



University  
of Washington

Computer  
Science &  
Engineering  
Building II

**LMN** Architecture  
Urban Design  
Interiors

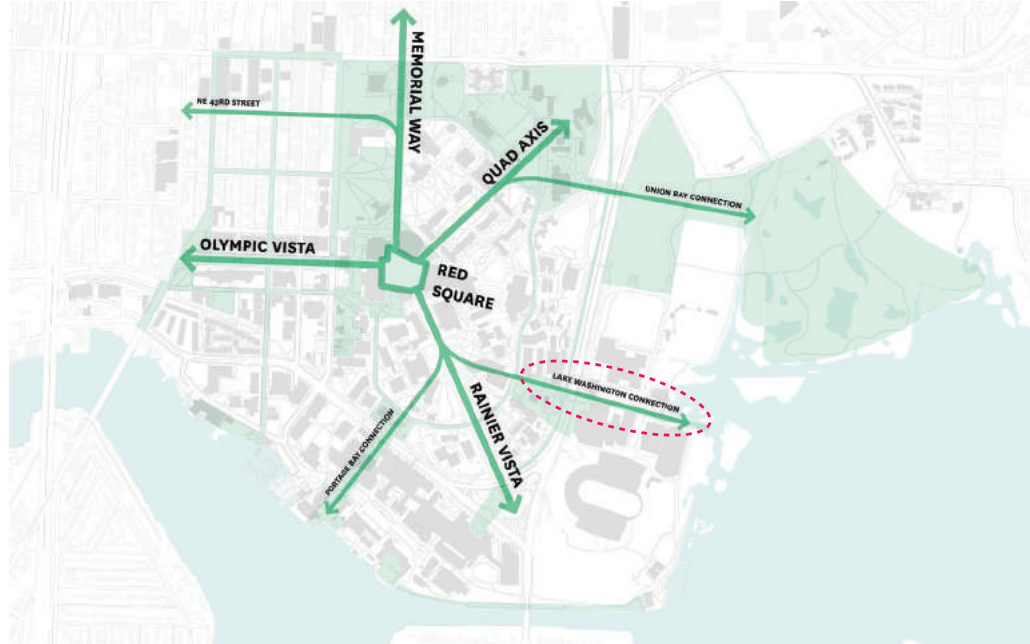
## **PROJECT GOALS**

- Create a Unified Complex for Computer Science & Engineering
- Provide Qualitative Parity
- Foster Collaboration Among Faculty, Students and Staff
- Enhance the Sense of Community for CSE Undergrads
- Provide Flexible Instructional and Research Spaces
- Maximize Natural Daylight
- Create Multiple Secure Zones
- Enhance Campus Connections & Landscape

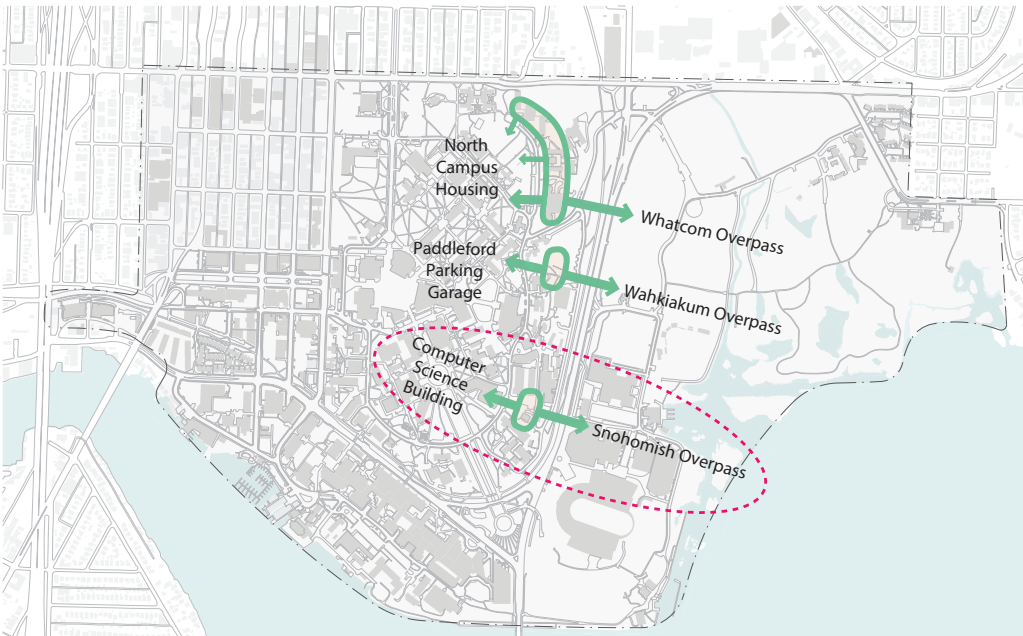
# CAMPUS LANDSCAPE FRAMEWORK



LANDSCAPE MOSAIC



CIRCULATION - RADIAL AXES

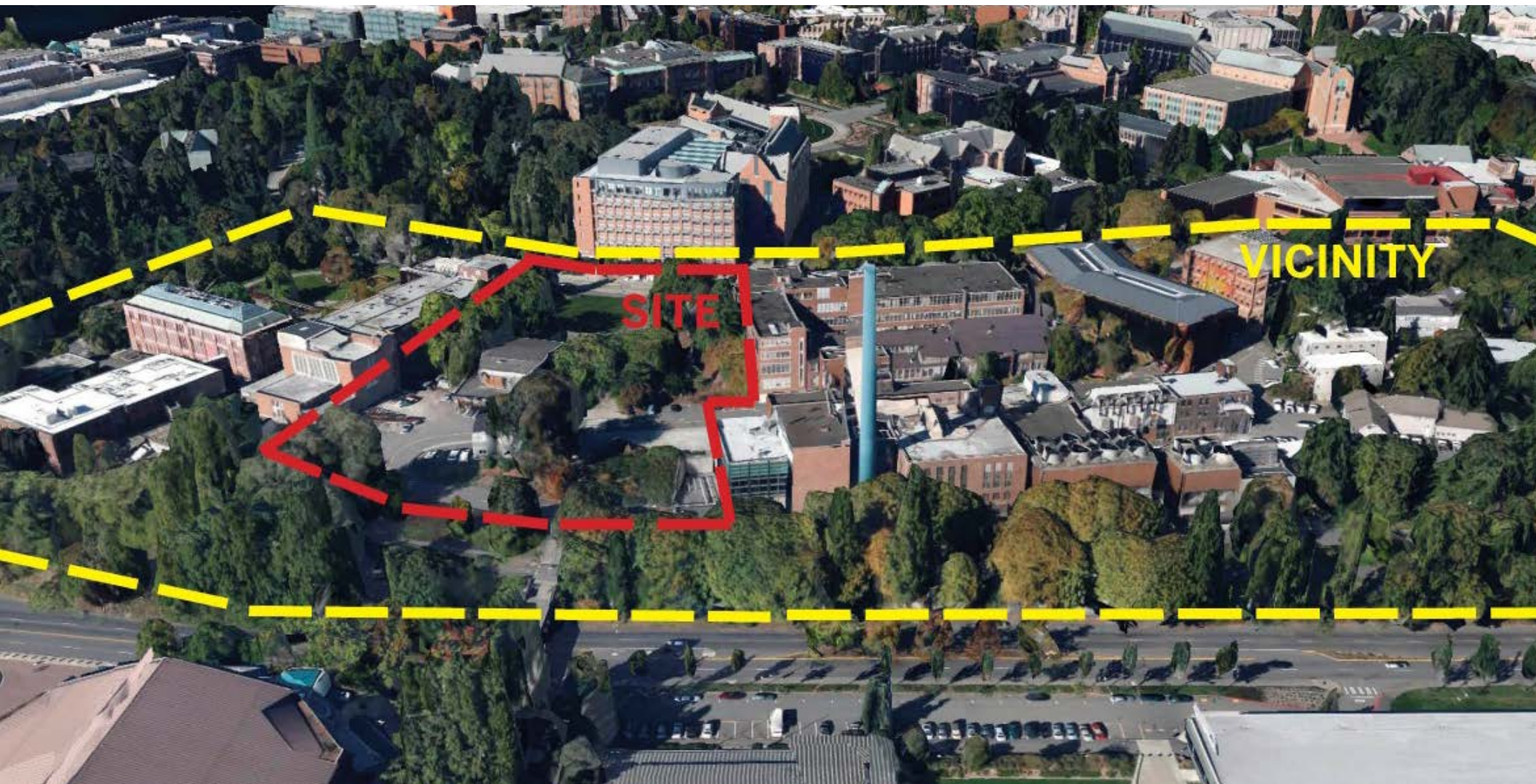


LAKE WASHINGTON CONNECTION



SNOHOMISH LANE CORRIDOR

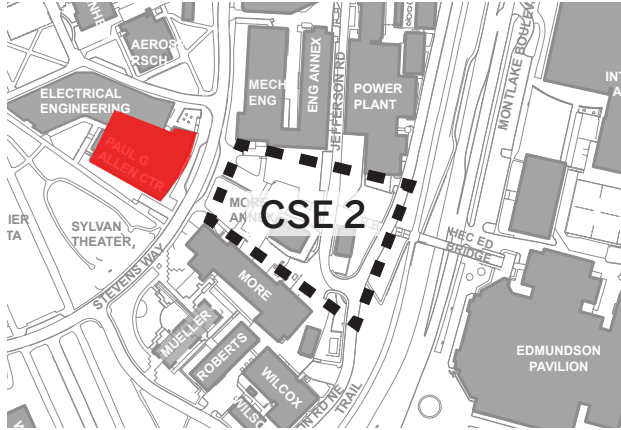
- Burke Museum and 43rd Street Entrance 1
- U District Green Ways 2
- Parrington Lawn 3
- Red Square and Thresholds 4
- George Washington Lane 5
- Olympic Vista 6
- University Bridge Landing 7
- Under University Bridge 8
- W10 Parking Lot 9
- Bryants Park 10
- Grant Lane 11
- Ascotin Place 12
- Portage Bay Connection 13
- Salmon Homing Pond 14
- Montlake Cut Walkway 15
- Health Sciences Bridge 16
- Stevens Way Reorganization 17
- Lake Washington Connection 18
- Burke Gilman Trail Stormwater 19
- Union Bay Natural Area 20



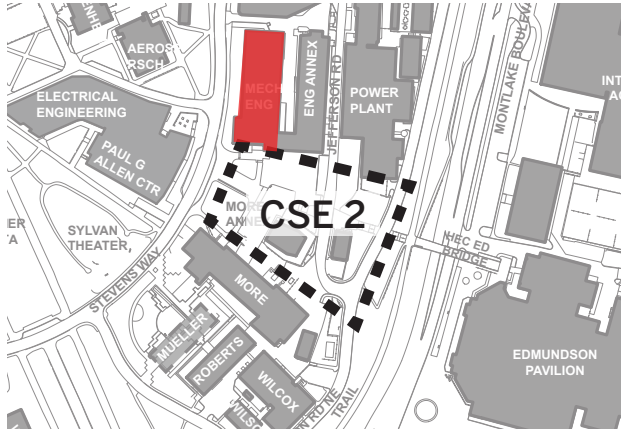
**SITE**

**VICINITY**

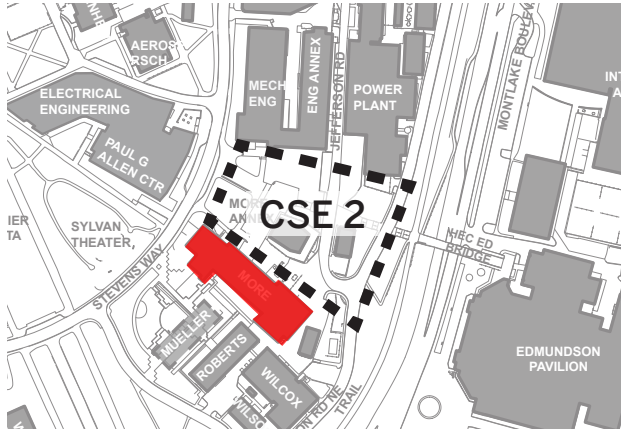
# PAUL G. ALLEN CENTER



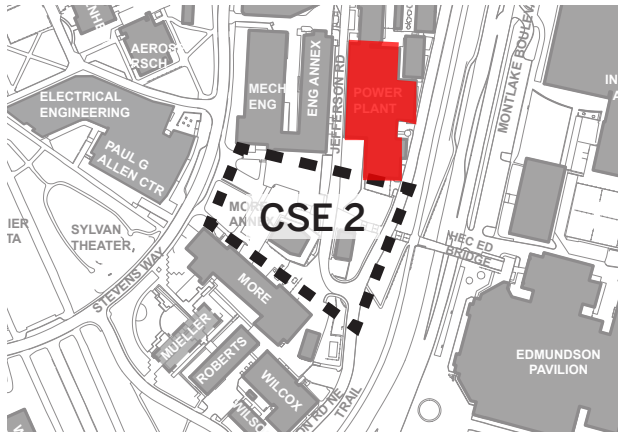
# MECHANICAL ENGINEERING



# MORE HALL



# POWER PLANT



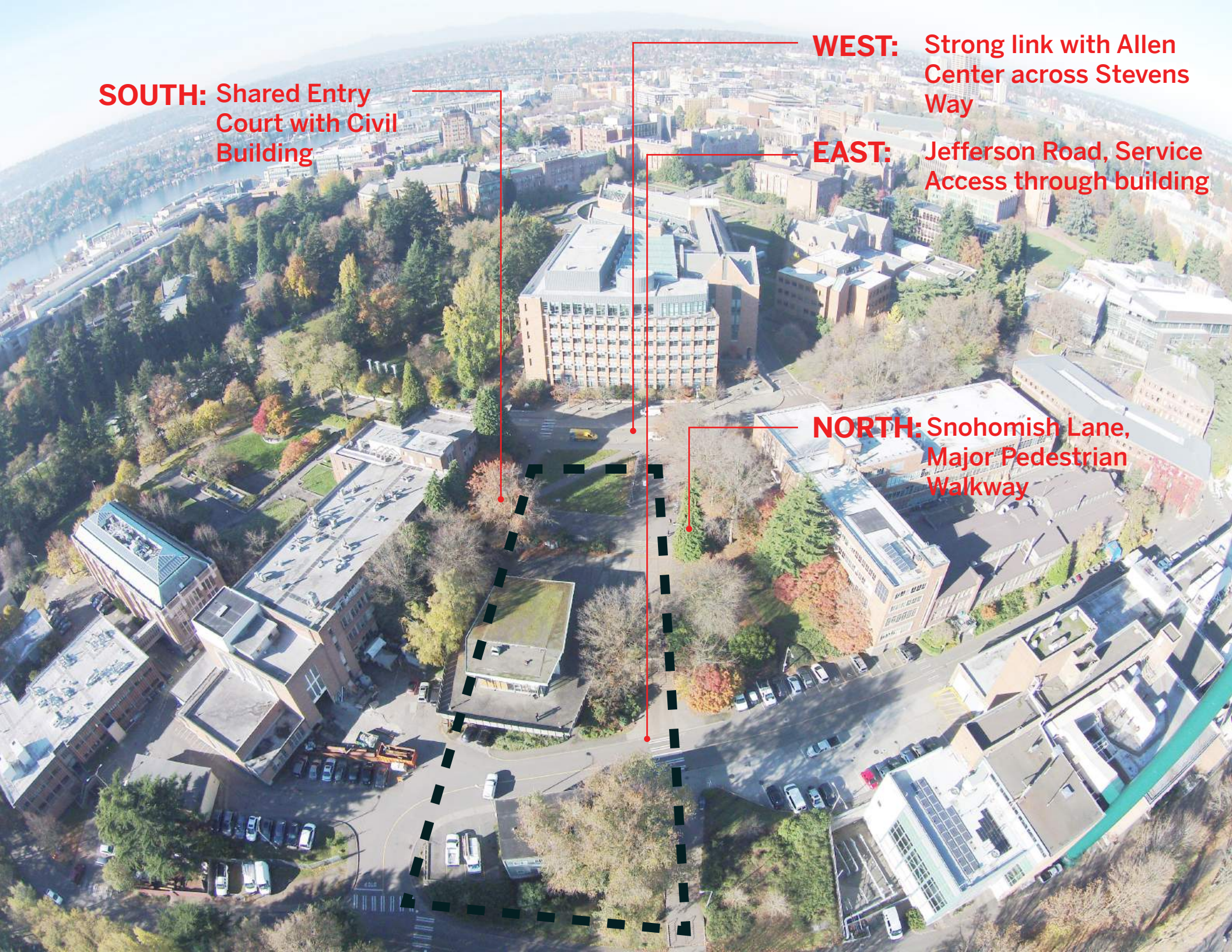


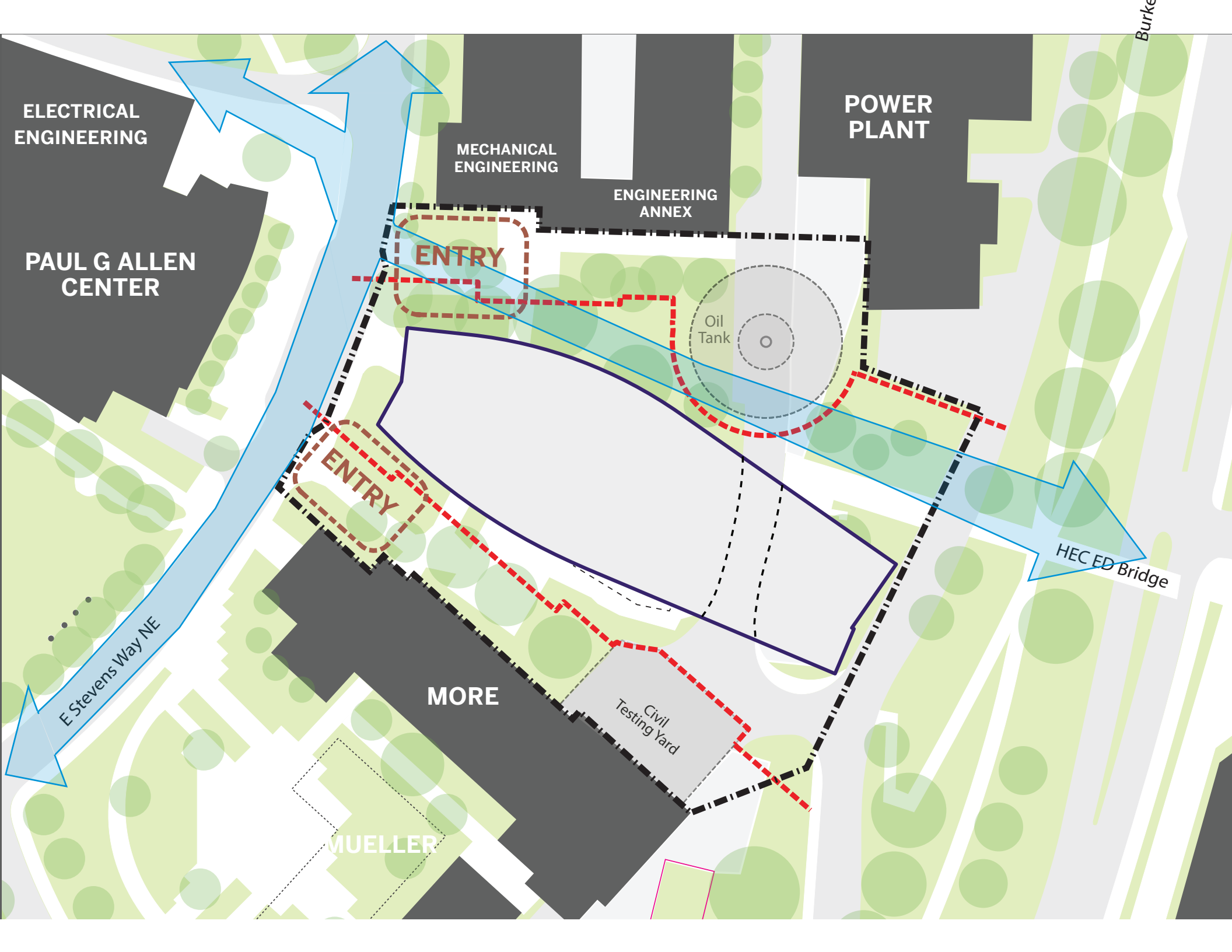
**SOUTH:** Shared Entry Court with Civil Building

**WEST:** Strong link with Allen Center across Stevens Way

**EAST:** Jefferson Road, Service Access through building

**NORTH:** Snohomish Lane, Major Pedestrian Walkway





ELECTRICAL  
ENGINEERING

PAUL G ALLEN  
CENTER

MECHANICAL  
ENGINEERING

ENGINEERING  
ANNEX

POWER  
PLANT

ENTRY

Oil  
Tank

ENTRY

HEC ED Bridge

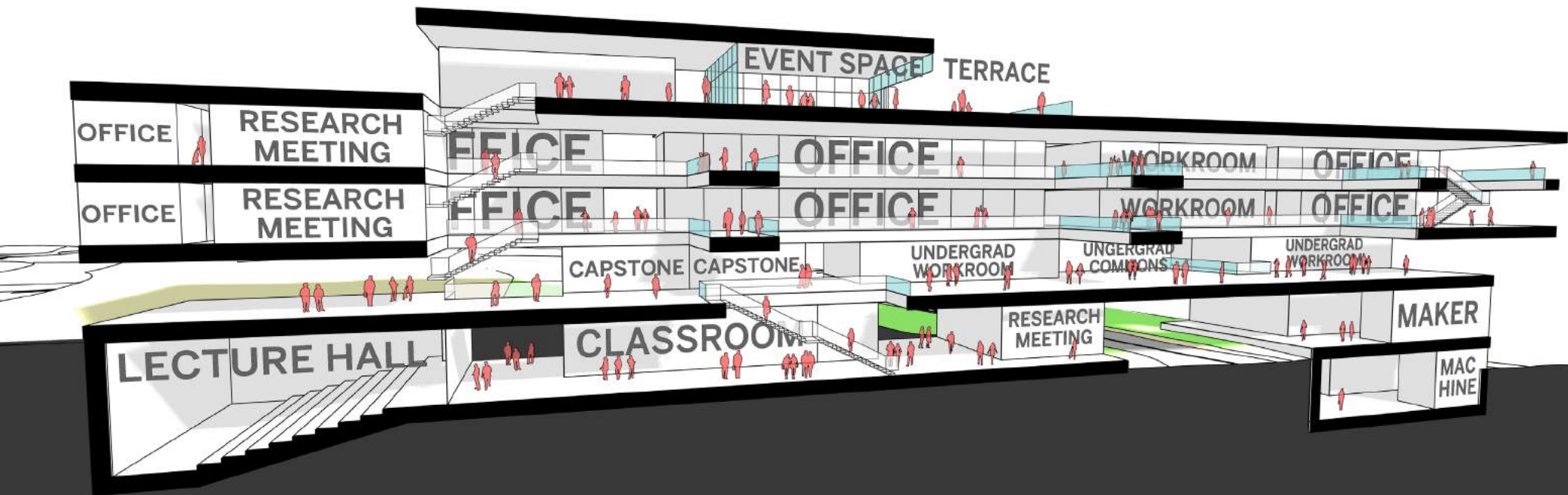
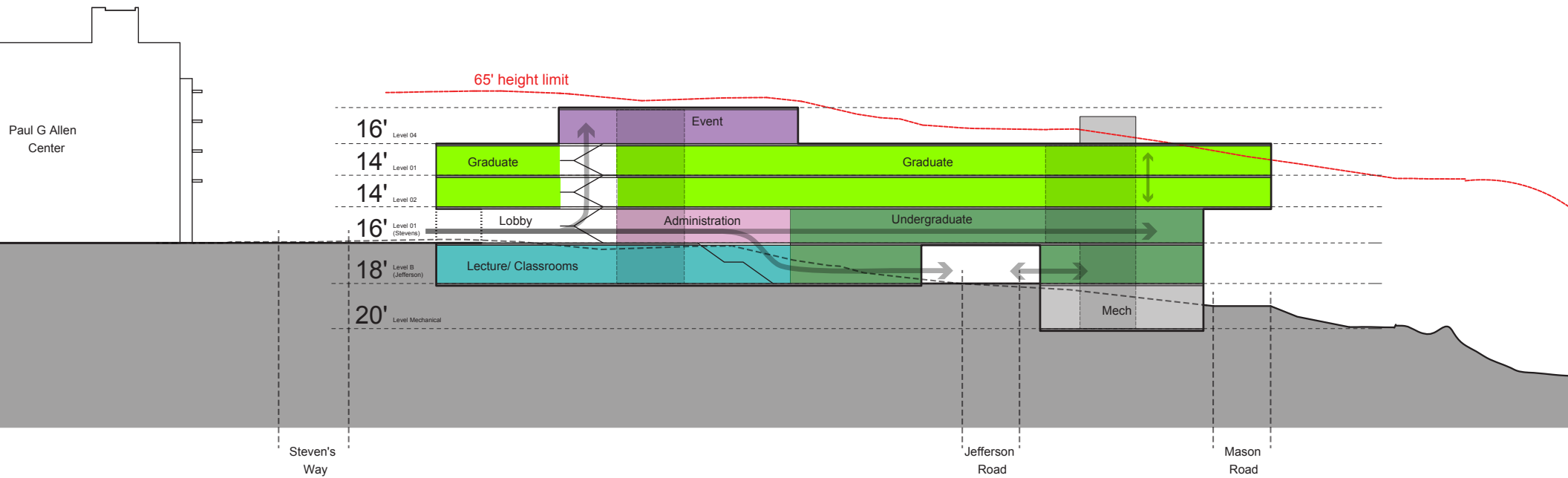
E Stevens Way NE

MORE

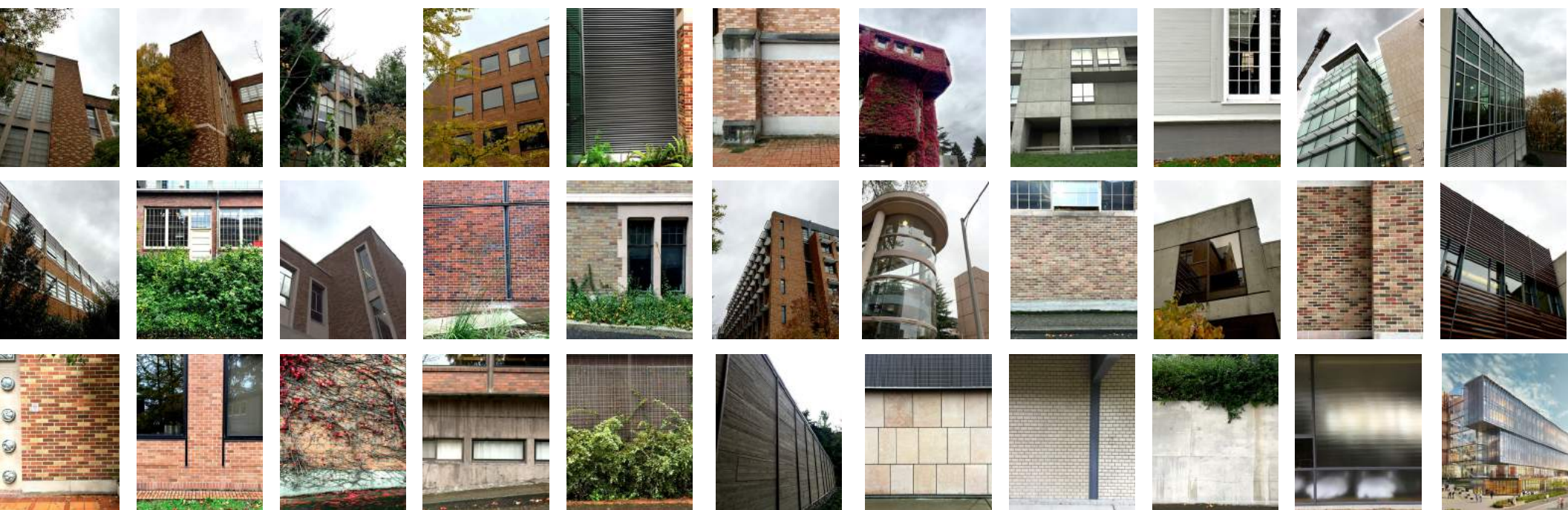
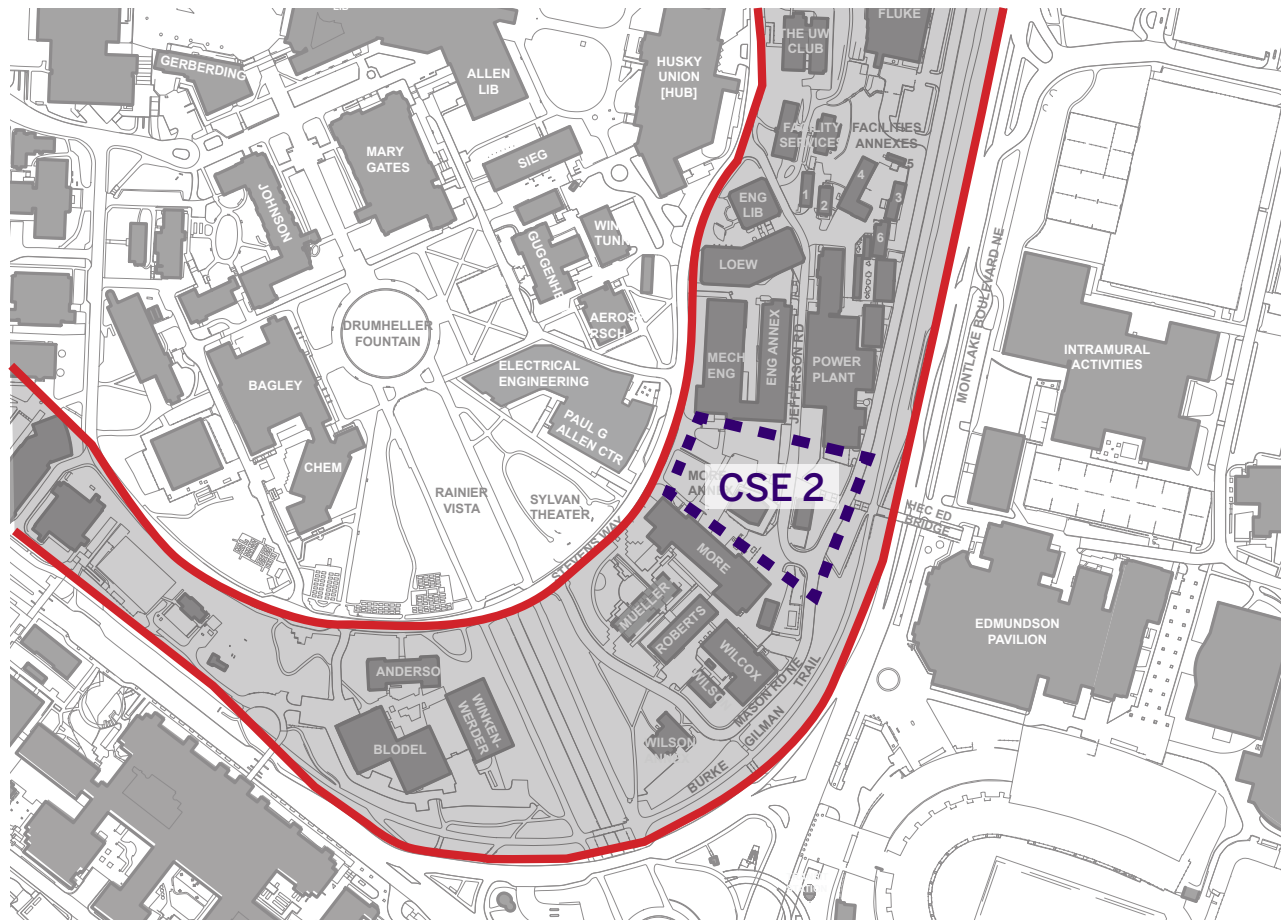
Civil  
Testing Yard

MUELLER

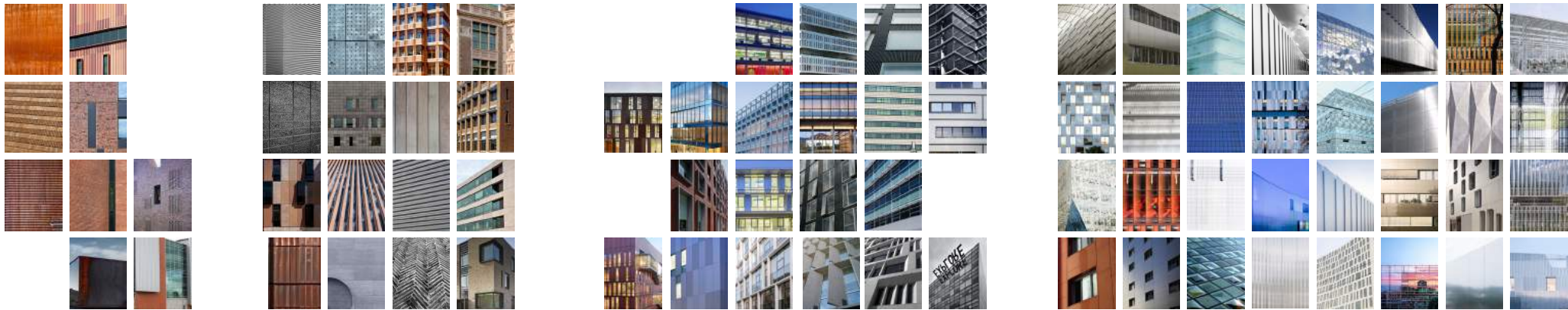
Burke







# MATERIAL SELECTION



Massive



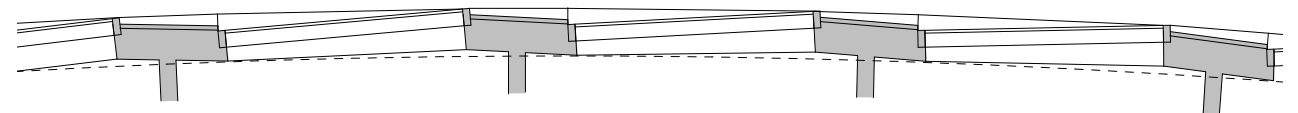
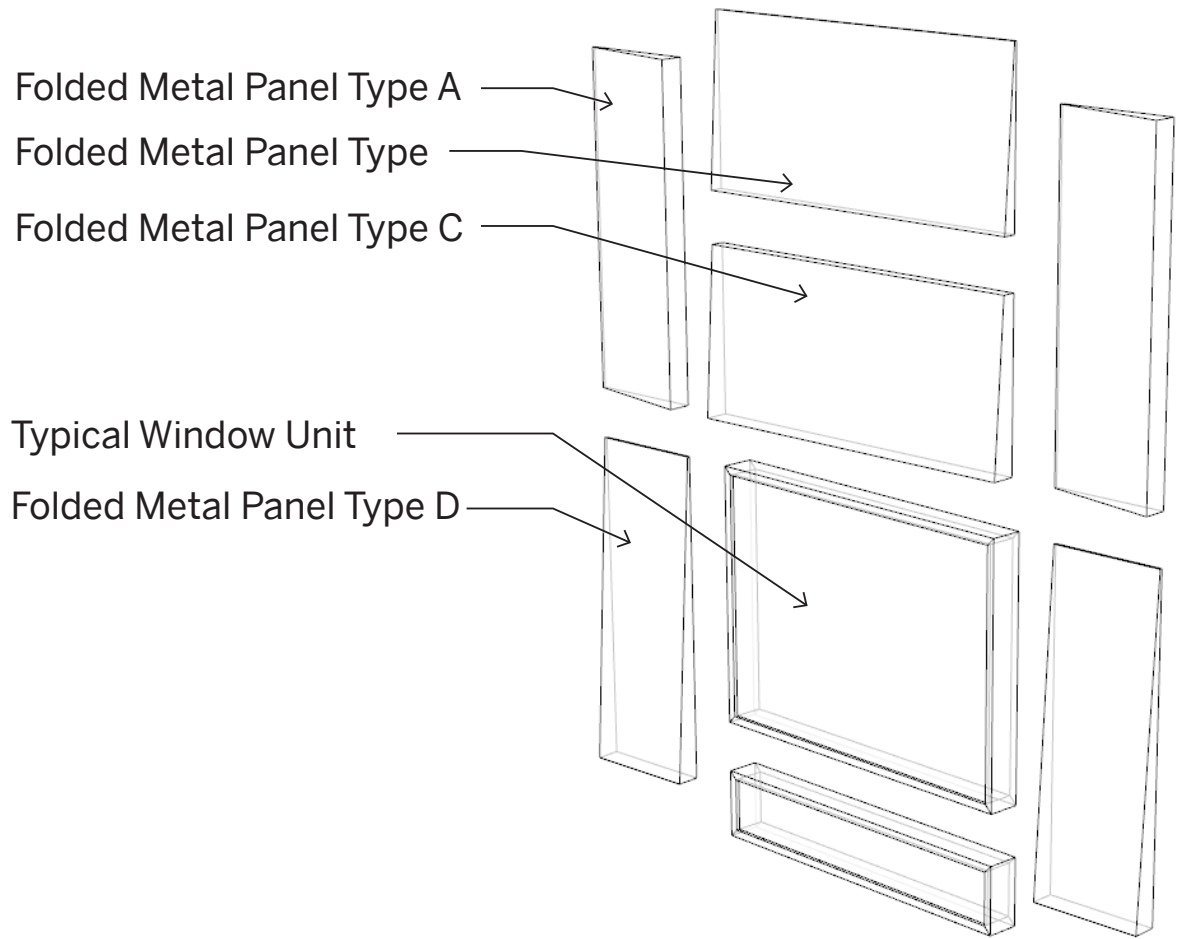
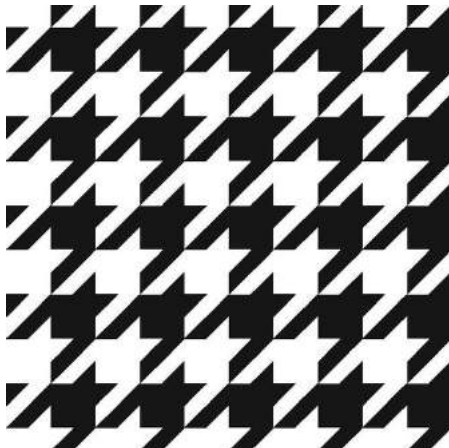
Light







# SHINGLED



Wall Assembly Plan View

# SHINGLED

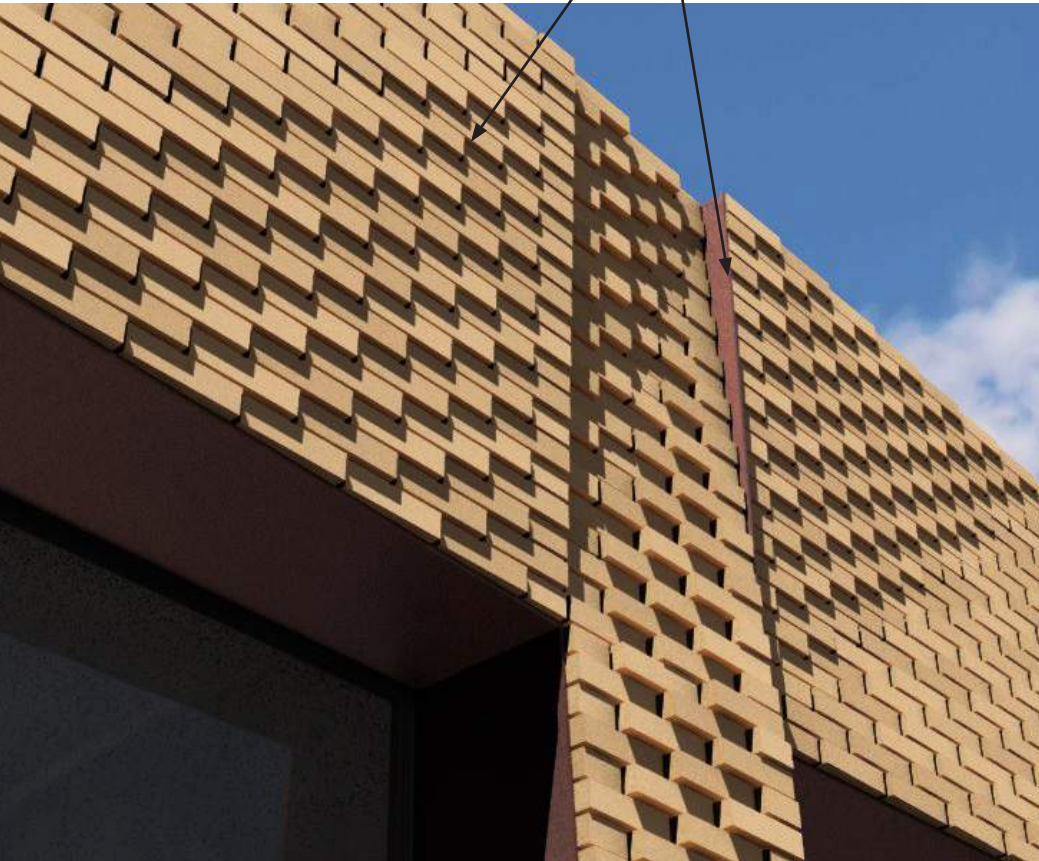


# SHINGLED



# SOUTH FACADE

Copper Trim  
Structural Brick



Inset Windows

# NORTH FACADE

Copper Trim  
Structural Brick

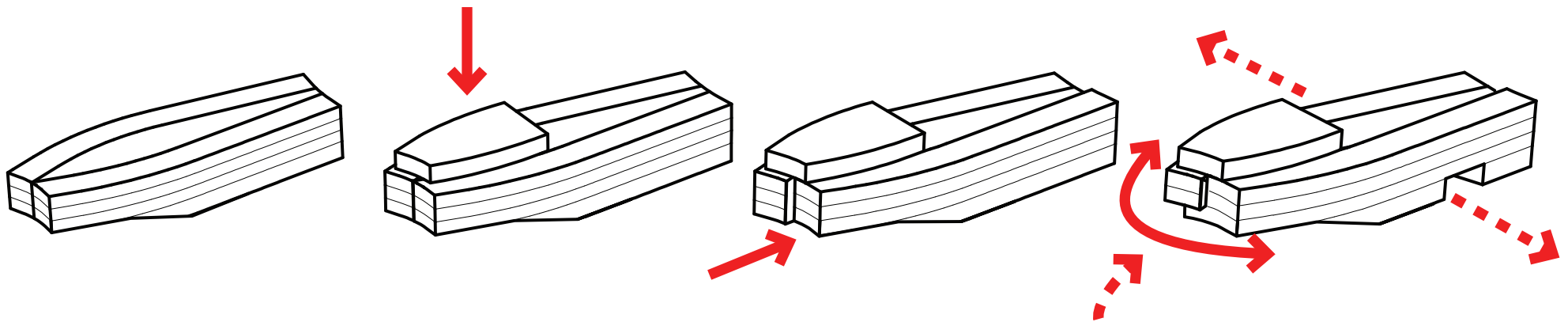


Flush Windows





# FORMAL EVOLUTION



**1.** Two Volumes with Central Atrium

**2.** Roof Event Center

**3.** Shift South to Connect

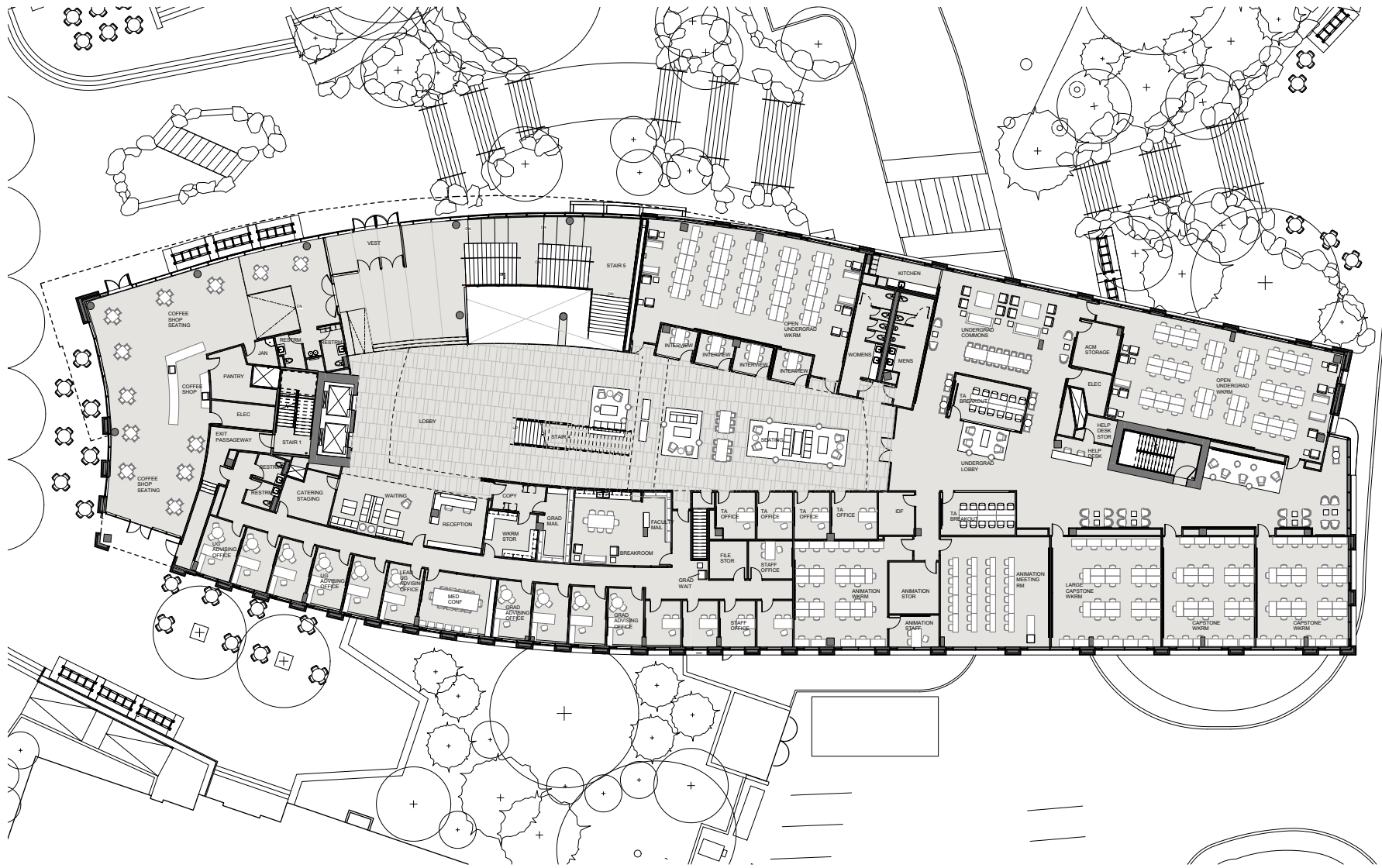
**4.** Carve to Form Entry/Service Access

# GROUND FLOOR PLAN

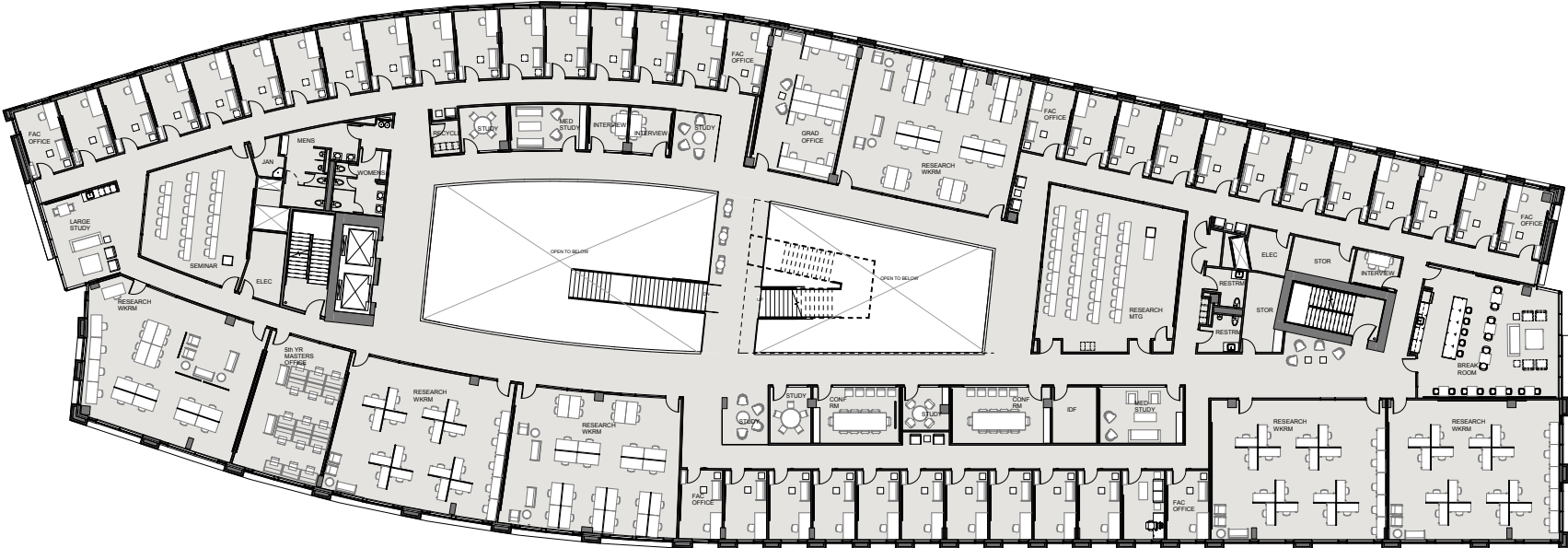




# FIRST FLOOR PLAN



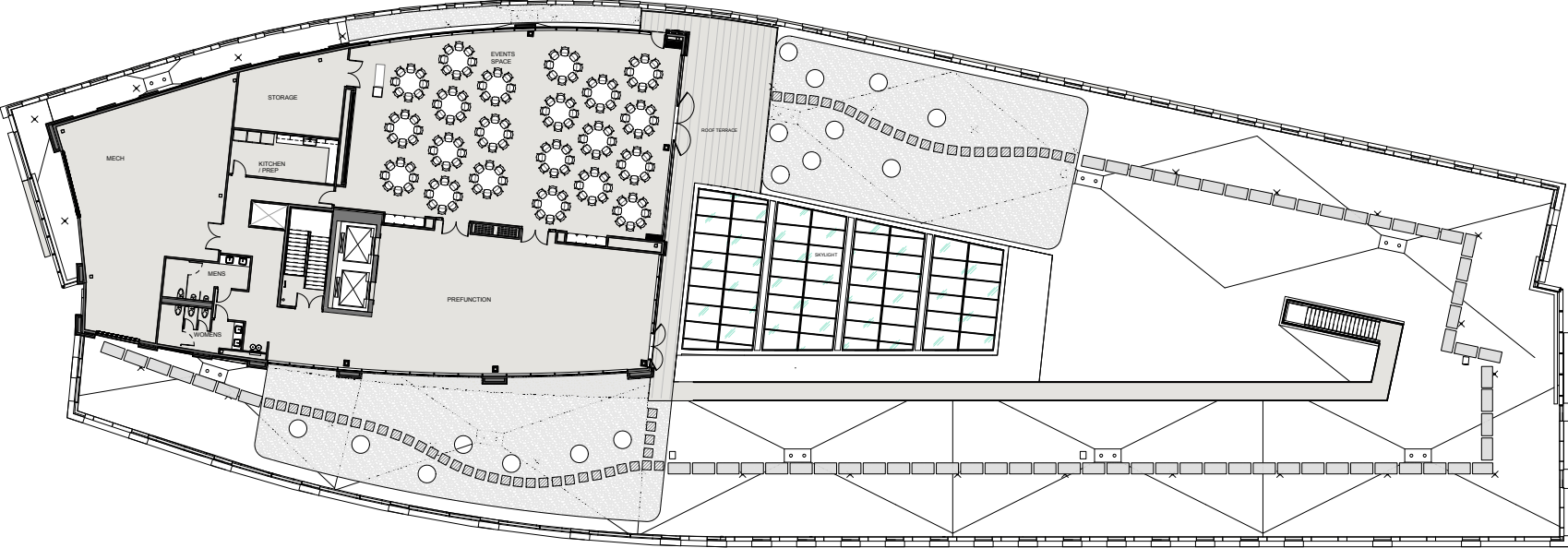
# SECOND FLOOR PLAN



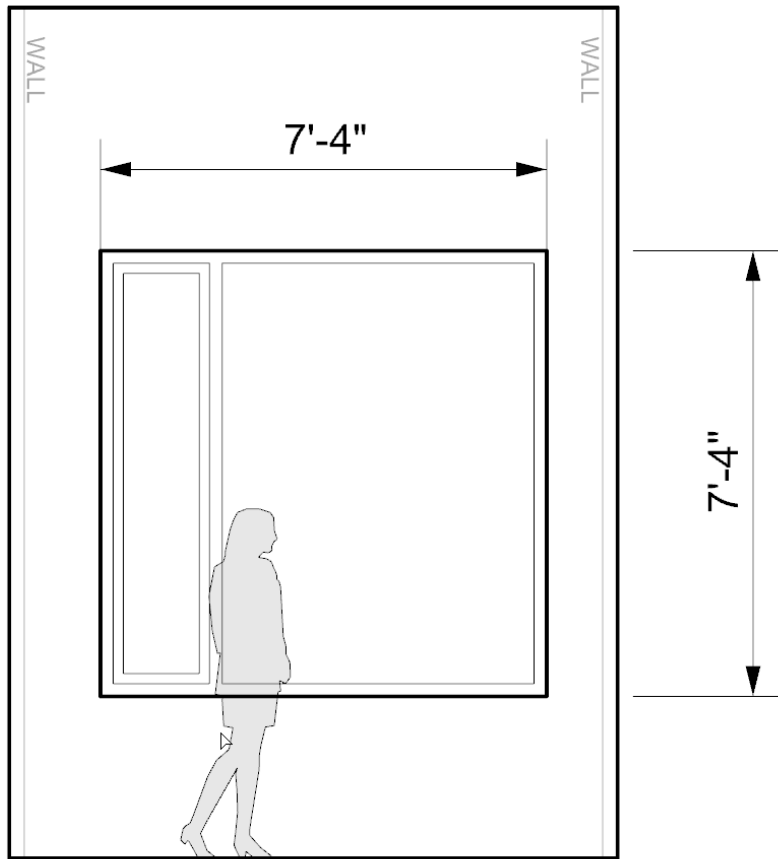
# THIRD FLOOR PLAN



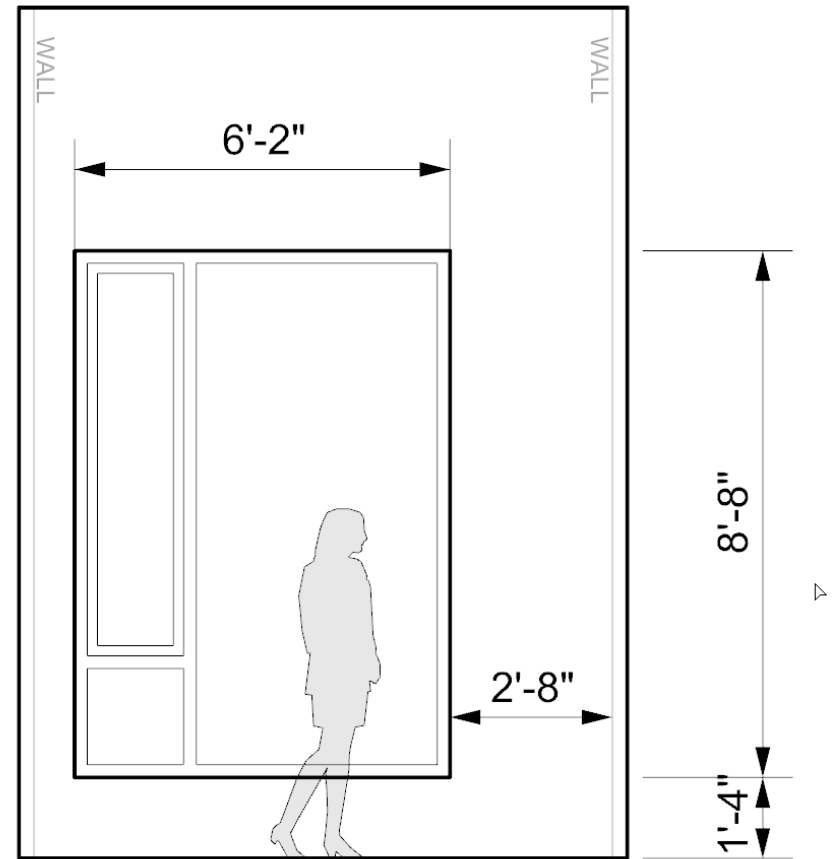
# FOURTH FLOOR PLAN



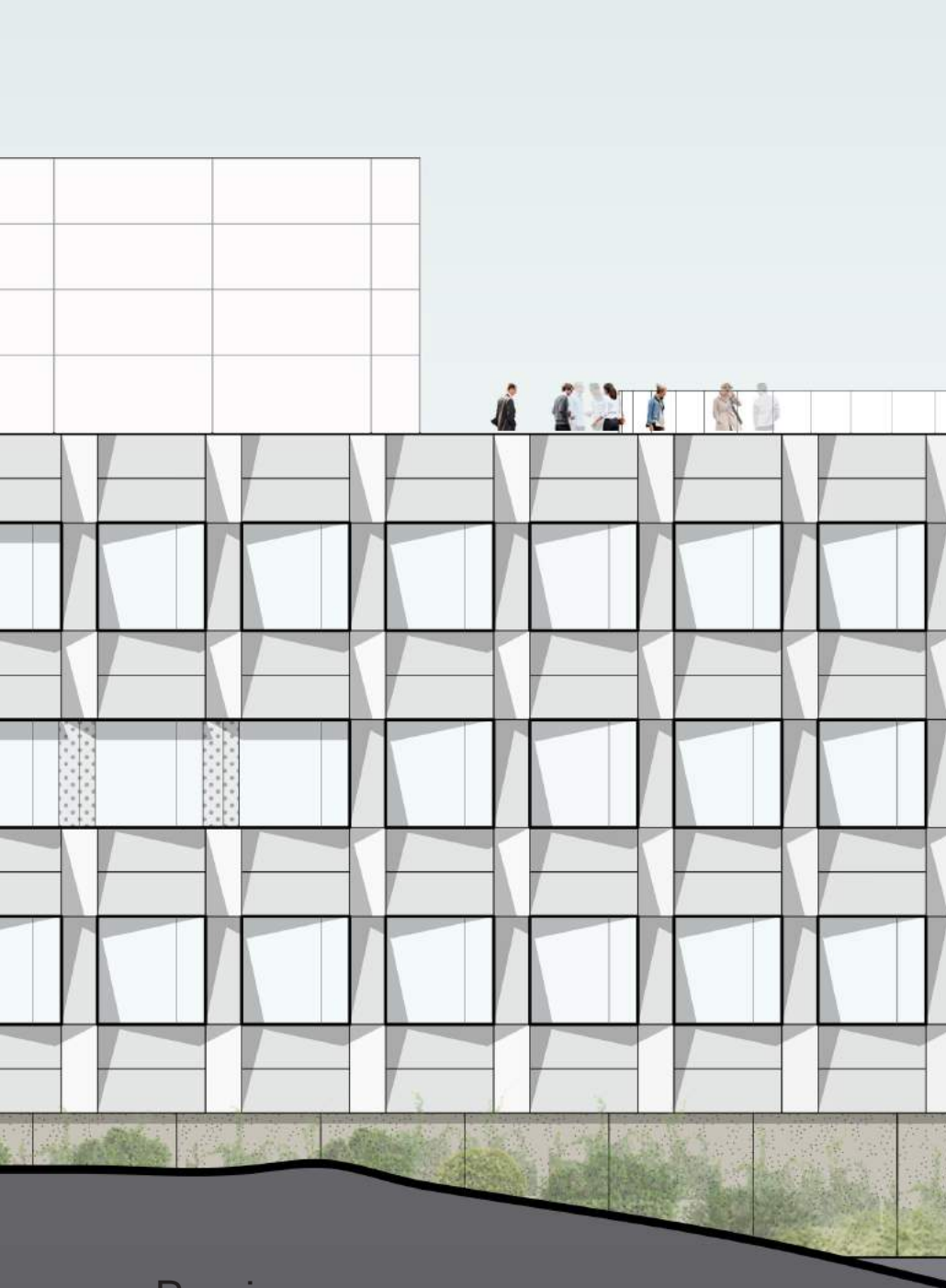
# APERTURE ADJUSTMENTS



Previous to match  
Allen Center



Revised taller window  
configuration allows  
more variety

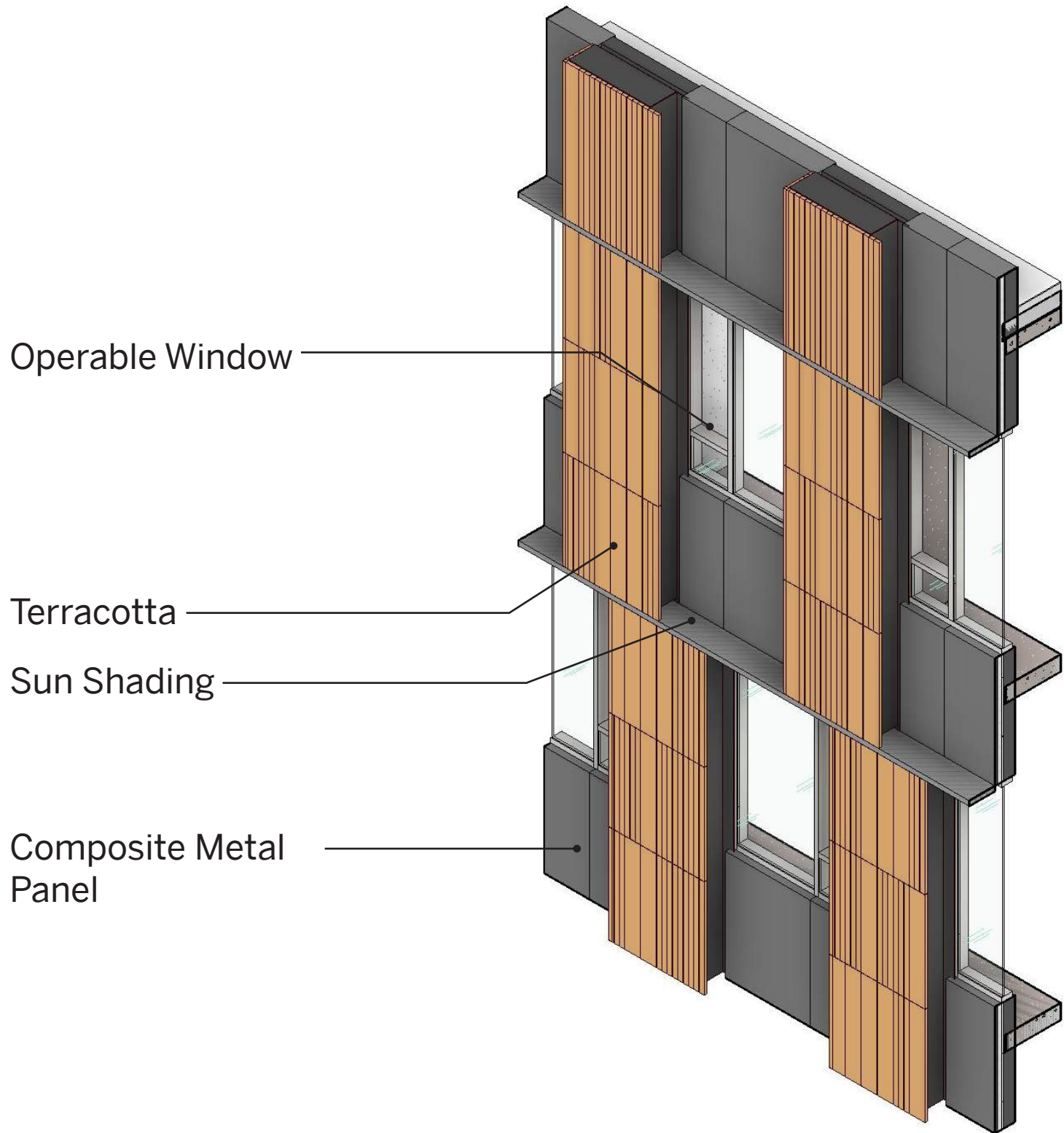


Previous

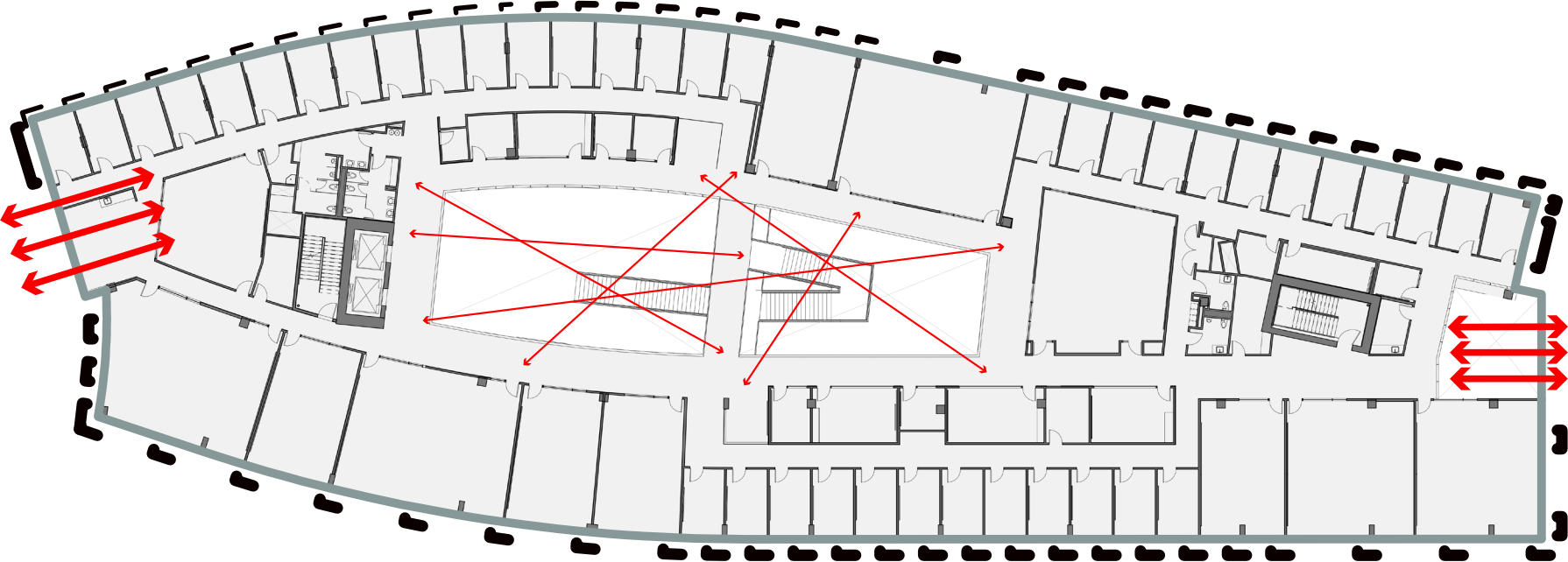


Present

# SYSTEM

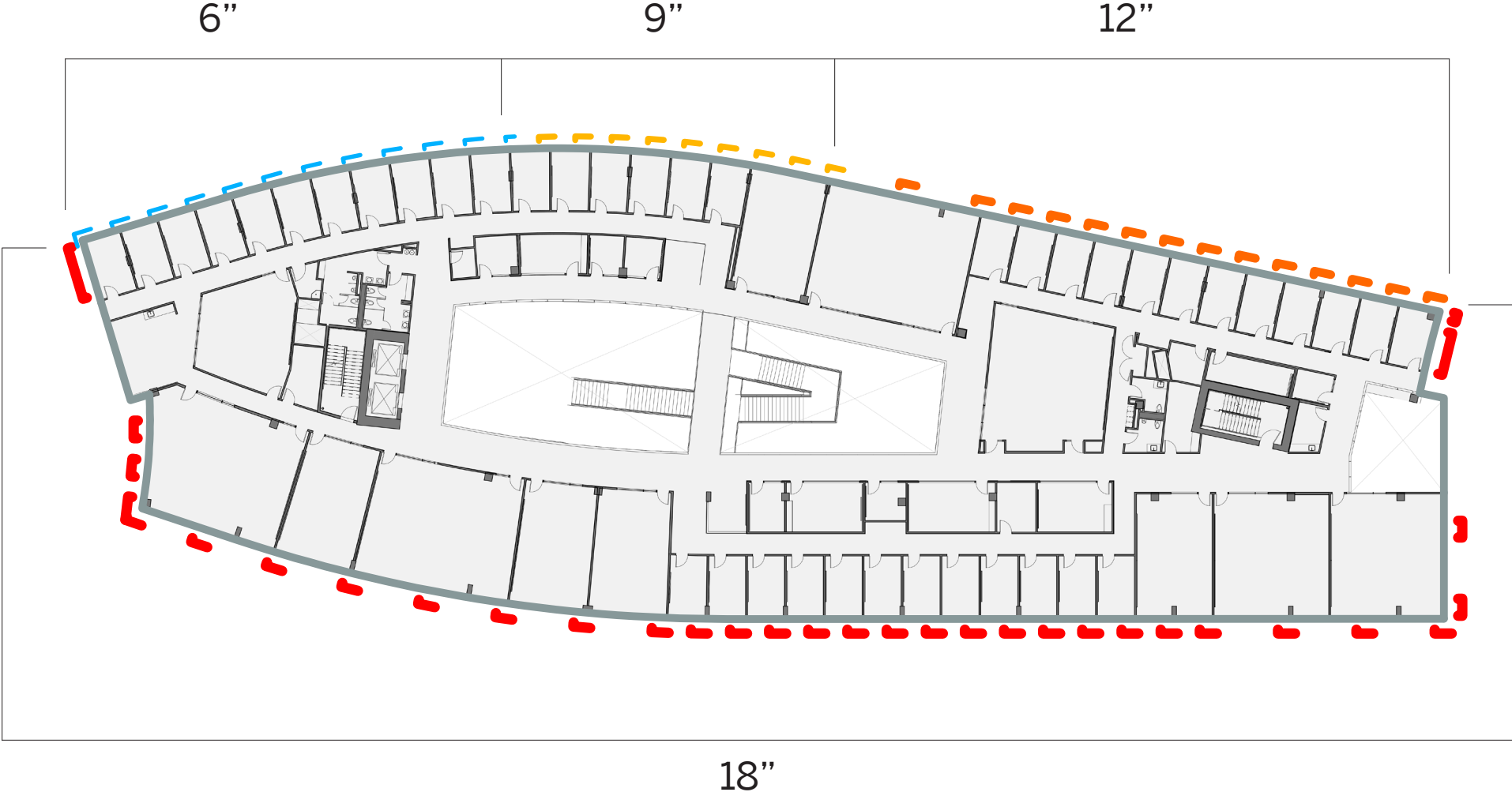


# SYSTEM EXTENTS

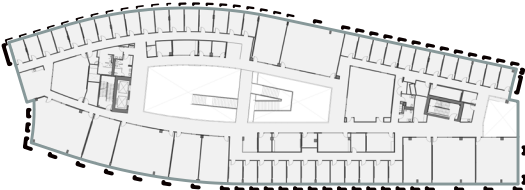




# SYSTEM DEPTH



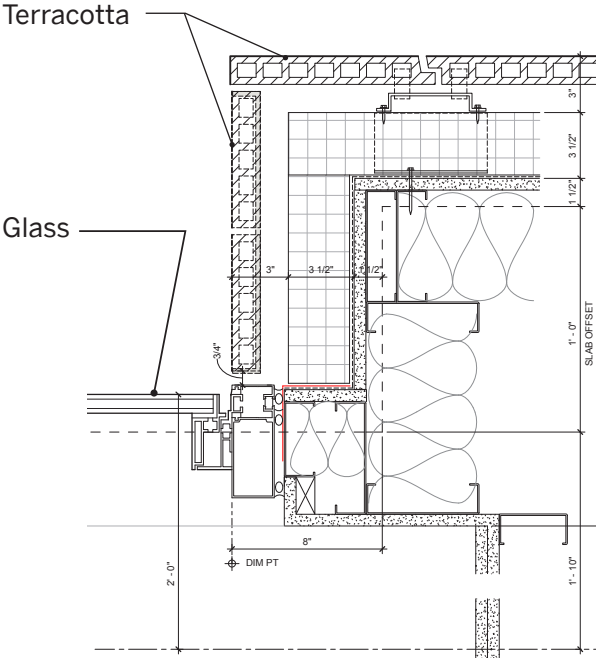
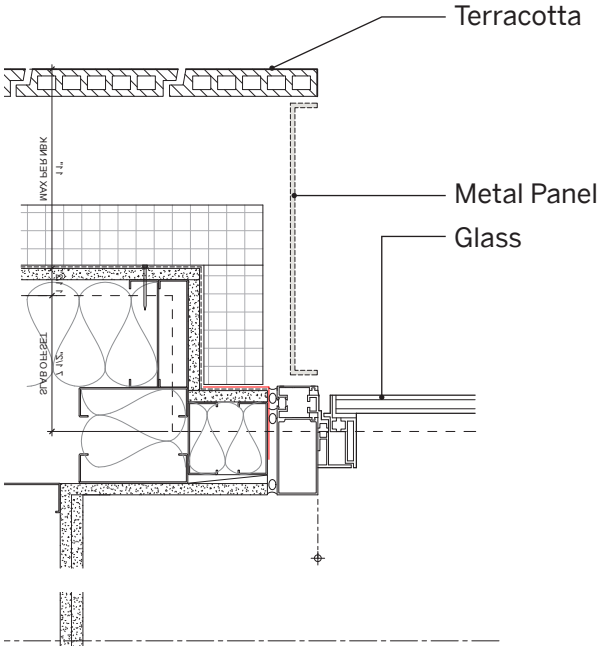
# DETAIL



Facing East



Facing West



# Civil Engineering



# More Hall



# Allen Center



Terra Mauve 105  
R:157 G:97 B:65



Runyon Canyon Tan 1140  
R:157 G:111 B:74



California Redwood 1190  
R:153 G:90 B:73



Sienna Clay 104  
R:190 G:120 B:81



Buckhorn 987  
R:133 G:116 B:95



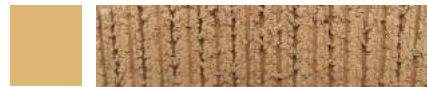
Wynwood 1231  
R:125 G:92 B:79



Raisin 1237  
R:115 G:88 B:73



Dorset Gold HC-8  
R:222 G:183 B:116



Cornucopia Tan 119  
R:209 G:135 B:79



Warm Sienna 1203  
R:166 G:90 B:79



Pumice Stone 1197  
R:145 G:92 B:72



Seminole Brown 1183  
R:142 G:94 B:81



Sienna Clay 104  
R:190 G:120 B:81



Terra Mauve 105  
R:157 G:97 B:65



Roxbury Caramel HC-42  
R:203 G:164 B:121



Baked Pretzel 1126  
R:146 G:115 B:86









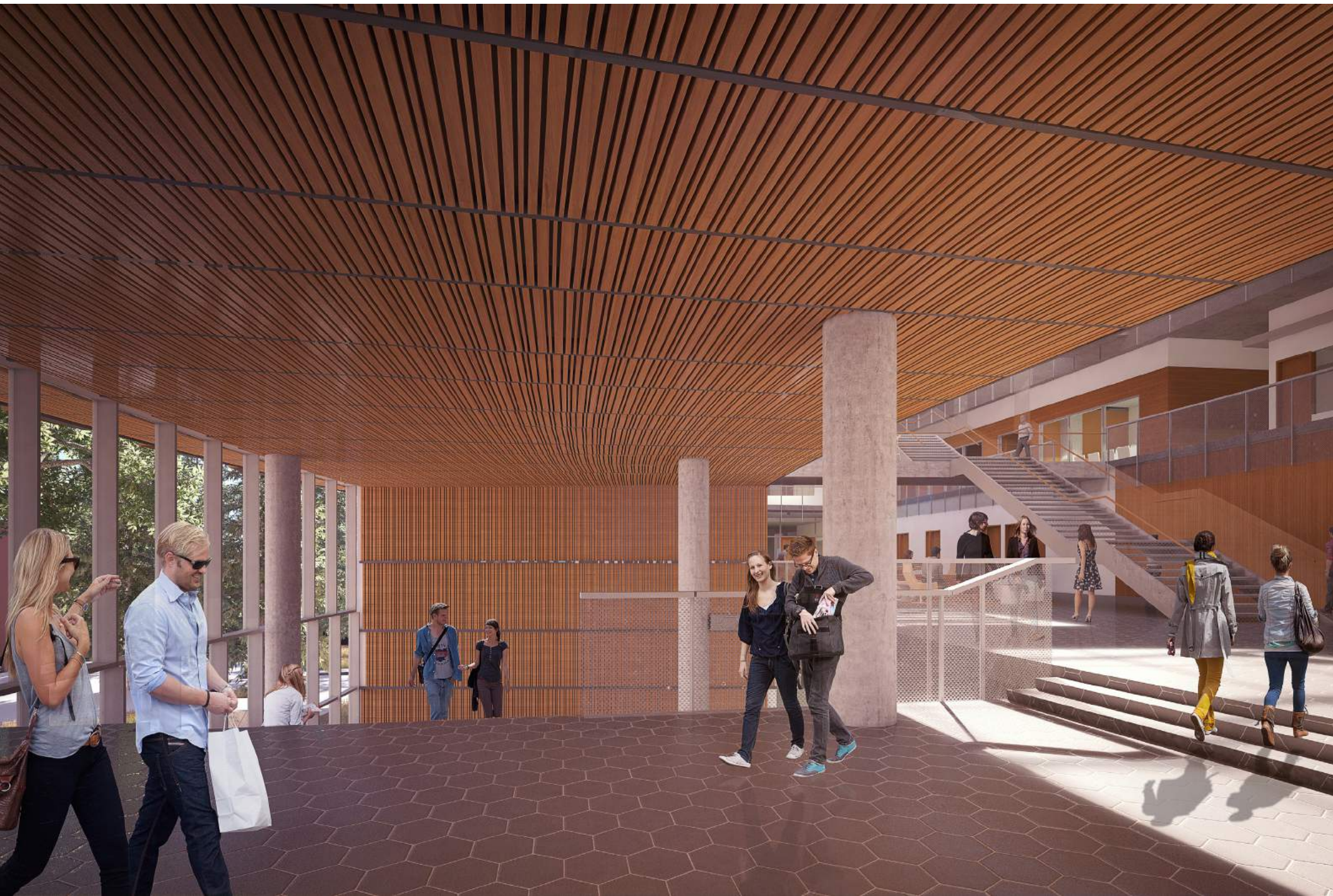






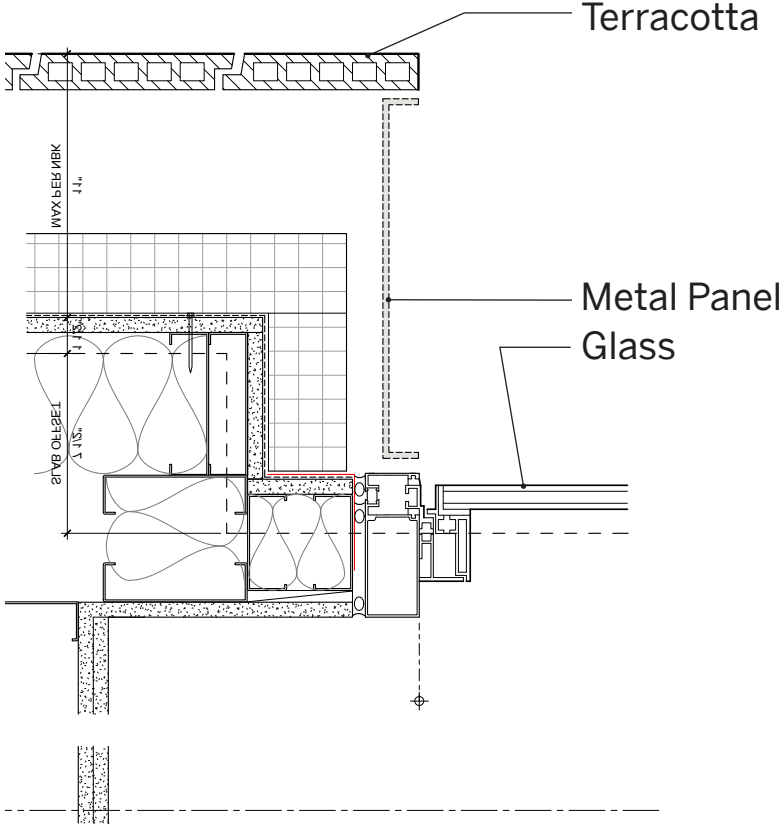




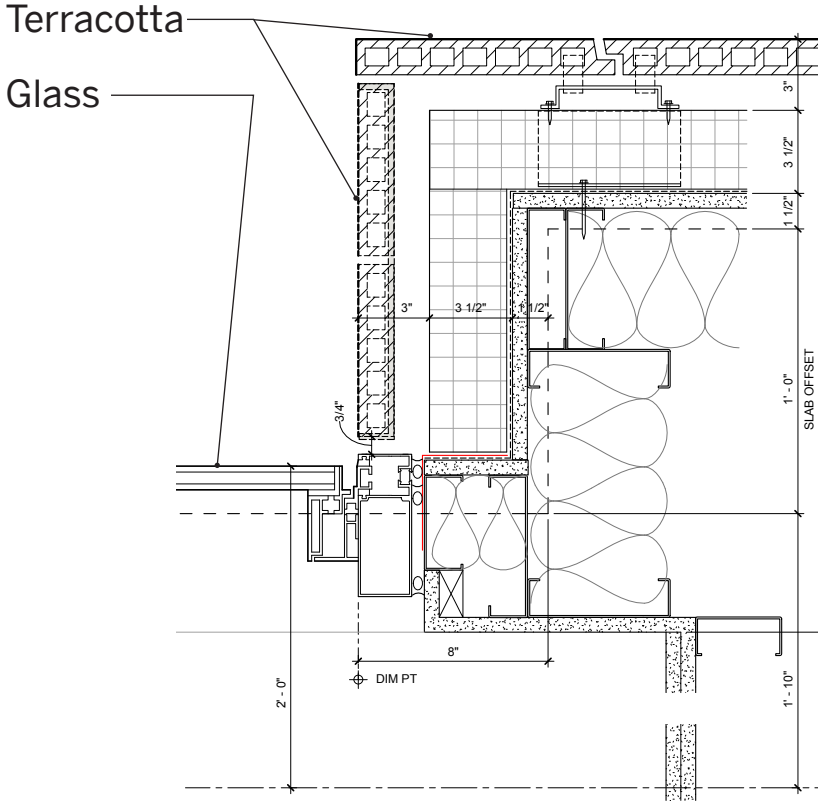




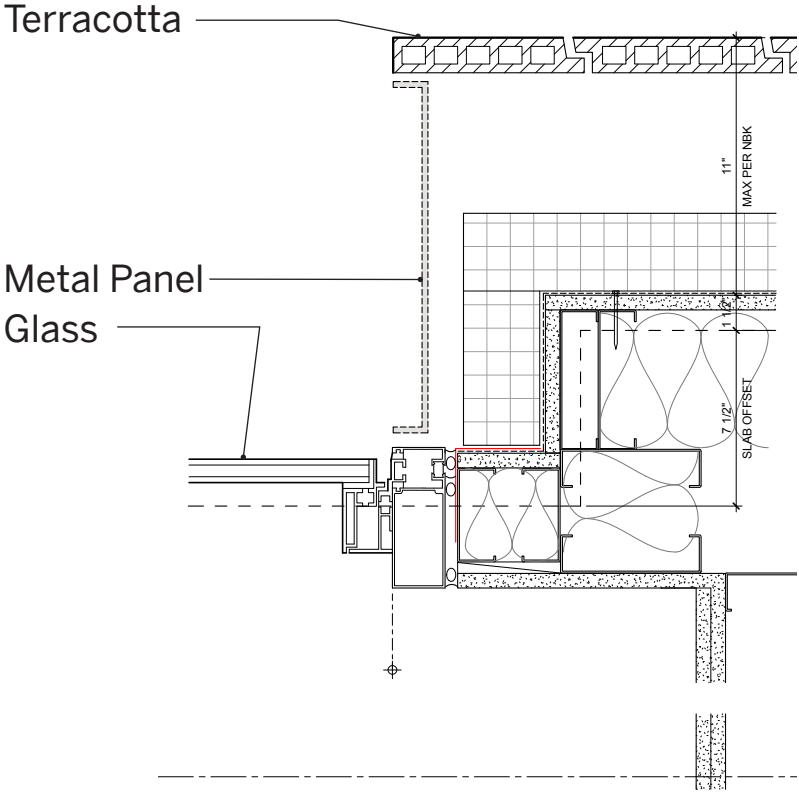
# DETAIL FACING EAST

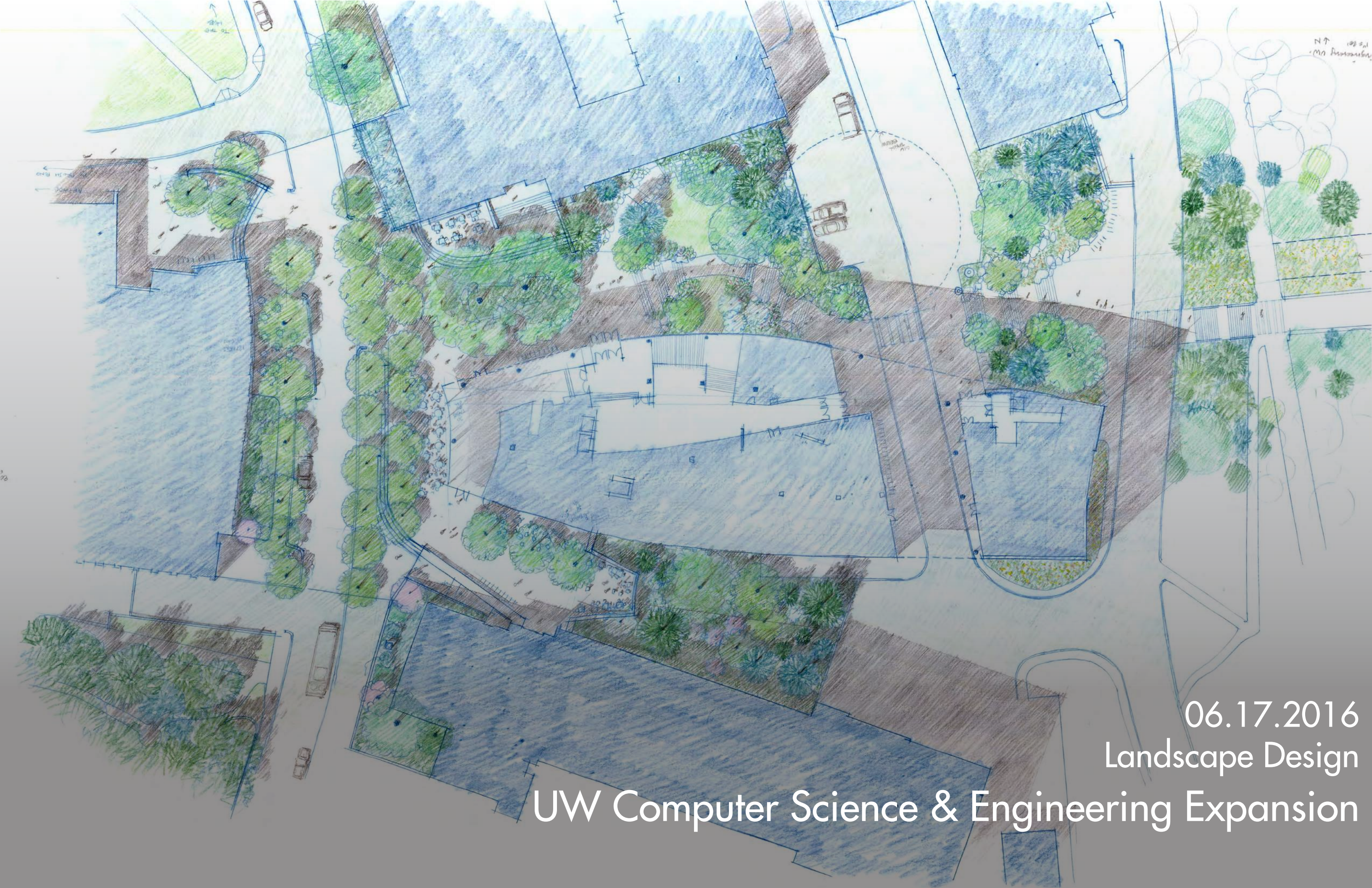


# DETAIL FACING WEST - OPTION 1



# DETAIL FACING WEST - OPTION 2

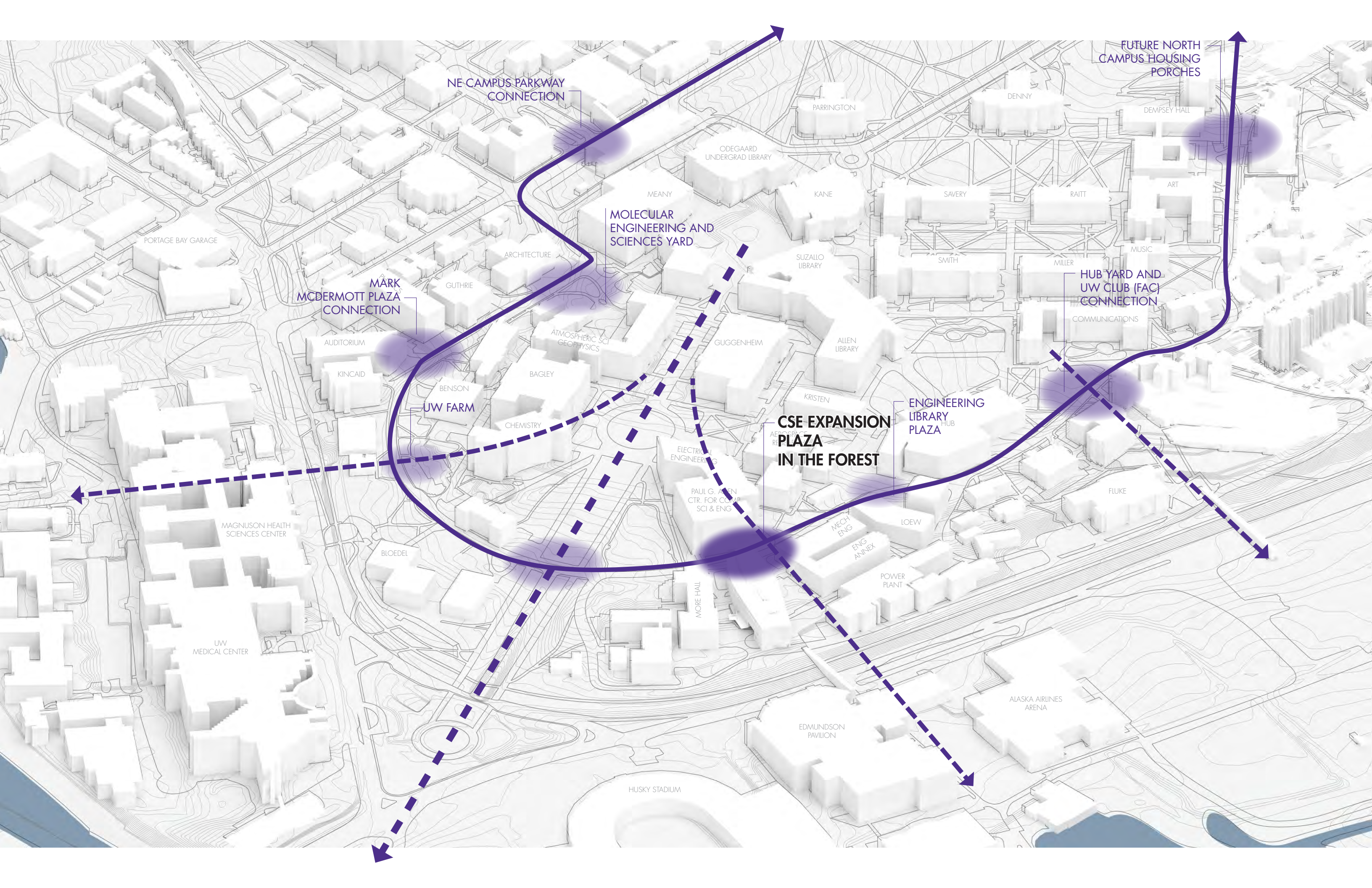




NT  
MN

06.17.2016  
Landscape Design  
UW Computer Science & Engineering Expansion





NE-CAMPUS PARKWAY CONNECTION

MOLECULAR ENGINEERING AND SCIENCES YARD

MARK McDERMOTT PLAZA CONNECTION

CSE EXPANSION PLAZA IN THE FOREST

HUB YARD AND UW CLUB (FAC) CONNECTION

FUTURE NORTH CAMPUS HOUSING PORCHES

PORTAGE BAY GARAGE

AUDITORIUM

KINCAID

BENSON

J.W. FARM

CHEMISTRY

BAGLEY

ATMOSPHERIC SCI. GEOPHYSICS

ELECTRICAL ENGINEERING

PAUL G. ALEN CTR. FOR COMP. SCI. & ENG.

MORE HALL

EDMUNDSON PAVILION

HUSKY STADIUM

MAGNUSON HEALTH SCIENCES CENTER

U.W. MEDICAL CENTER

BLOEDEL

PARRINGTON

ODEGAARD UNDERGRAD LIBRARY

MEANY

KANE

SUZALLO LIBRARY

SAVERY

RAITT

ART

DEMPSEY HALL

MUSIC

MILLER

SMITH

COMMUNICATIONS

FLUKE

ALASKA AIRLINES ARENA

POWER PLANT

LOEW

MECH. ENG.

ENG. ANNEX

KRISTEN

GUGGENHEIM

ALLEN LIBRARY

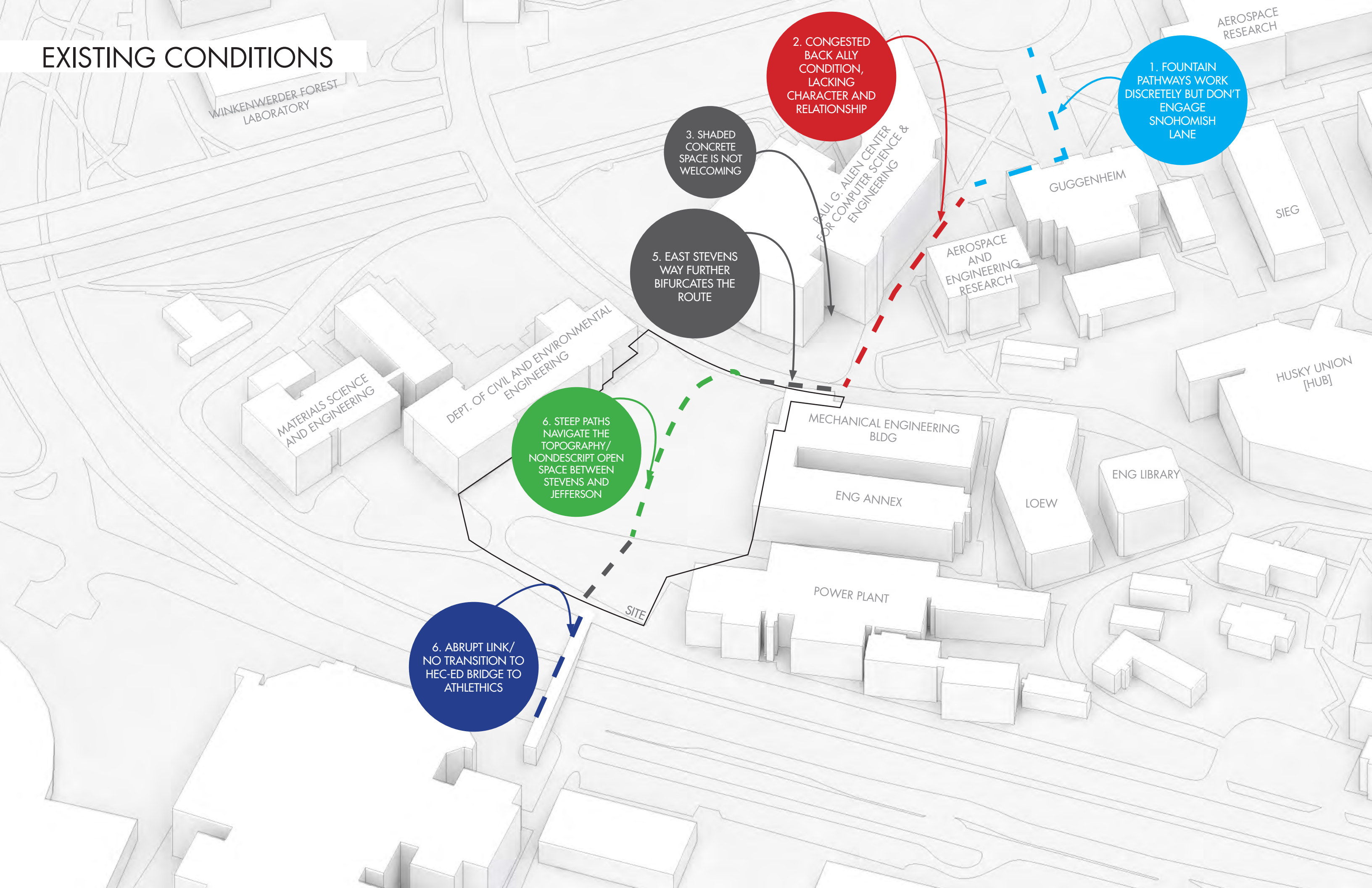
DENNY

ARCHITECTURE

GUTHRIE

MARK McDERMOTT PLAZA CONNECTION

# EXISTING CONDITIONS



1. FOUNTAIN PATHWAYS WORK DISCRETELY BUT DON'T ENGAGE SNOHOMISH LANE

2. CONGESTED BACK ALLEY CONDITION, LACKING CHARACTER AND RELATIONSHIP

3. SHADED CONCRETE SPACE IS NOT WELCOMING

5. EAST STEVENS WAY FURTHER BIFURCATES THE ROUTE

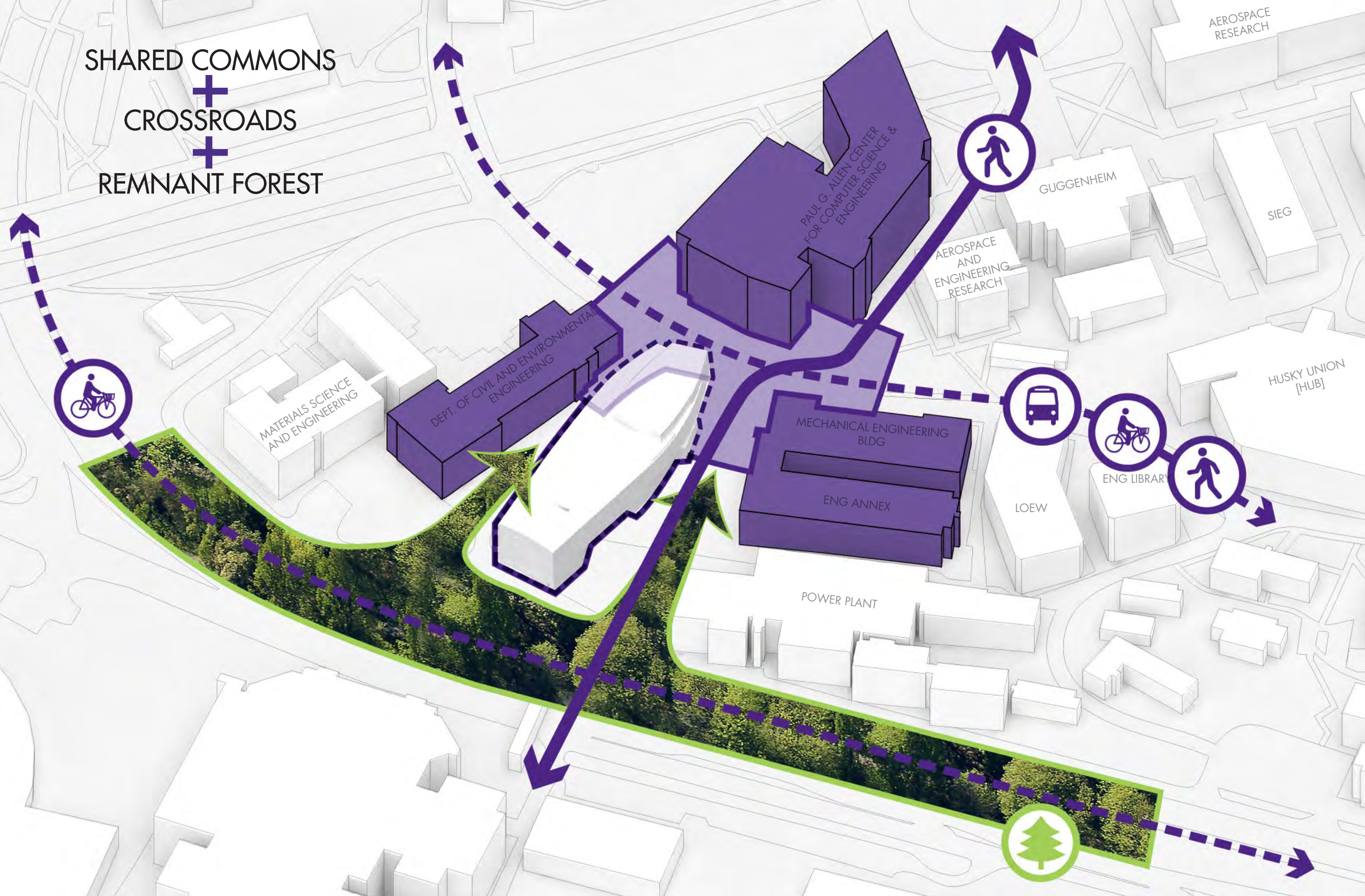
6. STEEP PATHS NAVIGATE THE TOPOGRAPHY/ NONDESCRIP OPEN SPACE BETWEEN STEVENS AND JEFFERSON

6. ABRUPT LINK/ NO TRANSITION TO HEC-ED BRIDGE TO ATHLETICS

SHARED COMMONS

CROSSROADS

REMNANT FOREST



# SITE PLAN



Benton Lane

NEW FIELDS

MECHANICAL ENGINEERING BUILDING

POWER PLANT

OIL TANK ACCESS HATCHES

Mechanical Engineering Entry

Nested Lawn

Woodland Stair

Woodland Stair

FUTURE BRIDGE LOCATION

PAUL G. ALLEN CENTER FOR COMPUTER SCIENCE & ENGINEERING

Shared Plaza

COMPUTER SCIENCE AND ENGINEERING II

JEFFERSON ROAD

MASON ROAD

STEVENS WAY

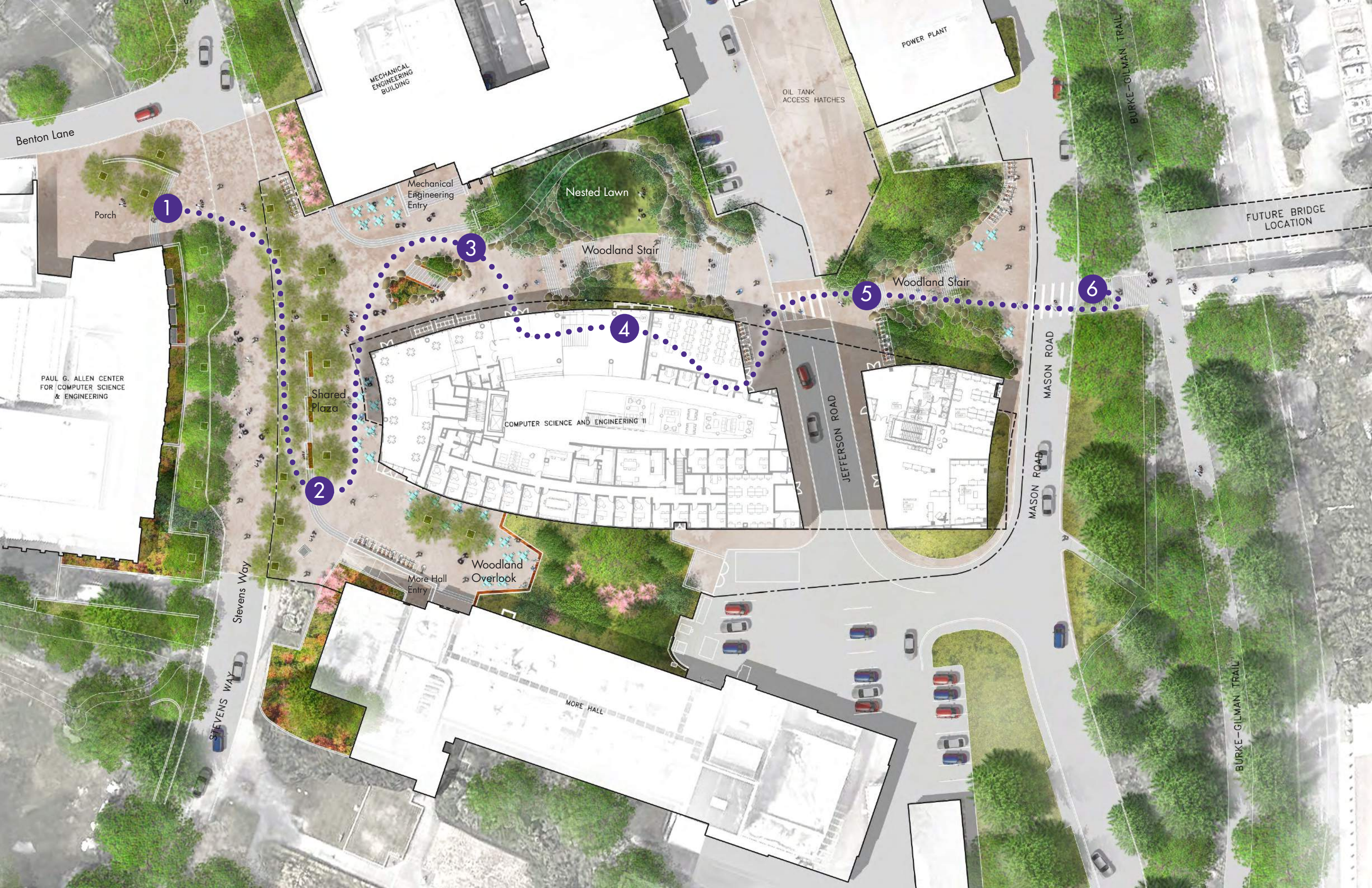
More Hall Entry

Woodland Overlook

Loading

MORE HALL

BURKE-GILMAN TRAIL



Benton Lane

MECHANICAL ENGINEERING BUILDING

POWER PLANT

OIL TANK ACCESS HATCHES

Porch

1

Mechanical Engineering Entry

Nested Lawn

3

Woodland Stair

Woodland Stair

5

6

FUTURE BRIDGE LOCATION

PAUL G. ALLEN CENTER FOR COMPUTER SCIENCE & ENGINEERING

2

Shared Plaza

4

COMPUTER SCIENCE AND ENGINEERING II

JEFFERSON ROAD

MASON ROAD

Stevens Way

More Hall Entry

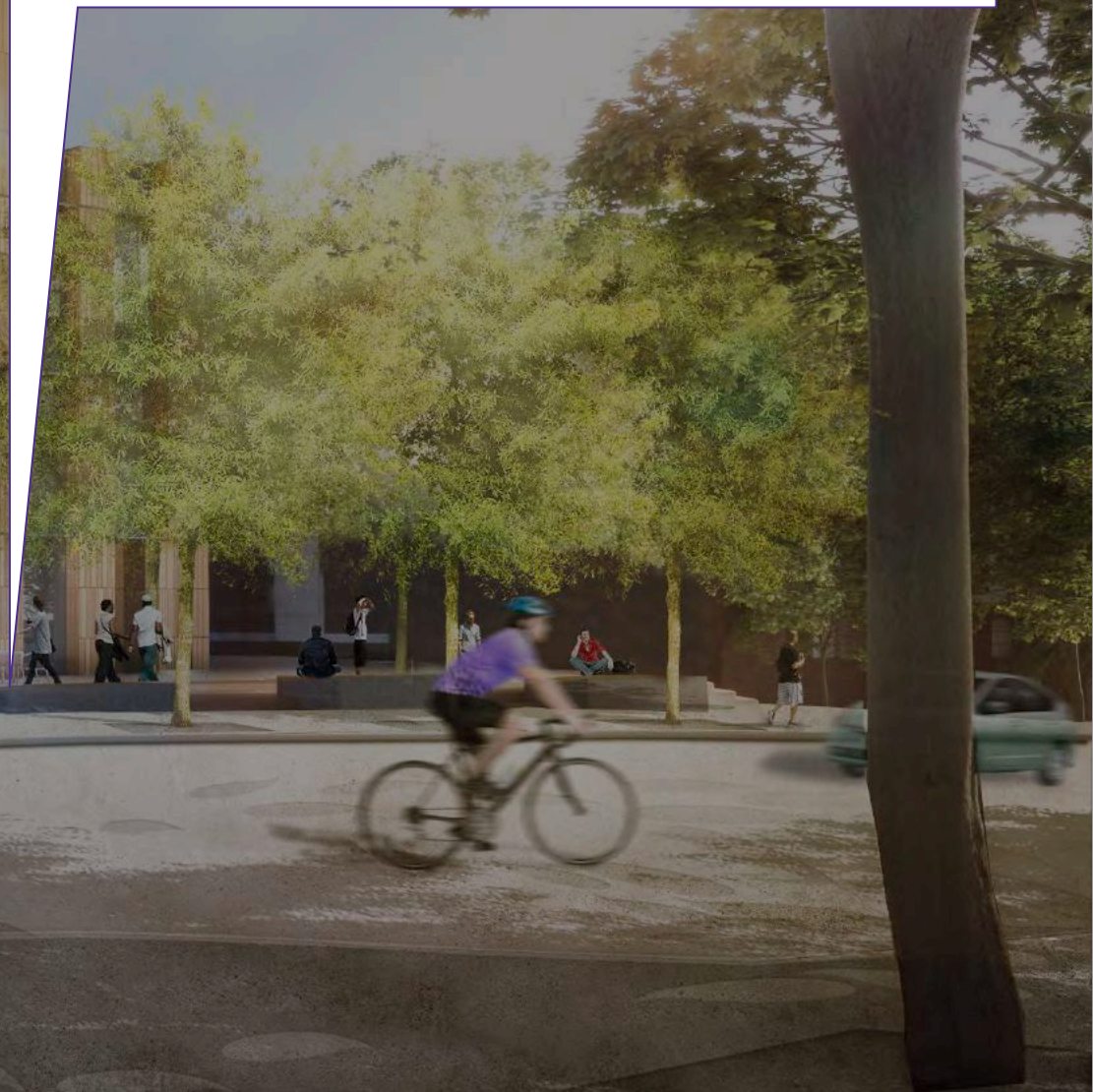
Woodland Overlook

MORE HALL

BURKE-GILMAN TRAIL



1 Stevens Way and  
Computer Science & Engineering Plaza



**1** Stevens Way and Computer Science & Engineering Plaza



**2** More Hall Terrace and Overlook





Lacebark Elms

CSE Plaza Terrace

cafe tables & chairs

stone seatwall



Woodland Overlook



More Hall Entry

bike racks

ADA Accessible Ramp

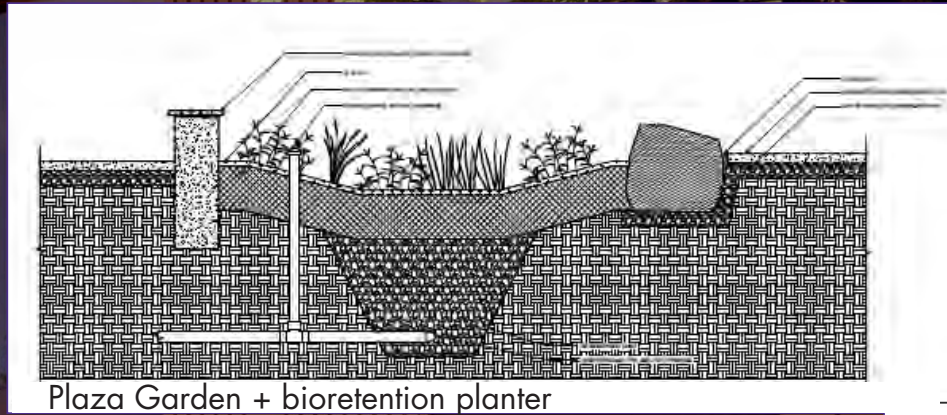


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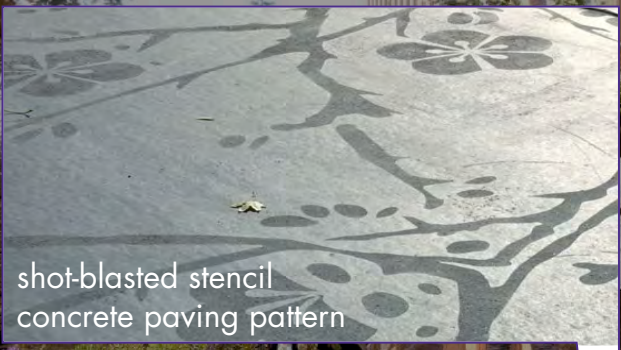
Computer Science & Engineering  
Plaza and Entry



Woodland Stair down to Nested Lawn and Hec-Ed Bridge



Plaza Garden + bioretention planter



shot-blasted stencil concrete paving pattern

basalt boulders as plaza elements and woodland walls

**3** Computer Science & Engineering Plaza and Entry



4 Nested Lawn and Woodland Stair







Mason Road

Tree planting spaced away from building facade

Woodland groundcover planting

Woodland Stair up to Plaza and Stevens Way







bike racks

raised table crosswalk

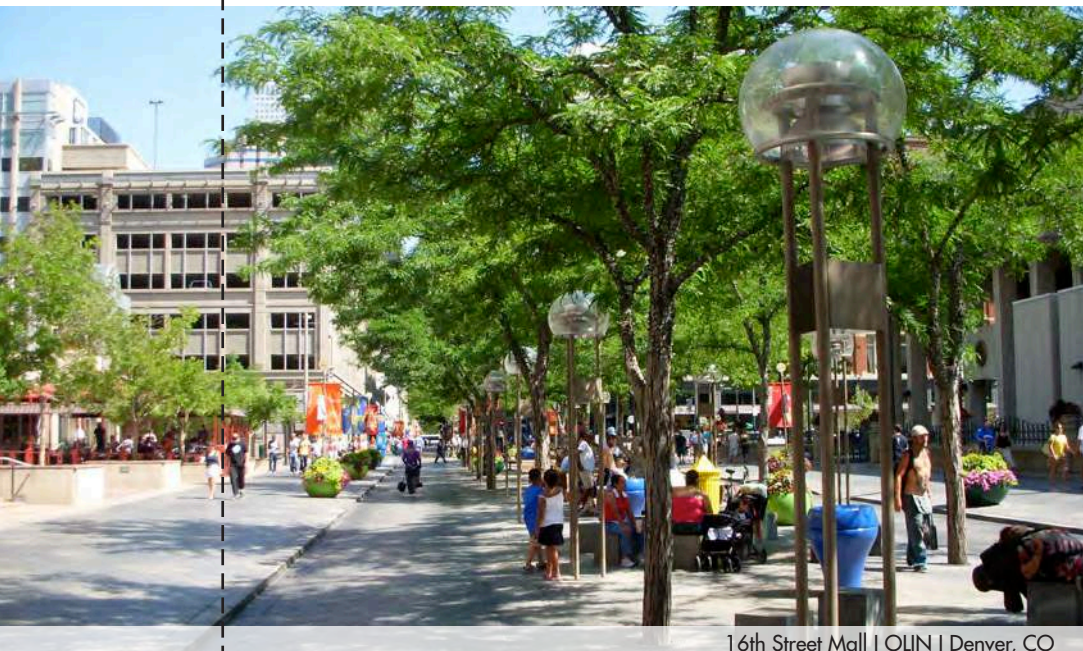
Woodland groundcover planting

Woodland Stair up to Stevens Way

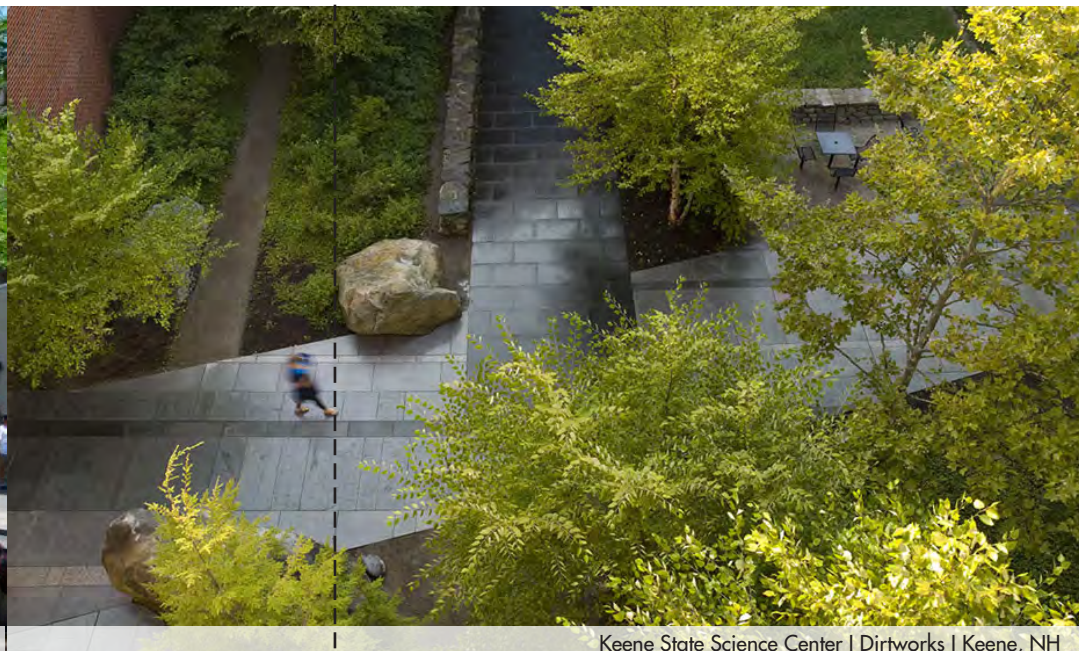
Nested Lawn

Jefferson Road

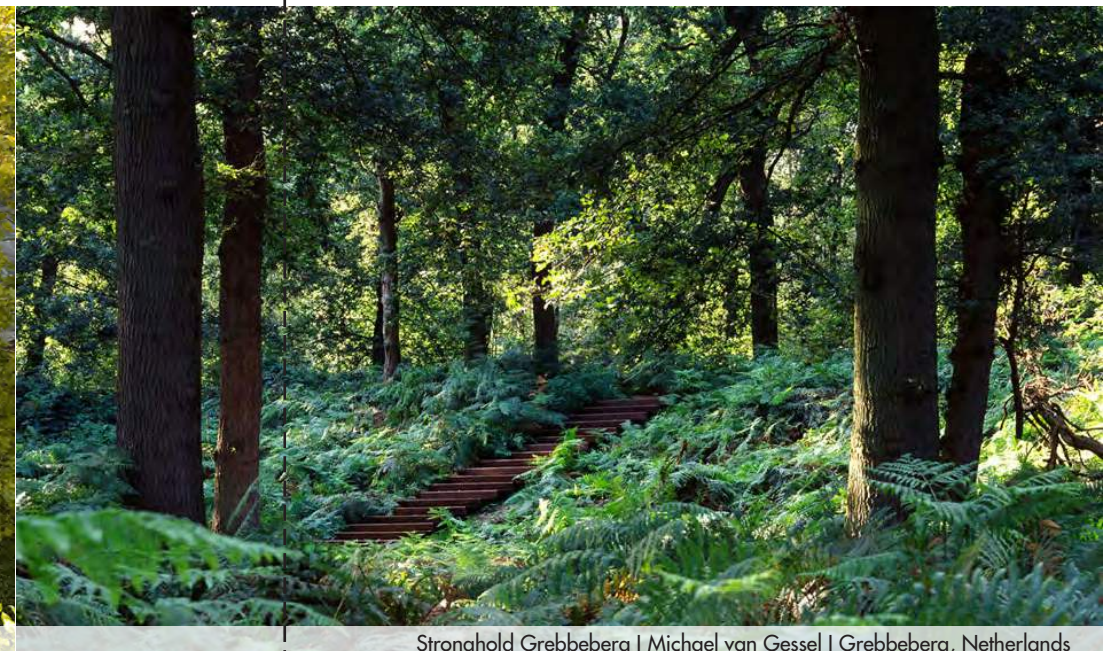
# TRANSECT



16th Street Mall | OLIN | Denver, CO



Keene State Science Center | Dirtworks | Keene, NH



Stronghold Grebbeberg | Michael van Gessel | Grebbeberg, Netherlands



Paul G. Allen Center

Stevens Way

Shared Plaza

Woodland Stair + Nested Lawn

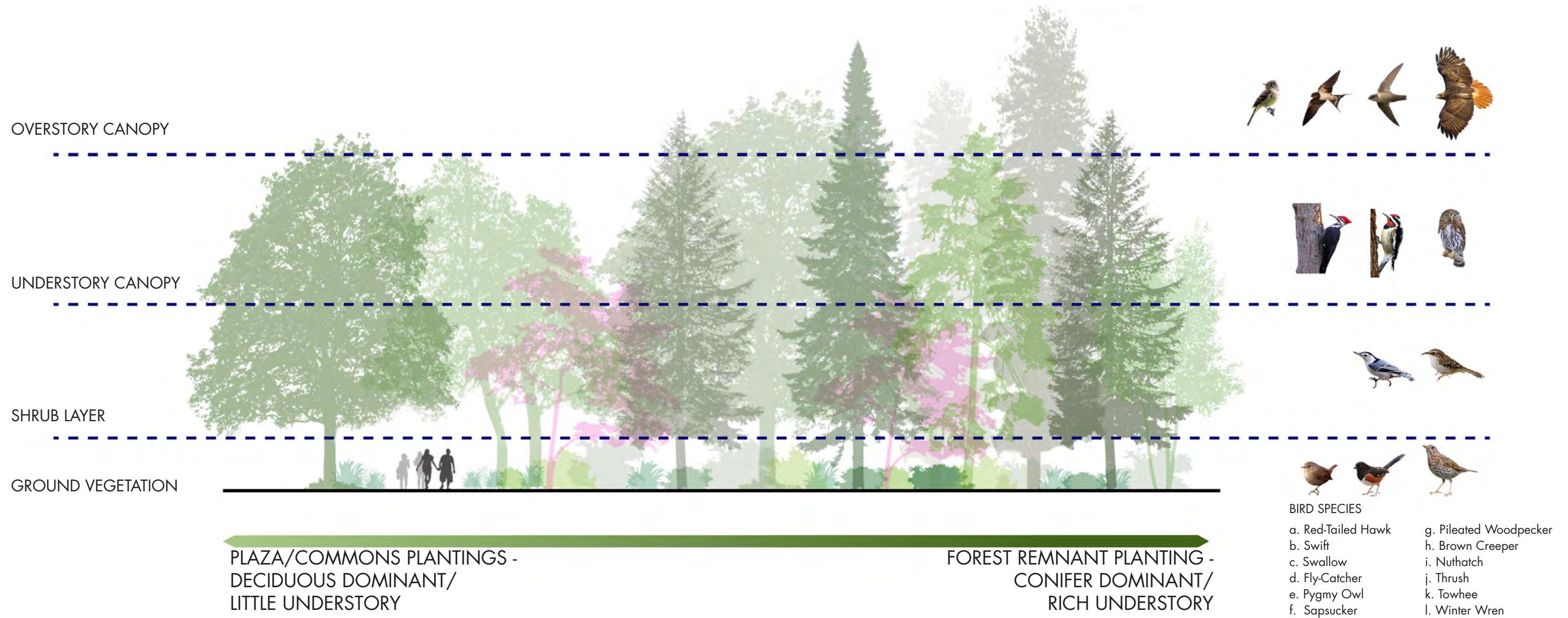
Jefferson St.

Mason Rd.

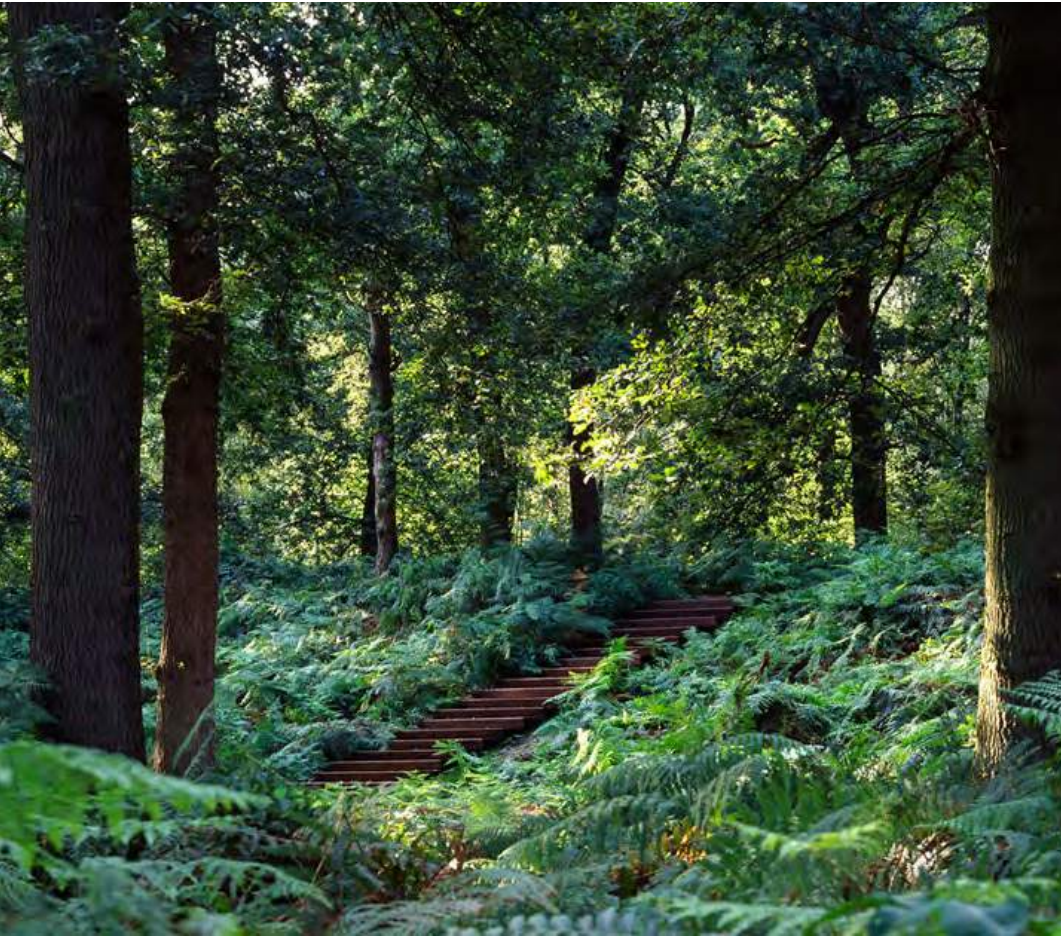
Burke-Gilman Trail

Lake Washington Connection

# PLANTING STRATEGY + BIODIVERSITY



# PLANT PALETTE - WOODLAND



## CANOPY TREES



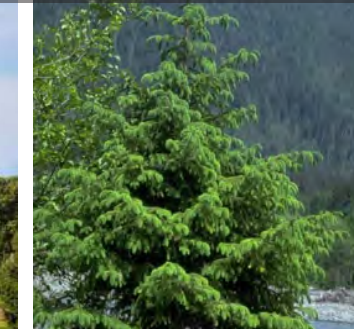
*Populus tremuloides*  
Quaking Aspen



*Acer macrophyllum*  
Bigleaf Maple



*Thuja plicata*  
Pacific Red Cedar



*Picea sitchensis*  
Sitka Spruce



*Pseudotsuga menziesii*  
Douglas Fir



*Chamaecyparis nootkatensis*  
Alaska Cedar

## UNDERSTORY TREES



*Malus fusca*  
Pacific Crabapple



*Cornus kousa*  
Kousa Dogwood



*Amelanchier alnifolia*  
Shadbush



*Acer circinatum*  
Vine Maple

## SHRUBS



*Rhododendron macrophyllum*  
Pacific Rhododendron



*Ribes sanguineum*  
Flowering Currant



*Symphoricarpos albus*  
Common Snowberry



*Mahonia nervosa*  
Dwarf Oregon Grape



*Philadelphus lewisii*  
Wild Mock-Orange



*Holodiscus discolor*  
Oceanspray



*Pinus mugo*  
Mountain Pine



*Cornus red-osier*  
Redosier Dogwood



## PERENNIALS + GROUNDCOVERS



*Lamprocapnos spectabilis*  
Bleeding Heart



*Maianthemum dilatatum*  
False Lily-of-the-Valley



*Oxalis oregana*  
Wood Sorrel



*Polemonium foliosissimum*  
Jacob's Ladder



*Gynocarpium dryopteris*  
Oak Fern



*Athyrium filix-femina*  
Lady Fern



*Polystichum munitum*  
Sword Fern



*Maianthemum racemosum*  
False Solomon's Seal

# PLANT PALETTE - PLAZA + STREET



## CANOPY TREES



*Quercus phellos*  
Willow Oak



*Ulmus parvifolia*  
Lacebark Elm

## FLOWERING PERENNIALS



*Achillea millefolium*  
Yarrow (white)



*Delphinium menziesii*  
Menzies' Larkspur



*Eriophyllum lanatum*  
Oregon Sunshine



*Lavandula intermedia 'Grosso'*  
Fat Bud French Lavender



*Penstemon serrulatus*  
Cascade penstemon



*Lupinus latifolius*  
Broadleaf Lupine



*Symphyotrichum subspicatum*  
Douglas Aster



*Clarkia amoena*  
Farewell to Spring

## BIOFILTER PERENNIALS + GRASSES



*Rubus spectabilis*  
Salmonberry



*Camassia quamash*  
Common Camas



*Erigeron speciosa*  
Showy fleabane



*Carex obnupta*  
Slough Sedge



*Carex stipata*  
Awlfruit Sedge



*Juncus ensifolius*  
Swordleaf Rush



*Schoenoplectus tabernaemontani*  
Softstem Bulrush



*Festuca rubra*  
Fine Fescue Creeping Red

# MATERIAL STUDY

**\$** \$3-5/sf  
STONE FINES



**\$** \$5/sf  
ASPHALT

- options include:
- warm mix
  - reclaimed asphalt pavement
  - porous asphalt



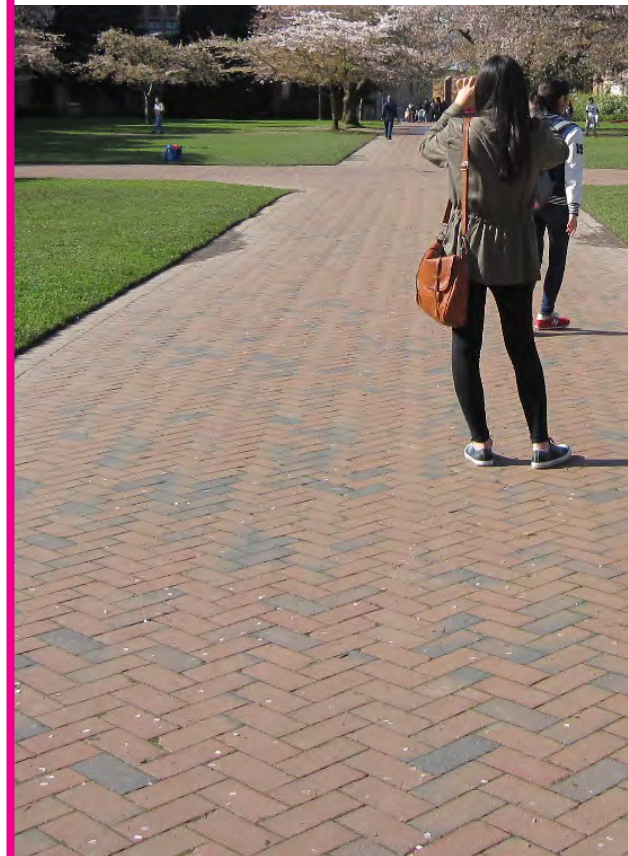
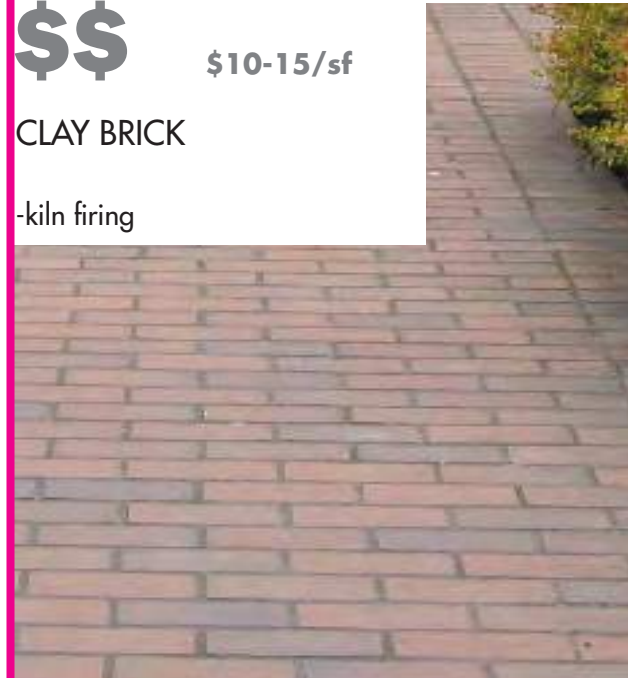
**\$\$** \$10-15/sf  
CIP CONCRETE

- variety of available finishes
- fly ash is a recovered resource



**\$\$** \$10-15/sf  
CLAY BRICK

- kiln firing



**\$\$\$** \$15-20/sf  
ASPHALT BLOCK

- durable
- Post Industrial Recycled Content
- Hanover: only manufacturer? (consider transport costs)
- some have high SRI (to aid in reduction of heat island effect)



Plum Blossoms

# PAVING CONCEPT

Tawamaga Sobatsue

Formless by The  
Rena Schald, DeWitt art

Theodore Roethlis  
"Oyster River Sequence"

11. May 2016. CSE Plaza and Stevens Way. U.W.

Stamped Blossoms  
and leafy frigs

"Where is  
The Moon"  
Autumn poem

Capital  
calligraphy by Hor'ami / flowing cursive style

Raked gravel

Gary Sneider  
"River and Mountain  
in our End"

Edo Mountain poet.  
Japanese / Zen about

Li Po, Tu Fu  
Chinese court-recess  
poems

Ground  
concrete, radial  
swirls.  
Waves, Raked gravel  
pattern

Poems in  
plaza

Poems in  
plaza













KOATSU + SOTATSU





# STORMWATER MANAGEMENT STRATEGY

- IMPERMEABLE SURFACES**
- 6,985 SF  Pollution-generating impervious surface
  - 11,555 SF  Paved surface - collected
  - 17,403 SF  Paved surface - uncollected
  - 5,928 SF  Roof - most potential for collection - TBD
  - 28,260 SF  Roof - least potential for collection - TBD

- MANAGEMENT APPROACH**
- 1,715 SF  Potential Biofilter Planter Areas
  -  Newly Planted Tree
  -  Cartridge Filter
  -  Surface flow
  -  Piped flow

Based on a total potential collection area of 17,483 SF, approximately 875 SF of planter area is required, using a ration of 20:1.





Benton Lane

MECHANICAL ENGINEERING BUILDING

POWER PLANT

OIL TANK ACCESS HATCHES

Porch

Mechanical Engineering Entry

Nested Lawn

Woodland Stair

Woodland Stair

PAUL G. ALLEN CENTER FOR COMPUTER SCIENCE & ENGINEERING

Shared Plaza

COMPUTER SCIENCE AND ENGINEERING II

JEFFERSON ROAD

MASON ROAD

Stevens Way

More Hall Entry

Woodland Overlook

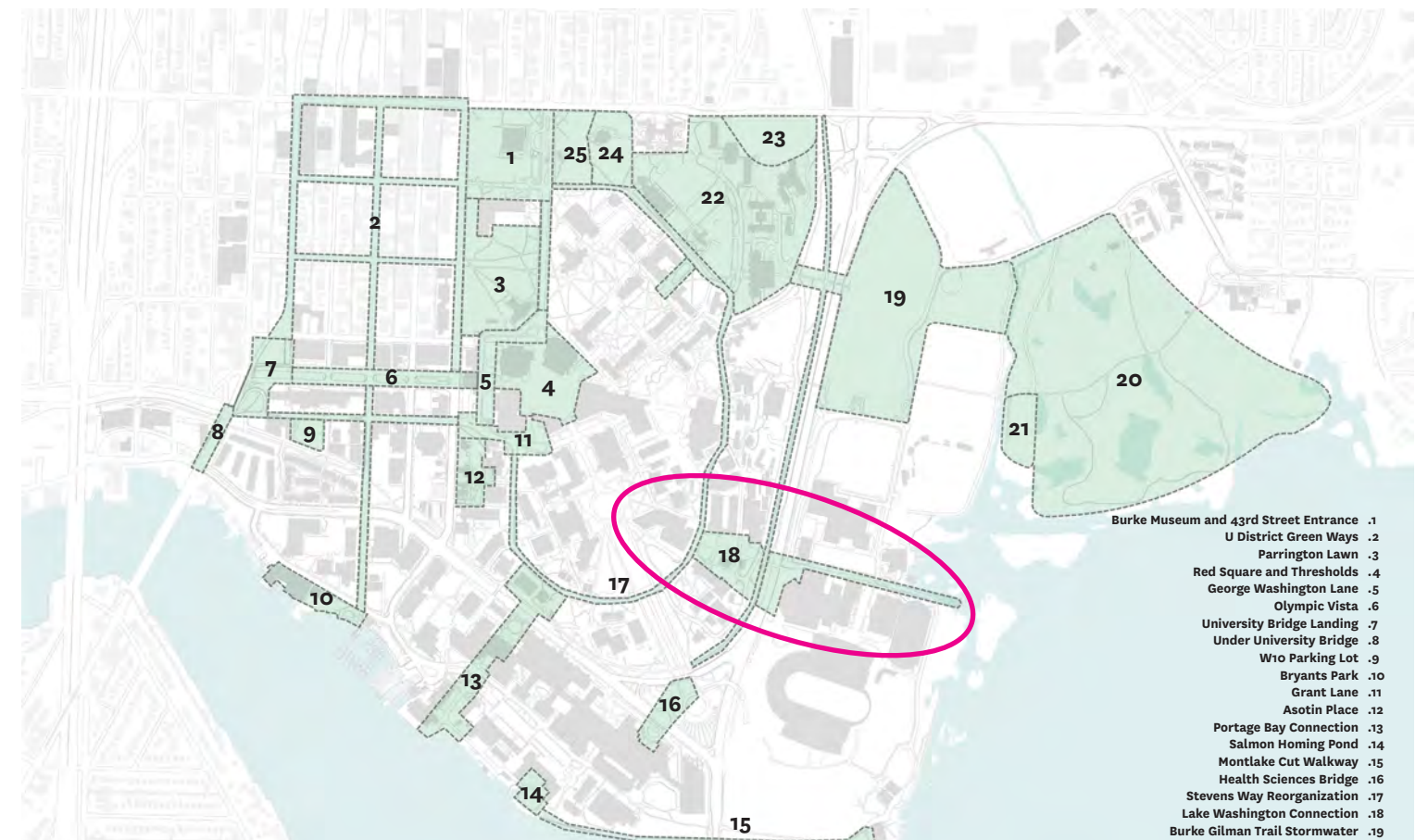
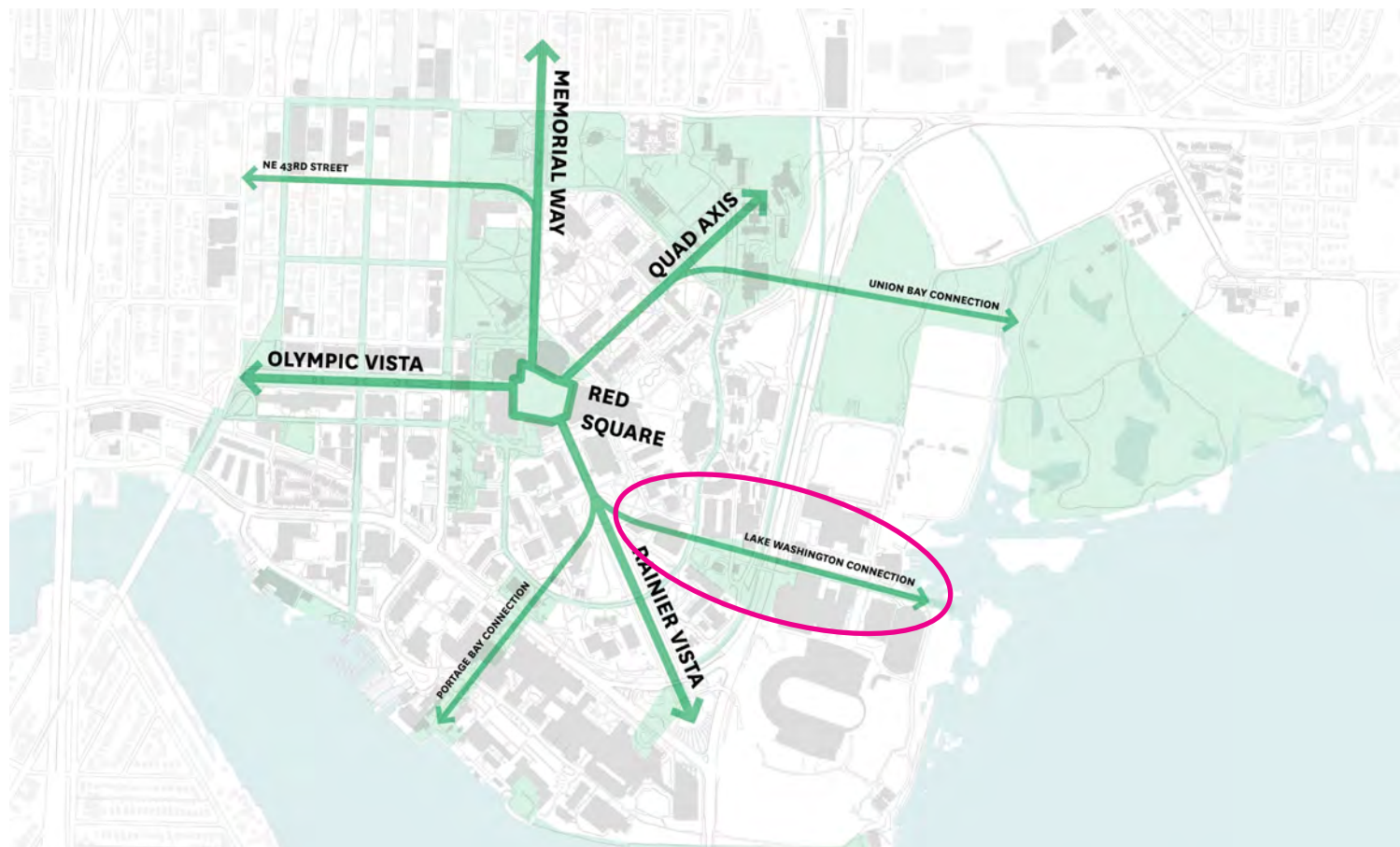
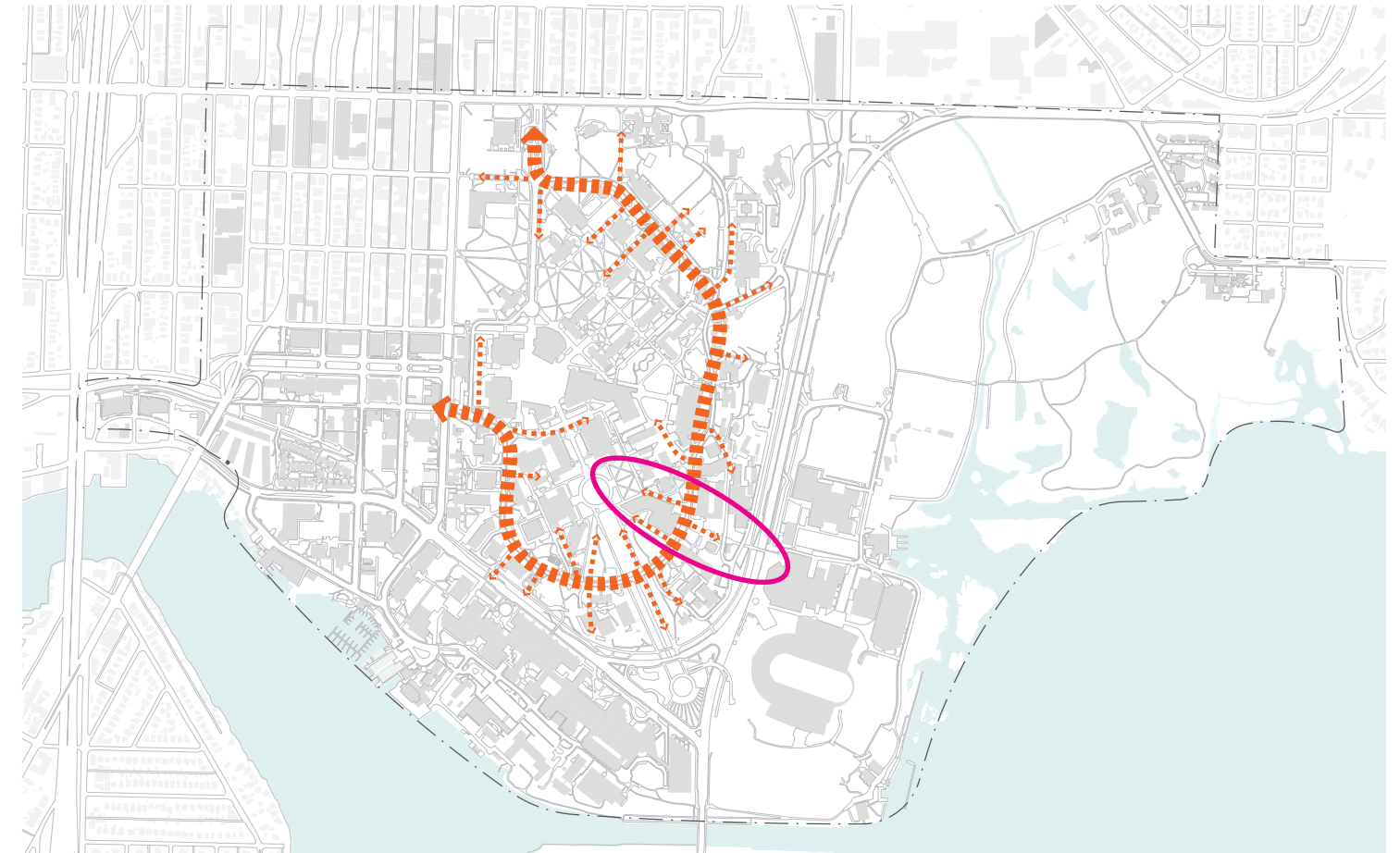
MORE HALL

BURKE-GILMAN TRAIL

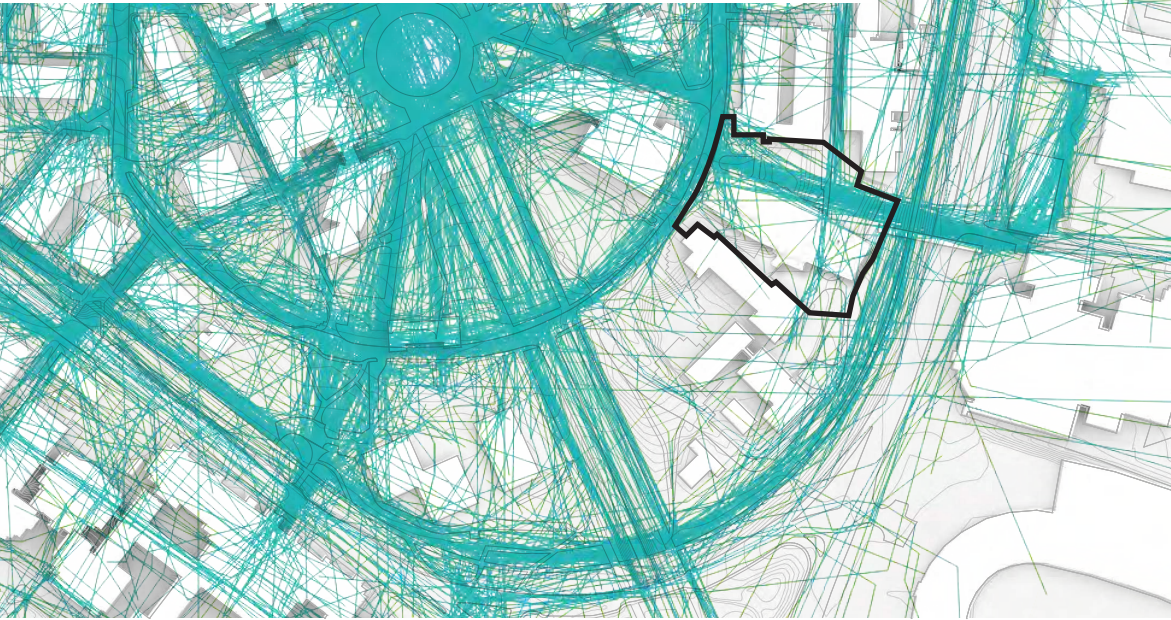
FUTURE BRIDGE LOCATION



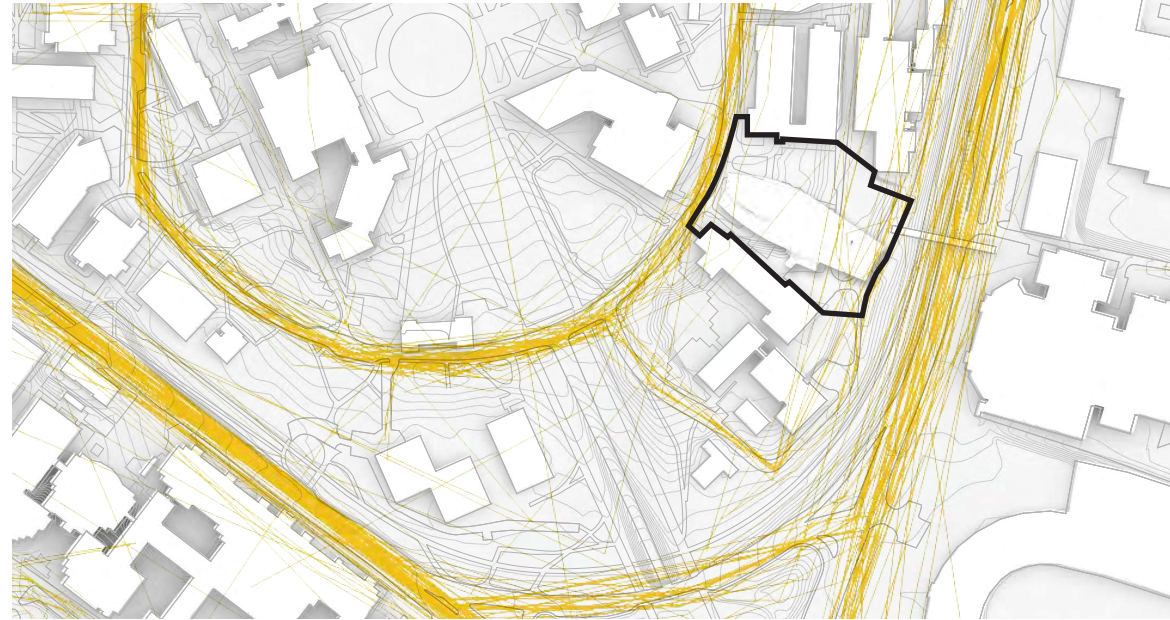
# CAMPUS FRAMEWORK



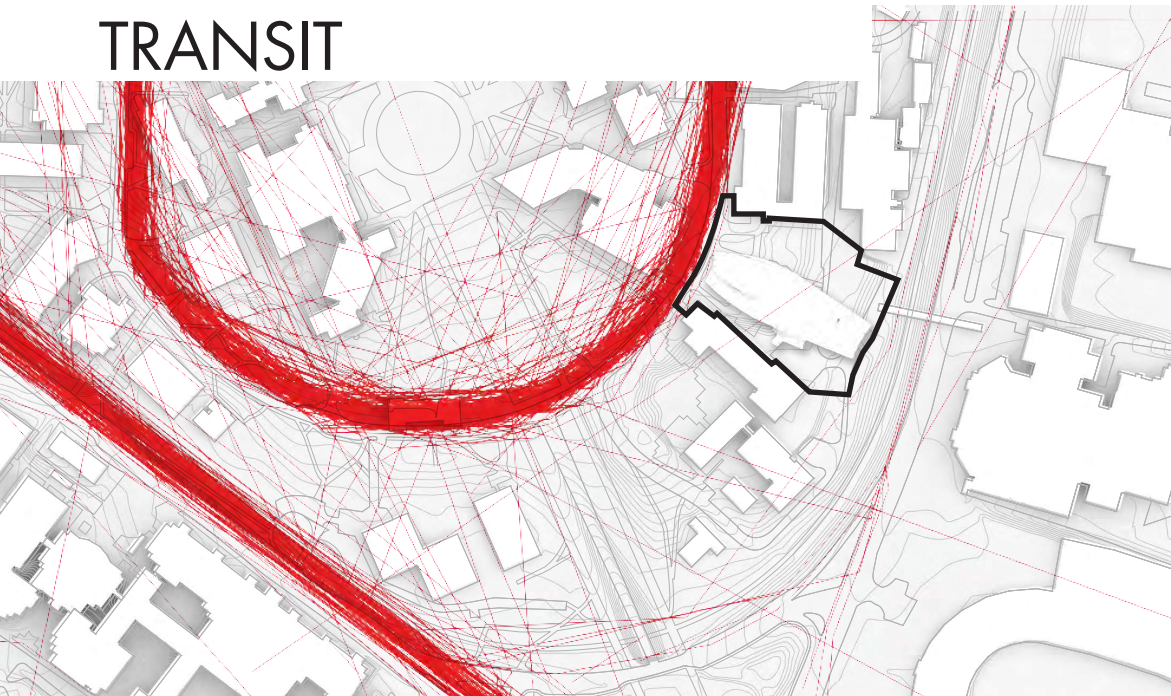
PEDESTRIANS



CARS



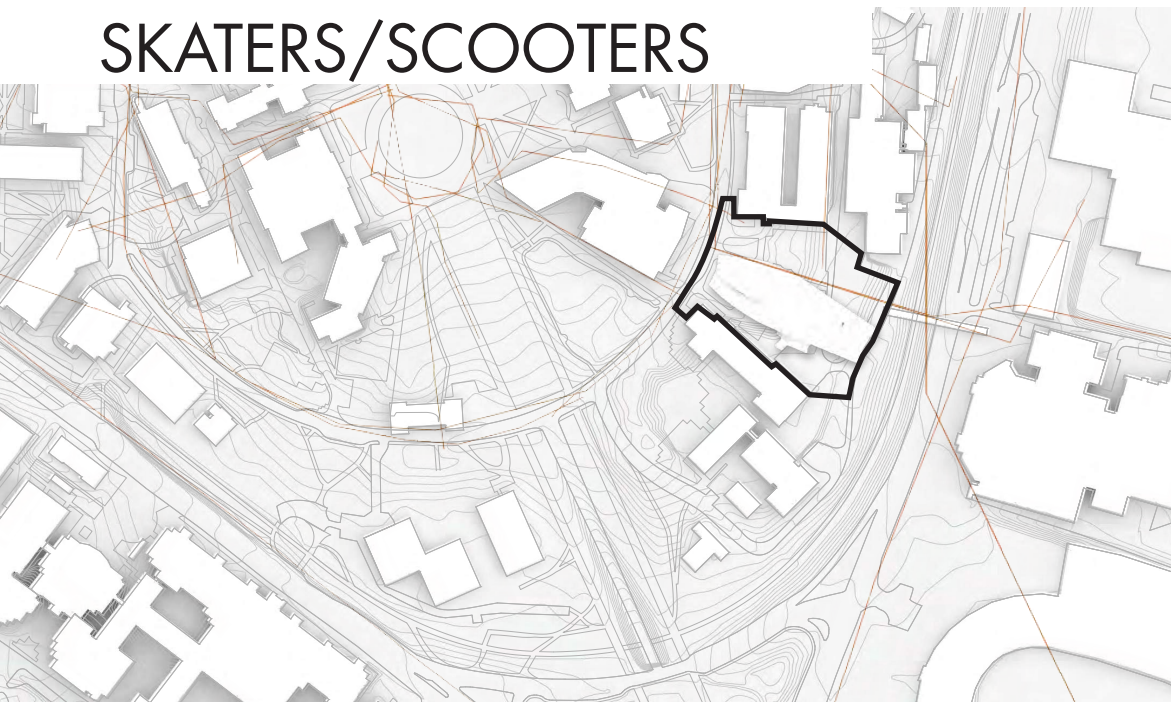
TRANSIT



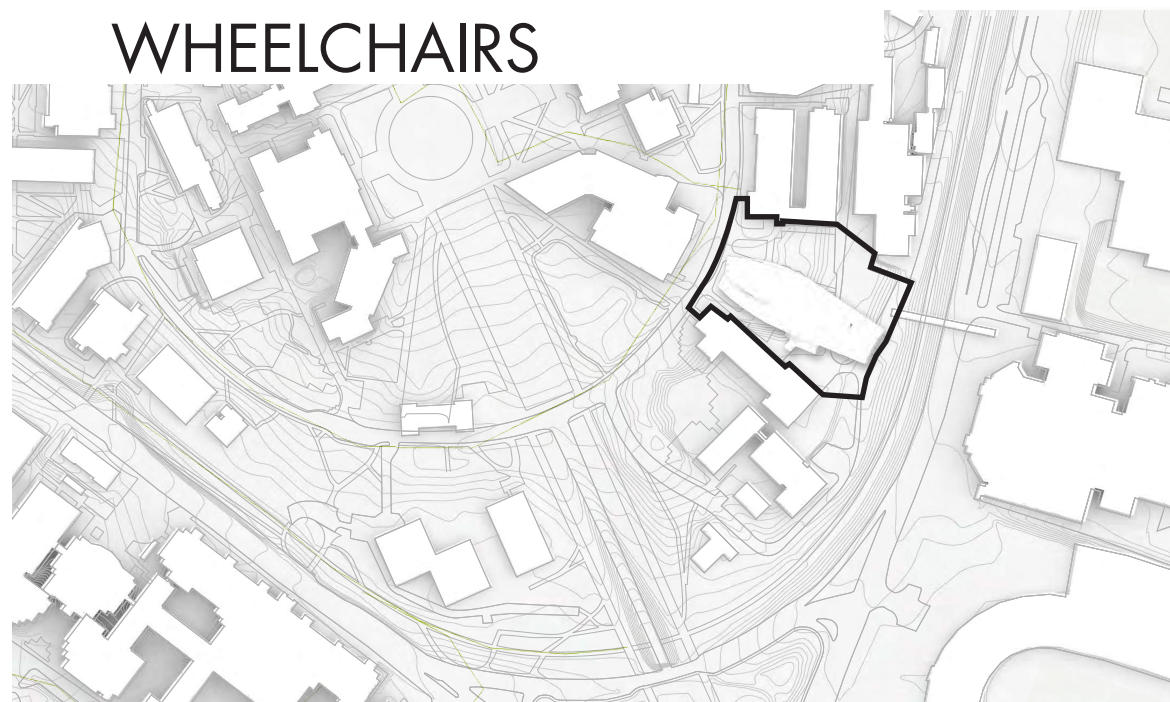
BIKES



SKATERS/SCOOTERS

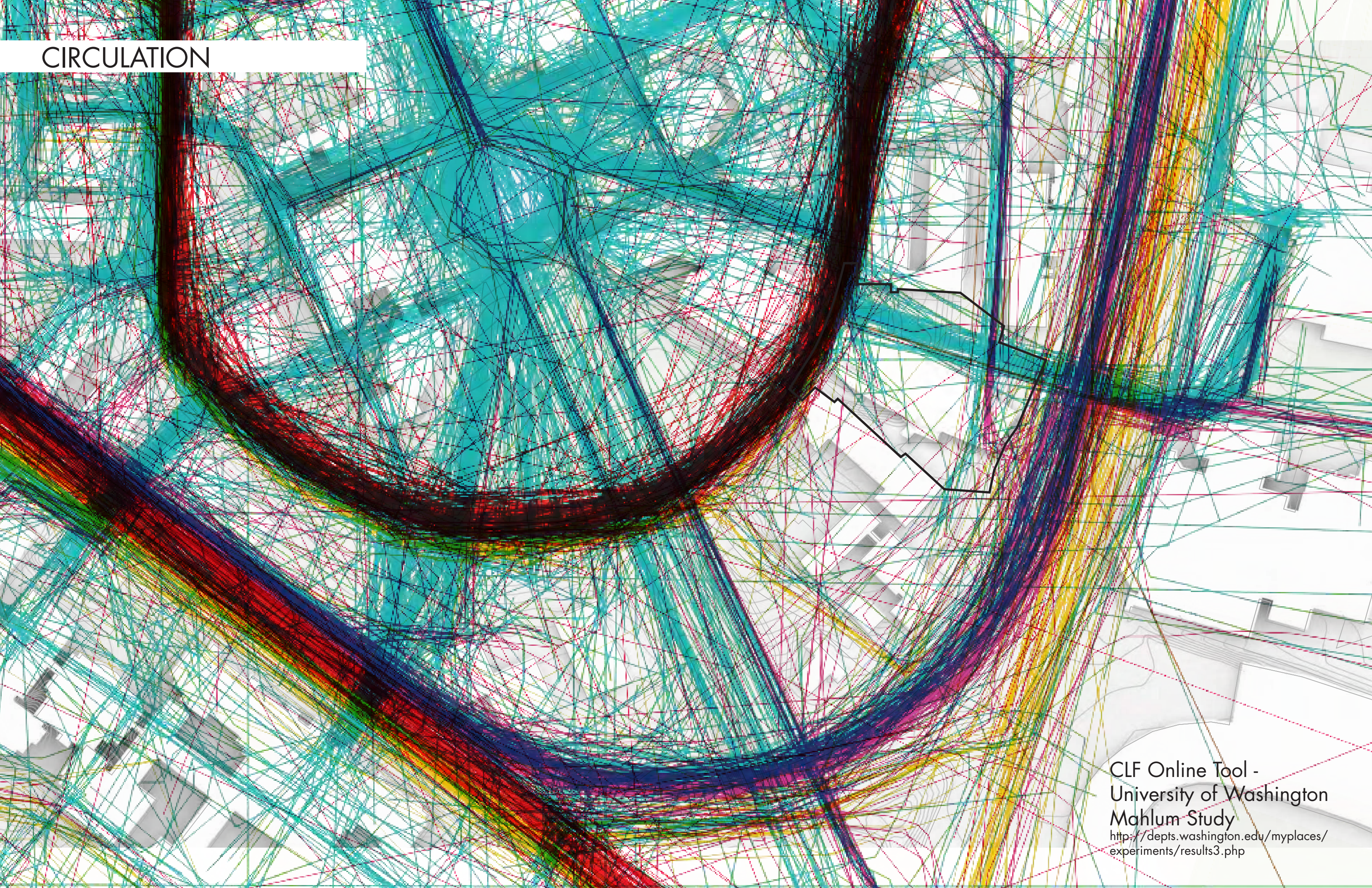


WHEELCHAIRS

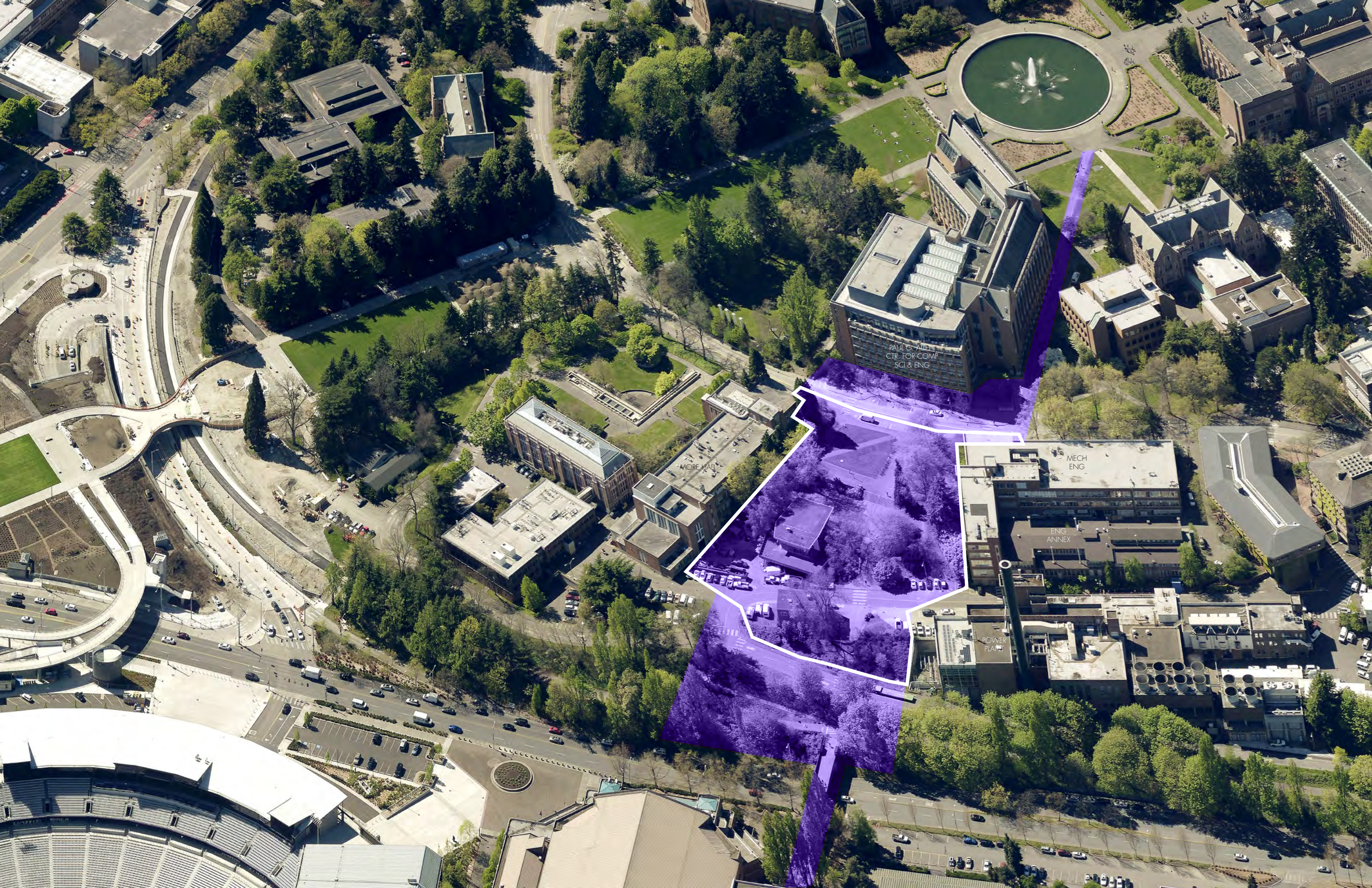


- CLF Online Tool - University of Washington Mahlum Study <http://depts.washington.edu/myplaces/experiments/results3.php>
- Key location between well-used pedestrian routes
- Sandwiched between transit, car and bike routes.

# CIRCULATION



CLF Online Tool -  
University of Washington  
Mahlum Study  
<http://depts.washington.edu/myplaces/experiments/results3.php>



PAUL G. ALLEN  
CTR. FOR COMP  
SCI & ENG

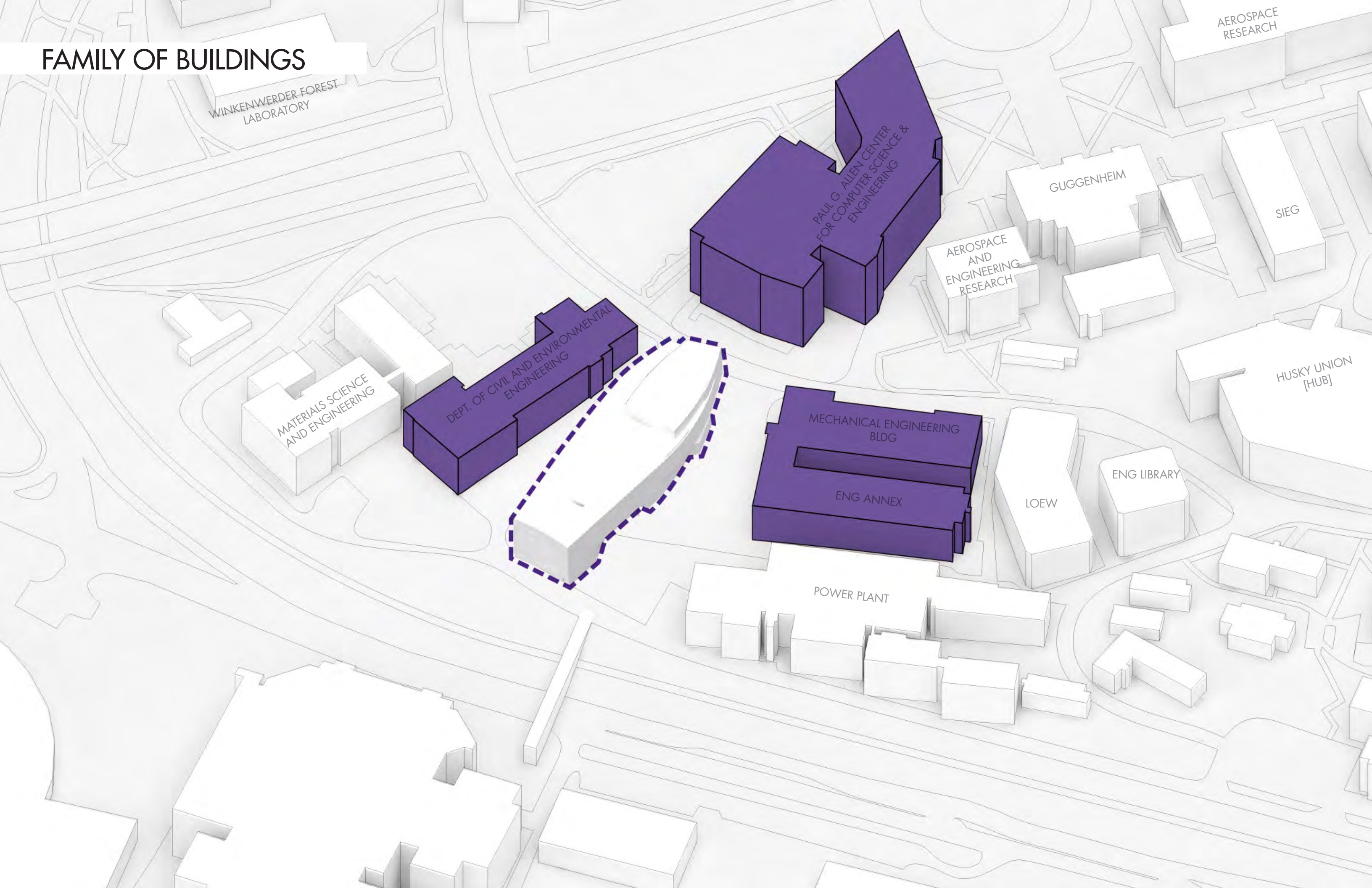
MORE HALL

MECH  
ENG

ENG  
ANNEX

POWER  
PLANT

# FAMILY OF BUILDINGS



WINKENWERDER FOREST  
LABORATORY

MATERIALS SCIENCE  
AND ENGINEERING

DEPT. OF CIVIL AND ENVIRONMENTAL  
ENGINEERING

PAUL G. ALLEN CENTER  
FOR COMPUTER SCIENCE &  
ENGINEERING

MECHANICAL ENGINEERING  
BLDG

ENG ANNEX

POWER PLANT

AEROSPACE  
AND  
ENGINEERING  
RESEARCH

LOEW

ENG LIBRARY

GUGGENHEIM

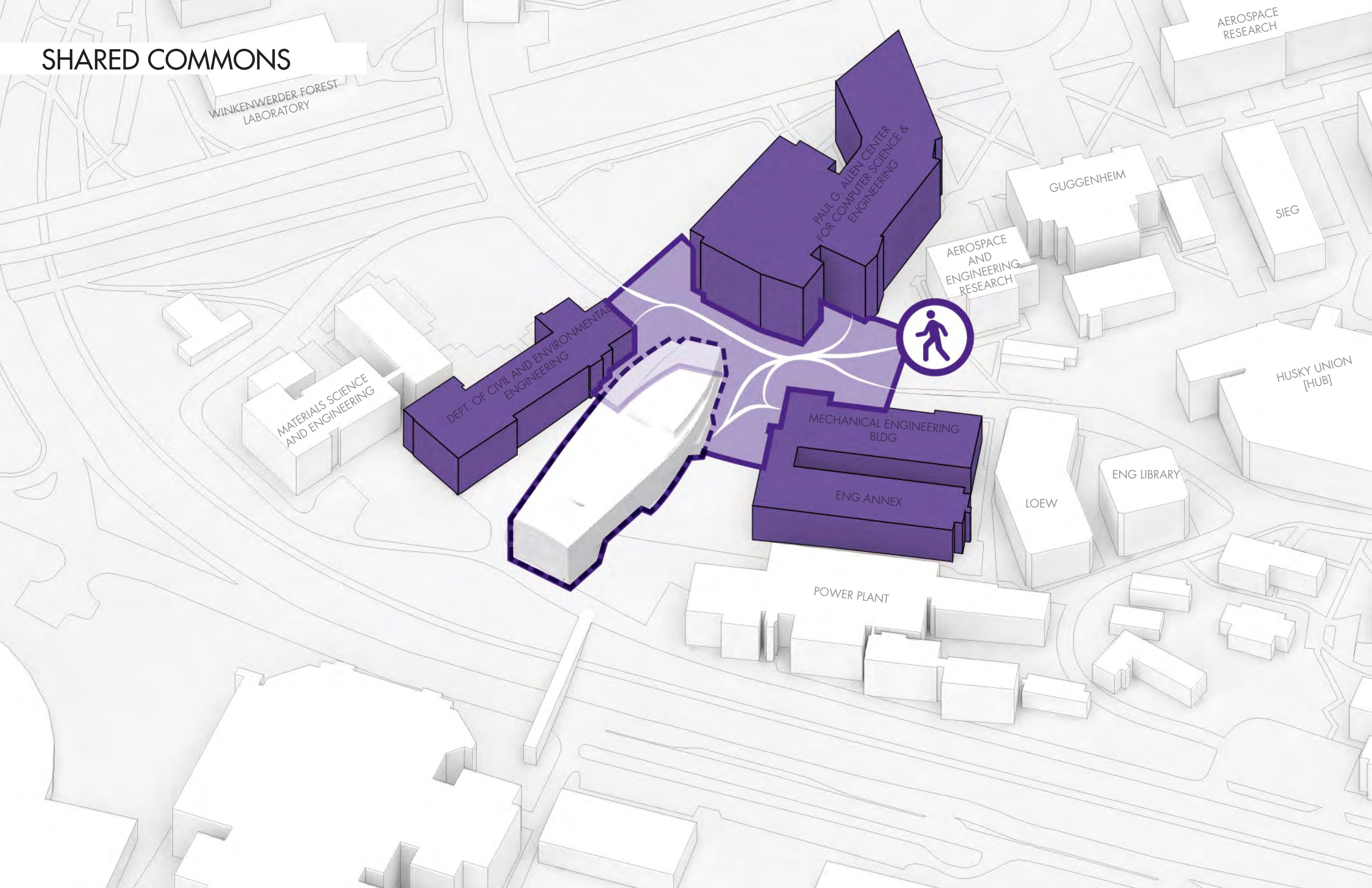
SIEG

AEROSPACE  
RESEARCH

HUSKY UNION  
[HUB]



# SHARED COMMONS



WINKENWERDER FOREST  
LABORATORY

MATERIALS SCIENCE  
AND ENGINEERING

DEPT. OF CIVIL AND ENVIRONMENTAL  
ENGINEERING

PAUL G. ALLEN CENTER  
FOR COMPUTER SCIENCE &  
ENGINEERING

AEROSPACE  
AND  
ENGINEERING  
RESEARCH

GUGGENHEIM

SIEG

HUSKY UNION  
[HUB]

MECHANICAL ENGINEERING  
BLDG

ENG ANNEX

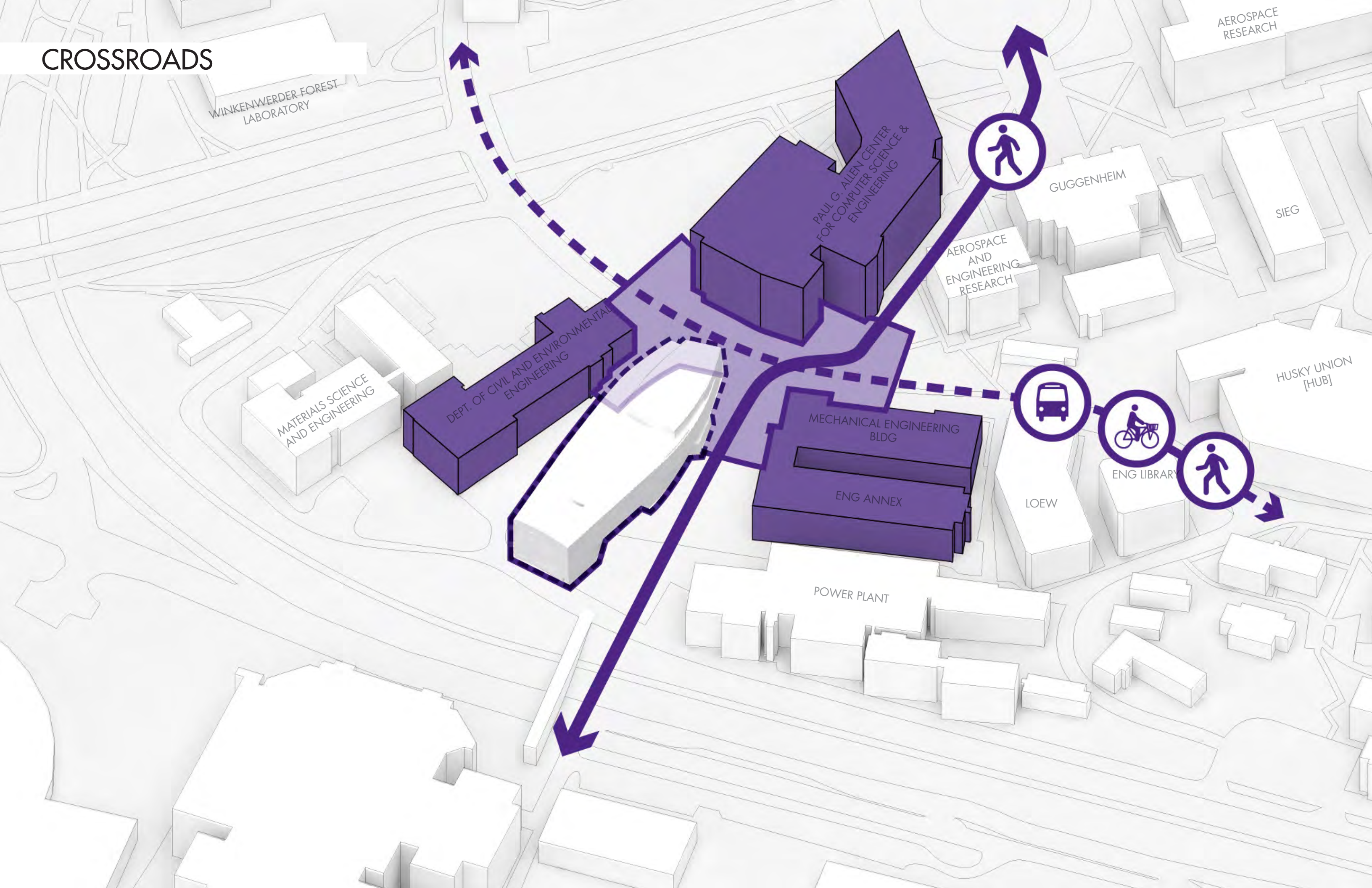
ENG LIBRARY

LOEW

POWER PLANT

AEROSPACE  
RESEARCH

# CROSSROADS



# REMNANT FOREST

WINKENWERDER FOREST LABORATORY

MATERIALS SCIENCE AND ENGINEERING

DEPT. OF CIVIL AND ENVIRONMENTAL ENGINEERING

PAUL G. ALLEN CENTER FOR COMPUTER SCIENCE & ENGINEERING

AEROSPACE AND ENGINEERING RESEARCH

GUGGENHEIM

SIEG

HUSKY UNION [HUB]

MECHANICAL ENGINEERING BLDG

ENG ANNEX

ENG LIBRARY

LOEW

POWER PLANT

AEROSPACE RESEARCH



AEROSPACE RESEARCH

MECHANICAL ENGINEERING BLDG

ENG ANNEX

ENG LIBRARY

LOEW

POWER PLANT

HUSKY UNION [HUB]

AEROSPACE RESEARCH

GUGGENHEIM

SIEG

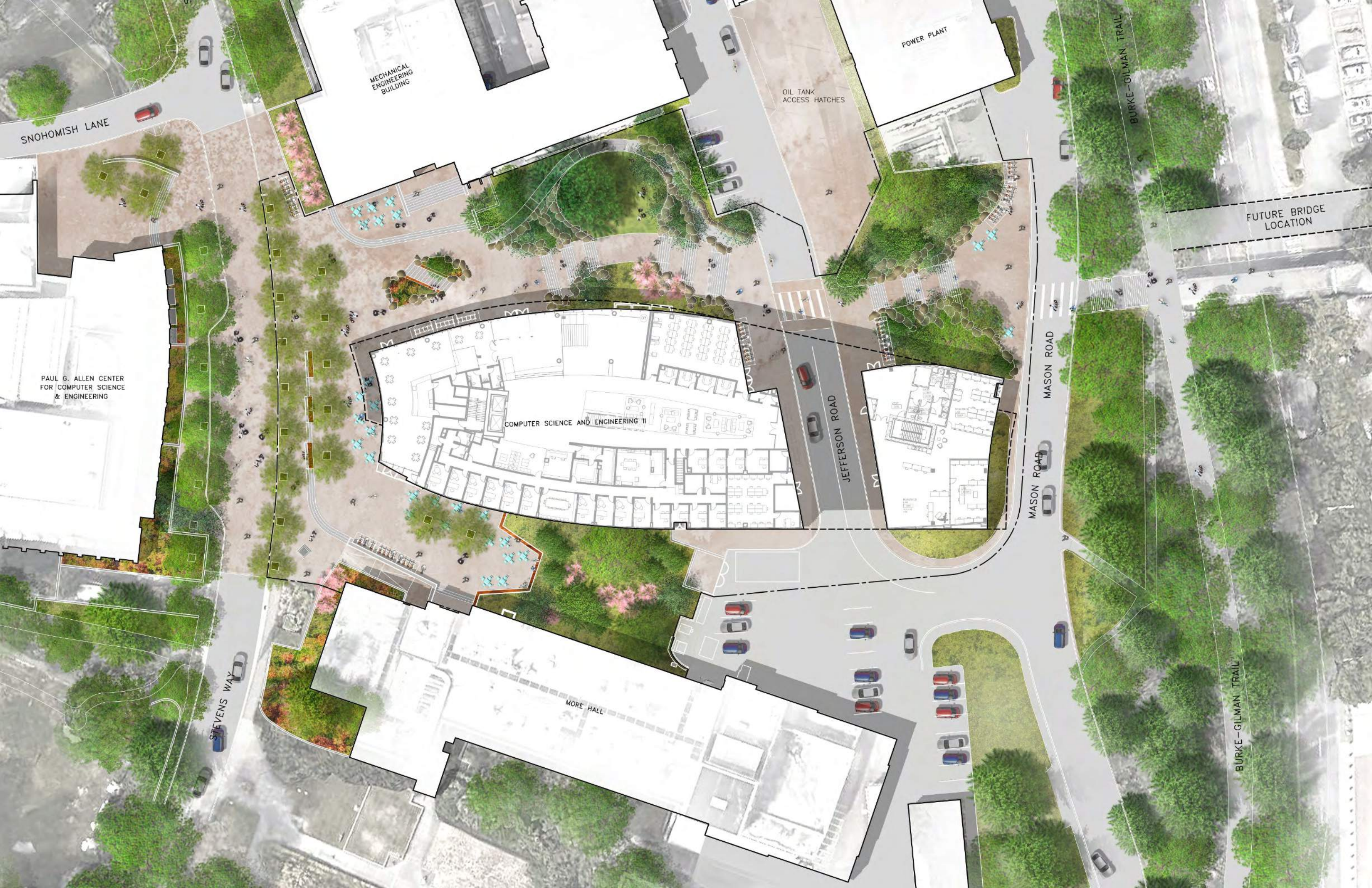
AEROSPACE AND ENGINEERING RESEARCH

PAUL G. ALLEN CENTER FOR COMPUTER SCIENCE & ENGINEERING

DEPT. OF CIVIL AND ENVIRONMENTAL ENGINEERING

MATERIALS SCIENCE AND ENGINEERING

WINKENWERDER FOREST LABORATORY



SNOHOMISH LANE

MECHANICAL ENGINEERING BUILDING

POWER PLANT

OIL TANK ACCESS HATCHES

PAUL G. ALLEN CENTER FOR COMPUTER SCIENCE & ENGINEERING

COMPUTER SCIENCE AND ENGINEERING II

JEFFERSON ROAD

MASON ROAD

STEVENS WAY

MORE HALL

FUTURE BRIDGE LOCATION

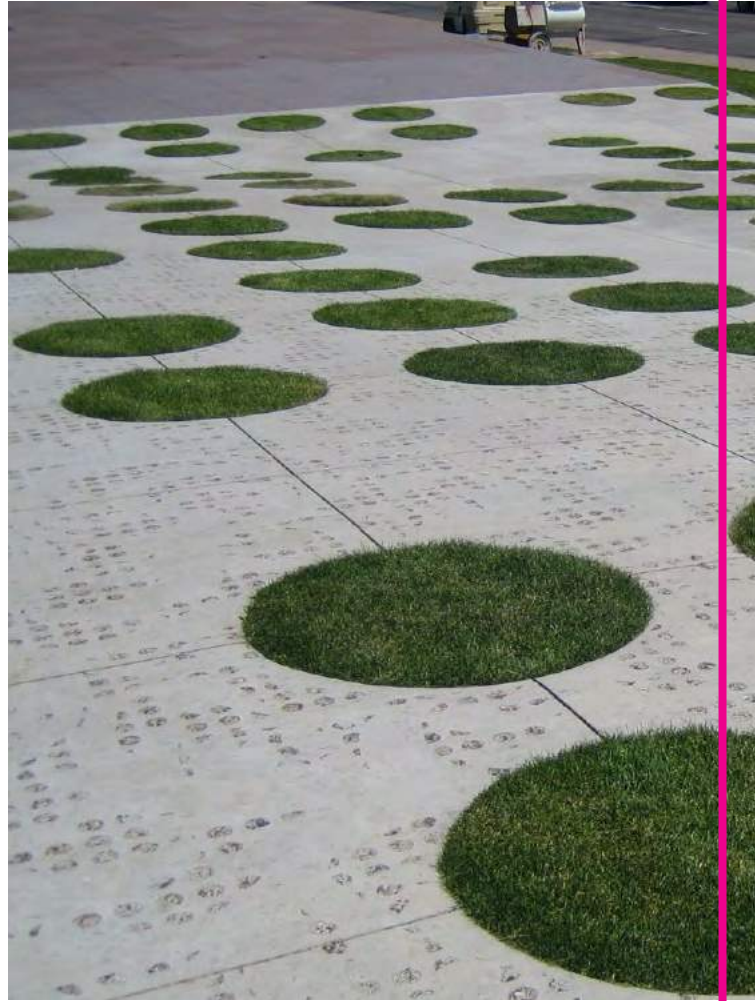
BURKE-GILMAN TRAIL

# PAVING CONCEPTS

## CONCRETE IMPRESSIONS



BRUSHED CONCRETE TEXTURE



WALKER ART CENTER | MINNEAPOLIS, MN, US



NORMAND PARK | LONDON, UK



KVAESTHUS | COPENHAGEN, DK



# Snohomish - *Sdoh-doh-hobsh*

*The Coast Salish peoples recognized Salmon as beings spiritually superior to humanity.*

## **Southern Lushootseed salmonoid vocabulary** [\[ edit \]](#)

**sčədadx<sup>w</sup>**

a word that covers all Pacific salmon and some species of trout.

**sačəb**

Chinook or King

**c'uwad**

sockeye salmon

**skwəxwic**

coho salmon

**łxway'**

chum salmon

**hədu**

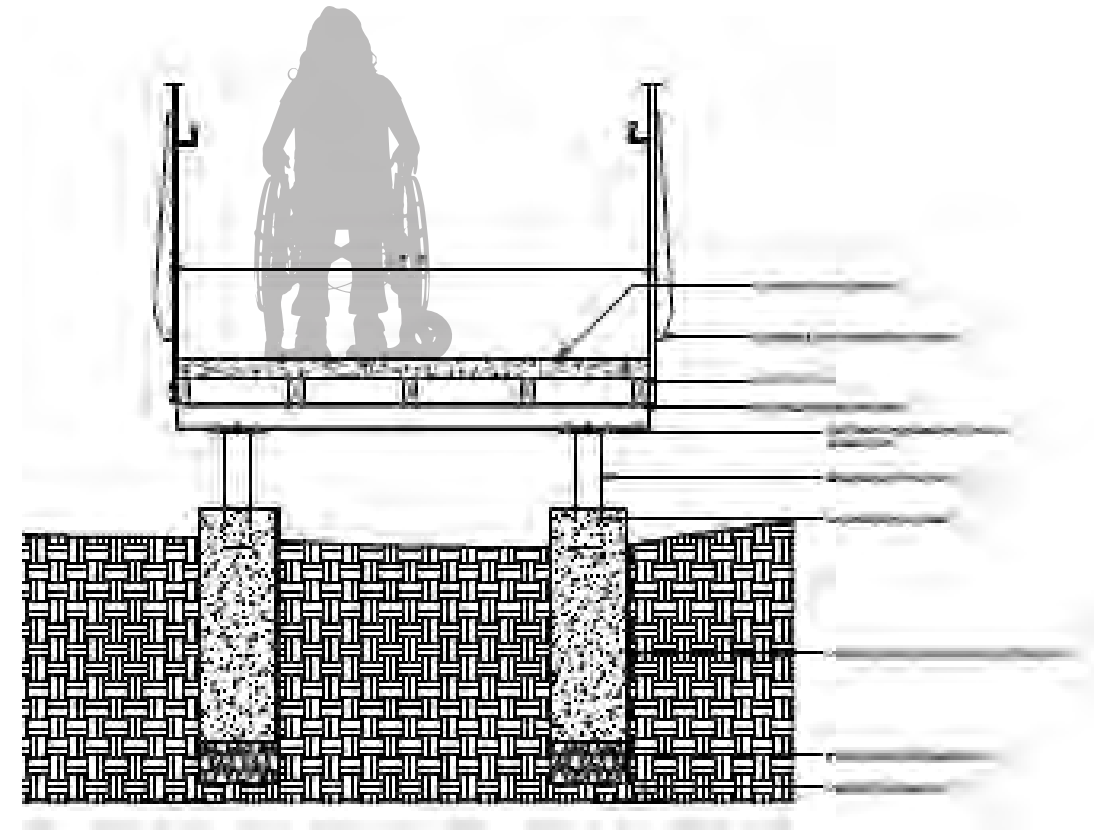
the pink salmon

**skwawəl'**

steelhead

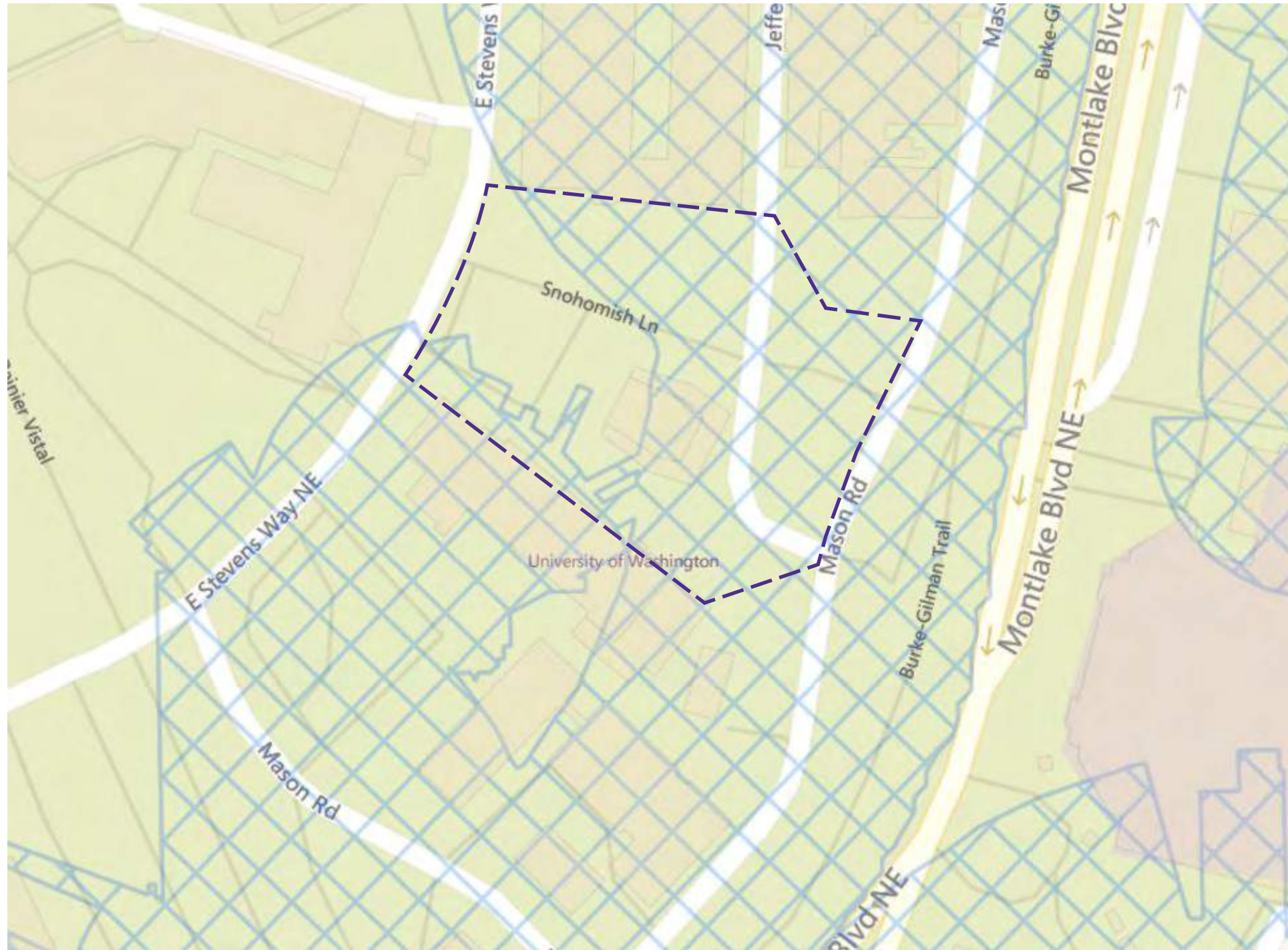


# NESTED LAWN - ADA RAMP





# STORMWATER MANAGEMENT



Seattle Infiltration Mapping - "feasibility not required"

## INFEASIBILITY CRITERIA

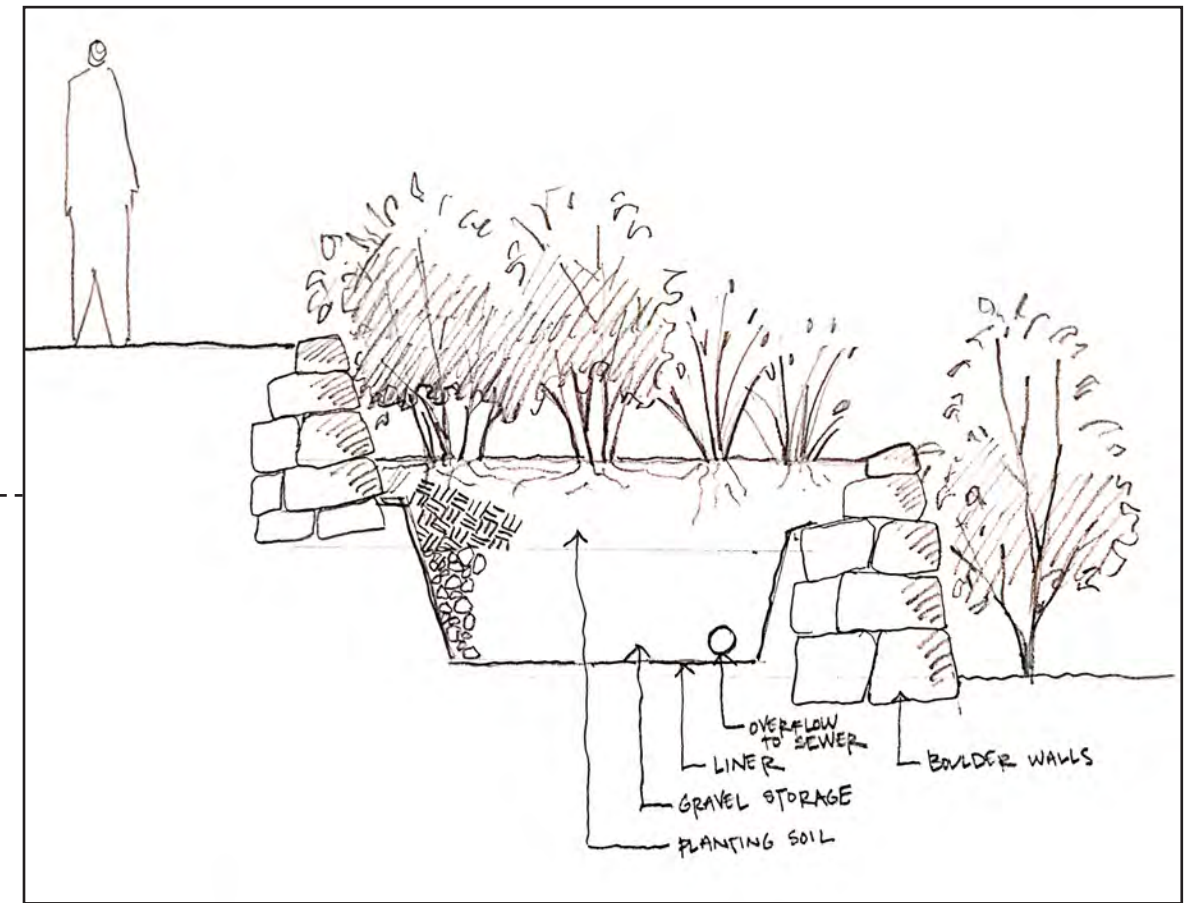
- Full Dispersion
- Infiltration Trench
- Drywell
- Raingarden
- Infiltrating Bioretention
- Rainwater Harvesting
- Permeable Pavement Facility
- Permeable Pavement Surface
- Sheet Flow Dispersion
- Concentrated Dispersion
- Splashback Downspout Dispersion
- Trench Downspout Dispersion

## ✓ **Non-Infiltrating Bioretention**

- Vegetated Roof
- Single Family Residential Cistern
- Perforated Stub Out Connection

## ✓ **Newly Planted Tree**

# STORMWATER MANAGEMENT PLANTERS



# BIKE PARKING



TOTAL  
**110**  
(85 req.)



# LOADING PARKING SPOTS EXISTING



SNOHOMISH LANE

STEVENS

MECHANICAL  
ENGINEERING  
BUILDING

POWER PLANT

OIL TANK  
ACCESS HATCHES

PAUL G. ALLEN CENTER  
FOR COMPUTER SCIENCE  
& ENGINEERING

COMPUTER SCIENCE AND ENGINEERING II

JEFFERSON ROAD

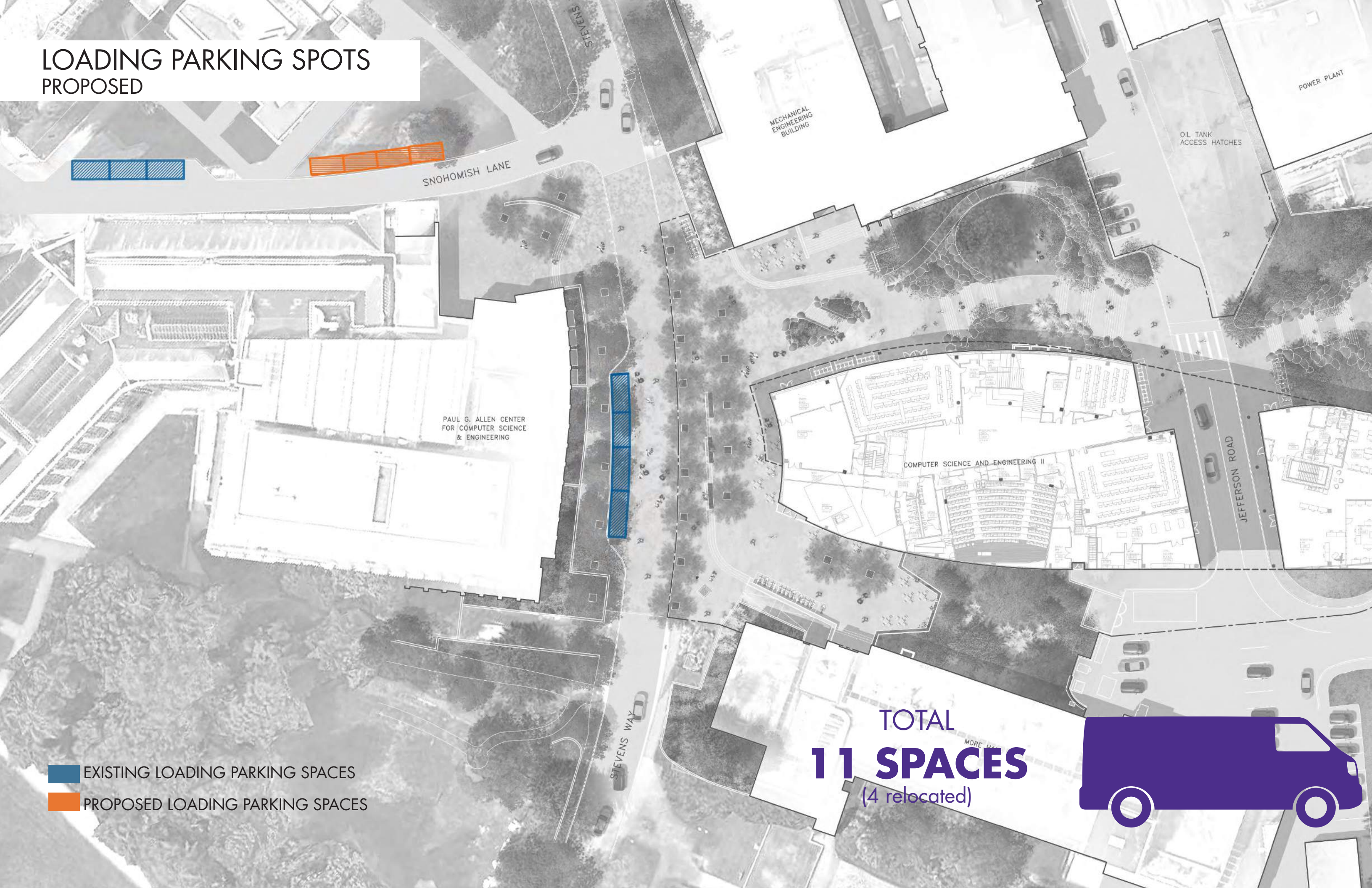
STEVENS WAY

TOTAL  
**11 SPACES**

EXISTING LOADING PARKING SPACES



# LOADING PARKING SPOTS PROPOSED



SNOHOMISH LANE

STEVENS

MECHANICAL  
ENGINEERING  
BUILDING

POWER PLANT

OIL TANK  
ACCESS HATCHES



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& ENGINEERING

COMPUTER SCIENCE AND ENGINEERING II

JEFFERSON ROAD

STEVENS WAY

MORE

-  EXISTING LOADING PARKING SPACES
-  PROPOSED LOADING PARKING SPACES

TOTAL  
**11 SPACES**  
(4 relocated)



# LOADING PARKING SPOTS PROPOSED



SNOHOMISH LANE

MECHANICAL  
ENGINEERING  
BUILDING

POWER PLANT

OIL TANK  
ACCESS HATCHES

PAUL G. ALLEN CENTER  
FOR COMPUTER SCIENCE  
& ENGINEERING

COMPUTER SCIENCE AND ENGINEERING II

JEFFERSON ROAD

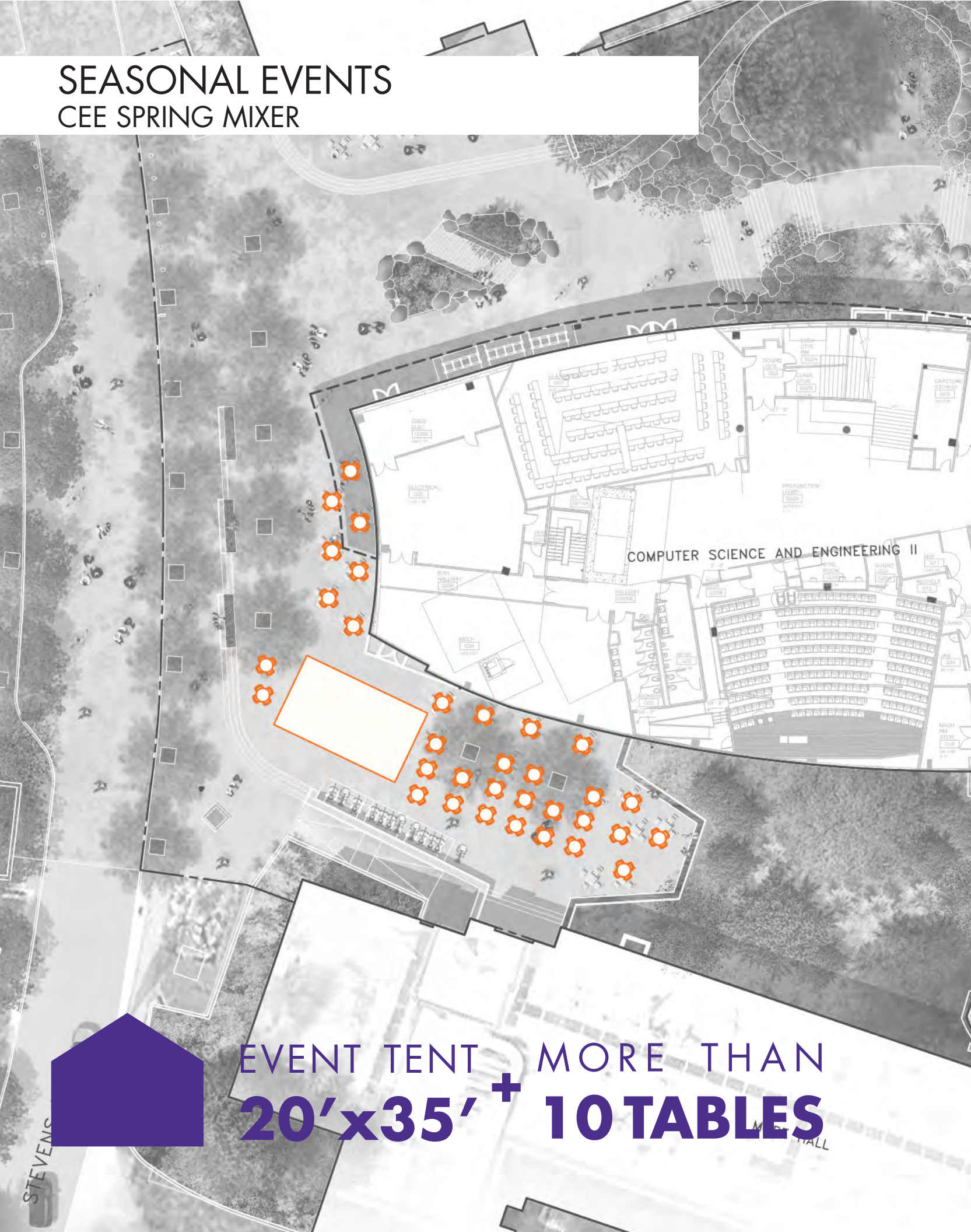
STEVENS WAY

-  EXISTING LOADING PARKING SPACES
-  PROPOSED LOADING PARKING SPACES

TOTAL  
**11 SPACES**  
(6 relocated/reconfigured)



SEASONAL EVENTS  
CEE SPRING MIXER



EVENT TENT MORE THAN  
**20'x35' + 10 TABLES**

