

radha iyer

u. penn masters of architecture '28

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spring 2026	recipe pavilion	2nd place, schenk woodman comp.	3	collaborative work with Ella Matthews, Ian Zang all drawings own	
fall 2025	museum extension	univ. of pennsylvania arch 521	6	individual work	
	watering the plants	univ. of pennsylvania arch 501	7	individual work	
fall 2023	sfsu lca	ehdd + carbon leadership forum	8	collaborative work with ehdd all drawings own	
spring 2023	cultural kitchen	univ. of washington arch 402	10	collaborative design-build with studio + Prof. Steve Badanes	
spring 2022	albuquerque a.d.u.	univ. of washington arch 321	13	individual work	
fall 2021	precedent: chur	univ. of washington arch 300	14	collaborative work with Jorge Burke, Oleh Fylyk	
fall 2022	master planning	univ. of washington urbdp 498	15	individual work	

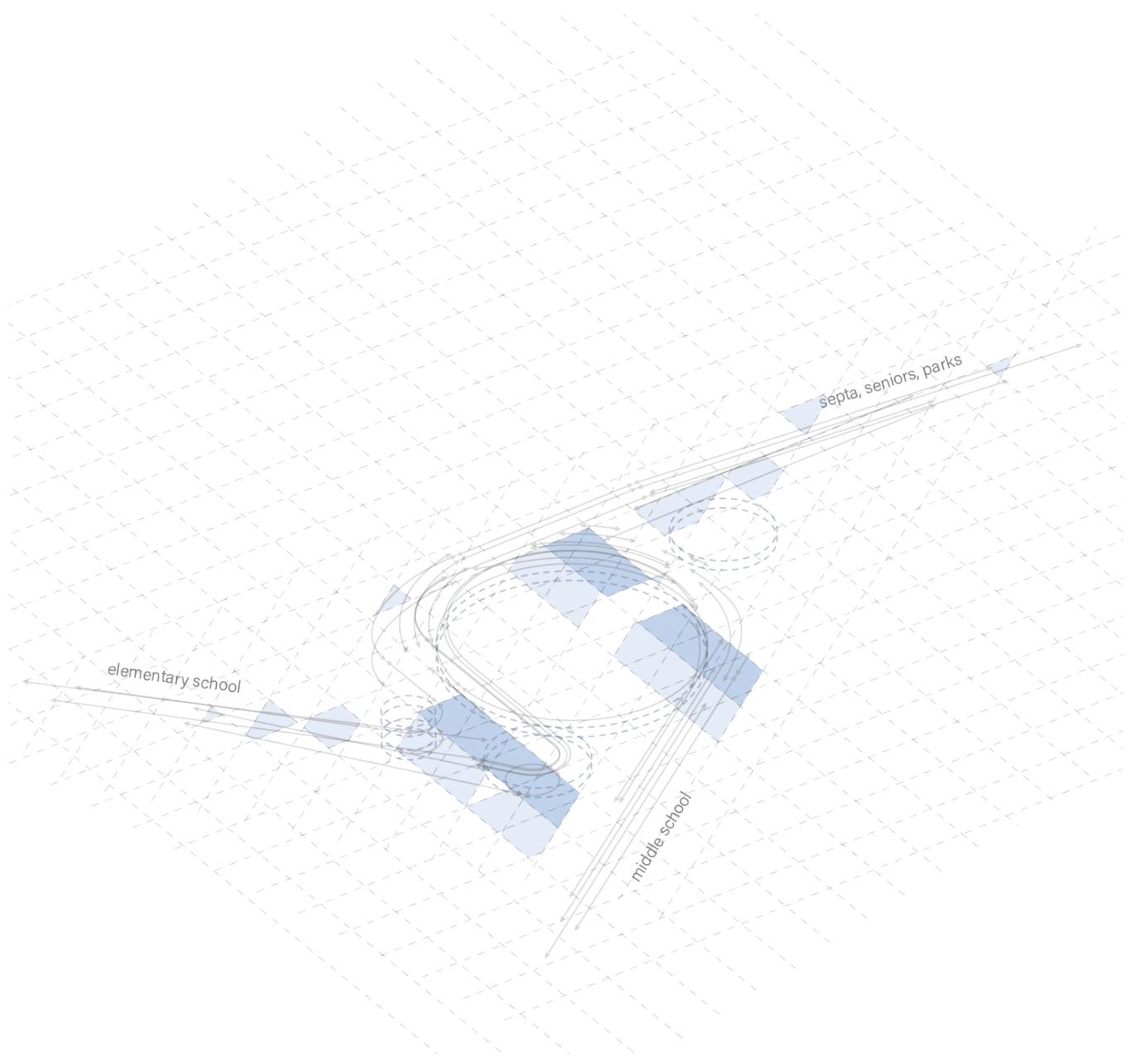


concept collage/diagram:
passing down a recipe

food and nature bring together
generations: every child loves
their grandmother's recipes and
the smell of freshly picked herbs.

recipe a multigenerationally collaborative pavilion for the Schenk-Woodman competition

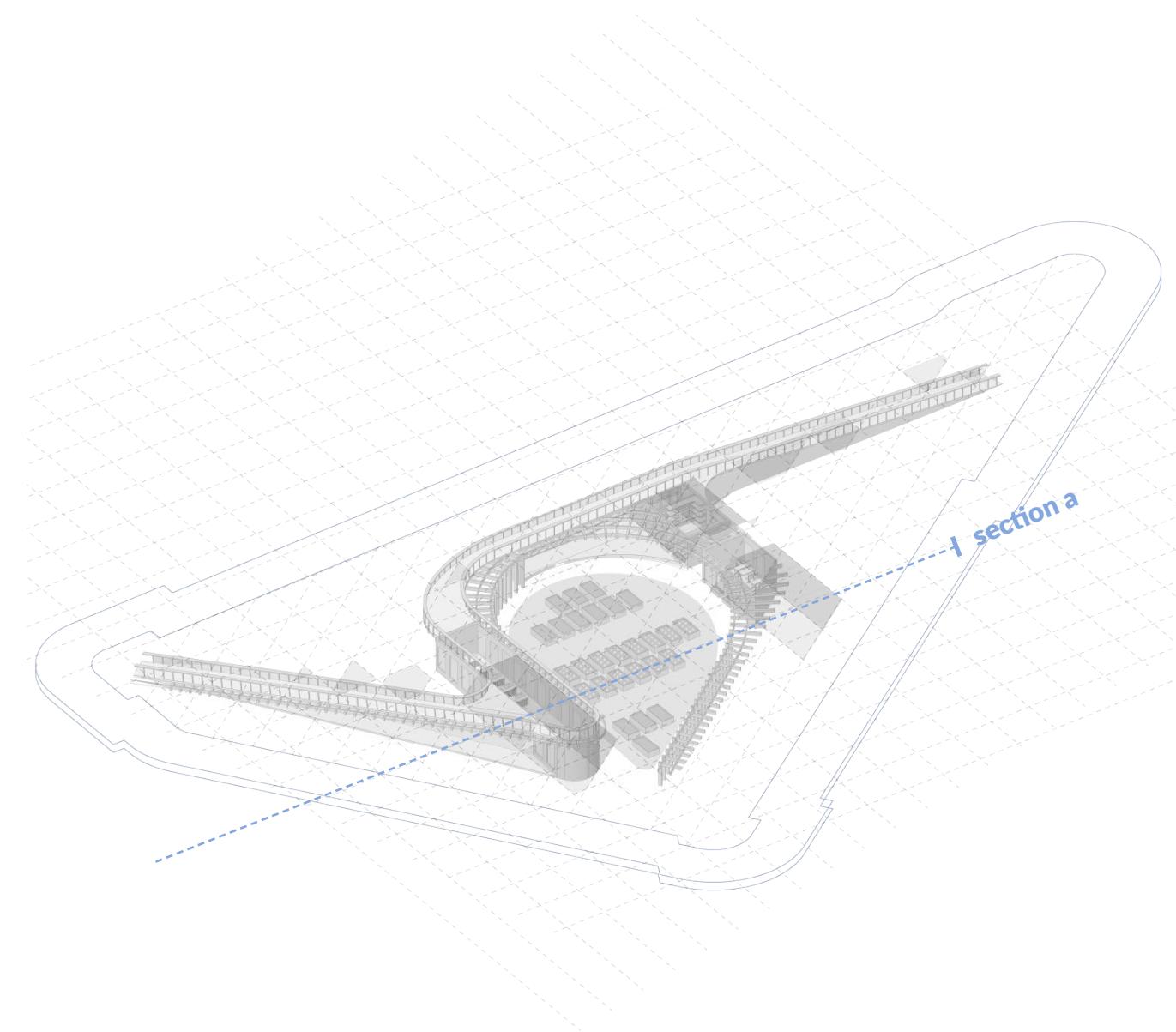
spring 2026



form-finding diagram:

the site + its occupants

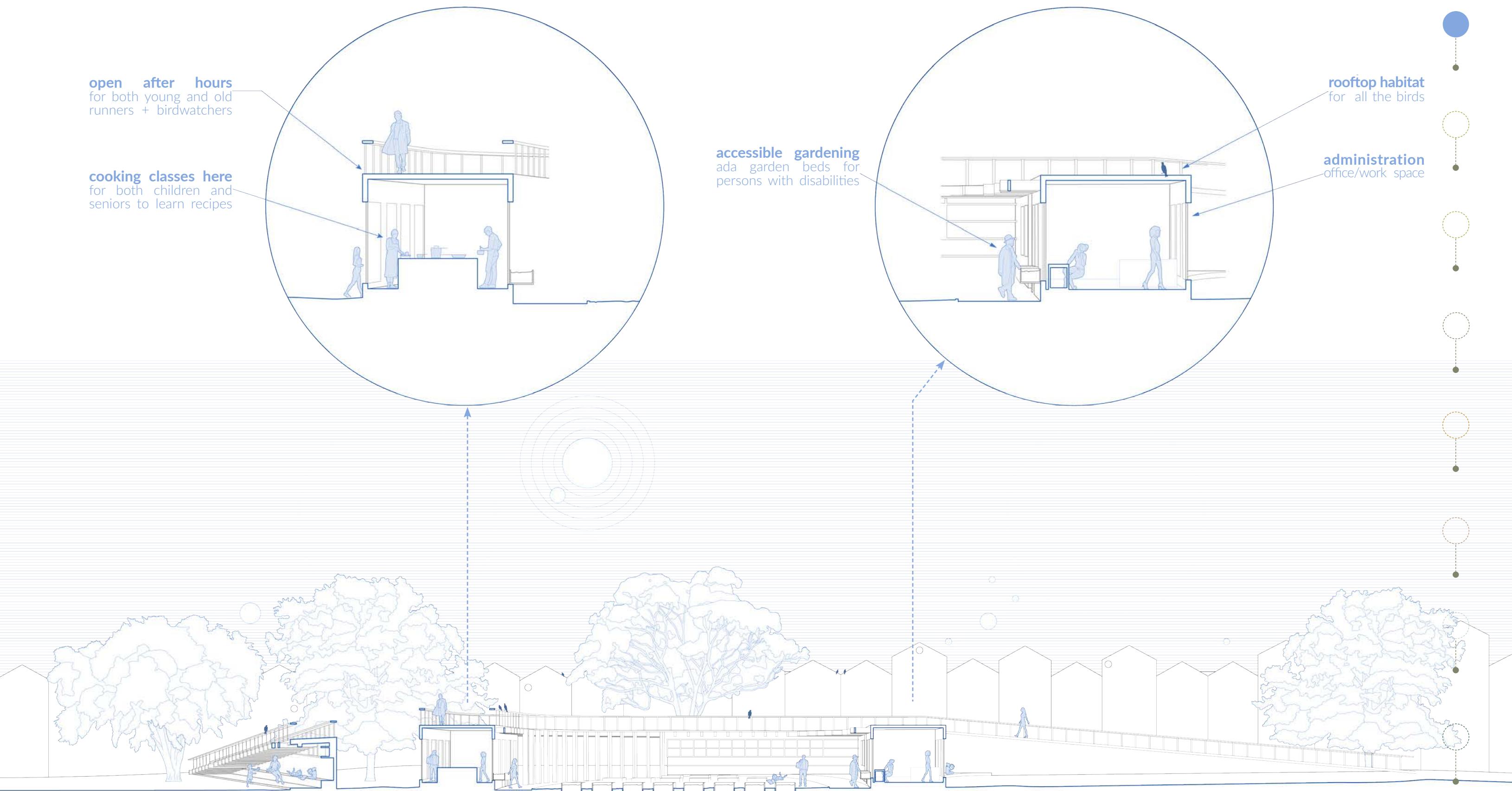
the community in the cobb's creek neighborhood around our site requested two things: an increase in programming for youth, and an increase in programming for seniors.



site axonometric diagram:

flowing around a garden

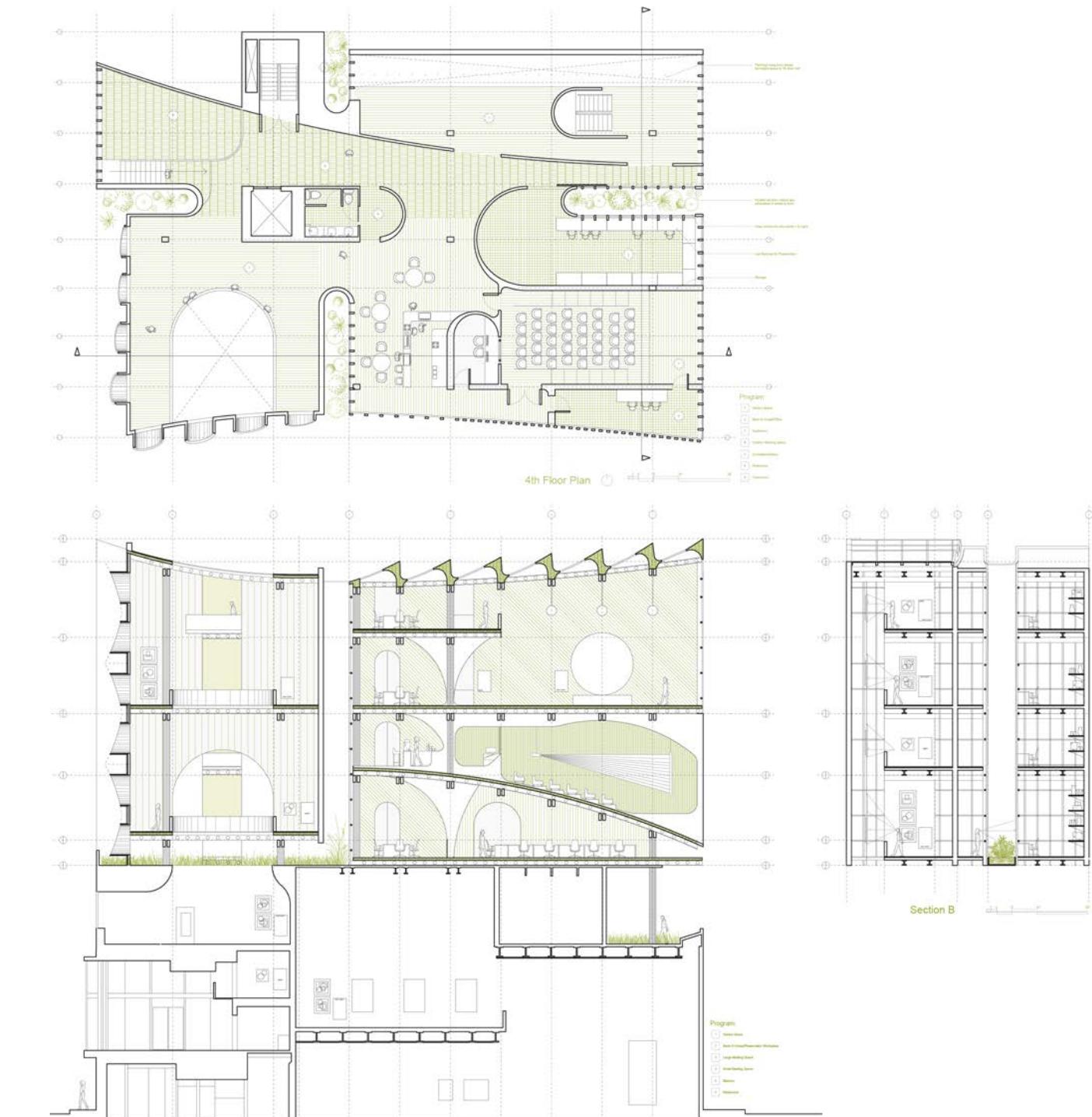
the competition prompt required that the enclosed structure have very little roof area to secure the site. we used ramps to do this in our project to create enclosure and avoid the fencing.



section a

recipe

spring 2026



cutting space with light:

a vertical extension to the institute of contemporary art. In plan and section, 5' circles divide space, 10' circles create smaller private spaces, 20' circles allow in light

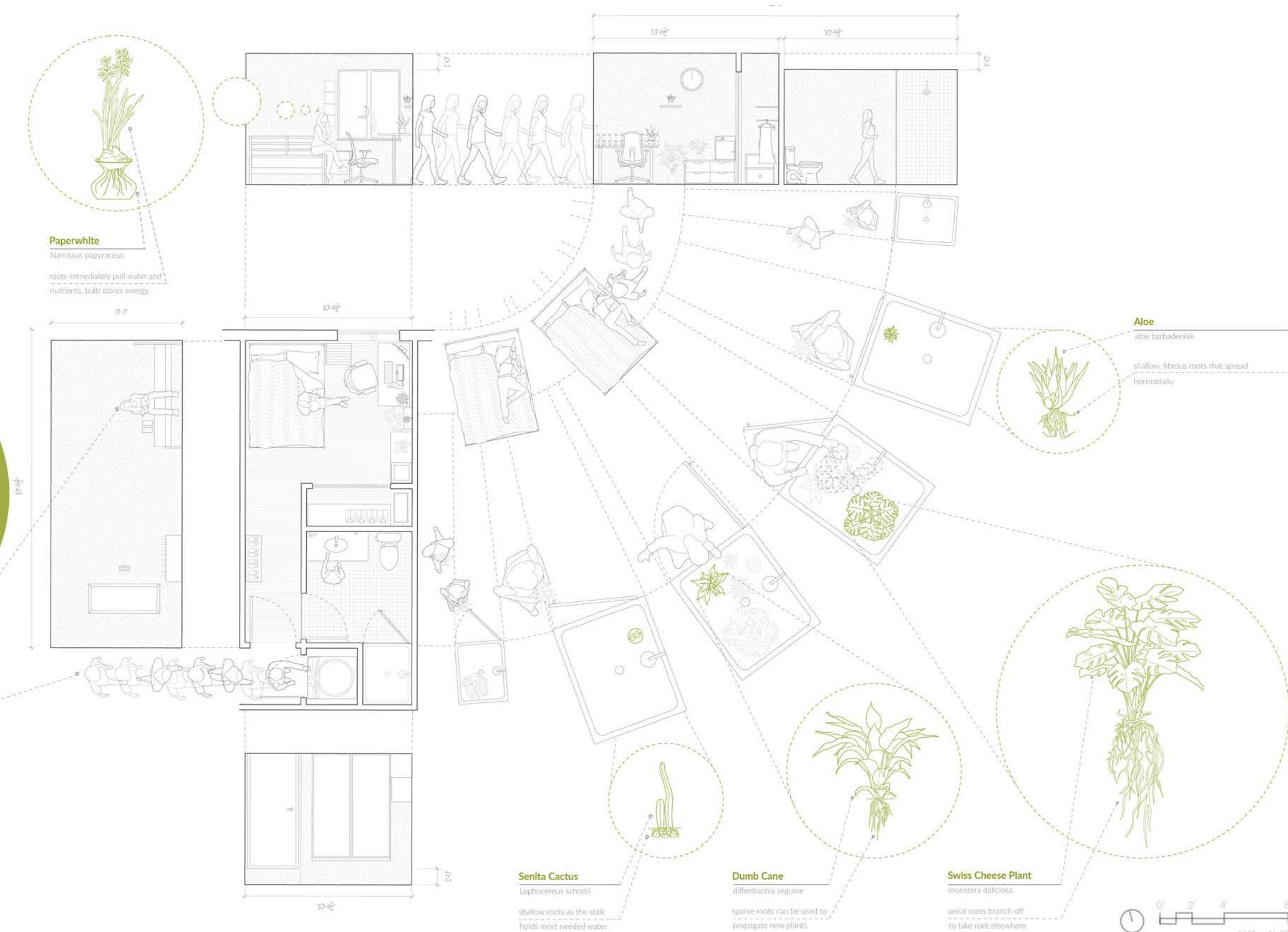
or create shared public spaces, shaping movement with light. Program includes back-of-house space for art preservationists, a multipurpose gallery/event space, and a small auditorium.



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Homo Sapiens

waters the plants
approx. once weekly





sfsu housing: lca a life cycle assessment in Revit + OneClick LCA visualized w/ Excel



LEED v4.1 M+R Credit: WB Life Cycle Assessment

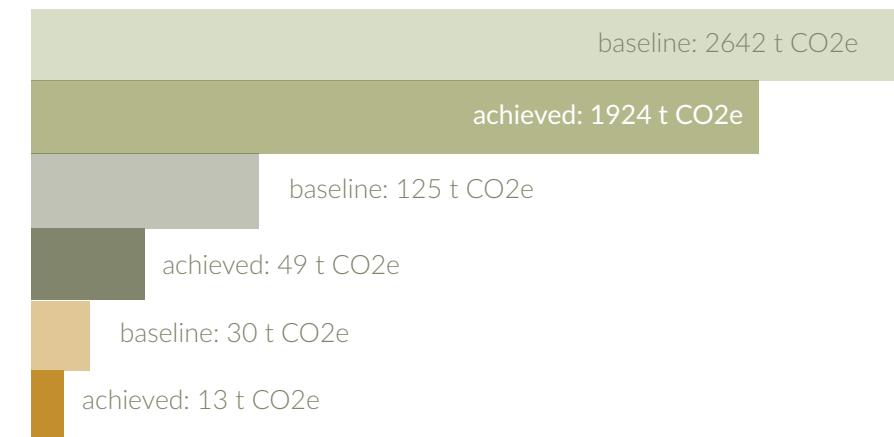
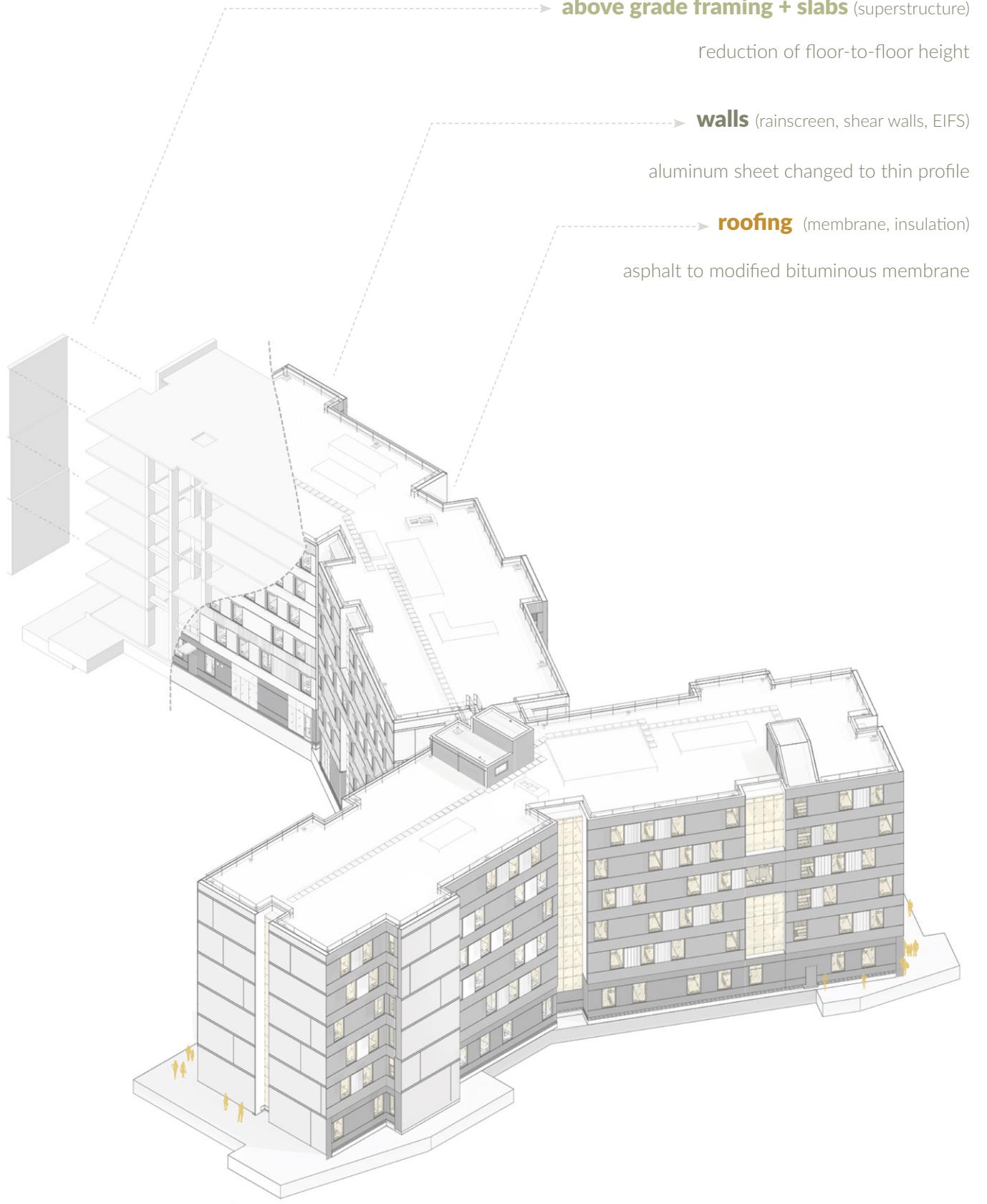
the six graphs above show life cycle impact reduction by category(embodied carbon,ozone depletion, and so on) from the 75% SD to the 100% CD model.

ehdd usually contracts out all life cycle assessment work to a LEED consultant. in this first in-house life cycle study, I explored new ways of visualizing data. rendering + revit model in collaboration with ehdd, data + diagrams all my own work.

- foundation elements
- structural framing/slabs
- sheathing + flashing
- stairs
- exterior walls
- exterior windows



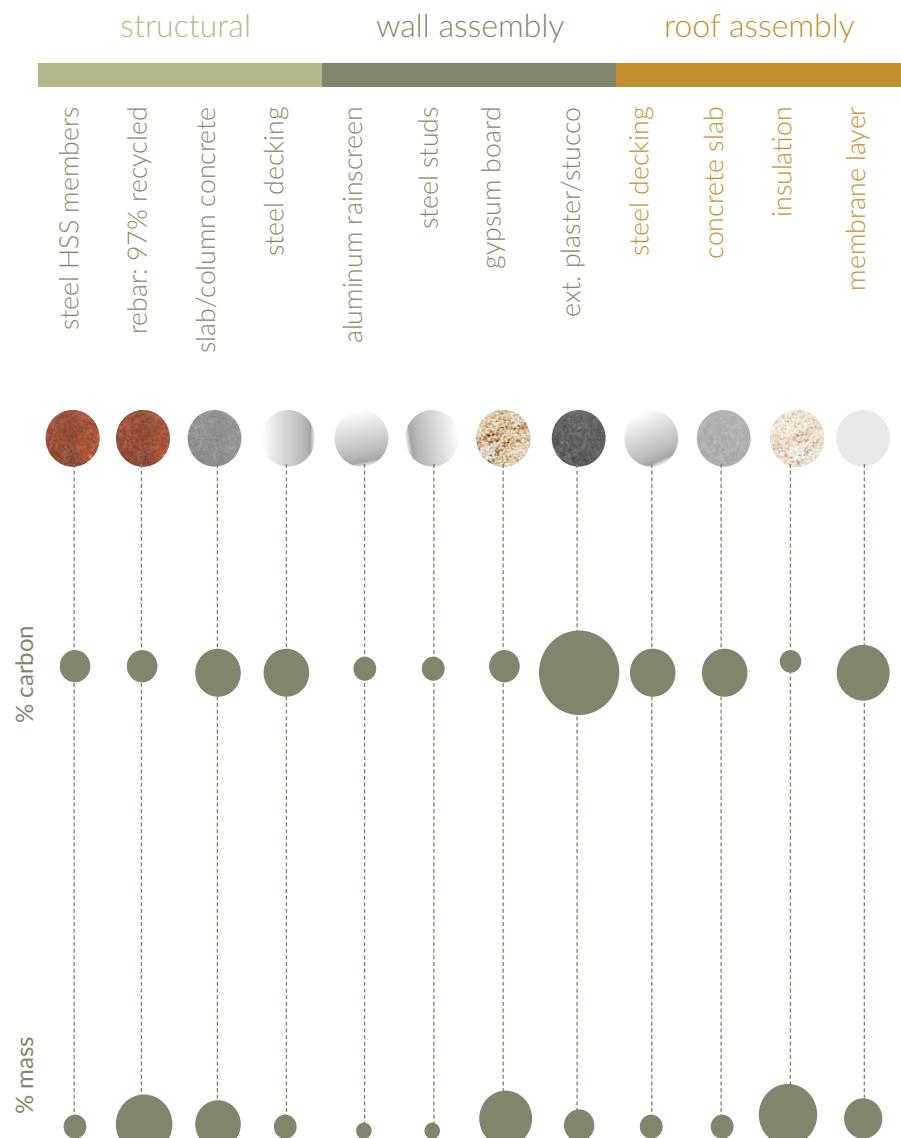
ehdd + carbon leadership forum



graphing carbon reduction

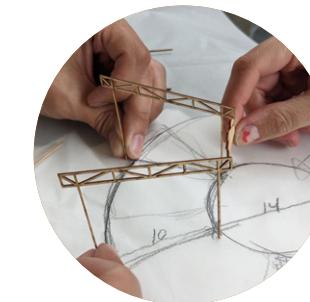
the graph at left is an alternate visualization of building embodied carbon by component, showing the same reductions from above in a different format.

material impact (% of building kgCO2e) vs weight



material impact by weight

the graph at left visualizes, in abstract fashion, the percent embodied carbon of each material compared to its percent mass in the building.



1. stick model



2. truss prefabrication



3. welding columns



4. panel prefabrication



5. sitework



6. chunk assembly



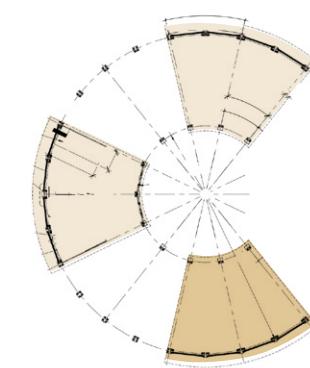
7. connecting chunks



8. gravel + watering it in



9. celebration

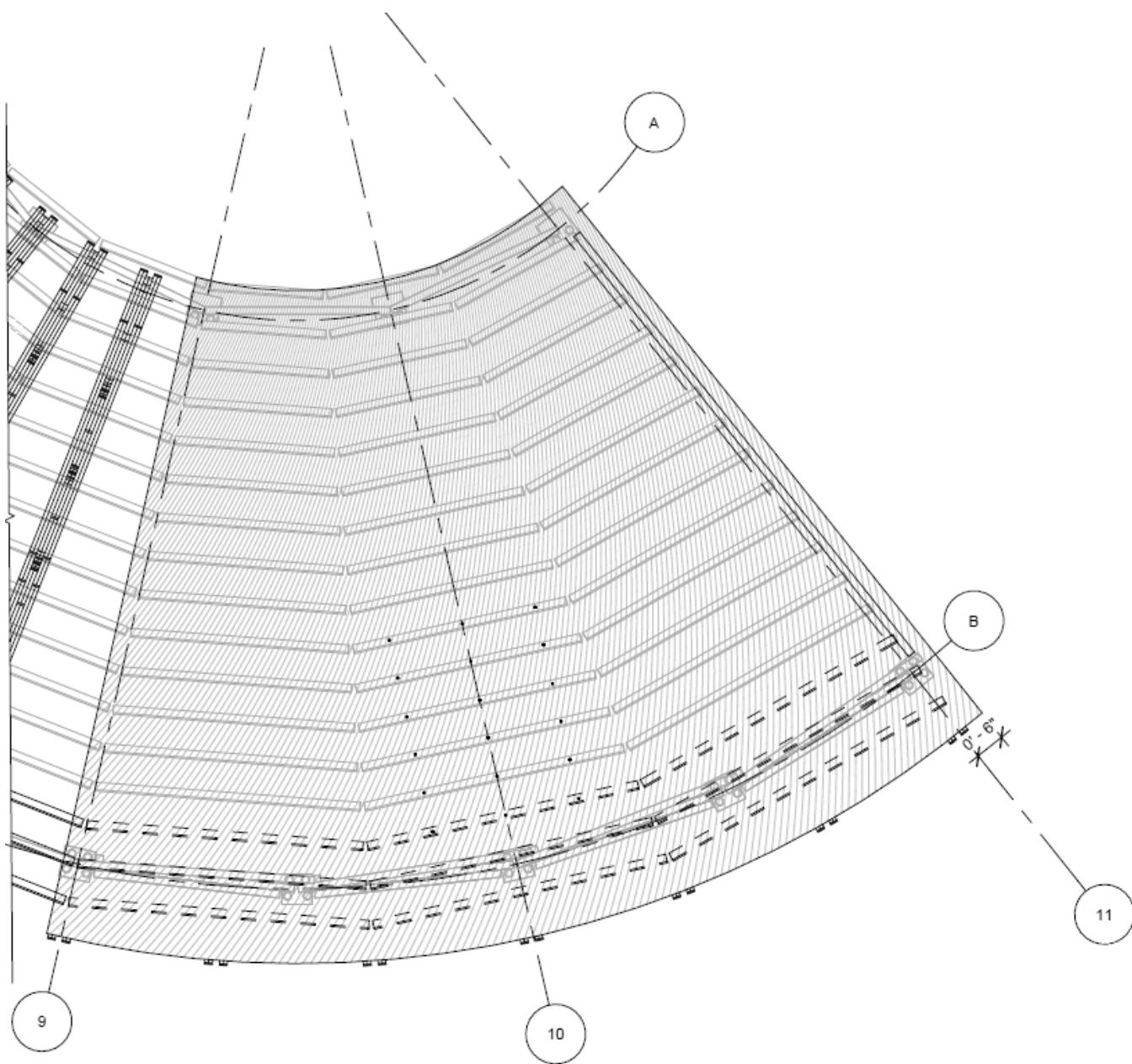


program + the uw farm:

the campus urban farm at the univ. of washington requested our studio build a gathering space for classes and cooking as their programming expanded.

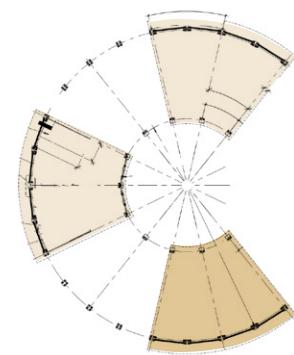
credits for studio work:

team of 16 students and 3 profs. my role was initial sitework coordination with the farm + roof detailing. the uw cultural kitchen, was completed in 12 weeks.



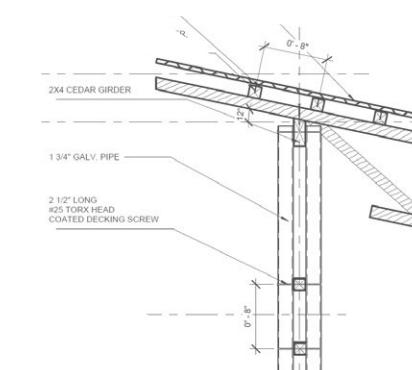
total: 360 sf covered

three 120-sf wedges
two “trellis” spaces



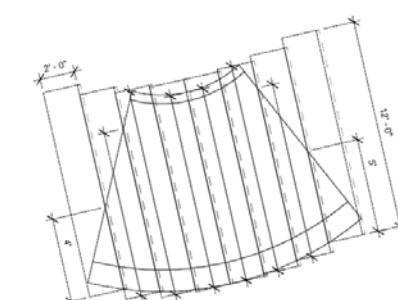
roof plan: nts

alternating covered and open spaces



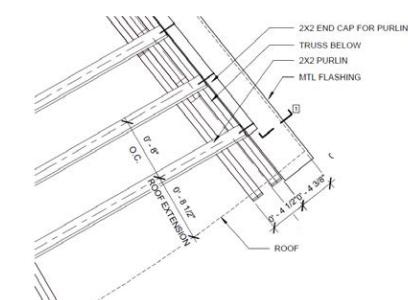
column-roof detail

alternating covered and open spaces



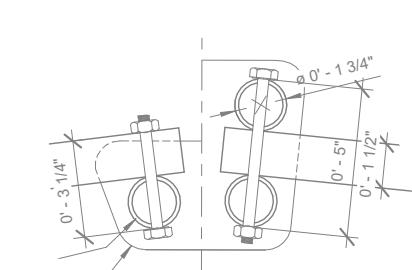
roof panel layout: nts

a way to tile 2' x 12' polycarbonate panels for each segment



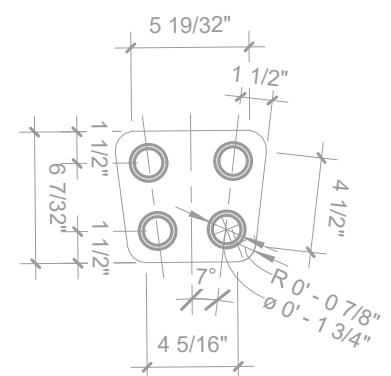
roof edge detail: nts

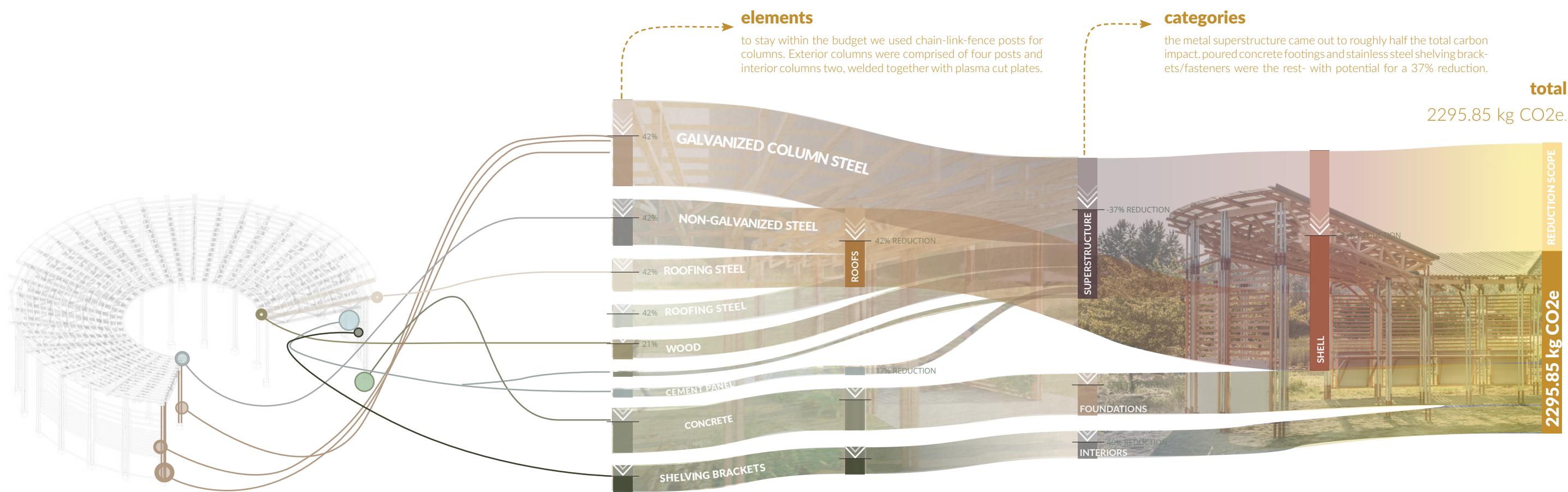
credit: caitlin truong, taylor sanyville



column details

credit: jan green



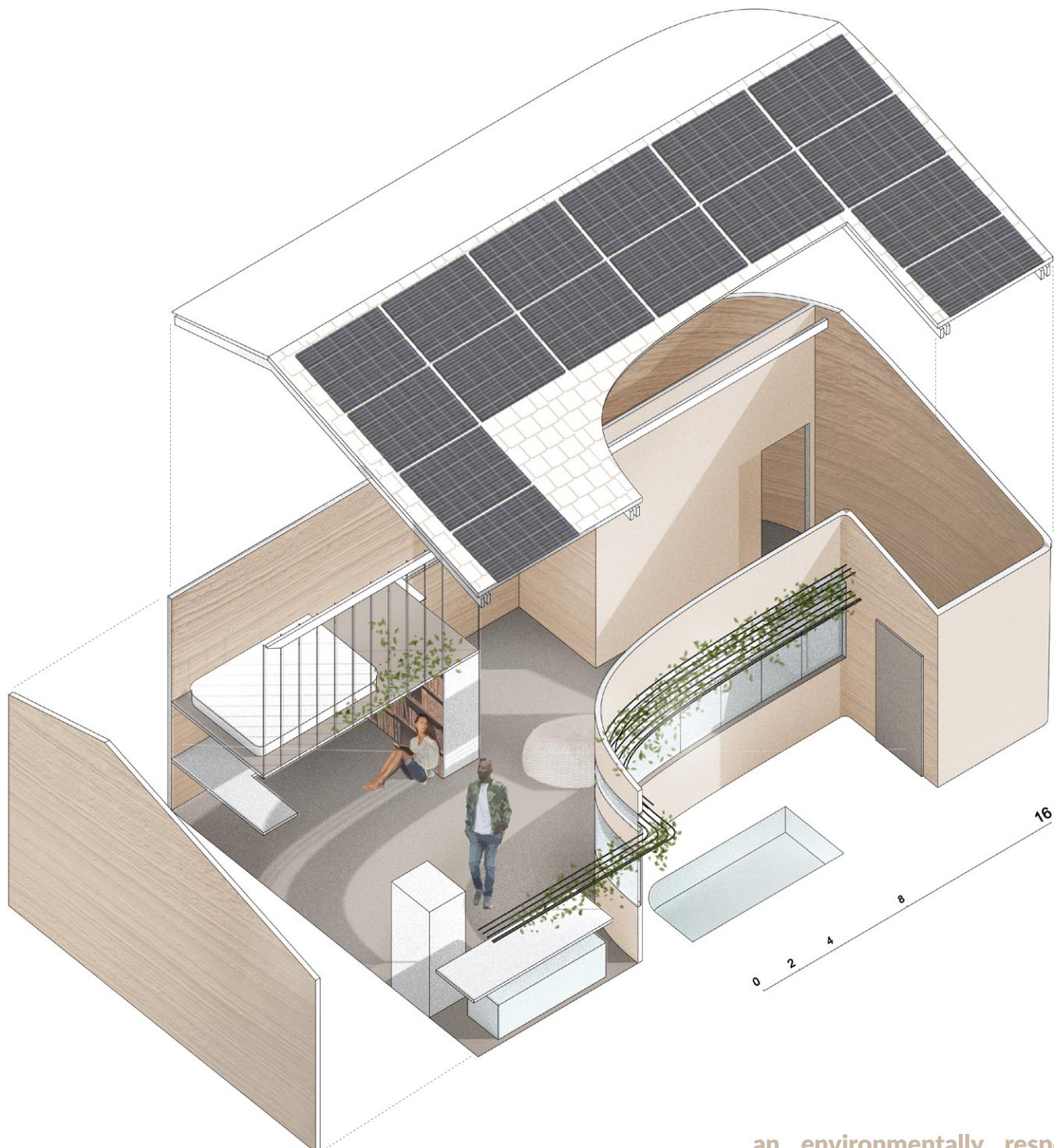


life cycle assessment 2:

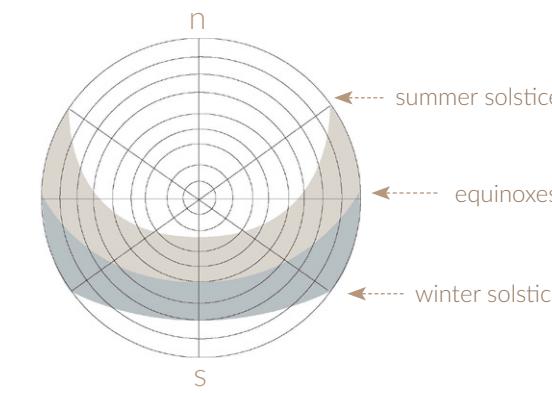
all materials were procured locally from around the Seattle area, and as this was a design-build, we had granular control over what materials we were purchasing.

this study was done retroactively to see if we could have lowered emissions further than we did. The galvanized column steel was the largest contributor to energy, and understandably so, as the structure was wood.





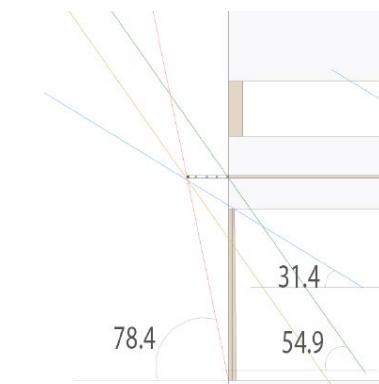
an environmentally responsive building begins by mapping the climate - sun, wind, rain, humidity.



sun paths



wind speed/direction



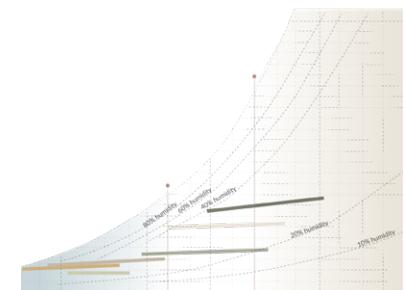
shading device design

angles of shading trellis based off of sun altitude at solar noon, calculated using the following equation:

A - 90 - latitude + declination

$$\text{december} = 90 - 35.1 - 23.5 = 31.4$$

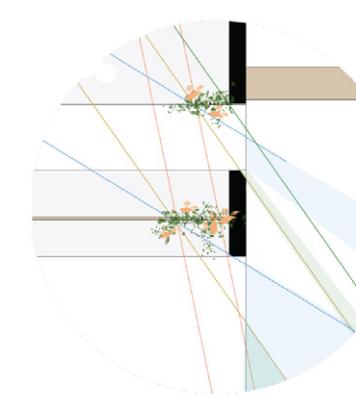
$$\text{june} = 90 - 35.1 + 23.5 = 78.4$$



temp/humidity

temperature + mass

the day-night temperature and humidity swings and the high temperatures indicated above point to a high-mass building..



adaptive shading: plants

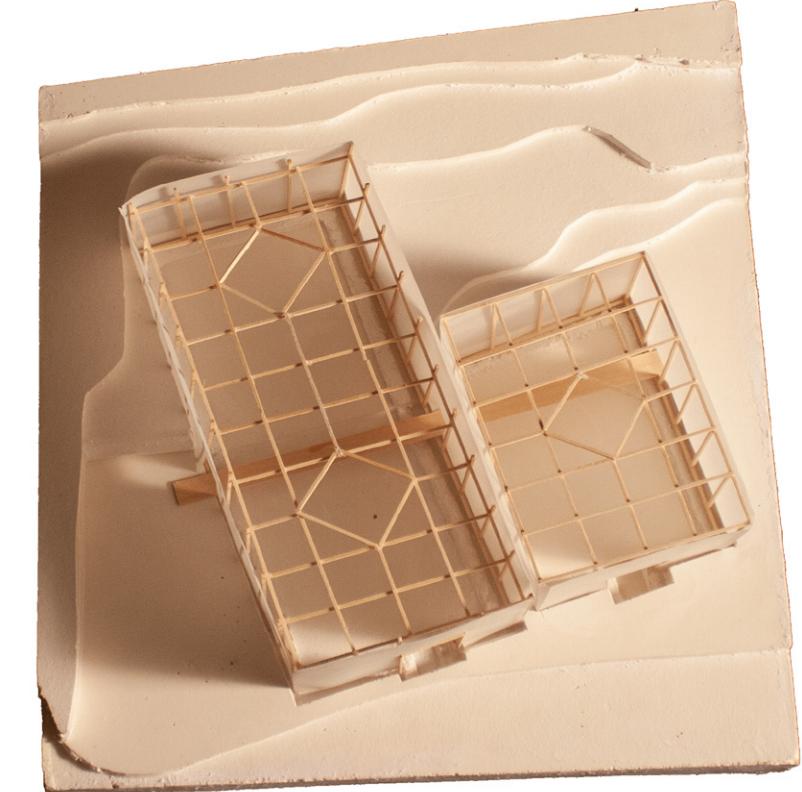
vegetation on a trellis is used to adaptively shade the glazing at the angles calculated above, as shown by diagram top right.



plaster base



wooden framework



wooden framework + trace shell (above), paper roofs (below)

credit for studio work:

plaster base formwork: self
plaster pouring: oleh fulyk
slats on outside: jorge burke
wooden framework: self

skeleton and skin

peter zumthor's shelter for roman ruins in chur, switzerland, encapsulates the ruins of a roman structure in a thin wooden skeleton wrapped with a skin of wood slats. A suspended aperture allows in light. a 1/16" massing model and a 1/2" scale section model.







campus solar plan

