

BORA



PORTLAND PUBLIC SCHOOLS

Ida B. Wells High School

Comprehensive Planning Committee Meeting #5
Feb 22, 2024

after BRUCE
public relations & marketing

WALKER | MACY **kpff**

DESIGN TEAM HERE TODAY



Donna Bezio
PPS



Erik Gerding
PPS



Hector Lopez
PPS



Rolando Aquilizan
PPS



Stefee Knudsen
Bora



Amelie Reynaud
Bora



Aisha Marcos
Bora



Josh Brandt
Bora



Chelsea McCann
Walker Macy



Rhonda Teeny
After Bruce



Thy Daniels
After Bruce

AGENDA

- Overview + Introduction** 00:05
- Objectives + Look Ahead** 00:05
- Community Engagement Update** 00:05
- Indoor Air Quality** 00:10
- Ed Spec Update** 00:10
- What We've Heard: CPC 4 + CDW 3** 00:15
- Recommended Site Design Option** 00:20
- Guiding Principles and Impacts on Design** 00:15
- Feedback Exercise** 00:30
- Close + Next Steps** 00:05

meeting notes
from CPC #4 are
posted on the PPS
Bond website!

OBJECTIVES FOR TODAY

Vision Statement & Guiding Principles: consider how the Guiding Principles show up now or in the future.

Site Approach: review recommended option

“Work toward ONE preferred option to take to the School Board.”

modernizations are about the **physical space**

- how it looks and feels
- how the infrastructure supports teaching & learning

this work is **not about operations**

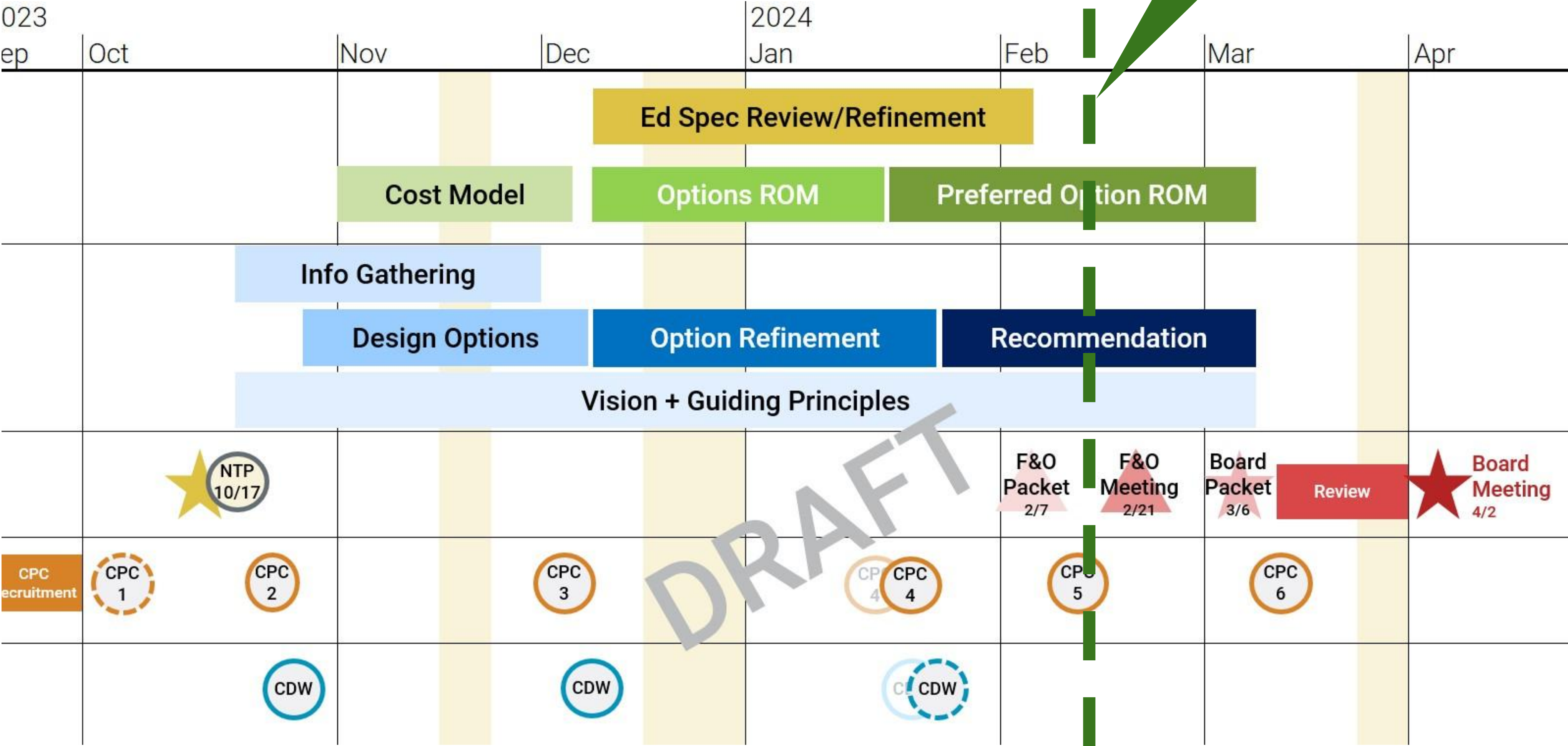
- how it is managed
- what types of classes or functions are inside



Your input helps us understand qualitative questions:

experience, uniqueness, and the culture of this school.

WHERE ARE WE IN THE PROCESS



WHERE ARE WE IN THE BIG PICTURE

We are
HERE

2019
Comprehensive
Master Plan

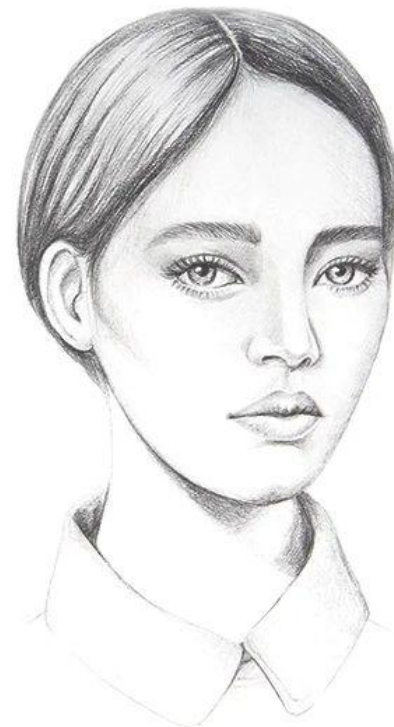
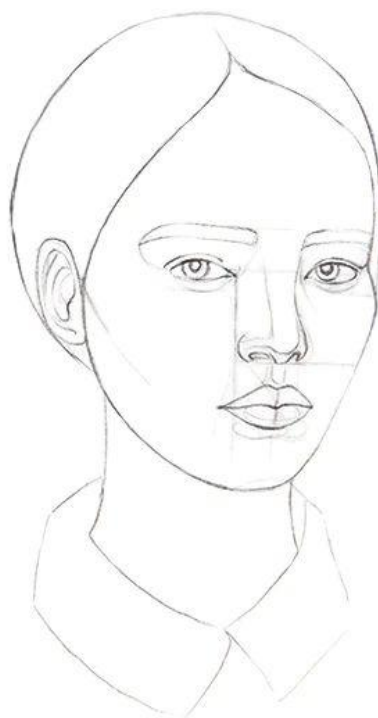
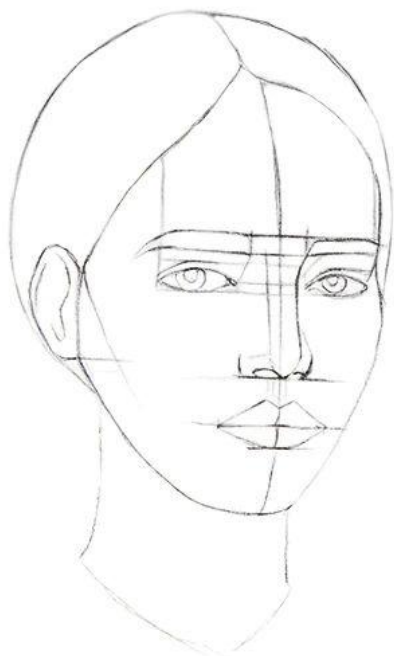
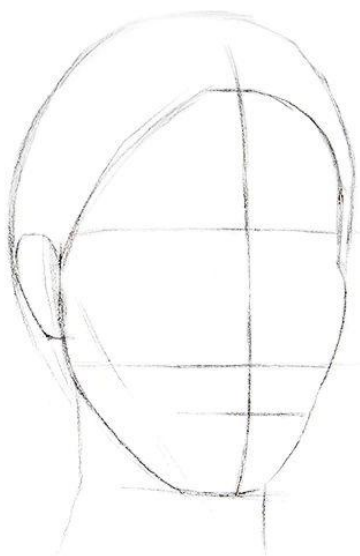
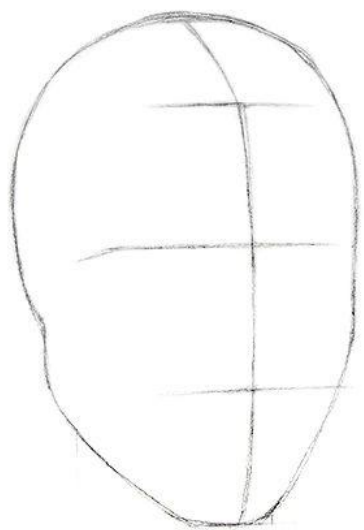
2023-24
**Comprehensive
Planning**

Schematic
Design

Design
Development

Permit
Documents

Ready for
Construction!



TYPICALLY
18-24 MONTHS

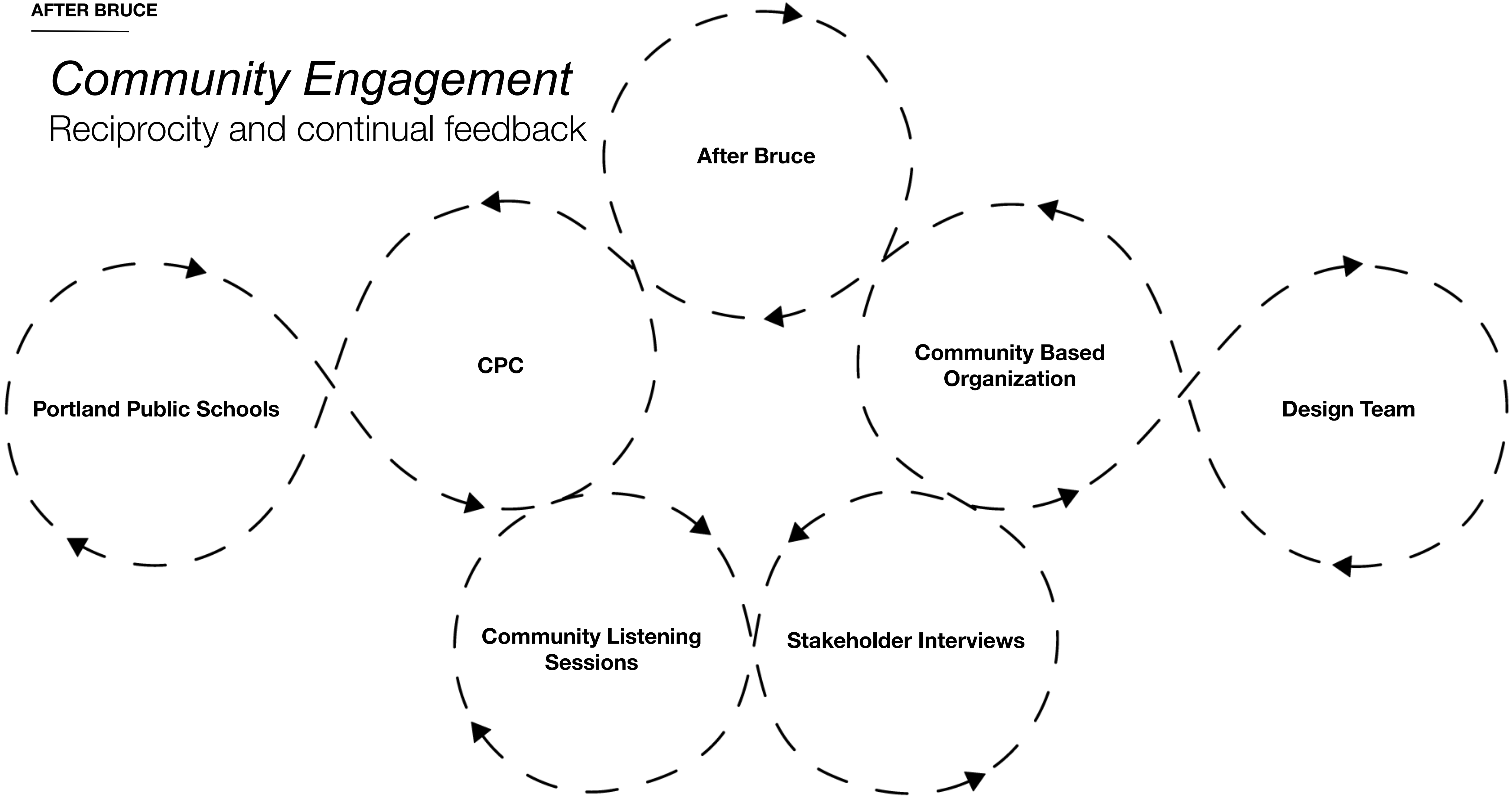
TYPICALLY
24-36 MONTHS

Community Engagement Update



Community Engagement

Reciprocity and continual feedback



Community Engagement

Where we're at in the process

Stakeholder interviews 

Community listening sessions

Advisors to student affinity groups 

Special Education staff 

Muslim & Arab students 

Immigrant and refugee community members 

Students leaders and members of affinity groups 

Community Engagement

Where we're at in the process

Students of affinity groups have to adapt regularly to what might be available, and not knowing where future meetings might take place has become a **barrier to increased participation**.

The **lack of common areas** where students can meet informally creates challenges. The hallways have become an informal gathering spot which causes significant traffic impacting mobility.

The current campus lacks space that is **intentionally meant for staff**.

A **multicultural space** to support students of all different backgrounds would be ideal and could also serve as a space to accommodate religious needs.

Community Engagement

Where we're at in the process

When it comes to the facilities, **Special Education feels like an afterthought** due to a lack of basic things.

Making the new building a **community hub** where neighbors who need it can access many different services (ie: health, mental health, recreation, social services, etc.) would be good for everyone to feel like they belong to this community.

Some students can be overwhelmed (and therefore cannot learn) when overstimulated by bright lights, loud sounds, and crowded spaces.

The way the school is currently broken out into sections, with some classrooms in basements that feel like hideaways, creates a sense of **disconnect and isolation**.

Community Engagement

Upcoming listening sessions

Date	Session	Location
February 27, 2024	Disability Community served by IBWHS * Feedback forms will also be distributed to caregivers	In-person
March 2, 2024	Somali Facilitated Listening Sessions	In-person
March 5, 2024	Teachers and staff of color	In-person
March 5, 2024	Students and families of color	In-person
March 13, 2024	Office Hour + Open House	In-person

If you or someone you know may be interested in joining these sessions, please connect with us after the meeting.

Indoor Air Quality



Designing for Healthy Air Quality



Why Indoor Air Quality?



Air is Our Largest Environmental Intake

We ingest many more pounds of air per day than food or water

Air quality significantly impacts our health, mood, and mental functioning



The most important thing about air is Oxygen, but
we don't measure O₂, we measure CO₂



How much CO₂ is too much?

The most important thing about air is Oxygen, but
we don't measure O₂, we measure CO₂



... CO₂ makes us sleepy

Current codes are insufficient because they do not require air changes for health.

And there is no new widely accepted standard.

PPS sets a maximum CO₂ threshold of 700 ppm

Three Strategies

#1 Supply Oxygen and Flush CO₂
To promote mental acuity

Three Strategies

#1 Supply Oxygen and Flush CO₂
To promote mental acuity

#2 Avoid Outdoor Pollutants
Car exhaust, wildfire smoke, pollen, etc.

Three Strategies

#1 Supply Oxygen and Flush CO₂

To promote mental acuity

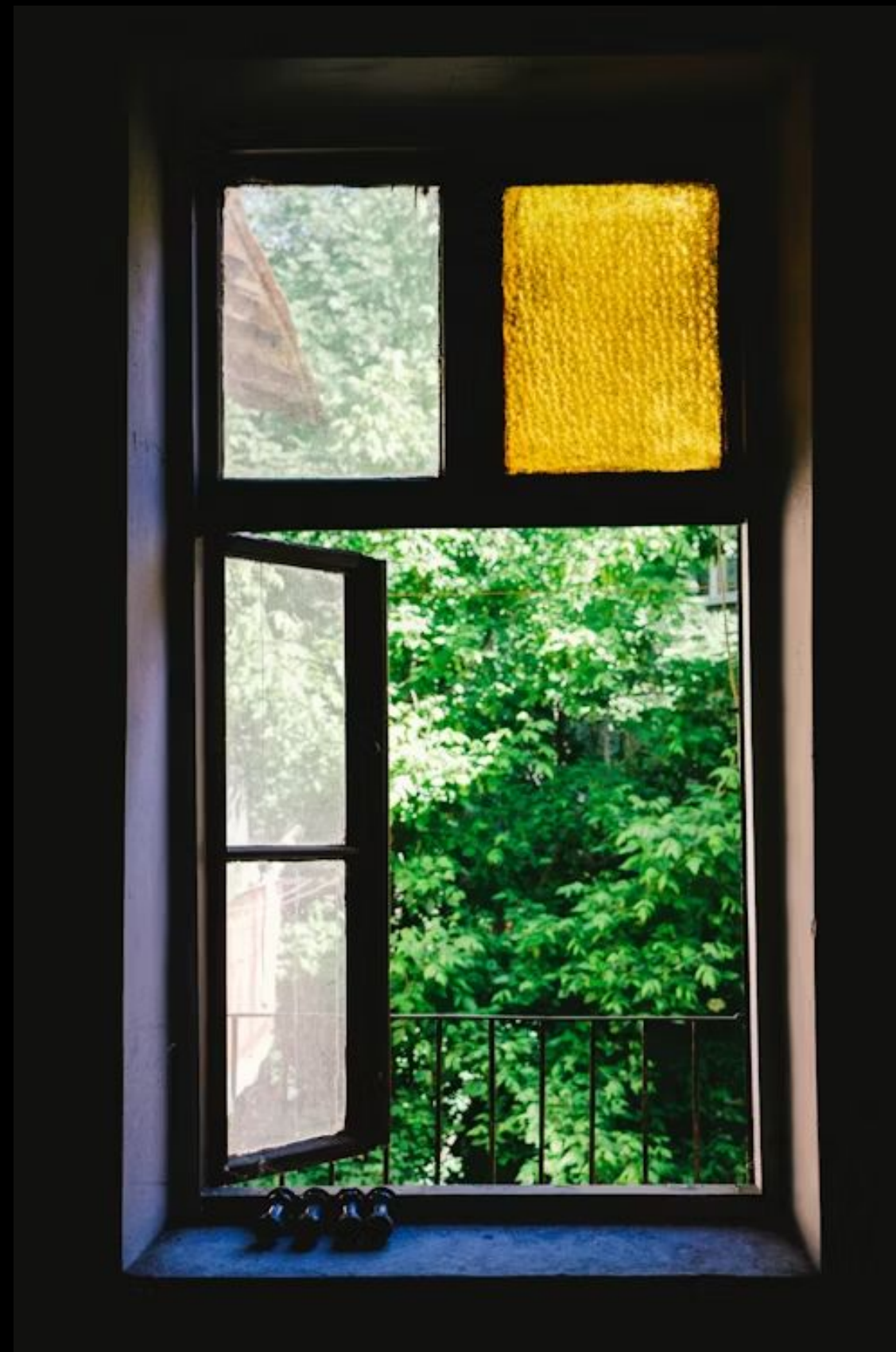
#2 Avoid Outdoor Pollutants

Car exhaust, wildfire smoke, pollen, etc.

#3 Avoid or Flush Indoor Pollutants

Material offgassing, combustion, airborne pathogens, body odor, etc.

#1 Supply Oxygen and Flush CO₂



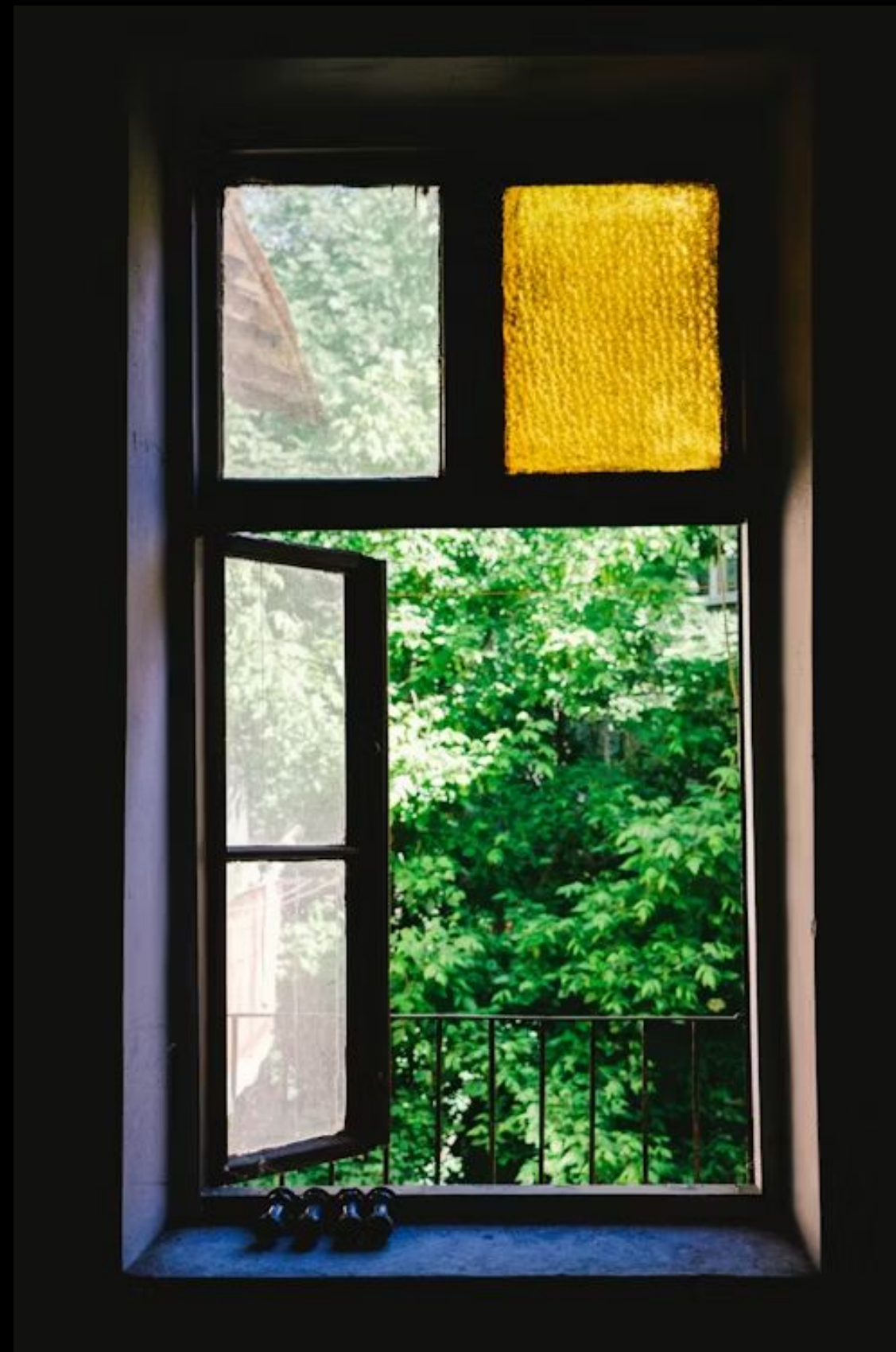
Outdoor air can be delivered via mechanical systems or windows.

Filtration alone is not enough

#1 Supply Oxygen and Flush CO₂

Previous ventilation requirements only considered odors: roughly 2-3 ACH.

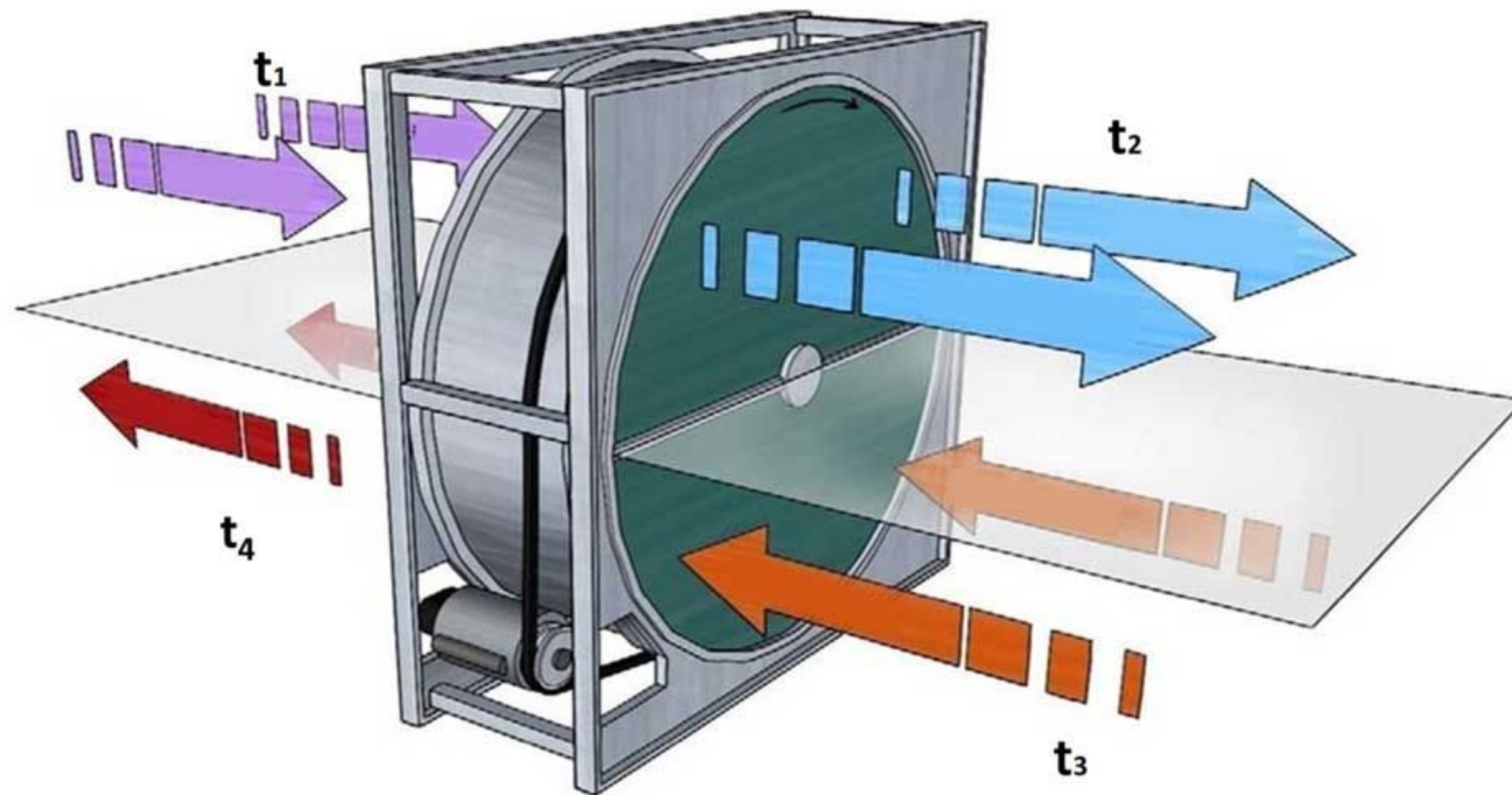
Emerging studies recommend 5 ACH as a target.



Outdoor air can be delivered via mechanical systems or windows.

Filtration alone is not enough

Energy Recovery Ventilator / Heat Exchanger



#2 Avoid Outdoor Pollutants

Car exhaust, wildfire smoke, pollen, etc.

A photograph of a forest fire. In the upper left, a bright orange and red fire is visible, with thick, dark smoke rising from it. The smoke spreads across the top of the frame, creating a hazy, orange-tinted sky. Below the smoke, a dense forest of evergreen trees covers a hillside. The trees are dark green, and the overall scene is somber and dramatic. The text "We Need To Keep This Outside" is overlaid in white at the bottom.

We Need To Keep This Outside



And This



MERV 14 Filtration for Incoming Air

#2 Avoid Outdoor Pollution

Tight Construction

Air Quality testing at Lincoln High School.
A measured reading of 0.126 cfm/sf is
almost four times as tight as code
requirements!



#3 Avoid or Flush Indoor Pollution

We avoid these toxic chemical is finishes

Bora’s Chemicals of Concern

Intrinsic to our material selection philosophy is the knowledge that many substances, ubiquitous in the built environment, cause harm to people and the natural environment. On each project, we set out to avoid the chemicals of concern listed below, and with each effort, come one step closer to a world free of these dangerous chemicals.



EXTERNAL Environmental Concerns

Polyvinyl Chloride (PVC) + Chlorinated PVC (CPVC)

The production of PVC is extraordinarily toxic and energy intensive, and there are no safe outcomes at the end of its useful life. Its negative impacts bear heavily on lower income and minority communities that live near production and incineration facilities. These inequitable societal and environmental costs are not reflected in the purchase price of PVC products, though alternatives are readily available for most applications.

Vinyl Flooring
PVC Roofing
Vinyl Windows
Plastic Wall Protection
Fabrics + Window Coverings
Furniture

Perfluorinated Compounds (PFOA, PFOS, PFBS)

PFCs are reproductive toxins and endocrine disruptors that are extremely persistent and bioaccumulate in the environment. They are used to increase water, stain, or wrinkle resistance in products. Increased awareness of their negative impacts are making them easier to avoid.

Carpet
Resilient Flooring
Floor Sealant + Coatings
Grout

Antimicrobials

Antimicrobials are developmental and aquatic toxins. Some provide necessary product preservation, but overuse may contribute to increased antibiotic resistance. They provide no proven health benefit and should be avoided when marketed with health claims.

Textiles
Countertops
Baby Changing Stations
Many Other Touch Surfaces

Arsenic, Cadmium, Chromium, Lead, Mercury

These toxic metals are extremely hazardous in very small doses, especially to young children. In addition to some architectural products where they can be avoided, they are found in plumbing and electronic equipment, batteries, and fluorescent lighting.

Wood Preservatives
Glazes + Pigments
Metal Plating
Fly Ash Recycled Content in Carpet
Products with Recycled PVC
Rubber Flooring with Recycled Tires

Alkylphenol Ethoxylates

APEs are endocrine disruptors that bioaccumulate in the environment. It is unclear at this time how prevalent their use is in the products we specify.

Paint

CFC, HCFC, HFC

These substances contribute substantially to global warming. Regulations are gradually phasing out the worst of these, along with those that are ozone-depleting.

XPS + Spray Foam Insulation



INTERNAL Health Concerns

Formaldehyde

Formaldehyde is readily emitted into interior environments causing respiratory and other short and long term health issues. Options for ultra-low emitting or no-added formaldehyde are typically available.

Composite Wood Products
Insulation

Halogenated + Organophosphate Flame Retardants

Flame retardants are associated with lower IQ and hyperactivity in children, hormone disruption and reduced fertility in adults, and these types are highly persistent and bioaccumulate in the environment. They often do not increase fire safety and pose additional risks to fire-fighting personnel.

EPS/XPS Insulation
Single-Ply Roofing
Upholstery Foam

Antimony Trioxide Flame Retardants

Antimony Trioxide is a concerning member of the non-halogenated and non-organophosphate flame retardant categories.

Batt + Spray Applied Insulation
Carpet Backing + Vinyl Flooring
Single-Ply Roofing
Polyurethane + Epoxy Coatings
PET Textiles

Orthophthalates

Phthalates are developmental and reproductive toxins, endocrine disruptors, and asthmagens, and persist and bioaccumulate in the environment. They are used primarily to make materials such as PVC softer and more flexible, providing another reason to avoid vinyl products.

Carpet Backing + Vinyl Flooring
Woodwork Adhesives + Binders
Roofing

Bisphenol A (BPA)

BPA is a reproductive and developmental toxin and endocrine disruptor that persists and bioaccumulates in the environment. It is a component of some polycarbonate plastics and epoxies and should be easy to identify in ingredient disclosure documentation.

Flooring
Laminate
Grout + Mortar
Polycarbonate Panels/Skylights
Whiteboard Paint

Isocyanates

Isocyanates are asthmagens and air pollutants. Some provide the only and preferred alternative to formaldehyde binders, but other products with isocyanates should be avoided.

Spray Foam Insulation
Whiteboard Paint

Solvents

Solvents can cause short term health effects like headaches and contribute to long term neurodevelopmental effects and cancer. Use water-based alternatives.

Paints
Wood Finishes
Adhesives

References
Perkins&Will Precautionary List | Green Science Policy Institute Six Classes | Healthy Building Network Transformation Targets
International Living Future Institute LBC Red List | Cradle to Cradle Products Innovation Institute Restricted Substances List

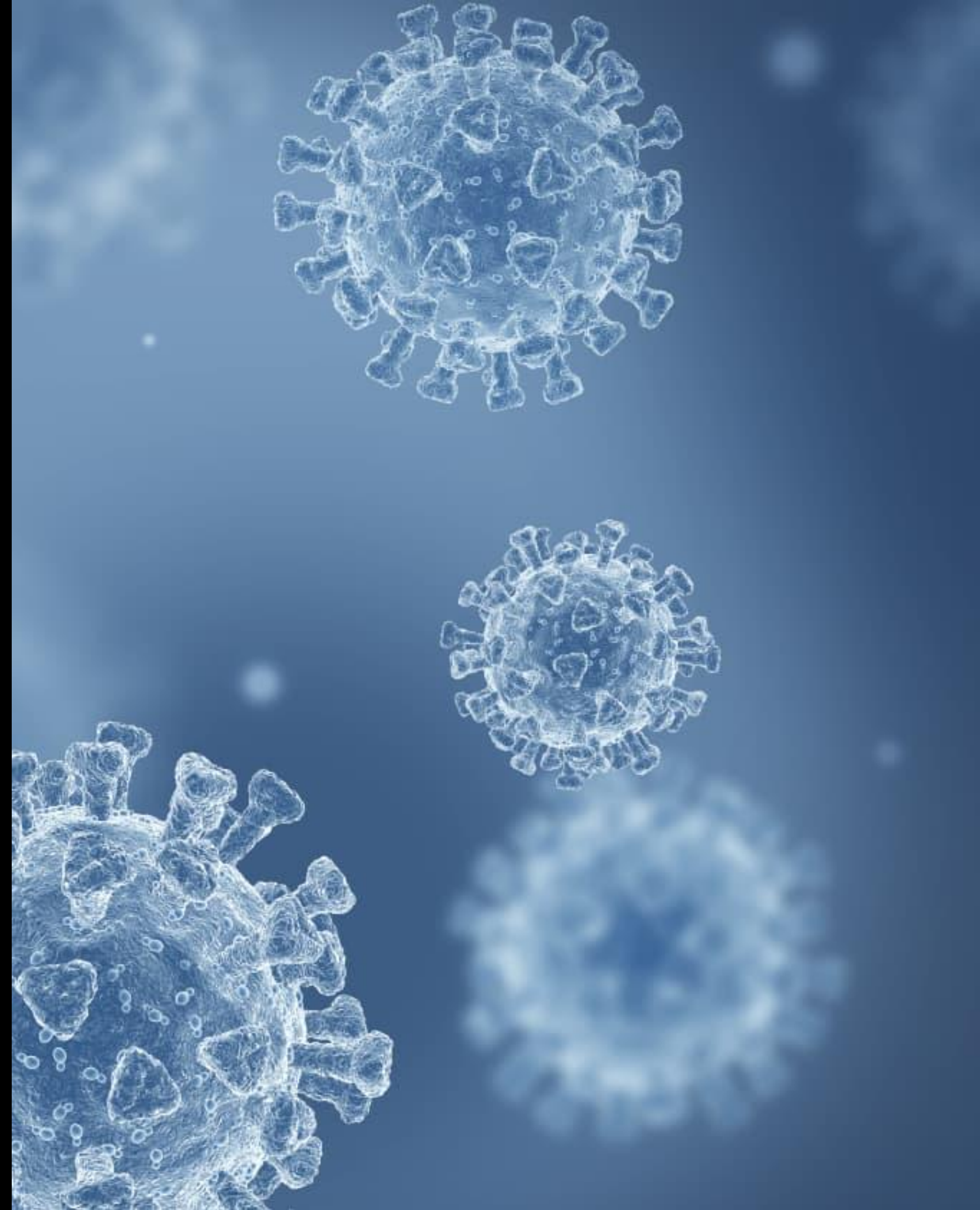
#3 Avoid or Flush Indoor Pollution

Avoid combustion in the building



#3 Avoid or Flush Indoor Pollution

And flush dust, odors, and airborne pathogens



So How Do We Ensure Healthy Indoor Air Quality?



IAQ Strategy for I. B. Wells

Design ducts to deliver 5 ACH of outdoor air

Filter incoming air with MERV 14 filters

Avoid combustion and hazardous materials

Provide operable windows for safety and resilience

Technical IAQ Metrics

Temperature	70 to 76	°F
Percent Relative Humidity	40 to 60	Percent
Carbon Dioxide	<700	ppm
Total VOCs	<500	µg/m ³
Particulate Matter (PM _{2.5})	<12	µg/m ³

Achievable within current mech systems and budgets.
PPS's new projects also will be meeting LEED Gold certification.

Monitoring



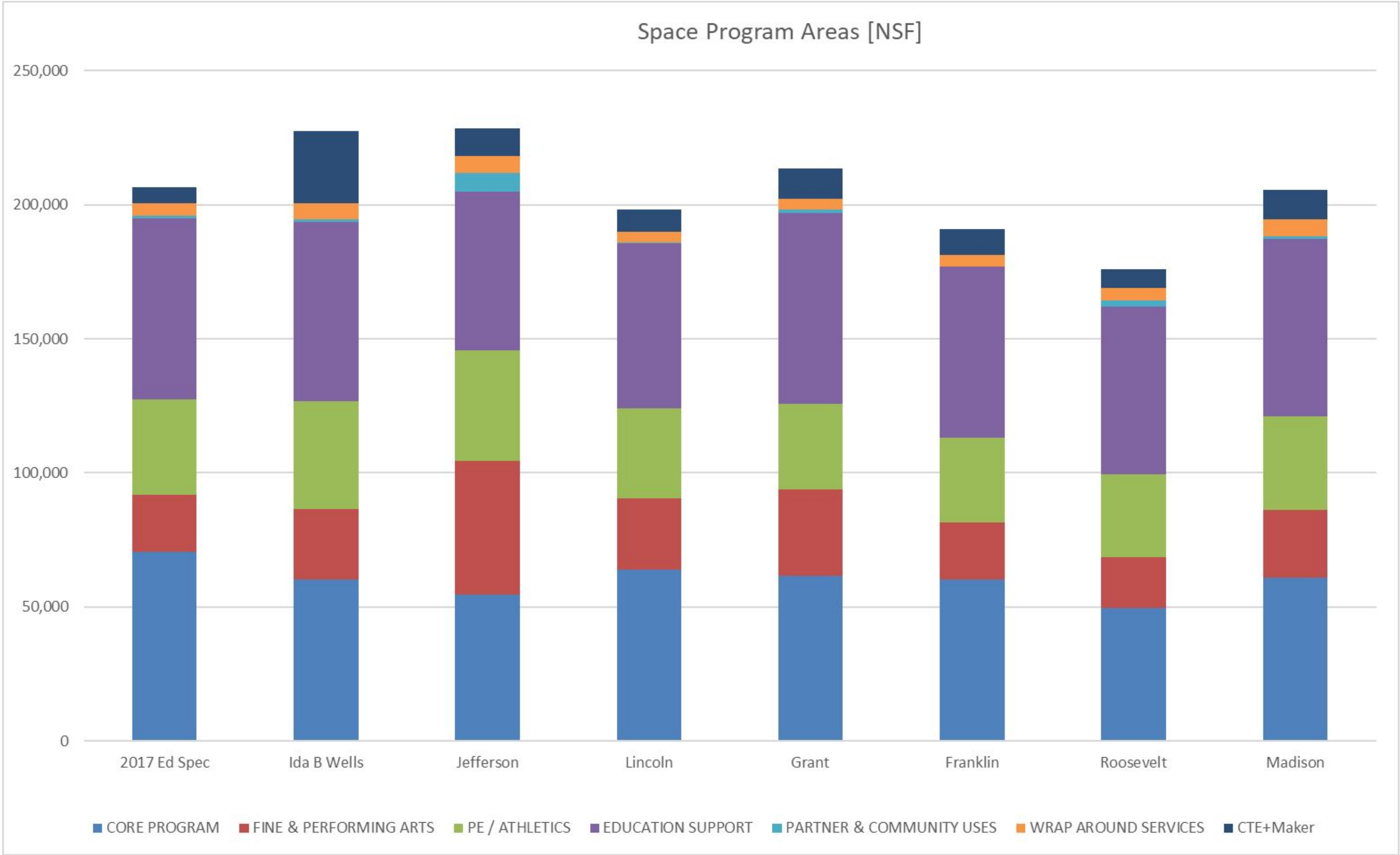
Thank You!

Record your questions
on the board

Ed Spec Update



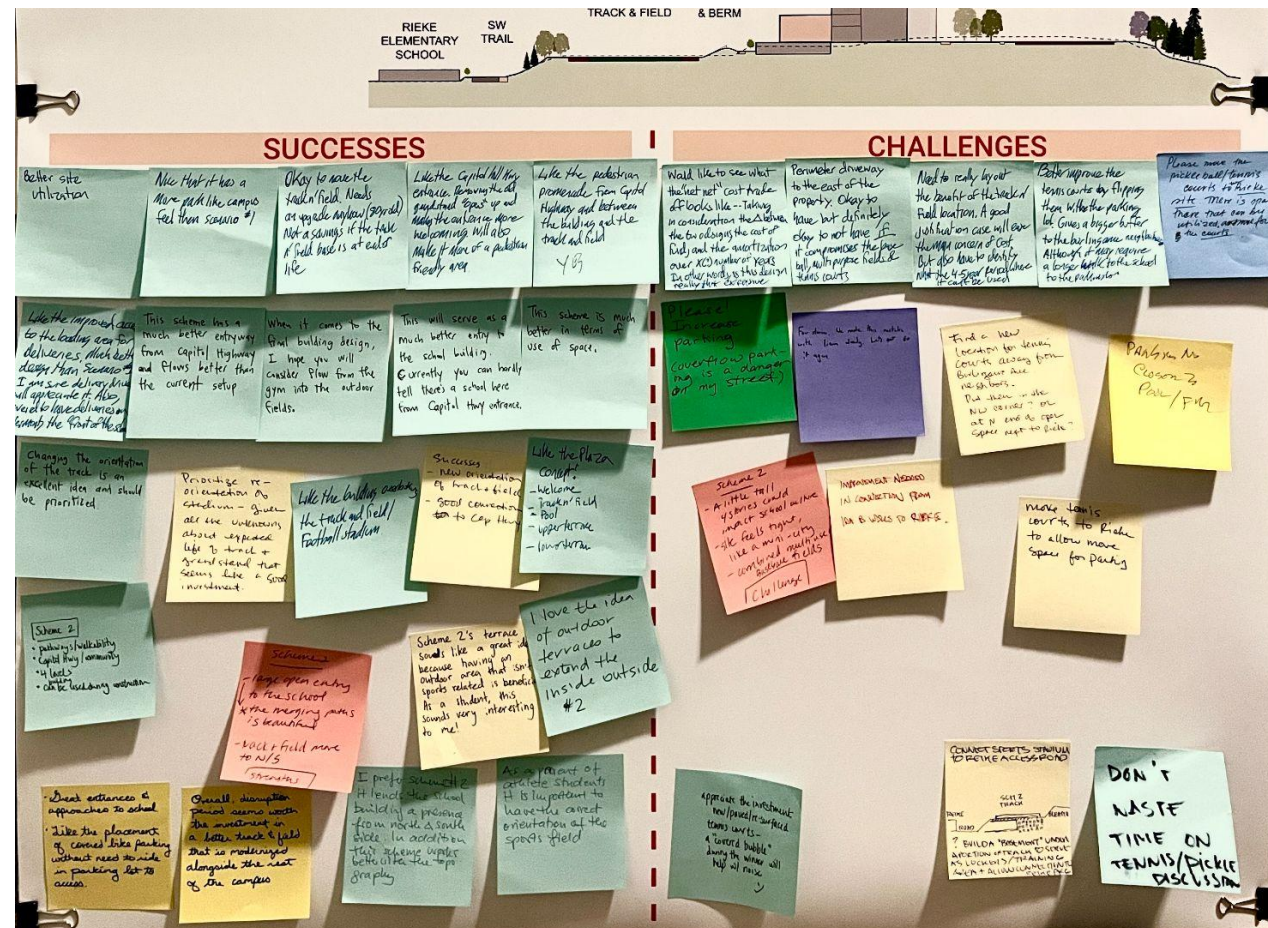
ED SPEC UPDATE



What We've Heard

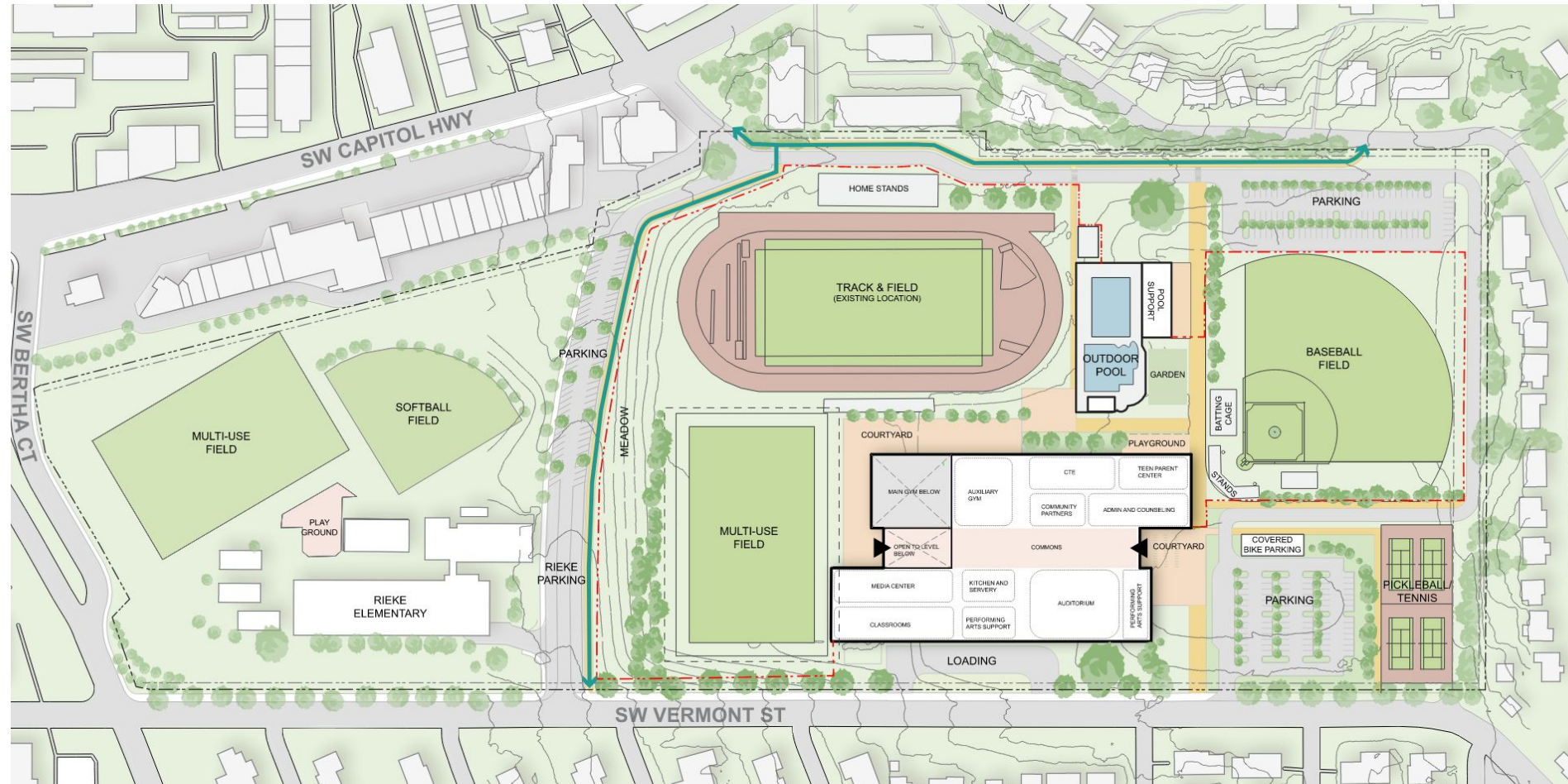


A man in a green button-down shirt is pointing at a large architectural drawing on a wall. A woman with long brown hair, wearing a black t-shirt and a dark baseball cap, is looking at the drawing. Another man in a blue and white plaid shirt stands to the right, also looking at the drawing. The drawing appears to be a site plan or map with various colored areas and text. There are some books or pamphlets on a table in the foreground.



WHAT WE'VE HEARD

Scheme 1



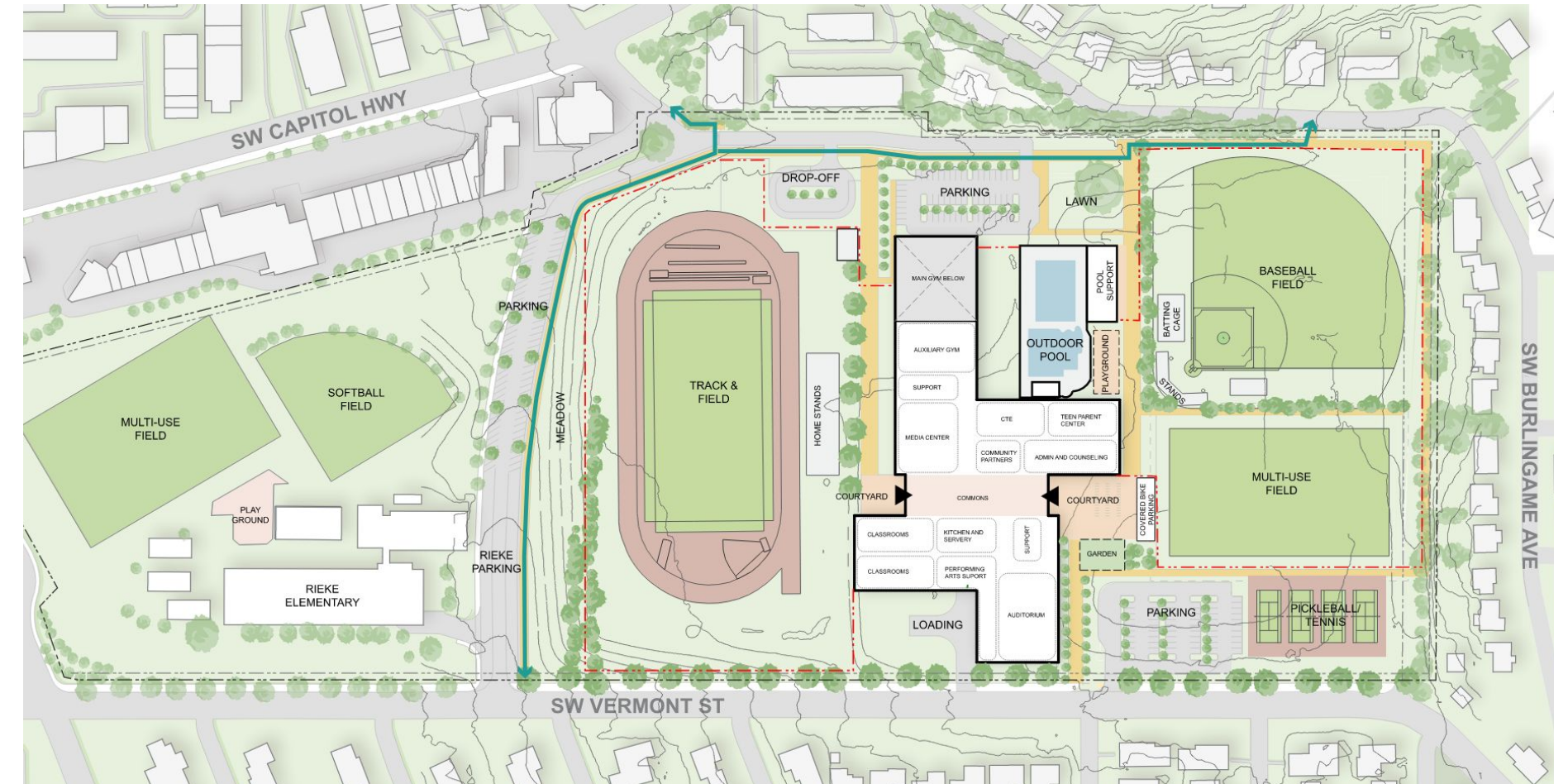
SUCCESSSES

- Minimizes western sun exposure
- Building Height better for neighborhood scale
- Lower overall cost due to leaving T&F in place
- Massing integrates with natural landscape
- Variety of courtyards that are connected to site

CHALLENGES

- Weak connection to Capitol Hwy
- Not enough parking near Capitol Hwy
- Difficult access to west side of building
- Tennis courts too close to Burlingame neighbors (noise concerns)

Scheme 2



SUCCESSSES

- Minimizes western sun exposure
- Strong connection to Capitol Highway
- Lots of parking near Capitol Highway
- Variety of courtyards that are connected to site
- Easy access to all sides of building

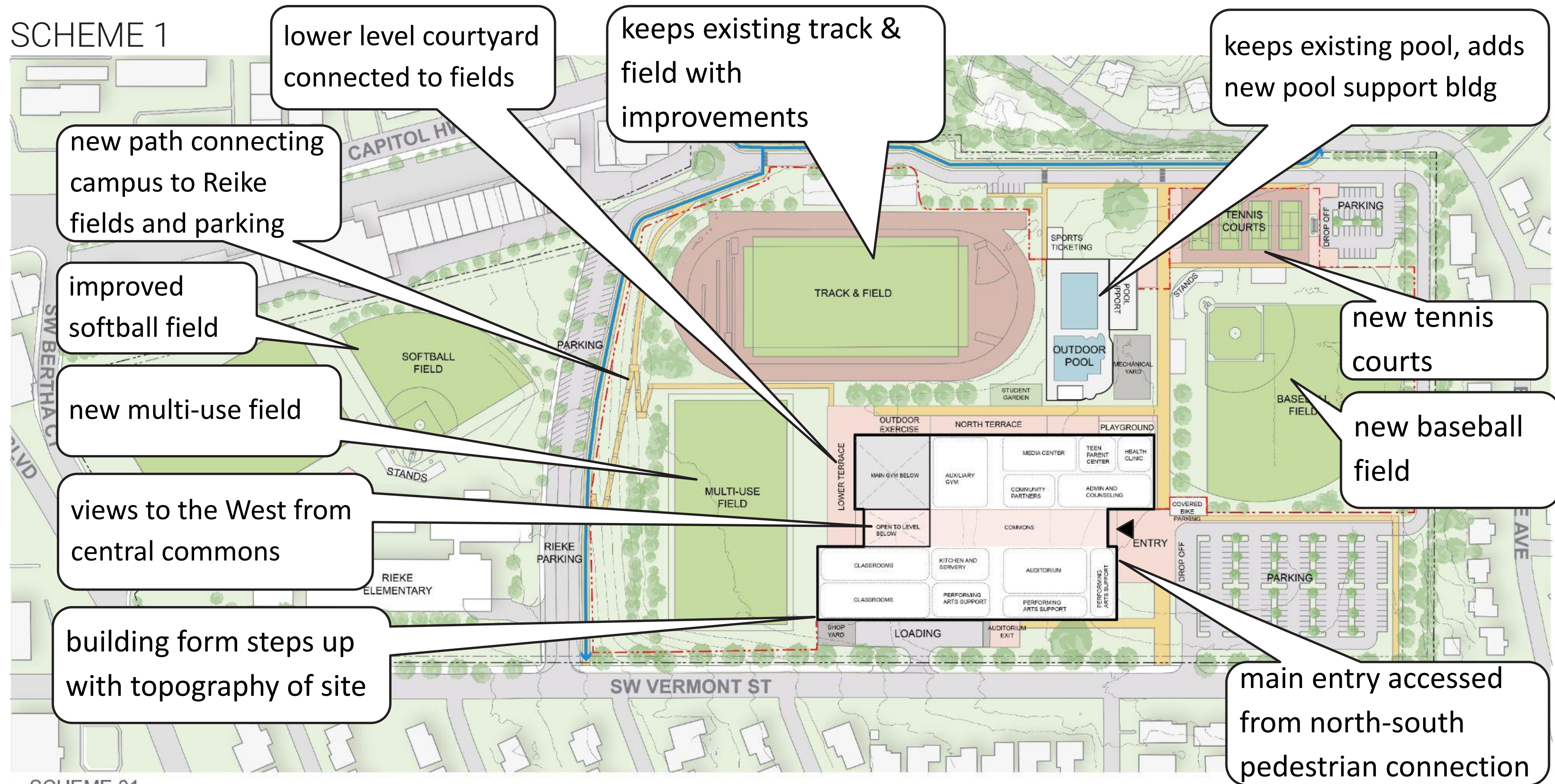
CHALLENGES

- Secondary entrance confusing and might be a safety concern
- Building too close to pool
- Higher overall cost due to relocation of T&F
- T&F unusable during construction
- Tennis courts too close to Burlingame neighbors (noise concerns)

Site Design Options and Recommendation



SCHEME 1



SCHEME 01



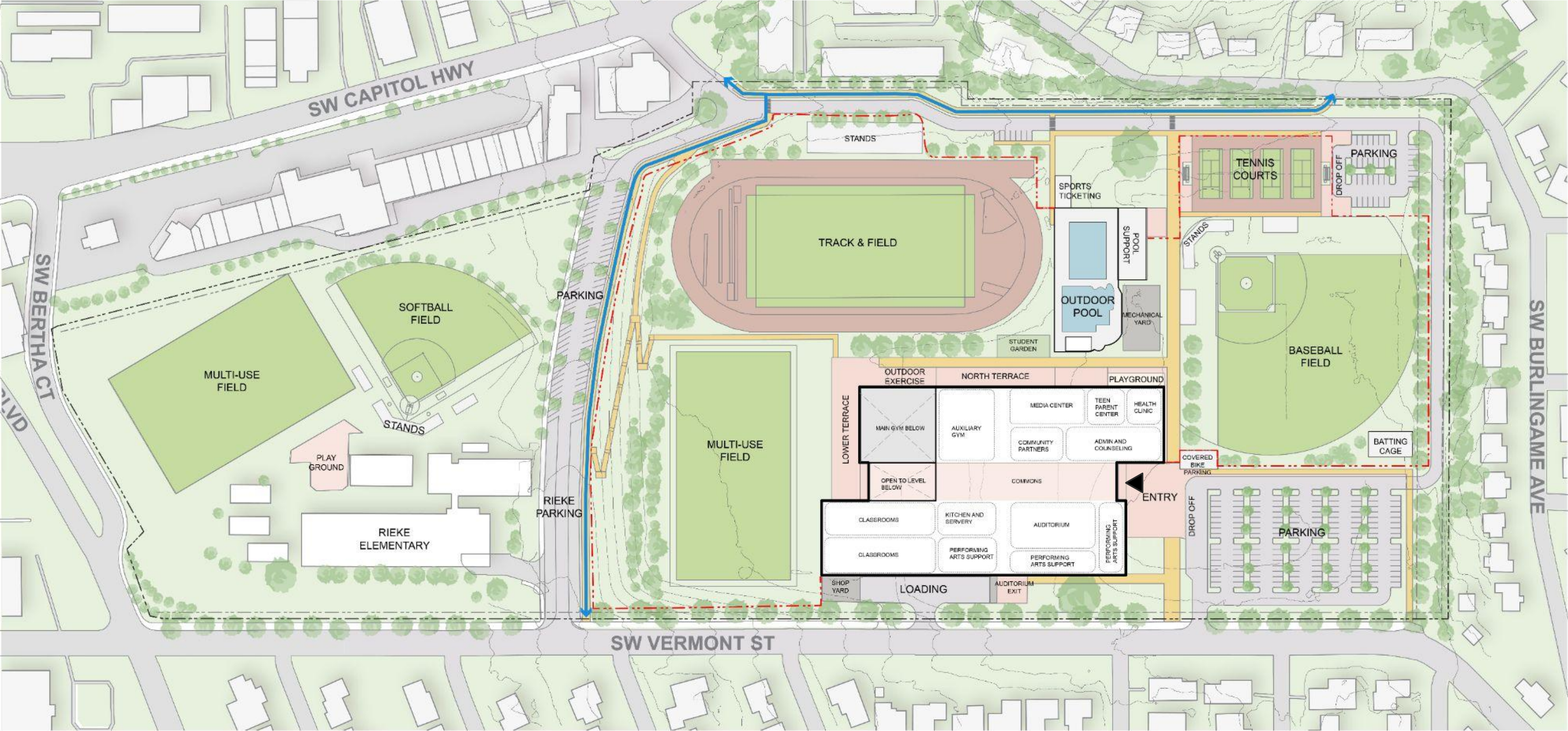
KEY:

Securable Perimeter

SW Trails



SCHEME 1



SCHEME 01



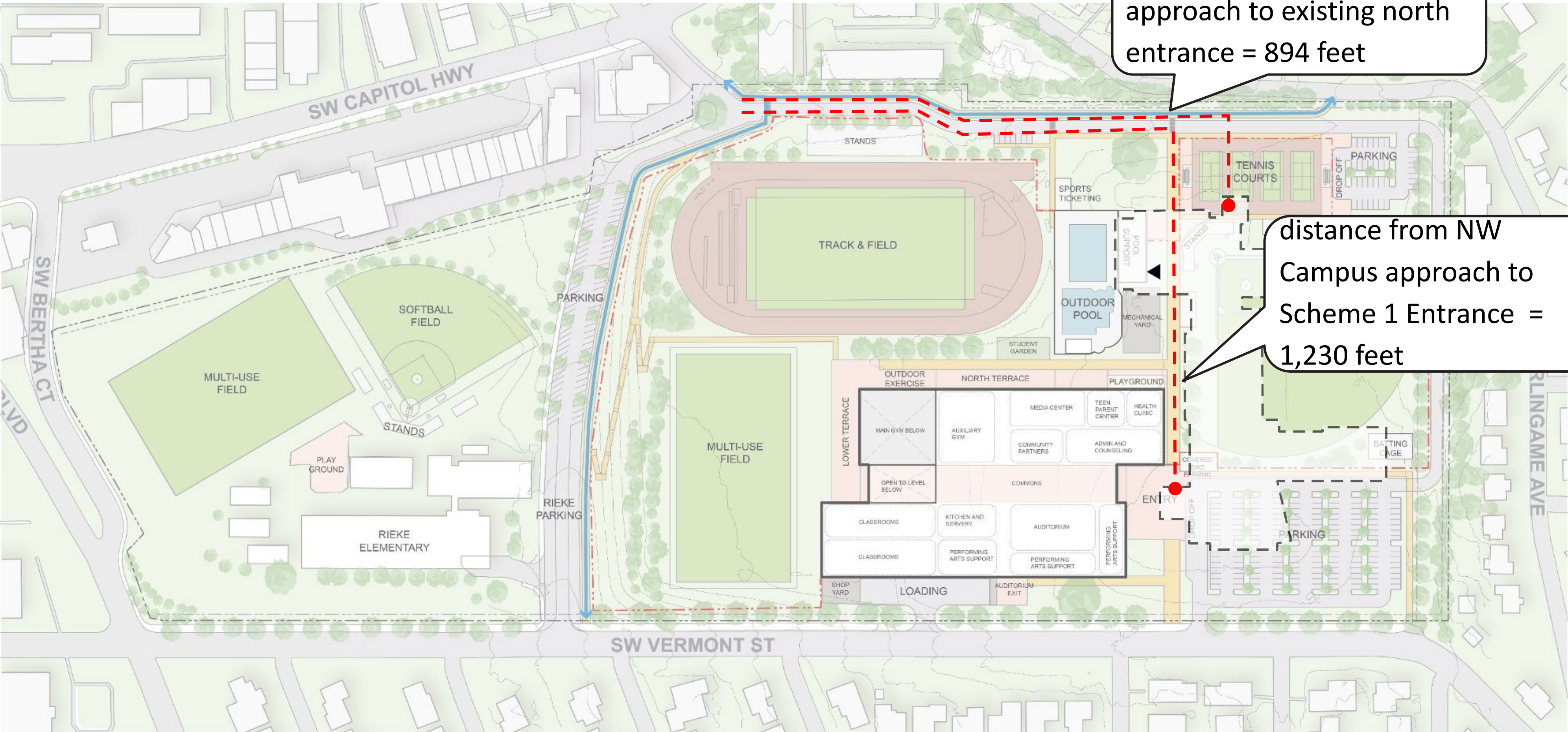
KEY:

Securable Perimeter

SW Trails



SCHEME 1 - DISTANCE TO ENTRY FROM NW APPROACH



SCHEME 01



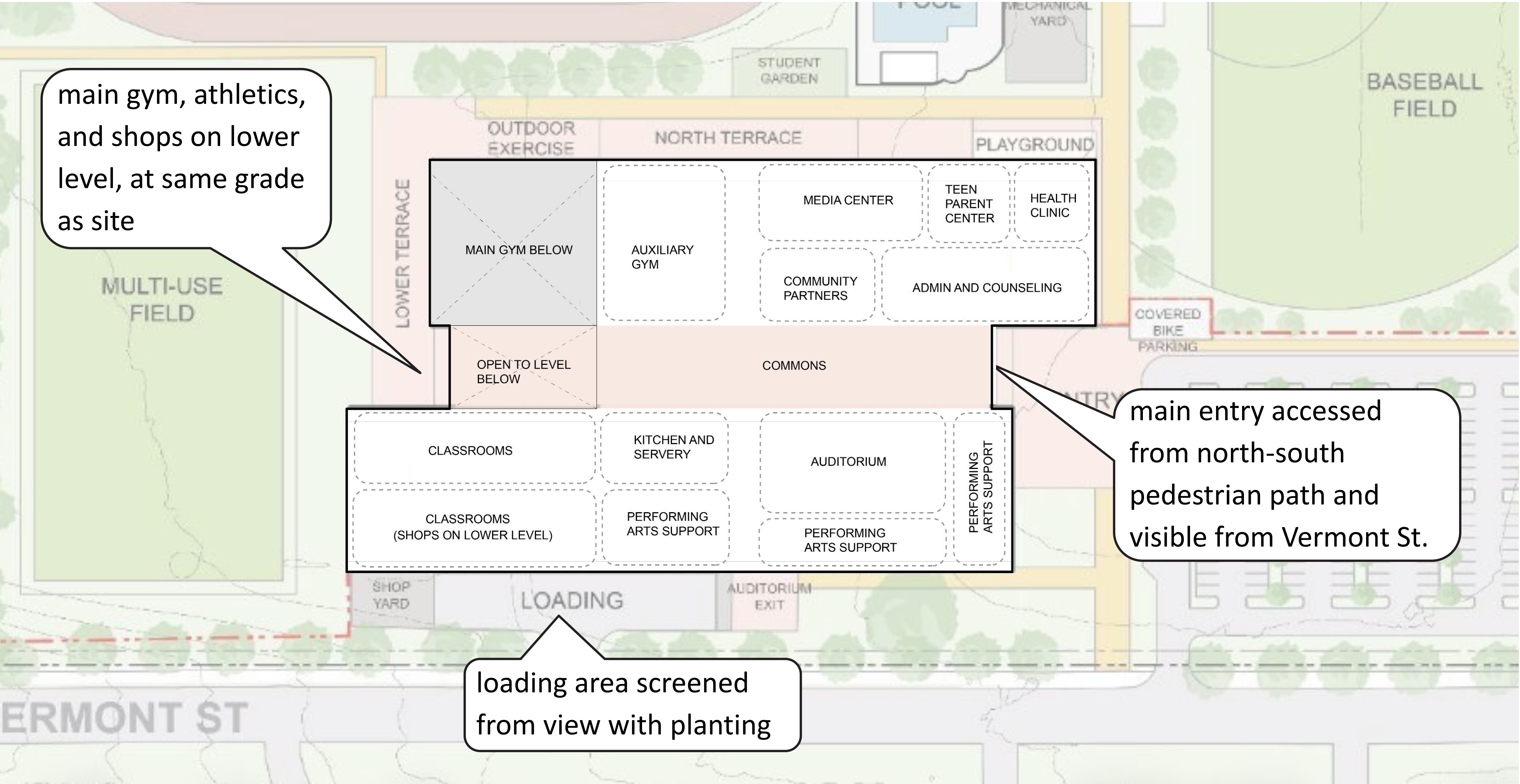
KEY:

Securable Perimeter

SW Trails



SCHEME 1



SCHEME 1



Building form steps up with topography; lower level at grade with western portion of site

Gyms and athletics close to track & field and multi-use field

Primary “bars” running east-west to minimize western sun exposure

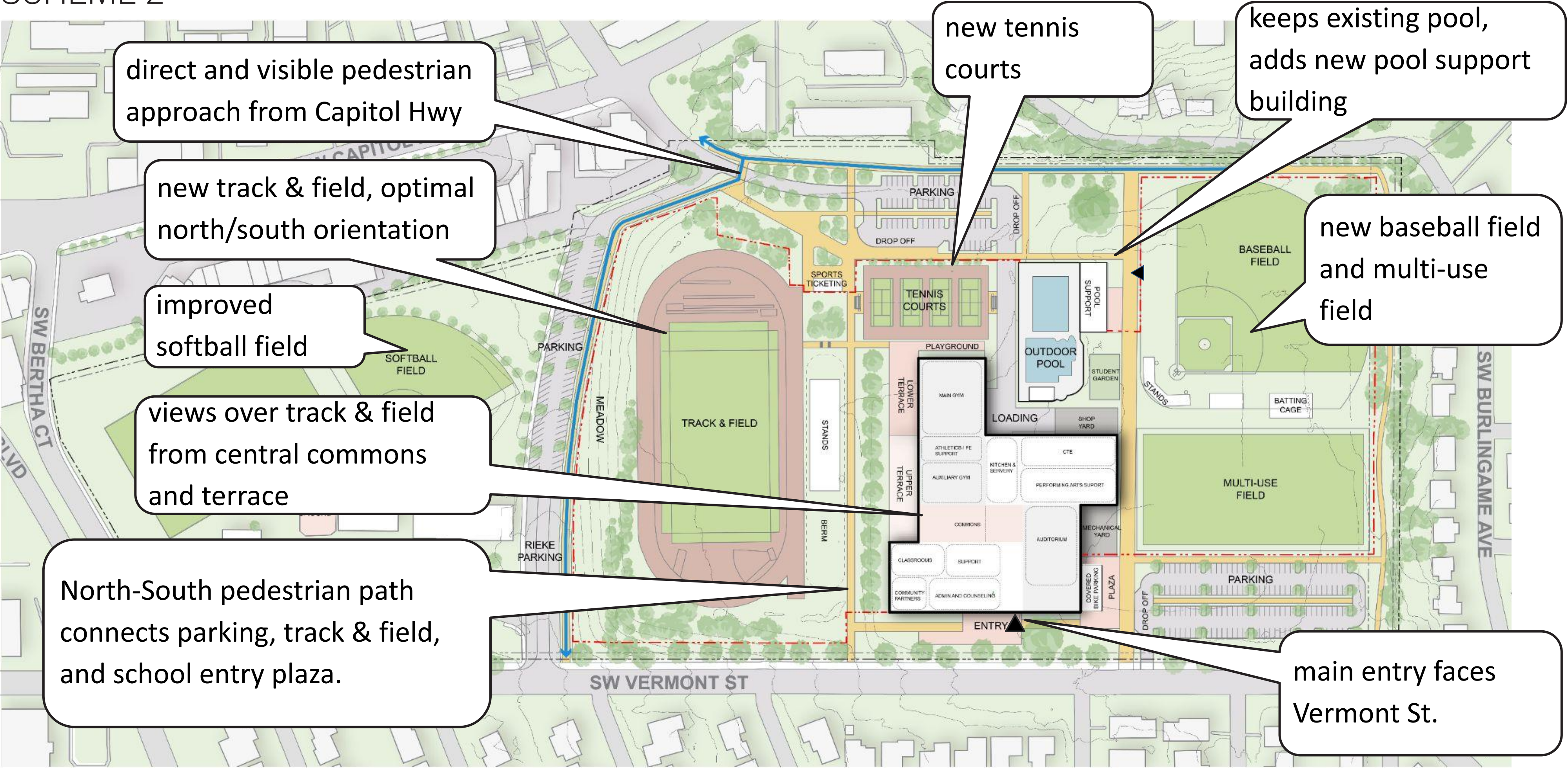
Classrooms primarily on upper levels

Main entry plaza connected to North-South pedestrian path

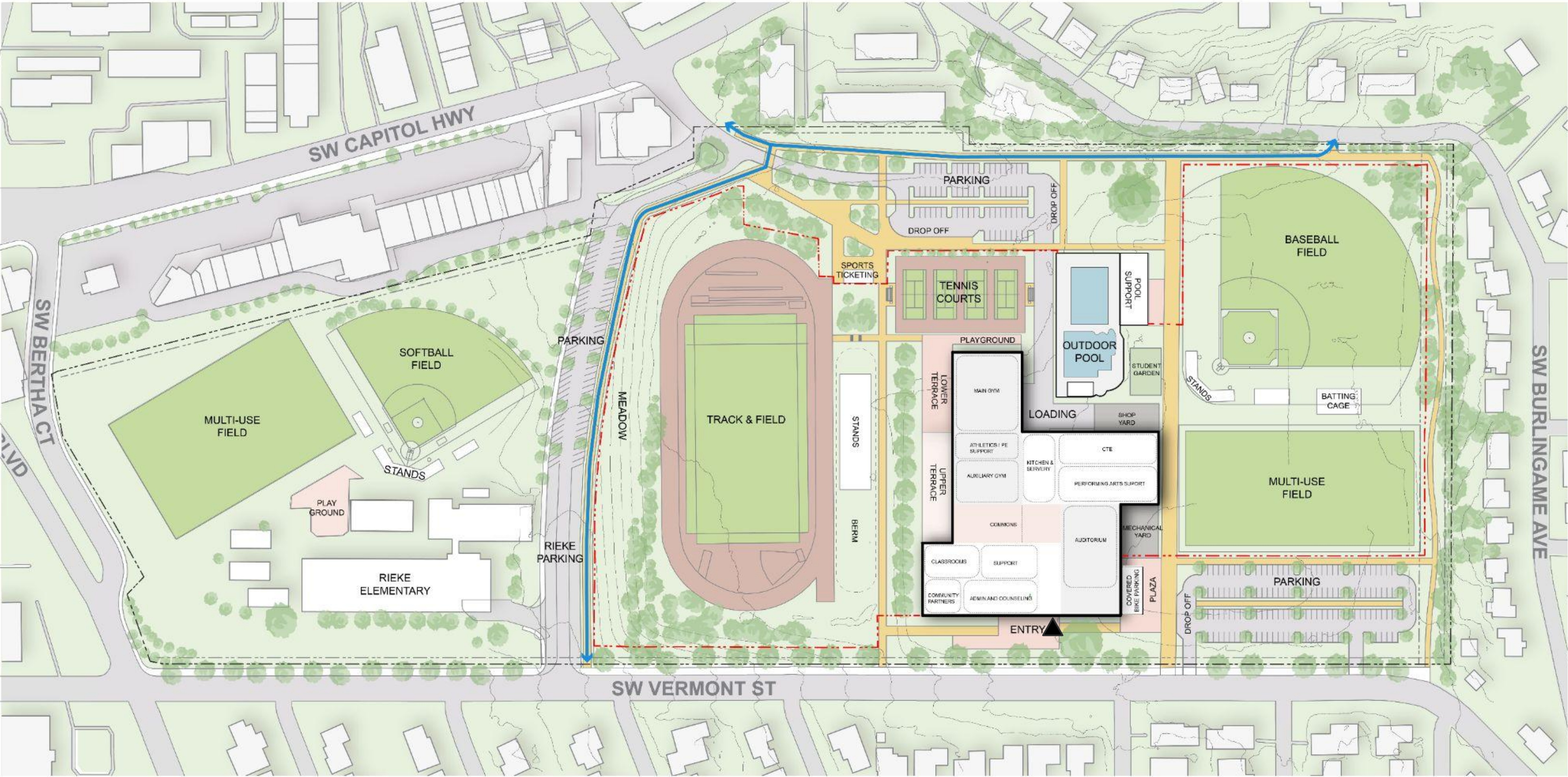
Auditorium close to main entry

Massing - Aerial View

SCHEME 2



SCHEME 2



SCHEME 02



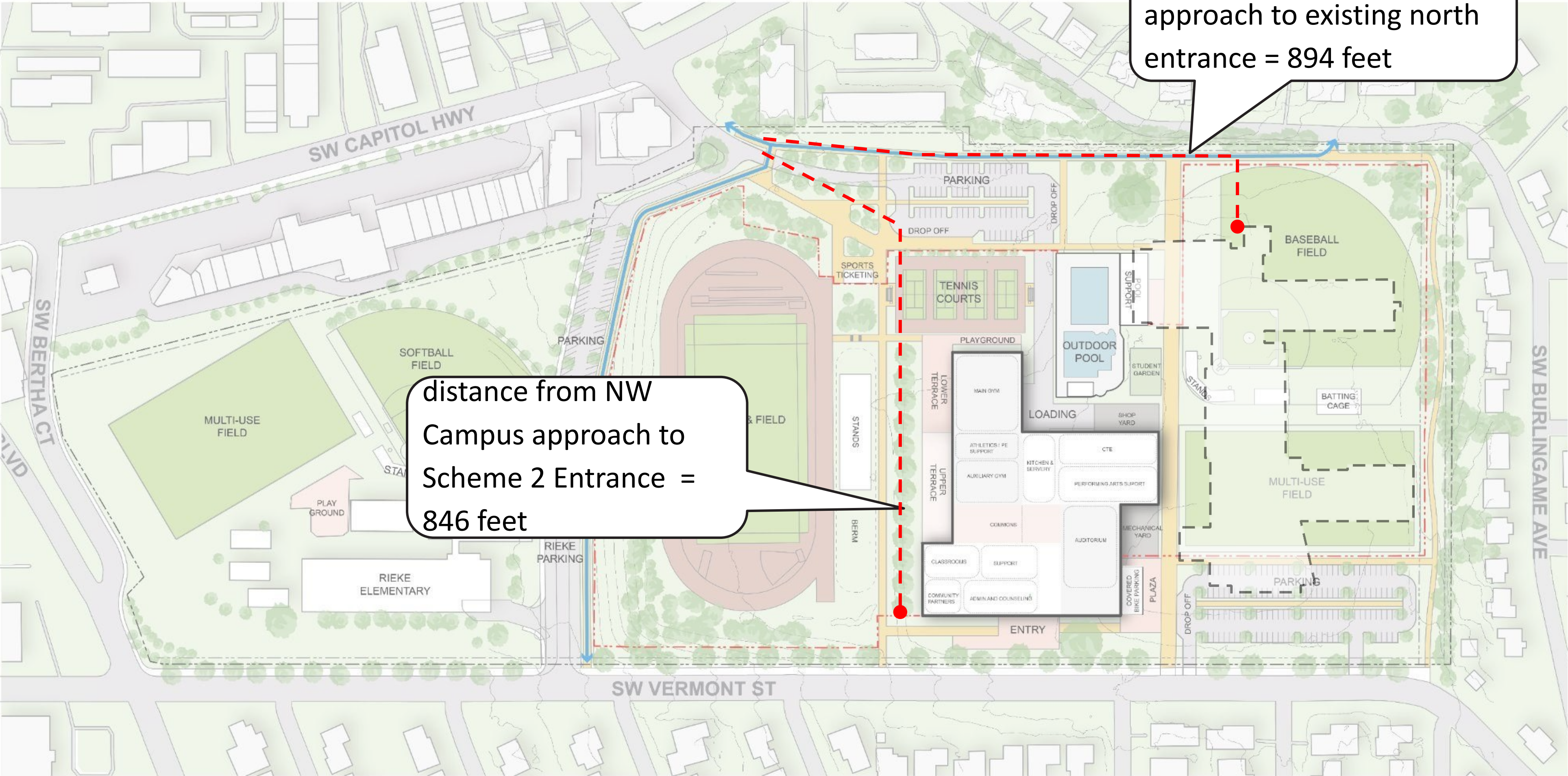
KEY:

Securable Perimeter

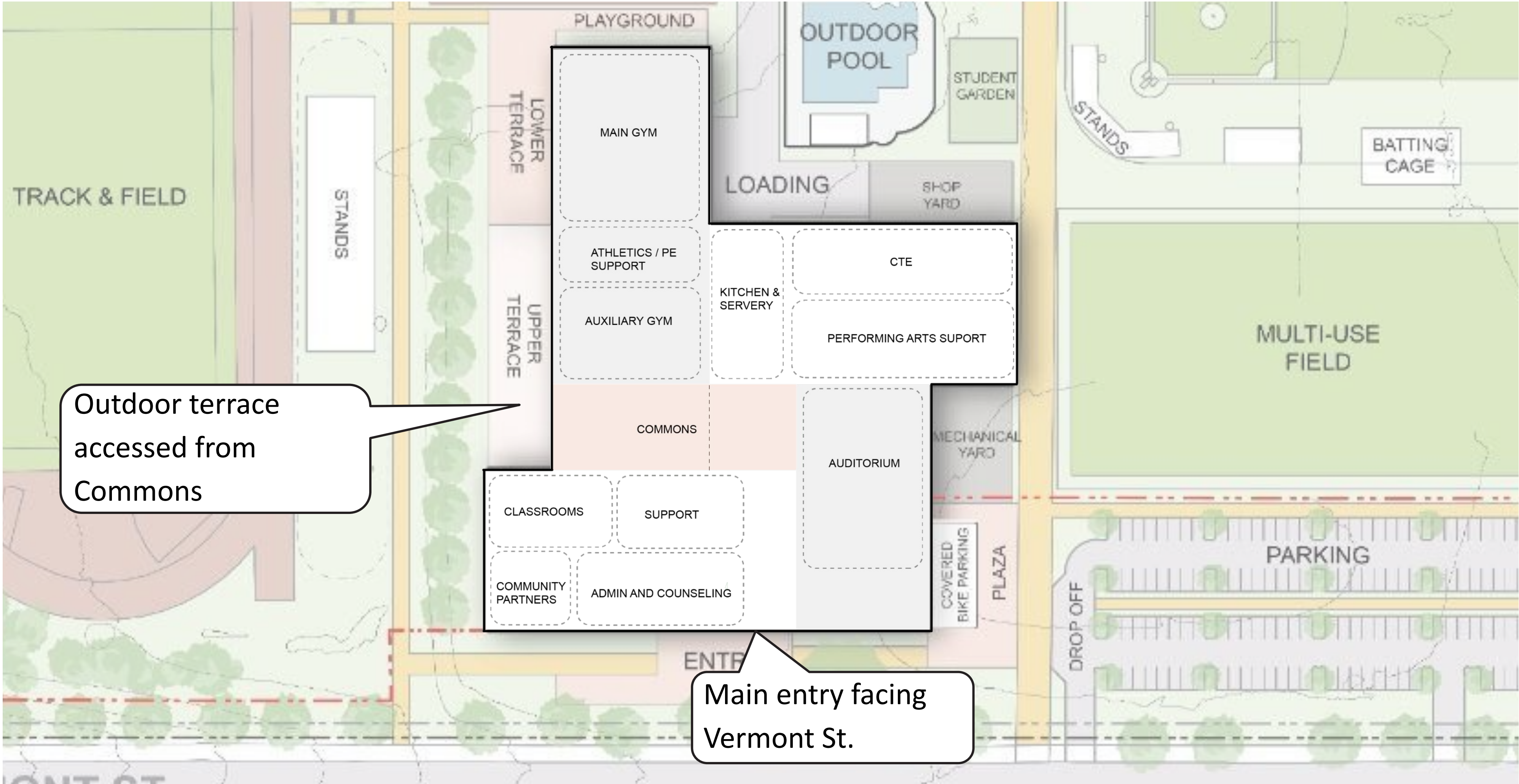
SW Trails



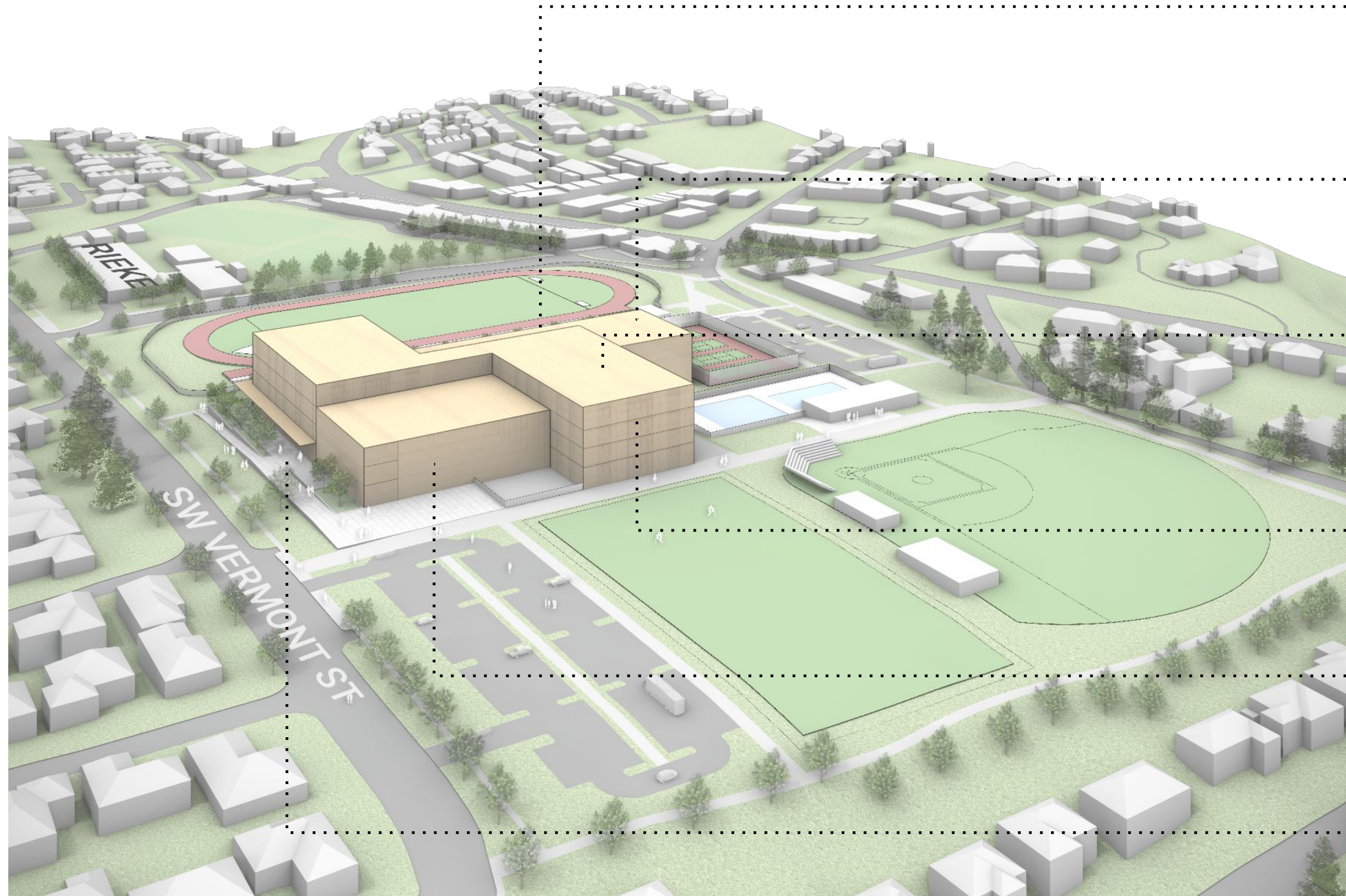
SCHEME 2 - WALKING DISTANCE FROM NW APPROACH



SCHEME 2



SCHEME 2



Building form connects to both Capitol Hwy and Vermont St. approaches

Gyms and athletics close to track & field and Capitol Hwy. approach

Primary “bars” running east-west to minimize western sun exposure

Classrooms on upper levels

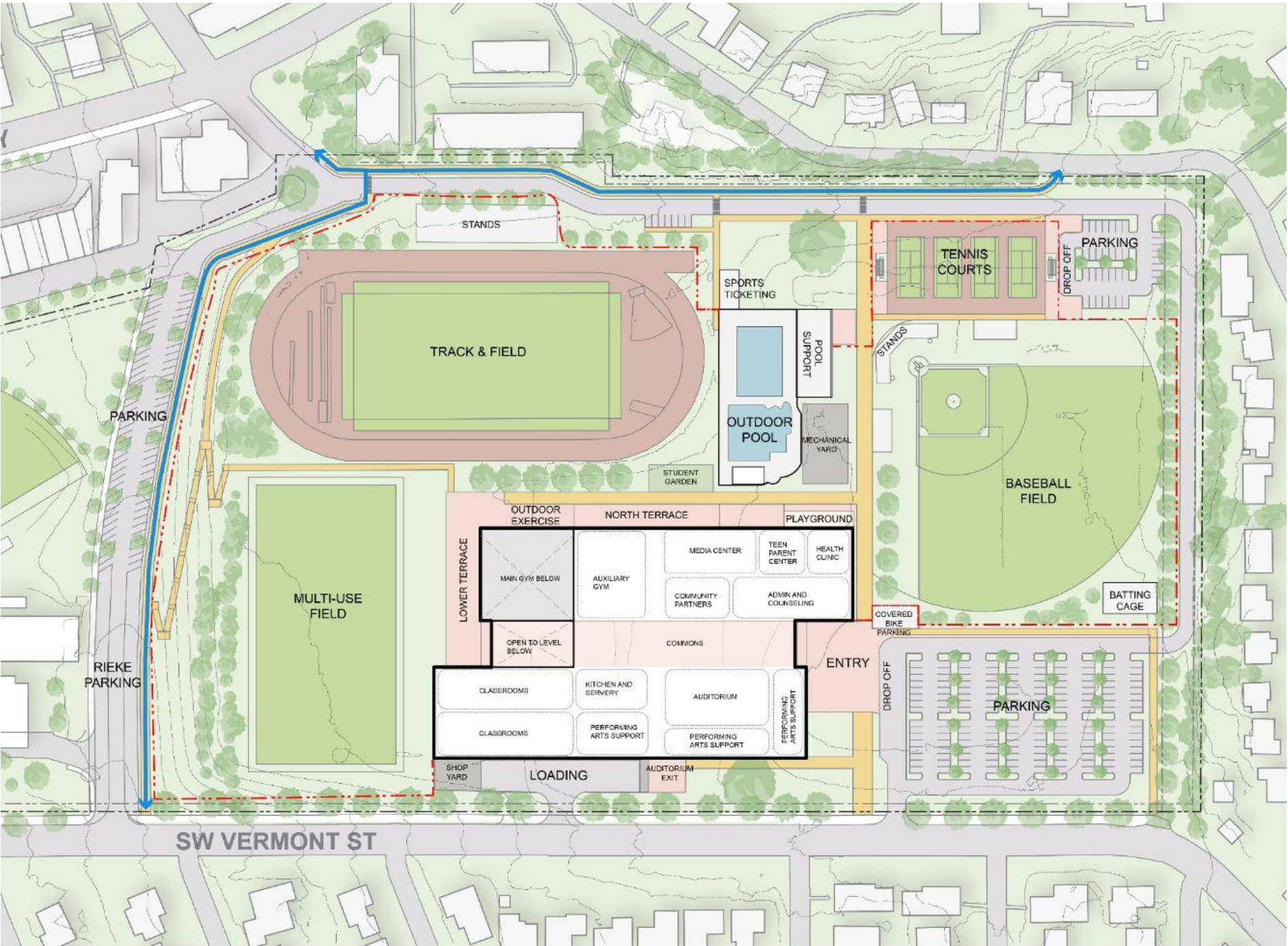
Auditorium close to main entry

Main entry visible and easy to approach from Capitol Hwy and Vermont St.

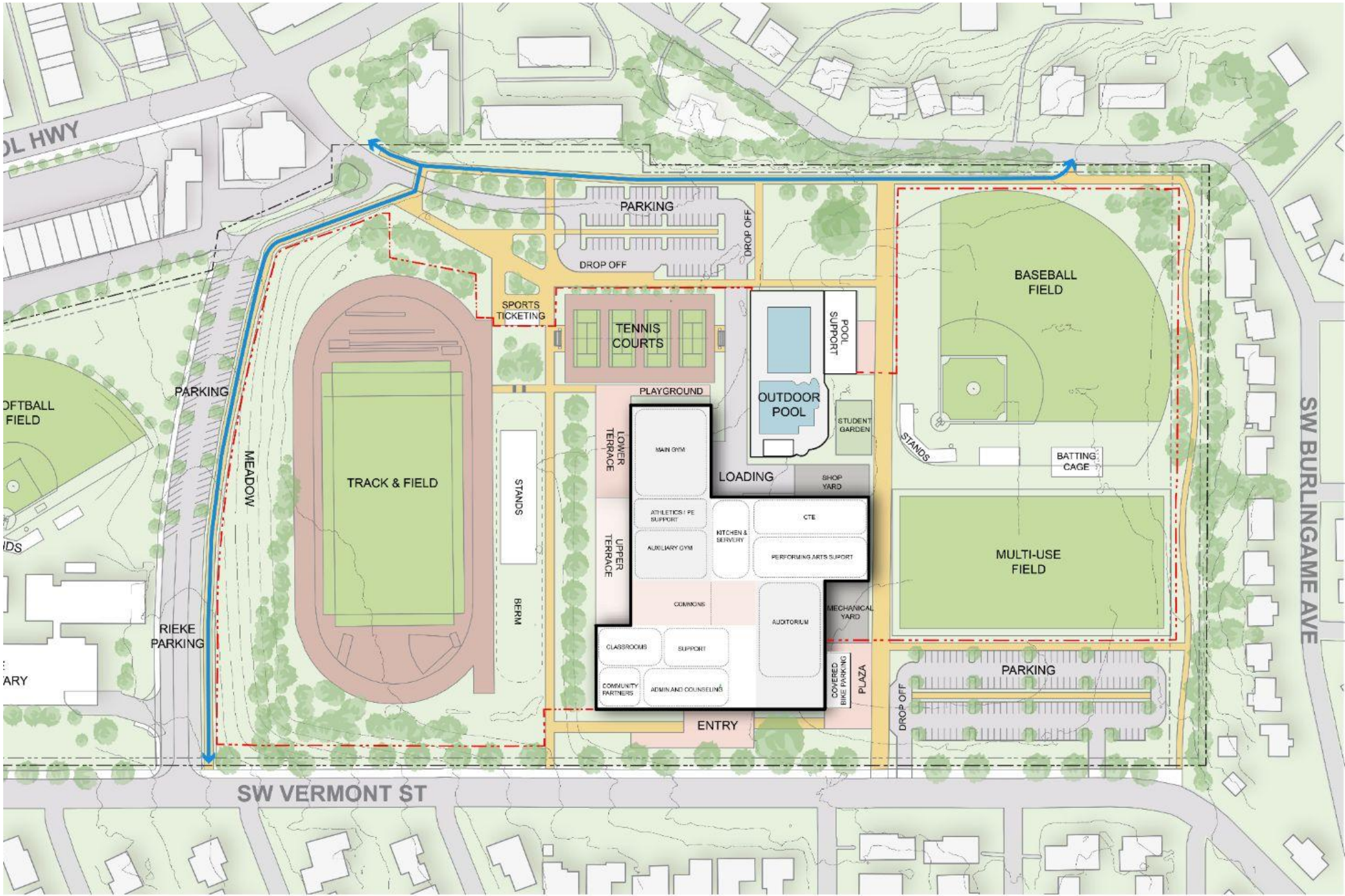
Massing - Aerial View

SITE DESIGN OPTIONS

SCHEME 1

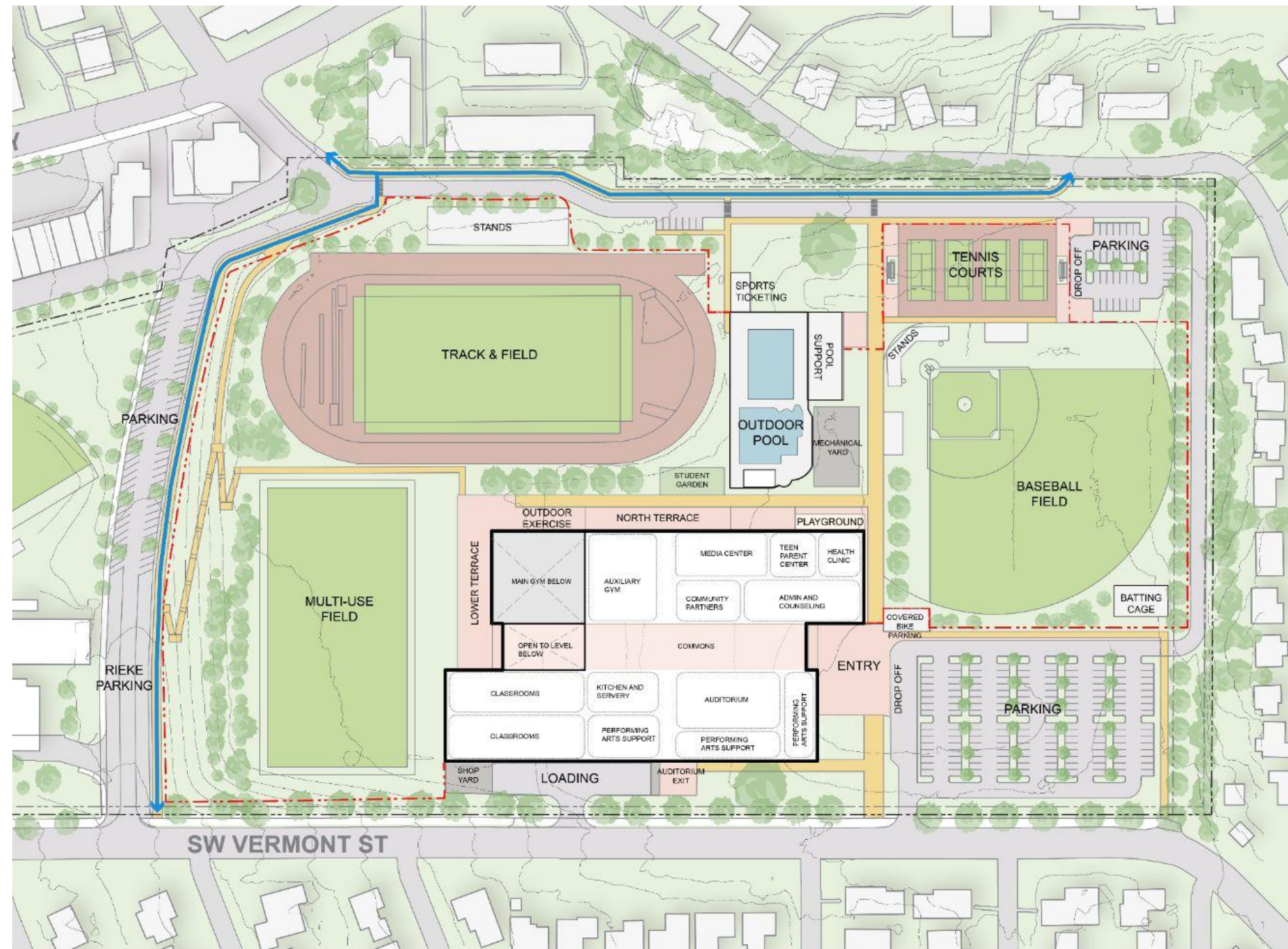


SCHEME 2



SITE DESIGN OPTIONS - RECOMMENDATION

SCHEME 1



- **Lower site cost (track and field not relocated)**
- **Minimal track and field disruption during construction**
- **Shorter construction duration**
- Better connection to Rieke parking and fields
- Strong N-S and E-W pedestrian connections though middle of the site
- Southeast parking lot provides better drop-off and student arrival sequence near building entry
- Vehicular connection between the two parking lots
- Multiple loading locations separates service vehicles from other vehicles and pedestrians / bikes
- More separation between school and existing pool, more flexibility with building footprint

EXISTING HS



Massing - View from Vermont St. (Southeast)

SCHEME 1



Massing - View from Vermont St. (Southeast)

EXISTING HS



Massing - View from Capitol Hwy Approach

SCHEME 1



Massing - View from Capitol Hwy Approach

EXISTING HS



Massing - View from Vermont St. (Southwest)

SCHEME 1



Massing - View from Vermont St. (Southwest)

Vision Statement + Guiding Principles



DRAFT VISION STATEMENT

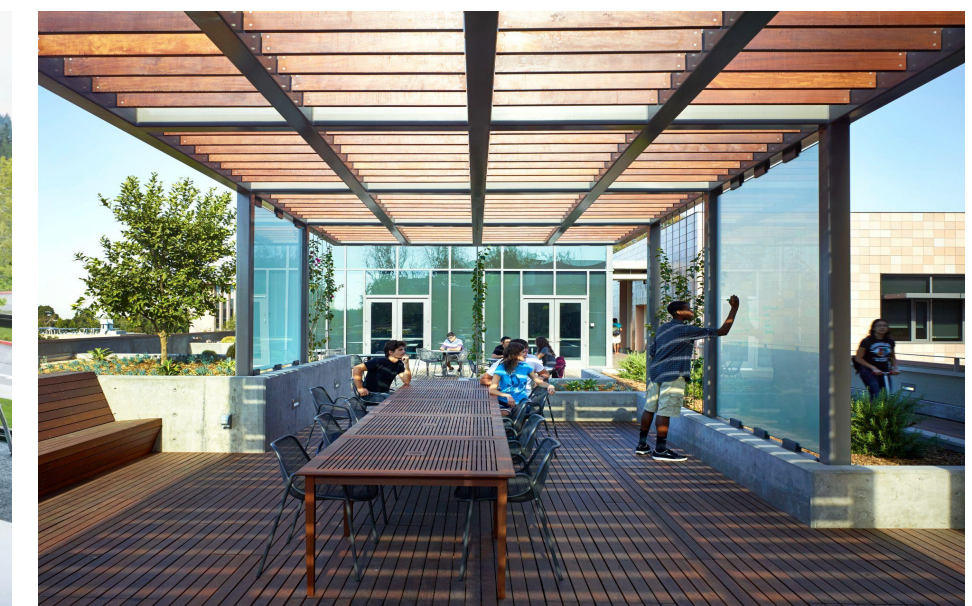
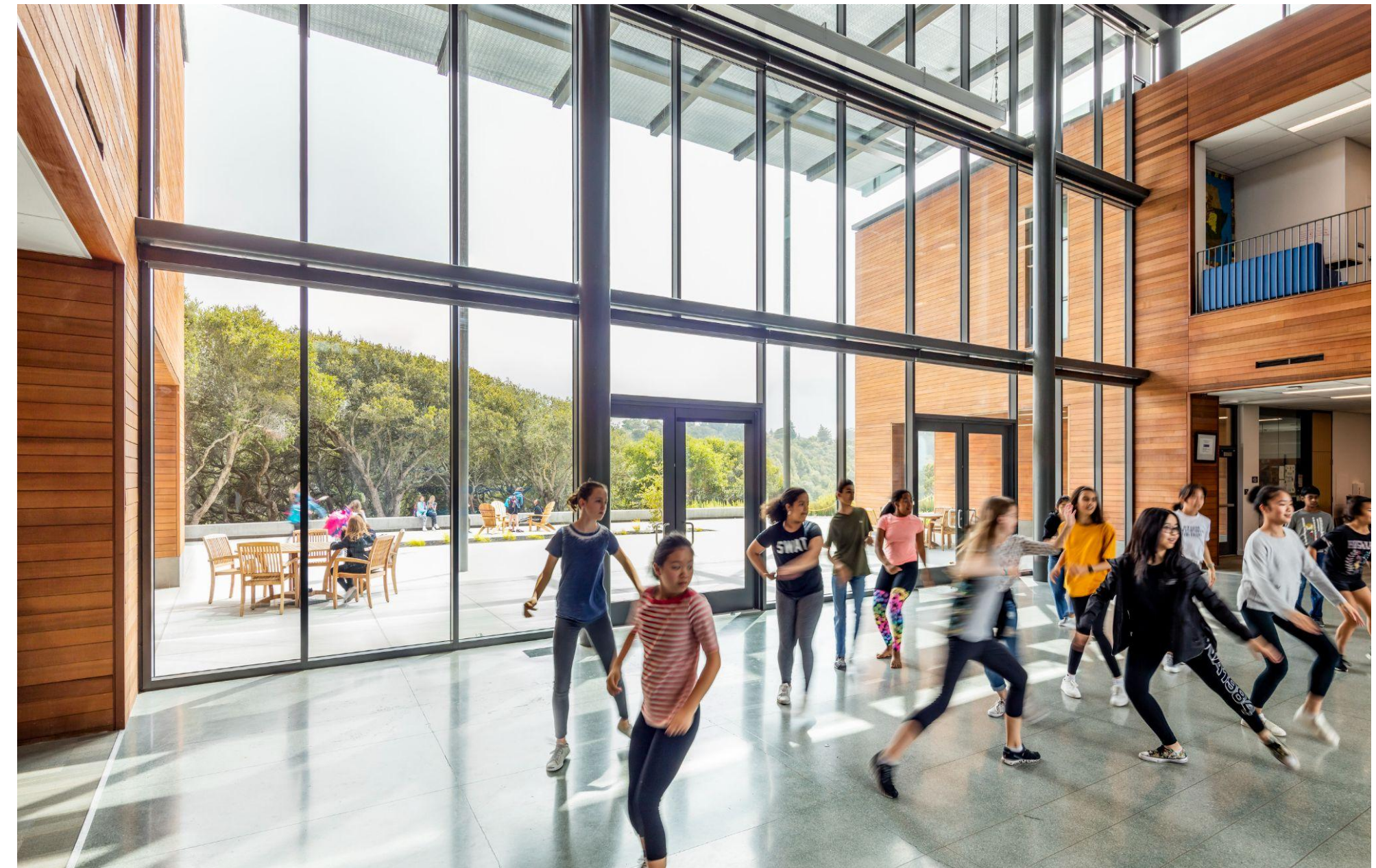


The design of the new Ida B Wells High School will support the whole student in their journey toward lifelong learning and success, guided by a comprehensive definition of student health, a process rooted in equity and inclusion, and a finished place that demonstrates climate and disability justice. Inspired by the legacy of its namesake, the new building will embrace transparency and truth – in organization, in structure, in materials and in storytelling – to ensure Ida B Wells is embodied within its walls.

GUIDING PRINCIPLES - DRAFT

1. STUDENT HEALTH (INTELLECTUAL, PHYSICAL + MENTAL)

- a. **SUPPORT** learning with great daylighting, healthy indoor air quality and excellent acoustics, borrowing the principles of biophilic design to achieve a welcoming environment.
- b. **CREATE** a bold, flexible teaching environment that will inspire and support a variety of learning styles well into the future.
- c. **DEVELOP** dynamic habitats for teenagers and teachers, supporting their social need to connect with one another as part of the path to teaching and learning success.
- d. **GATHER** students, faculty, and staff in a safe environment where they feel a sense of pride and belonging, coalescing the community within a central “heart” while creating a variety of flex spaces to offer choice.



GUIDING PRINCIPLES - DRAFT

2. EQUITY + INCLUSION

- a. **LIFT** the voices of a diverse student body, empowering and making visible the many cultures within the community through meaningful, equity-informed, impactful engagement.
- b. **SEEK** input from a broad set of voices throughout the process of design, respecting the truth of lived experience while elevating the most marginalized members of the community through transparency and trust-building activities.
- c. **CONNECT** to the broader business and residential district by making the new school a focal point and beacon of activity in SW Portland – supporting the financial health of nearby retailers while preserving security and safety for the student population.



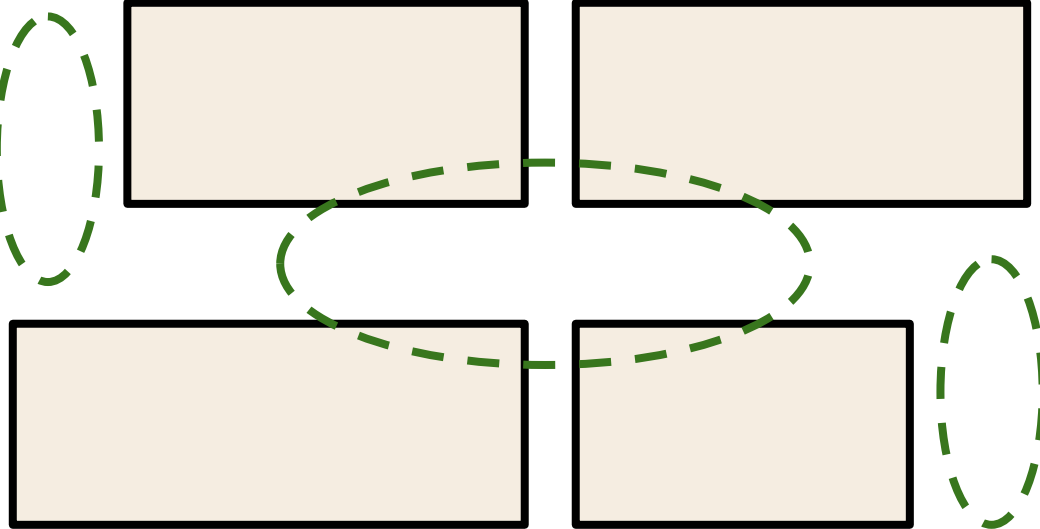
GUIDING PRINCIPLES - DRAFT

3. JUSTICE

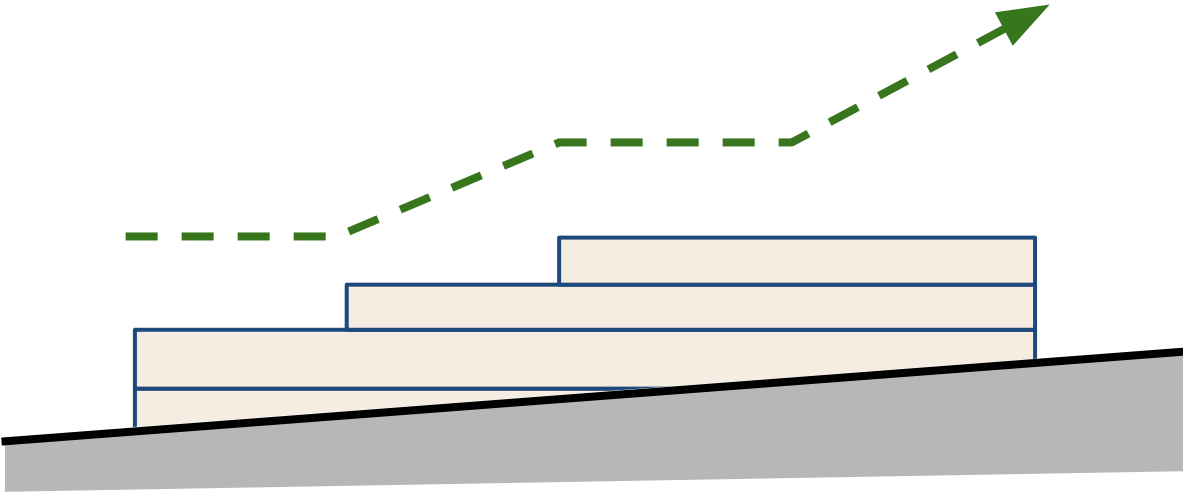
- a. **HONOR** the legacy of justice established by Ida B Wells through design, art and storytelling within the building and on the site.
- b. **LEAD** by example in creating one of the most sustainable schools in the country, fully compliant with the PPS Climate Crisis Response Policy while employing simple and easily maintained systems within enduring functional spaces.
- c. **EMBRACE** the lens of disability justice to create a school that is universally accessible, going beyond code to create a physical place of inclusion at the site and building scale.



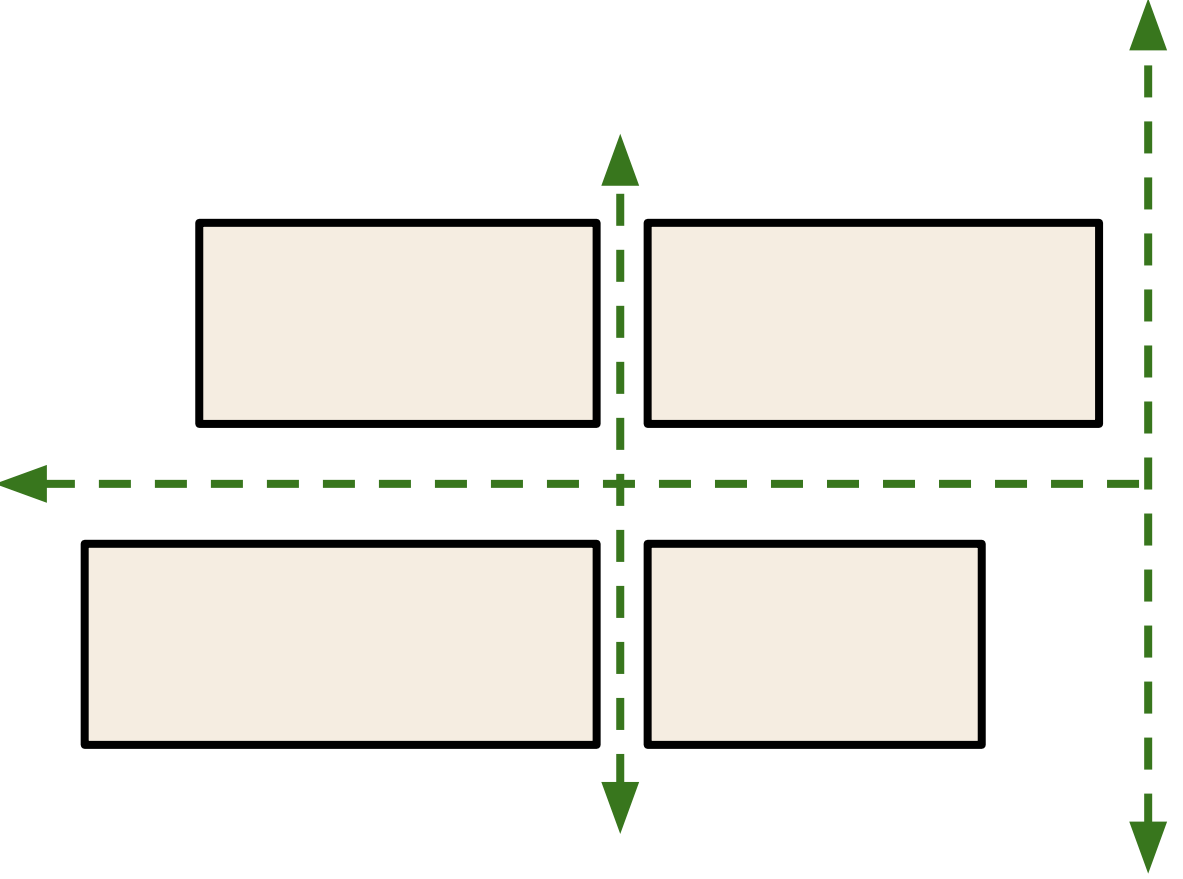
SCHEME 1 - DESIGN CONCEPTS



GATHER



LIFT



CONNECT

Feedback Exercise



Self Reflection 00:05

For the recommended scheme, please write on post-it notes:

What guiding principles are most important, and why?

*How do you **see** the guiding principles show up in the current design?*

*How do you **hope** these guiding principles will show up in the future?*

Walk About: 00:25

Post comments on boards + discuss

Review other people's comments posted

Discuss common themes and trade-offs

Additional Feedback?

WellsBond@pps.net

Next Steps



NEXT STEPS

Board Packet: 3/5

- **final information** for the Board of Education Meeting on 4/2

CPC-6: 3/12, 6-8pm

Community Open House: 3/13, 4-7pm

Additional Feedback?

WellsBond@pps.net

Additional Feedback?

Website: pps.net/IdaBWellsBond

Email: WellsBond@pps.net

Questions?
THANK YOU