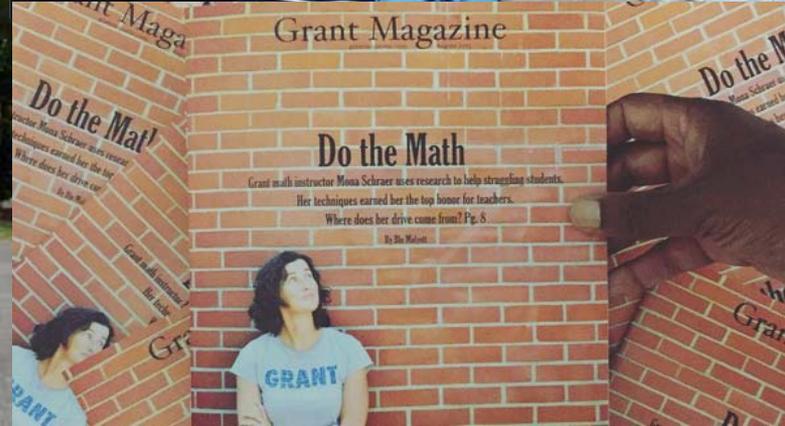


mahlum

Schematic Design OPEN HOUSE
Grant High School Modernization
05.26.16



Grant Bond Website

Bond (School Building Improvement Bond)

Department Main Page

Bond videos

- Community Oversight
- Get Involved
- Student Engagement
- Faubion
- Franklin
- Roosevelt
- Grant**
- Benson Master Plan
- Lincoln Master Plan
- Madison Master Plan
- Summer Projects
- Seismic
- Accessibility
- Roof Replacement
- Doing business with PPS
- Bond Board Resolutions
- FAQ's and Bond History
- Bond Events Calendar

Home > Departments > Bond (School Building Improvement Bond) > Grant

Grant Modernization

5/43 Grant High Public Engagement 3-14-16

Ted Wolf
Community Member

Grant High School is one of 3 PPS high schools being modernized as part of an 8-year \$482 million school building improvement bond. Grant's modernization will completely reconfigure and update learning spaces with a focus on indoor environmental quality, sustainability and historic preservation. Learn more about Grant High School here. The planning for the modernization of Grant began in the fall of 2015 and construction is scheduled to begin in summer 2017 and last 2 years. Students are scheduled to returned to a Modernized Grant in the fall of 2019.

[The Grant Schematic Design Open House is Thursday, May 26th 5:30-7:30p.m. in the Library | in Español](#)

[View the Grant preliminary Master Plan concept video here](#)

[View the Grant Modernization flver | in Español](#)

www.pps.k12.or.us/bond/grant

Today's Agenda

Project Overview
Listening Stations

Project Overview

Team Introductions

Process & Schedule

SDWS 1 Shareback

SDWS 2 Shareback

Schematic Design Development

Overview of Today's Listening Stations

Project Overview

Team Introductions

Process & Schedule

SDWS 1 Shareback

SDWS 2 Shareback

Schematic Design Development

Overview of Today's Listening Stations

Portland Public Schools

:: Michelle Chariton, *Project Director*

:: Kristie Moore, *Project Coordinator*

Design Advisory Group (DAG)

:: Carol Campbell, *DAG Chair Elect*

:: Abby Williams, *DAG Co-Chair Elect*

:: Pam Knowles, *Elected Official*

Andersen Colas Construction (CM/GC)

:: Andrew Colas, *Project Executive*

:: Erin Storlie, *Sr. Project Manager*

:: Marc-Daniel Domond, *Project Manager*

:: Emily Hager, *Sr. Estimator*

:: Dan Bott, *Sr. Superintendent*

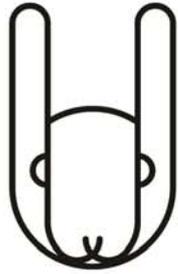
Design Team

- :: Mahlum, *Prime Architect*
- :: Mayer/Reed, *Landscape Architect*
- :: Balheizer & Hubbard, *Civil Engineering*
- :: KPFF, *Structural Engineering*
- :: Interface, *Mechanical, Electrical, Plumbing, Security*
- :: Peter Meijer Architects, *Historic Preservation Architect*
- :: PLA, *Theater Design*
- :: Halliday, *Nutritional Services*
- :: Greenbusch, *Acoustics, Audio/Video, Vertical Transportation*
- :: Morrison Hershfield, *Envelope Consultant*
- :: Karen Braitmayer, *Accessibility Design*
- :: Angelo Planning Group, *Land Use Planning*
- :: Rider Levett Bucknall, *Cost Estimation*
- :: APEX, *Environmental Consultant*

DAG



PM 6:49 APR/28/2016

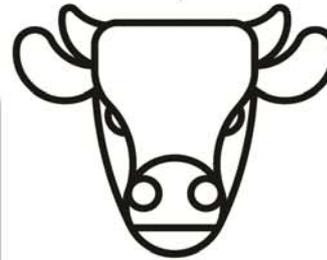


I feel very good about the **results of the auditorium**. It was my main mission to ensure that it was not demolished and restored to be modern. I am so happy that everyone has been able to come to an agreement. We took it above and beyond by adding light lock.

I love being the pioneer for the **gender inclusive restrooms**. It is very fitting for our character.

I learned a lot: process, budget, importance of multiple perspectives. **I championed the CTE spaces and equity**. Challenges are: working with groups with different priorities. Most proud of the entire project. I'm excited about everything :)

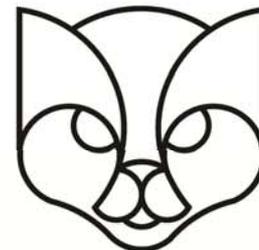
Great that we have pathways east-west and north-south! **Happy that the pathway across fields was incorporated into the plan!** Great green spaces, athletics, amphitheater, public use & school use.

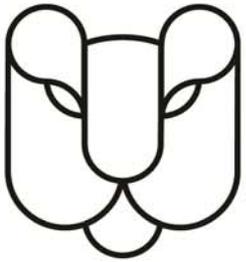


These forum spaces will be used a lot! **Small rooms will make students feel more comfortable.**



Keeping sports on campus! **Girls can play at their school.** The band could play at their games! Woo!





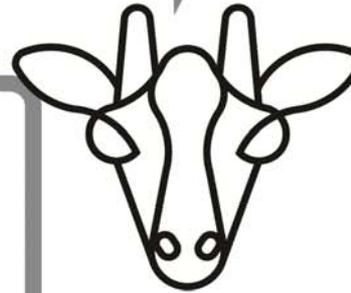
The space in front for the **beautiful old gym** to breathe!

The open space **entry is very inspiring to me.** I love the artistic stairways.

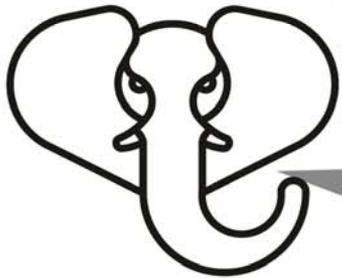
Yea! **Two ramps** at the main entries!

Great input from the public and DAG on the auditorium!

Really excited about this maker's space!

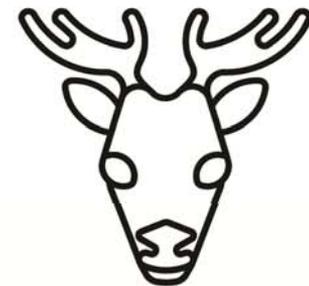


I came in more concerned about public engagement and process rather than any particular design element. **I would have pushed for CTE but really didn't need to.** I think the process has been very collaborative.



Love the **track gallery** idea in the Arts Complex!

Community partner at the kiosk!



SCHEMATIC DESIGN OPEN HOUSE

How have you positively impacted the modernization of Grant High School?

mahlum



Project Overview

Team Introductions

Process & Schedule

SDWS 1 Shareback

SDWS 2 Shareback

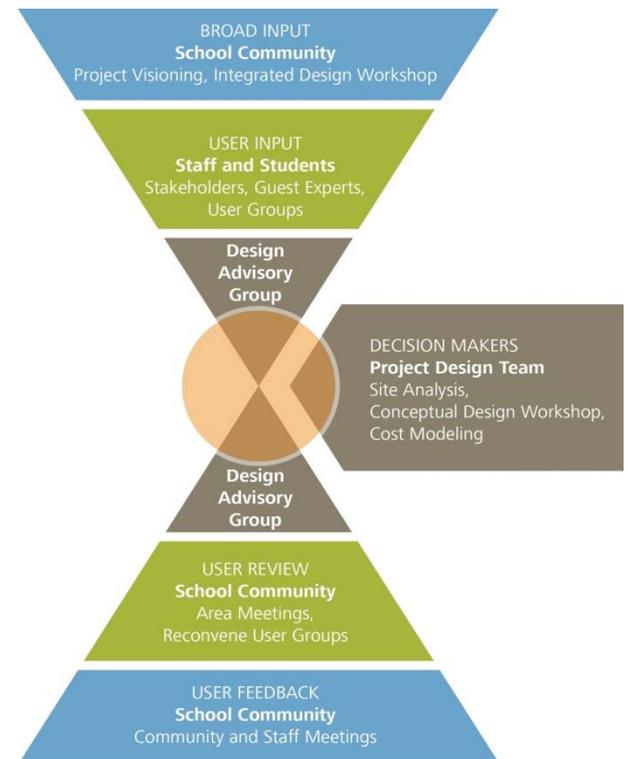
Schematic Design Development

Overview of Today's Listening Stations



Contributing Voices

PPS Board of Education
Stakeholder Cohorts
Design Advisory Group
Guest Experts
Students
Parents
Community





Stakeholder/DAG/Community Input to Date

47 Stakeholder & All Staff Meetings

9 DAG Meetings

5 Community Workshops/Open House (average 100+)

+ Countless Student Engagement Events

+ PTA & Board Meetings

+ School Tours

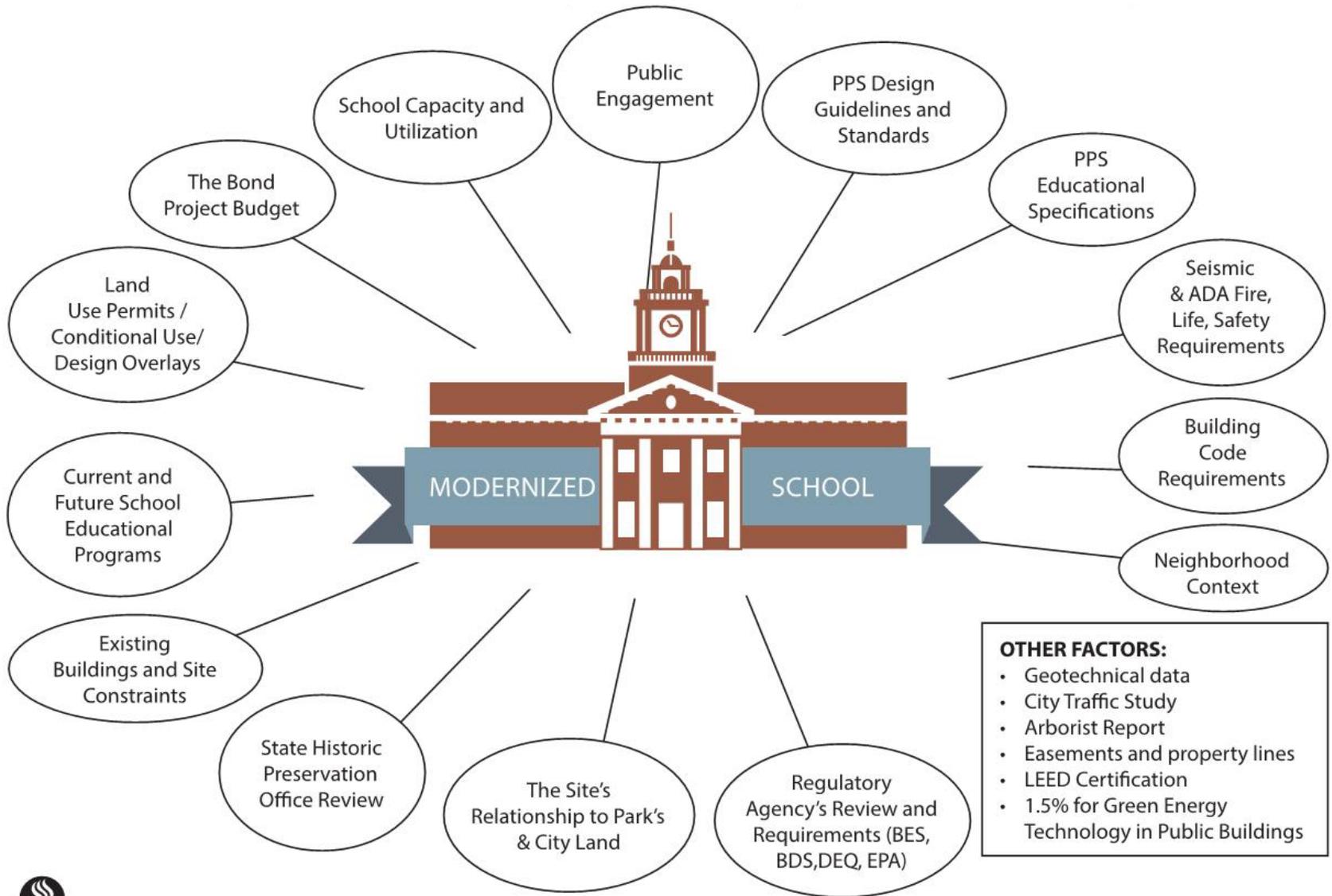


Schedule

DAG 01	Sep 09	S.I.B.C. Meeting	Dec 08
DAG 02	Sep 24	School Board	Dec 15
DAG 03	Oct 08	DAG 06	Dec 16
School Tours	Oct 23	SD Workshop 1*	Jan 09
MP Workshop 1*	Oct 24	DAG 07	Jan 21
DAG 04	Nov 05	DAG 08	Mar 03
MP Workshop 2*	Nov 07	DAG Thank You	Mar 04
DAG 05	Nov 19	SD Workshop 2*	Mar 05
MP Open House*	Dec 03	DAG 09	Apr 28
		SD Open House*	May 26

*Community Focused Meetings

Additional Factors Influencing Design



Budget

Construction

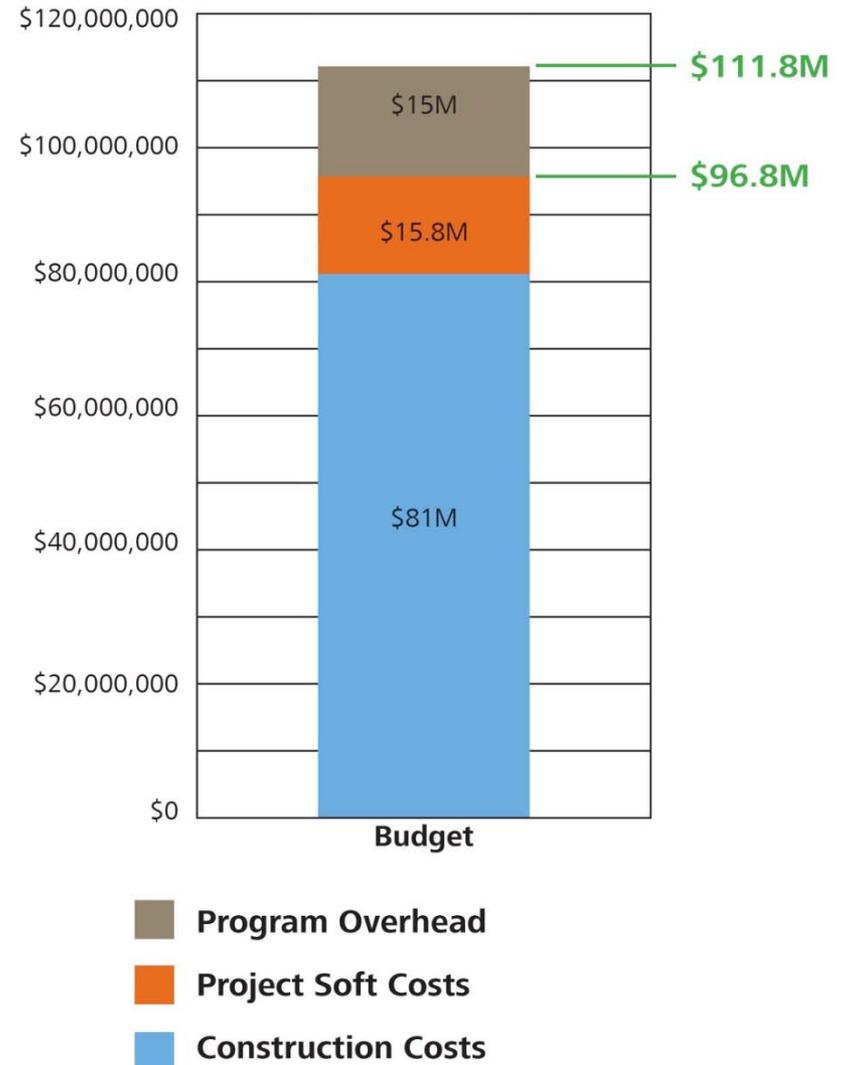
- Historic preservation
- Modernization “Sticks & Bricks”
- Site improvements
- Offsite improvements
- Design contingency
- Hazmat removal

Project “soft costs”

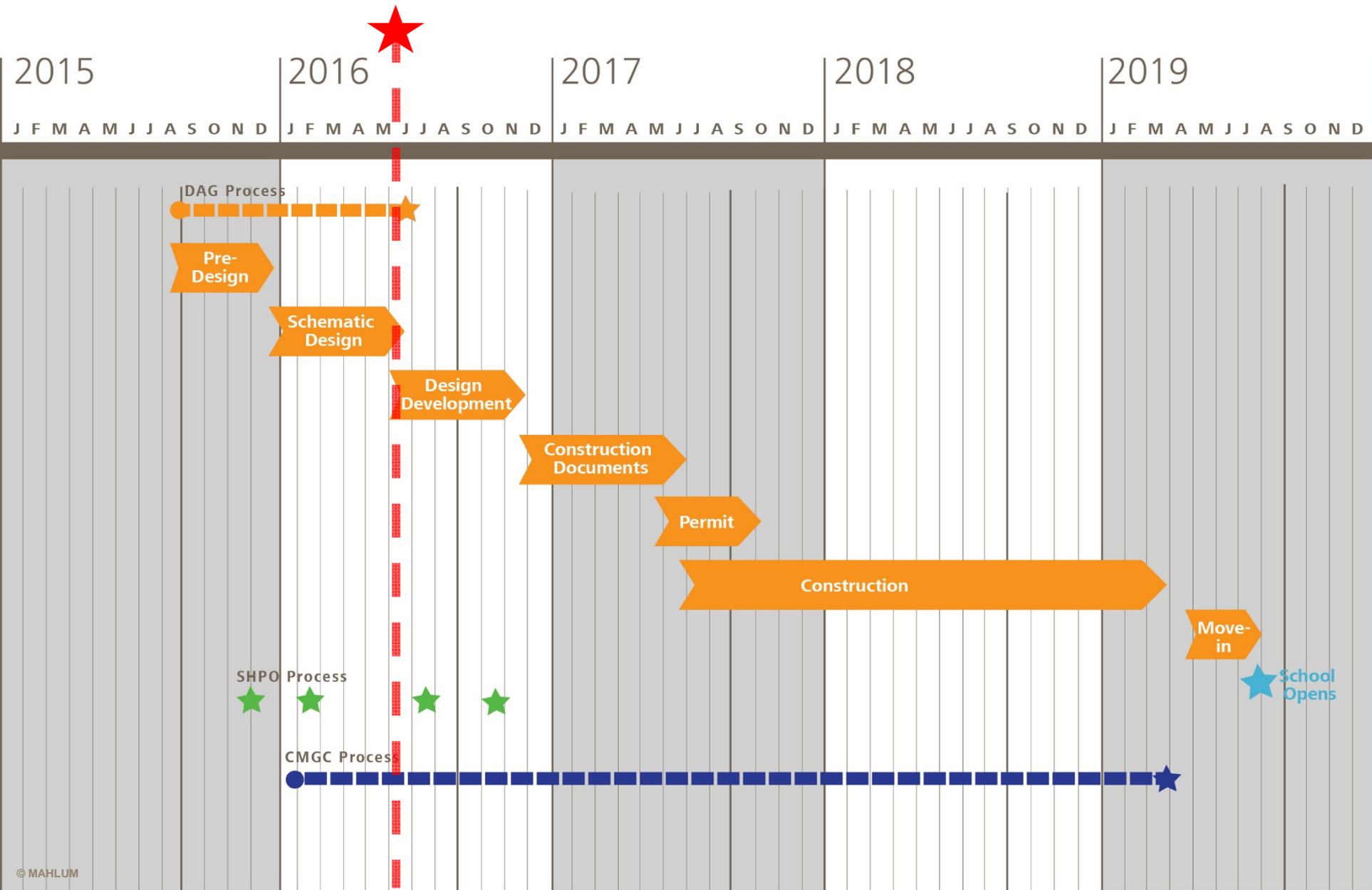
- New furniture and equipment
- Classroom technology
- Network and phones
- Professional services
- Permit and utility fees

Program cost

- Escalation
- Project contingency
- Project management
- Owner held insurance



Project Schedule



Project Overview

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SDWS 1 Shareback

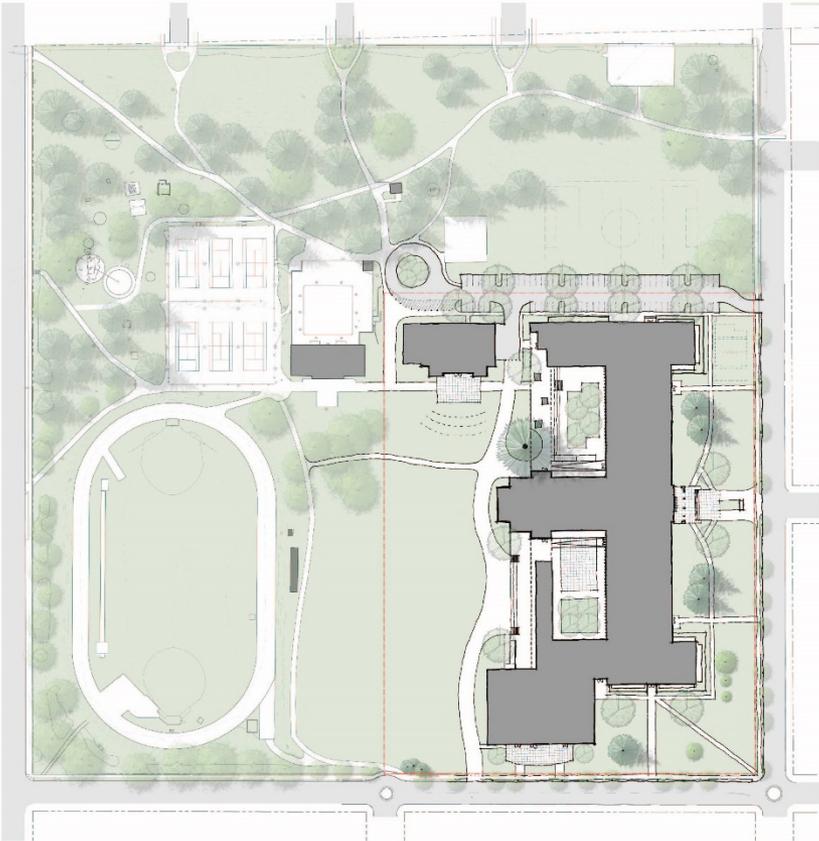
SDWS 2 Shareback

Schematic Design Development

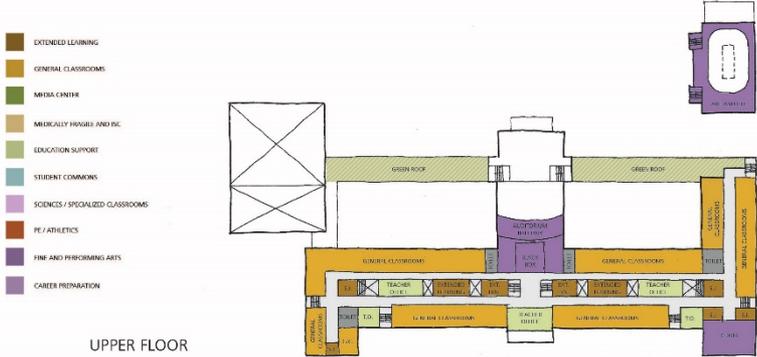
Overview of Today's Listening Stations

Group Activity 01

SITE CONCEPT



BUILDING CONCEPT AND MASSING



Positive Aspect & Why?



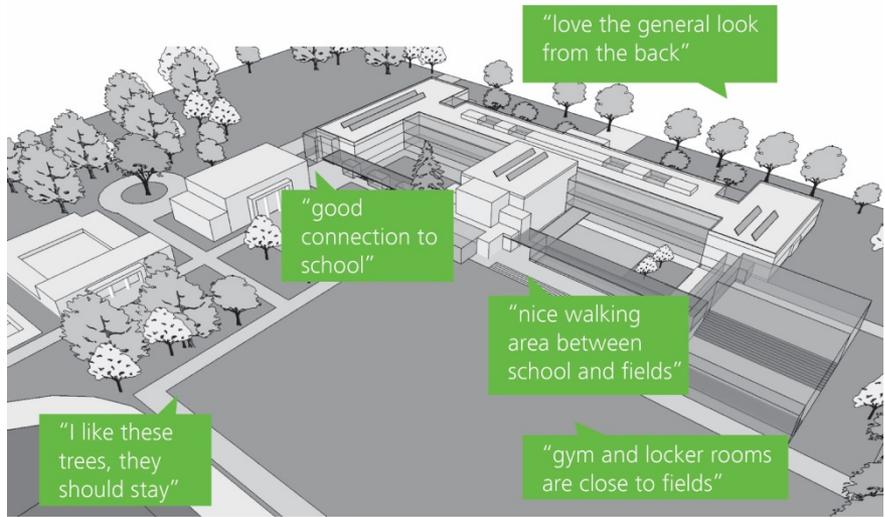
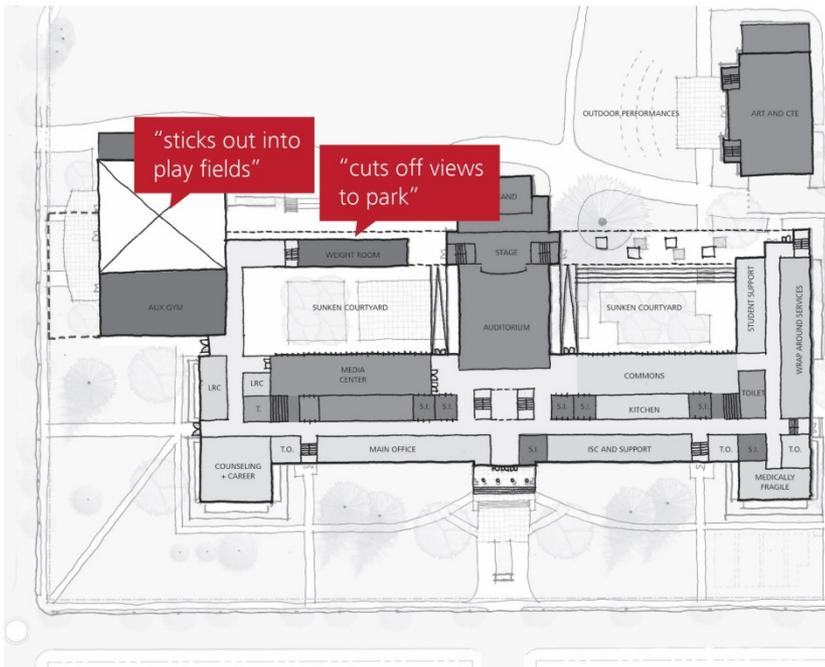
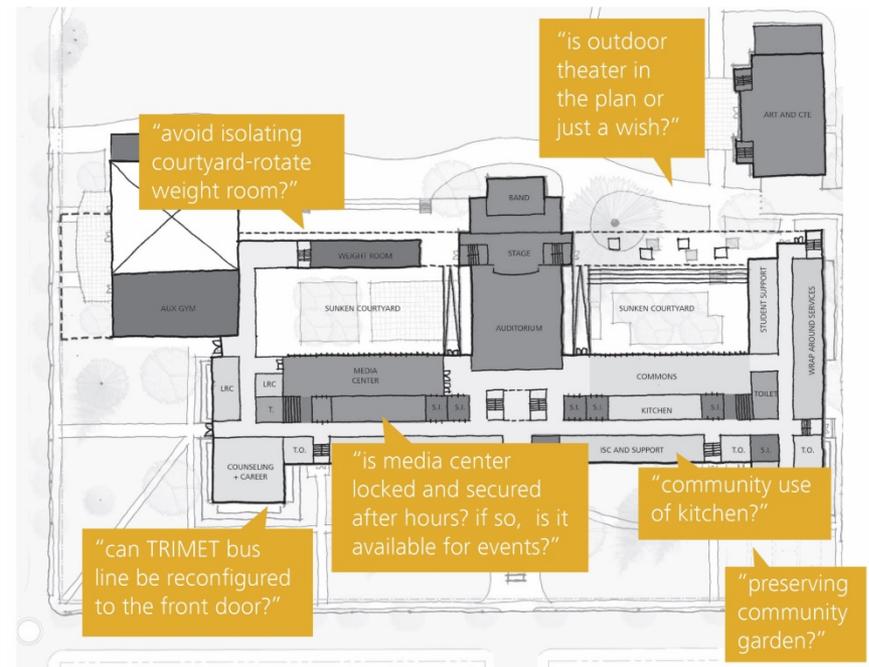
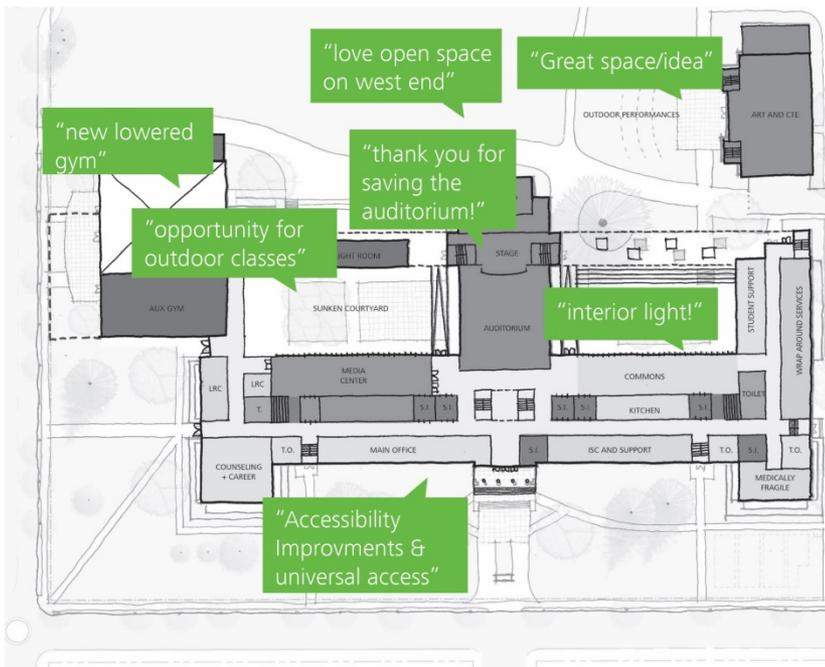
Negative Aspect & Why?



What do you want to know more about?



AM11:02 JAN/ 9/2016



Group Activity 02

Design Advisory Group Mission



The Grant High School modernization will result in an inclusive learning environment that fosters strong, productive relationships among students, teachers, and the community through inspiring, flexible spaces that honor the history while supporting students' success in college, career, and life.

From Broad Goals to Actionable Items

Use this goal and the masterplan concept to generate 3-5 specific features, activities, or programs. If we were to achieve this statement, what would the school look like? How would Grant operate?

1

Sustain a student-centered approach, where all learners feel connected by celebrating diversity and inclusion

Transformational Idea



Must Do



Low Hanging Fruit



SCHEMATIC DESIGN WORKSHOP 1

Design Advisory Group Goals

Together, the DAG prioritized their top ten goals from a bucket of about 200. From there, the community added their comments and ranked these from one to ten, and stakeholders voted. Here are the results based on the average.

- TIE
- 1 Sustain a student-centered approach, where all learners feel connected by celebrating diversity and inclusion
 - 2 Design a building to inspire learning, to serve as a place of possibility
 - 3 Support the educational mission of Grant with a variety of flexible study & project spaces that anticipate future needs
 - 4 Accommodate diverse teaching & learning styles to facilitate strong relationships
 - 5 Create state-of-the-art facilities for all disciplines *
 - 6 Focus on college and career readiness, preparing students to enter the workforce as positive contributors of society
 - 7 Blend indoor and outdoor spaces to enhance quality of learning environment and deepen our connection to nature
 - 8 Build the school as the heart of the community through services, opportunities, and recreation
 - 9 Provide a variety of spaces to gather, eat, and hangout throughout the campus
 - 10 Honor the rich history of Grant by preserving architecturally and culturally significant features

At the top, all agreed that the school should be student centered, inspiring, celebrating diversity and inclusion. *Stakeholders felt strongly that all disciplines should have state-of-the art facilities.



AM11:33 JAN/ 9/2016

From Goals to Action Items



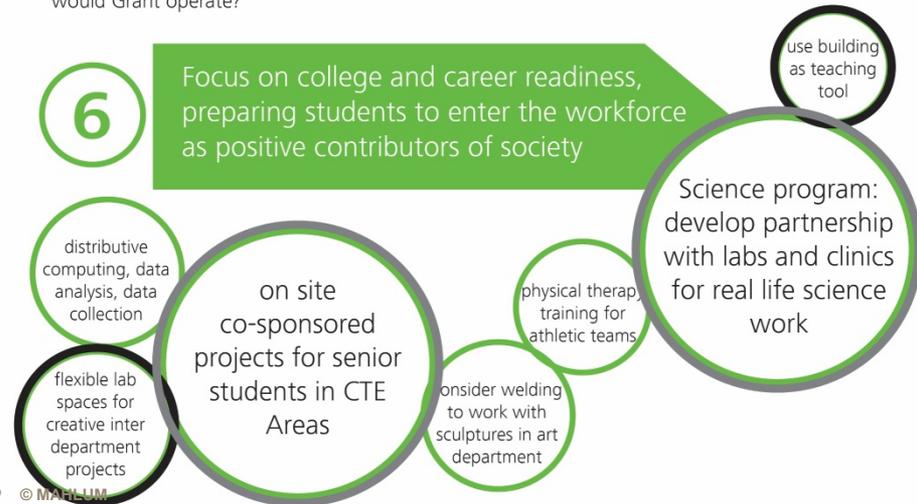
We asked community members to generate specific features, activities, or programs from each goal. If we were to achieve this statement, what would the school look like? How would Grant operate?



From Goals to Action Items



We asked community members to generate specific features, activities, or programs from each goal. If we were to achieve this statement, what would the school look like? How would Grant operate?



From Goals to Action Items



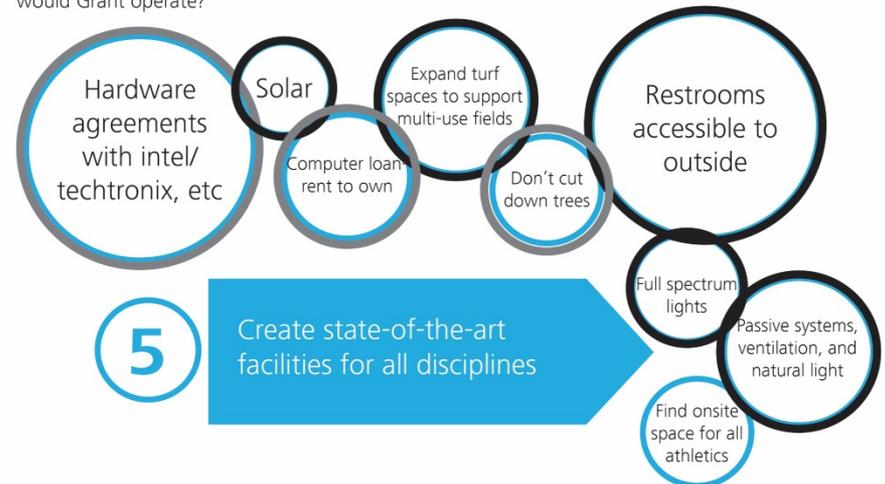
We asked community members to generate specific features, activities, or programs from each goal. If we were to achieve this statement, what would the school look like? How would Grant operate?



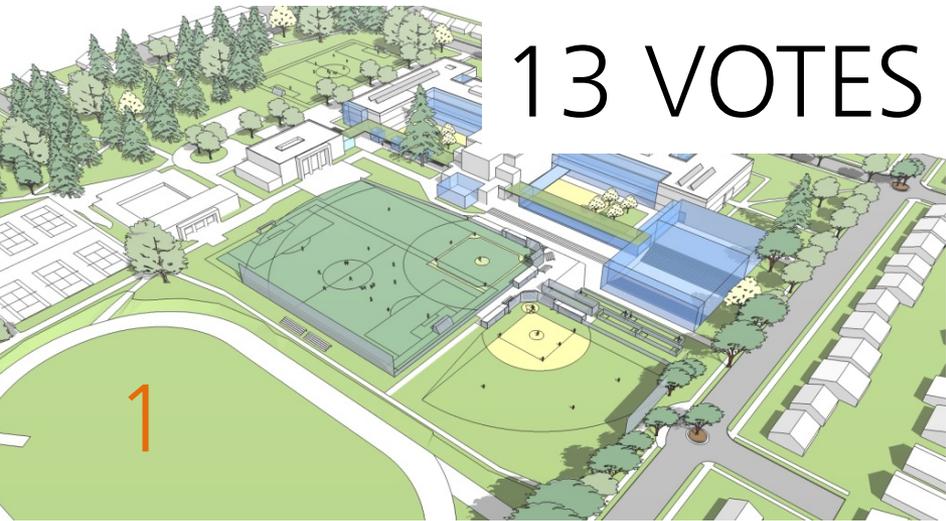
From Goals to Action Items



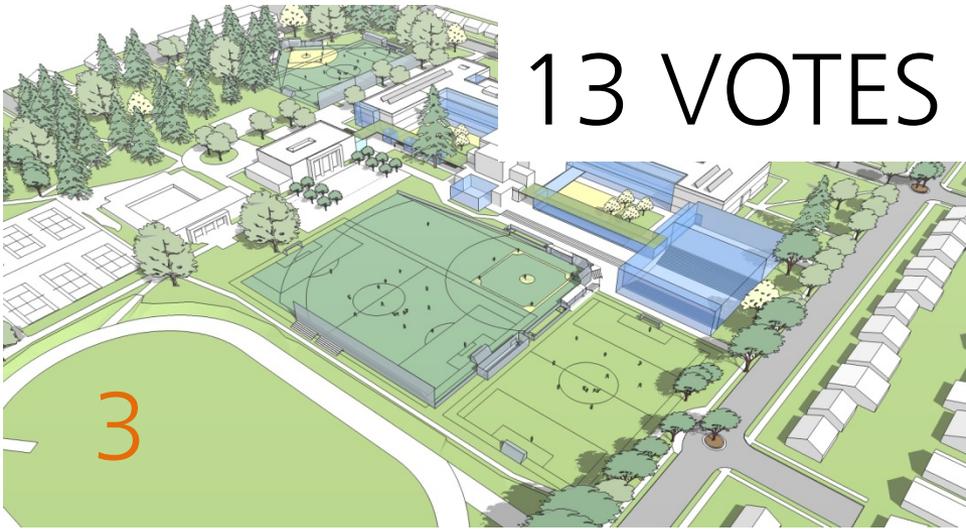
We asked community members to generate specific features, activities, or programs from each goal. If we were to achieve this statement, what would the school look like? How would Grant operate?



Group Activity 03



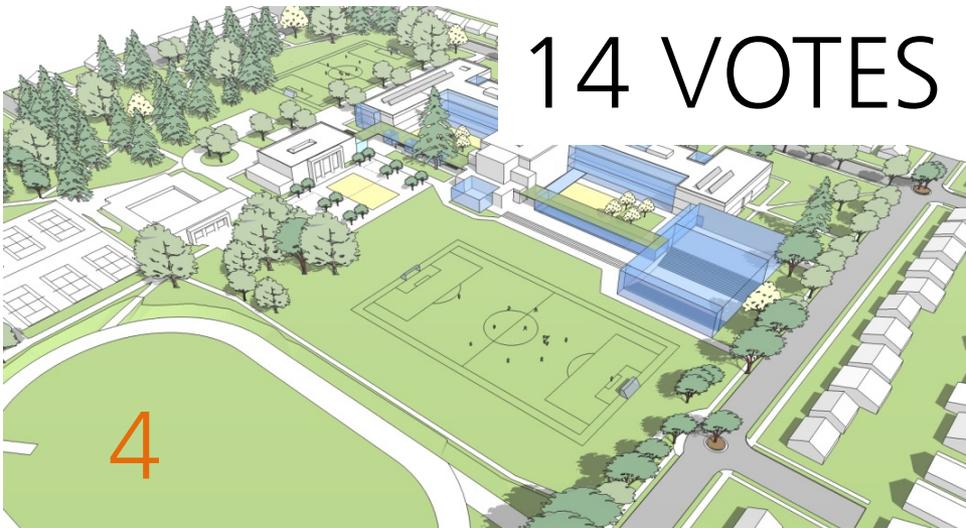
13 VOTES



13 VOTES



4 VOTES



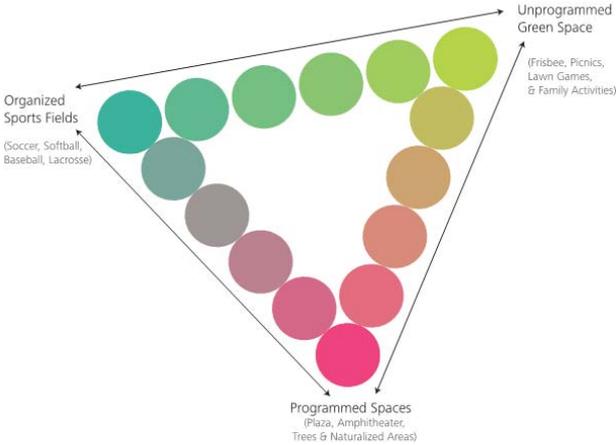
14 VOTES



Group Activity 04

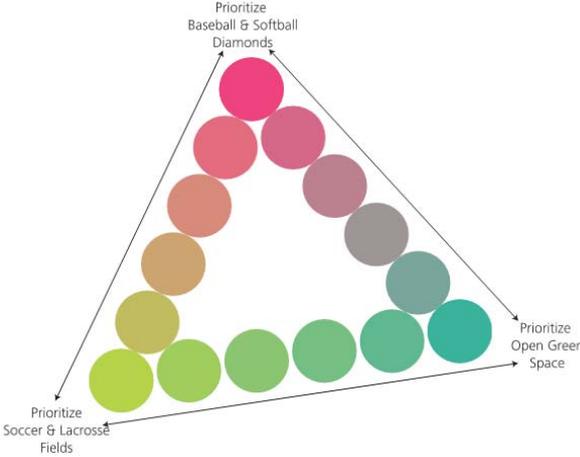
If there was one site configuration that **best supported the community...**

Place one dot on the triangle to indicate where you fall on the spectrum.



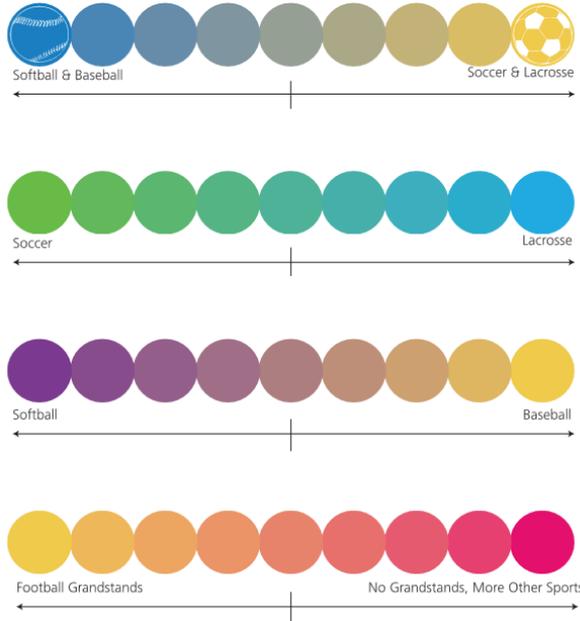
If there was one field organization that supported the **most Grant students...**

Place one dot on the triangle to indicate where you fall on the spectrum.

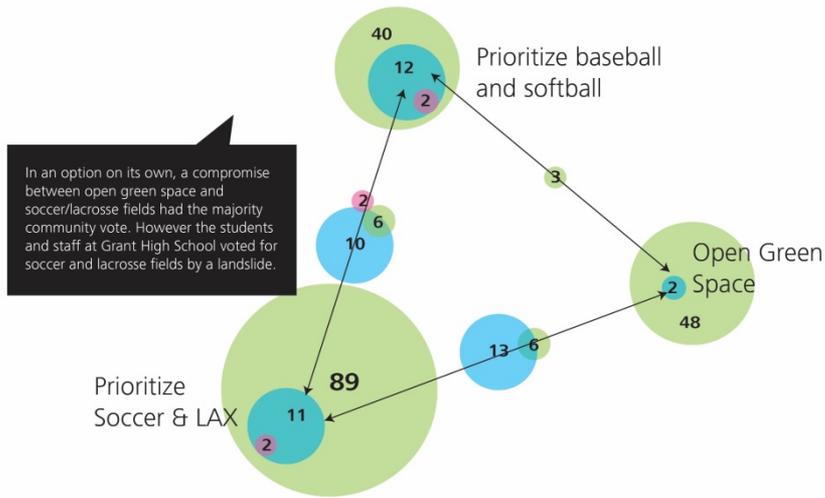


On-Site Athletic Fields Prioritization

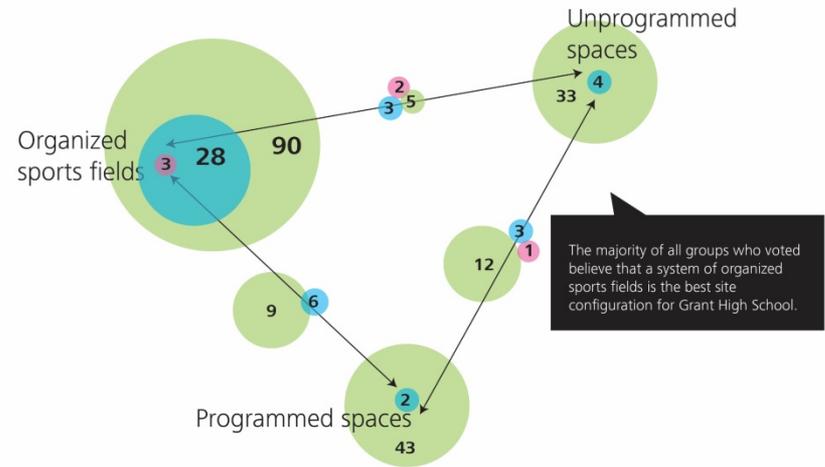
Place one dot on each black line to indicate where you fall on the spectrum.



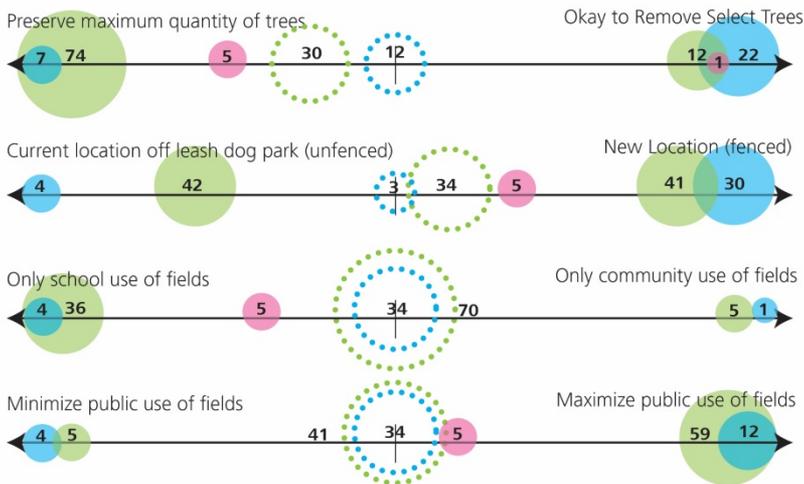
If there was one **field organization** that supported the most Grant students...



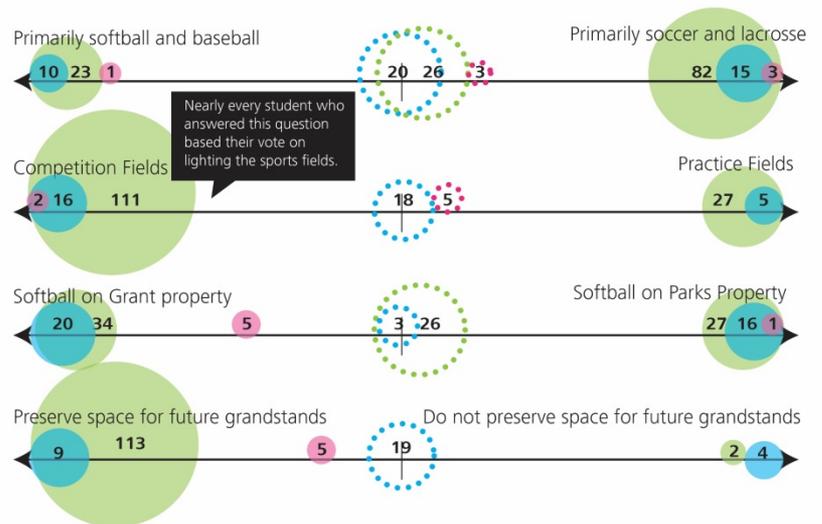
If there was one **site configuration** that best supported the community...



Parks Partnership Prioritization



On Site Athletic Fields Prioritization



Project Overview

Team Introductions

Process & Schedule

SDWS 1 Shareback

SDWS 2 Shareback

Schematic Design Development

Overview of Today's Listening Stations

Group Activity 01

Exterior: Site & Courtyards



Take a minute to empathize with your assigned Persona. Now react as you would as this student. How are you thinking and feeling about the environment before you? What are some challenges and opportunities you may face? What do you care about most?

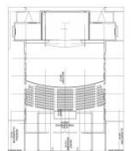
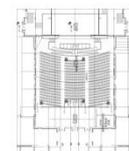
1



2



3



Interior: Performing Arts



Take a minute to empathize with your assigned Persona. Now react as you would as this student. How are you thinking and feeling about the environment before you? What are some challenges and opportunities you may face? What do you care about most?

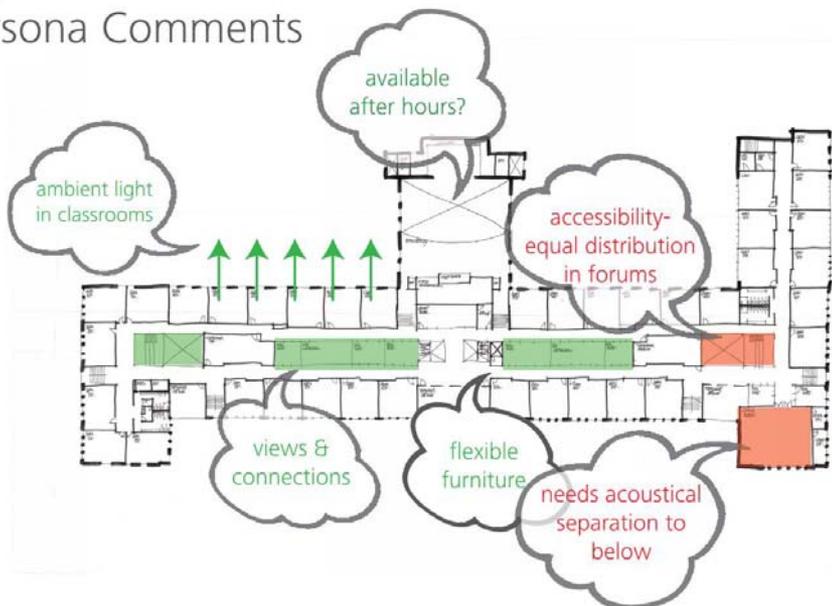
What We Heard

- Dance prefers to be in performing art space rather than near athletics
- Maintain existing choir room
- Provide ADA access to auditorium
- Provide light and sound lock for auditorium
- Theater classroom needs to share support space with auditorium
- Practice rooms could double as dressing rooms
- Make-up area could be in theater corridor w. separate dressing areas
- Audio engineering overlooks auditorium
- Drama & dance classrooms can be used as performance spaces
- Acoustical separation between performance spaces is critical

Project Investigation Based on your Persona

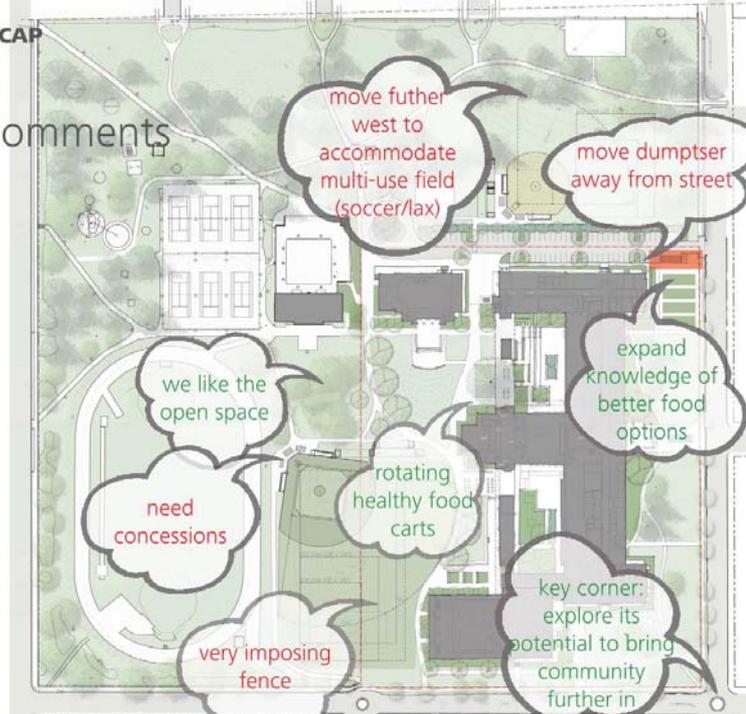
SD WKSHP 2 RECAP

Upper Level:
Persona Comments



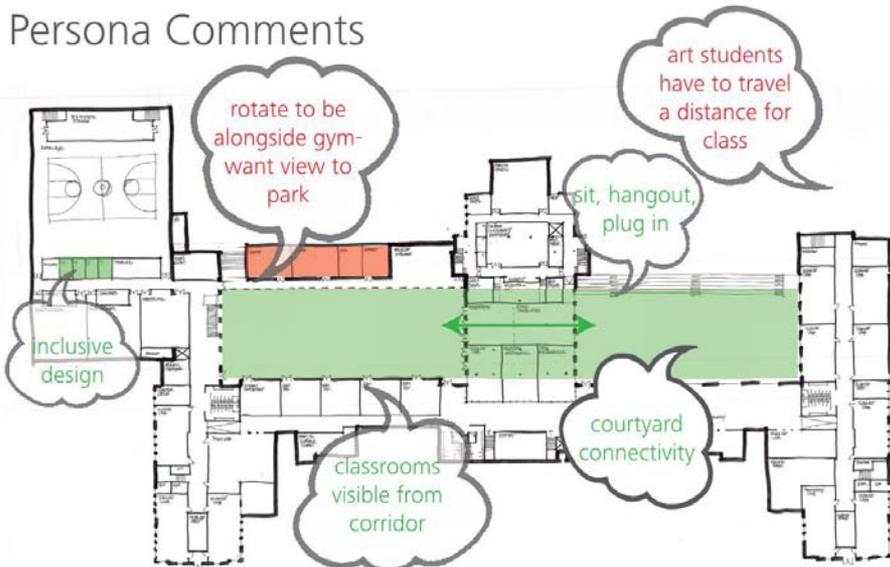
SD WKSHP 2 RECAP

Site Plan:
Persona Comments



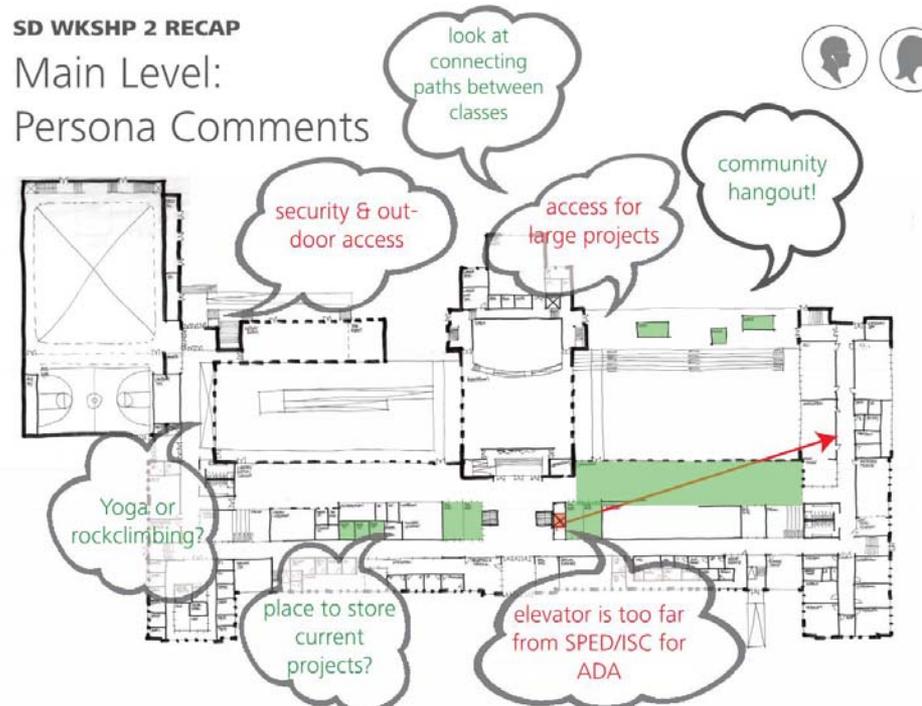
SD WKSHP 2 RECAP

Lower Level:
Persona Comments



SD WKSHP 2 RECAP

Main Level:
Persona Comments

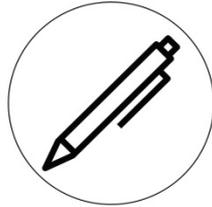


Group Activity 02

Team Arts/Music/Humanities Industry mahlum 

Group Activity Two: 45 minutes.

You are in charge of designing a major city-wide event at the new Grant High School.



Your team's focus is on creating a large gathering at the new Grant High School. Together, using your knowledge of the region's resources, organizations, and trends, help us understand what would be a memorable event, or series of events, to celebrate **Arts, Music and Humanities** that integrates the entire student body (1700).

Things to Consider

- + Who is your target audience?
- + Think about different disciplines' involvement: how are you showcasing the diverse programs at Grant?
- + Which spaces would you utilize?
- + What audio-visual and technology do you need?
- + How might the day be documented or recorded?
- + What is missing for your event to be successful?

Event Toolbox

Grantasia	Convention	Showcase	TEDx PDX
Hack-a-thon	Tournament	Displays	Symposium
Code-a-thon	Farm To Table	Demonstration	Seminar
24 hour charrette	Fiesta	Performance	Workshop
Sustainability Summit	Fairs	Presentation	Roundtable
Robotics Competition	Feasts	Promotion	Conference
Pop-up shops	Field Day	Publication	Assembly
Farmers Market	Festival	Feature	Mock-Events

Draw on the site and floorplans to indicate places, flow of people and materials, event layout and any other tools or spaces you may need to support the event.

Title of the Event: _____

What will catch people's attention?

Duration/Season/Timing: _____

When would be the optimal timing?

Purpose: _____

What is the intention of day/week?

Disciplines: _____

Who is doing what? Locate them on the site & floorplans.

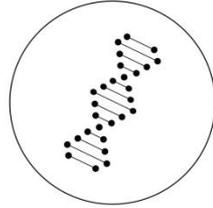
Photo Courtesy: Bureau of Art in the Public Space

Design a Major Event

Team Science/Engineering Industry

Group Activity Two: 45 minutes.

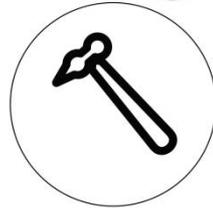
You are in charge of designing a major city-wide event at the new Grant High School.



Team Trades/Crafts/Maker Industry

Group Activity Two: 45 minutes.

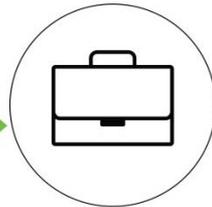
You are in charge of designing a major city-wide event at the new Grant High School.



Team Entrepreneurs/Marketing Industry

Group Activity Two: 45 minutes.

You are in charge of designing a major city-wide event at the new Grant High School.



Team "Other" Industry

Group Activity Two: 45 minutes.

You are in charge of designing a major city-wide event at the new Grant High School.

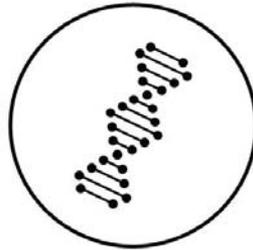


SD WKSHP 2 RECAP

Design a Major Event

STEMTASIA

brought to you by: Team Science & Engineering



CONCEPT Spring School year in Jan or May: Fri afternoon - Sunday

PURPOSE Culminate work done, practice and create new **cooperative** work, integrate family, create alliance between student and businesses (internships), continuing education in **research & innovation**

ACTIVITIES **Hack-a-thon** model: mixed student + expert teams are given an inquiry/problem solving statement, such as 'global warming,' teams compete to generate solutions, raise awareness, **connect ideas to real world issues**

SD WKSHP 2 RECAP

Design a Major Event

Generals are Dreamers

brought to you by: Team Other Industry



CONCEPT Fall 2019 **Grand Opening** of the new Grant High School

PURPOSE Introduce the new modern high school as a place to inspire students, teachers, and community and to cultivate **design thinking**, innovation **inquiry** and creativity.

ACTIVITIES All disciplines will be involved, from lectures to workshops, **demonstrations on how the building operates** to inspire, support learning, making and creating.

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SDWS 1 Shareback

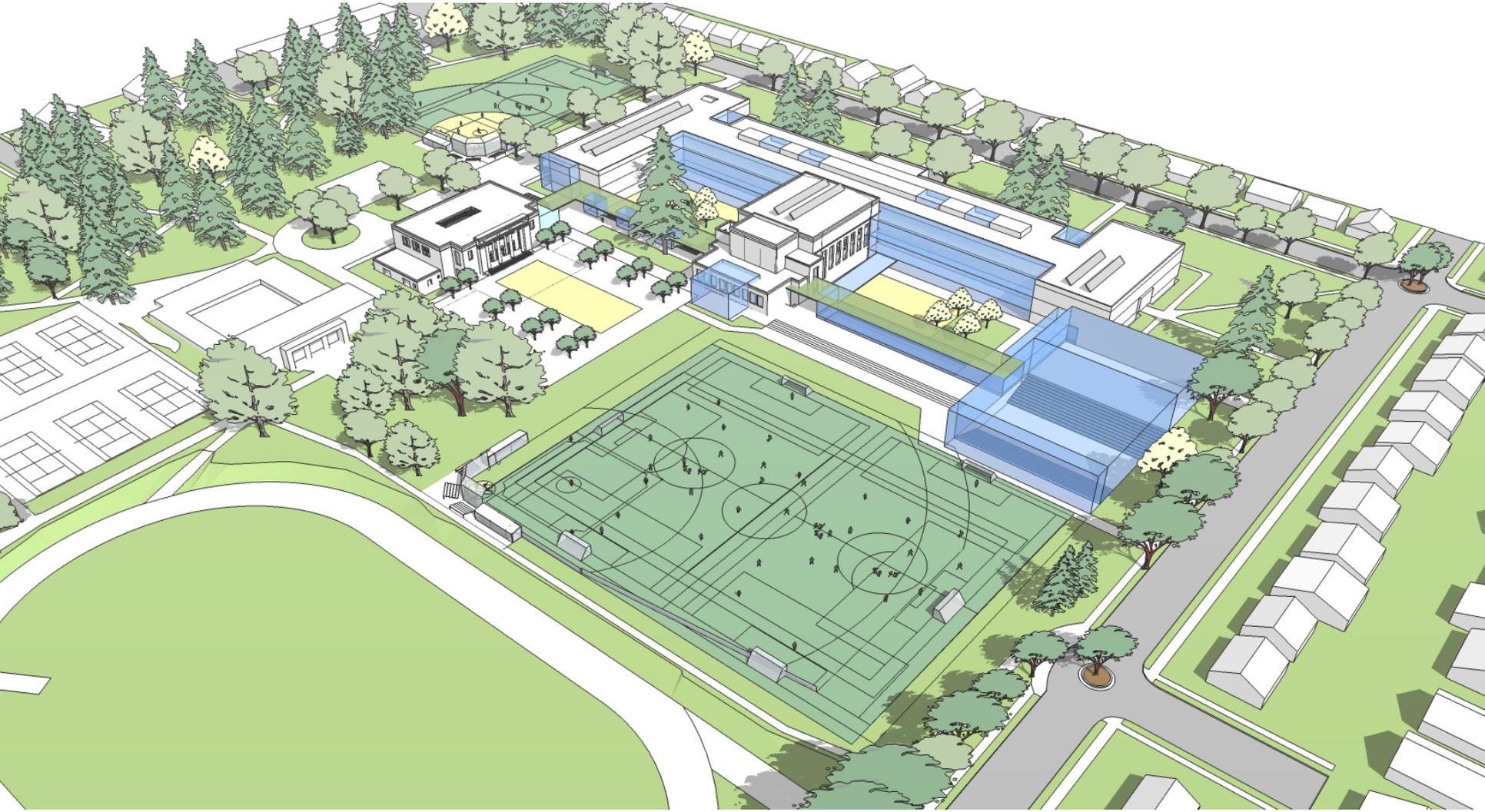
SDWS 2 Shareback

Schematic Design Development

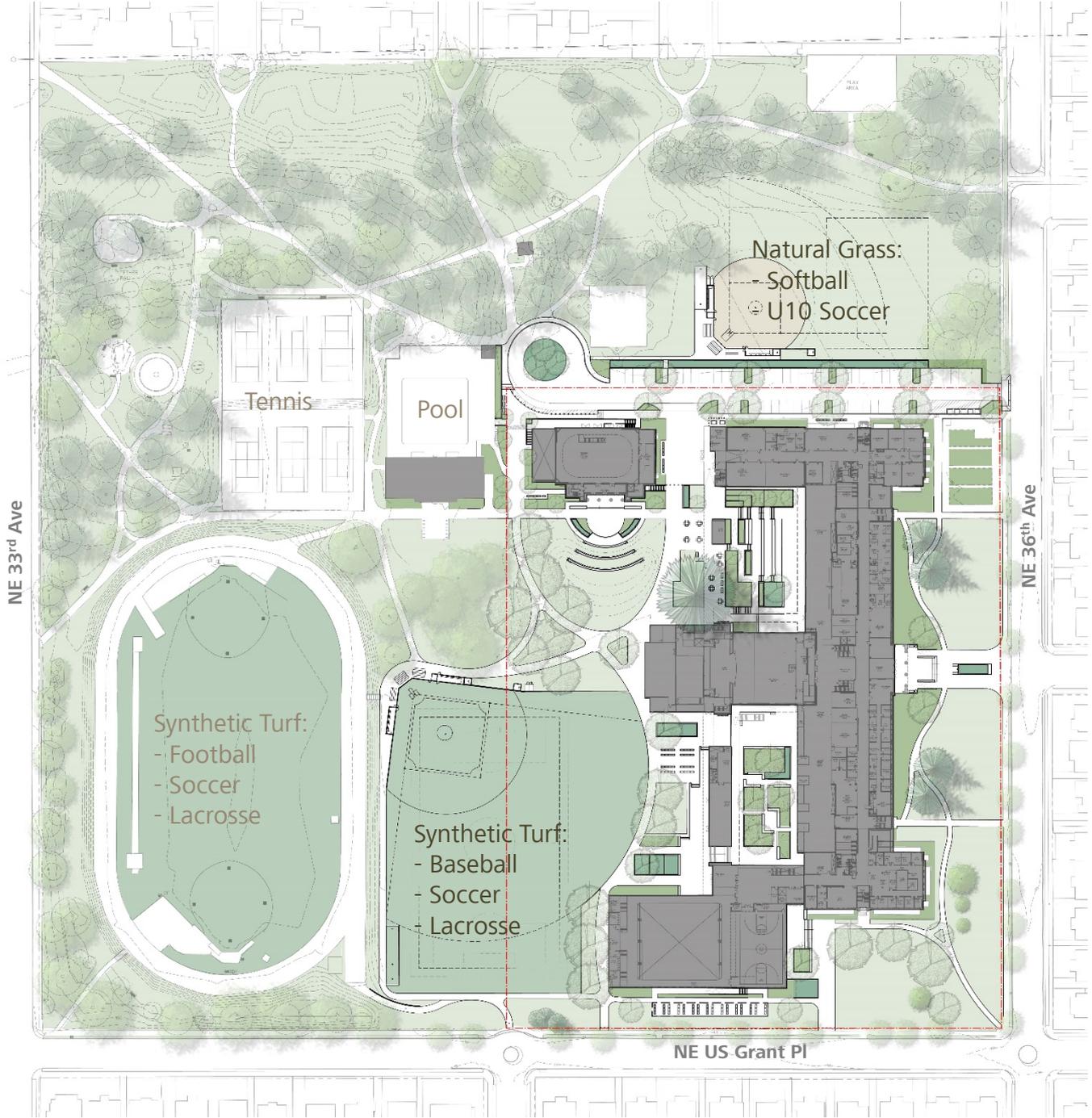
Overview of Today's Listening Stations

Schematic Design Development :: Site

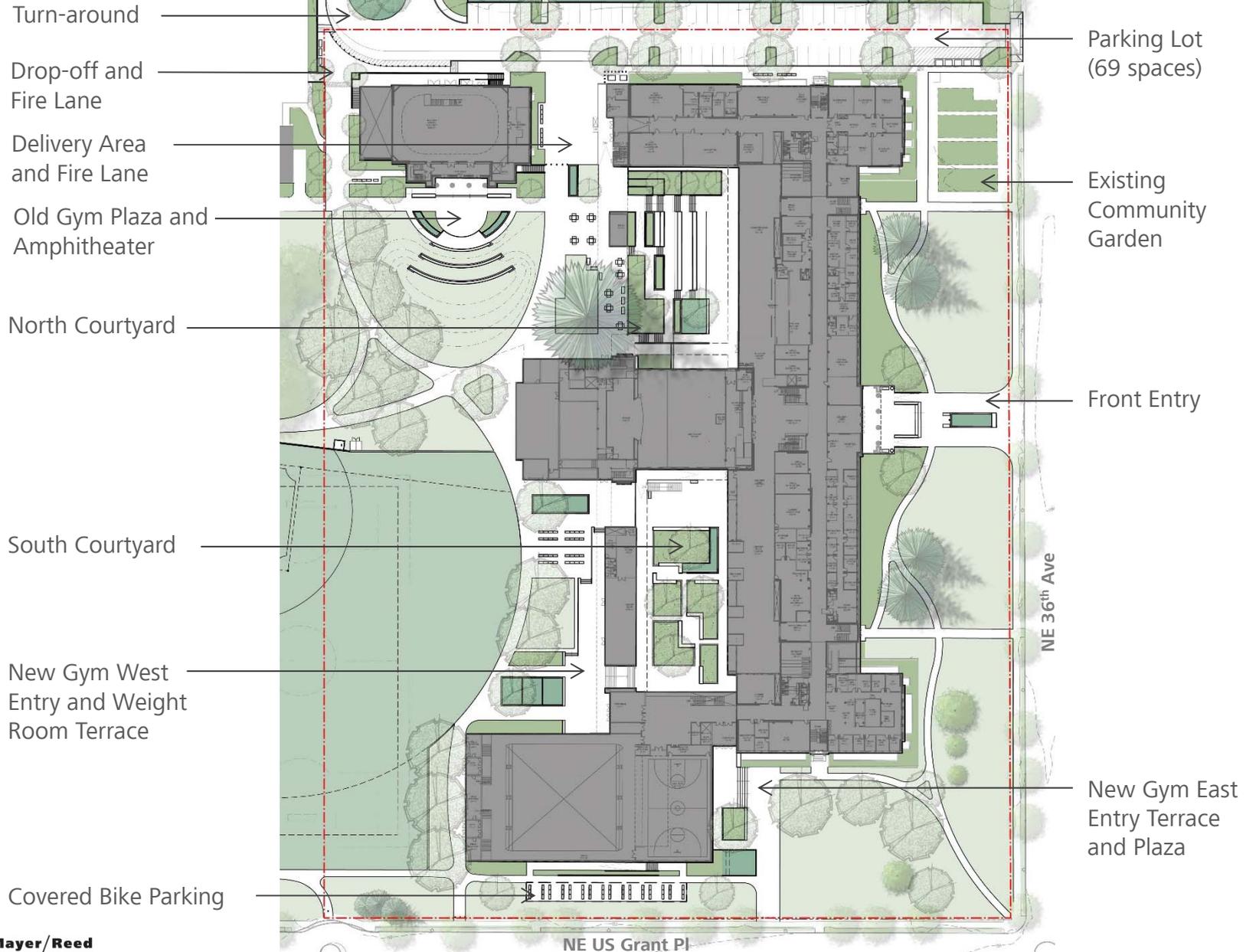
Master Plan :: Site Concept



Schematic Design :: Site Concept

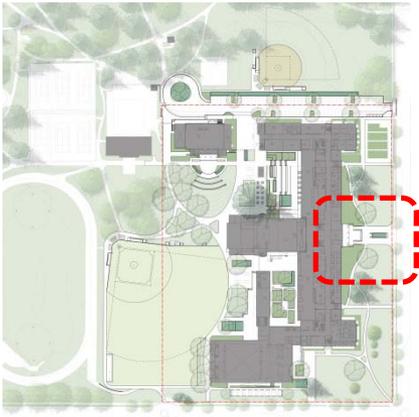
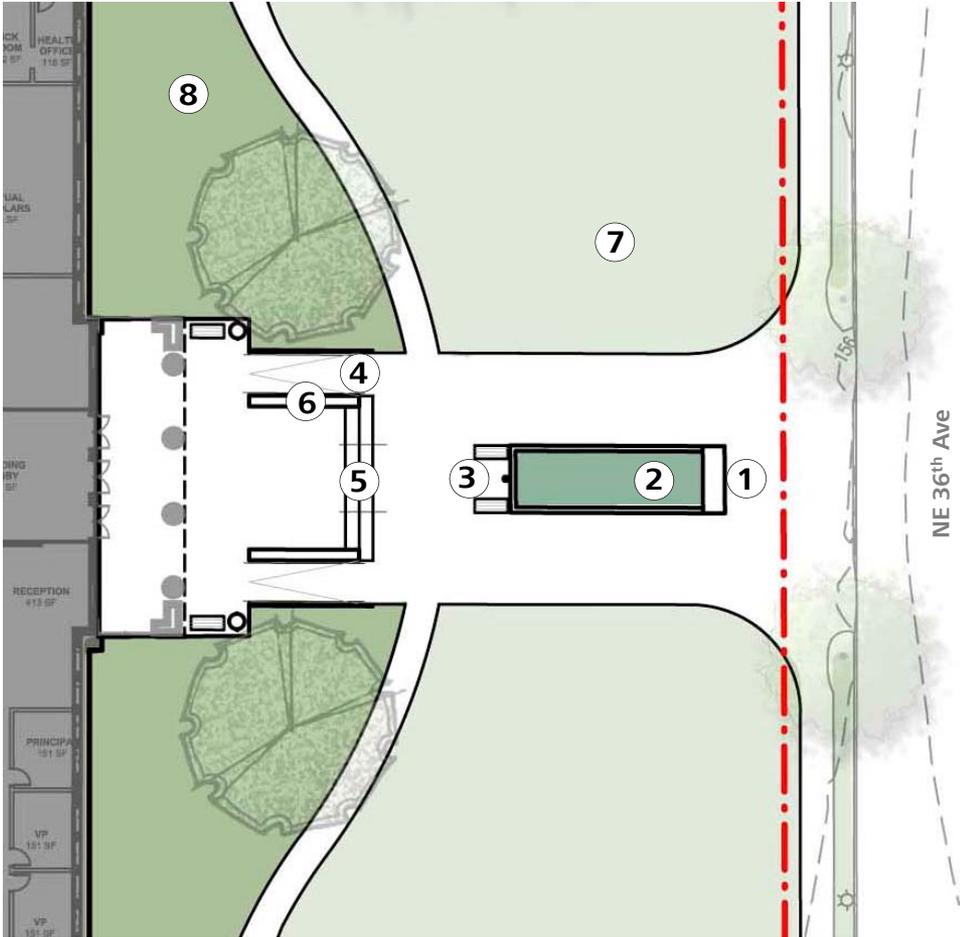


Site Plan

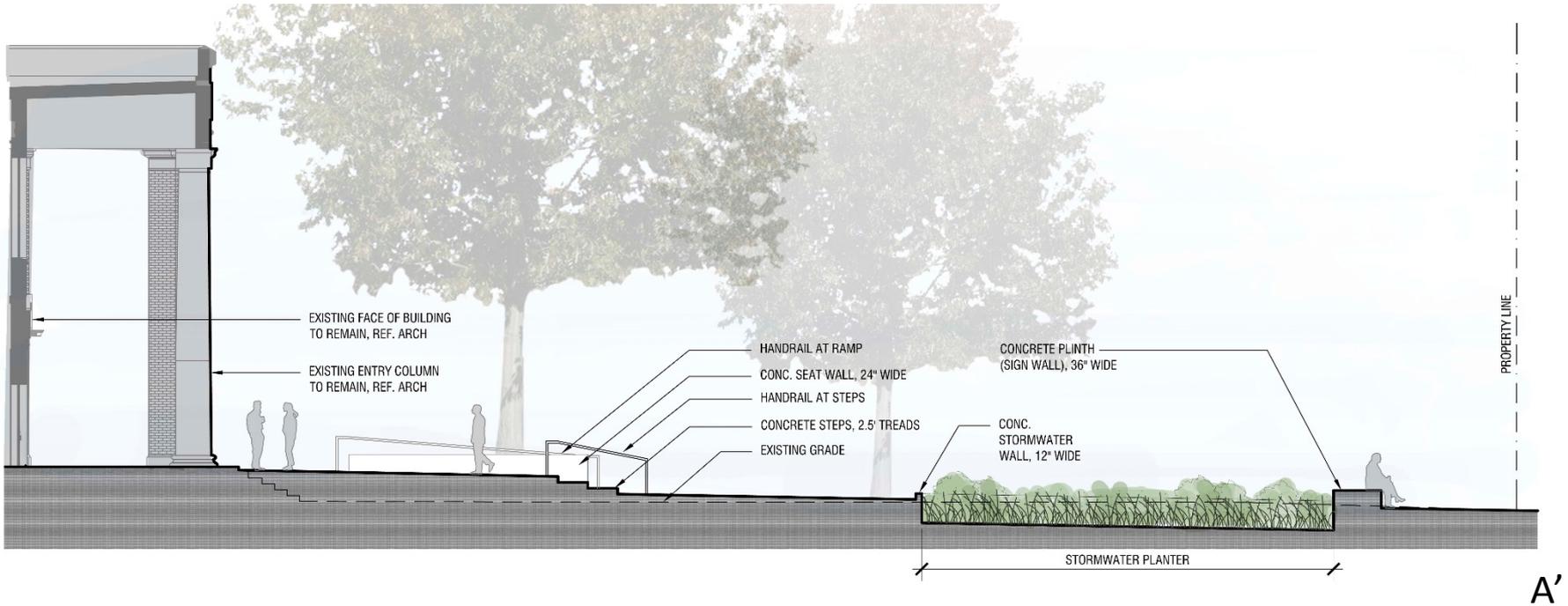
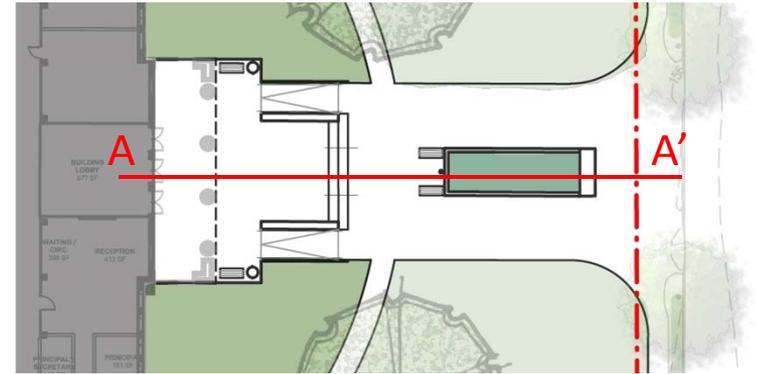


Main Entry

- 1 Wide Seat Wall / Sign Wall
- 2 Stormwater Planter
- 3 Memorial Benches and Flagpole
- 4 Ramp
- 5 Steps
- 6 Seat Wall
- 7 Lawn
- 8 Shrubs



Main Entry

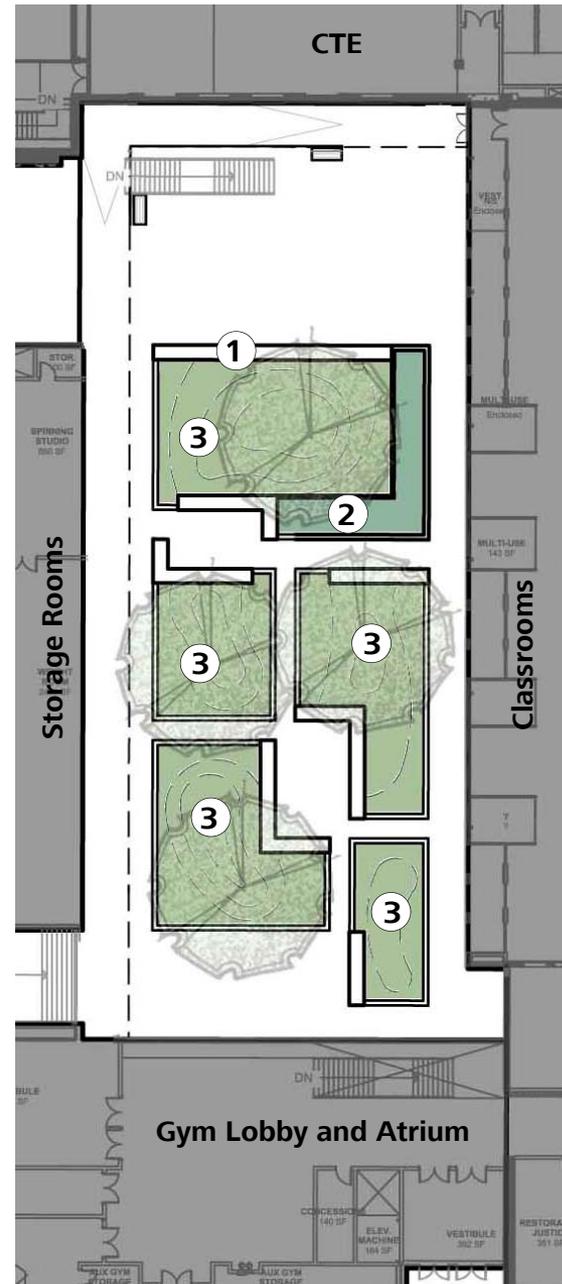
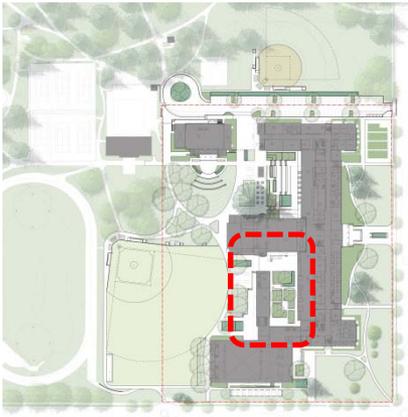


A

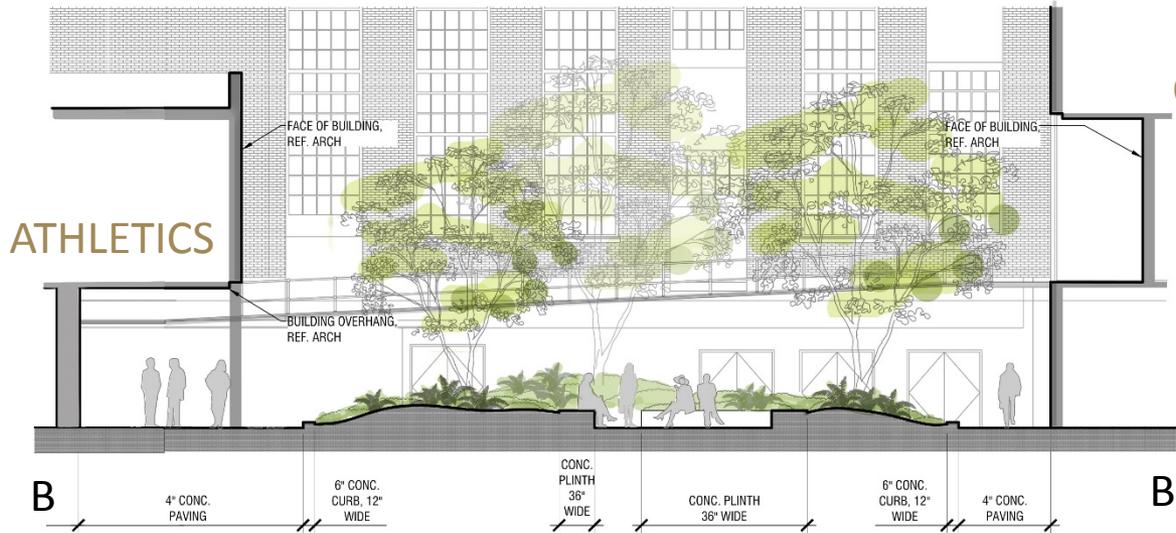
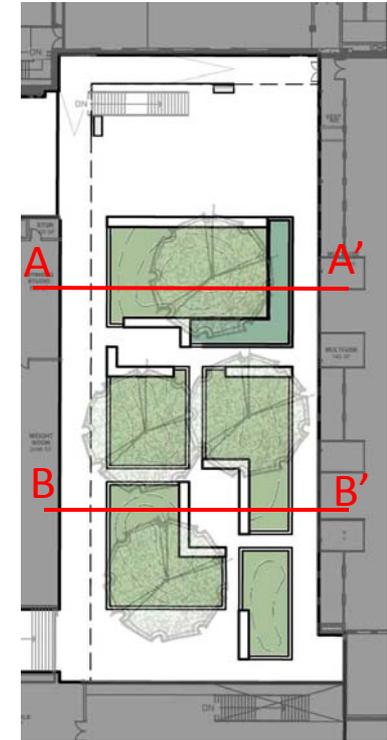
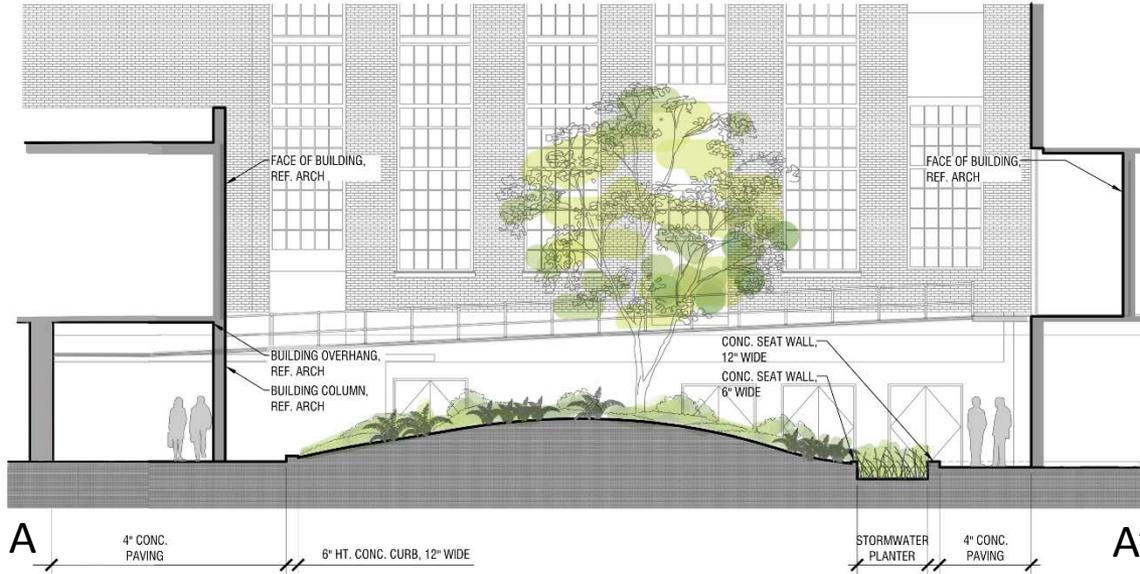
A'

South Courtyard

- 1 Wide Seat Wall
- 2 Stormwater Planter
- 3 Vegetated Mounds



South Courtyard



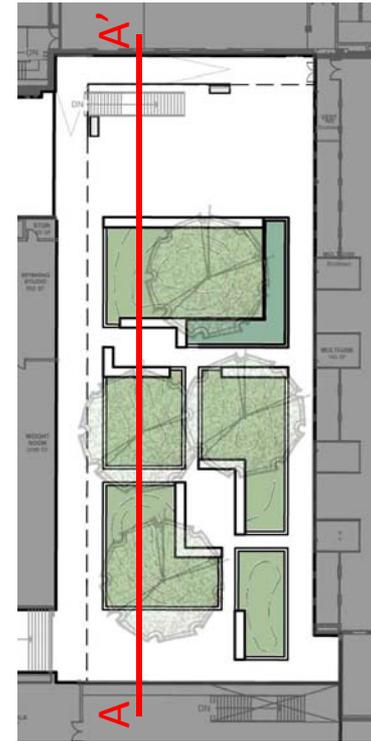
CLASSROOMS

LIBRARY

CLASSROOMS

ATHLETICS

South Courtyard



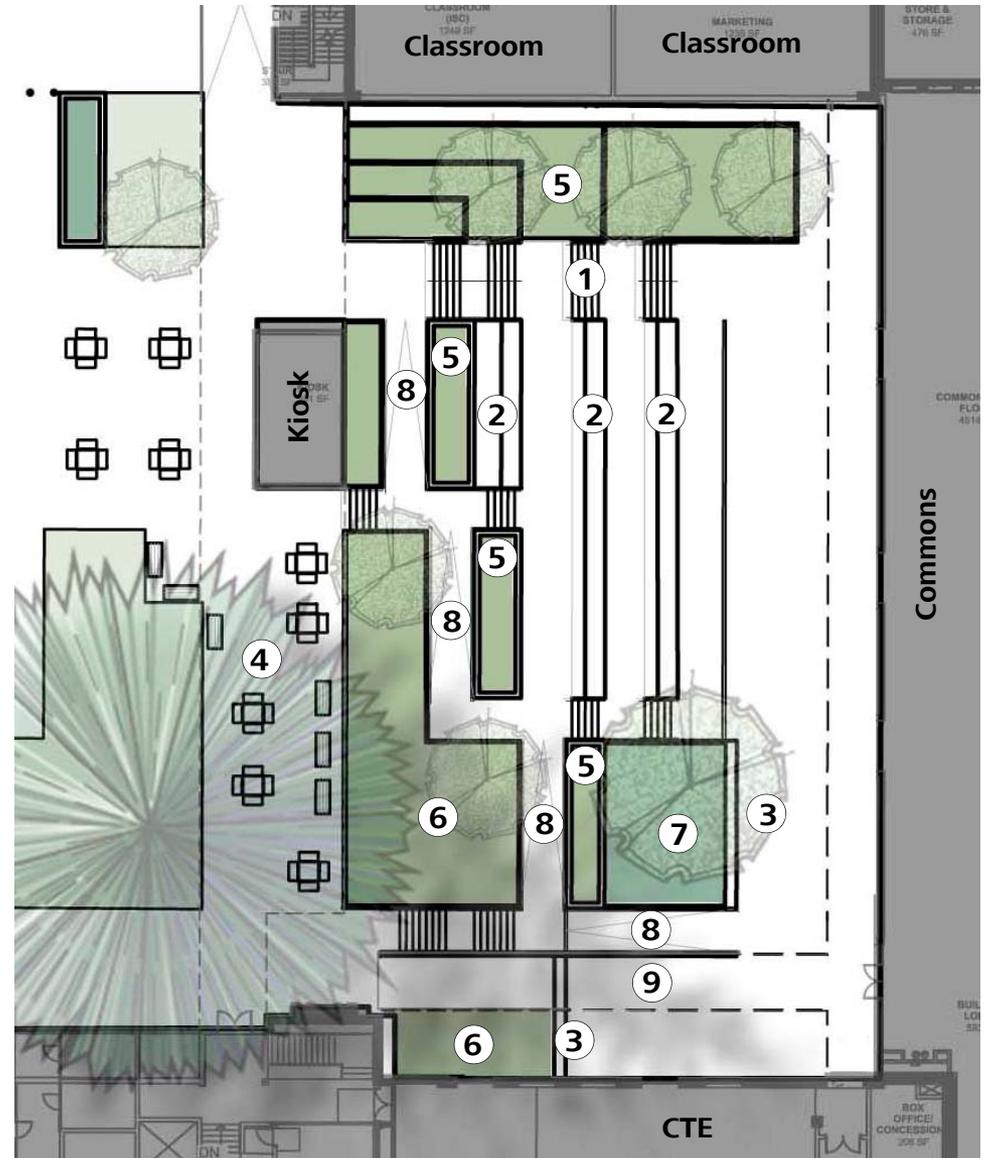
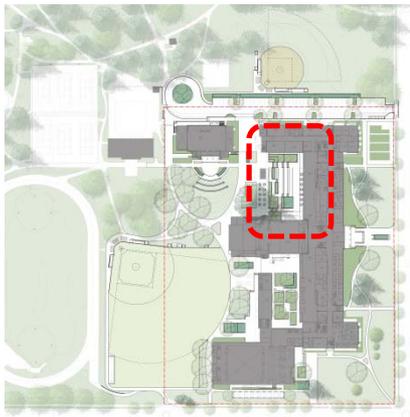
GYM
LOBBY

THEATER

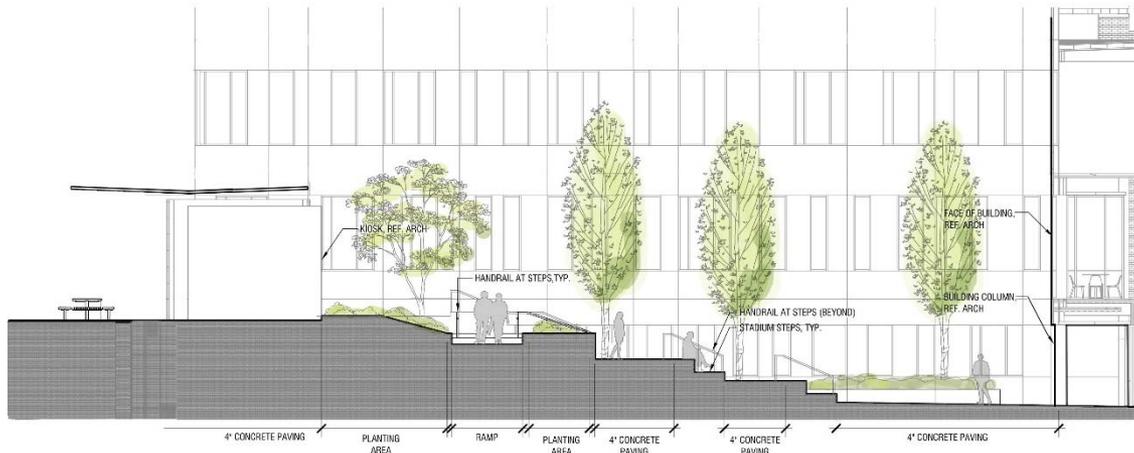


North Courtyard

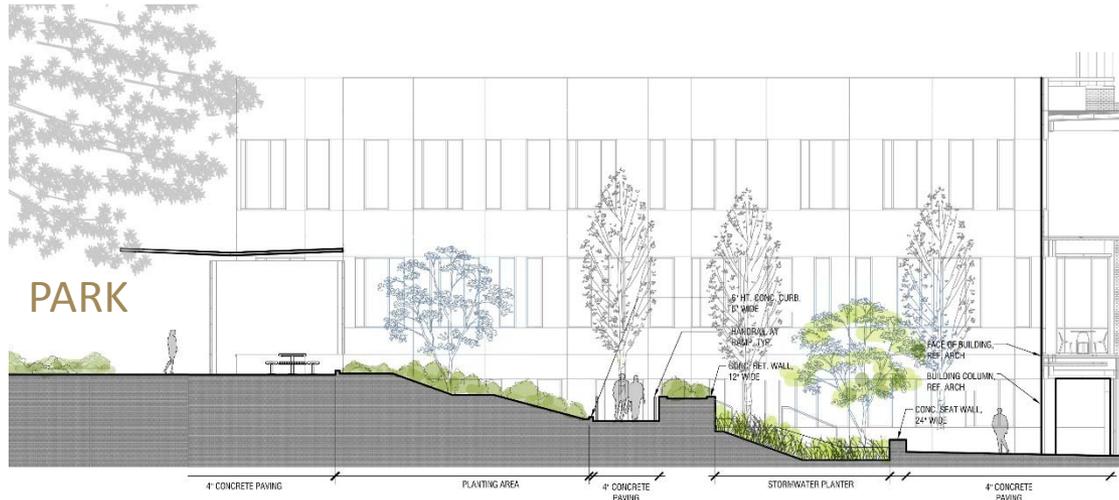
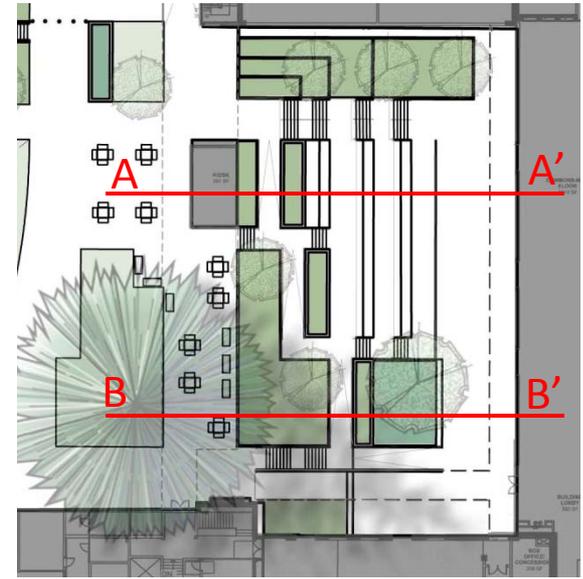
- 1 Steps
- 2 Stadium Seating
- 3 Seat Wall
- 4 Fixed Seating
- 5 Raised Planter
- 6 Sloped Planting Area
- 7 Stormwater Planter
- 8 Ramp
- 9 Ramp (overhead)



North Courtyard



A A'

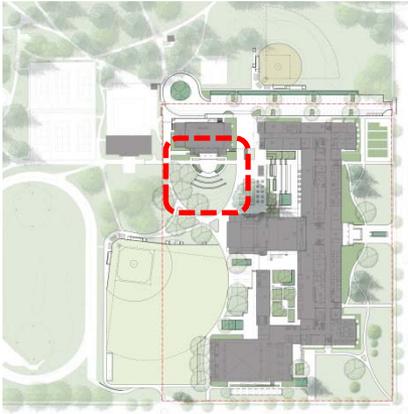
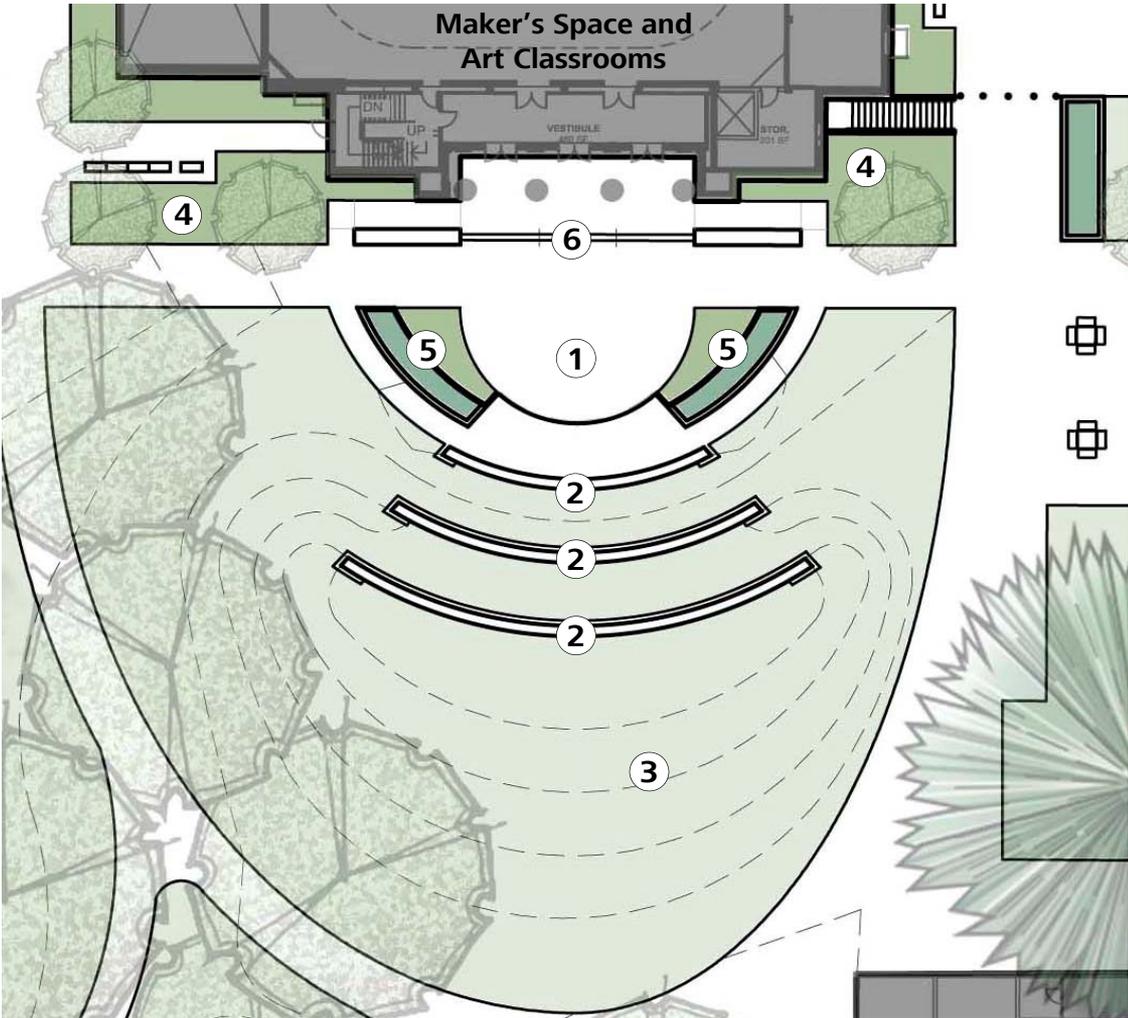


B B'

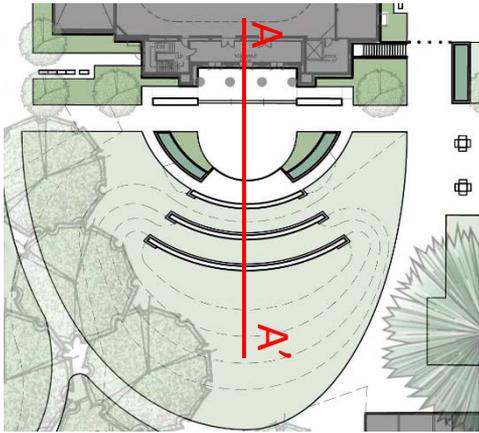
CLASSROOMS
COMMONS
COMMONS

Art Complex Amphitheater

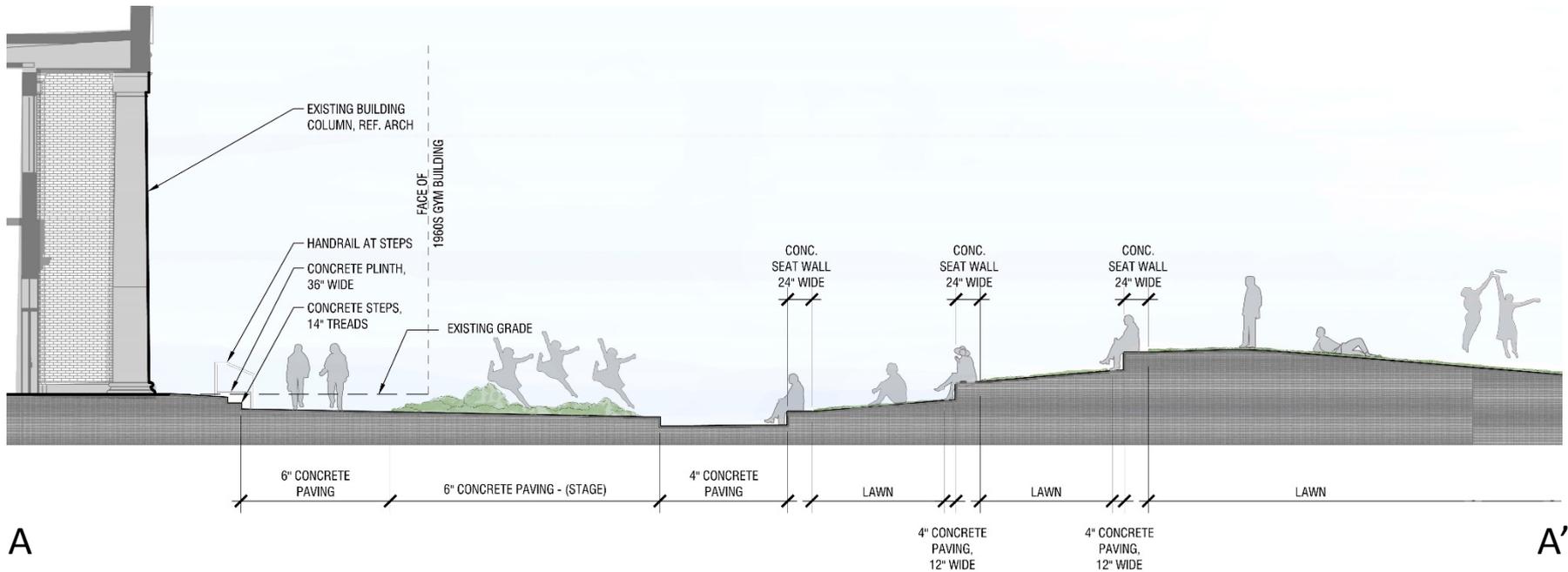
- 1 Stage
- 2 Seat Wall
- 3 Sloped Lawn
- 4 Shrubs
- 5 Shrub Planting, Stormwater Planter, and Sloped Walk
- 6 Ramps, Steps, and Seat Walls



Art Complex Amphitheater

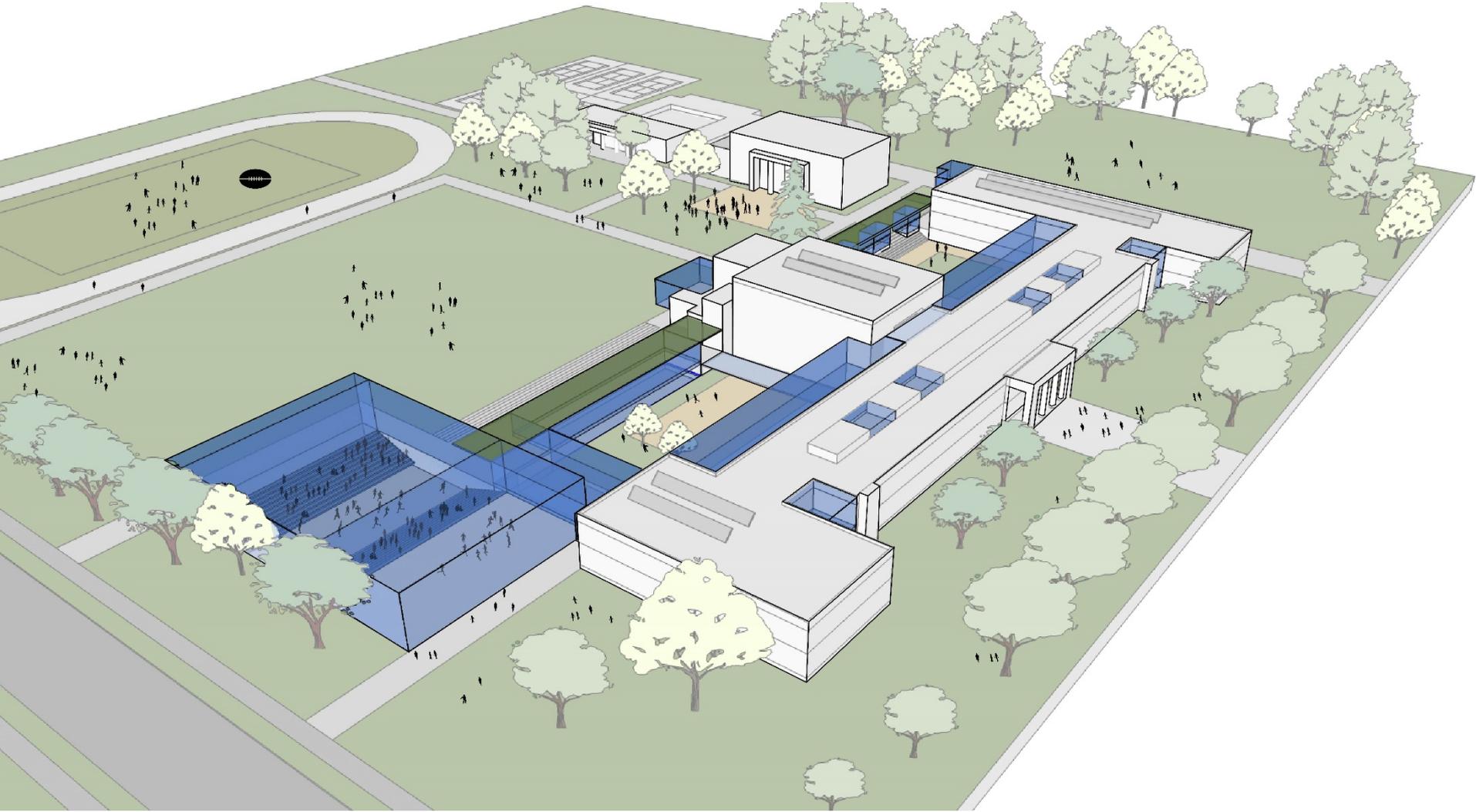


Concordia University Amphitheater

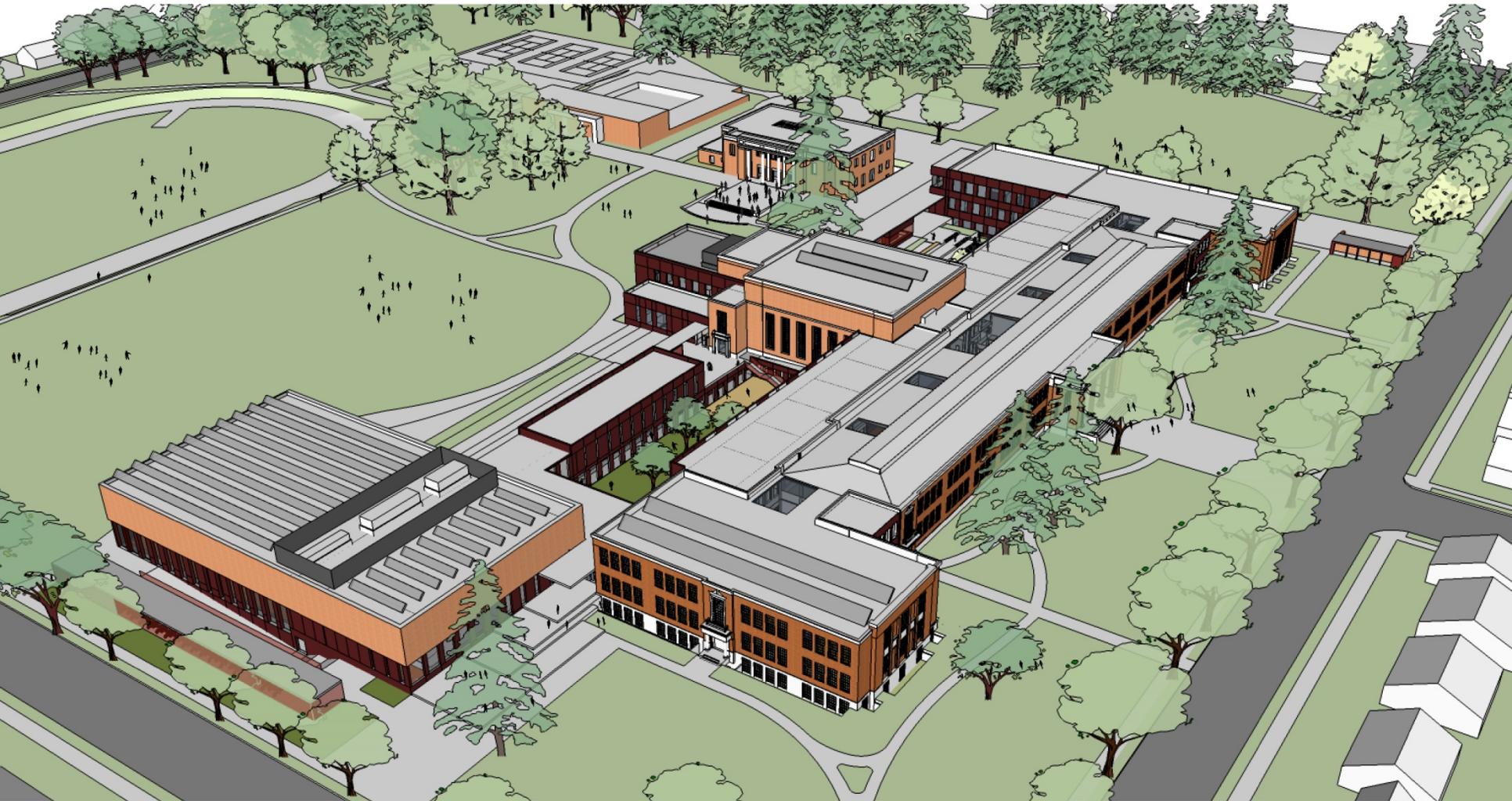


Schematic Design Development :: Building

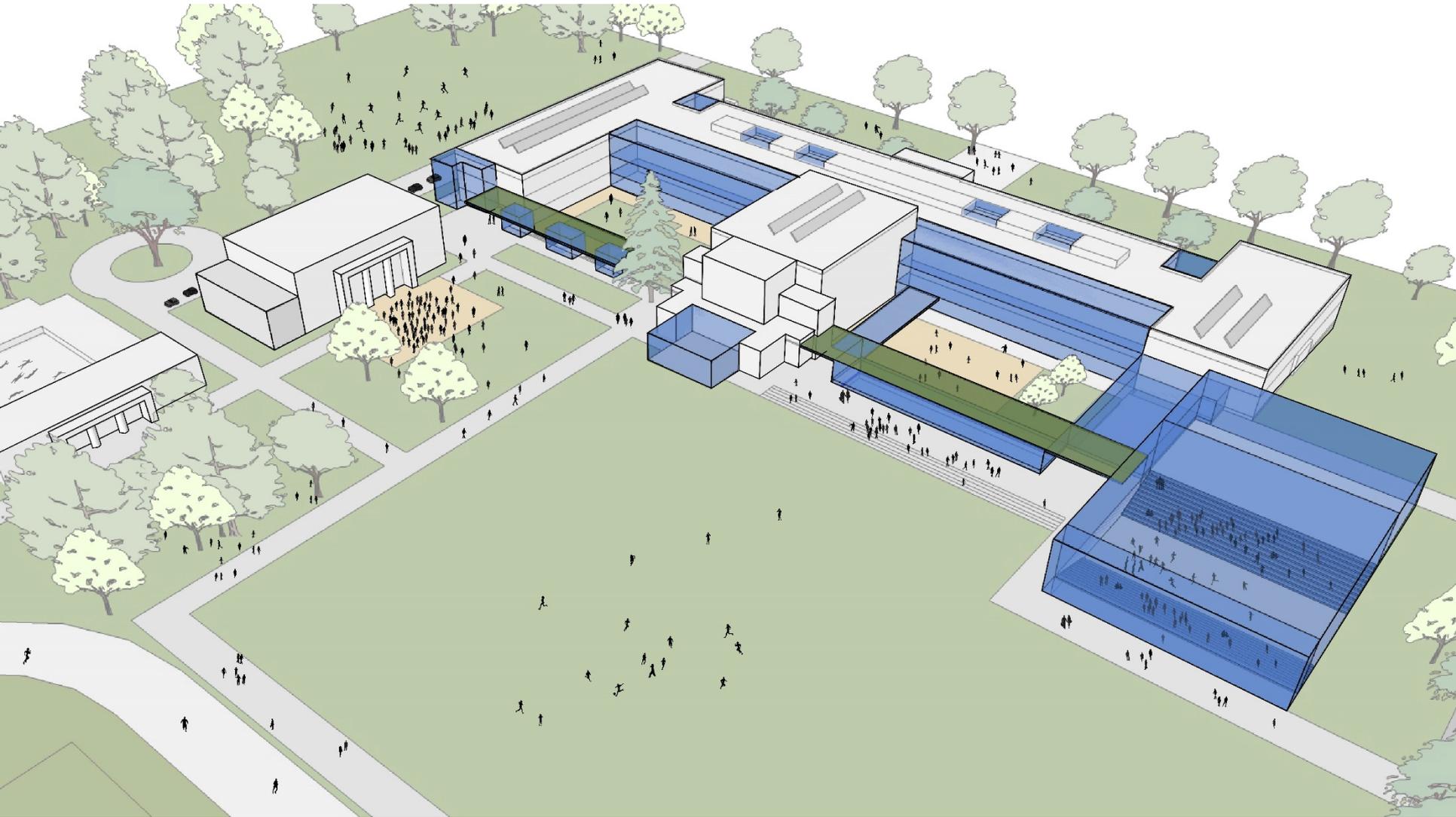
Master Plan



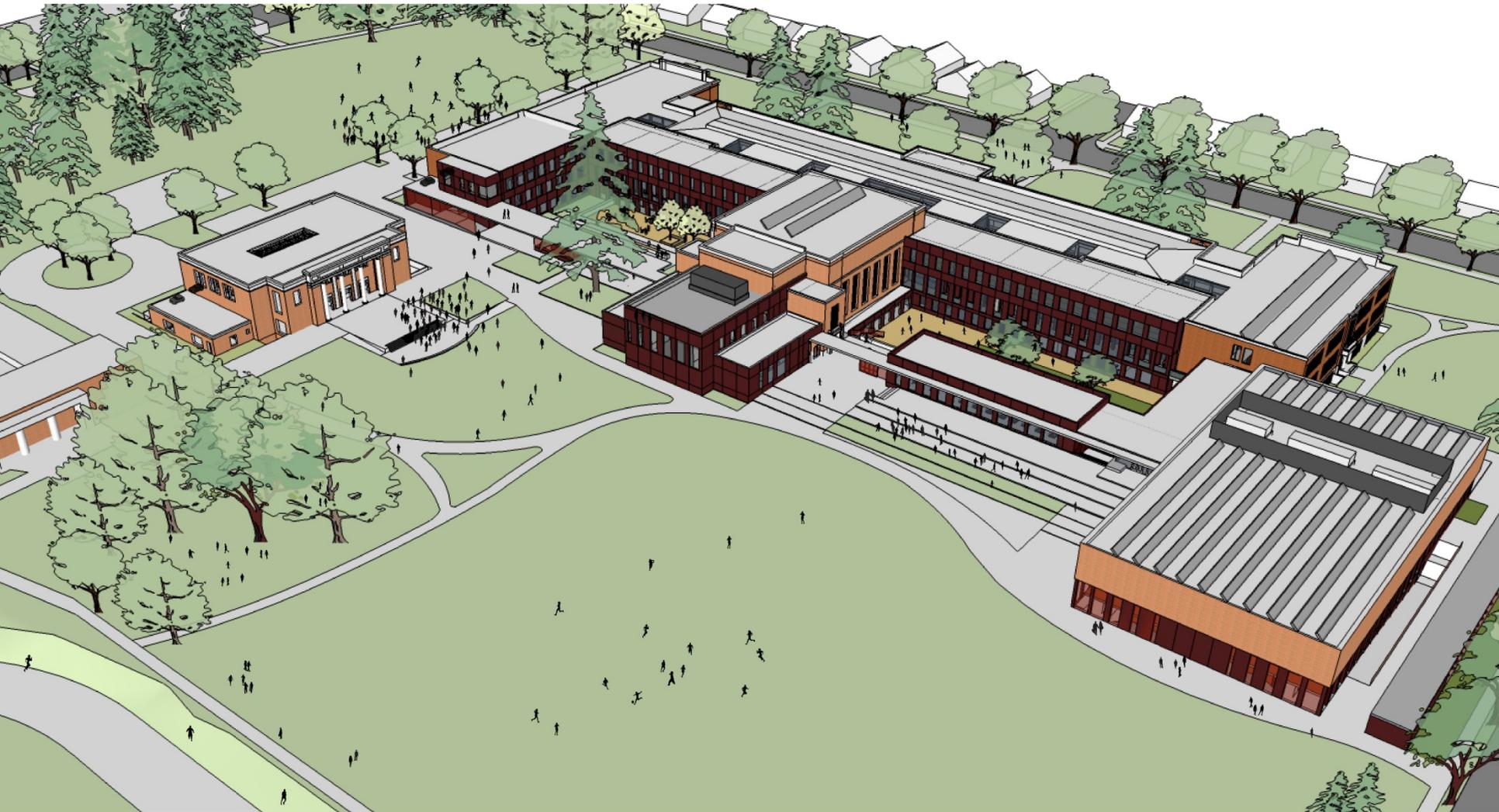
Schematic Design



Master Plan



Schematic Design

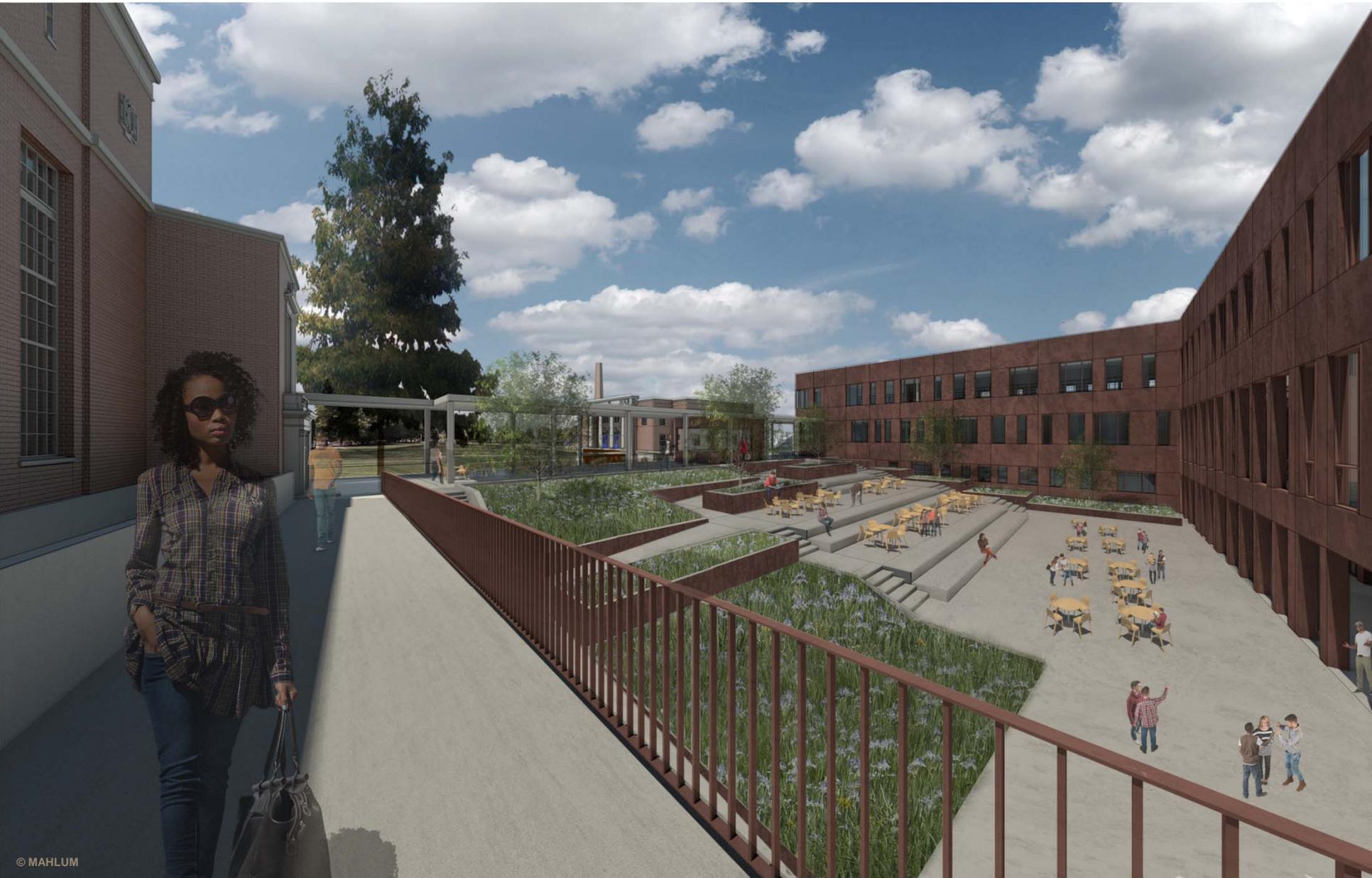




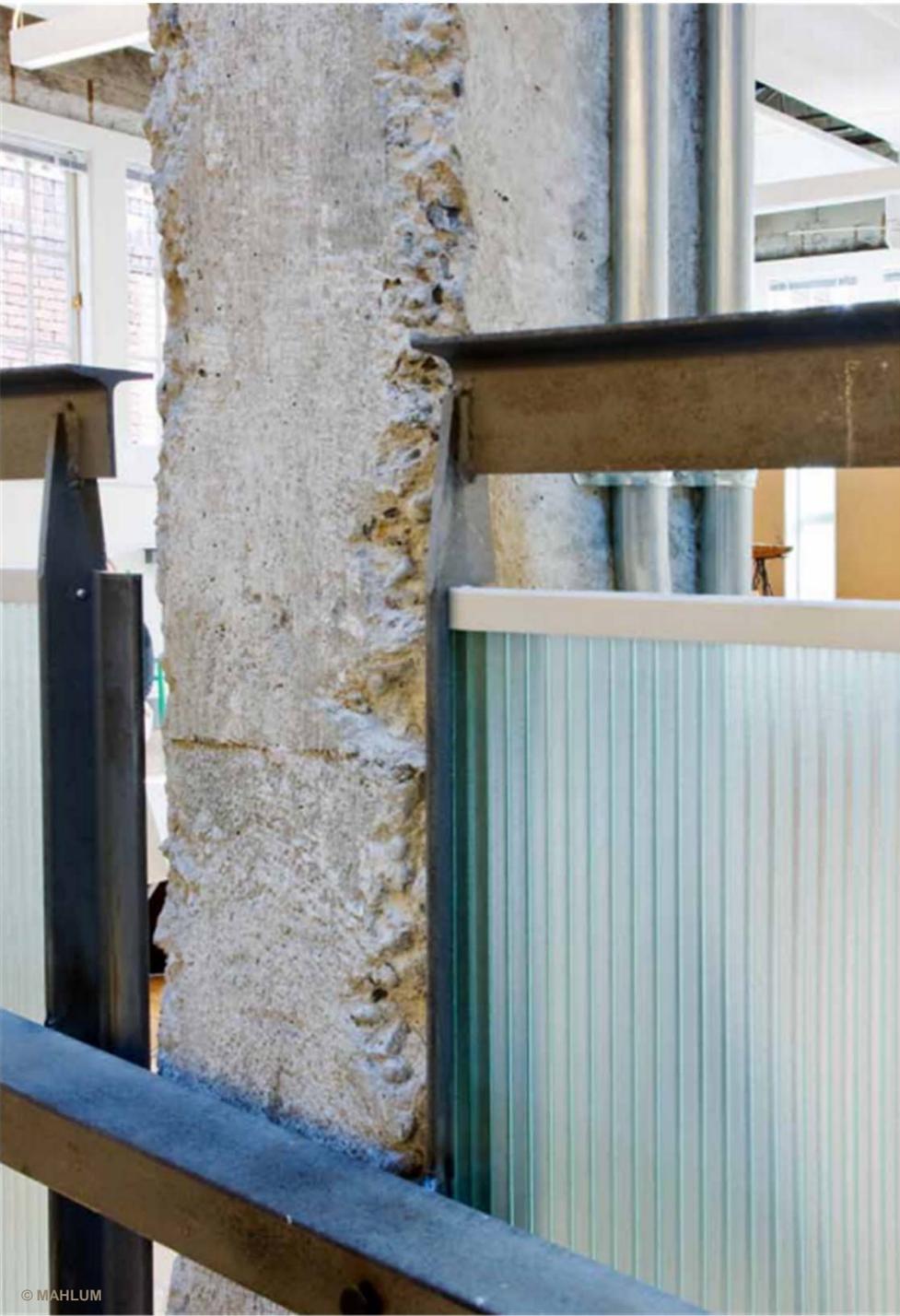






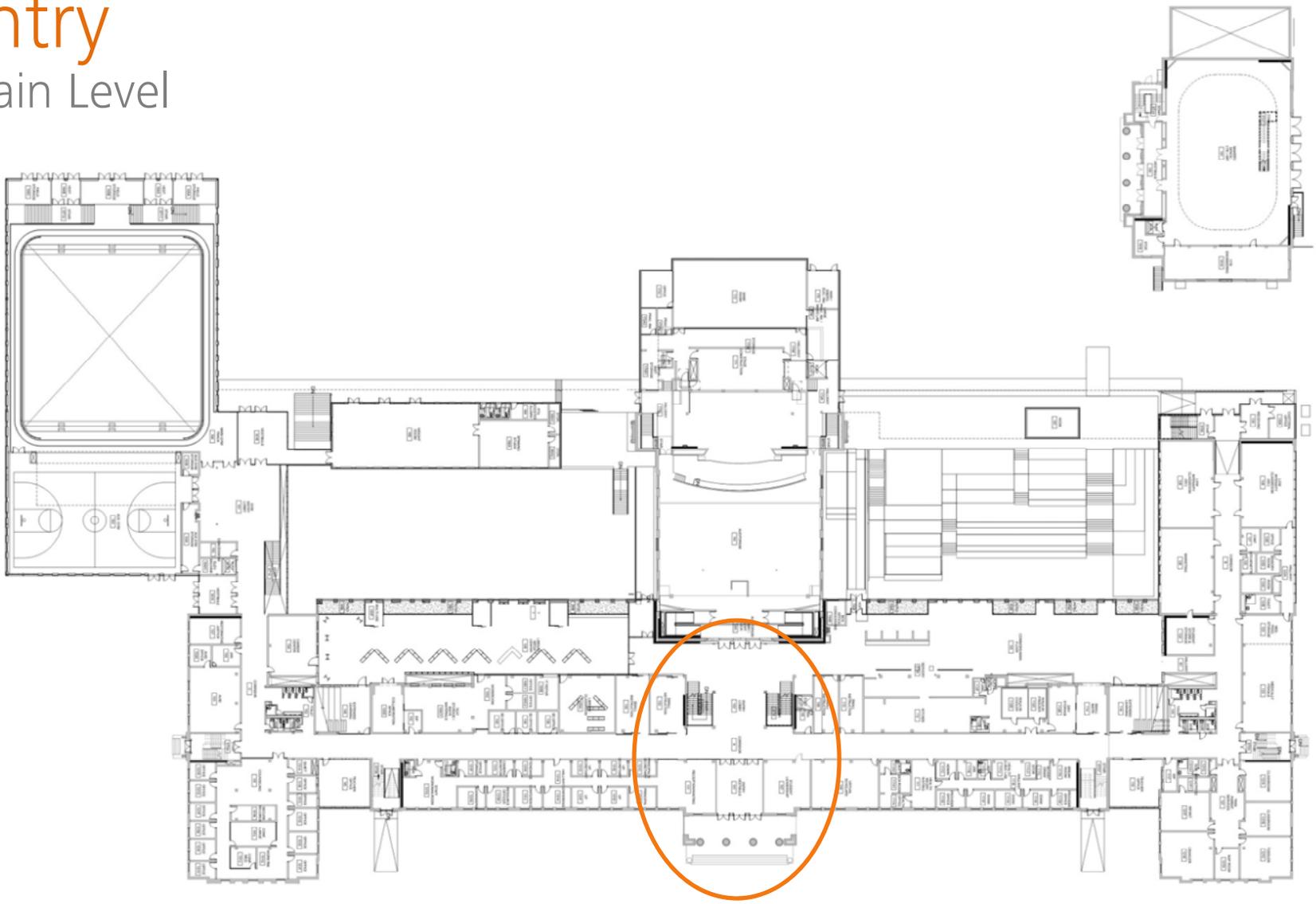


Schematic Design Development :: Building



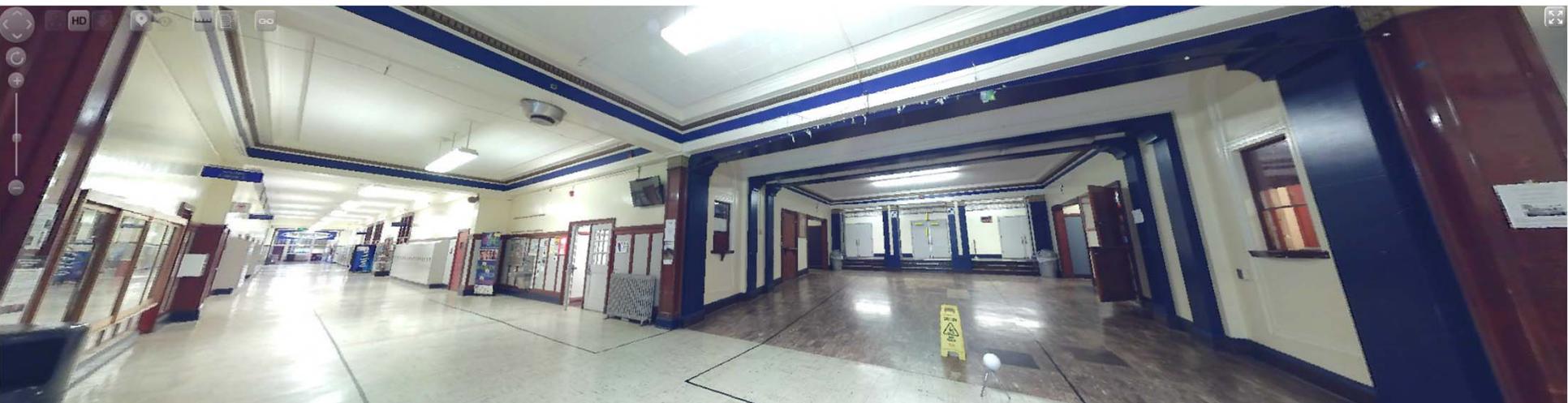
Entry

Main Level



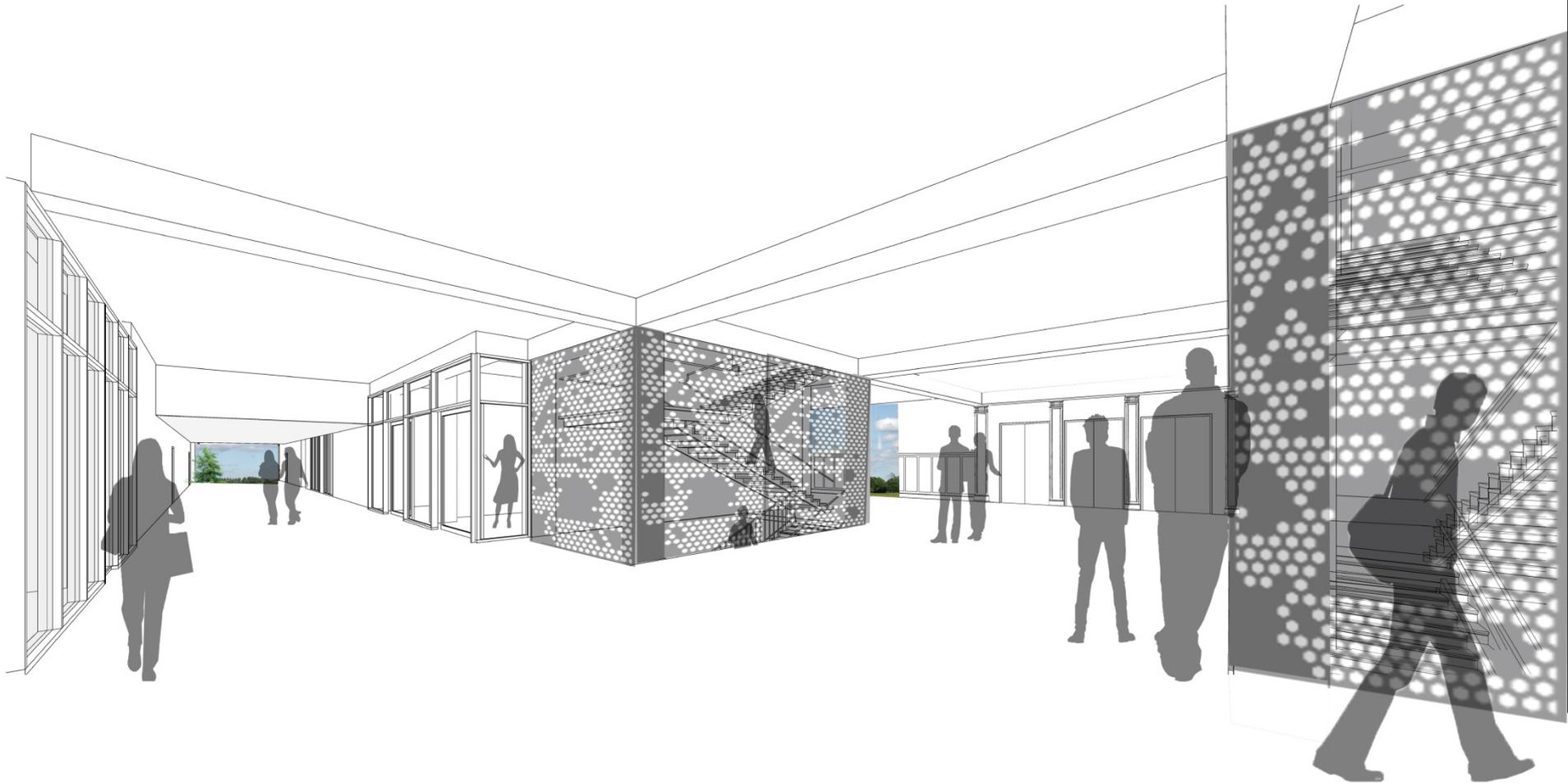
Entry

Main Level



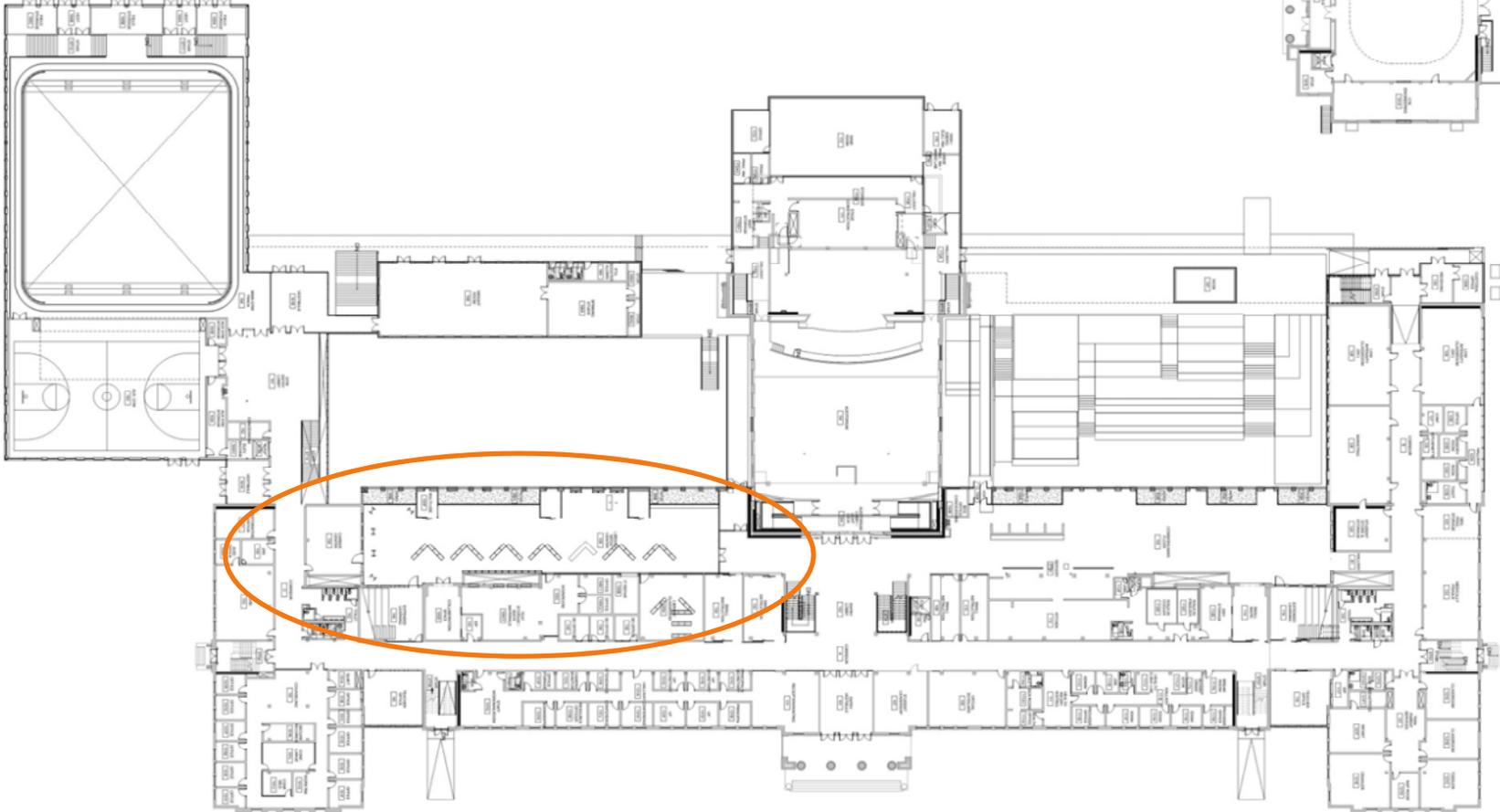
Entry

Main Level



Library

Main Level



Library

Individual work areas

Group work areas

Pin Up space

Quiet space

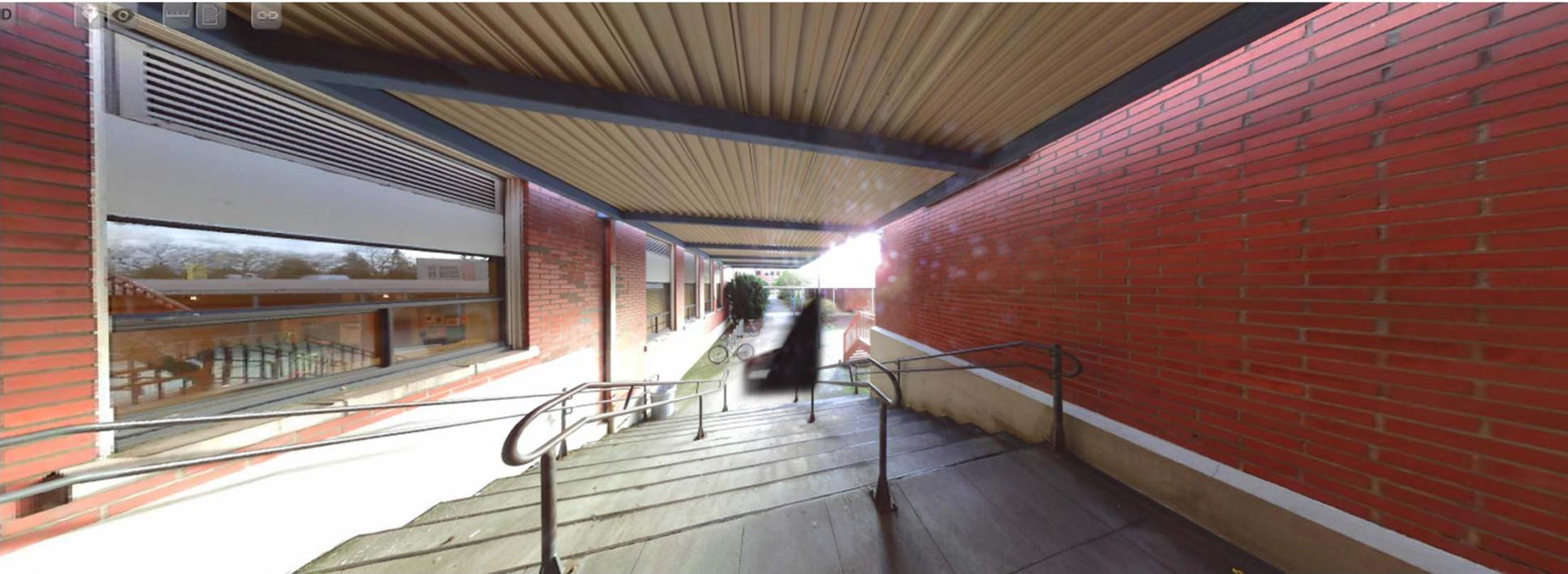
Movable tables

Group tech stations



Library

Main Level



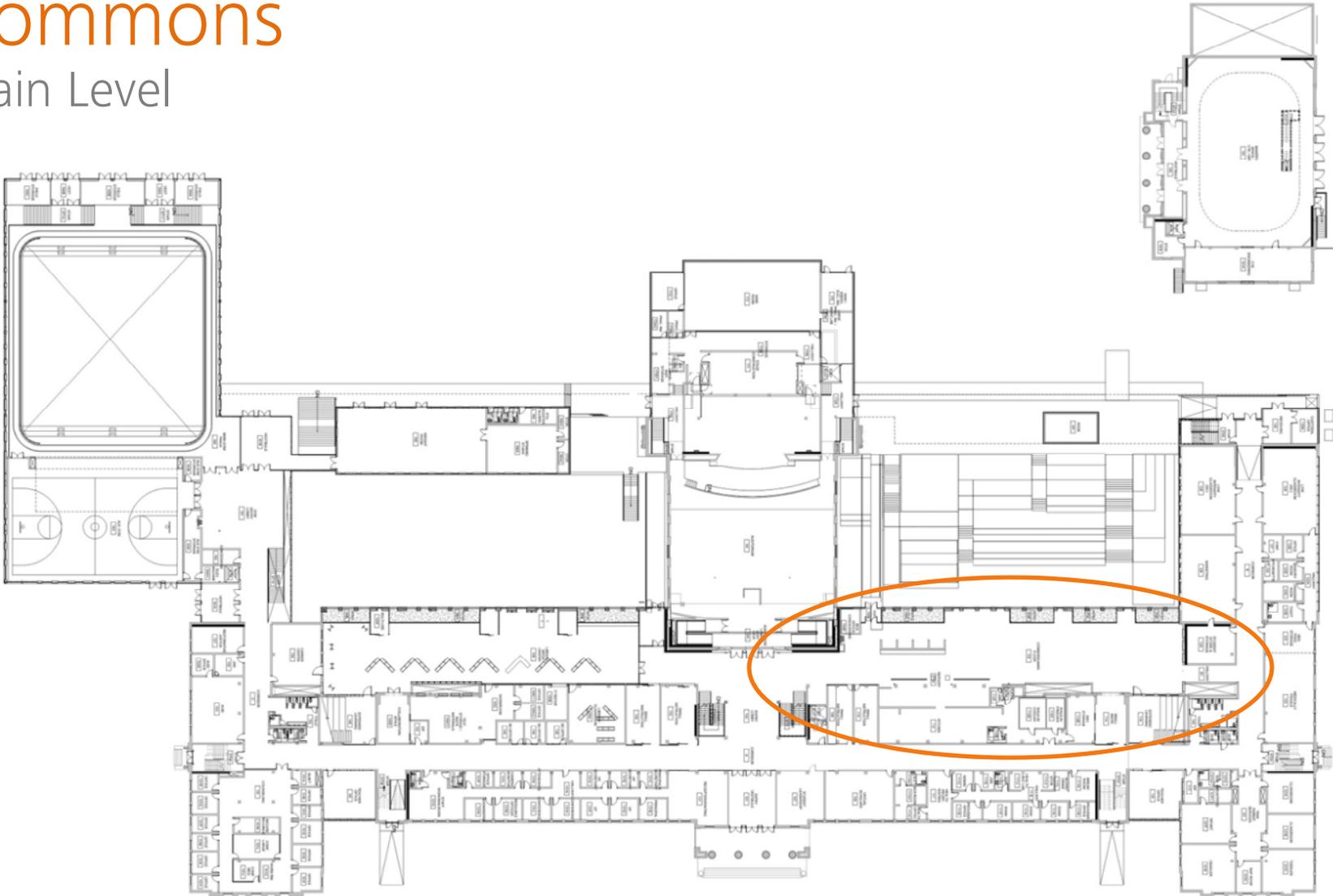
Library

Main Level



Commons

Main Level



Grant Magazine

The Grant High School news magazine. Connected.

MAY 2016 ISSUE

Lunchroom Legacy

GM

STORY BY SOPHIE HAUTH, KALI RENNAKER AND LAEL TATE | PHOTOS BY JOSHUA WEBB
ON MAY 7, 2016

0



When the long-awaited lunch bell rings at Grant High School, students shuffle out of their classes, eager for something to eat.

Grant Magazine

The Grant High School news magazine. Connected.

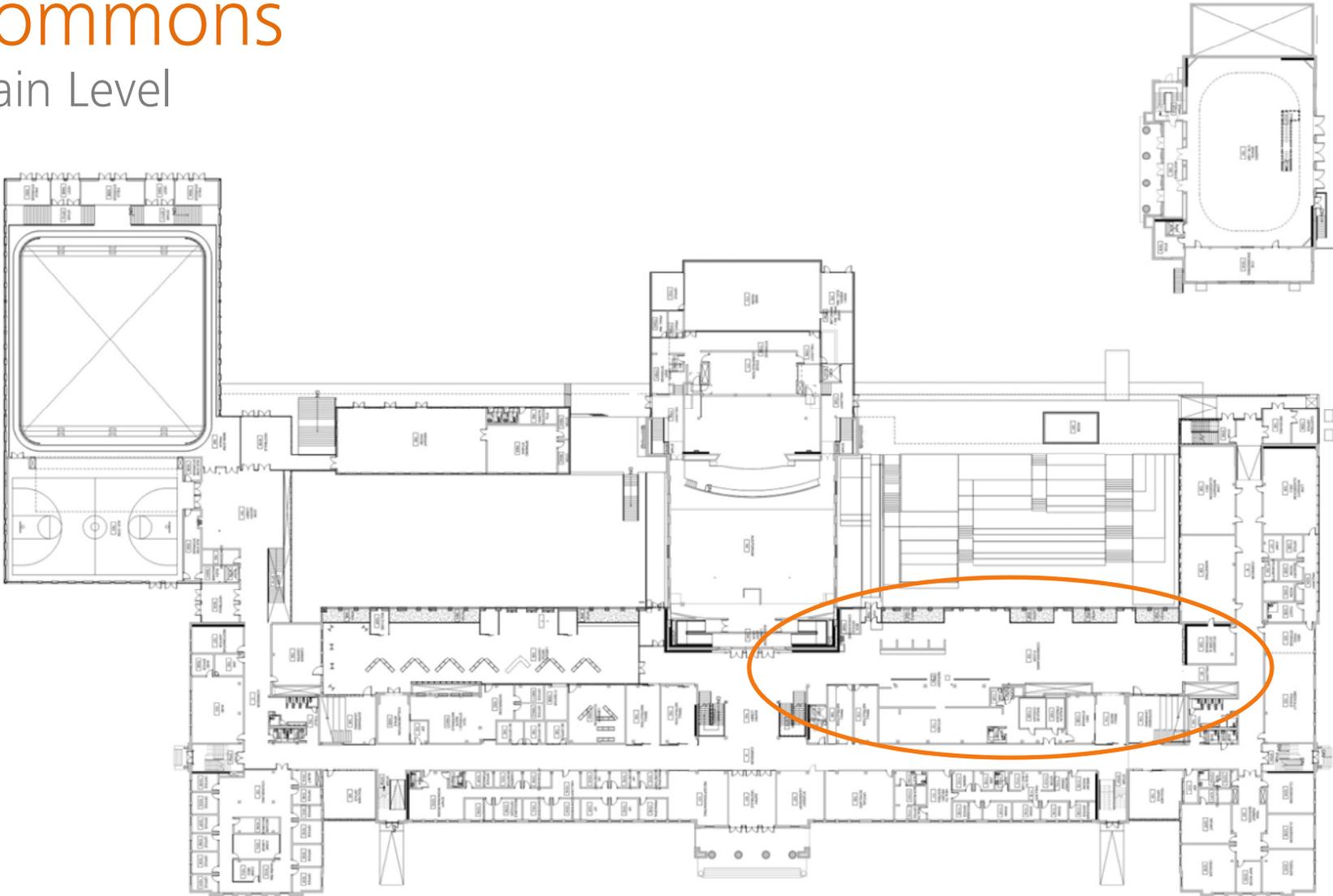
“The cafeteria...should exemplify unity, and everybody should come together in the cafeteria. It’s everybody’s favorite time, ‘cause everybody loves lunch.”

“The space, what it looks like...makes a really huge impact on how people feel about the cafeteria.”

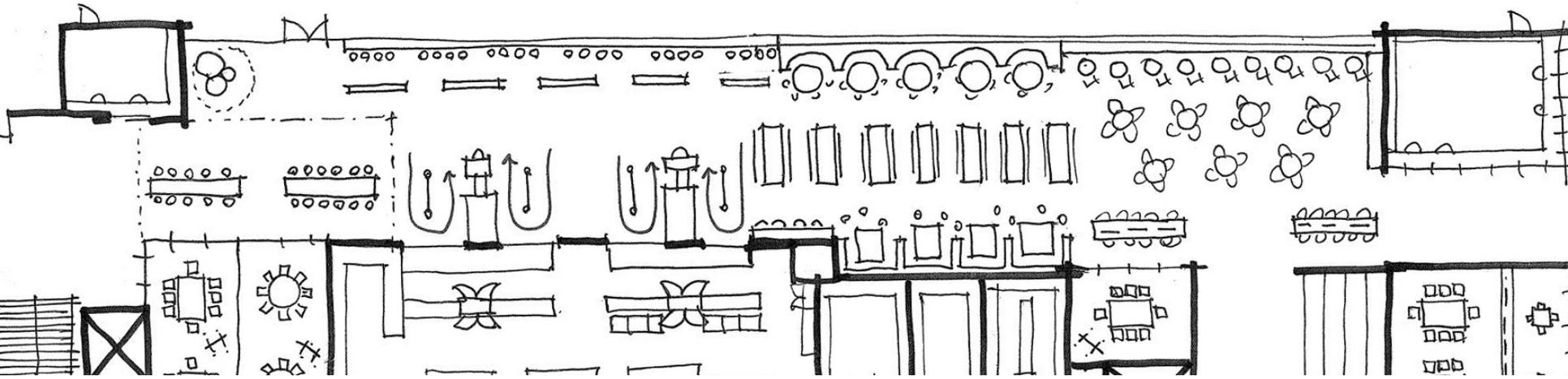
- *Student Comments*

Commons

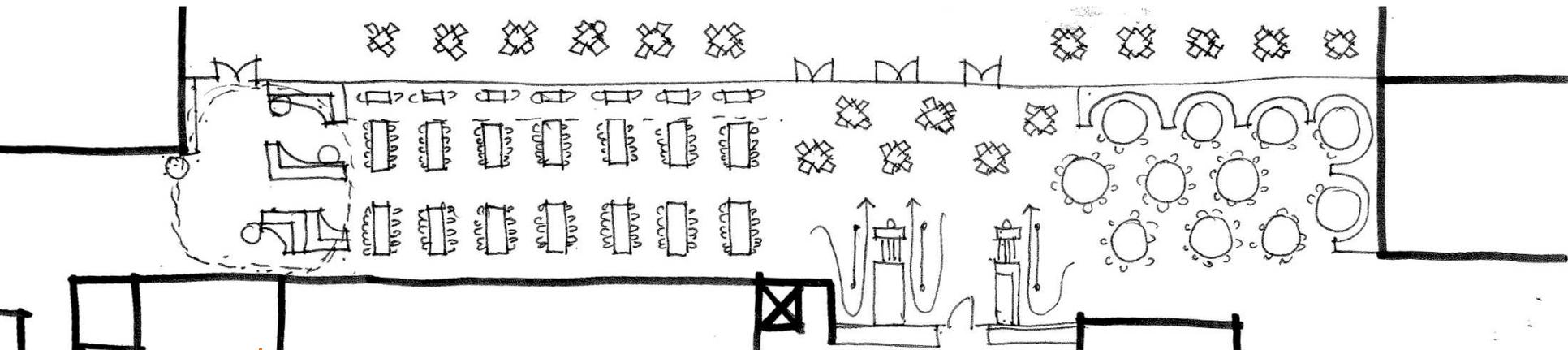
Main Level



Commons- Learning Cafe



Main Level



Lower Level

Commons

Main Level



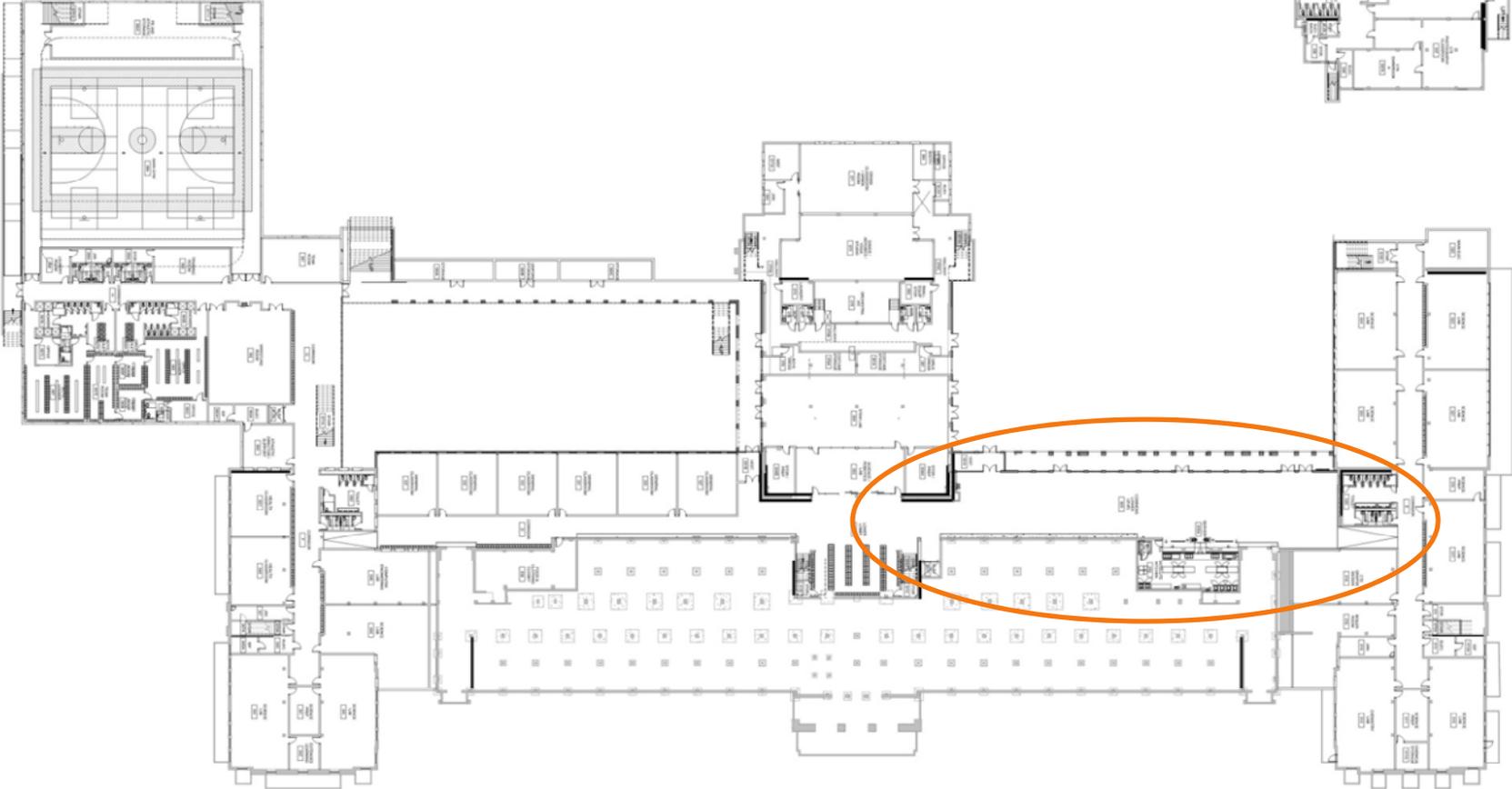
Commons

Main Level



Commons

Lower Level



Commons

Lower Level



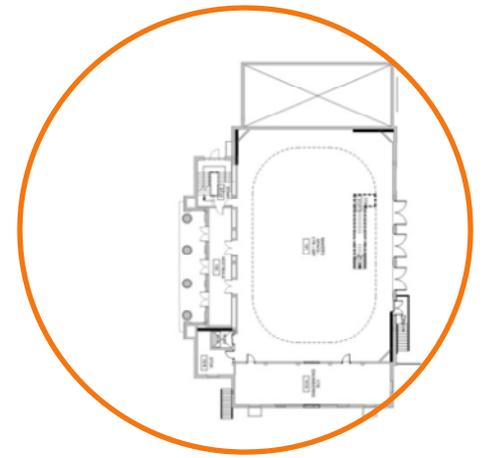
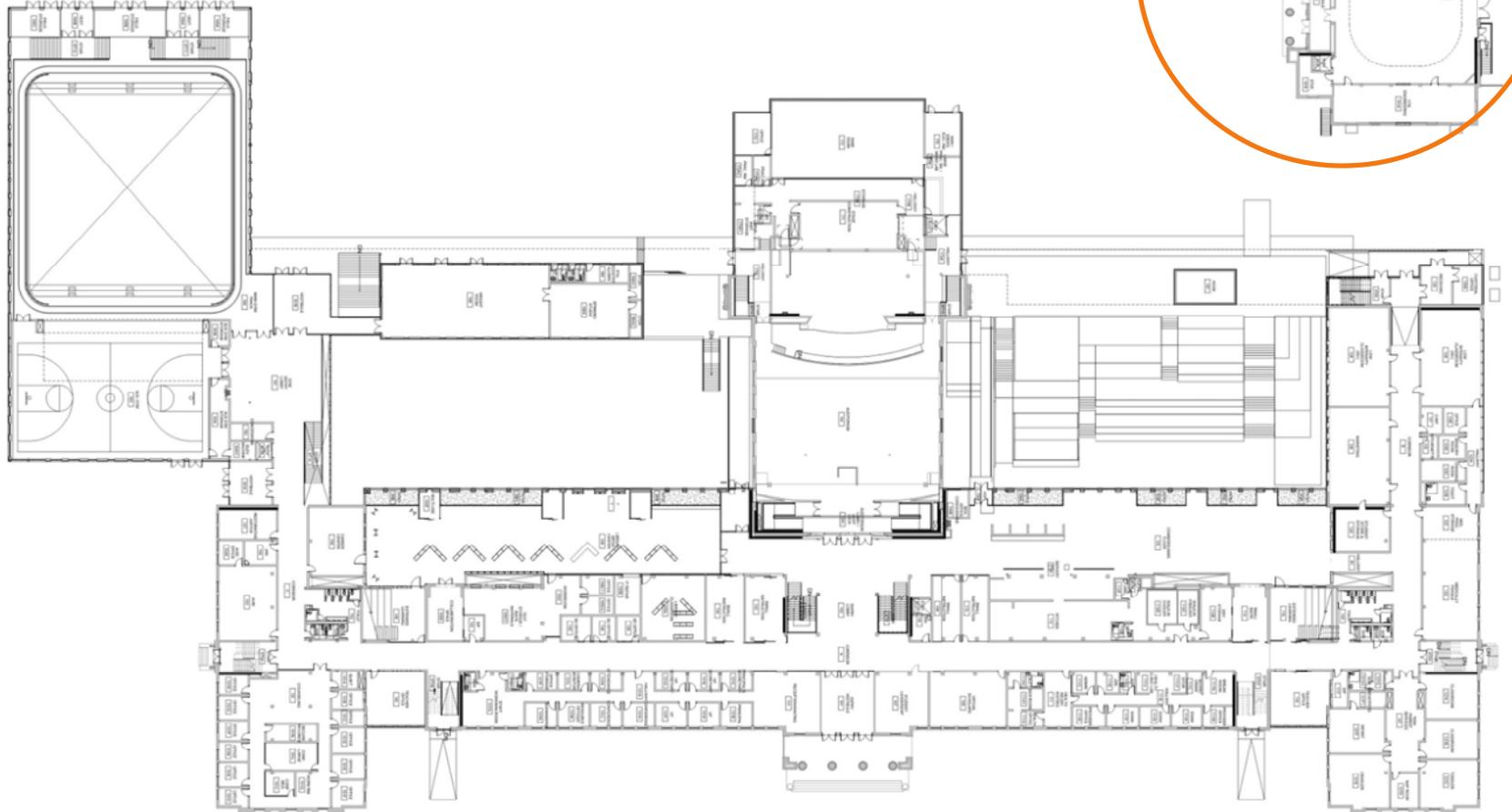
Commons

Lower Level



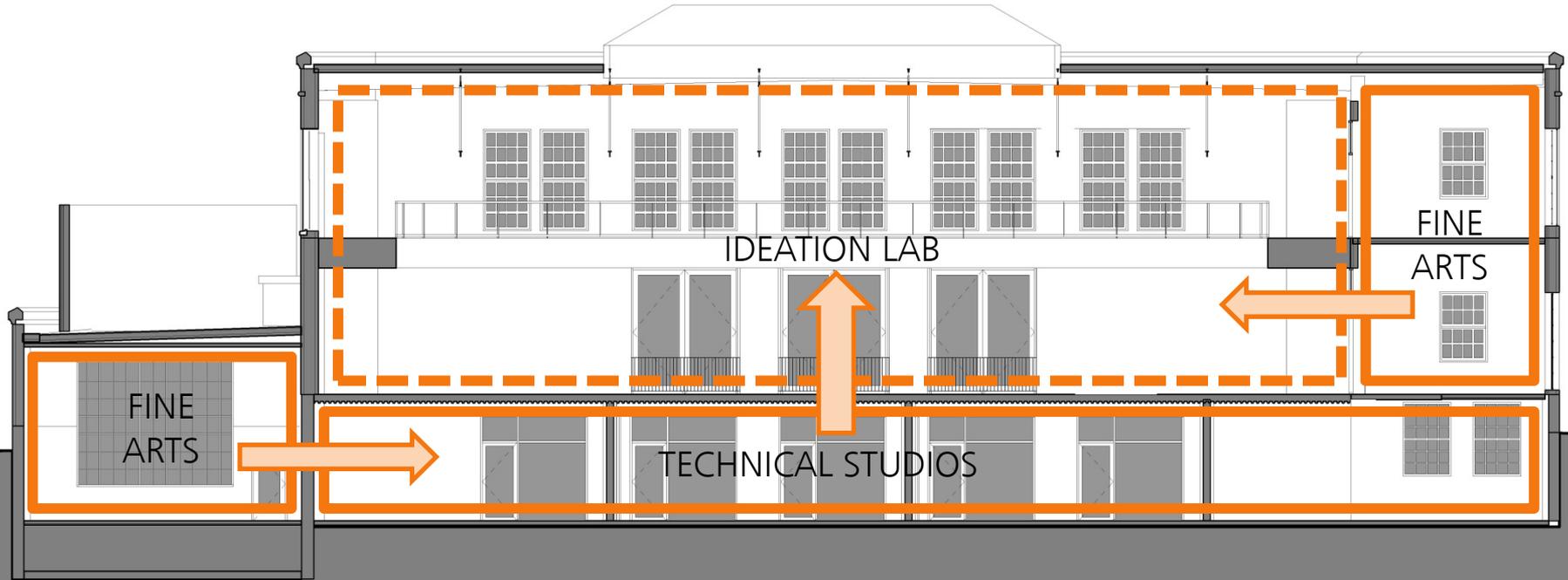


Art Complex



Art Complex :: Community of Practice

Ideation Lab



Ideation Lab

Open, Shared, Flexible Space



Ideation Lab

Open, Shared, Flexible Space



Ideation Lab

Open, Shared, Flexible Space



Art Complex

Fine Art Studios



Art Complex

2-D Art Studios



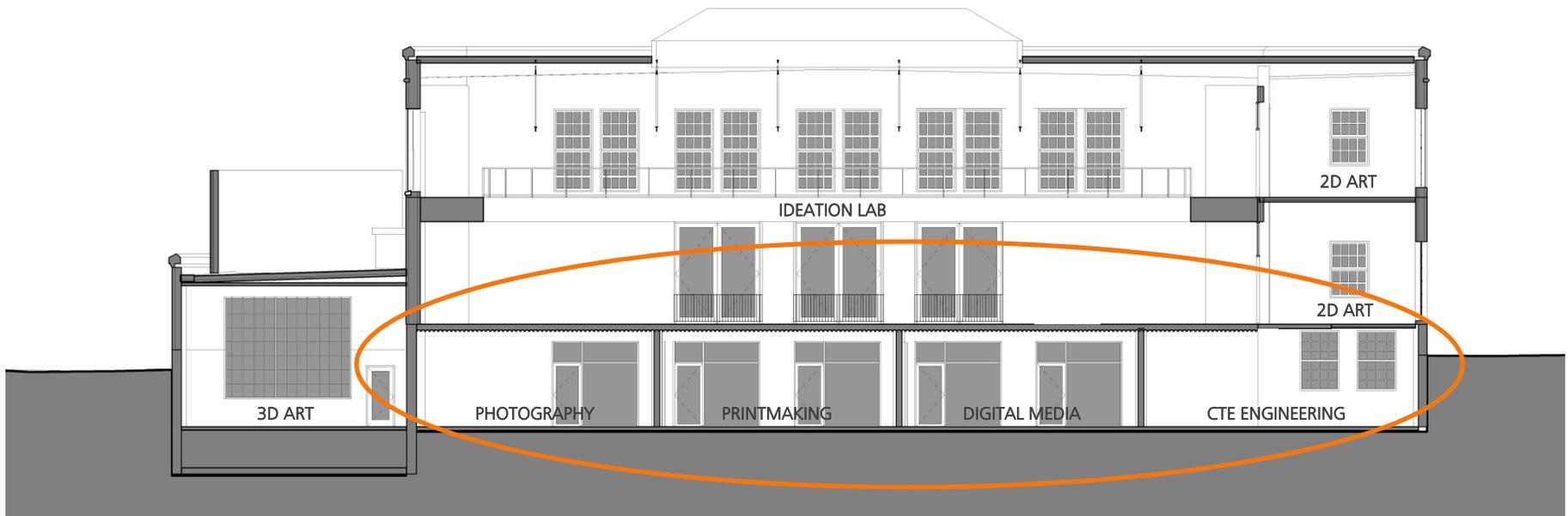
Art Complex

3-D Art Studio



Art Complex

Technical Studios



Art Complex

Technical Studios



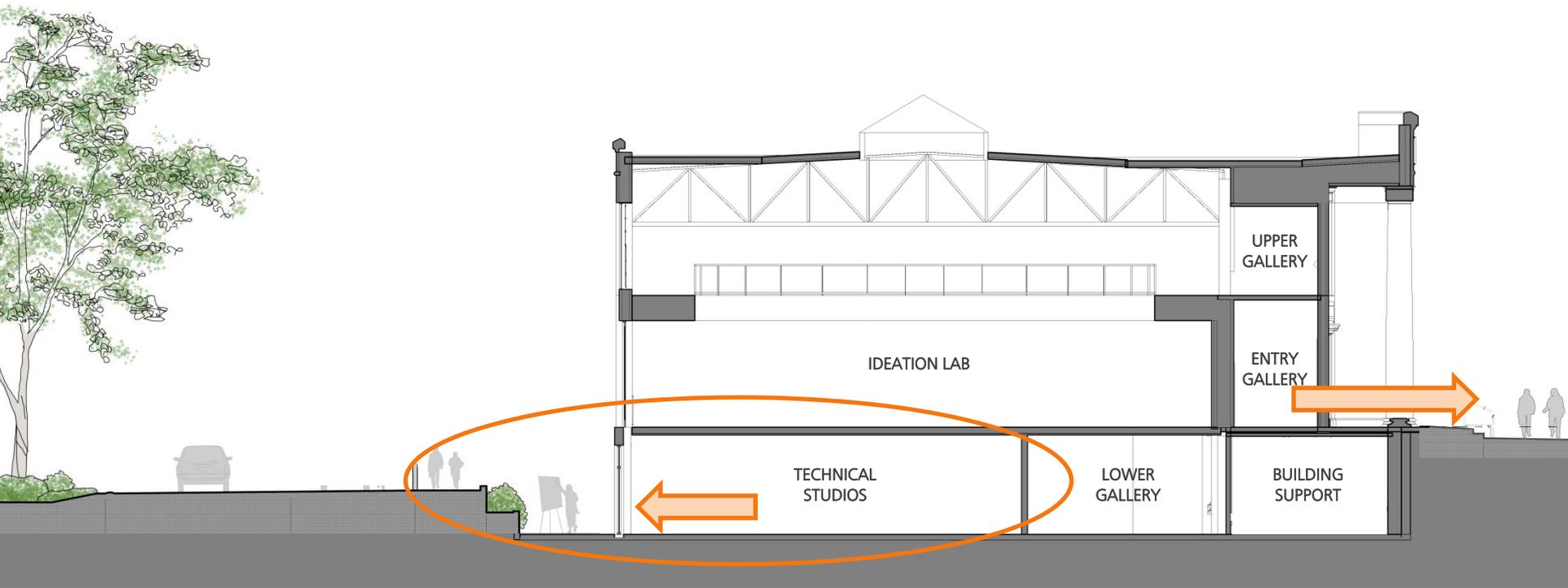
Art Complex

Technical Studios



Art Complex

Work Yards



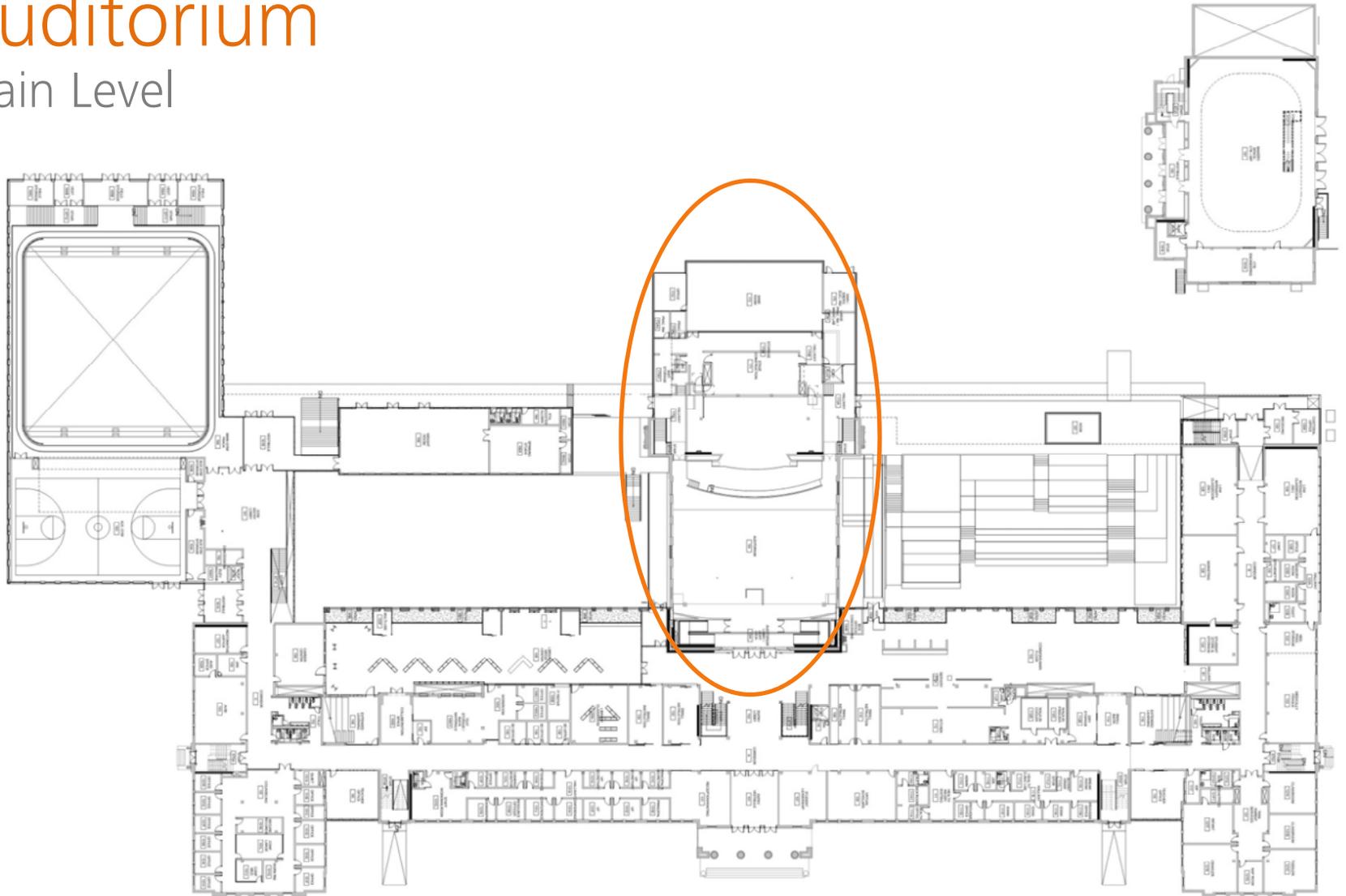
Art Complex

Work Yards



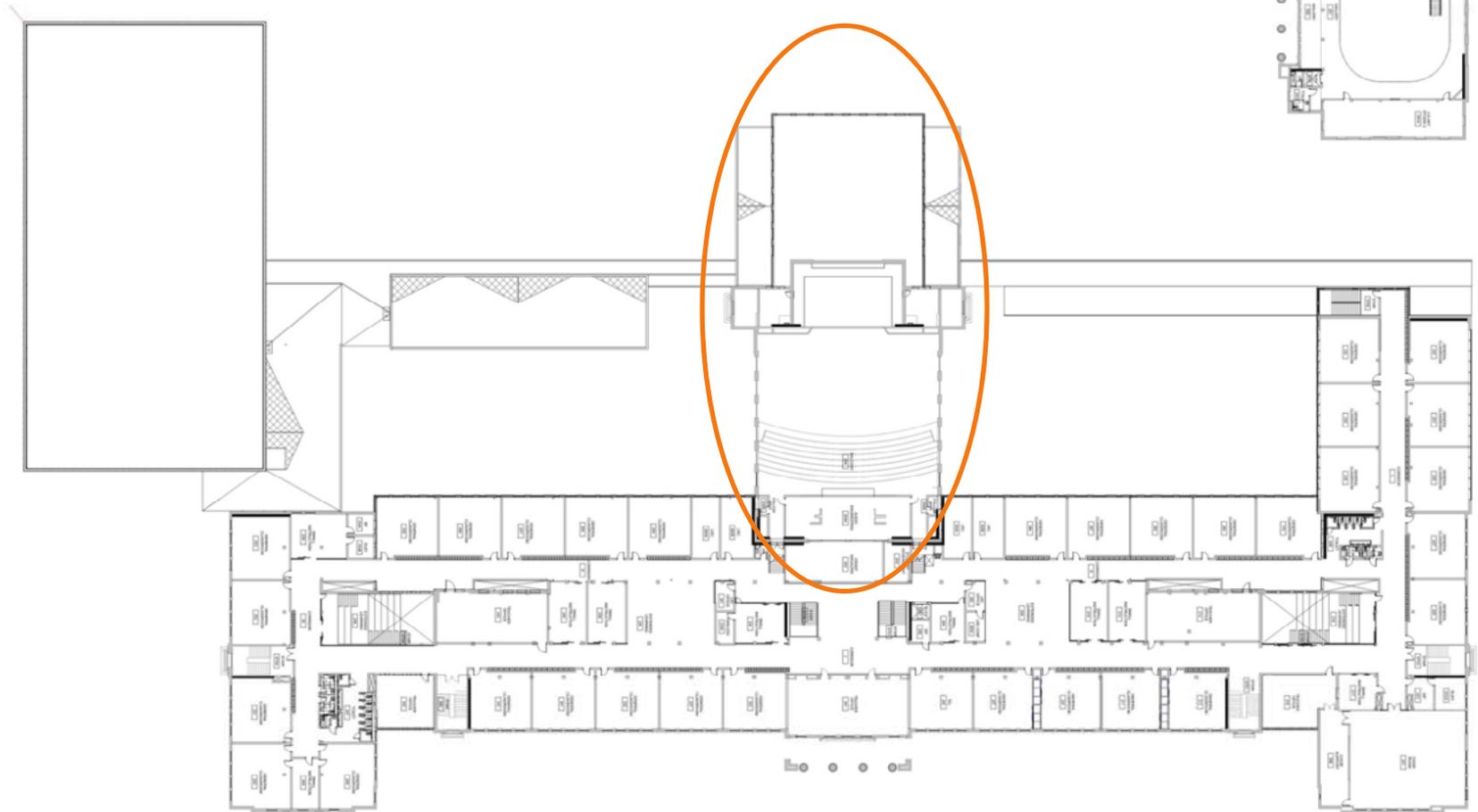
Auditorium

Main Level



Auditorium

Upper Level



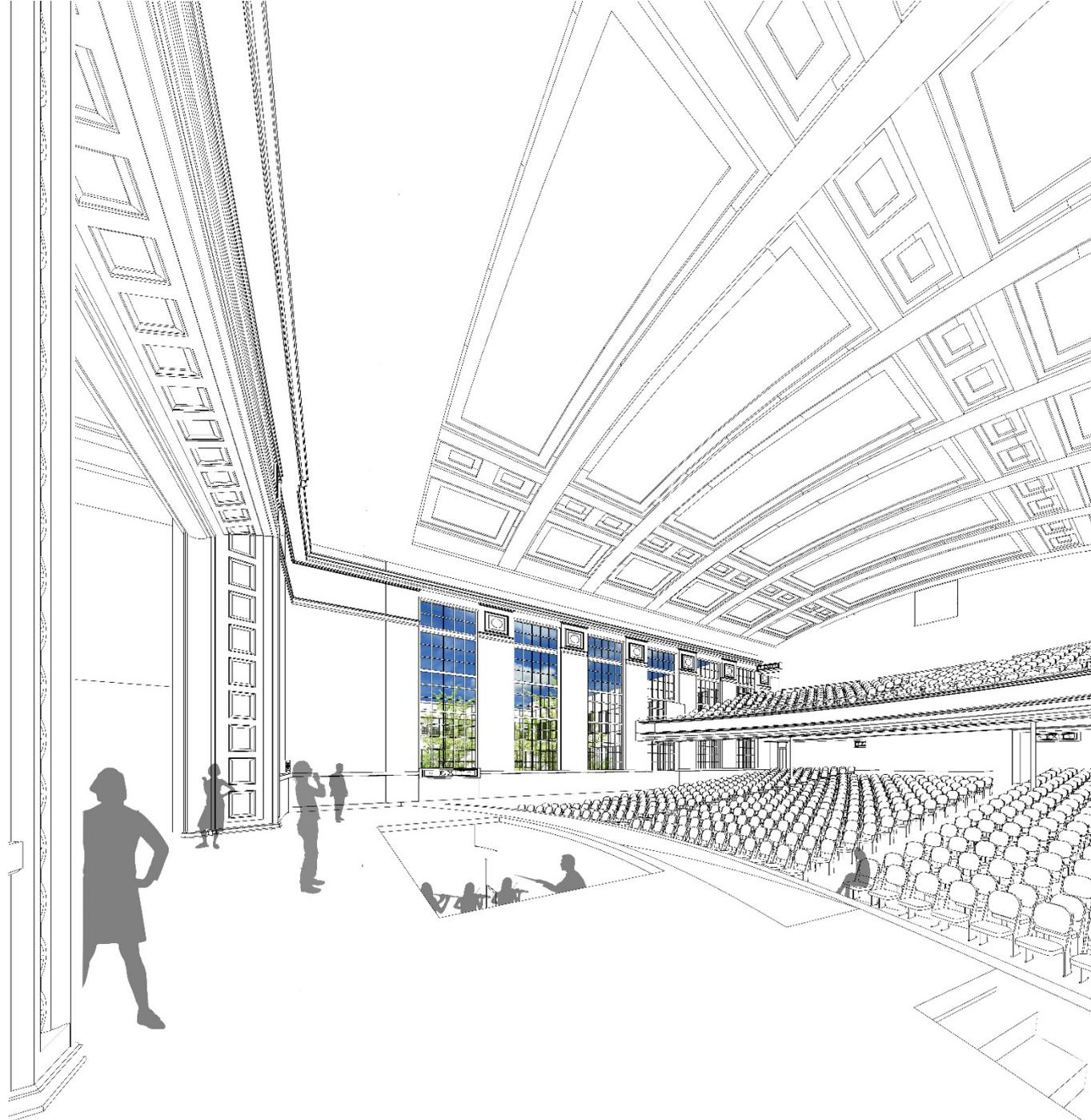
Auditorium

House



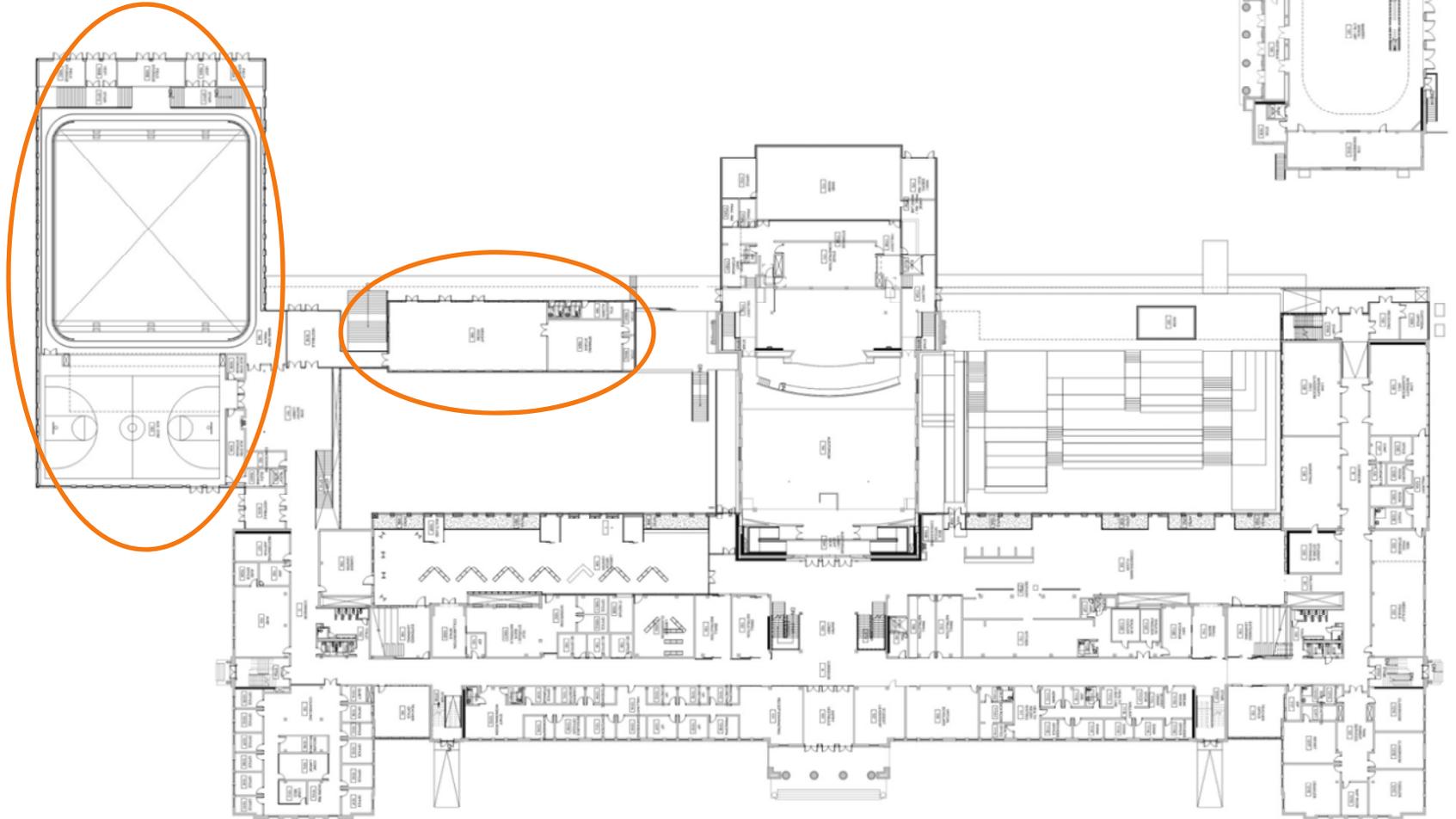
Auditorium

House



Athletics

Main Level



Athletics Lobby

Main Level



Athletics Lobby

Main Level



Athletics Gymnasium

Main Level



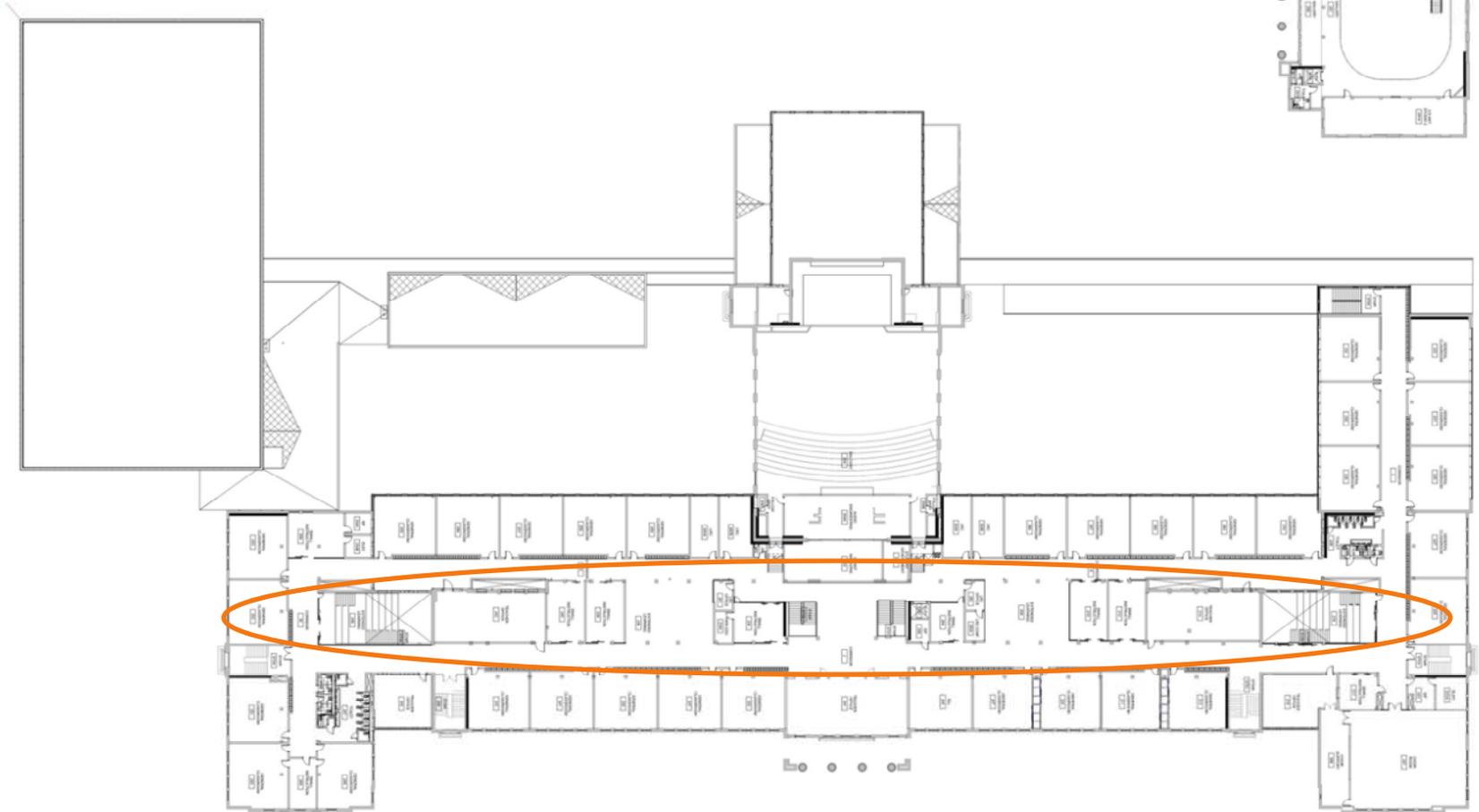
Athletics Gymnasium

Main Level



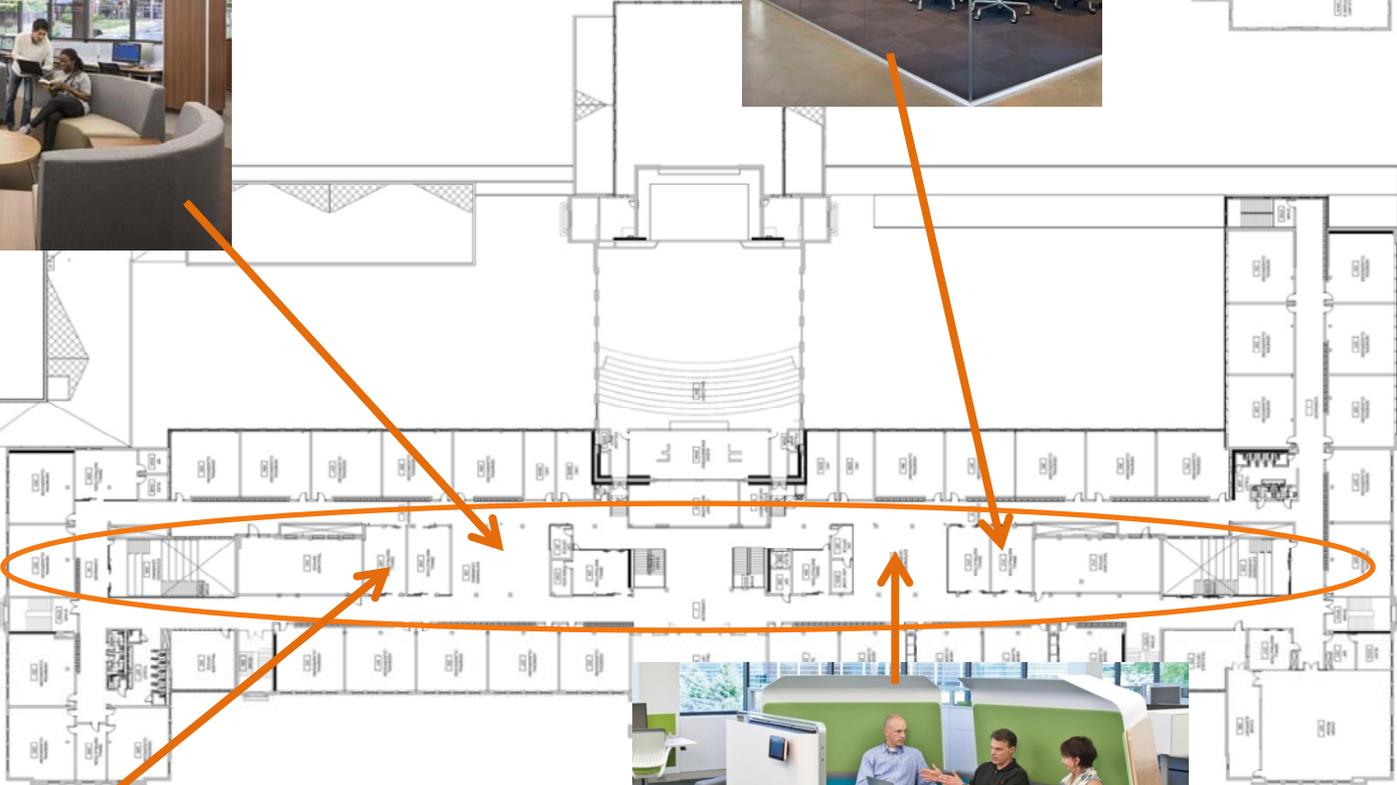
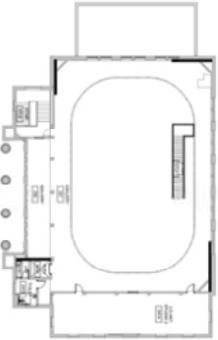
Learning Edge

Upper Level



Learning Edge

Upper Level



Learning Edge

Upper Level



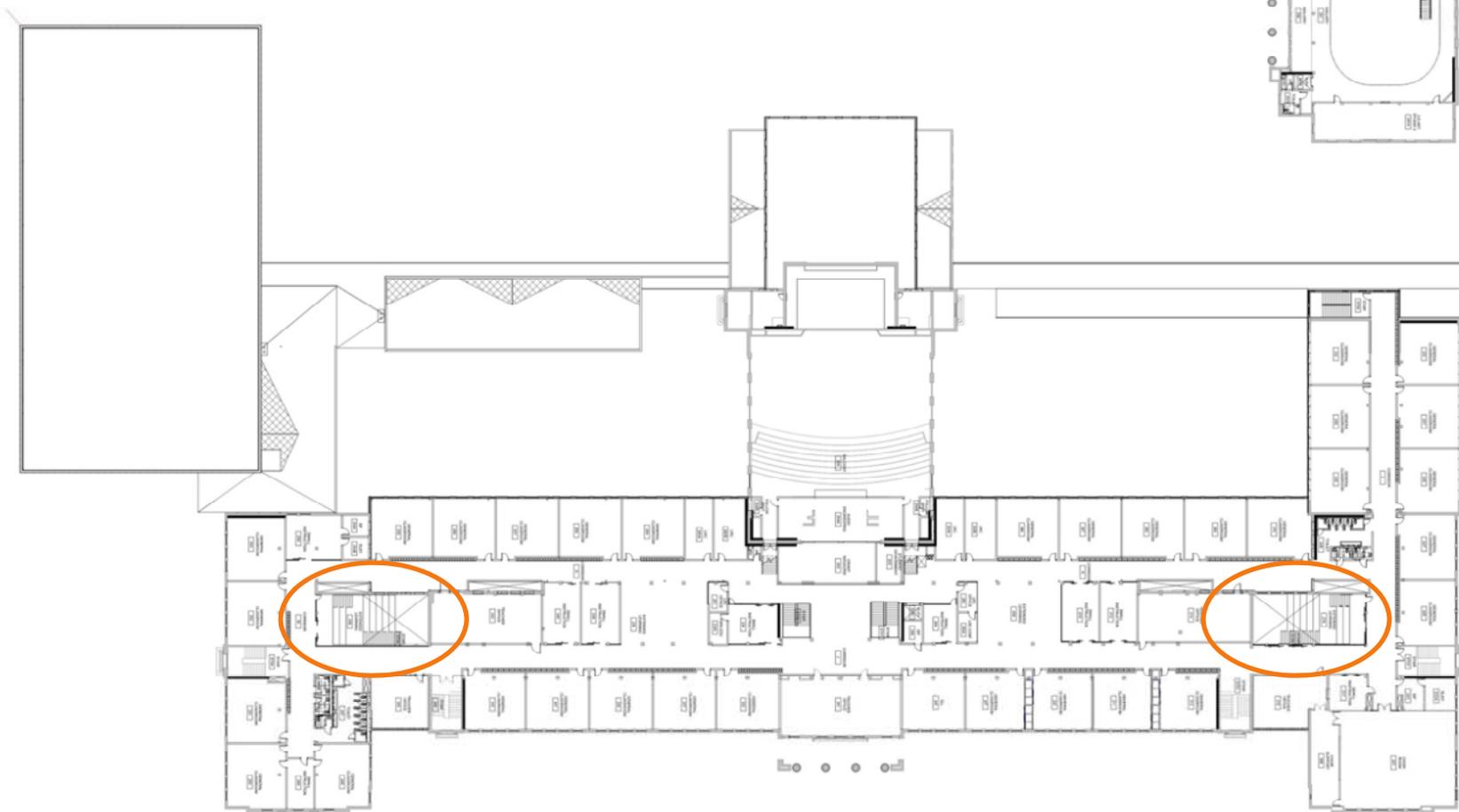
Learning Edge

Upper Level



Forum

Upper Level



Forum Seating

Eating
Studying
Presenting
Group work



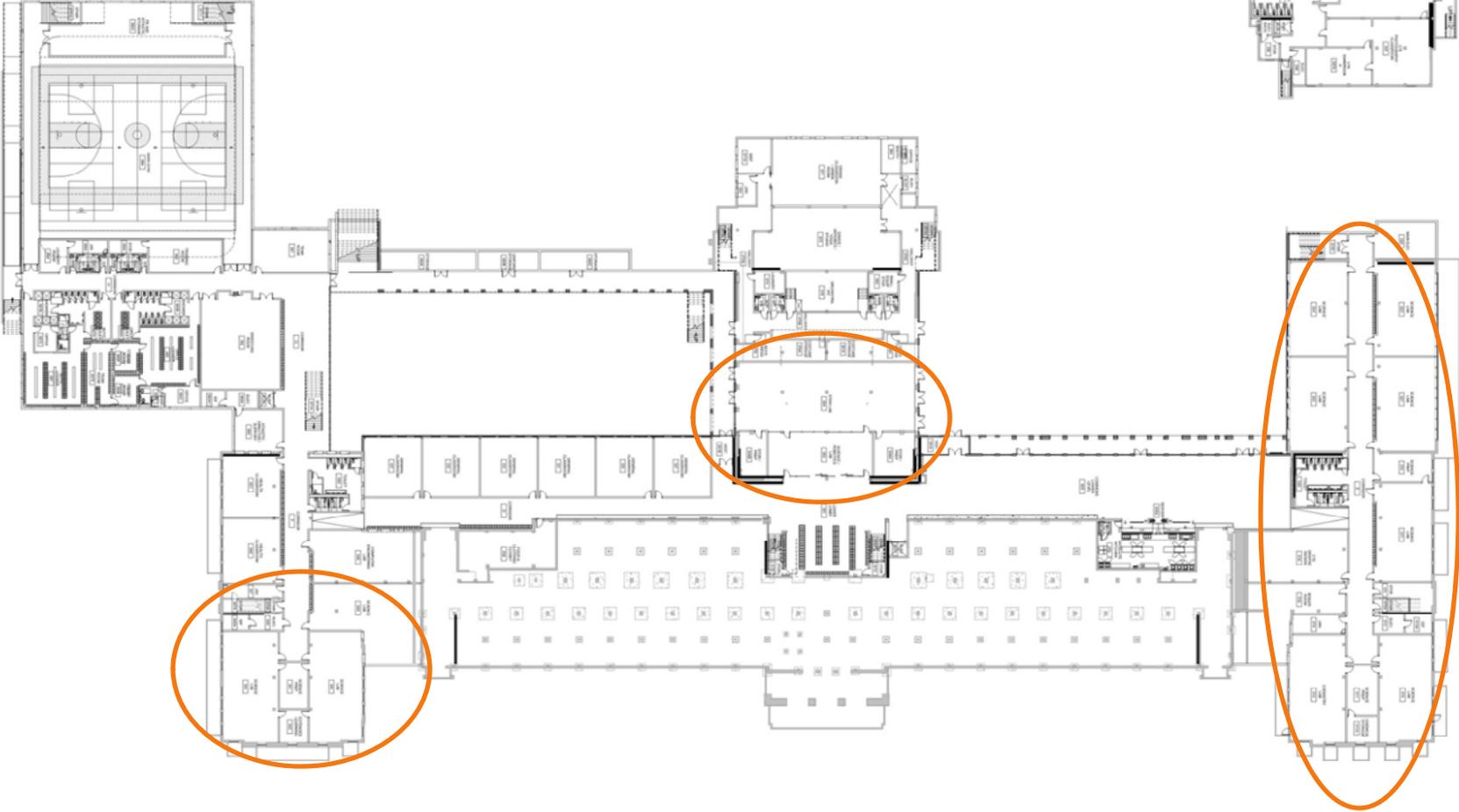
Forum

Main Level

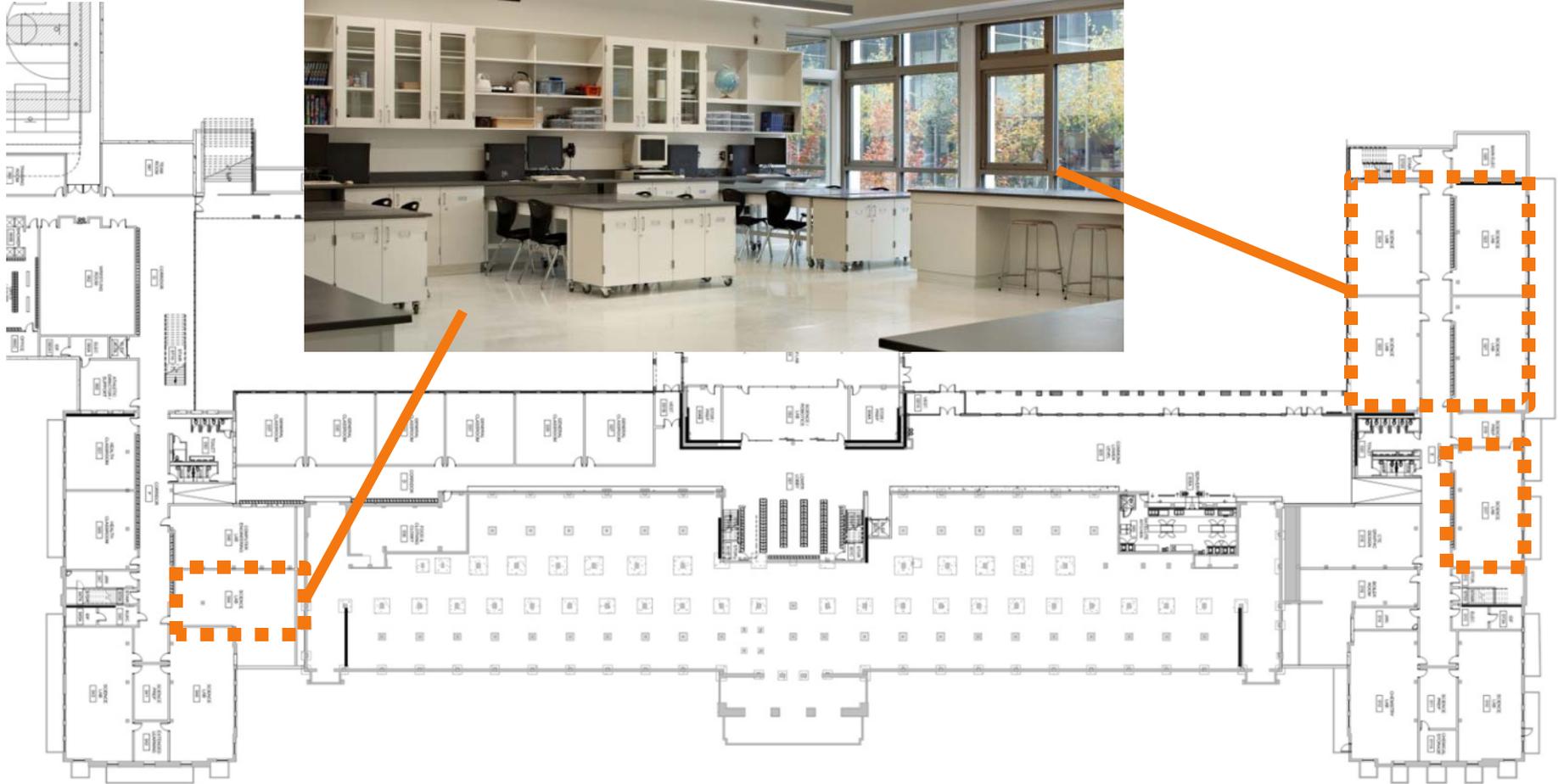


Science & STEM

Lower Level



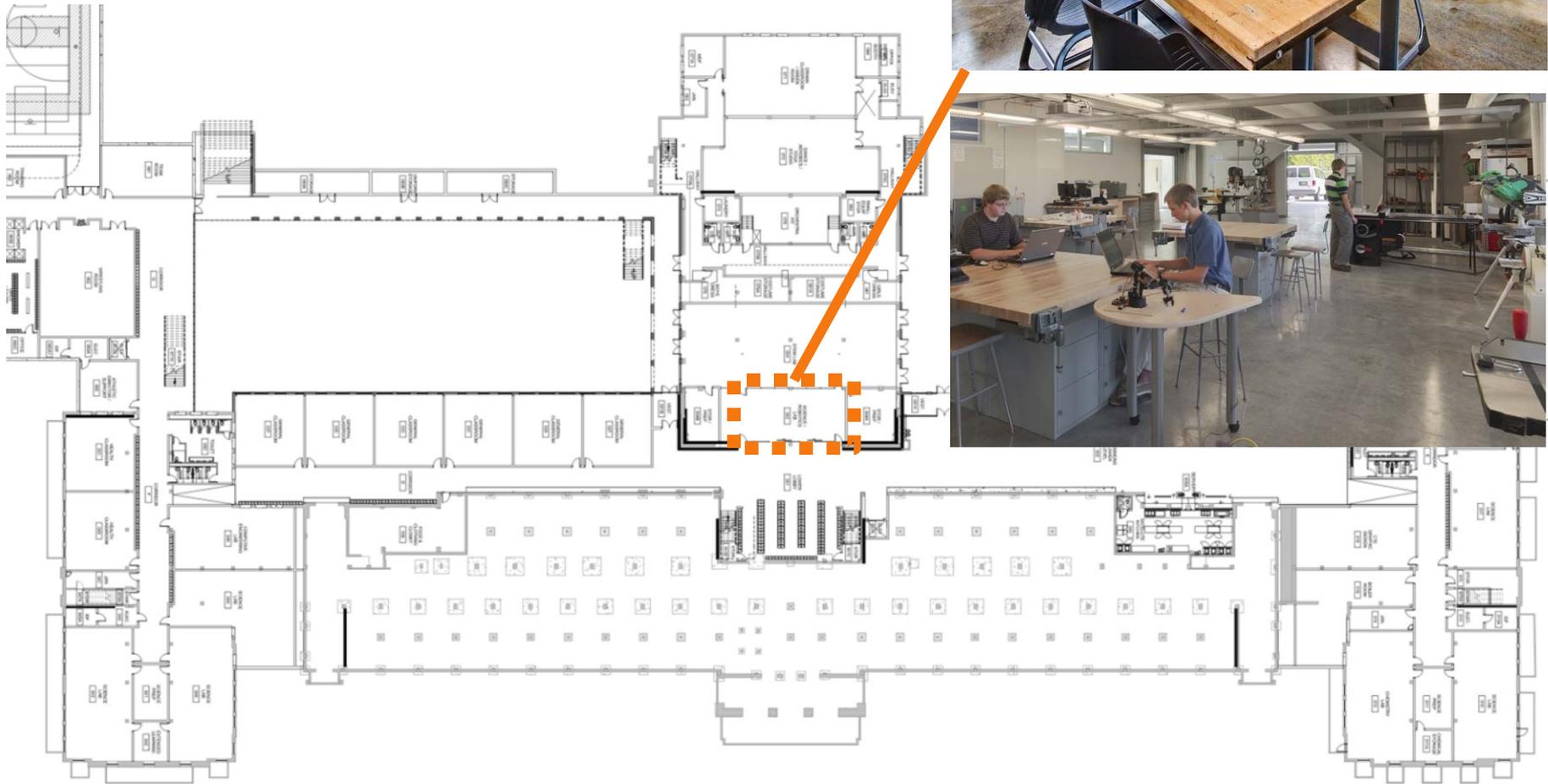
Flexible Labs



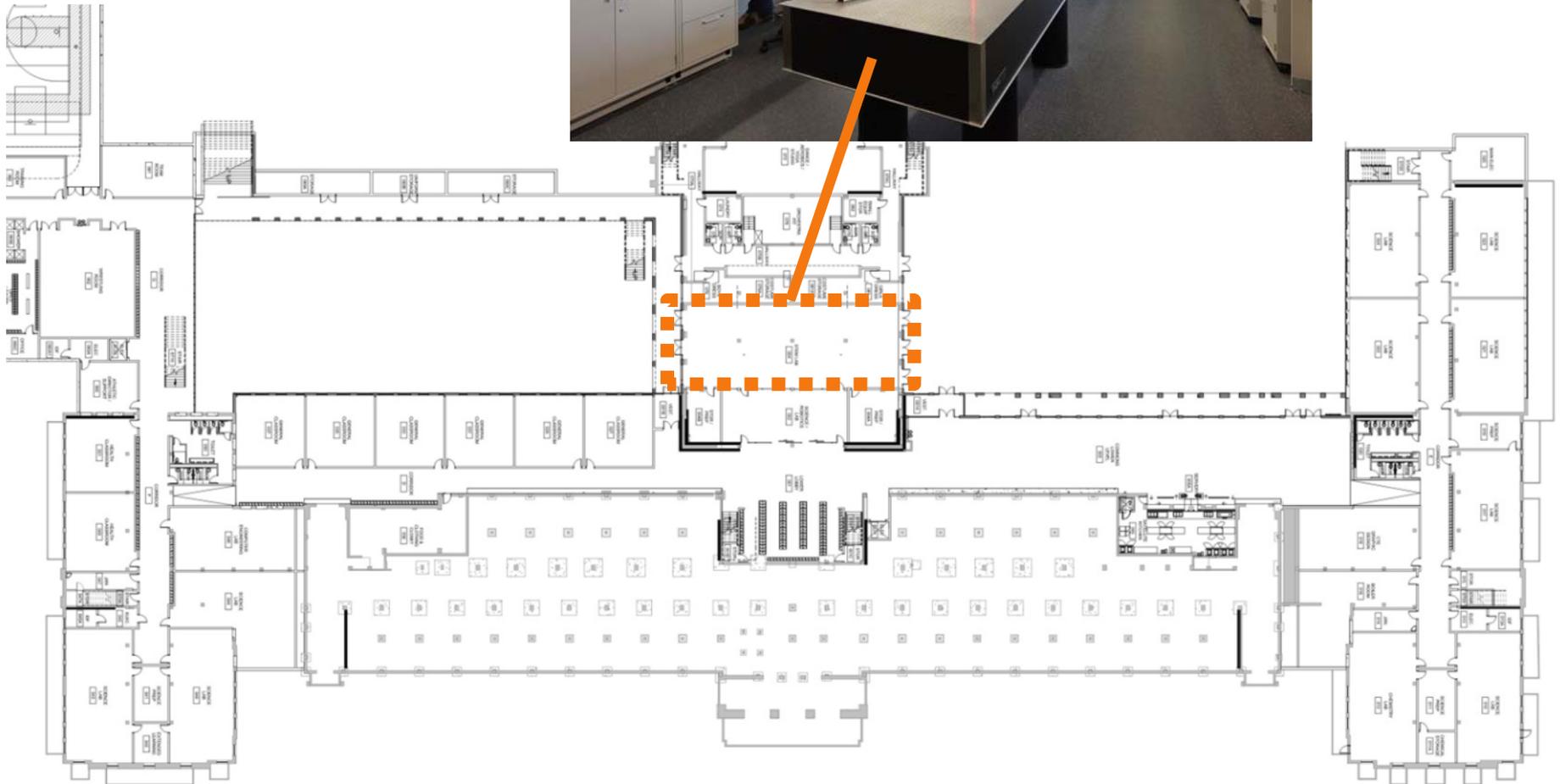
Specialized Labs



Crossover Lab



STEM Lab



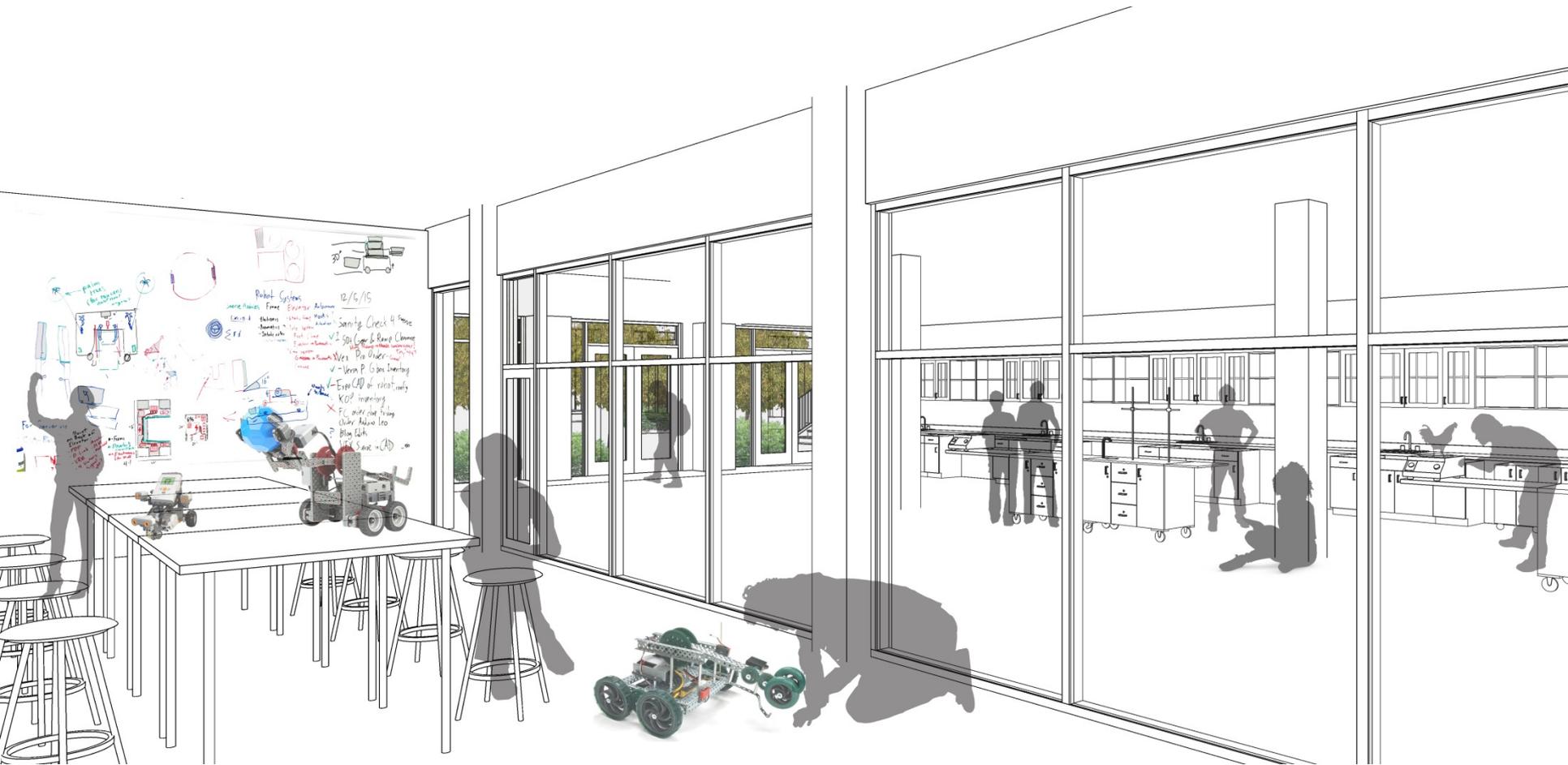
STEM

Lower Level



STEM

Lower Level





Schematic Design Development:: Gender Inclusive Restrooms

Gender Inclusive Restroom Design



Inclusive Restroom Design



Equality



Equity

Inclusive Restroom Design :: Precedent

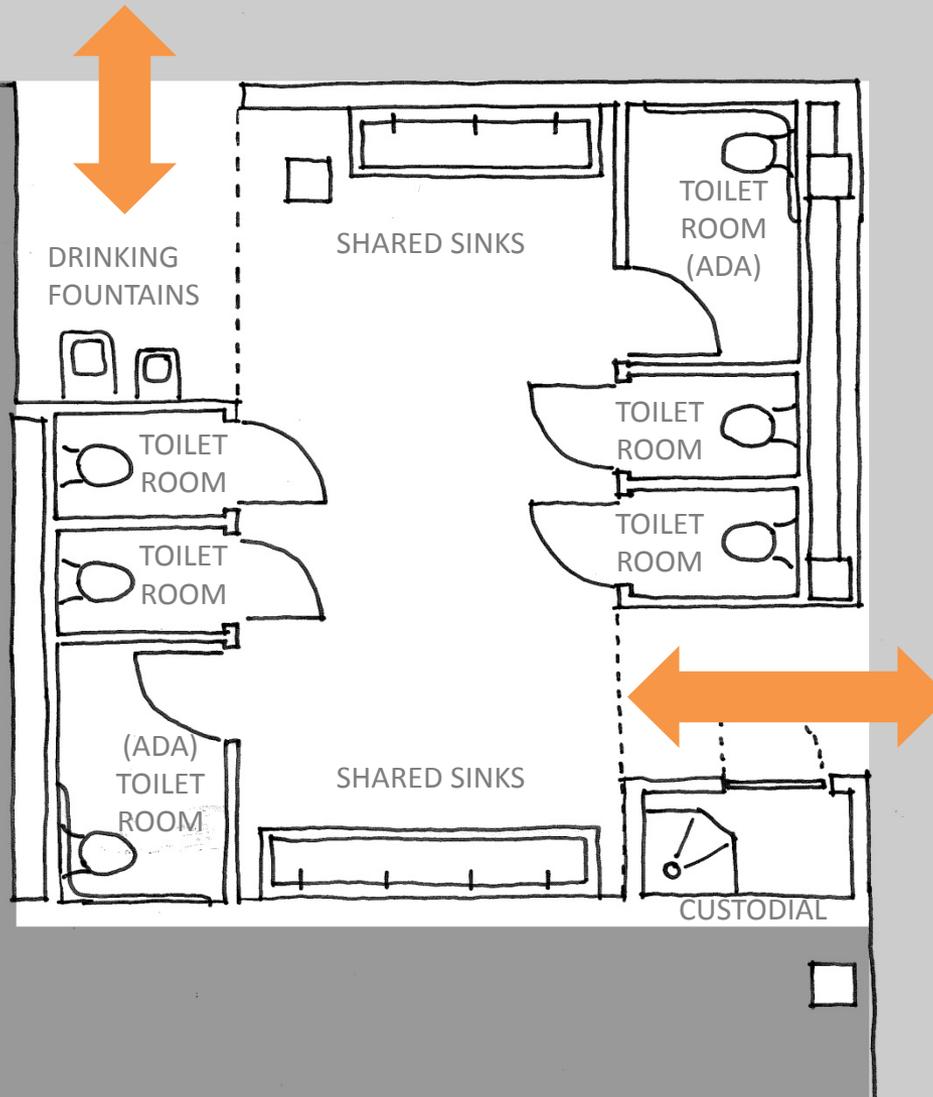


Inclusive Restroom Design :: Precedent



Inclusive Restroom Design :: Concept

- :: Floor to ceiling walls with either full height doors, or full height partition doors
- :: (6) Fully enclosed toilet rooms; (2 of 6) accessible
- :: Trough sinks with integrated hand dryers
- :: (1) Custodial closet



(6) TOILETS
(6-7) SINKS

Project Overview

Team Introductions

Process & Schedule

SDWS 1 Shareback

SDWS 2 Shareback

Schematic Design Development

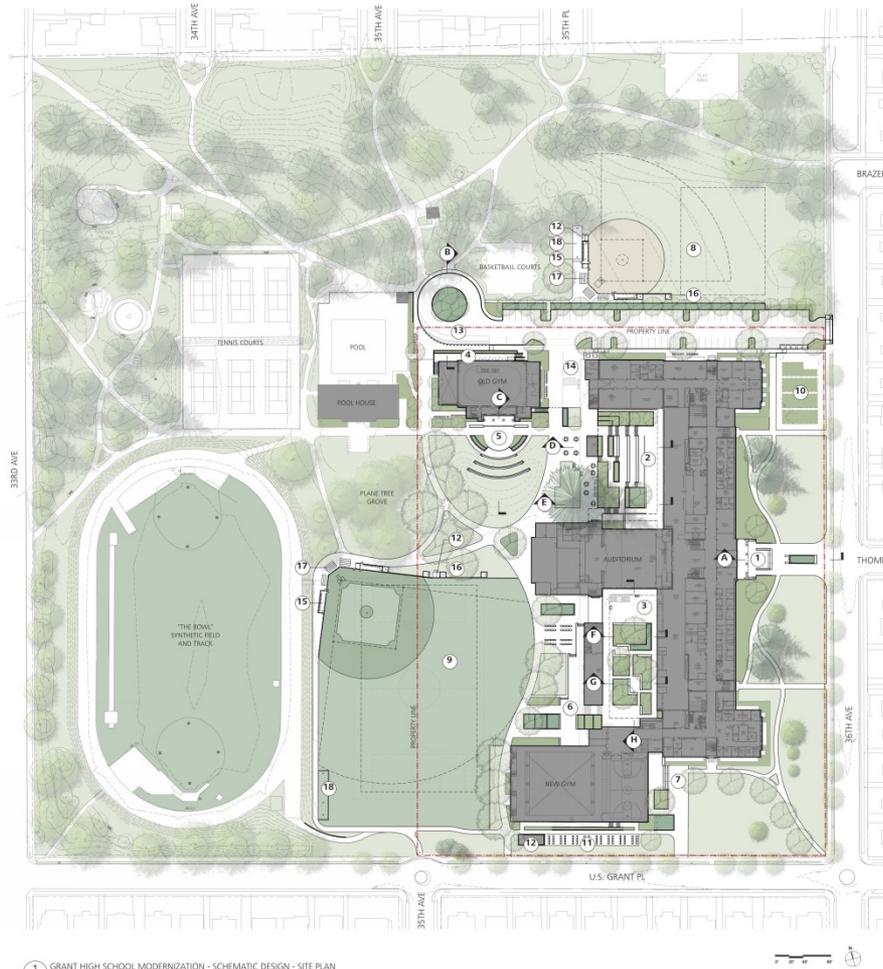
Overview of Today's Listening Stations

Listening Station 1: Focus on Site

1 Site Development

How will the site support Grant High School programs?

Mayer/Reed mahlum



1 GRANT HIGH SCHOOL MODERNIZATION - SCHEMATIC DESIGN - SITE PLAN

1 Site Development

How will the site support Grant High School programs?

Mayer/Reed mahlum



D NORTH COURTYARD - CROSS SECTION ELEVATION



E NORTH COURTYARD - CROSS SECTION ELEVATION



F SOUTH COURTYARD - CROSS SECTION ELEVATION



G SOUTH COURTYARD - CROSS SECTION ELEVATION



H SOUTH COURTYARD - LONGITUDINAL SECTION ELEVATION

Listening Station 2: Focus on Building Design

2 Building Development

How will the new building support Grant High School programs?



East Elevation



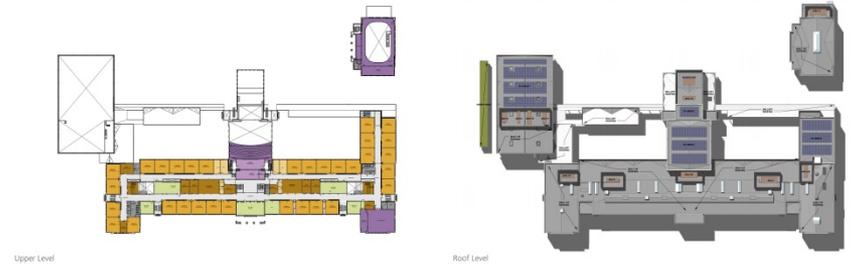
New Gymnasium Lobby



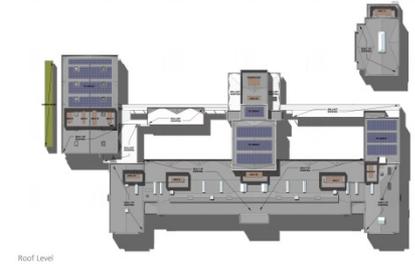
New Gymnasium Looking towards Fields

2 Building Development

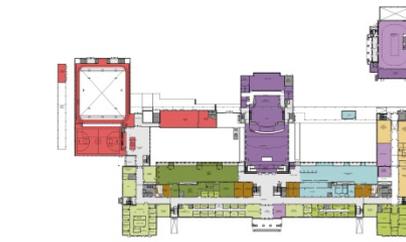
How will the new building support Grant High School programs?



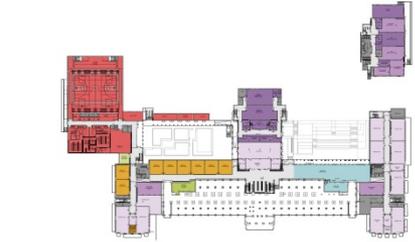
Upper Level



Roof Level



Main Level



Lower Level



North Courtyard

Listening Station 3: Focus on Historic Preservation

3 Historic Analysis

How will the modernization celebrate historic elements?



3 Historic Analysis

How will the modernization celebrate historic elements?



- Rankings
1. Auditorium
 2. Main Entry/ Portico
 3. Interior stairs
 4. Old gym
 5. Murals & Artwork
 6. Front lawn
 7. Choir room
 8. Historic windows
 9. Original library
 10. Corridors



Auditorium House



Main Entry Portico



Interior Stairs, Wood Banisters



Old Gym



Murals in Auditorium



Entry Casework



Historic Front Lawn



Choir Room



Historic Windows



Original Library



Corridors



Art Show in Old Gym

General Notes

1. All work shall comply with applicable codes and standards unless otherwise specified.
2. The contractor shall be responsible for obtaining all necessary permits and approvals.
3. All work shall be completed in accordance with the program schedule and shall be subject to inspection and approval by the project manager and the architect.
4. The contractor shall be responsible for protecting all existing historic elements and shall be required to repair any damage to such elements.
5. The contractor shall be responsible for the preservation of the historic fabric of the building and shall be required to repair any damage to such fabric.
6. The contractor shall be responsible for the preservation of the historic fabric of the building and shall be required to repair any damage to such fabric.
7. The contractor shall be responsible for the preservation of the historic fabric of the building and shall be required to repair any damage to such fabric.
8. The contractor shall be responsible for the preservation of the historic fabric of the building and shall be required to repair any damage to such fabric.
9. The contractor shall be responsible for the preservation of the historic fabric of the building and shall be required to repair any damage to such fabric.
10. The contractor shall be responsible for the preservation of the historic fabric of the building and shall be required to repair any damage to such fabric.

General Notes

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3. All work shall be completed in accordance with the program schedule and shall be subject to inspection and approval by the project manager and the architect.
4. The contractor shall be responsible for protecting all existing historic elements and shall be required to repair any damage to such elements.
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8. The contractor shall be responsible for the preservation of the historic fabric of the building and shall be required to repair any damage to such fabric.
9. The contractor shall be responsible for the preservation of the historic fabric of the building and shall be required to repair any damage to such fabric.
10. The contractor shall be responsible for the preservation of the historic fabric of the building and shall be required to repair any damage to such fabric.

Listening Station 4: Focus on Sustainability

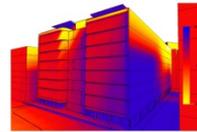


4 Sustainability

How will Grant High School become a green building?

Rankings

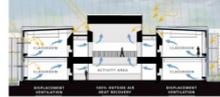
1. High Performance Building
2. Daylight & Views
3. Natural Cooling & Ventilation
4. Strategies for Human Comfort & Health
5. Water Use Reduction
6. On-Site Renewable Energy
7. Building Reuse
8. Stormwater Design
9. School as a Teaching Tool
10. Rainwater Harvesting



High Performance Building



Daylight & Views



Natural Cooling & Ventilation



Human Comfort & Health



Water Use Reduction



On-Site Renewable Energy



Green Roofs



Stormwater planters



Operable Windows



LED Lights & Occupancy Sensors



Building Terrace



Stormwater Design



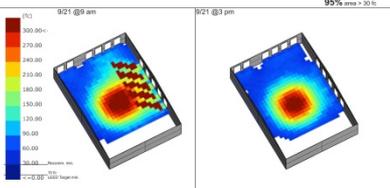
School as Teaching Tool



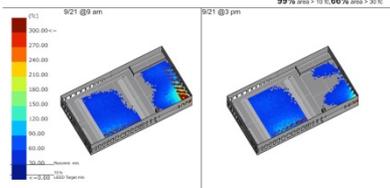
Rainwater Harvesting

LEED 2009 for Schools New Construction and Major Renovations		Grant High School
Project Overview		Spring 2016 - Sustainable Design
1.1.1 Sustainable Sites	Prerequisite: 1.1.1.1	1.1.1.1.1 Minimum 10% Open Space
1.1.1.1.1	1.1.1.1.1.1	1.1.1.1.1.1.1
1.1.1.1.1	1.1.1.1.1.2	1.1.1.1.1.2.1
1.1.1.1.1	1.1.1.1.1.3	1.1.1.1.1.3.1
1.1.1.1.1	1.1.1.1.1.4	1.1.1.1.1.4.1
1.1.1.1.1	1.1.1.1.1.5	1.1.1.1.1.5.1
1.1.1.1.1	1.1.1.1.1.6	1.1.1.1.1.6.1
1.1.1.1.1	1.1.1.1.1.7	1.1.1.1.1.7.1
1.1.1.1.1	1.1.1.1.1.8	1.1.1.1.1.8.1
1.1.1.1.1	1.1.1.1.1.9	1.1.1.1.1.9.1
1.1.1.1.1	1.1.1.1.1.10	1.1.1.1.1.10.1
1.1.1.1.1	1.1.1.1.1.11	1.1.1.1.1.11.1
1.1.1.1.1	1.1.1.1.1.12	1.1.1.1.1.12.1
1.1.1.1.1	1.1.1.1.1.13	1.1.1.1.1.13.1
1.1.1.1.1	1.1.1.1.1.14	1.1.1.1.1.14.1
1.1.1.1.1	1.1.1.1.1.15	1.1.1.1.1.15.1
1.1.1.1.1	1.1.1.1.1.16	1.1.1.1.1.16.1
1.1.1.1.1	1.1.1.1.1.17	1.1.1.1.1.17.1
1.1.1.1.1	1.1.1.1.1.18	1.1.1.1.1.18.1
1.1.1.1.1	1.1.1.1.1.19	1.1.1.1.1.19.1
1.1.1.1.1	1.1.1.1.1.20	1.1.1.1.1.20.1
1.1.1.1.1	1.1.1.1.1.21	1.1.1.1.1.21.1
1.1.1.1.1	1.1.1.1.1.22	1.1.1.1.1.22.1
1.1.1.1.1	1.1.1.1.1.23	1.1.1.1.1.23.1
1.1.1.1.1	1.1.1.1.1.24	1.1.1.1.1.24.1
1.1.1.1.1	1.1.1.1.1.25	1.1.1.1.1.25.1
1.1.1.1.1	1.1.1.1.1.26	1.1.1.1.1.26.1
1.1.1.1.1	1.1.1.1.1.27	1.1.1.1.1.27.1
1.1.1.1.1	1.1.1.1.1.28	1.1.1.1.1.28.1
1.1.1.1.1	1.1.1.1.1.29	1.1.1.1.1.29.1
1.1.1.1.1	1.1.1.1.1.30	1.1.1.1.1.30.1
1.1.1.1.1	1.1.1.1.1.31	1.1.1.1.1.31.1
1.1.1.1.1	1.1.1.1.1.32	1.1.1.1.1.32.1
1.1.1.1.1	1.1.1.1.1.33	1.1.1.1.1.33.1
1.1.1.1.1	1.1.1.1.1.34	1.1.1.1.1.34.1
1.1.1.1.1	1.1.1.1.1.35	1.1.1.1.1.35.1
1.1.1.1.1	1.1.1.1.1.36	1.1.1.1.1.36.1
1.1.1.1.1	1.1.1.1.1.37	1.1.1.1.1.37.1
1.1.1.1.1	1.1.1.1.1.38	1.1.1.1.1.38.1
1.1.1.1.1	1.1.1.1.1.39	1.1.1.1.1.39.1
1.1.1.1.1	1.1.1.1.1.40	1.1.1.1.1.40.1
1.1.1.1.1	1.1.1.1.1.41	1.1.1.1.1.41.1
1.1.1.1.1	1.1.1.1.1.42	1.1.1.1.1.42.1
1.1.1.1.1	1.1.1.1.1.43	1.1.1.1.1.43.1
1.1.1.1.1	1.1.1.1.1.44	1.1.1.1.1.44.1
1.1.1.1.1	1.1.1.1.1.45	1.1.1.1.1.45.1
1.1.1.1.1	1.1.1.1.1.46	1.1.1.1.1.46.1
1.1.1.1.1	1.1.1.1.1.47	1.1.1.1.1.47.1
1.1.1.1.1	1.1.1.1.1.48	1.1.1.1.1.48.1
1.1.1.1.1	1.1.1.1.1.49	1.1.1.1.1.49.1
1.1.1.1.1	1.1.1.1.1.50	1.1.1.1.1.50.1
1.1.1.1.1	1.1.1.1.1.51	1.1.1.1.1.51.1
1.1.1.1.1	1.1.1.1.1.52	1.1.1.1.1.52.1
1.1.1.1.1	1.1.1.1.1.53	1.1.1.1.1.53.1
1.1.1.1.1	1.1.1.1.1.54	1.1.1.1.1.54.1
1.1.1.1.1	1.1.1.1.1.55	1.1.1.1.1.55.1
1.1.1.1.1	1.1.1.1.1.56	1.1.1.1.1.56.1
1.1.1.1.1	1.1.1.1.1.57	1.1.1.1.1.57.1
1.1.1.1.1	1.1.1.1.1.58	1.1.1.1.1.58.1
1.1.1.1.1	1.1.1.1.1.59	1.1.1.1.1.59.1
1.1.1.1.1	1.1.1.1.1.60	1.1.1.1.1.60.1
1.1.1.1.1	1.1.1.1.1.61	1.1.1.1.1.61.1
1.1.1.1.1	1.1.1.1.1.62	1.1.1.1.1.62.1
1.1.1.1.1	1.1.1.1.1.63	1.1.1.1.1.63.1
1.1.1.1.1	1.1.1.1.1.64	1.1.1.1.1.64.1
1.1.1.1.1	1.1.1.1.1.65	1.1.1.1.1.65.1
1.1.1.1.1	1.1.1.1.1.66	1.1.1.1.1.66.1
1.1.1.1.1	1.1.1.1.1.67	1.1.1.1.1.67.1
1.1.1.1.1	1.1.1.1.1.68	1.1.1.1.1.68.1
1.1.1.1.1	1.1.1.1.1.69	1.1.1.1.1.69.1
1.1.1.1.1	1.1.1.1.1.70	1.1.1.1.1.70.1
1.1.1.1.1	1.1.1.1.1.71	1.1.1.1.1.71.1
1.1.1.1.1	1.1.1.1.1.72	1.1.1.1.1.72.1
1.1.1.1.1	1.1.1.1.1.73	1.1.1.1.1.73.1
1.1.1.1.1	1.1.1.1.1.74	1.1.1.1.1.74.1
1.1.1.1.1	1.1.1.1.1.75	1.1.1.1.1.75.1
1.1.1.1.1	1.1.1.1.1.76	1.1.1.1.1.76.1
1.1.1.1.1	1.1.1.1.1.77	1.1.1.1.1.77.1
1.1.1.1.1	1.1.1.1.1.78	1.1.1.1.1.78.1
1.1.1.1.1	1.1.1.1.1.79	1.1.1.1.1.79.1
1.1.1.1.1	1.1.1.1.1.80	1.1.1.1.1.80.1
1.1.1.1.1	1.1.1.1.1.81	1.1.1.1.1.81.1
1.1.1.1.1	1.1.1.1.1.82	1.1.1.1.1.82.1
1.1.1.1.1	1.1.1.1.1.83	1.1.1.1.1.83.1
1.1.1.1.1	1.1.1.1.1.84	1.1.1.1.1.84.1
1.1.1.1.1	1.1.1.1.1.85	1.1.1.1.1.85.1
1.1.1.1.1	1.1.1.1.1.86	1.1.1.1.1.86.1
1.1.1.1.1	1.1.1.1.1.87	1.1.1.1.1.87.1
1.1.1.1.1	1.1.1.1.1.88	1.1.1.1.1.88.1
1.1.1.1.1	1.1.1.1.1.89	1.1.1.1.1.89.1
1.1.1.1.1	1.1.1.1.1.90	1.1.1.1.1.90.1
1.1.1.1.1	1.1.1.1.1.91	1.1.1.1.1.91.1
1.1.1.1.1	1.1.1.1.1.92	1.1.1.1.1.92.1
1.1.1.1.1	1.1.1.1.1.93	1.1.1.1.1.93.1
1.1.1.1.1	1.1.1.1.1.94	1.1.1.1.1.94.1
1.1.1.1.1	1.1.1.1.1.95	1.1.1.1.1.95.1
1.1.1.1.1	1.1.1.1.1.96	1.1.1.1.1.96.1
1.1.1.1.1	1.1.1.1.1.97	1.1.1.1.1.97.1
1.1.1.1.1	1.1.1.1.1.98	1.1.1.1.1.98.1
1.1.1.1.1	1.1.1.1.1.99	1.1.1.1.1.99.1
1.1.1.1.1	1.1.1.1.1.100	1.1.1.1.1.100.1

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Daylight Study of New Gymnasium



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