



INTERDISCIPLINARY ENGINEERING BUILDING (IEB)

UNIVERSITY OF WASHINGTON

UWAC Meeting
14 March 2022



KIERAN TIMBERLAKE

IEB Community

- Primary academic home for **freshmen and sophomore students**
- A place for teaching and interaction with **engineering faculty representing multiple fields and disciplines;**
- A place for **exchange with industry partners**
- A place to coalesce the College into **one community** and champion the **inclusion of historically underrepresented groups** in the engineering sciences
- A place that reshapes open space and campus connectivity for the **UW Community**

IEB Project Goals

GROW

The IEB will...help us **grow** in terms of **numbers** and **to become** more **inclusive, collaborative, innovative, and adaptable**, with programs supported by facilities rivaling or exceeding those of our peer institutions.

ENRICH

The IEB will be an important part of our **on-campus student experience** and will serve as a **home or "engineering central,"** offering the spaces needed to **educate students to solve major societal challenges.**

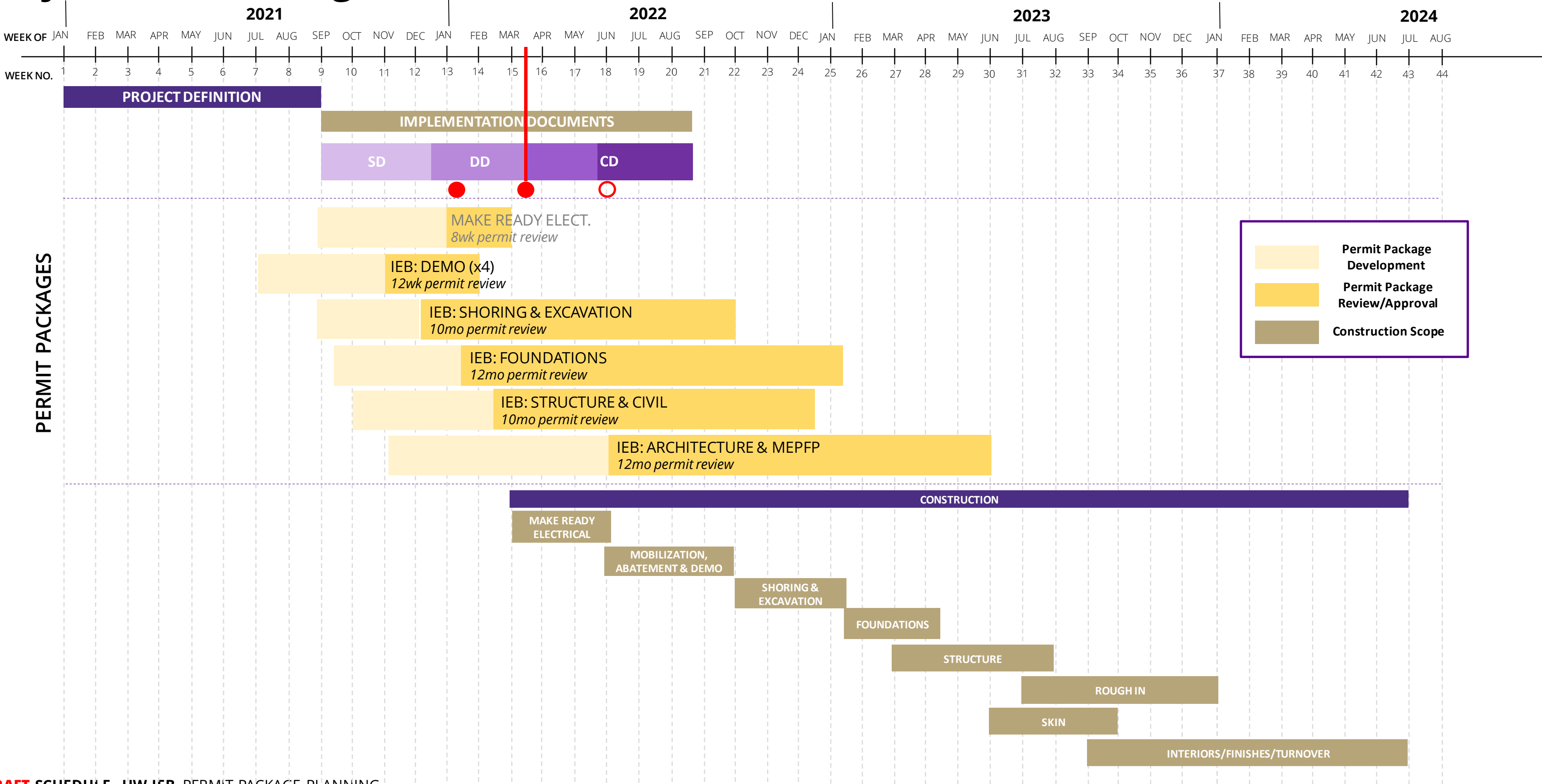
COLLABORATE

The IEB will embody our commitment to providing **exposure to the full range of engineering disciplines** right away, supporting **project-based learning, interdisciplinary teamwork, improved diversity,** and increased partnerships with industry, and more.

ENGAGE

The IEB will provide a **silos-free learning environment** that students need to **prepare for industry and entrepreneurial careers** in collaboration with fellow students across campus.

Project & Permitting Schedule



NEXT STEPS – Agreed upon at January UWAC meeting

- **Foundations & Structural permitting**
- **DD level design investigations of masonry/glazing envelope**
- **Articulation of operable windows within the fenestration**
- **Building exterior elements articulation**
- **Rooftop mechanical enclosure massing and material investigation**
- **Further design investigations of interiors**
- **Continued monitoring of market volatility and shelling strategies**

NEXT MEETING

- **UWAC – June 13th**



UWAC Agenda

10 Min **Site Design**
Progress Update

10 Min **Interior Design**
Progress Update

6 Min **Envelope Design**
Progress Update

SITE DESIGN

PROGRESS UPDATE





RED SQUARE

HUB

IEB SITE

FLUKE

JEFFERSON RD

LOEW

STEVENS WAY

MASON RD

MONTLAKE BLVD

RAINIER VISTA

UNION BAY





OVERALL SITE PLAN

UNIVERSITY OF WASHINGTON – INTERDISCIPLINARY ENGINEERING BUILDING

14 MARCH 2022 | © KIERANTIMBERLAKE | HENSEL PHELPS | PLACE

HUSKY UNION BUILDING

STEVENS WAY

ANNEX 04

MASON RD





CURRICULAR

CIRC.

CURRICULAR

CIRC.

PORCH

PORTAL

CIRC.

PROJECT SPACE

GROVE



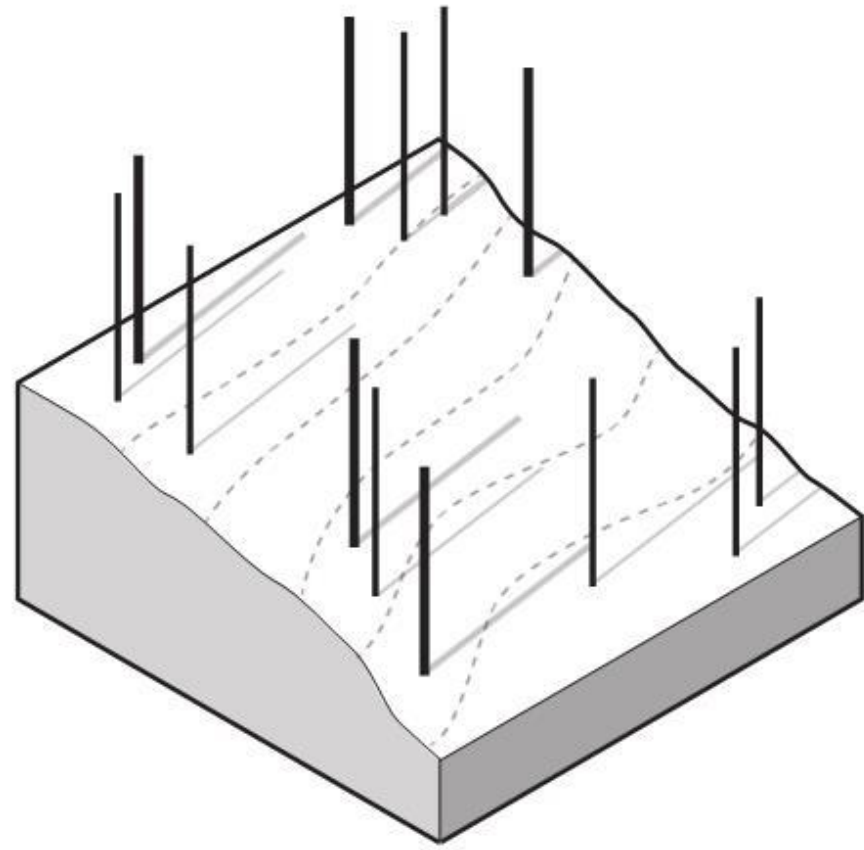
RESPOND TO THE LANDSCAPE



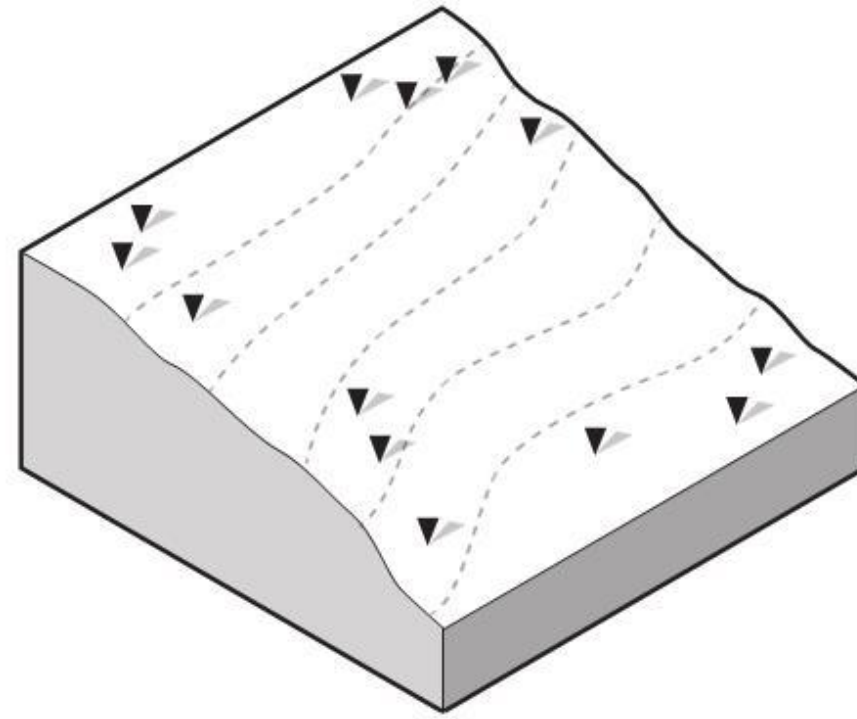
FACILITATE CAMPUS CONNECTIVITY



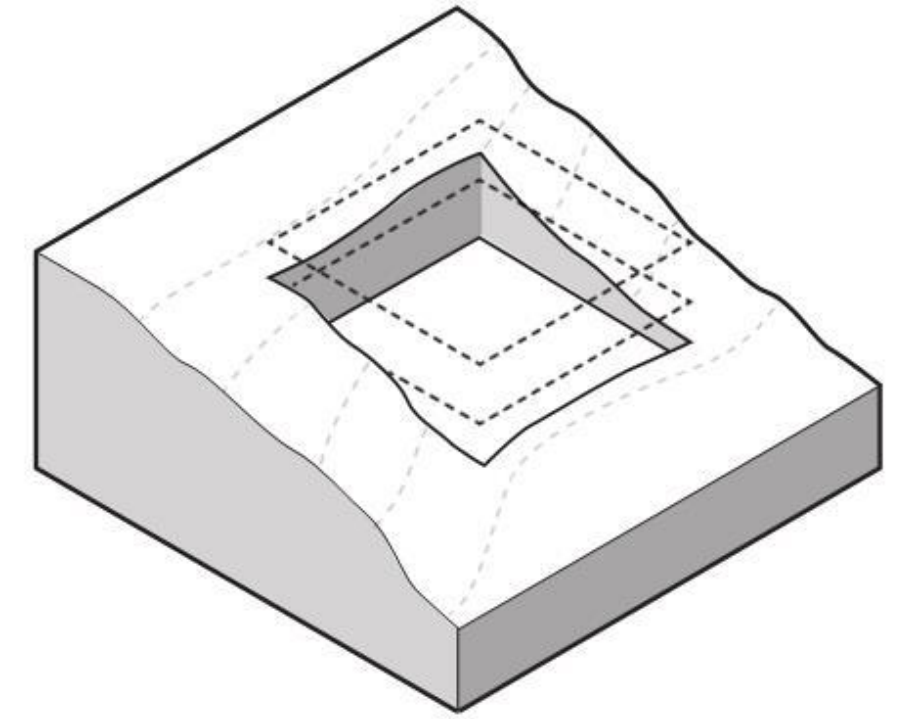
ENGAGE STUDENT LIFE



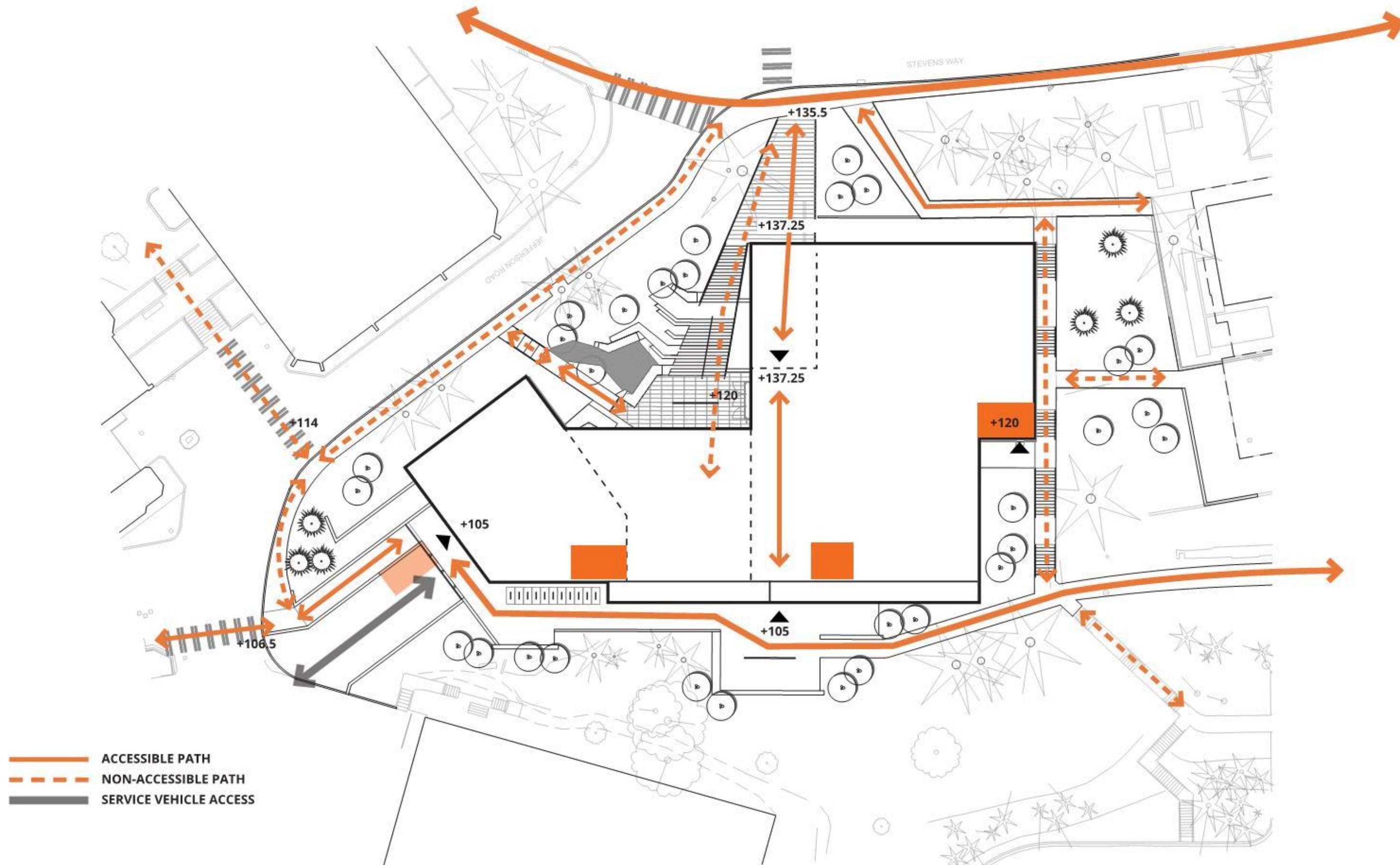
TREE RINGED CONTEXT



TREES | GRADING | ACCESS

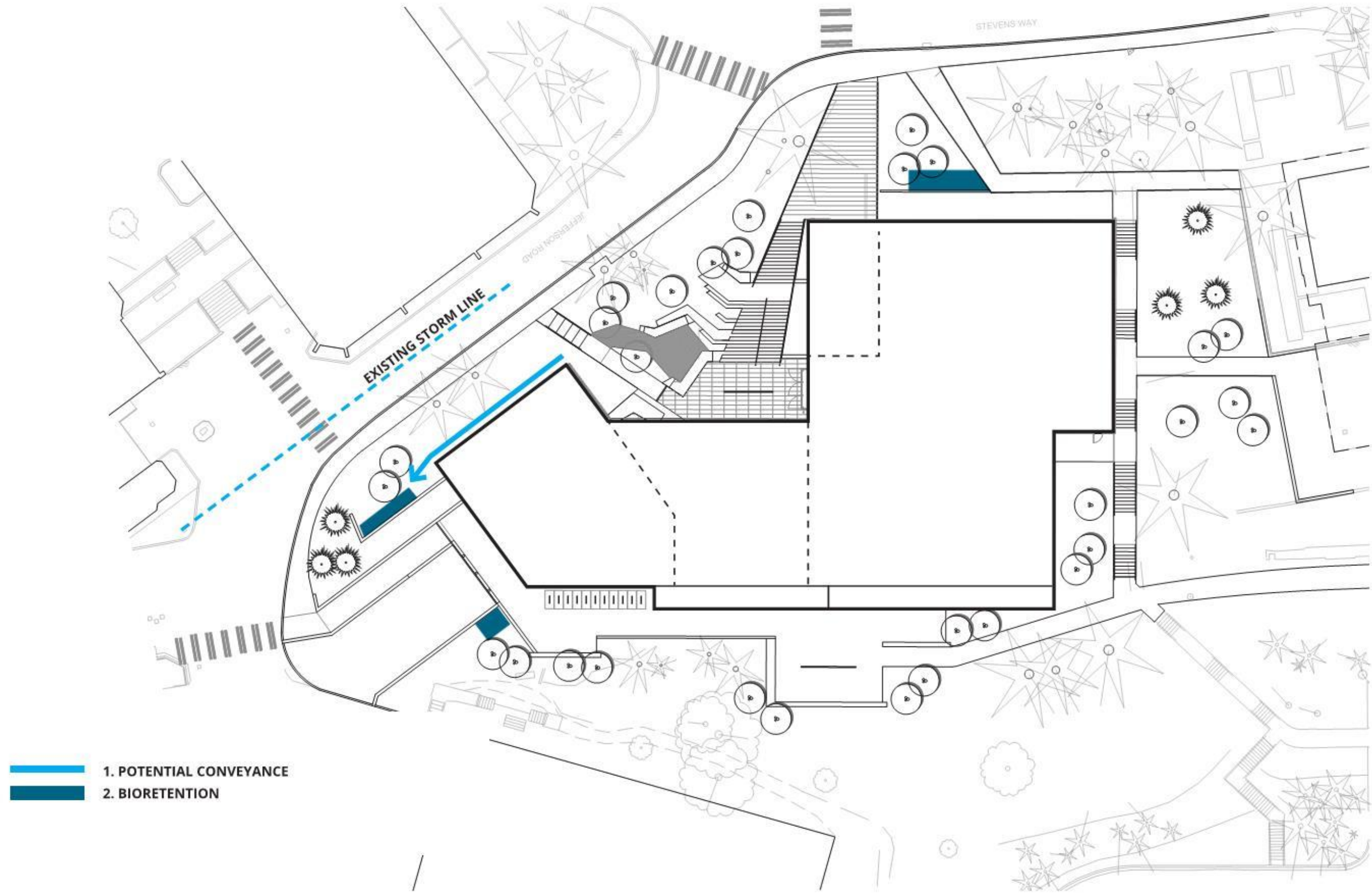


GRADING | BUILDING | STORMWATER



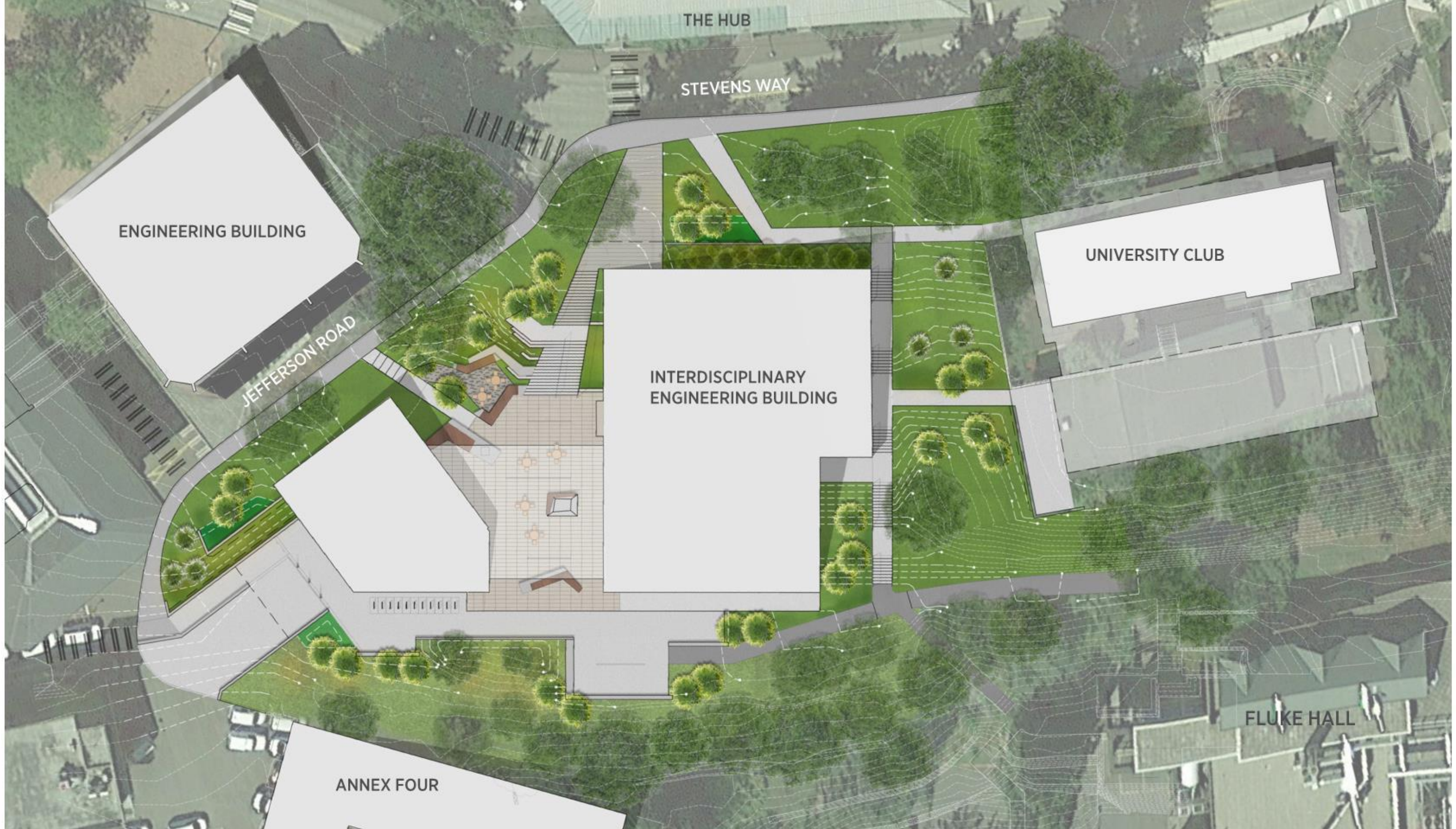
SITE CIRCULATION

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SITE STORMWATER

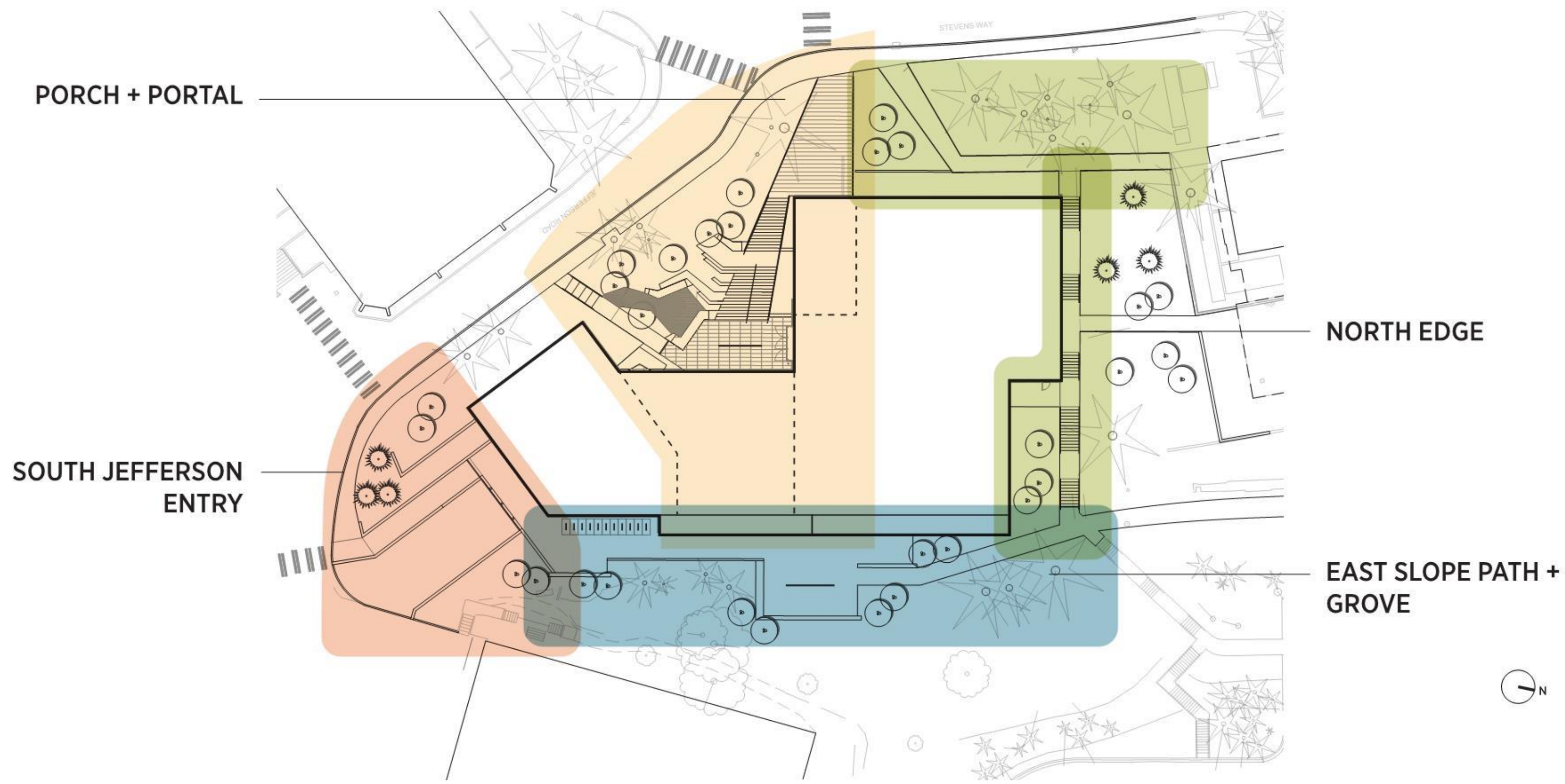
UNIVERSITY OF WASHINGTON - INTERDISCIPLINARY ENGINEERING BUILDING

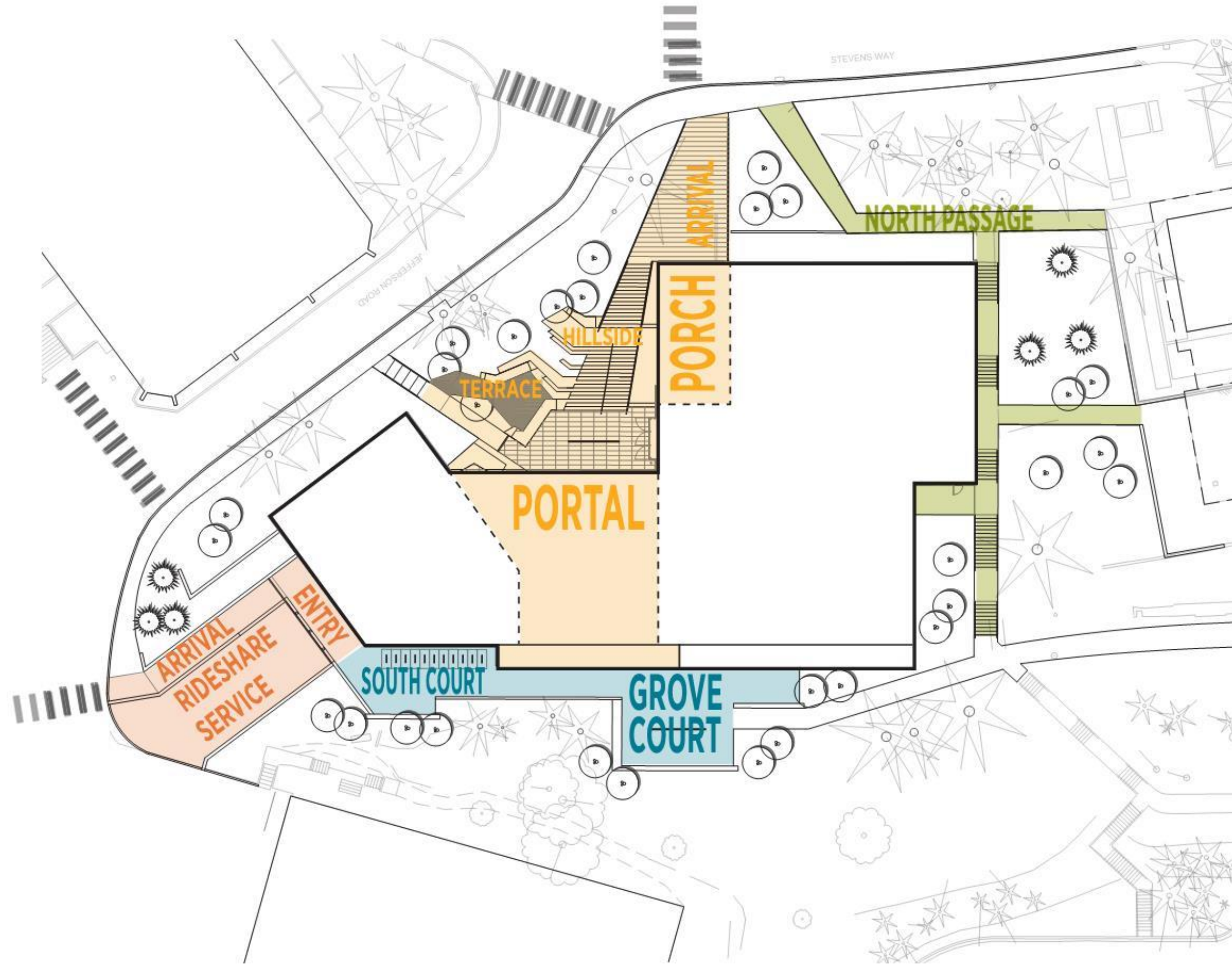


OVERALL SITE PLAN

UNIVERSITY OF WASHINGTON - INTERDISCIPLINARY ENGINEERING BUILDING

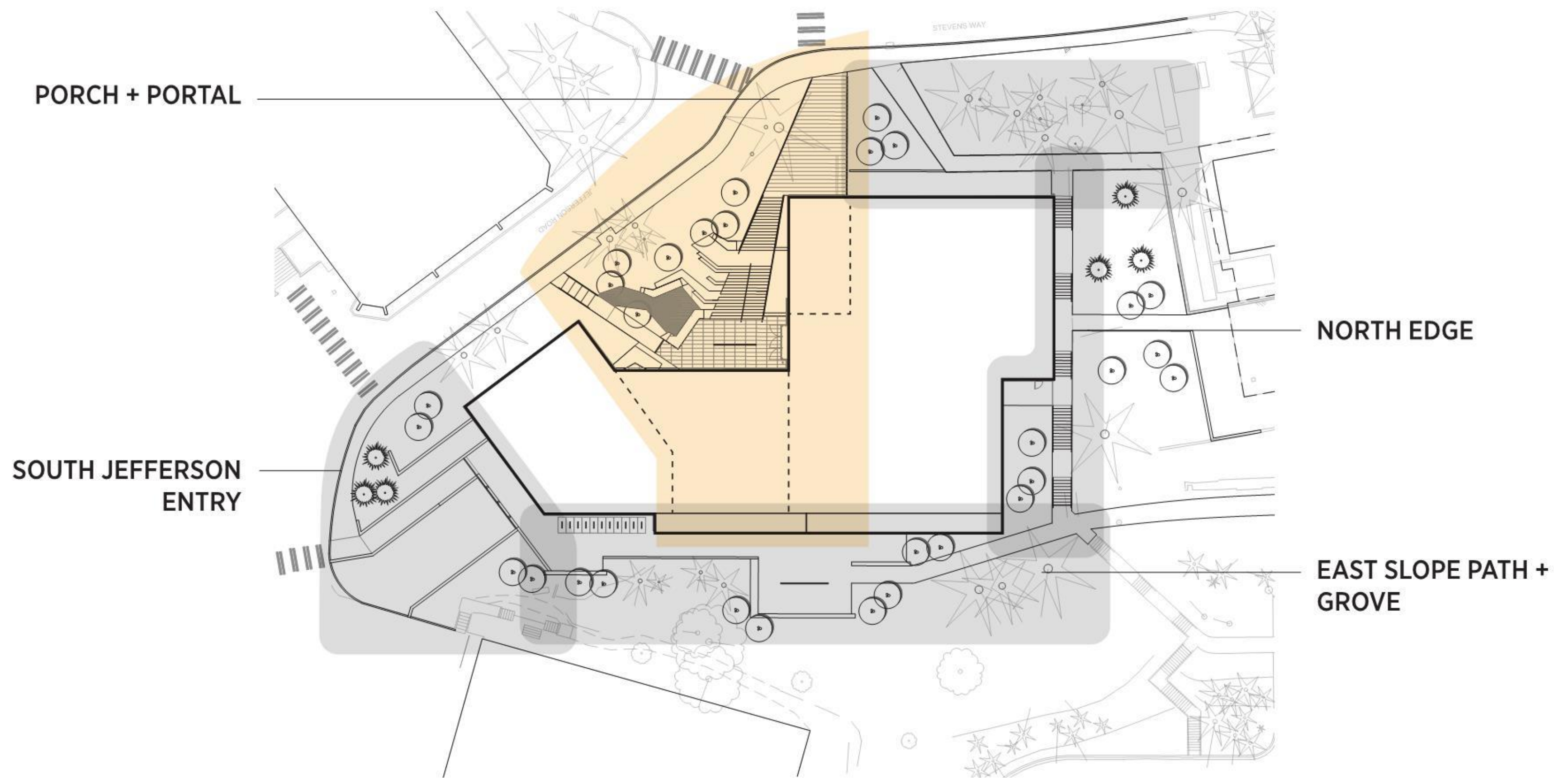
14 MARCH 2022 | © KIERANTIMBERLAKE | HENSEL PHELPS | PLACE





SITE PROGRAM

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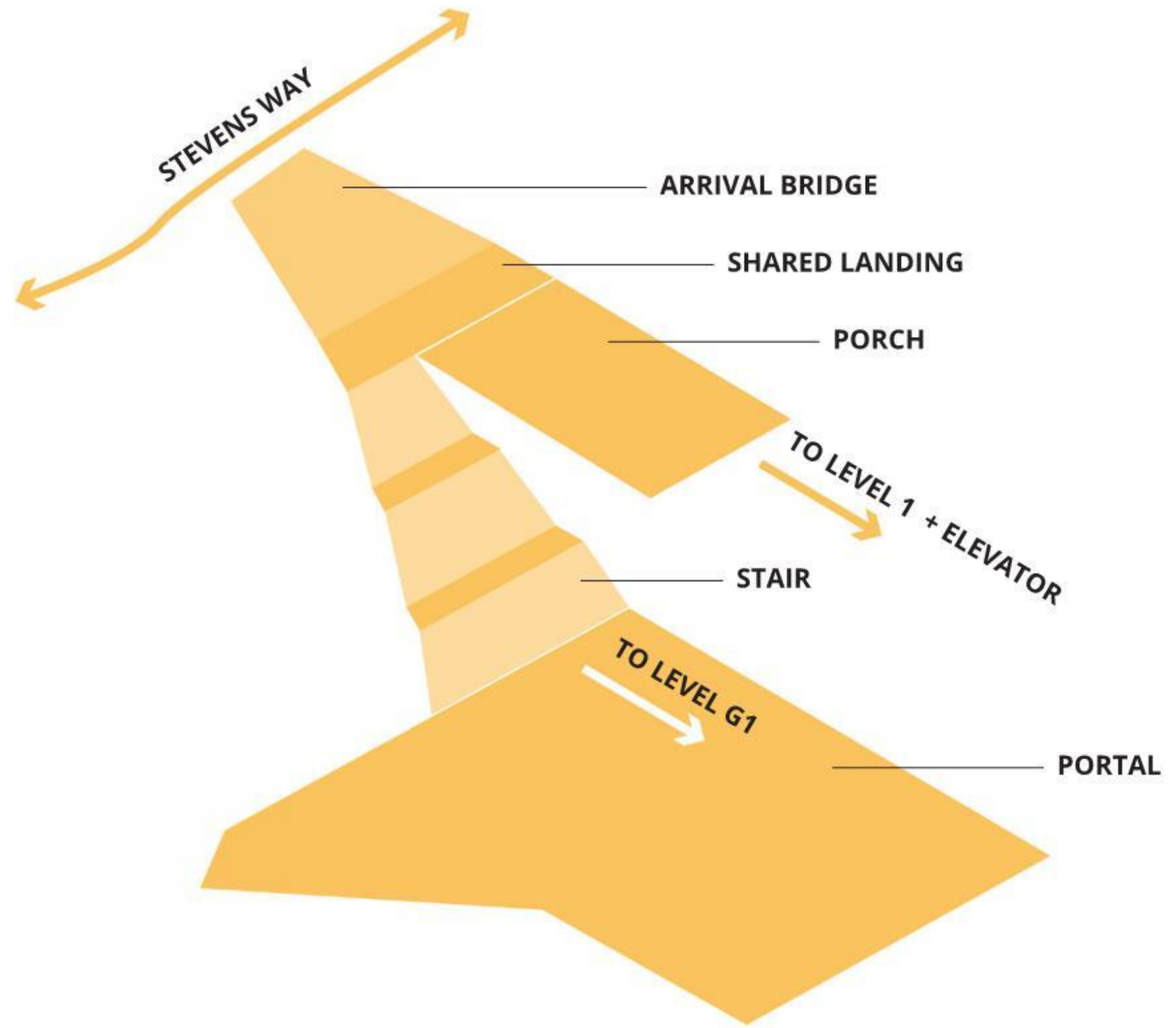


PORCH + PORTAL

**SOUTH JEFFERSON
ENTRY**

NORTH EDGE

**EAST SLOPE PATH +
GROVE**



PORCH + PORTAL CONCEPT

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STEVENS ENTRY SEQUENCE

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PORTAL DESIGN - TERRACES (MAY 15, 3 PM)
UNIVERSITY OF WASHINGTON - INTERDISCIPLINARY ENGINEERING BUILDING

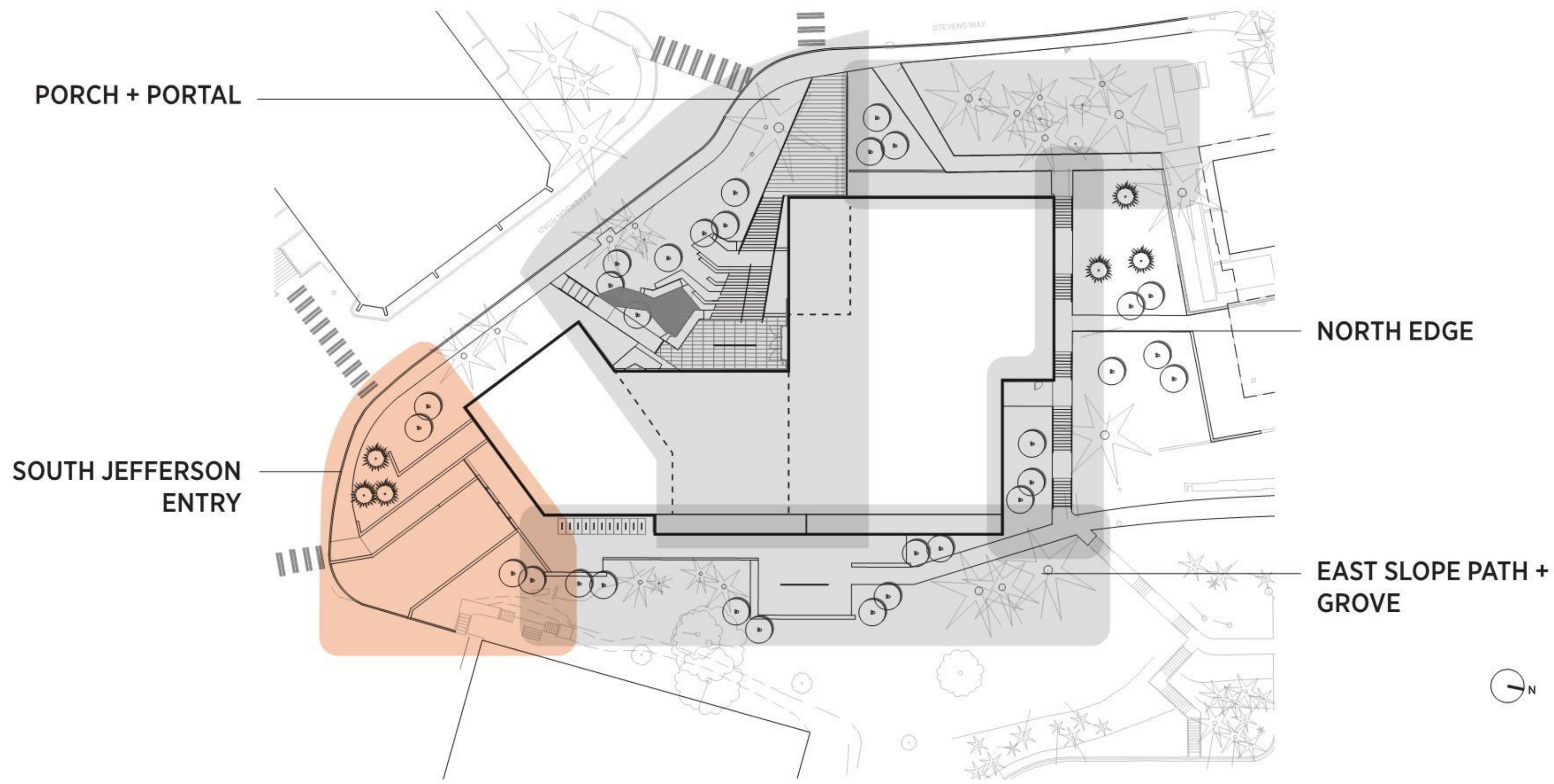


PORTAL DESIGN - JEFFERSON ENTRY (MAY 15, 3 PM)
UNIVERSITY OF WASHINGTON - INTERDISCIPLINARY ENGINEERING BUILDING





PORTAL DESIGN - EAST OVERLOOK (MAY 15, 11 AM)
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PORCH + PORTAL

SOUTH JEFFERSON ENTRY

NORTH EDGE

EAST SLOPE PATH + GROVE





Bioretention

Terraced slope

Pedestrian arrival

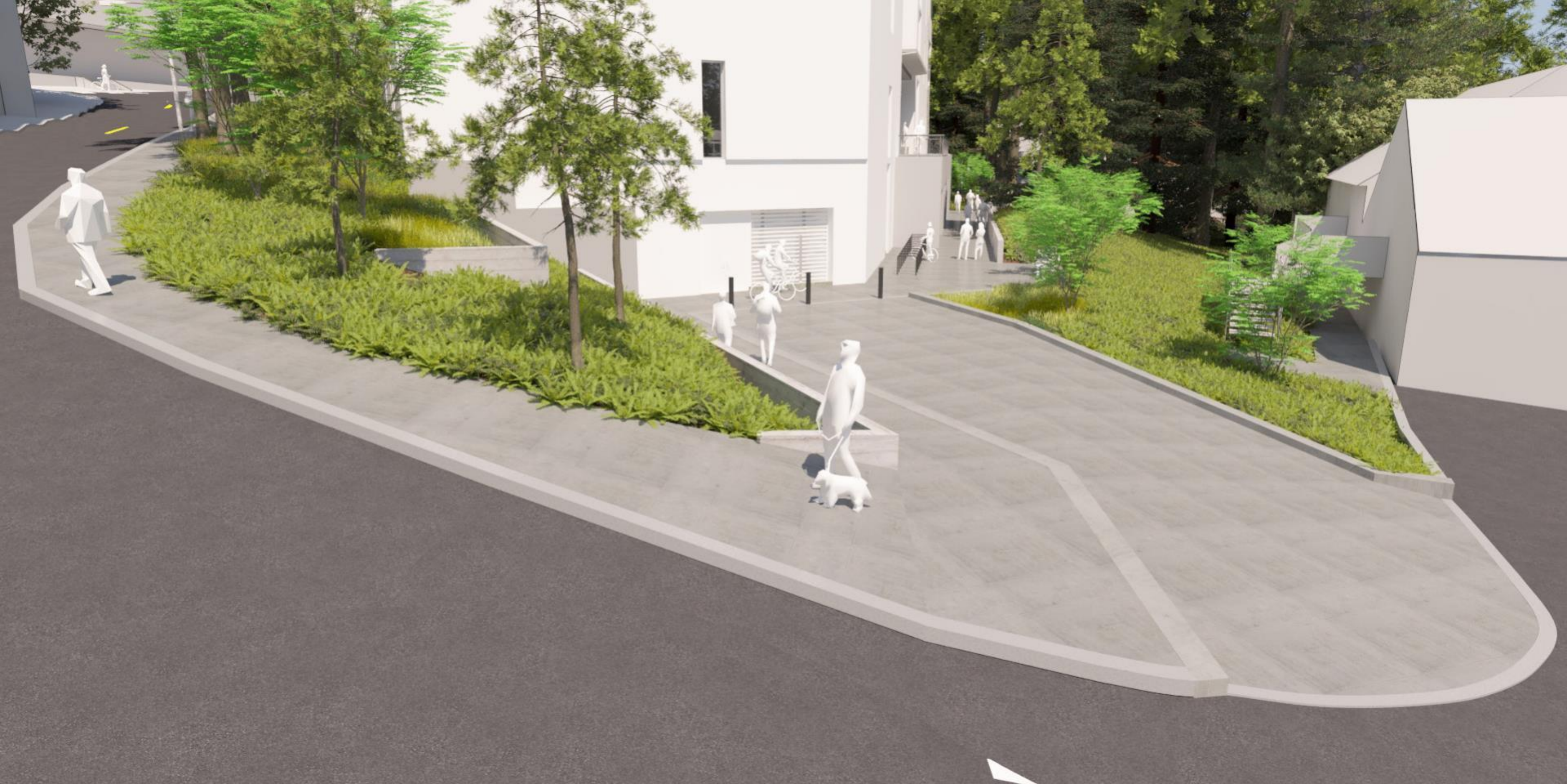
Service access

Jefferson entry

Rideshare

IEB courts + mid-slope path

Bioretention



SOUTH JEFFERSON ENTRY

UNIVERSITY OF WASHINGTON - INTERDISCIPLINARY ENGINEERING BUILDING



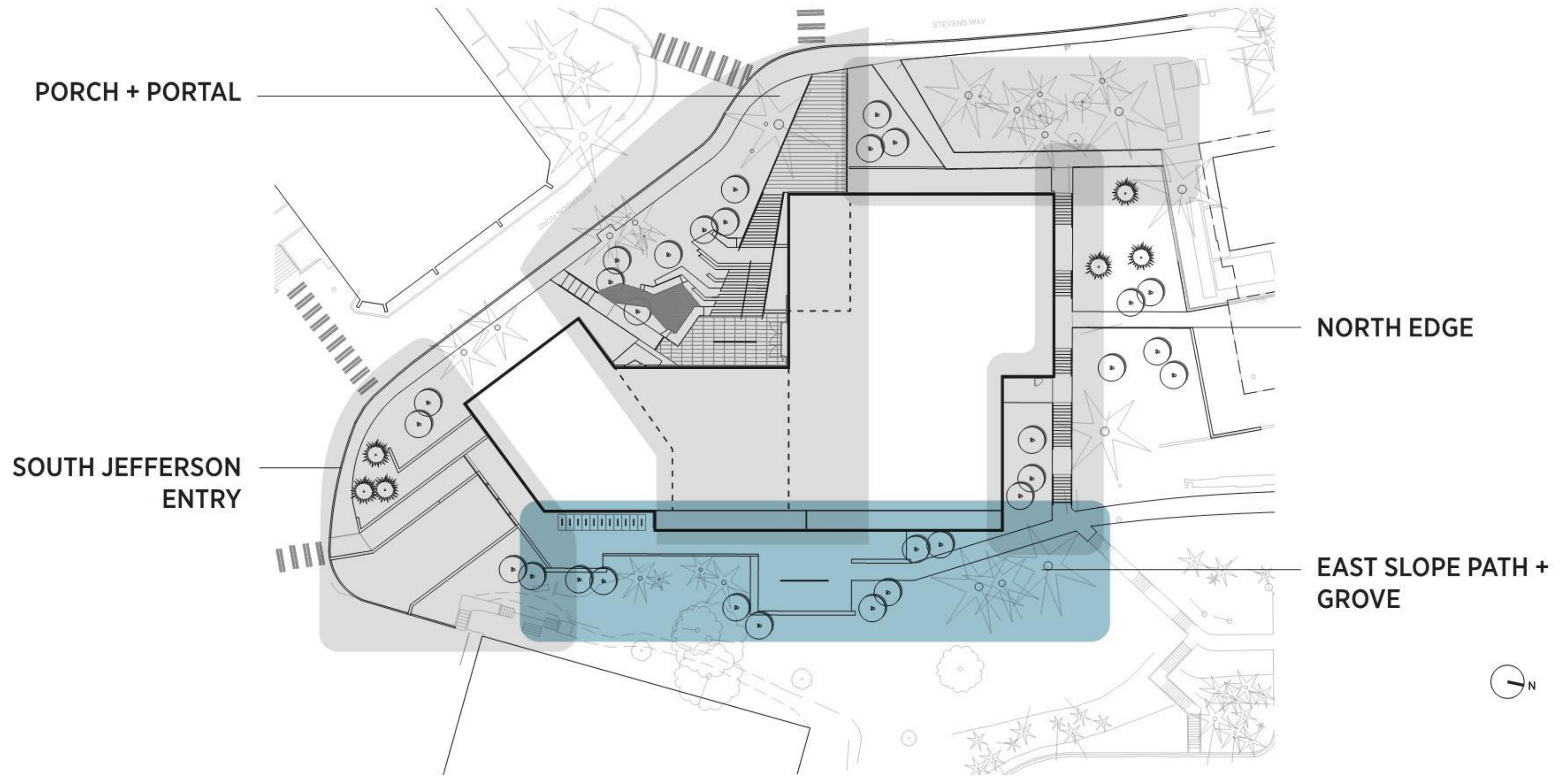
SOUTH JEFFERSON ENTRY

UNIVERSITY OF WASHINGTON - INTERDISCIPLINARY ENGINEERING BUILDING



SOUTH JEFFERSON ENTRY

UNIVERSITY OF WASHINGTON – INTERDISCIPLINARY ENGINEERING BUILDING



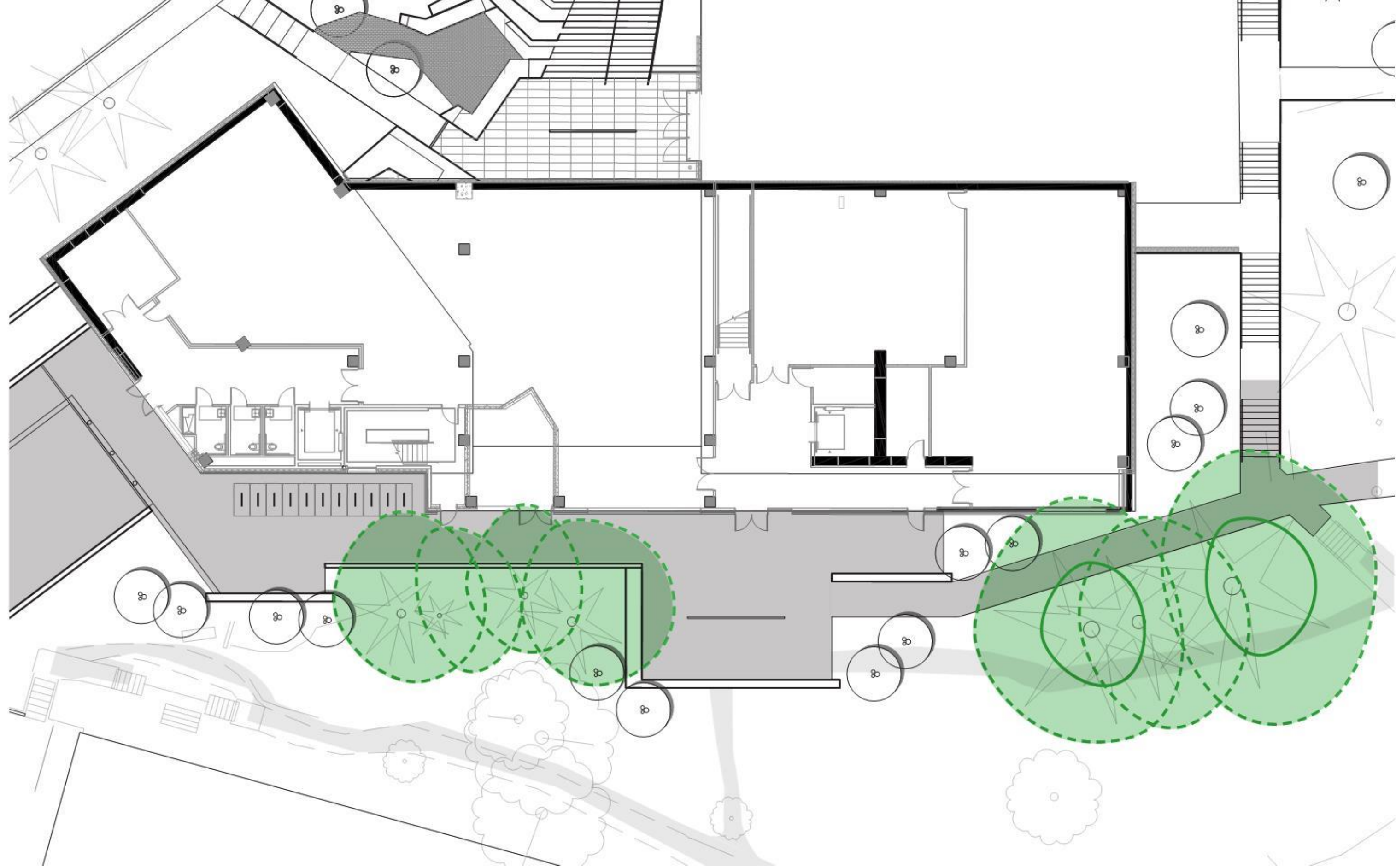
EAST SLOPE PATH + GROVE

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EAST SLOPE PATH + GROVE ENLARGEMENT

UNIVERSITY OF WASHINGTON - INTERDISCIPLINARY ENGINEERING BUILDING



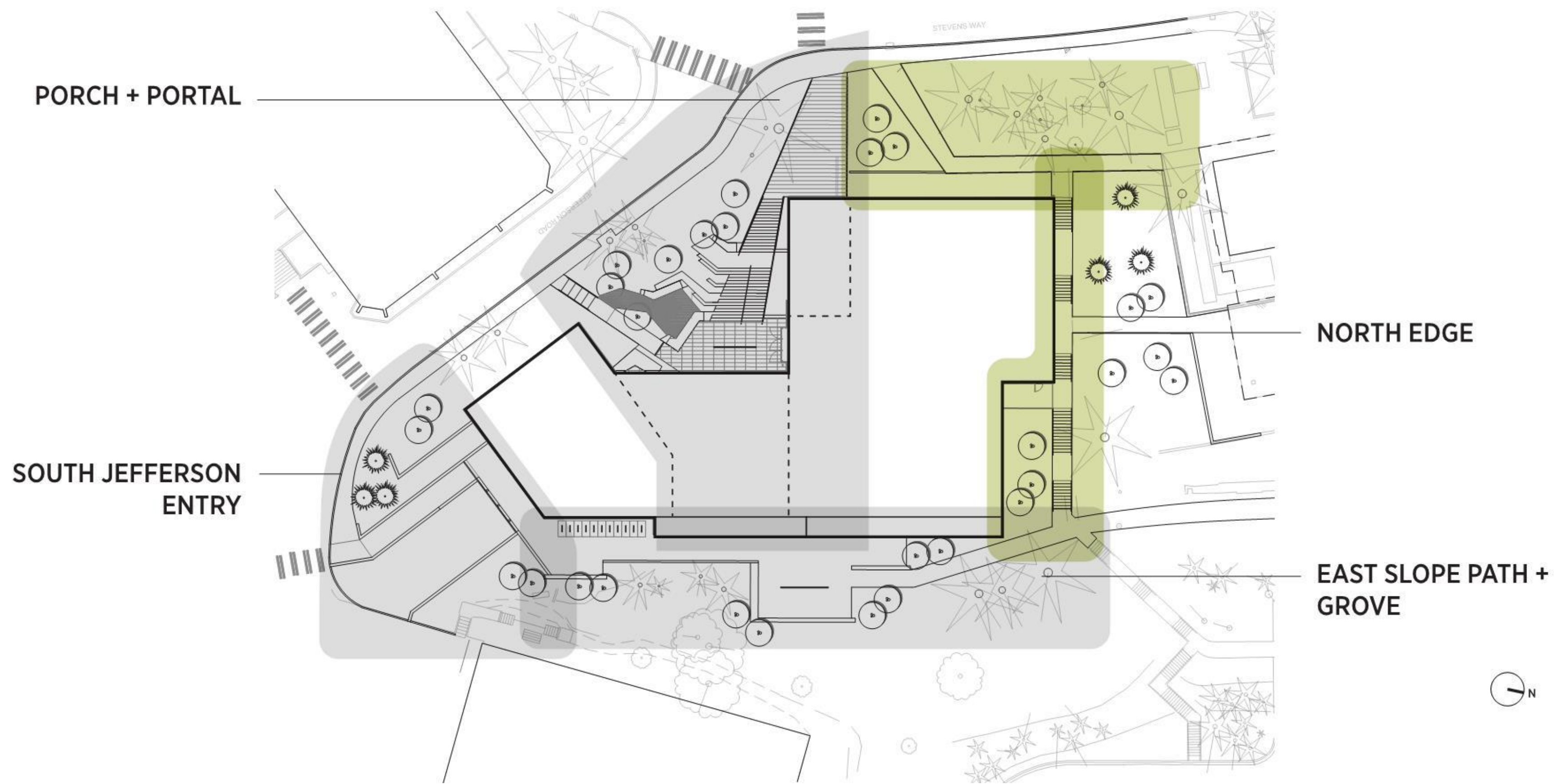






EAST SLOPE PATH + GROVE – GROVE COURT

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PORCH + PORTAL

SOUTH JEFFERSON
ENTRY

NORTH EDGE

EAST SLOPE PATH +
GROVE



Northside connections

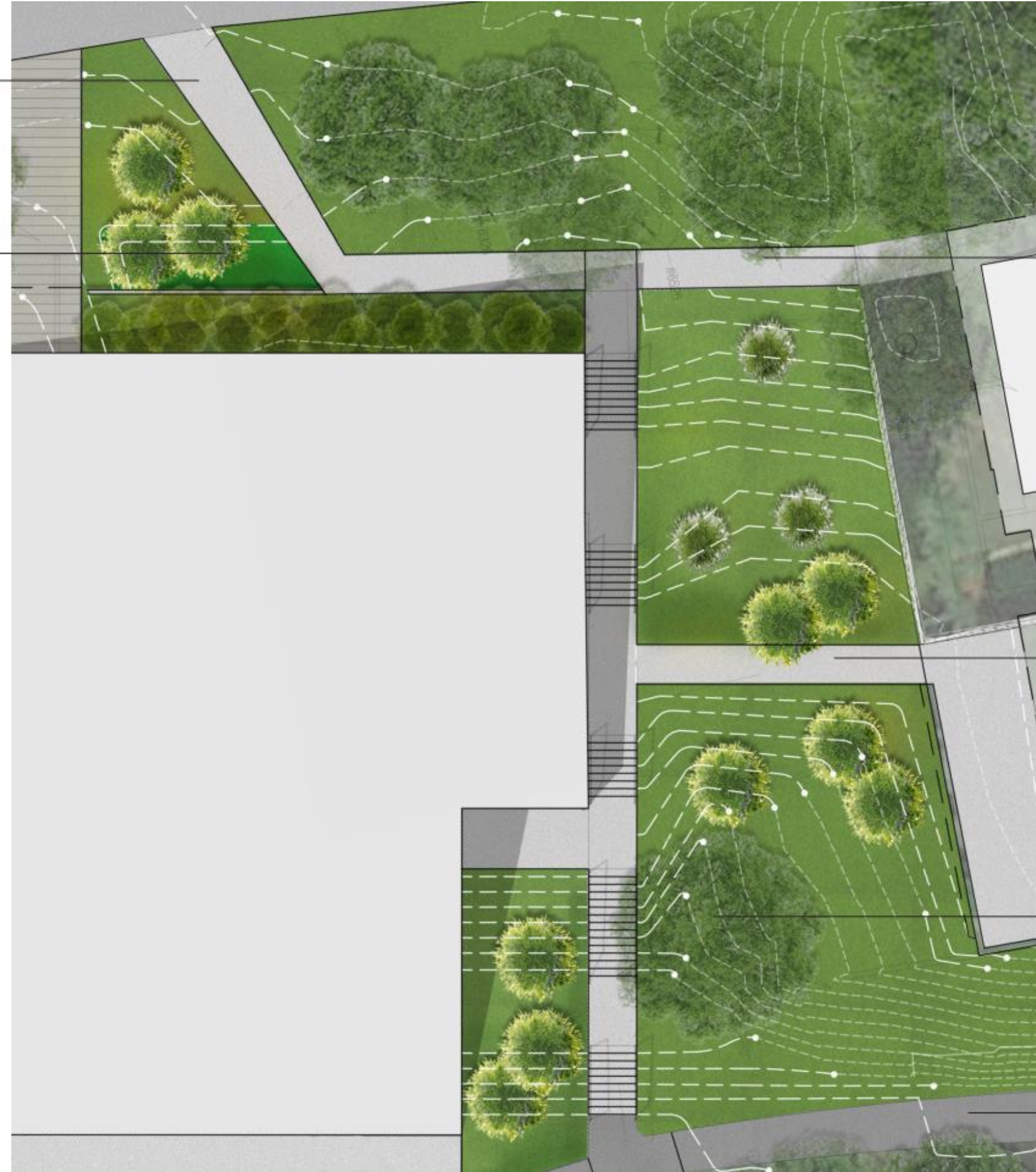
Bioretention

University club accessible
lower level access

University club connection

Exceptional Douglas Fir

Mid slope path



NORTH EDGE ENLARGEMENT

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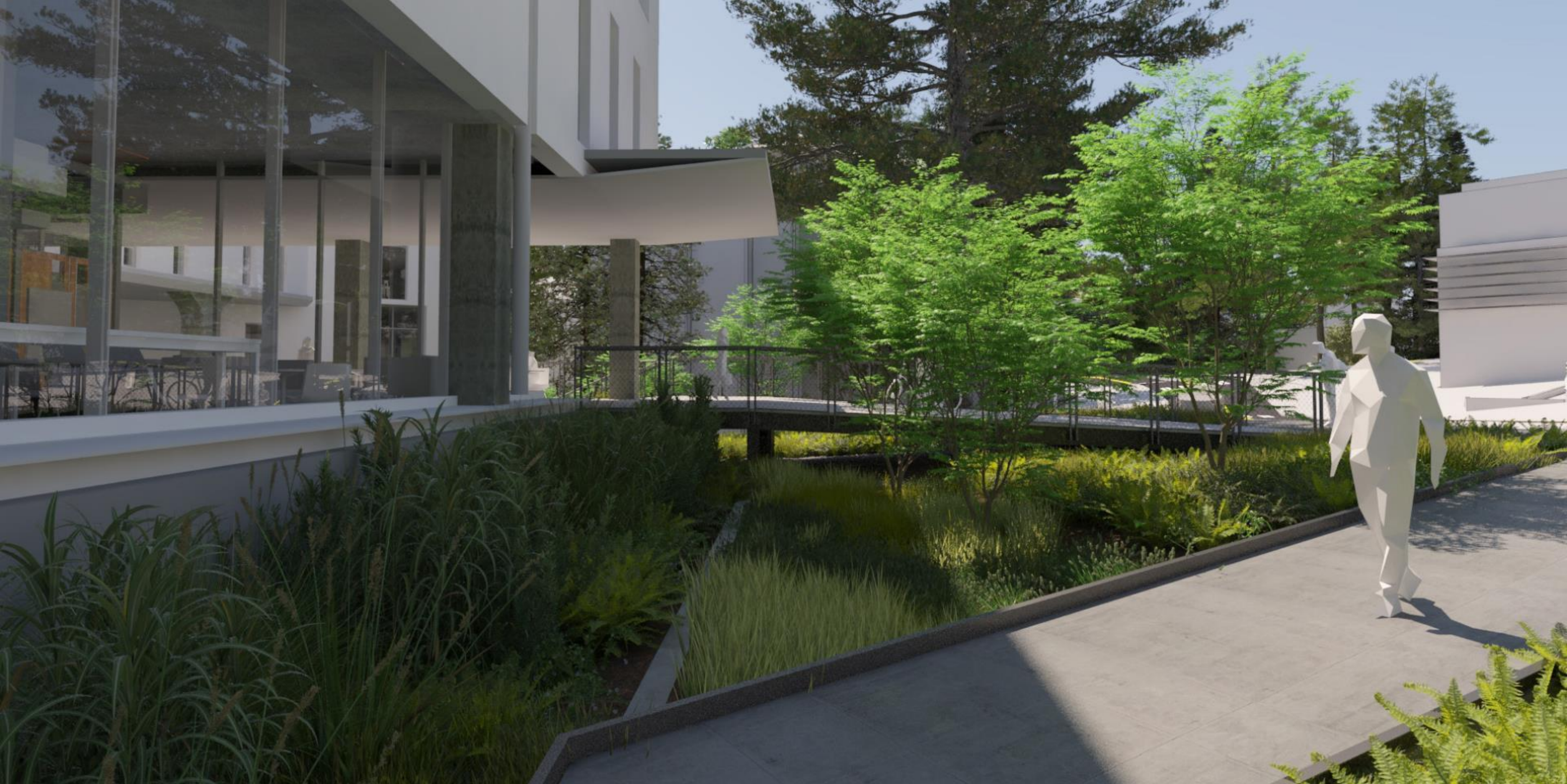
NORTH EDGE – MID SLOPE PATH

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NORTH EDGE - UNIVERSITY CLUB ACCESS

UNIVERSITY OF WASHINGTON - INTERDISCIPLINARY ENGINEERING BUILDING





entry bridge | light touch planking



guardrail character | enhance + disappear



handrails | clean detailing



connection pathways | visible edges



built in seating | warmth in materials



retaining walls | textural treatment



gathering plaza | accent finished concrete



terrace placemaking | sandset pavers



composition | native and adapted



shade loving groundcovers | deer + sword ferns



evergreen and fragrance | sarcococca



seasonal structure | yellow twig dogwood



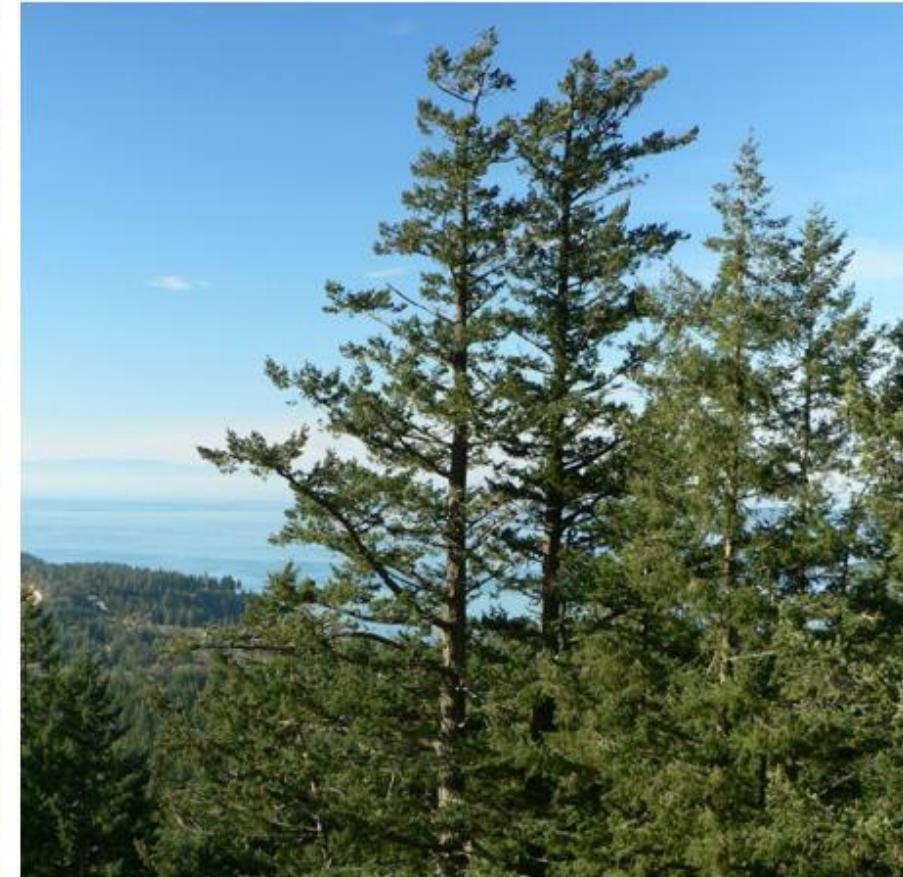
woodland dappling | vine maple



midstory show | cornus mas



enhanced woodland grove | western red cedar



view framing | douglas fir

SITE PLANTING CHARACTER

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Interior Design

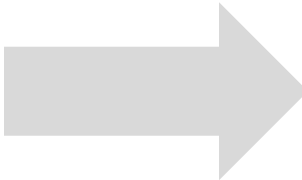
PROGRESS UPDATE



DETAILED INSIGHTS

DETAILED INSIGHTS

Identifying space needs and requirements



- 01/12 – SITE & SHELL PROJECT WORK TEAM
- 01/19 – SITE & SHELL PROJECT WORK TEAM
- 01/20 – ELEVATOR DESIGN
- 01/26 – SITE & SHELL PROJECT WORK TEAM
- 01/26 – SITE ACCESSIBILITY & VEHICULAR ACCESS
- 01/27 – SUSTAINABILITY & “LIVING LAB”
- 01/28 – ACCESS CONTROL
- 02/09 - SITE & SHELL PROJECT WORK TEAM
- 02/09 – INTERIORS & MGMT PROJECT WORK TEAM**
- 02/11 – ACCESS CONTROL
- 02/11 – SITE ACCESSIBILITY & VEHICULAR ACCESS
- 02/15 – ELEVATOR DESIGN
- 02/18 – DAN RATNER & DR. KAREN THOMAS-BROWN MEET WITH STUDENTS TO DISCUSS THE INTERIOR DESIGN APPROACH**
- 02/16 - SITE & SHELL PROJECT WORK TEAM
- 02/22 – ENGINEERING ACADEMIC CENTER REVIEW
- 02/28 – ACCESS CONTROL
- 03/02 – INTERIORS & MGMT PROJECT WORK TEAM**
- 03/09 – SITE & SHELL PROJECT WORK TEAM

JUNE & JULY 2021

Furniture Criteria

A1

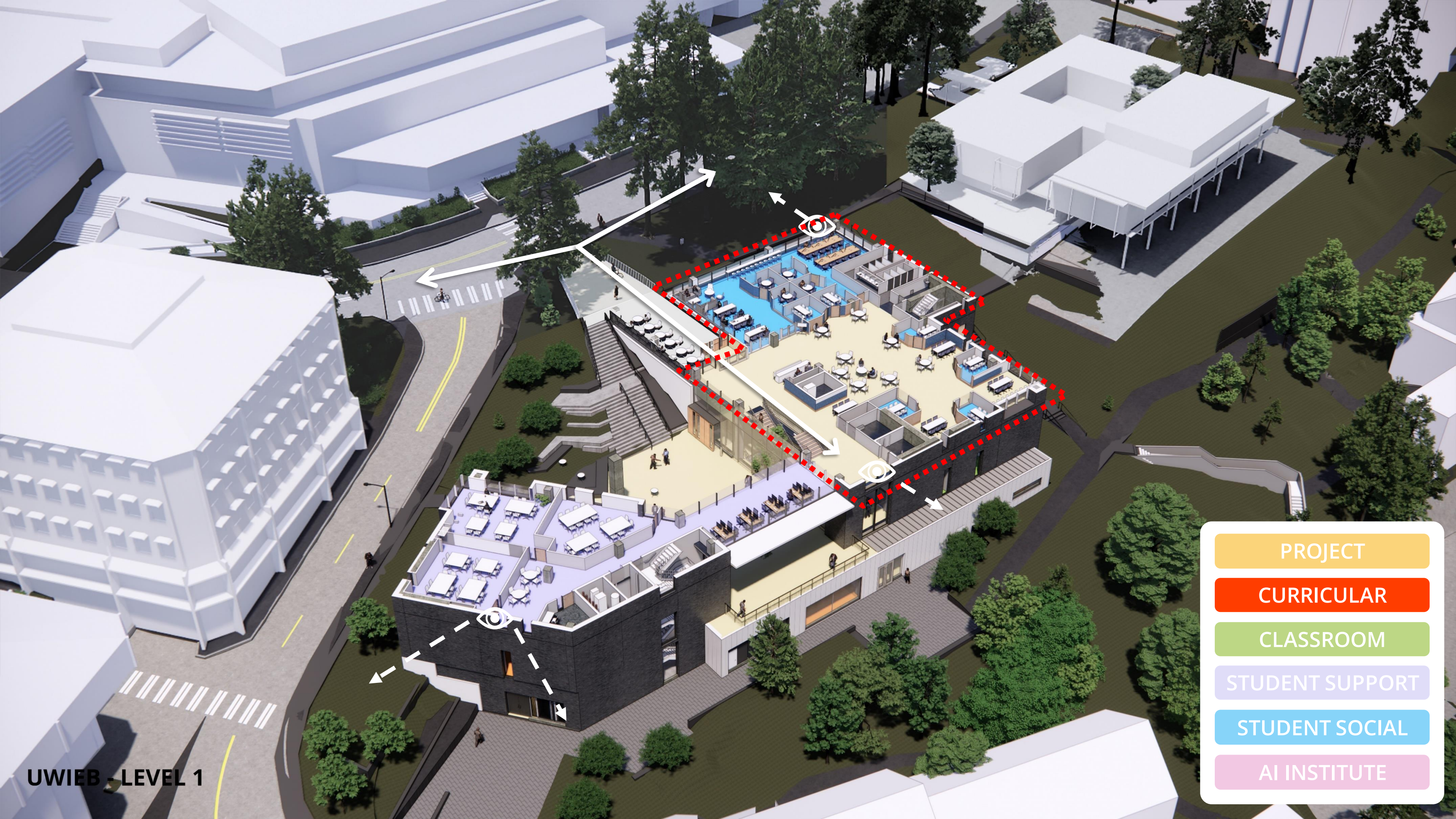
- Easy to move / reconfigure
- Easy to store and swap for alternates
- Comfortable but not intended for extended stay
- Group focused

Program of Walls

Opportunities for Material Distinction

Acoustic Environment

- A1 
- A2 // B1 
- B2 // C1 



- PROJECT
- CURRICULAR
- CLASSROOM
- STUDENT SUPPORT
- STUDENT SOCIAL
- AI INSTITUTE

UWIEB - LEVEL 1

Scenarios



SCENARIO 1

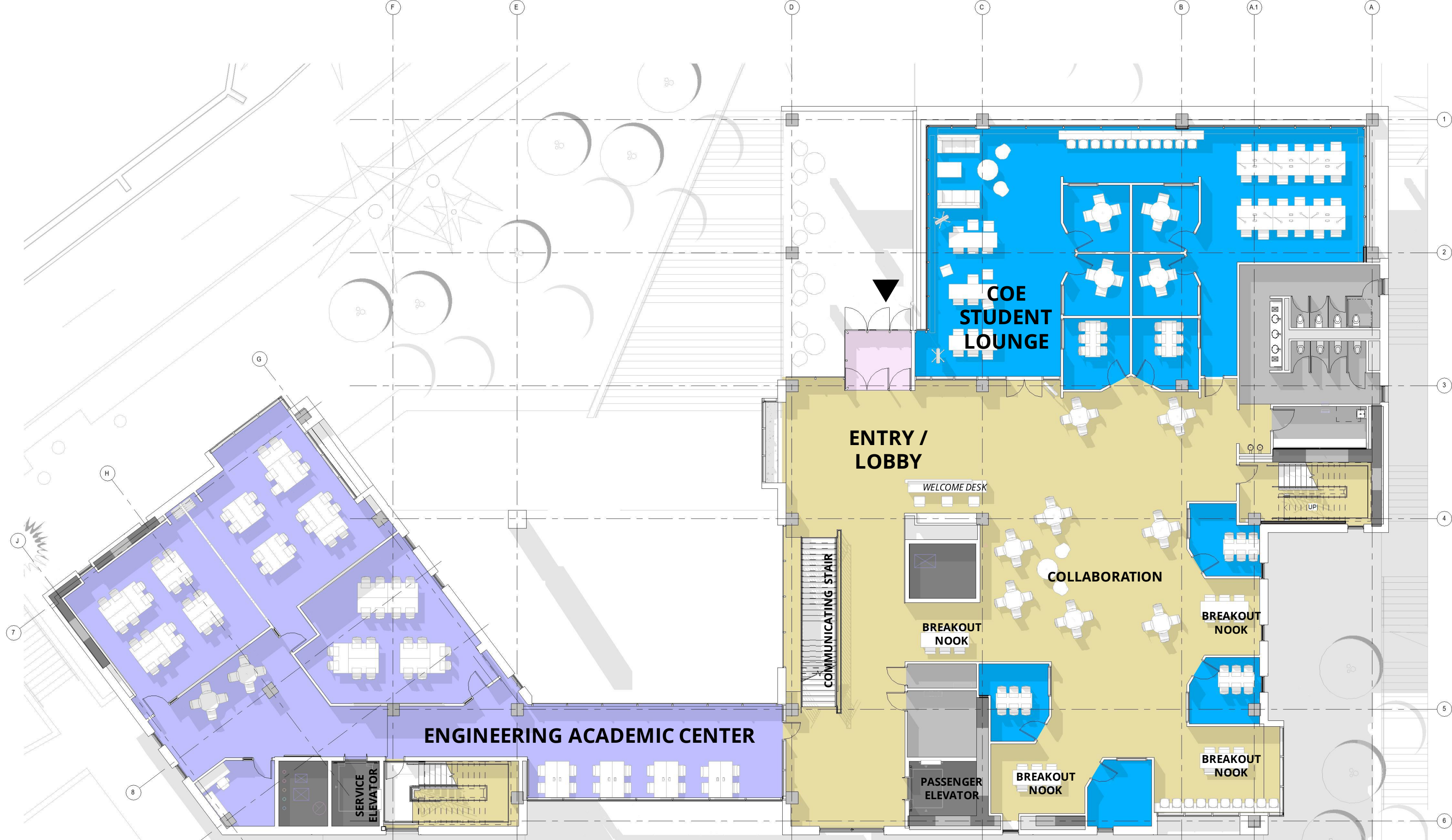
SCENARIO 1A

SCENARIO 2

SCENARIO 3

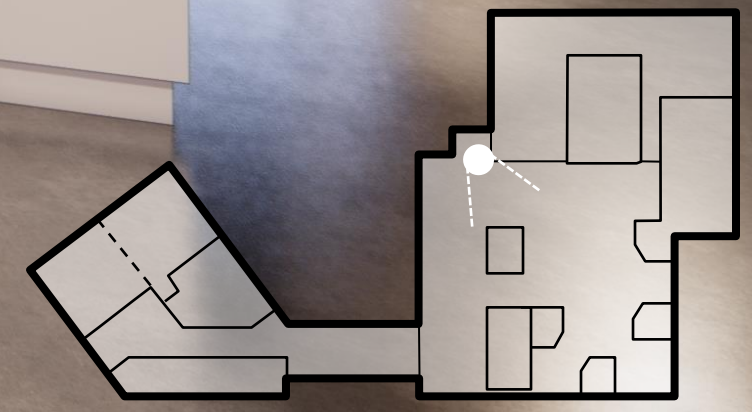
LEVEL 1 – STUDENT SPACE DISTRIBUTION

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LEVEL 1 - ENTRANCE LOBBY & WELCOME DESK

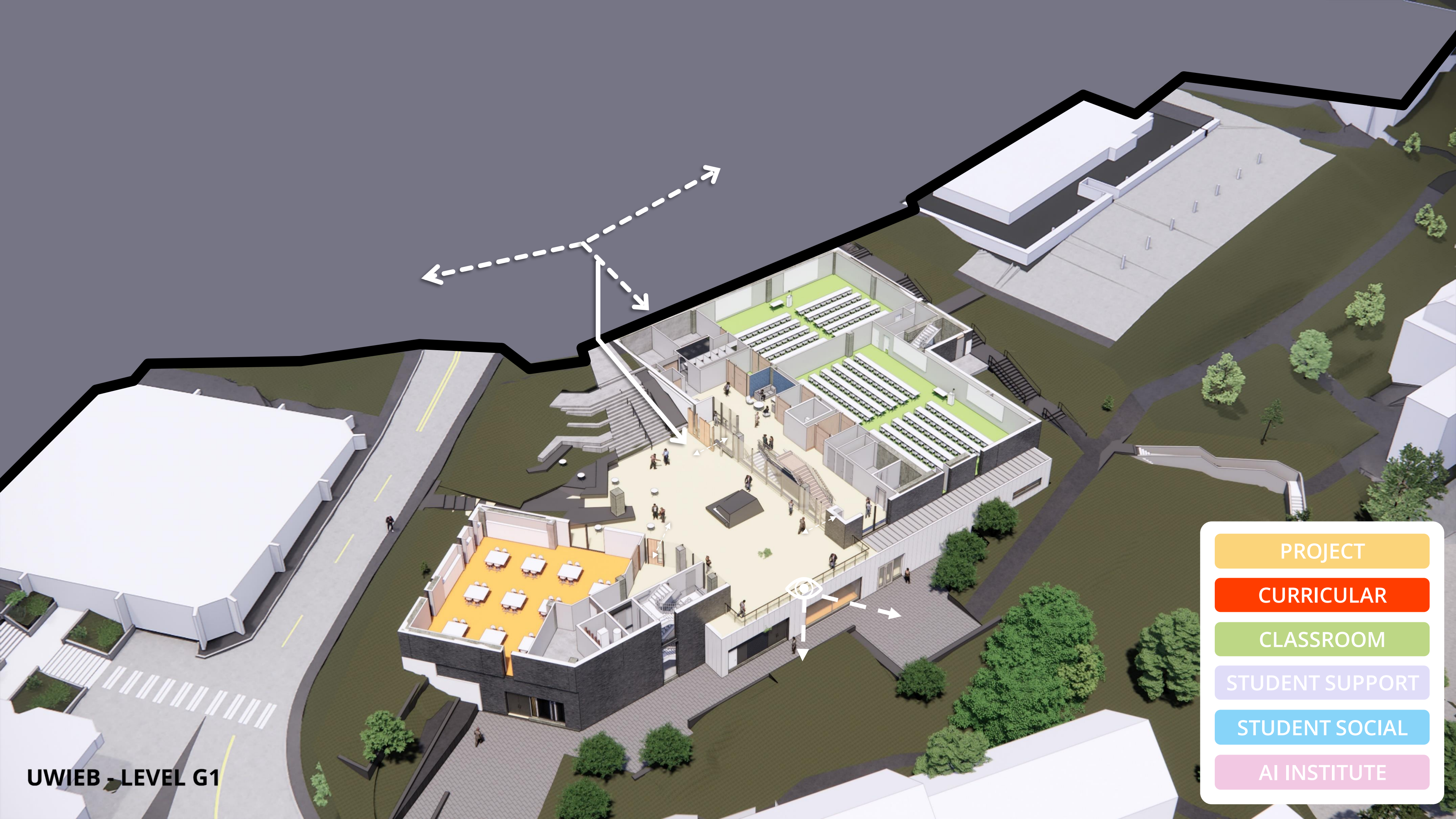




LEVEL 1 - STUDENT LOUNGE & BREAKOUT ROOMS







UWIEB - LEVEL G1

- PROJECT
- CURRICULAR
- CLASSROOM
- STUDENT SUPPORT
- STUDENT SOCIAL
- AI INSTITUTE

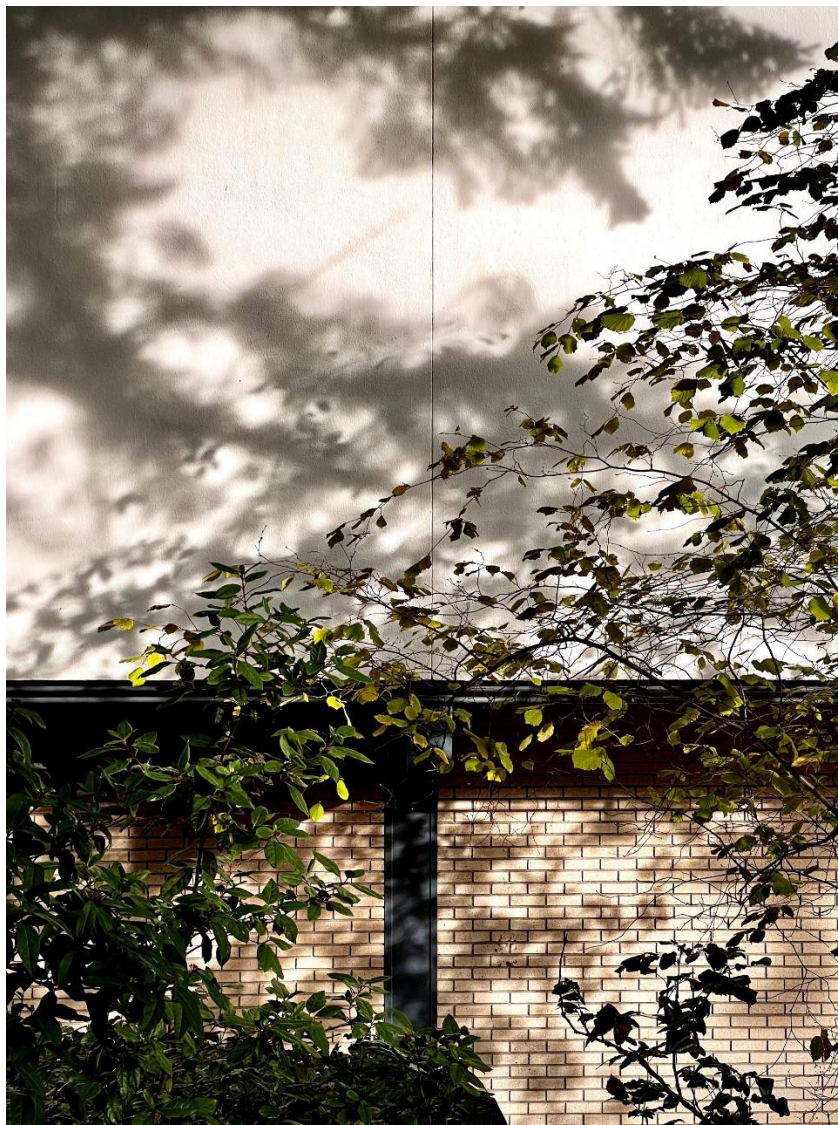


ENVELOPE DESIGN

PROGRESS UPDATE

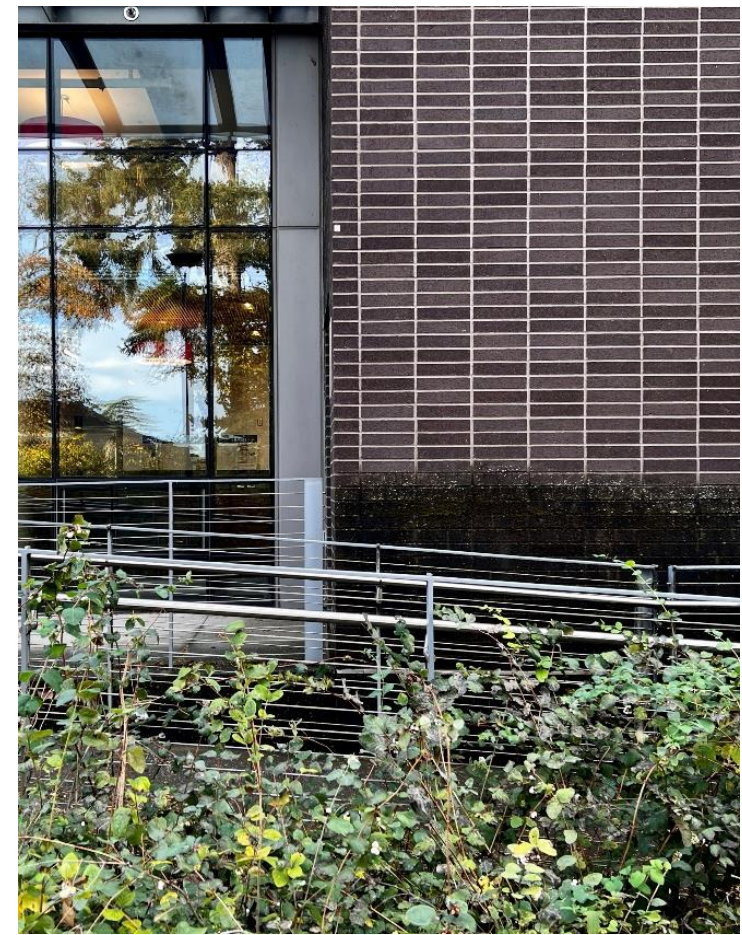
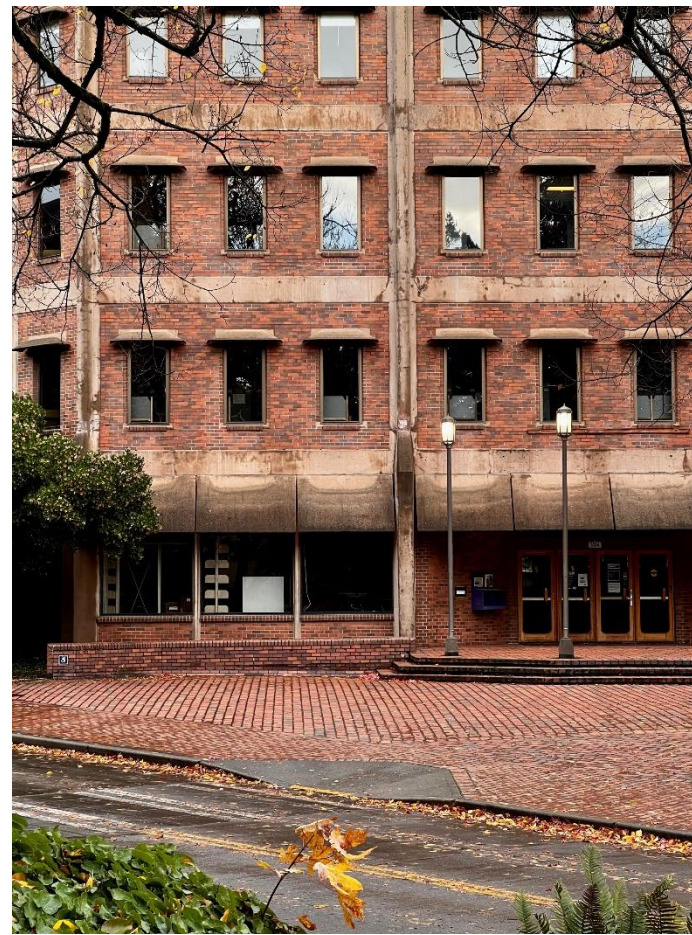


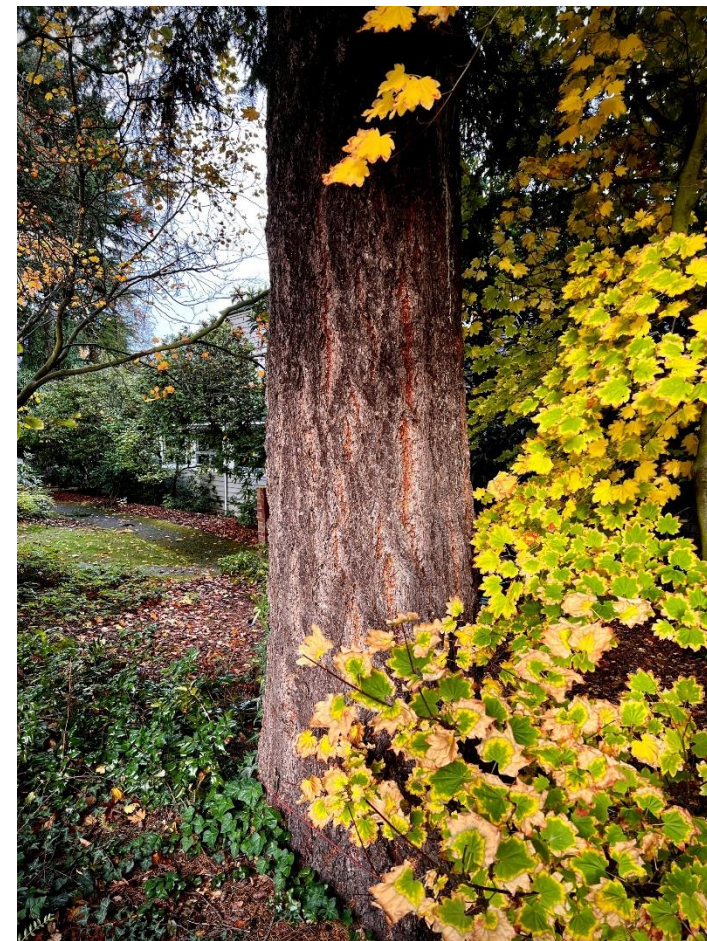
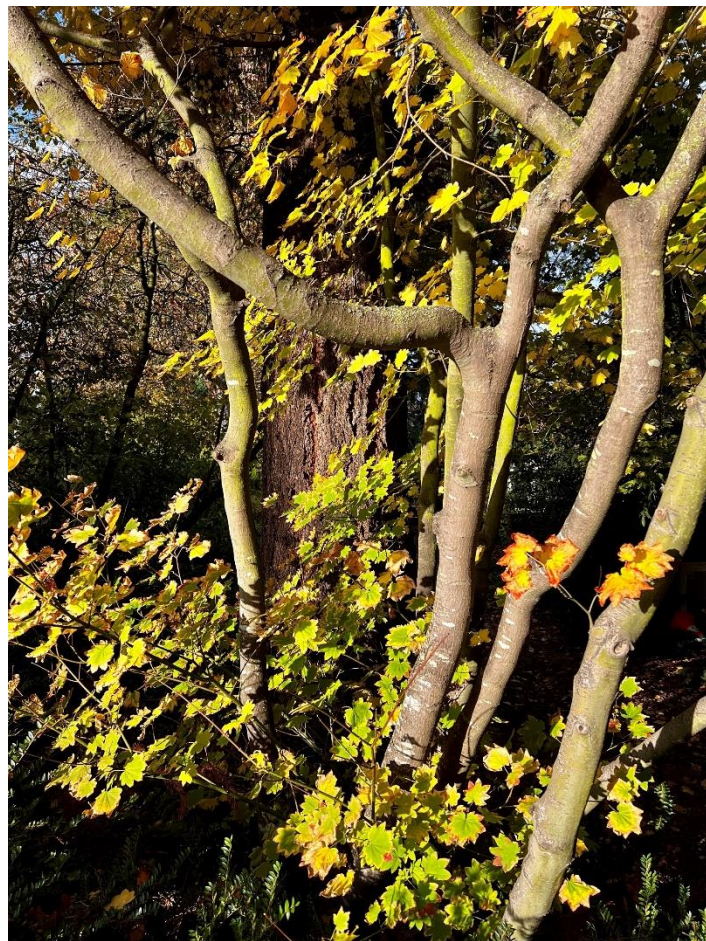
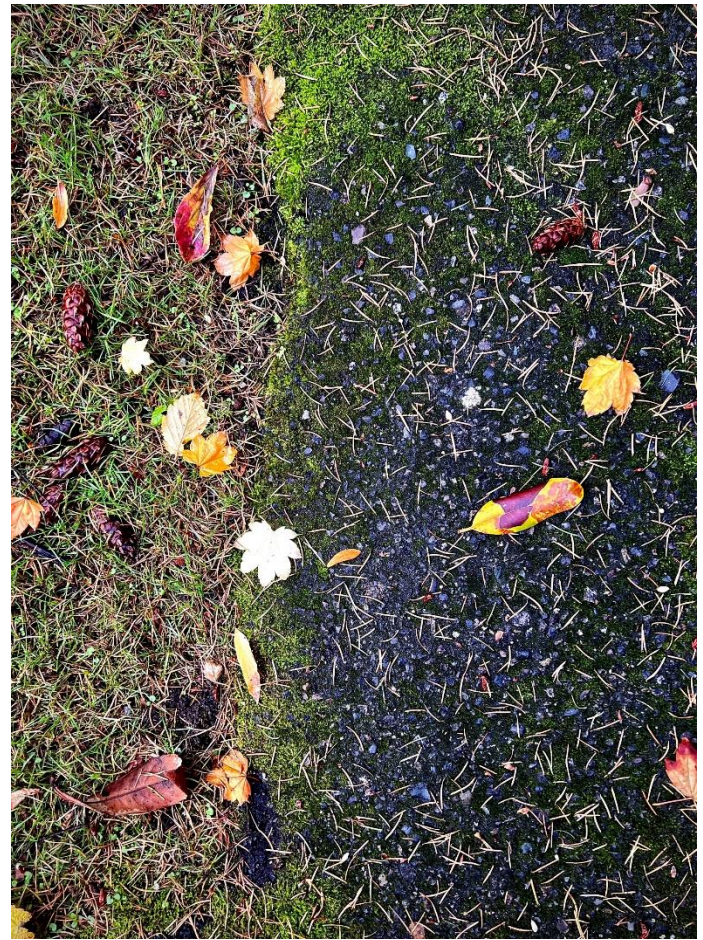




CAMPUS OBSERVATIONS AND MATERIALS

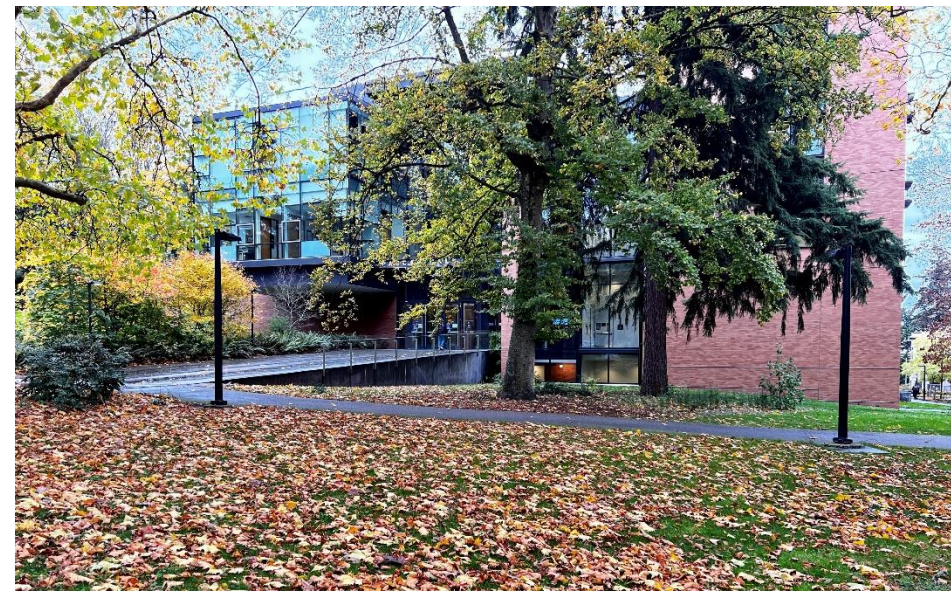
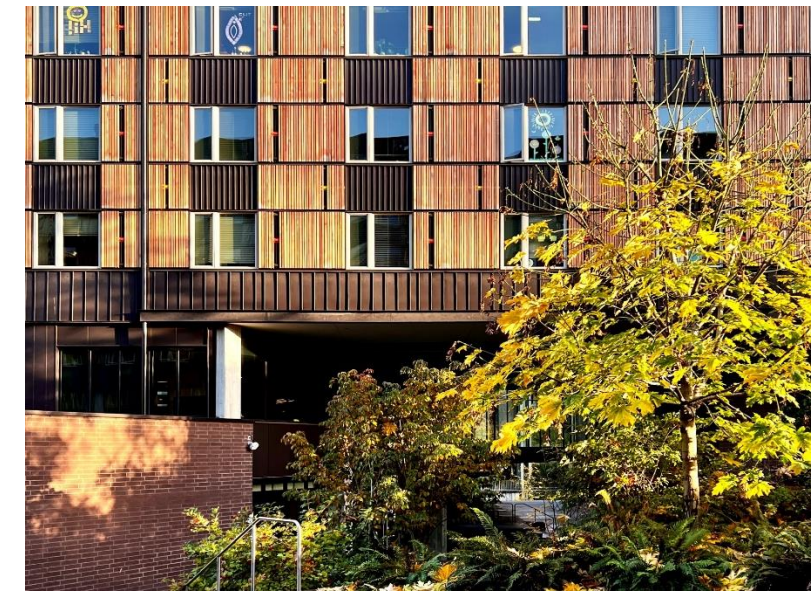
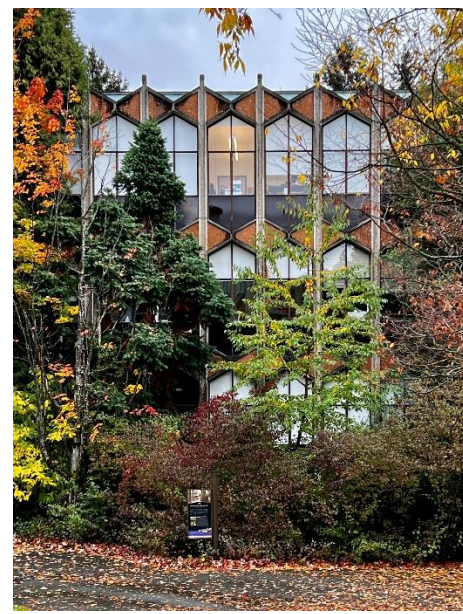
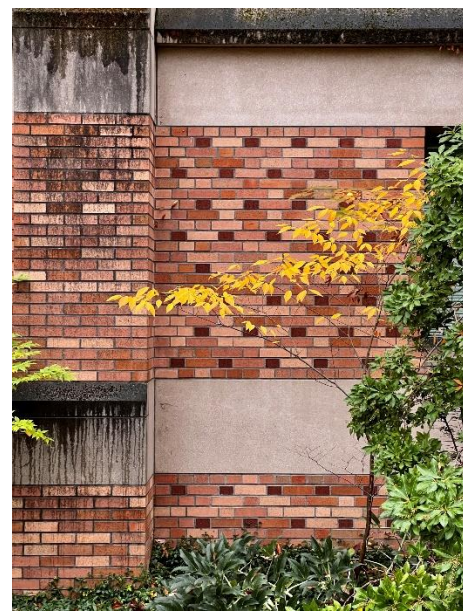
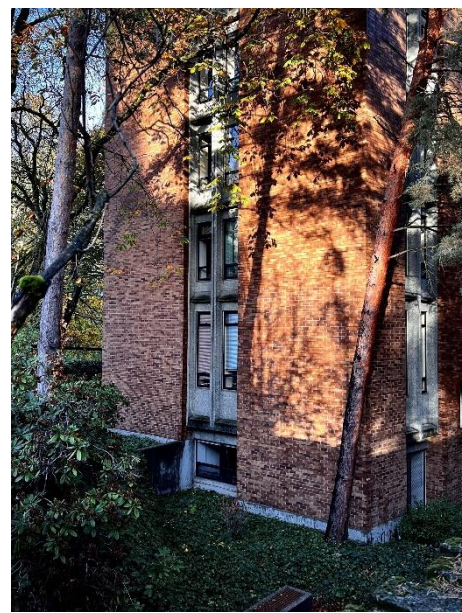
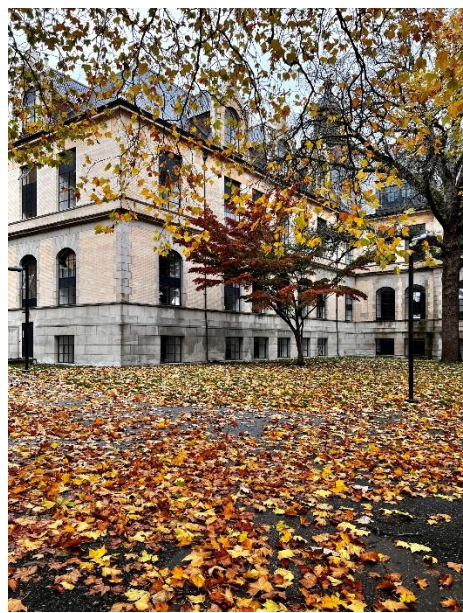
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SITE OBSERVATIONS AND MATERIALS

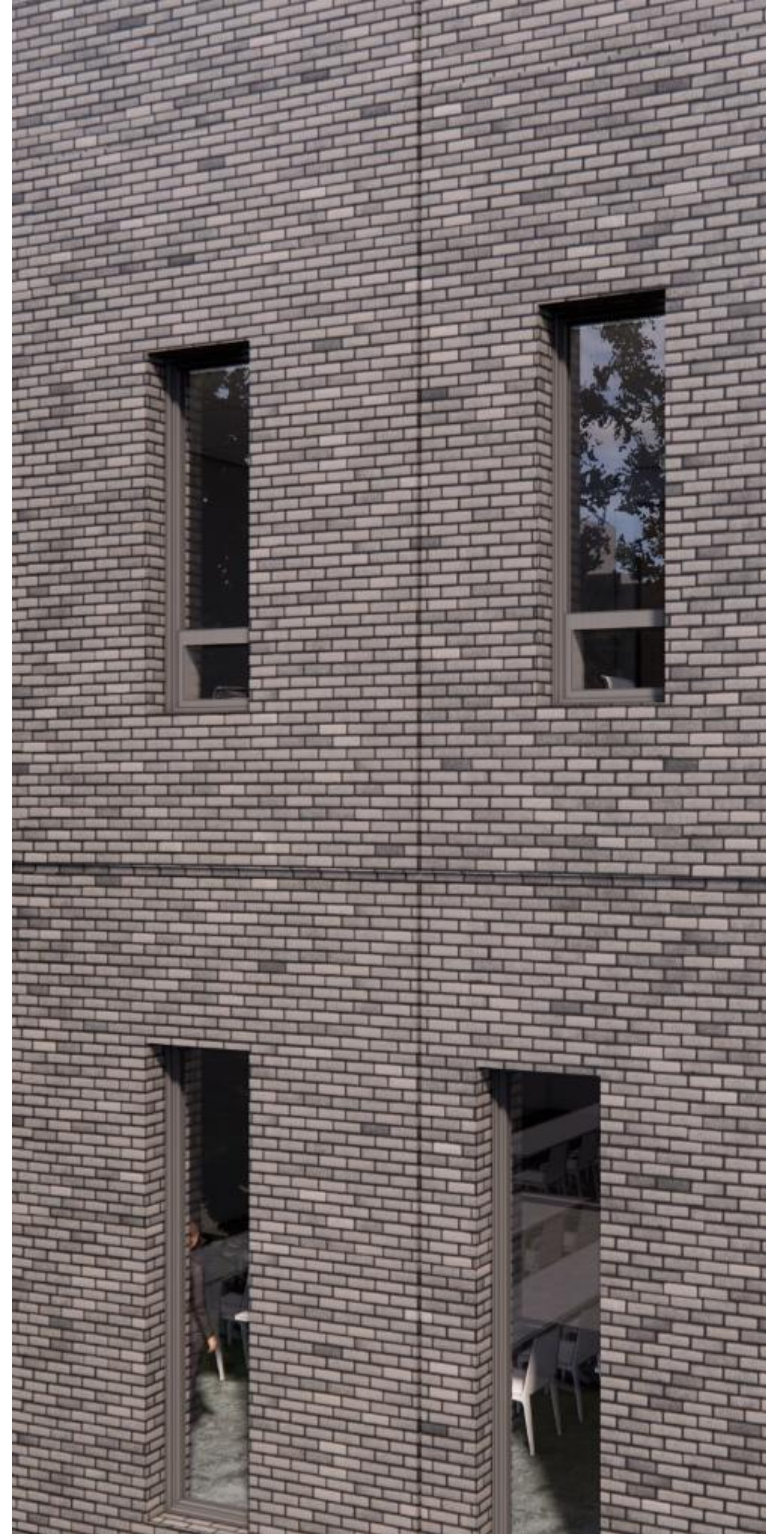
UNIVERSITY OF WASHINGTON - INTERDISCIPLINARY ENGINEERING BUILDING



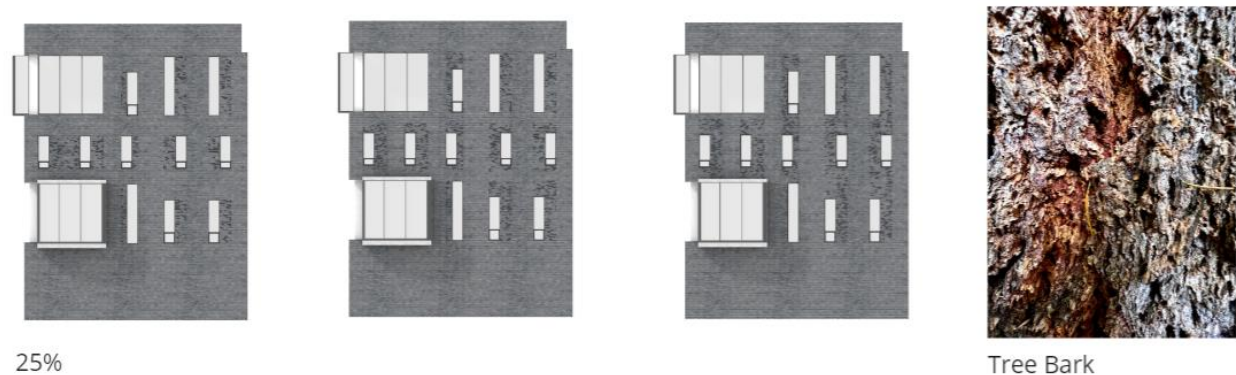
ENVELOPE CONSTRAINTS



MASONRY DETAILING



EXPLORING PATTERN AND TEXTURE



25%

Tree Bark



5%

Ponderosa Pine Bark

5%

10%

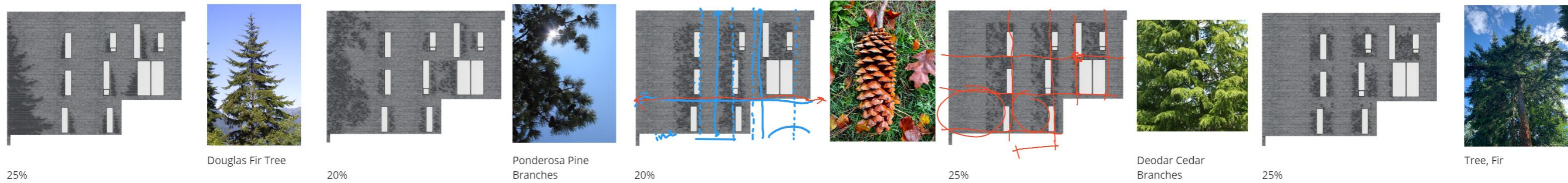
Olympic National Forest

10%

Forest on Duwamish Land

10%

Deodar Cedar Branches



25%

Douglas Fir Tree

20%

Ponderosa Pine Branches

20%

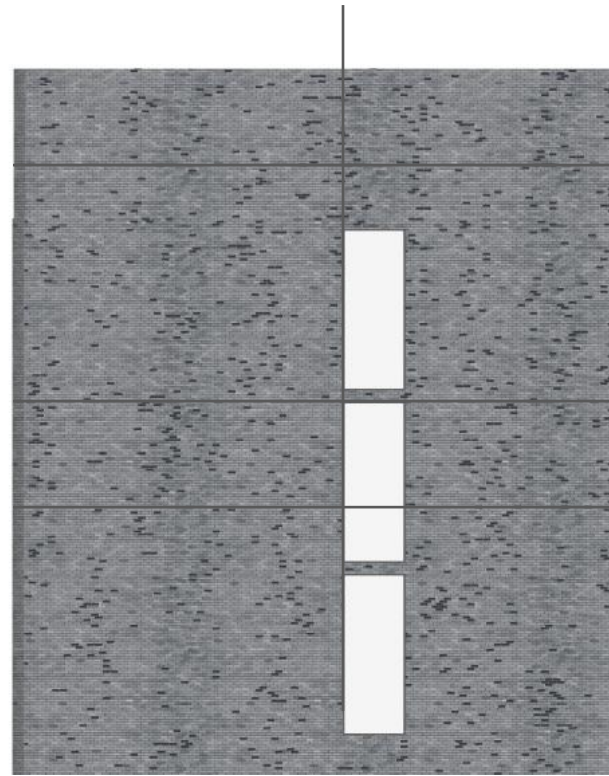
25%

Deodar Cedar Branches

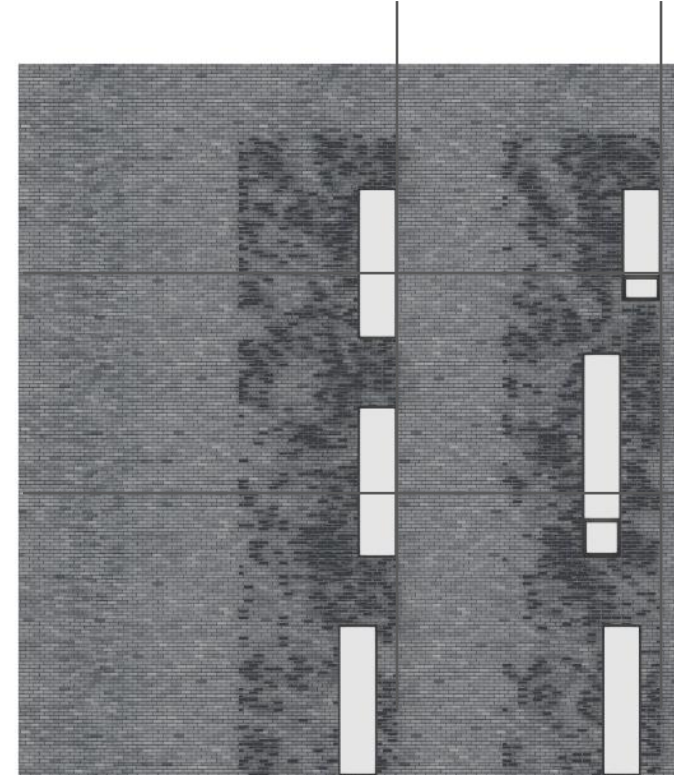
25%

Tree, Fir

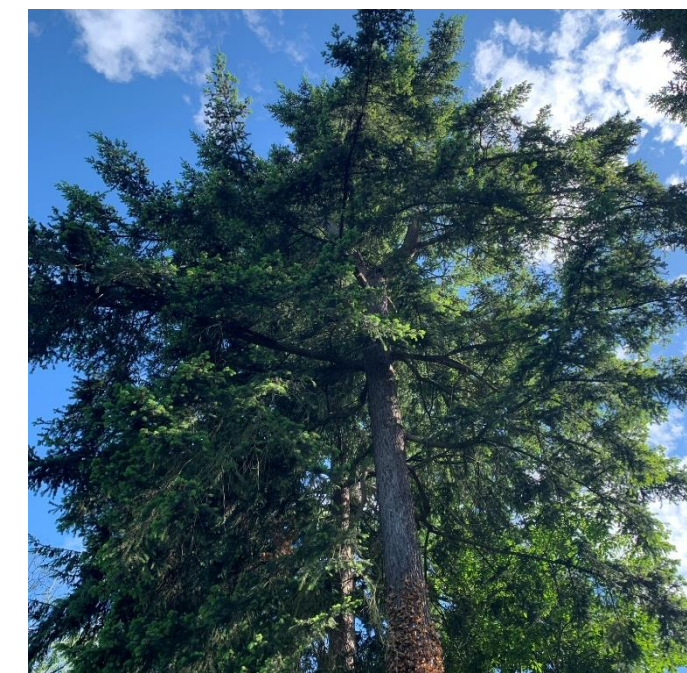
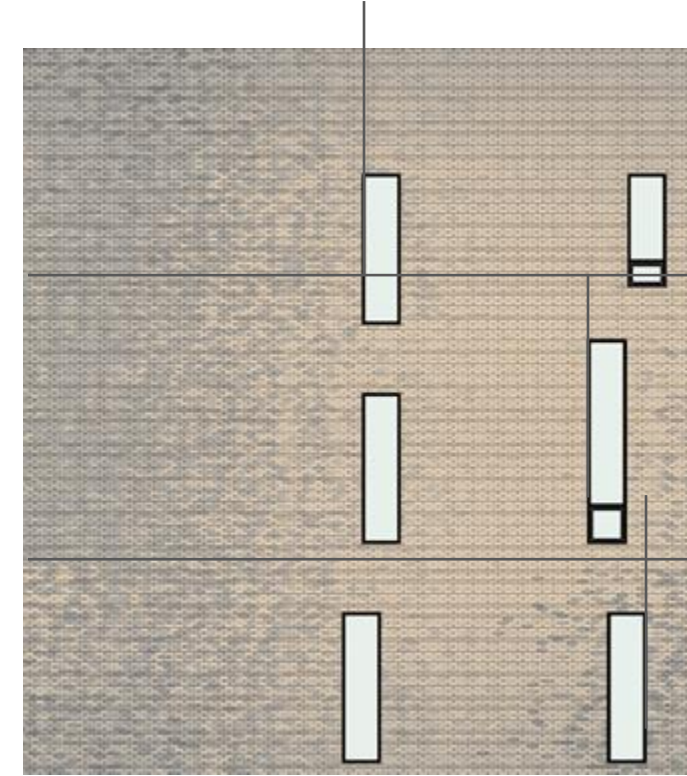
DISTRIBUTED



LOCALIZED



REFLECTIVE



SOURCE AND COLOR



Classic Used
Tumbled Used

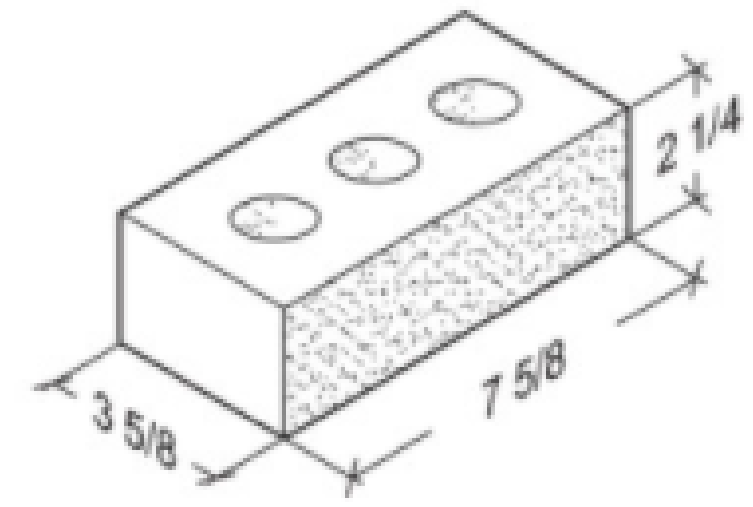
Westport Used
Tumbled Used



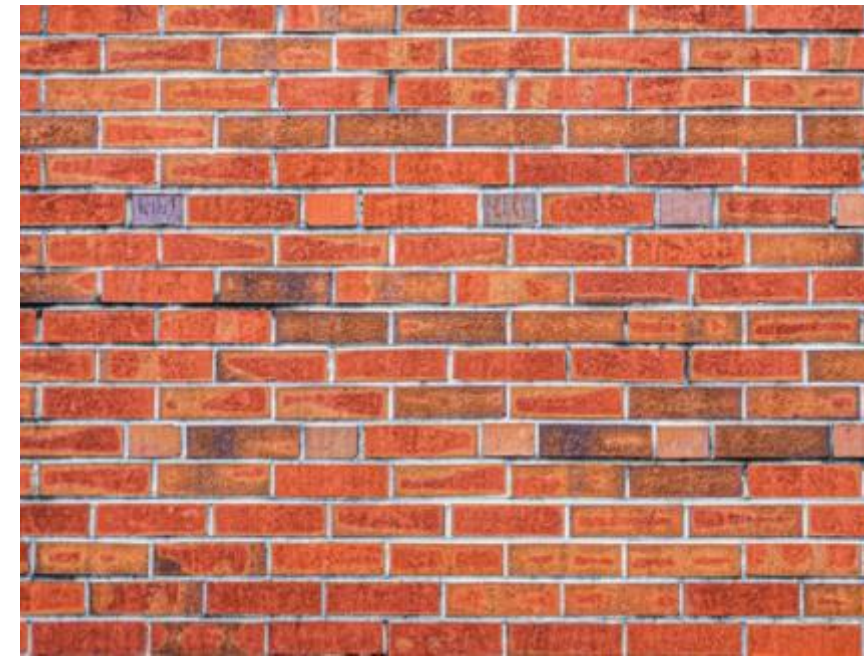
Midnight Sky

Mutual Used
Tumbled Used

DIMENSION



COURSING

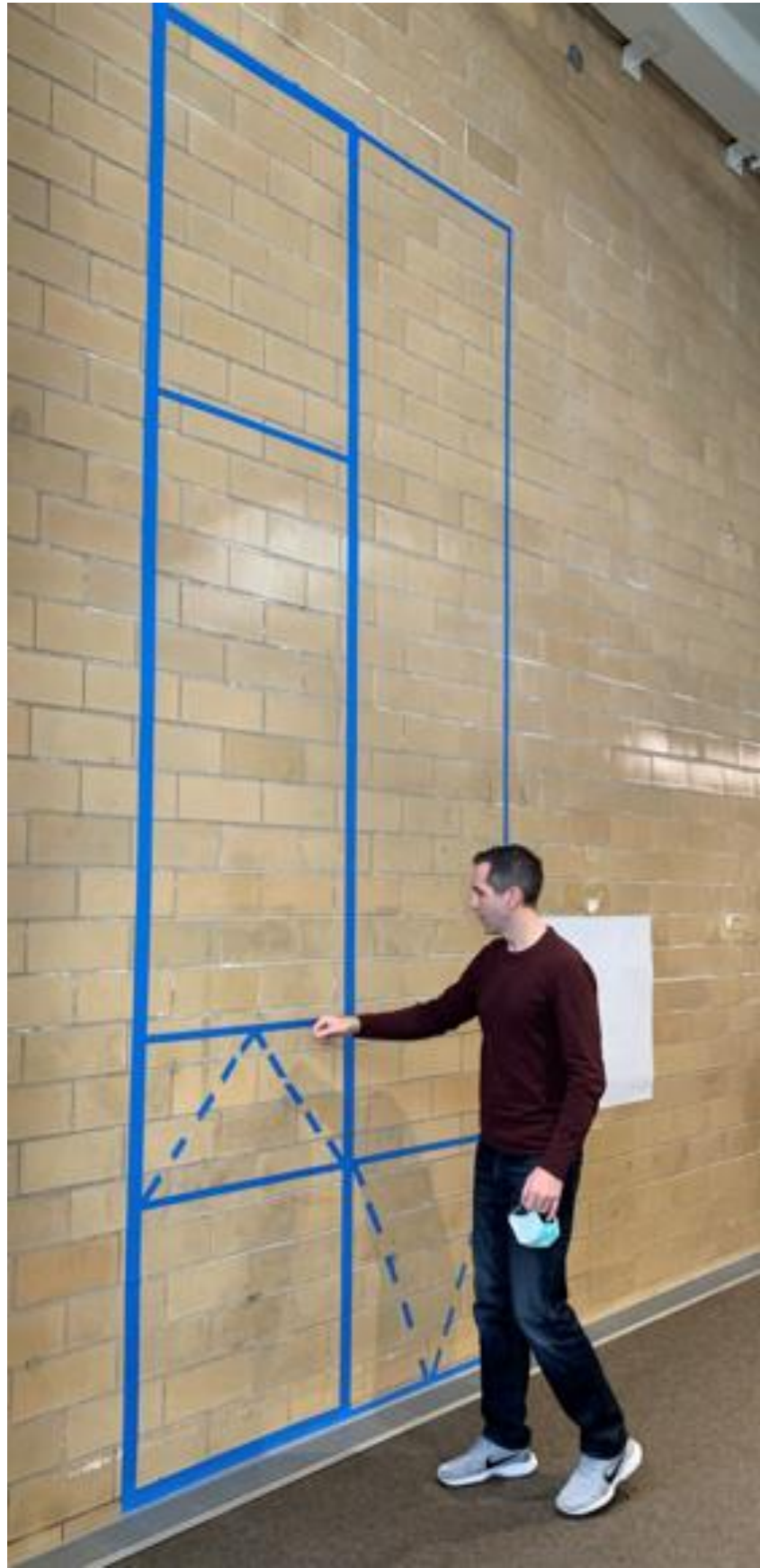
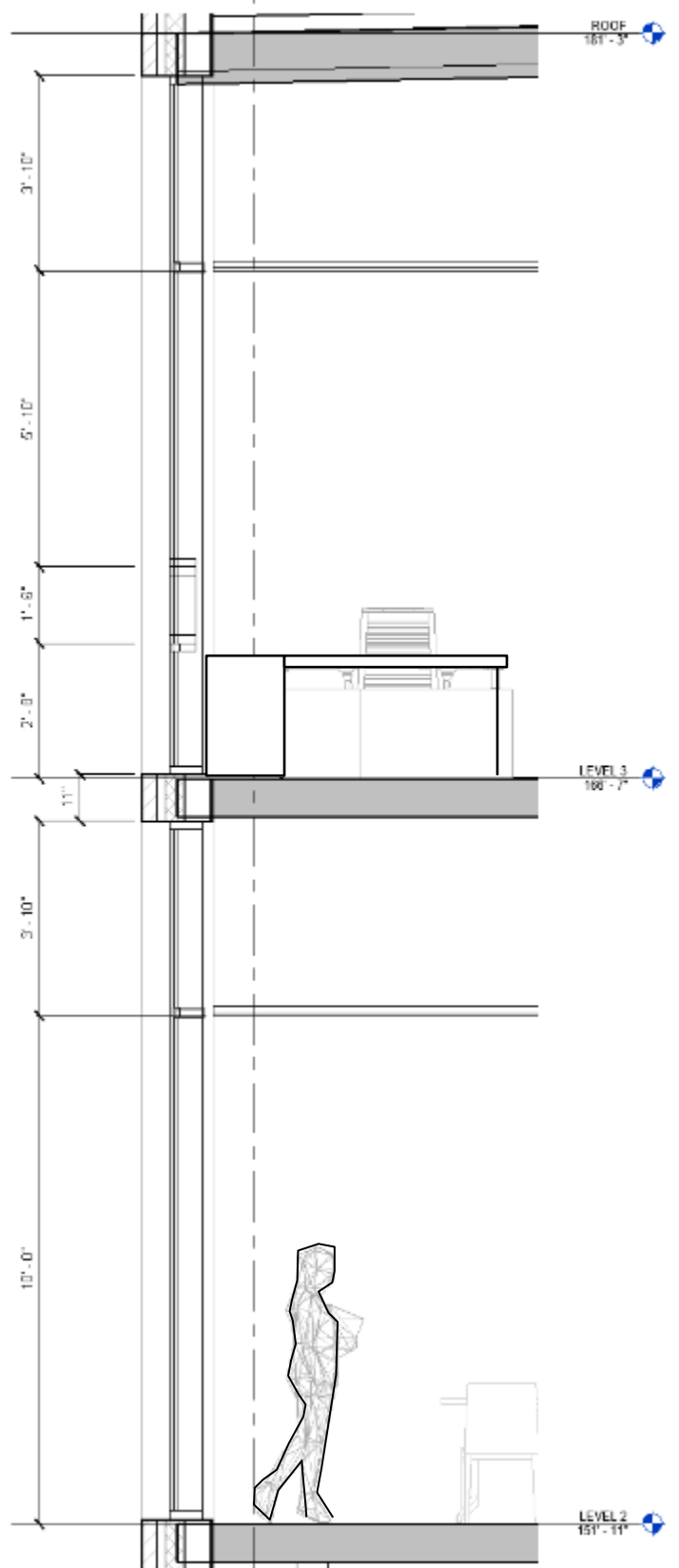
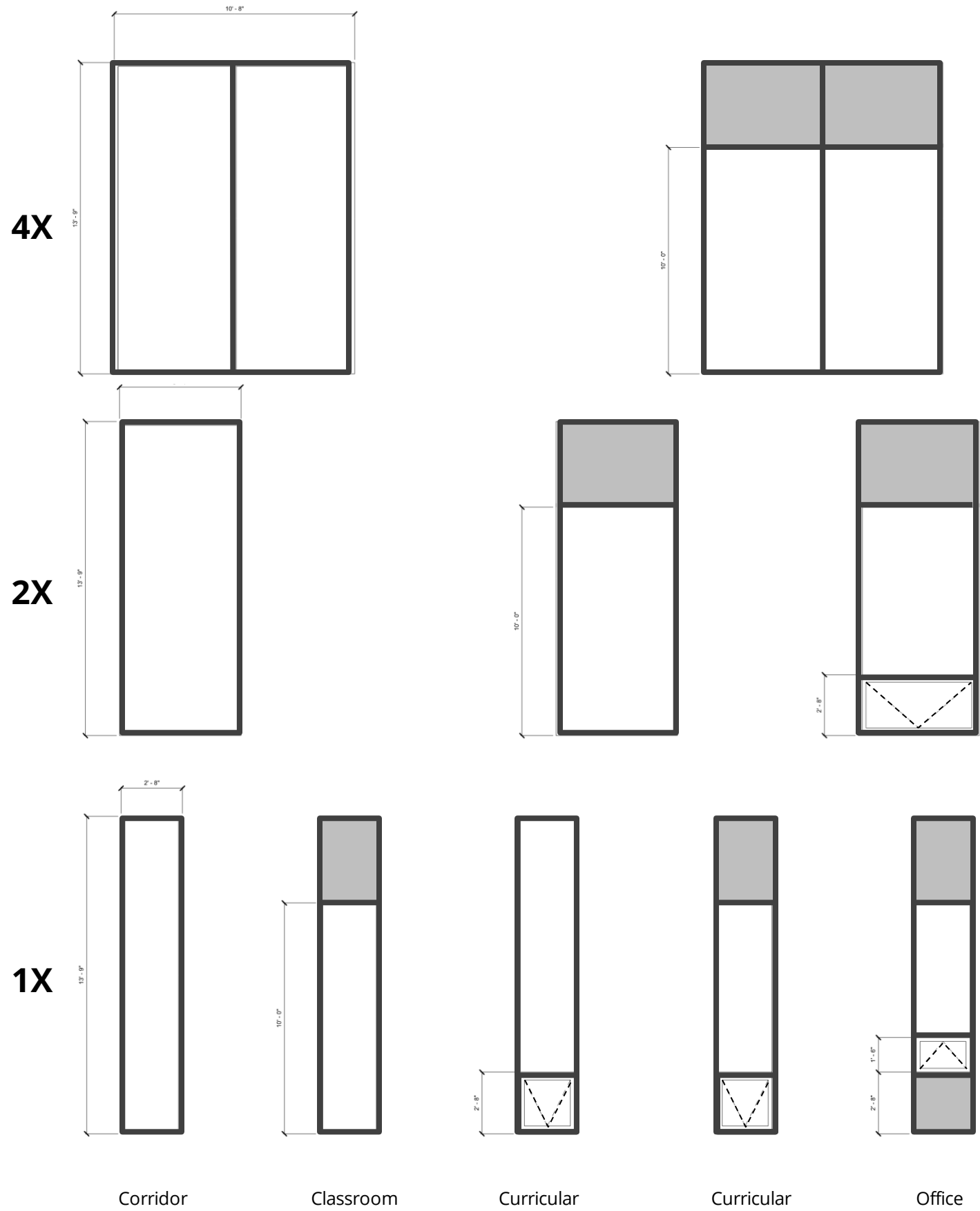


CONSTRUCTABILITY AND CRAFT





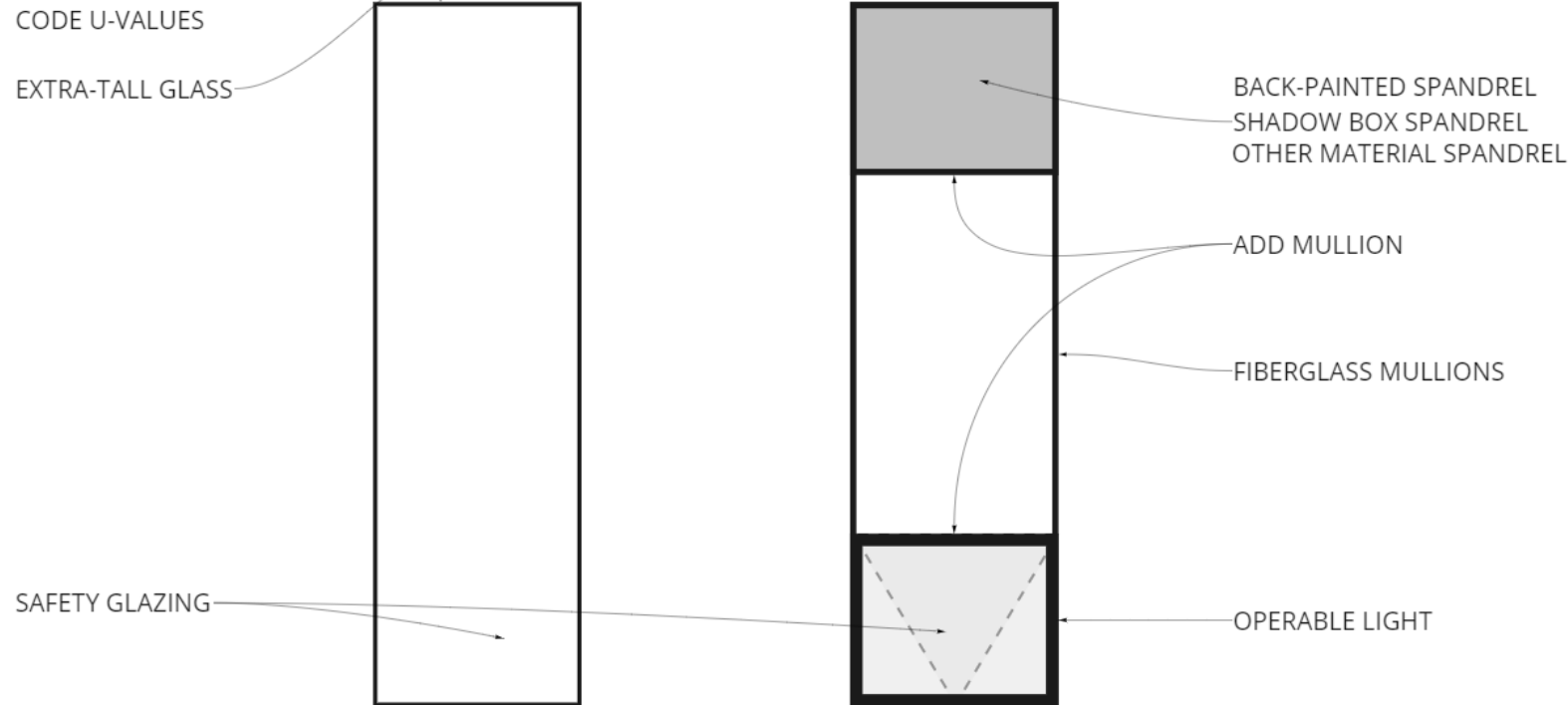
INDIVIDUAL WINDOWS TYPOLOGIES



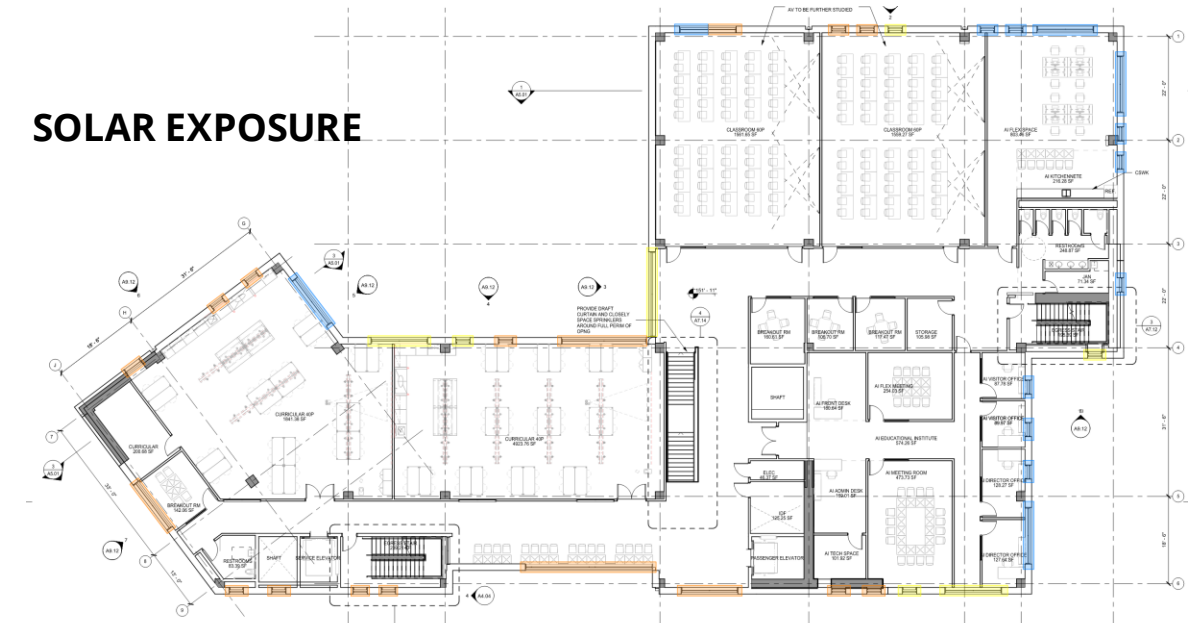
WINDOW Design Parameters

- Window Manufacturer
- Solar Exposure
- Ceilings
- Operability
- Placement (Inside)
- Aesthetic (Outside)
- Embodied Carbon

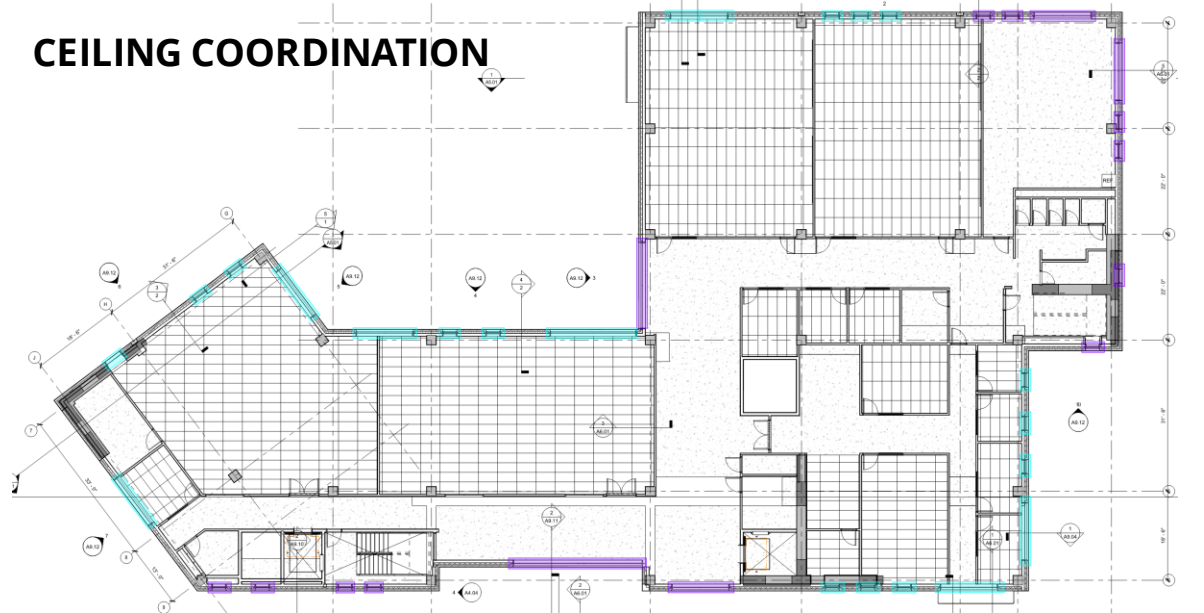
COST FACTORS



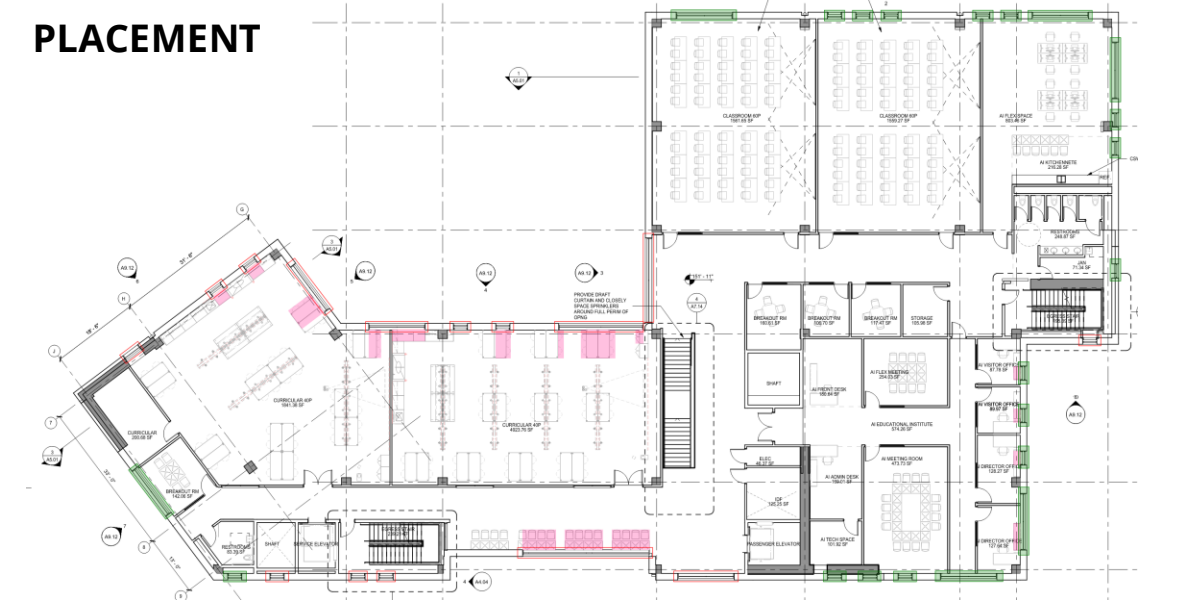
SOLAR EXPOSURE



CEILING COORDINATION



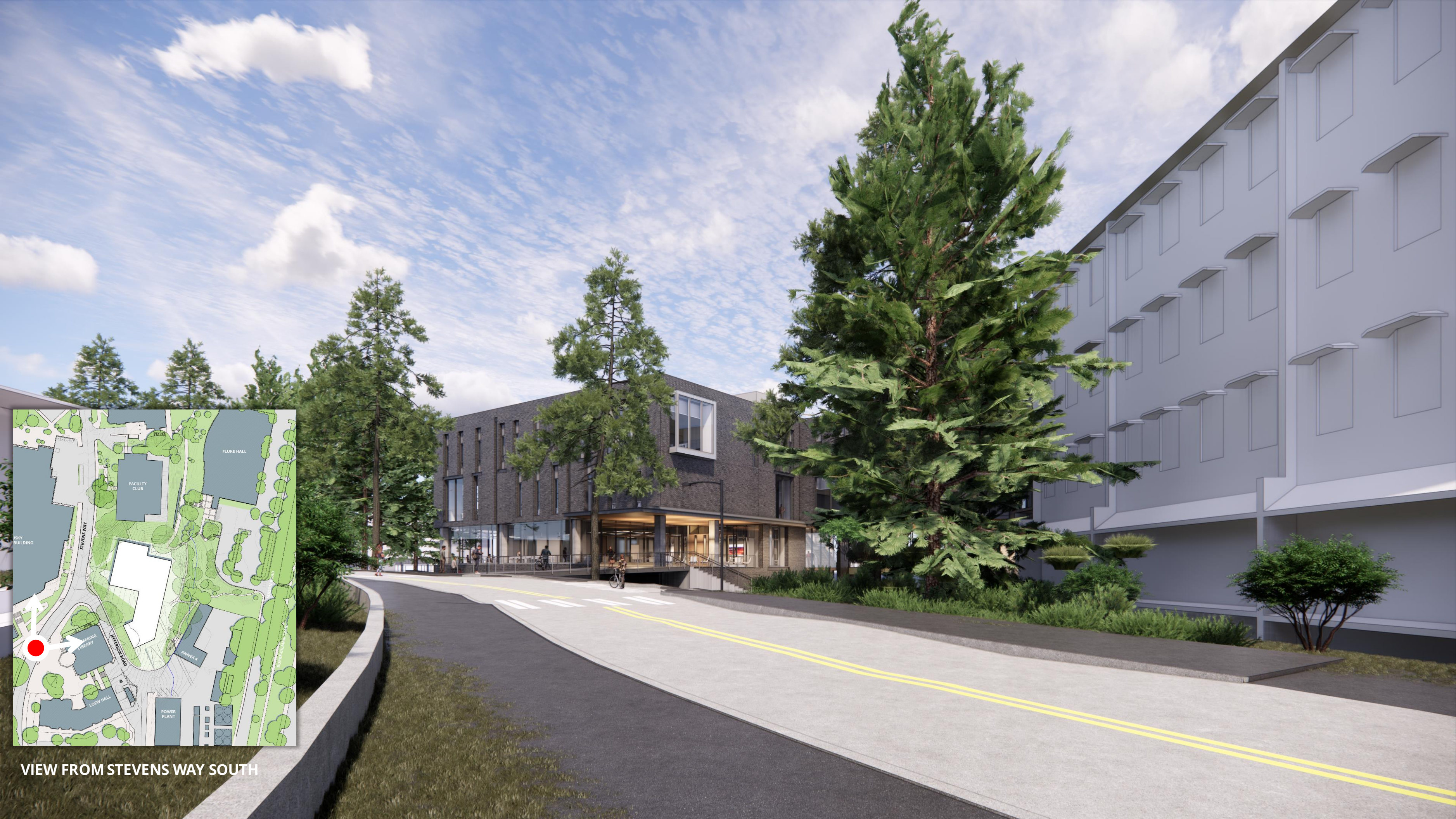
PLACEMENT







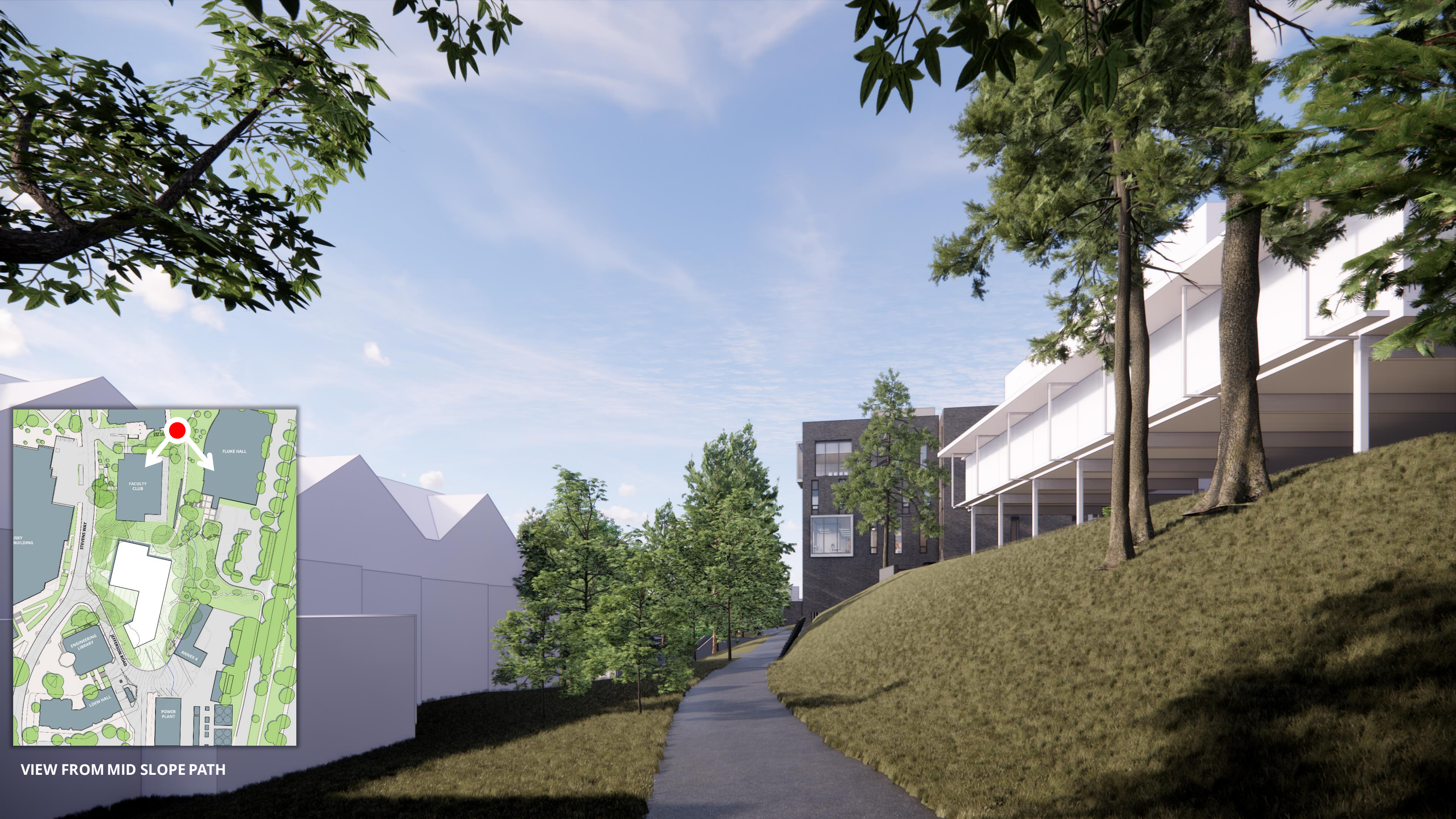
VIEW FROM STEVENS WAY NORTH



VIEW FROM STEVENS WAY SOUTH



VIEW FROM ENGINEERING LIBRARY AND LOEW HALL



VIEW FROM MID SLOPE PATH



VIEW FROM MID SLOPE PATH

An architectural rendering of a modern, multi-story brick building with large windows and a central entrance. The building is surrounded by tall pine trees. In the foreground, there is a paved area with a crosswalk and a few people walking. The text "NEXT UWAC MEETING" and "June 13th" is overlaid in the center of the image.

NEXT UWAC MEETING
June 13th

END