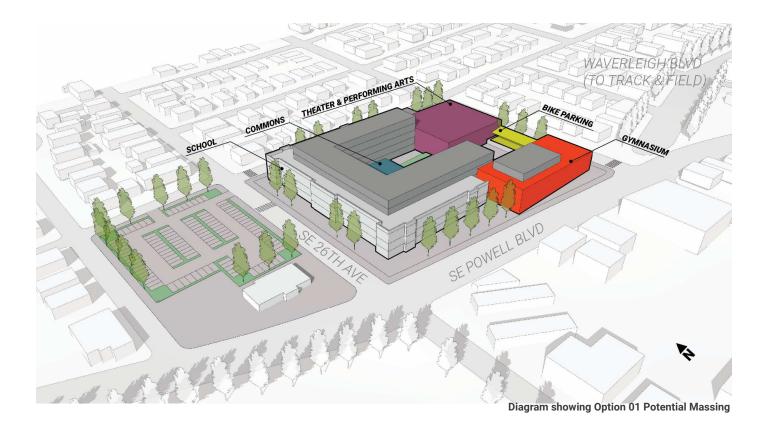
#### **OPTION ANALYSIS**

The comprehensive plan studied four options for the layout of the modernized CHS. Each of these options represented a different permutation of two decisions: to retain portions of the existing building or to build all new, and to build on only one site or to locate a portion of the school on the parking lot site across SE 26th Avenue.

Each of these options offered tradeoffs in size and quality of open space, scale of the building relative to the neighborhood and spaces on the site, the ability to retain historic portions of the existing building, the possibility of saving mature trees on the site, and parking capacity for staff.

Ultimately, Option 02 was recommended as the best direction for the project. The following pages will dive into the challenges and opportunities afforded by each scheme in order to reconstruct the decision making process that led to the recommended scheme.

03-4



#### OPTION 01 ANALYSIS: CONSOLIDATED, RETAIN PORTIONS OF EXISTING

This option proposed to retain 55,000 sf of the existing 1929 CHS building and add onto it with 260,000 sf of new construction space on the main site only. These two decisions raised opportunities and challenges, which will be described in the following paragraphs.

#### **OPPORTUNITIES**

03-5

The primary benefit of this scheme is the preservation of the existing north, west and south facades. Retaining the existing facades would preserve a significant resource in the Portland urban fabric and celebrate the importance of the building in local memory.

Retaining portions of the existing structure would eliminate the embodied carbon required to rebuild the 55,000 sf of structure from scratch.

The consolidated scheme also would ensure the whole student body is located on one site.

Leaving the parking lot site as a parking lot would ensure the greatest number of parking spaces would be available for staff use.

Retaining the existing facades would maintain the existing building scale on the street.

#### CHALLENGES

Cost estimates have predicted that retaining the existing building would cost \$10 million more than the baseline allnew, consolidated scheme.

Retaining the existing building would govern the locations of large building elements and impede opportunities to create a contiguous outdoor student space on the main site.

The existing 'front yards' on SE 26th Avenue and SE Powell Boulevard would remain as unusable outdoor spaces that do not contribute to outdoor student space.

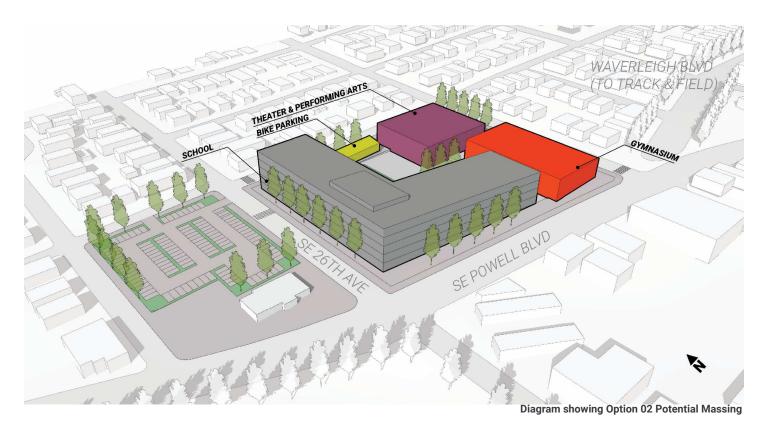
The main entry of the existing building is not currently accessible and cannot be made accessible without significant alterations. Modifying the historic entry would compromise the goal of preserving the existing facade.

Introducing a new main entrance elsewhere on site would be a navigational challenge for visitors, who would naturally be drawn to the existing entry on SE 26th Avenue.

Retaining the existing facades would force the new additions toward the east and into the center of the site. This would reduce the available outdoor space and require that it be surrounded by four or five stories of building on three sides.

#### **TAKEAWAY**

This option was ultimately not selected due to the challenges described previously and above. For a more in depth analysis of the impacts of retaining the existing building, see the Existing Site Fit section later in this volume.



# OPTION 02 ANALYSIS: CONSOLIDATED, ALL NEW CONSTRUCTION

This option proposed to demolish the entire existing CHS building and replace it with an all-new construction school consolidated on the main site. These two decisions raised opportunities and challenges, which will be described in the following paragraphs.

#### **OPPORTUNITIES**

03-6

The primary benefit of this scheme is the flexibility to remake the school with as few limitations as possible. This allows the new layout to make the most of the available square footage on the site by reclaiming the existing setbacks on SE Powell Boulevard and SE 26th Avenue. Consolidating this outdoor square footage creates the opportunity for a large, contiguous outdoor space somewhere on the site.

The flexibility also means that the location of the theater and gymnasium can be dictated by the needs of the school rather than by the available space leftover by the

retained portions of the existing building.

Consolidating the building on the main site would ensure the whole student body is collocated.

Leaving the parking lot site as a parking lot would provide the largest possible parking capacity for staff use.

According to cost estimates, this option is the least expensive of the four options.

#### CHALLENGES

Demolishing the existing building would sacrifice the embodied carbon held within the existing structure and existing facade. Furthermore, this option would result in the loss of the existing facade, which many community members have expressed is an important part of the urban fabric of southeast Portland.

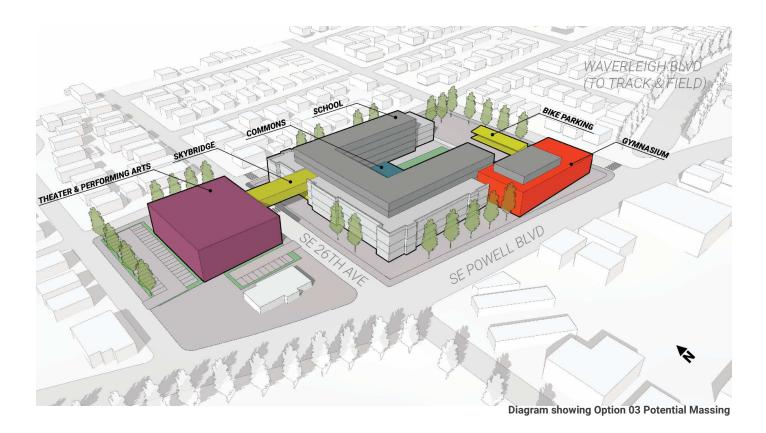
Locating the entire school on one site will result in smaller outdoor spaces and/or a larger building than would be possible if the school was built partially on the parking lot site. A larger building would mean more shaded area in the vicinity of the school, both on the on site outdoor

spaces and in the neighborhood.

The building would also need to carefully resolve how its bulk is perceived on the street level and relative to neighboring residential houses. The existing building's scale would have been smaller, and would not have changed as perceptibly as an allnew construction project.

#### TAKEAWAY

This option was selected due to the opportunities described above. Most of the challenges described here can be resolved during the future design phases.



#### OPTION 03 ANALYSIS: DISTRIBUTED, RETAIN PORTIONS OF EXISTING

This option proposed to retain 55,000 sf of the existing 1929 CHS building and add onto it with 200,000 sf of new construction space on the main site and 60,000 sf of new construction space on the parking lot site. The two buildings would be connected by a skybridge. These two decisions raised opportunities and challenges, which will be described in the following paragraphs.

#### **OPPORTUNITIES**

03-7

Similar to Option 01, this scheme also preserves the majority of the existing 1929 north, west and south facades. The preservation would be less complete, due to the intersection of the new skybridge with the existing west facade.

Also similar to Option 01, retaining portions of the existing structure would eliminate the embodied carbon required to rebuild the 55,000 sf of structure from

scratch.

The distributed scheme would reduce the size of the building on the main CHS site. As a result, there would be a greater opportunity to create a large, contiguous outdoor space for student use on the main site.

Retaining the existing facades would maintain the existing building scale on the street.

A skybridge would be an opportunity to celebrate CHS's presence in the community, and there was some student excitement about the prospect of the bridge.

#### CHALLENGES

Cost estimates have predicted that maintaining the existing building, building a skybridge and building on two sites would cost approximately \$35 million over the baseline of building all-new on only one site.

The introduction of the skybridge was perceived as a logistical challenge by CHS staff. There was also a concern that

the portion of the building on the parking lot site would be disconnected from the rest of the school. The skybridge would also require City Council approval, which is not guaranteed.

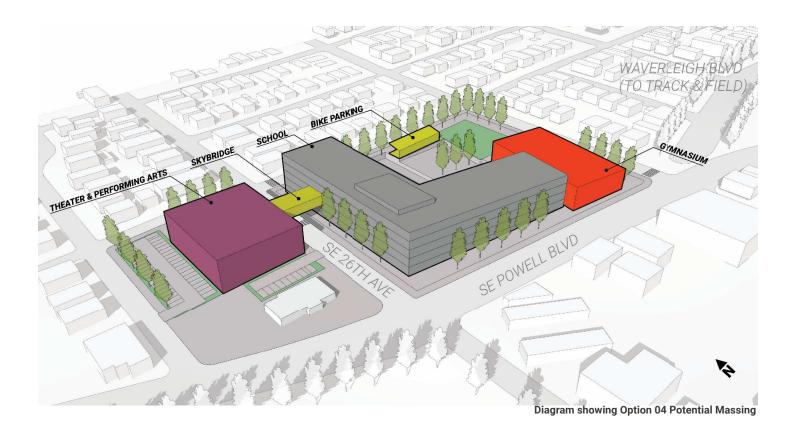
There would be a reduction in parking space counts on the parking lot site if a portion of the school is built there.

This scheme has many of the same challenges described in Option 01 with regard to the entry sequenceif the existing entry facade is retained. However, the skybridge could assist in marking a new entry on SE 26th Avenue.

The existing 'front yards' on SE 26th Avenue and SE Powell Boulevard would remain as unusable outdoor spaces. However, the loss of this space would be less impactful on the site design due to the expansion of the school across SE 26th Avenue and the resulting larger outdoor student space on the main site.

#### **TAKEAWAY**

This option was ultimately not selected due to the challenges described previously and above.



# OPTION 04 ANALYSIS: DISTRIBUTED, ALL NEW CONSTRUCTION

This option proposed to demolish the entire existing CHS building and replace it with an all new construction school, distributed across the main site and the parking lot site. These two decisions raised opportunities and challenges, which will be described in the following paragraphs.

#### **OPPORTUNITIES**

03-8

The primary benefit of this scheme is the flexibility to remake the school with as few limitations as possible. This allows the new layout to make the most of the available square footage on the main site by reclaiming the existing setbacks on SE Powell Boulevard and SE 26th Avenue. Consolidating this outdoor square footage provides the opportunity for a large, contiguous outdoor space somewhere on the main site.

The flexibility also means that the location of the theater and gymnasium can be dictated by the needs of the school rather

than by the available space leftover by the retained portions of the existing building.

Locating some of the building on the parking lot site allows even greater opportunity for outdoor space on the main site. The building on the main site could also be shorter, which might resolve issues with building scale in the surrounding residential neighborhood.

#### CHALLENGES

Demolishing the existing building would sacrifice the embodied carbon held within the existing structure and existing facade. Furthermore, taking this option would result in the loss of the existing facade, which many community members have expressed is an important part of the urban fabric of southeast Portland.

This option would require a skybridge to connect the two buildings, which would need to be carefully studied to avoid unintended consequences for the use of the school, such as isolating certain programs on the second site or causing bottlenecks as students move through the

relatively narrow skybridge. Additionally, the skybridge would require City Council approval, which is not guaranteed.

Cost estimates have predicted that building on two sites with a skybridge could cost approximately \$25 million more than the baseline cost of building on only one site.

There would be a reduction in parking capacity on the parking lot site if a building was constructed there.

#### **TAKEAWAY**

This option was ultimately not selected as the recommended option due to the challenges described previously and above. However, there is sufficient interest to justify further study of a partially distributed / all new scheme in the next design phase.

#### **EXISTING SITE FIT**

The Comprehensive Plan has selected an option that does not retain portions of the existing CHS building. The following section will analyze the conditions on the existing site and reconstruct the thought process that led to this decision.

## UNDERSTANDING THE CONSTRAINTS

The existing CHS building footprint occupies 73% of the site and its configuration leaves minimal outdoor space for student use. The modernization will increase the size of CHS by approximately 25%.

As a means of comparison, the footprint of the modernized Lincoln High School (LHS) would occupy approximately 56% of the CHS main site area. LHS is a six-story building. The modernized CHS will need to be shorter to work with the existing neighborhood context, and thus occupy a larger footprint than LHS.

A primary goal of the modernization is to reintroduce open space for student use on the CHS main school site. At LHS, approximately 37,000 sf of outdoor space is provided for student use, not including the track, field and practice field. To provide an equivalently sized outdoor student use space at CHS, the design would need to devote 21% of the main site area to this purpose.

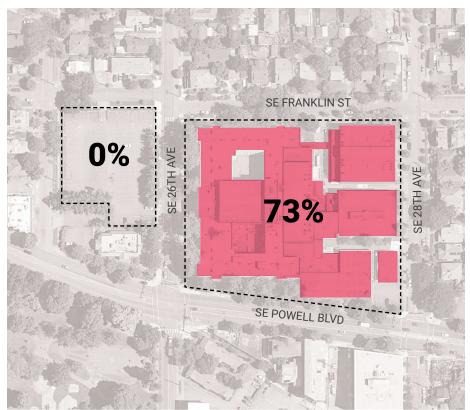
Zoning regulations require a minimum of 20-25% of landscaped area on the main school site. Zoning regulations will also require that the design observe minimum setbacks on the SE Franklin Street and SE 28th Avenue.

The service yard, trash enclosure, and bike shelter will occupy approximately 5% of the main site area. Staff parking will be located off the main site.

#### **TAKEAWAY**

03-9

The modernization of CHS will require significant reconfiguration of the building and site to provide an adequately sized school and outdoor space for student use. Even with these changes, it will be necessary to request zoning adjustments.



Site coverage of the existing CHS main site and parking lot.



Study showing the footprint of LHS overlaid on the CHS main site and parking lot.

#### **EXISTING BUILDING**

#### WHAT COULD BE RETAINED?

In terms of square footage, 70% of the existing CHS is part of the original 1929 building and contributing to historic significance. The additions in the 1950's and 60's are inefficiently organized, do not contribute to historic significance, and have not been identified by the community as important to retain in the modernization. If a portion of the existing building were to be modernized, these additions would be removed.

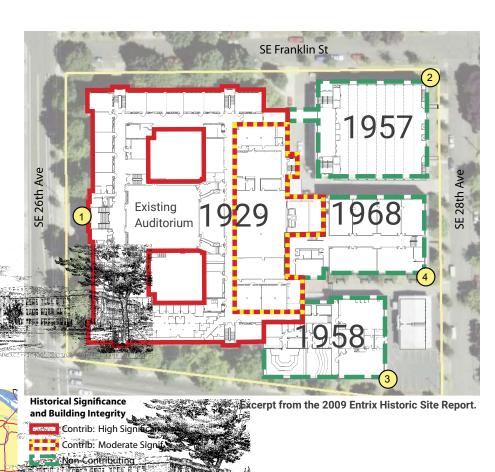
Studies showing the potential renovation of the 1929 Auditorium were recently to the CPC, community, studies school staff. Feedback from these structures indicated that despite appreciation for the Auditorium's historic character, the renovated space could not meet the demands of modern performance education. The modernized CHS will have an all new construction theater and the existing auditorium will be removed.

the historical significance and building integrity of the east side of the 1929 building. With the Auditorium already slated for replacement, maintaining this portion became unviable.

In order to meet the square footage requirements of the Ed Spec, the modernized CHS must be built to a height of up to five stories. (The existing school is only three stories tall). The team's structural engineer found that building on top of the existing structure to increase the height of the school was not feasible. Due to this constraint, only the historic facades on the north, west and south elevations, and one structural bay behind them could feasibly be retained in the modernization.

#### **TAKEAWAY**

A modernization where portions of the existing school remain would only include the outer 'C' shape shown in the adjacent diagram. The area of the portion identified to remain is approximately 55,000 sf, or 30% of the original 1929 construction. This 55,000 sf would make up approximately 17% of the final square footage of the modernized CHS.





Area to be demolished if a portion of the existing school is identified to remain.

# SPACE LAYOUT WITH THE EXISTING BUILDING

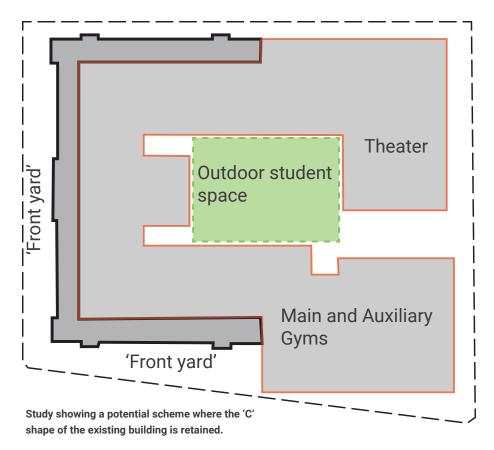
#### UNDERSTANDING THE CONSTRAINTS

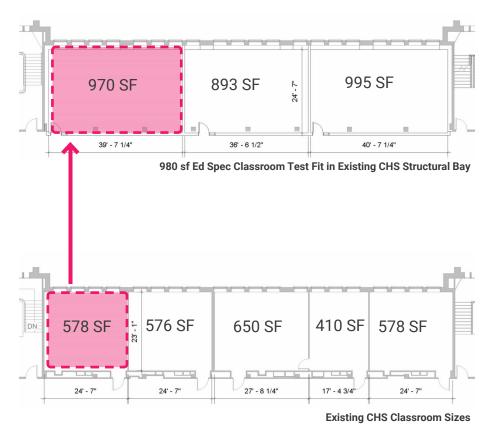
The remaining 'C' shape of the existing building would dictate the spatial layout of the modernization in several ways:

- >Existing floor to floor heights are 13 feet 3.5 inches tall. The existing structural bays are approximately 23 feet deep. This height and bay depth is not appropriate for larger and taller spaces like athletics or performance arts. These larger spaces must be located elsewhere on the site. The remaining 'C' shape could house classrooms and office spaces.
- >Due to the location of the existing 'C' shape, the only on-site locations available for the theater and the gym are on the east side of the site. This forces any open space to the center of the site, where the configuration of the building will constrain the outdoor student space to approximately 10% of the site's area. Note: the LHS modernization devoted the equivalent of 21% of the CHS site's area to outdoor student space.
- >The west and south facades of the existing building are distant from the sidewalk, leaving 'front yards' that are disconnected from the rest of the campus. These 'front yards' account for 10% of the site area, are not required setbacks, and will not contribute to an outdoor student space in the center of the campus.
- >The shallow existing structural bays force standard classrooms to be long and narrow in proportion. While this is advantageous for daylighting, it positions students further from the teaching wall. A more square proportion is preferable for a teaching space.

#### **TAKEAWAY**

The location and configuration of the existing 'C' shape on the CHS main site dictates the location of large program elements and compromises opportunities to create a large, contiguous outdoor student space.





#### **CARBON**

If the modernization of CHS retained a portion of the existing building, all mechanical, plumbing and electrical services would be removed. Most interior finishes would also be removed, with only select elements kept for salvage or protected in place (like wood detailing or stone window sills). What would remain is the concrete structure and some of the exterior walls of the existing building.

Retaining the existing structure would save the embodied carbon of the existing structure and exterior walls, thereby avoiding the carbon emissions of rebuilding these elements.

If the CHS project retains 55,000 sf the original 1929 building, it would result in a savings of 3% of the embodied carbon required for an all new hybrid mass-timber and steel building.

#### **TAKEAWAY**

Retaining the 'C' shaped portion of the existing building saves a small amount of carbon relative to the overall carbon use of an all new hybrid mass-timber and steel building.



An image of Grant High School undergoing its recent modernization.

#### COST

Modernizations of existing buildings are certain to encounter unexpected conditions, which can drive up construction cost and lengthen construction schedules. Cost estimates for schemes that maintained portions of the existing building showed increased costs of approximately \$10 million over the baseline cost of an all-new construction project. Note: this is a roughly 2% increase over the baseline cost.

#### CONCLUSION

After this information was shared with the CPC, community, students and school staff, the majority of responses indicated a preference that the CHS modernization be an all new construction building.

#### COMPARISON OF EMBODIED CARBON IN CONSTRUCTION TYPES



3% Additional Reduction when reusing outer classroom bay of 1929 building (55,000sf)

MAHLUM | Studio Petretti

# MEETINGS AND COMMUNITY EVENTS

The Comprehensive Plan process consisted of a number of meetings and community events to gather feedback and share progress. The following pages will provide a narrative of the Comprehensive Plan process by summarizing the events of each meeting.

#### LIST OF MEETINGS:

- > CPC 01
- > CPC 02
- > CPC 03
- > CPC 04
- > CPC 05
- > CPC 06
- > Public Workshop 01
- > Public Workshop 02
- > Public Workshop 03
- > Staff Workshop 01
- > Staff Workshop 02
- > Student Leadership Class
- > CHS Architecture Presentation



## **CHS - Comprehensive Planning Committee**

Meeting Schedule:

CPC#1 October 4th, 2023 CPC#2 November 2<sup>nd</sup>, 2023 Community Workshop November 4th, 2023 December 5<sup>th</sup>, 2023 CPC#3 CPC#4 January 18th, 20234 Community Workshop January 20th, 2024 February 15th, 2024 CPC#5

CPC#6

March 14<sup>th</sup>, 2024

CHS - CPC #1 - October 4, 2023

**CPC 01** 

Date: October 04, 2023

Location: Cleveland High School Library

**Topic: Introduction** 

Presentation Slides Link

The first Comprehensize Plan Committee (CPC) meeting introduced the team and provided context on the CPC's tasks and goals. The bond measure was explained and an overview of the larger context of the design phase was given.

After a review of the findings from the 2019 Conceptual Masterplan, a history of the costs of previous modernizations were shared to contextualize the estimated cost of the CHS modernization project.

The tasks for the CPC were to analyze all possible site alternatives to understand cost, schedule, risk and opportunities. The overarching goal was to work toward one preferred scheme to pursue in the next design phases.

The CPC's effort would be informed by community engagement and bolstered by community workshops, a general survey, focus groups, the PTA and more.

Visioning activities focused on defining success for the project and community engagement ideas were employed to help ground the process in a shared language.



CPC 02

Date: November 16, 2023

Location: Mahlum Architects

Topic: Context and Facts

Presentation Slides Link

The team provided information to orient the CPC to the opportunities and challenges of the three PPS-owned sites that Cleveland occupies. Recent news and information enabled the design team to communicate to the CPC that the Fred Meyer / Kroger site was not for sale and would not be part of the studies in the Comprehensive Plan process.

The presentation explained that the design team would be gathering information from school-based groups (such as students, athletics, and specialized programs), the general pulic (via Public Design Workshops), and focused community engagement (such as affinity groups and community-based organizations that support CHS families, led by After Bruce).

The design team shared opportunities and challenges of the three PPS-owned sites and invited the group to add to the analysis. The CPC asked for more information related to the other PPS high schools (population, density, locations students are traveling from) and the Ed Spec (amount of space devoted to athletics, amount of space devoted to non-student uses).



CPC 03

Date: December 5, 2023

Location: Cleveland High School Library

Topic: Opportunities and Trade-Offs

Presentation Slides Link

The meeting started with a land acknowledgement that was written by CHS students, followed by an update on the community-based engagement process.

The team then walked through the PPS Ed Spec and how it had been met in very different projects (i.e. Lincoln and Grant). The team demonstrated how the

entire Ed Spec program could fit on the main CHS site, with tradeoffs. Specialty consultants provided more insight into how the existing 1929 building might be retained. This included salvaging and reusing components, modernizing the entire historic structure, or doing a "facadectomy" by retaining the outer walls and creating a new structure within them. The team also presented the tradeoffs related to remodeling the existing theater or replacing it.

The design team shared that there is no viable option for relocating the track and that the only viable sites for the CHS building program are the existing main building site and parking lot site. There is not sufficient space to place the entire new building and the track on the existing track site.

The design team communicated that they would proceed with studying options to place the school on the main and parking lot sites.



**CPC 04** 

Date: January 25, 2024

Location: Cleveland High School Library

Topic: Comprehensive Plan Options

Presentation Slides Link

The team shared CPC and community feedback from the activities in CPC 03 and Public Workshop 01. When asked about having a taller building with more ground level outdoor space (i.e. courtyards and lawns) compared to a shorter building that would take up more ground space, all three groups strongly

agreed that a tall building was a better choice.

The feedback was not definitive on whether to retain portions of the existing 1929 building. Input was definitive that a new facility to replace the existing Auditorium was preferred.

The team presented four site options that combined the site givens and opportunities. The options showed how the PPS Ed Spec program could be organized on one or two sites, with or without retaining portions of the 1929 building. Each option bundled a series of trade-offs. Building on two sites allowed more ground level open space, but cost more. Retaining the existing 1929 building allowed the existing building scale/character and more trees to remain, but limited where the rest of the buildings can be located on site.



**CPC 05** 

Date: February 27, 2024

Location: Cleveland High School Library

Topic: Evaluation and Recommendation

Presentation Slides Link

The design team reviewed feedback from the CPC, student body and Public Workshop, who were all in favor of replacing the existing building but less definitive on the issues of building on both sites and open space character.

The design team presented new diagrams explaining that only 55,000 sf (or 22% of the 1929 building) would be retained if the existing building were modernized.

The team shared that the recommended direction for the modernization was to build an all-new school, consolidated on one site. This option carried the lowest risk of all options while allowing flexibility to reorganize the site. Option 04, the all-new school distributed on two sites came at a higher cost, but was mentioned as a scheme that could be studied in the upcoming design phase.

The design team shared studies of the parking lot, which compared parking counts if the site were a surface lot with parking counts if the site had a 60,000 sf building on it.

The CPC reviewed activity boards showing different site configurations for the distributed and consolidated schemes, climate response concepts for modern sustainable buildings, and site layout options for the field site.



CPC 06

Date: March 21, 2024

Location: Mahlum Architects

Topic: Refinement

Presentation Slides Link

The meeting began with an overview of the PPS bond budget from Erik Gerding, who explained the context of the CHS modernization within the larger landscape of the upcoming school improvement bond.

The team then shared a list of community groups who had been involved in listening sessions over the course of the comprehensive plan and key themes for the future of CHS.

The results of the digital survey were also shared. The feedback from the survey indicated over 80% of the respondants prefered to build a new building.

The design team shared a developed recommendation for the layout of the school, and went into detail regarding the program layout within it.

Based on the interest level in the distributed scheme at CPC 05, the team will continue to consider an option to decant some of the building to the parking lot site, connected by a skybridge.

Several options were also presented for the field site, analyzing different scenarios for the placement of the field house, bleachers, and practice field.



DESIGN WORKSHOP 01 Date: December 16, 2023

Location: Cleveland High School Cafeteria

Presentation Slides Link

Over 65 members of the community attended: current and future students and parents, staff, neighbors, business owners, Principal Jo Ann Wadkins, and Board Representative Julia Brim Edwards.

The team shared an overview of the Comprehensive Plan process and provided some context about the

definitions of a modernization and an Educational Specification.

After an explanation of the community engagement process, the design team presented a draft vision and goals slide. The community was invited to provide feedback that would be incoporated into the final statements. The comments included a desire to address student safety, to acknowledge climate change and resiliency, and to enhance the goals surrounding CHS as a community asset and welcoming environment.

Specific feedback included requests for areas that can be shared with the community, lots of natural light and greenery, improved circulation around the school, and safer pedestrian crossings.

The design team provided an analysis of the existing building as well as an explanation of some of the opportunities and tradeoffs of keeping the existing building.



DESIGN WORKSHOP 02 Date: February 3, 2024

Location: Cleveland High School Cafeteria

Presentation Slides Link

The public workshop began with an introduction and a review of the first public workshop in December 2023.

The design team then shared studies of the existing building which tested how 980 sf general classrooms might fit into the existing structure. An explanation of PPS's District Policy on Climate Crisis Response, Climate Justice and Sustainability Policy was also given, in order to contextualize the importance of mitigating the embodied carbon use in the modernization.

The design team explained the different ways the existing building might exist in the community's consciousness; from appreciation of the old architecture to a representation of systemic or social injustice.

Afterwards, the team shared an explanation of why the existing CHS site is the only option for the location of the school. Finally, the team shared the four options demonstrating the permutations of retaining the existing building or building all new and building on two sites or building on only one site.



DESIGN WORKSHOP 03 Date: March 16, 2024

Location: Cleveland High School Cafeteria

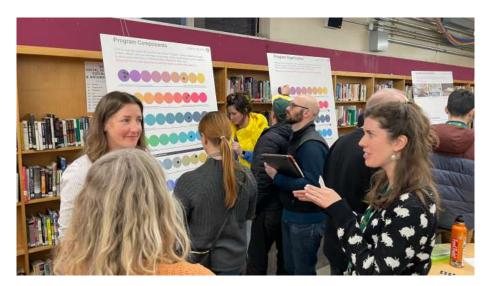
Presentation Slides Link

The meeting began with an overview of the bond process and CHS's place in the larger picture of the district's modernization effort.

After a brief overview of the Comprehensive Plan to date, the design team summarized the constraints of the CHS site. These constraints helped to tell the story of how the team had reached the decision to recommend the demolition of the existing CHS.

Studies showing the development of the all-new consolidated scheme were shared before beginning a listening session activity.

Community members cycled through a series of stations where design team members facilitated discussion around a series of topics: parking, field site layouts, building expression, embodied carbon, building massing and the student experience.



STAFF WORKSHOP 01 Date: January 2nd, 2024

Location: Cleveland High School Library

The meeting began with an overview of the Comprehensive Plan process and a review of the 2019 Conceptual Master Plan.

Afterwards, the team defined the terms modernization, Comprehensive Plan, and Education Specification to provide context of what was planned for CHS.

Next, the design team explained the community-based engagement process that would help to guide the Comprehensive Plan and future design phases.

The design team described the existing building and the opportunities and tradeoffs associated with retaining portions of it in the modernization.

Studies of a renovation of the auditorium as well as comparisons of different general classroom sizes across the district were shared to give the staff an understanding of possible ways to reuse the existing building.

Studies showing how the modernized school might fit on the existing CHS site were shared to demonstrate the parameters the new school must work within.



STAFF WORKSHOP 02 Date: February 6, 2024

Location: Cleveland High School Library

The workshop began with a review of the first staff workshop and an overview of the Comprensive Plan progress to date. This introduction covered some of the feedback received from the CPC, school-based and public workshops.

Spectrum studies were shared, which explained the preferences collected from each of the other community groups

involved in the process.

The design team then shared the four site layout options exploring whether to retain existing or build all new, or to build on two sites or only on one.

Each of these options was presented with an estimated cost to give more context.

The attendees then proceeded to the activity boards where they were able to leave feedback on site layout and other priorities for the design.

#### STUDENT LEADERSHIP CLASS

Date: February 20, 2024

Location: Cleveland High School Library

#### HOW DO YOU NAVIGATE CHS NOW?

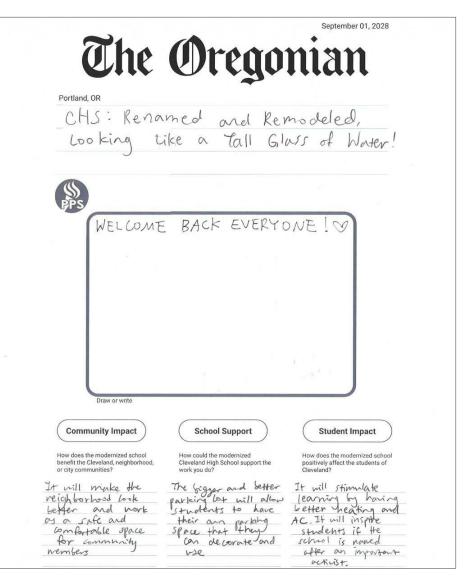
CHS students helped the team understand what it is like to inhabit CHS. They drew diagrams showing their path of arrival to the campus, then drew their route within the building on a given day. Their stories pointed out long/circuitous routes, a bottleneck between the 1929 and 1968 wings, and a lack of places to hang out.



#### WHAT STORY WILL WE TELL?

Groups of students created headlines to tell the story they hope will be told on a future opening day for CHS. Ideas included "Cleveland High School Claims Best Library in PPS," "Cleveland Unveils Biggest Sports Complex in Oregon," and "Lowest Carbon Impact across all PPS Schools!" Other interests were a pool, an indoor track, and keeping the pipe organ. Students also shared a desire that the modernized school will get a new name, one that better represents its community.





### STUDENT LEADERSHIP AND CARE LEADERSHIP CLASSES

The design team was invited to work with the Leadership and CARE Leadership classes. They started by presenting the CHS Modernization process and provided a lesson on sustainability in buildings. Before sharing the current design progress, they asked students to brainstorm what stories they would like to tell about the modernized school when it opens. After explaining the four site options, students were invited to provide feedback on each option. A selection of their comments are shown to the right. Their input on the critical questions spectrums is shown in the Executive Summary.

The skybridge is useless

I like blocking Powell

Greenspace should be used for campus lunch and outdoor time.

You have no idea how badly I want a skybridge.

Cool. New building:)
No parking:(

Affinity and leadership club space...build community

Courtyard with open space would be nice for outdoor seating that kids could eat lunch at. A lot of kids eat on the floor right now.

## CHS ARCHITECTURE PRESENTATION

Date: March 20, 2024

Location: Cleveland High School

Auditorium

While some CHS students took the SAT this Spring, students whose classrooms were being used as testing sites had the opportunity to learn more about architecture. The design team presented to eight class periods over the course of the day. They shared information about the Mahlum and Studio Petretti offices, what an architect does, and the career pathways to become an architect, interior designer, or construction trade worker. At the end of the session, the team gave students a glimpse into the current design process and invited them to take the PPS survey (see Appendix Vol 3). Students were very interested in exploring the design options.



