Cultivating the Community Commons: Climate, Culture + Craft

2015 Scan | Design Master Studio
University of Washington, College of Built Environments
INSTRUCTORS
Nancy Rottle, Associate Professor, Landscape Architecture, University of Washington
Jim Nicholls, Senior Lecturer, Architecture, University of Washington
Bianca Hermansen, Master Teacher, Gehl Architects + CitiTek
Hailey Mackay, Teaching Assistant, Landscape Architecture, University of Washington

STUDIO PARTICIPANTS
Mattias Bailey, Architecture
Max Baker, Architecture
Jackson Blalock, Landscape Architecture
Buddy Burkhalter, Architecture
Emily Darling, Architecture
David de la Cruz, Landscape Architecture
Donny Donoghue, Urban Design + Planning
Kelly Douglas, Landscape Architecture
William Estes, Landscape Architecture
Stephanie Farrell, Architecture
Shuyi Gao, Landscape Architecture
Melissa Gaughan, Urban Design + Planning
Lisa Glenn, Architecture
Jess Hamilton, Landscape Architecture
Melanie Hess, Landscape Architecture
Connor Irick, Architecture
Kasia Keeley, Landscape Architecture
Reed Kelly, Architecture
Cheryl Klotz, Urban Design + Planning
Eunice Lee, Architecture
Nico Martinucci, Urban Design + Planning
Christopher Morris, Architecture
Marta Olson, Landscape Architecture
Andrew Prindle, Landscape Architecture
Keegan Raleigh, Architecture
Christian van Waasen, Architecture + Landscape Architecture
Xia Yu, Landscape Architecture

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Gehl Architects
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Foreword

A block at the nexus of several diverse neighborhoods within The International Living Futures Institute’s (ILFI) Living Community district on Seattle’s First Hill provided the canvas for our 2015 Scan|Design Master Studio. Destined to transform within the next decade, the site offered our interdisciplinary teams the opportunity to explore questions related to equitable housing, business incubation, school and community facilities, urban food cultivation and vital public space. Inspired by Copenhagen’s approach to neighborhood “lifting” and projects we experienced in Denmark – from children’s arts centers, to vertical schools, urban productive gardens, “cloudburst” parks and street transformations to support walking, cycling and public life – and informed through district and site analyses, tours and a panel of experts, over the course of the term nine teams of students produced the thoughtful and innovative design proposals that are represented in this document. Students were asked, ‘How could a community commons be designed to cultivate cultural and climatic resilience through responsively crafted authenticity?’

We were guided by the aspirational standards of ILFI’s Living Community Challenge, Gehl’s Quality Criteria for creating thriving public spaces, and our experiences together in Denmark and Sweden, made possible through the generous sponsorship of the Scan|Design Foundation. The group bicycled extensively throughout Copenhagen and Malmö, experiencing those cities’ renewed neighborhoods, exciting new examples of architecture and landscape architecture, and thriving public realms. The staff of Gehl Architects and Cititek, Copenhagen’s bicycle and climate adaptation planners, practicing urban designers and architects from the firms of COBE, Schønherr, and Tredje Natur, and professional tour guides provided insight into the cities’ historical development and contemporary planning issues, elucidating design approaches to successful projects and sharing personal perspectives. Back in the studio in Seattle, students applied the lessons they learned to our Living Community project, benefitting from an additional two weeks of expert guidance from Bianca Hermansen of Cititek.

We have many people to thank for this remarkable opportunity in teaching and learning. Without the support of the Scan|Design Foundation, we could not have been so inspired by our experiences in Scandinavia or so deeply integrated tangible learning into our design work. We are sincerely appreciative of Bianca Hermansen’s generous, clear and insightful teaching and critique, and of her, Lars Gemzøe’s, and Gehl Architects’ illuminating lectures and tours. Architect Paul Olson provided invaluable logistics support and led our graphic explorations, helping to expand and solidify our perceptions during the study tour. We owe thanks to the many people in Seattle who helped us understand the conditions, forces, and potentials for the First Hill site, and provided feedback on our work, including Adam Paul Amrhein from ILFI. We are especially grateful to our capable teaching assistant Hailey Mackay for her invaluable role in the study-tour, studio and design and production of this document, and the students for their conscientious and thoughtful work over the course of the term. We thank you all, and hope that these ideas for promoting a democratic, equitable and ecological district may influence the future of this pivotal site in the First Hill Living Community.

Nancy Rottle, Associate Professor, Landscape Architecture, University of Washington
Jim Nicholls, Senior Lecturer, Architecture, University of Washington
University of Washington | College of Built Environments
Itinerary

Friday September 4
Welcome to Copenhagen!

Saturday September 5
A walking introduction to Copenhagen’s pedestrian network with Bianca Hermansen and Nancy Rottle, with urban space exercises along the way.

Sunday September 6
Experiencing Denmark - beyond Copenhagen. A train trip to the rich landscape to the north to visit Helsingor: Kronberg Castle, Maritime Museum by BIG and new Culture House/Library. Visit to Louisiana Museum to experience the Africa Exhibit.

Monday September 7
Lectures and public space exercises at Gehl Architects. Introduction to Copenhagen’s spatial history with Lars Gemzoe and Copenhagen’s new pedestrian network with Birgitte Bundesen Svarre.

Tuesday September 8
Birgitte Bundesen Svarre gives an introduction to the Gehl Quality Criteria and students apply the criteria to assess nearby public spaces. Sketch-share picnic in the afternoon.

Wednesday September 9
Bicycle tour of Copenhagen’s community cultural centers - Skuespillhuset, Venneby Allotment Gardens, Christiania, Sluseholmen and Danish Architecture Center.

Thursday September 10
Lecture introducing Copenhagen’s Bicycle Planning, bicycle tour of Norrebro with Bianca Hermansen.

Friday September 11
Bicycle tour of community spaces in Amager - Red Corner Day Care Center, Community Arts Complex + Children’s Culture House, Prags Boulevard - Kvarterhuset + Prismen, Maritime Youth Center, Amager Strandpark. Happy hour at Bianca’s house.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Prior to the beginning of Autumn 2015 quarter, twenty-seven graduate students from Architecture, Landscape Architecture and Urban Design participated in the 2015 Scan|Design Foundation Travel Study Program. The trip focused on resilient community spaces with an emphasis on sustainable building, adaptive reuse and climate mitigation. Through the study of built environments in Copenhagen, Samsø and Malmö, students were introduced to ideas and practices that transcended and united their disciplines, and encouraged a broader, multidisciplinary approach to design.

The trip introduced the students to the public space ideas studied and championed by Jan Gehl and Gehl Architects. The principle that design is an invitation, and in this case an invitation to engage and collaborate within and across neighborhoods and communities, was illustrated through lectures, tours and site visits. During the trip, students were afforded the unique opportunity to study with Bianca Hermansen, a former principal member of the internationally acclaimed Gehl Architects office. Field studies, lectures and workshops led by the staff of Gehl Architects were augmented by presentations from city officials, local design firms and local community activist groups in Copenhagen, Samsø and Malmö.
Itinerary (cont’d)

Saturday September 12
Free exploration of the city - precedent study site visits.

Sunday September 13
A trip to the sustainable island of Samsø. Train to Kalundborg, ferry to Samsø, bicycle into Ballen, with a lecture on Danish landscape palettes from Bianca.

Monday September 14
Morning tour of sustainable facilities from the Energy Academy. Lecture and tour of Energy Academy facilities. Bicycle tour to local windmills, hay storage and incinerator. Free afternoon on the island.

Tuesday September 15
An introduction to Copenhagen’s approach to climate adaptation. Lectures from Lykke Leonardson on the Cloudburst Mitigation Plan. Tredje Natur on Sankt Kjelds Klimatet Kvarter, COBE on kid-centered design and a tour of Taasinge Plads.

Wednesday September 16
Train to Malmö for two-day exploration of the city’s open space system and bicycle facilities. Exploring the new western harbor development with a tour of STPLN - layered community workshop spaces.

Thursday September 17
Walking tour of Bo01 sustainable waterfront housing development with Catarina Rolfsdotter-Jansson. Sketching and diagramming of Bo01, optional bicycle trip to the Eastern Cemetery. Free afternoon.

Friday September 18
Bicycle tour of cultural community spaces in Copenhagen – visiting Forfatterhuset Kindergarten, lecture at Biblioteket from Schønherr, tour of ØsterGro roof-top farm, tour of Gammel Hellerup Gymnasium.

Saturday September 19
Last day – free exploration and precedent study site visits. Group dinner at Madklubben Vesterbro.

Sunday September 20
Check out and Farewell

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Exploring the offices of COBE Architects after a presentation on kid-centric spaces in Copenhagen

Students sketch on Samsø

The hay incinerator at the Energy Academy

Sketching made hygge at the Children’s Culture House

Students tour ØsterGro rooftop farm and restaurant

Feeding the chickens at ØsterGro

Plants growing in at the new Taasinge Plads

OVERVIEW: Travel Study Tour

Melanie Hess

Mattias Bailey

Bill Estes

Buddy Burkhalter

Hailey Mackay

Bill Estes

Bill Estes

Martha Bailey

Melanie Hess
Course Sequence

Students were encouraged to collect and document innovative design practices throughout their travels in Scandinavia. Exploring Scandinavian design first-hand continued to inspire students long after we returned. During the quarter in Seattle students had opportunities to implement design inspiration from Scandinavia, working in various groups to take advantage of the interdisciplinary studio format. They worked in teams on community analyses and precedent studies before forming teams with peers from different disciplines.

For the final design project, these small interdisciplinary teams developed programs that would serve specific community needs. They then developed spaces to fulfill those needs designing either individually or in small teams. Over the course of the term, students continually refined their design proposals, responding to feedback from guests, peers, faculty, and Bianca Hermansen.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Course Objectives
To engage students in exploring strategies for creating resilient and equitable public space through reacting to such challenges and opportunities as urban intensification, affordability, cultural connections, community diversity, climate change adaptation and food security. These broad categories were broken down into detailed considerations using the International Living Futures Institute’s 7 Petals and the Living Community Challenge’s 20 Imperatives.

Interim group critique with Bianca Hermansen

Overview:
Master Studio
Cultivating the Community Commons:
Climate, Culture, Craft

The International Living Futures Institute’s (ILFI) new Living Community Challenge sets the standard for a Living Community that is “socially just, culturally rich, and ecologically restorative” through the metrics of place, water, energy, health and happiness, materials, equity and beauty. Such a metric system incorporates the Quality Criteria for public space used by Gehl Architects and expands them to incorporate environmental and social equity aspirations.

Our ScanlDesign Master Studio is inspired by Copenhagen’s approach to neighborhood “lifting” by providing arts and cultural facilities in every neighborhood for all ages, and the city’s approach to conjoin climate resilience with cultivation of a good and equitable city. We applied site program ideas from our travels, from children’s arts centers, to vertical schools, to urban productive gardens and “cloudburst” parks.

The selected project site and surrounding neighborhood in the First Hill district is destined to change in the next decades as the neighborhood intensifies, with streets already beginning to accommodate bicycles, pedestrians, and trolley transit, and we considered the public life -- both moving through and staying in -- the public realm of streets, parks and leftover spaces. The final designs were developed at all scales and show detailed and integrated resolution at the levels of district, site and building.
Design Methodology

During site analysis, students used Gehl Architects’ 12 Quality Criteria approach to observe and assess the site’s existing quality of life. These criteria were also used in conjunction with the Living Community Criteria 20 Imperatives as a checklist for developing new designs. This approach complemented the project area’s quantitative pedestrian analysis, allowing students to understand how people might experience the neighborhood. The students also used these Quality Criteria to evaluate their finished design proposals.

Proximity
We also applied the concept of creating proximity between urban amenities rather than focusing solely on density.
Life | Space | Buildings

In addition to using the 15 Quality Criteria, we use an exercise called “LifeSpaceBuildings” to help students develop site programs and designs that cater to diverse populations. Students took on roles of different community stakeholders to establish the required program elements needed to create vital public spaces that are inviting to all. After applying programming in two-dimensions, students then created massing studies to give three dimensional form to their programmed spaces.

Livability = Life first!

Gehl Architects Master Teacher

Students were first introduced to Gehl Architects’ working methods while in Copenhagen, through lectures and exercises. Bianca Hermansen, CEO of Cititek and formerly of Gehl Architects, gave students feedback on their designs in Seattle for two weeks during the studio, at the start and mid-points of the term. Her visit provided valuable feedback to guide the development of students’ designs.

Bianca Hermansen lectures during a bike tour stop
Consistent critiques helped challenge and support design development as students continued to refine their ideas and designs as teams and individuals. Desk critiques in studio with Jim and Nancy, as well as Bianca Hermansen during her visits, created structure for feedback. Students were also encouraged to seek advice from one another, using the range of experience and expertise available in studio.

Intergenerational Living team discusses their work at the mid-term review

The CO-OP team presents their work at the mid-term review

Students work through ideas during a desk critique

The CD-OP team presents their work at the mid-term review
In addition to desk critiques from instructors and informal peer reviews, students were also afforded two formal reviews. Hosting professionals from local architecture, planning and landscape architecture firms and the International Living Futures Institute, students prepared graphics and presentations aimed at communicating their ideas and designs. The experience of preparing and presenting, as well as the invaluable feedback from reviewers, helped students refine and reconsider their designs and their methods of representation. Whether in the middle of the term or at the end, reviews help students prepare for professional presentations, practicing their verbal and graphic communication skills.
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Good design is often informed and inspired by precedent studies of previously designed projects.

For this assignment, students worked in small interdisciplinary teams to select and research a precedent site which they then shared with the rest of the class.

During the study tour, students were given time to visit their precedent site in order to sketch, diagram and photograph on location.

Since the sites are located in Copenhagen, student research was conducted through site visits, websites, interviews, observations, articles, periodicals and/or books in order to dig deep for the essential lessons the projects have to offer.
Red Corner Day Care houses 160 nursery and kindergarten children in a u-shaped complex whose mass “hugs” a protective inner courtyard of sand boxes, vegetation, soft turf, and play structures. Strategically tallest (3-stories) against busy Sundholmsvej, dropping to a friendlier 1-story at the neighborhood side of the property. The most distinctive architectural element is a wide zig-zag ramp and catwalk system which acts as a green roof, additional play area, and circulation to all levels of the building.

The driving concept for the project was maximum proximity. The building design divides the 160 children into smaller “living rooms” of 10, each with their own room and outdoor area. However, free access throughout the institution and strong visual connection unites all the classrooms. The school also achieves maximum proximity within the diverse neighborhood. It provides a safe and protected campus, but allows for perimeter transparency that connects it to the surrounding neighborhood.
The Red Corner Day Care Center playfully claims its place among century-old brick buildings in the Sundholm quarter of SE Copenhagen. Historically, the district was a shelter for the poor and homeless and now houses care centers for drug addicts and the mentally ill. In 2009, the Municipality launched a comprehensive urban renewal scheme, and the Red Corner Day Care is clear evidence of the changing nature of Sundholm.
The Sydhavnen School aims to make everyday life special and to provide a town square for a new, developing neighborhood. Capitalizing on its harbor location, the project opens up towards a centralized playground and canal with cascading roof terraces that provide space for active learning and play.

Central playground and neighborhood park.

School amphitheater acts as a town square.

Designers: JJW Architects + PK3 Landscape
Client: Copenhagen Municipality
Gross Floor Area: 9,500 m²
Opened: 2015
Cost: 375 million USD

Terraced decks and playgrounds flow down from the roof to the surrounding harbor.
Section of Site

Plan of Site

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
“Rather than placing the hall outside the school – and spread the social life further – we have created a new focal point and link between the school’s existing facilities. The roof forms a molehill that serves as a giant piece of informal furniture engaging and supporting student life. The main architectural idea emerged from the rules of handball as the soft curved roof takes its form from the mathematical equation of the trajectory of a thrown ball – Form follows Function.” - Bjarke Ingels
Activity Level/Type Across Site

Play in Black Top Plaza
Play in Red Plaza
Lawn + Skate Park Bowl

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Superkilen
Nico Martinucci, Donny Donoghue + Andrew Prindle

Designers: Bjarke Ingels Group, Superflex, Topotek1
Client: City of Copenhagen and Realdania
Constructed: 2012

Superkilen is a 1/2 mile long park and urban space through the most culturally and socially diverse community in Copenhagen. The park celebrates its diverse populous with a collection of installations from over 60 nationalities that live nearby. Located along a central bike path, the space functions as the central landmark of the community and supports a diversity of passive and active community functions.
MUTUALISTIC MULTI-FUNCTION

BIBLIOTEKET functions as a “choose your own adventure” story, hosting personalized mindful moments, collective experience, and collaboration.

RESILIENCY THROUGH REDUNDANCY

Many of Nørrebro’s numerous semi-public spaces cater to specific identities, while BIBLIOTEKET’s flexible active and passive spaces emphasize transcultural growth. A wide array of public events and programming provides for diverse user groups while employing youth and people with disabilities.

PARK, PLAZA, PASSAGEWAY

Once a parking lot, the library’s “front porch” is now an open-function gathering space with seating, plantings, and rubberized surfaces. The sunken focal point hosts dance, gymnastics, and free form recreation. Pedestrians regularly stop to play, perch, and peruse while using the plaza as a convenient shortcut. Movable furnishings stay out overnight as the plaza remains occupied long after BIBLIOTEKET’s closing hours.
BUFFERS AND TRANSITIONS

Nørrebro boasts below-average car ownership, but suffers from heavy automotive through-traffic. Disadvantaged residents deal with increased pollution, manifested through sickness and grimy surfaces. A valued open space for Copenhagen’s densest district, BIBLIOTEKET’s plaza separates the building and participants from motor vehicles, while aiding in runoff-neutral site design. With 1600 m³ stormwater detention/infiltration capacity per rain event, the site is less reliant on centralized drainage.

BIBLIOTEKET

Jackson Blalock

Designers: COBE, Transform, Schønherr Landscape, Wessberg Engineering (via community visioning charettes)

Completed: 2012

Size: revamped 1,600 m² cultural center with 2,000 m² extension

Amenities: library (children’s, youth, and adult) cafe/lounge, meeting rooms, computers, media, concert hall, multi-use spaces, plaza, outdoor cafe

BIBLIOTEKET merges library and cultural center, offering Nørrebro’s diverse communities opportunities for active social inclusion.
The school campus is composed of several buildings from three periods of construction since 1892.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Designed by Dorte Mandrup Arkitekter, the addition to this independent school campus balances the needs of the curricula and the site. A modern metal screen continues the street wall without cutting off the classrooms from the surrounding urban life. The flexible, light-filled rooms give the school space for art, music and play. This sculptural composition can best be understood as part of the whole, as it contributes to improvements to the rest of campus, and shows appreciation for the institution’s teaching philosophy.
The architects addressed these challenges by creating an elevated wooden deck structure that echoes the forms of waves and is reminiscent of ships’ hulls. This meant that the topsoil could be left in place and allowed ample space for both boat storage below deck and recreation space above.

The interior space is simple and clean with a front house that functions as a common room completely enclosed by windows which face the coastline and reflect the waters of the Øresund.
Wave forms of the deck allow for elevated vantage points, easy boat storage through the site.

The design of this project had to balance the conflicting needs of its two intended user groups: a youth program that wanted outdoor space for kids to play and a sailing club that required space to store their boats. An additional challenge of the site was topsoil polluted by heavy metals which would cost a quarter of the total budget to remove.
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
This kindergarten serves 160 students in five small houses of 1-3 stories. From the outside the buildings create a ‘village’ for the children with each building being a ‘house’. Each house has a green roof or garden and every level is connected to an outdoor space.

**Designers:** COBE (architect), PK3 (landscape architect)

**Owner/Advocate:** City of Copenhagen

**Project Period:** 2012-14

**Size:** 20,750 sq. ft.

The uniform expression of the facade is a modern interpretation of the neighborhood’s traditional red brick. The similar material reinforces the connection with the area, but contributes something radically new and different. The vertical lamellae forms a continuous band from building to building and surrounds the playground as a fence, the roof deck as a railing, and windows as sun shades.

An interior 3-story atrium and stairs connect each level. The landings on each level become play spaces. The railings around the stairs mimic the exterior facade and provide security for each floor while allowing light, air, sound and views between spaces.

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View of Interior Play Space and Stairs

**Diagram**

Site Axon

**Site:** Edith Rodes Vej 2

**Google Maps 2015**

**PRECEDE:** Forfatterhus Kindergarten

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**Forfatterhus Kindergarten**

Reed Kelly

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Sports and Culture Program

Activity: public recreation.

People: visual connection + house supporting amenities

Place: covered non-conditioned space

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
This sports center is protected from the elements by a translucent polycarbonate skin. The material provides ample daylight and at night the building looks like a glowing crystal. Inside the sports hall steel and timber structure is exposed.

The openly organized sports area allows for various types of play to occur simultaneously. Generous stairs, that double as seating, lead to the balcony overlooking the main floor. More intimate play spaces such as a climbing wall can be explored from the balcony. The center is successful in providing visual connection through interior play spaces, these flexible spaces are facilitators of public leisure for all ages.
“Like a grotto among the trees, the assembly hall is located at first-floor height atop a 'forest' of slanted concrete columns.”
- Danish Architecture Center
The conceptual approach was to shift programatic space outside of the original bounds. This grants a lofty entrance to the center/library as well as more intimate windowed niches that connect the exterior and interior environments. A similar conceptual move is done for the assembly room, where space is captured outside of the original footprint and an elevated interior room hovers above the landscape. The space below, although barren and unprogrammed, does not exclude activity from any public seeking refuge. The transparent shell of the assembly room both reflects the surrounding neighborhood and creates literal and social transparency for activity within the center.

Program
Library
Youth Club
Adult Education
Community Arts
Flexible Rental Space
Cafe

Located in the Amagerbro neighborhood, this renovated 1880 factory now services the many organizations and cultural needs of the community. Featuring primarily a library, the projects also houses a cafe, art exhibitions, classrooms, and an assembly room for performances ranging from classical to children’s theater.
Universet prioritizes community engagement.

Play becomes part of the urban fabric, establishing a sense of security and neighborhood identity.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Urban Renewal

In the heart of the Norrebro neighborhood, a community that has long been plagued with social strife. Rather than barricading the schoolyard from its volatile setting, the designers open the site’s edges, thereby inviting community engagement. By closing Sjællandsgade to traffic, the designers established needed open space, creating a safe place for pedestrians facilitating social exchange.

Celebrated Play

Guldberg Byplads blurs the edge between civic space and playground. Play becomes a means for activating the site and as a formal framework that sustains multiple community functions.

Weightless Mass

“The Universe,” which houses an after-school facility, denies convention by dedicating both the ground plane and rooftop to public play space. Providing both shelter and prospect, the bulk of the structure seems to float above the glass facade of the ground floor to prioritize the community’s need for open space.

Previously devoted to vehicular traffic, the new pedestrian plaza facilitates passage, play, and community gathering.

Guldberg Byplads /Universet
Kelly Douglas + Shuyi Gao

Designers: Nord Architects, JJW Architects, Rambøll Engineering Group
Owner/Advocate: The City of Copenhagen
Project Period: 2006-11
Size: 60,000 ft²

An esteemed product of a region-wide urban renewal effort, Guldberg Byplads is at once civic plaza, schoolyard, and public playground. Guldberg Byplads provides an active neighborhood center for the diverse Norrebro community, designed through the significant participation of local residents.
Meandering pathways encourage pedestrians to appreciate the environment, while narrow, single-lane roads on either side of the promenade force drivers to do the same.

Amenities provide a variety of activities for users. Public fields are flexible in use, switching easily from one sport to another.

The transition between blocks is usually smooth, with pedestrians given the obvious priority at intersections, indicated by tabled crosswalks.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Sønder Boulevard
Max Baker

Designers: SLA
Owner/Advocate: The City of Copenhagen
Size: 16,000 sq m
Cost: $2.7 million US

Sønder Boulevard is a two kilometer stretch of street/park space connecting Central Station to the Carlsberg Area corporate park. Originally a neglected stretch of median along a busy roadway, it has been re-conceived as a pedestrian-centric public space.

History
Sønder Boulevard’s central promenade has historically been a narrow strip at the center of a four-lane throughway. The loss of the street’s elm trees to disease in the late-20th century only worsened the appeal of the park to residents.

Re-Conception
In 2004 SLA re-imagined the boulevard as a place that prioritized pedestrians over cars, reducing the number of vehicle lanes from four to two, in turn adding 56 feet of lateral space to the central promenade. Three play fields and a playground were added to the space, and over 200 trees were planted.

Today
Sønder Boulevard is now a well-utilized and vital part of the Vesterbro neighborhood. A variety of users can be seen enjoying the promenade. Areas near restaurants and stores are the busiest, with many people picnicking nearby.

Plan of Site

Site: Sønder Boulevard
Although the Kalvebod Bølge was designed to activate the neighborhood, it still lacks strong visual and spatial connections with the surrounding neighborhoods. The bank and the hotel that are adjacent to the marine park have blank facades that do not interact with the park. Although there is a small café in the hotel that has some outdoor seating, there are no public seating options on the edge of Kalvebod Bølge. The park is also separated from the busy pedestrian district near Tivoli Gardens by Kalvebod Brygge, a large and busy vehicular thoroughfare.
Activities

Due to its informal programming, the space can be used simultaneously for various different purposes. The design features two platforms for passive recreation, a set of exercise bars, a kayak slide, ramps for playing on bikes, and an oyster farm that helps to clean harbor water while also providing an opportunity for people to interact with nature in an urban environment.

The multi-tiered walkway serves as both a through-way and as a place for sunbathing on hot summer days.

Kalvebod Bølge is a popular summer hangout spot across the harbor from Islands Brygge. It was designed to activate the northwestern side of Copenhagen’s harbor, which was previously dominated by large-scale offices and hotels.

Designers: JDS Architects
Constructed: 2013
Size: 4,000 m²
Cost: 7,000,000 Euros
Client: Copenhagen Municipality

Kalvebod Bølge
Xia Yu + Melissa Gaughan
Tåsinge Square
Completed in December 2015 Tåsinge Square is the first piece of the climate quarter to come to life. Tåsinge offers a useful public green-space that will host a variety of ecozones, from sloping lawn to forests. Underground tanks hold rainwater and connect to an educational and interactive pump conveying water to planted areas in drier periods.

Bryggervangen
A wide thoroughfare typical of the area, Bryggervangen is being redesigned to create a lush green stream through the neighborhood that will channel rainwater to the harbor during a cloudburst. Public space is gained by narrowing traffic lanes and concentrating parking on the shady side of the street, making room for vegetation.
St. Kjeld’s Neighborhood Copenhagen is securing the city against cloudbursts (heavy, short-term rain) with green solutions at street level. Underused paved area in street right-of-ways is being converted to green space that supports a healthy and vibrant public life while adapting the neighborhood to increasingly intense cloudbursts.

**St. Kjeld’s Square**
St. Kjeld’s Square is a large roundabout in the heart of the neighborhood. Street area will be reduced and replaced with green public space. Landforms will be used to hold and direct water while also creating diverse habitat for humans and wildlife alike.

**Green Enclosed Courtyards**
Neighborhood courtyards will be expanded and improved with the goal of managing daily rainfall on site. Roof water will be collected in rain gardens, water towers or detention ponds in order to be used for irrigation and play.

“Rain forests” can retain water from 500-year cloudburst events

**Site:** Sankt Kjelds Kvarter

**Designers:** TREDJE NATUR, BHG Landscape Architects, SLA Architects

**Owner/Advocate:** Klimakvarter.dk, City of Copenhagen

**Project Period:** 2012 - ongoing

**Size:** 8000 sqm
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
History

Israels Plads was once part of Copenhagen’s bastioned fortifications. These fortifications became obsolete due to long-ranged cannons and decommissioned in the 1850’s. From 1889 to 1958, the plaza was home to Copenhagen’s vegetable market. In the 1960’s Israels Plads was converted to a massive car park. In 1973 the car park was moved underground.

In 2011, two covered market halls opened to bring back the square’s historical role as a vegetable market. In 2008, COBE won the design competition for the redesign of the square by introducing various facilities for recreation and performances while relating to its context.

The design was the product of thinking sculpturally about the site. The surface is elevated 25cm above the existing streets to act as a “flying carpet hovering on top of the historical plaza” hiding the cars that once dominated the plaza and are now in the garage below. The design is meant to be a merging of the city and the park that connects to its context.
Nine Principles for Designing Space for Children

1. Beach: adaptable, flexible space with different activities parallel to each other
2. Short-lived bubbles: space to conduct unpredictable, spontaneous events
3. The attentive eye: floors, walls and furnishings that encourage playful activity
4. Changing skin 1: multi-functional and flexible spaces
5. Changing skin 2: imprecisely defined furnishings for creative processes
6. Changing skin 3: architectural surprises
7. Fantastic space 1: spaces combined in complex forms
8. Fantastic space 2: unpredictable, inspiring spaces, open to a number of directions

Flexible connected multipurpose spaces
Outdoor amphitheater with storage space underneath
Imaginative fixtures
Fantastic complex unpredictable space
“Hygge” a cozy cave in the music room
Adventurous ways to get to the upper levels

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
As part of a neighborhood cultural uplift campaign, the Børne Kultur Hus Ama’r was created using children’s design ideas about making great space for kids. This new building houses long-running children’s arts and culture programs that previously used rooms in neighboring 1903 school buildings that were repurposed in the 1990s to support arts and culture.
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Understanding the context of the site the students were working within was an essential foundation for their designs. Students visited the site, listened to community members, compiled existing studies, and interviewed the experts. Working in teams, the students used the compiled data to map the existing and potential district assets towards meeting the Living Community Challenge.

Students used the lens of the 20 Imperatives of the Living Community Challenge as critical criteria through which to examine the site and its surrounding district influences.

Using the site block as an epicenter, the city map was divided into four quadrants by cardinal direction: Northeast, Southeast, Southwest, Northwest, with a team assigned to each quadrant. First on foot, then on the web, an inventory of district assets and potentials was documented for each quadrant.
Early birds eye rendering of Yesler Terrace

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Assets

The Northwest corner of the site area is poised for massive change in the next decade. Redevelopment of Yesler Terrace and new construction due to zoning and density will change the character of the neighborhood on this side of the site. New park space is focused on Yesler Way with an existing Boren Ave. Numerous community organizations sprinkle the area. Access to grocery stores is minimal. The King County Children and Family Justice Center occupies a significant portion of the area directly one north of the site. Although outside the focus area, the hospitals of First Hill to the northwest and Seattle University to the north are important institutions and campuses that effect the community.
Zoning

The project site is an entire city block, located on the northeast corner of 12th Avenue and Yesler. Although the current buildings on the block are well under 30 feet in height, the land is zoned NC-65 (Neighborhood Commercial, 65-foot maximum). The areas surrounding the site are similarly up-zoned—many lots contain small, turn-of-the-century bungalows, but are zoned to height maximums of 60 to 65 feet. This indicates that the area will likely experience much denser development in the future.

Land Use

Currently, the predominant land use in this quadrant is residential housing (both single family and apartments.) Due to the poverty level in the area, it is also home to many social service and county-owned buildings, such as Pioneer Fellowship, Childhaven, St. Francis House, and the King County Child and Family Justice Center. The neighborhood contains several community service properties including the Yesler Community Center, the Japanese Baptist Church, and Bailey Gatzert Elementary School. The area is serviced by very few commercial or retail establishments.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Circulation

The Northwest Quadrant is situated in between the edges of the First Hill, Central District, and Capitol Hill neighborhoods. Because of the density and diversity of these neighborhoods, the streets serve as major multi-modal throughways. The area is home to the new Seattle Streetcar, a grade separated bike network that is currently under development, and multiple transit routes that operate with 15-30 minute headways. Planned developments in the transit network are designated with dotted lines.

Traffic on Boren Avenue. Wide lanes, faster speed of travel, and steep narrow sidewalks make Boren Avenue a challenging environment for pedestrians and cyclists. Boren acts as a major obstacle in the neighborhood.

The wide intersection of Boren Avenue and Broadway has acute angles that make safe navigation difficult. To mitigate this, Seattle Department of Transportation has painted green bike lanes to alert drivers to the presence of cyclists. This intersection is a major transportation node for travel between Downtown Seattle, the Central District, and Capitol Hill.

Broadway’s newly renovated street typology features bi-directional grade separated bike-ways, streetcar infrastructure, and waiting platforms for transit riders. Broadway is the major path to and from Capitol Hill.
Energy

Energy Use Intensity (EUI) baselines as used in the International Living Futures Data survey for Yesler as well as the sixty percent reduction targets for the 2030 challenge. The project site is approximately 130,000 square feet. The average Photo Voltaic produces 8-10 kW per hour for about 5 hours a day. Based on this, the site has the potential to produce as much as 5,850,000kWh. If the site program elements achieve maximum efficiency and the energy capture on the site is substantial enough, due to the scale jumping for the Net Positive Energy requirements of the Living Community Challenge, the site could benefit the school and/or other buildings within the district.

Water:

The Living Community Challenge requires that a project meet 100% of the communities needs in a closed loop system while preserving natural hydrologic flows. Further, the challenge allows for scale jumping which would allow for grey water and black water to be treated at the community scale. The chart illustrates base line water use intensities as used by the Living Futures analysis of Yesler. With an average rainfall of 38.6” a year, the site can potentially capture a maximum of 418,166.67 cubic feet of rainwater annually. The site is currently almost completely impervious. The stormwater that lands on the site is carried away in the stormwater system.

Ecological Features

In the study area, the elevation from North to South is gradually changing from high to low. Our site is one of comparatively low point in this area. Because of topography changing the main ground water flow is from North to South. There are also a number of small patches of steep slope in between Boren Avenue and 12th Ave.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Demographics

The demographics of the NW quadrant were analyzed using data from both the 12th Avenue and First Hill urban villages. Whites make up the majority, followed by Asian, Black, Hispanic, and Native Hawaiian, Native American, and Other. The racial and ethnic mixes at Bailey Gatzert Elementary (25 languages spoken) also reflect this neighborhood diversity. A large senior living center is located on First Hill there is also an influx of young professionals to new developments on 12th Avenue. 41.3 percent of the population lives below the poverty level and unemployment is 8.7 percent, both numbers significantly higher than city and county averages. Additionally, 34 percent of the households are non-English-speaking.

Opportunities

Despite the issues that plague the area—poverty, homelessness, and the threat of gentrification to diversity—the site has the potential to support and preserve its poor yet precisely heterogeneous community. It is steeped in history and culture and is optimally located at the nexus of nine Seattle urban villages.

Living Futures Community Challenge

Existing

Possibilities
Aerial of area

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
The northeast quadrant is defined by its residential use, containing some of the closest single-family zoning to downtown. Large institutions such as the King County Detention Center, Seattle University and the Swedish Medical Center effectively frame a quiet district that manages to support a large number of cultural and social landmarks.
Streets in the quadrant are of similar size, but vary significantly in layout and congestion. North-south streets from 14th St. to 20th St. largely serve neighborhood residential traffic, limited to one-way in some sections due to parallel parking on either side. Jefferson and 12th are wider, faster, and work to integrate multiple transportation modes such as bikes, transit and cars.

The map shows the area’s extremely residential condition, contributing to the distinctly quiet and low density setting. The public space is located predominantly in the right of ways, while green space is inwardly located in the form of backyards. The fine grained nature of the inner blocks is contrasted by the high volume nature of exterior blocks bordering 12th Ave, Yesler Way, Jefferson St, and 19th Ave.
The single-use nature of the center of the neighborhood and larger, movement focused street typologies around its edges have created a void of both activity and movement in the center of the quadrant. There is little draw for anyone other than the residents of the area to traverse the core of the space, as they are more likely to travel north-south or east-west on the wider, faster moving arterials.

Large institutions - such as the Juvenile Detention Center and Swedish Medical Center - act as draws for employment and activity. Religious institutions are peppered throughout the southern side of the area. While the quadrant has some notable gardens, groceries are unavailable from small corner kiosks. The area is rich in cultural resources, including Washington House, The Boys & Girls Club, and the Pipsqueak Gallery.
The ILFI dictates that neither net energy nor net water must be resolved exclusively within the site. Seattle’s energy and water systems are inextricably tied together. Our weather and vast watersheds allow Seattle to derive roughly 90% of its power through hydroelectric dams - many of which also contribute to our drinking water system. While often touted as a clean and sustainable resource, hydroelectric systems also entail violent fracturing of riparian systems and habitats. The displacement of ecological and human based systems leave a mark on an otherwise clean technology. 60+ miles of pipeline these systems are able to provide roughly 140 million/gallons/day.
ANALYSIS: NE Quadrant
Last glacial period ends as melting ice sheets create the Puget Sound. Duwamish tribe descendants establish villages in what is now Seattle.

Henry Yesler builds sawmill along Elliott Bay, providing jobs for settlers and Duwamish.

Duwamish dispossessed by Treaty of Point Elliott, agreeing to “civilized habits.”

Logs slide from Profanity Hill’s ever-receding timber line along Yesler Way to the mill. The original “Skid Road” becomes demarcation line between affluent society and mill workers.

Dearborn Street Regrade cuts 108 ft deep, disconnecting Beacon Hill from First Hill.

African-Americans, Asian-Americans, and Jews flock to International District (and adjacent Central District) as racially restrictive deed covenants deny housing elsewhere, with Chinatown at its core.

Seattle Housing Authority opens Yesler Terrace, the first racially-integrated public housing in the USA.

Nihon Machi (“Japantown”) ravaged as Executive Order 9066 orders Japanese residents interned.

Racial restrictive covenants lose force of law as “open neighborhoods” now form an L-shaped ghetto extending from the International District, centered along Jackson Street and 23rd Avenue.

Interstate 5 divides International District as residents organize for community betterment.

Vietnamese immigrants form “Little Saigon” as economic and social center after the Fall of Saigon.

Kingdome constructed despite raising concern over further cultural disruption.

Plans underway to remake Yesler Terrace into mixed-income multifamily housing, as this low-density area defies Seattle development trends. Residents receive amenities and neighborhood connectivity, receive guarantees for 1-to-1+ replacement of low-income units amidst expected population growth from 1,200 to 12,000 area residents.

Duwamish tribe remains federally unrecognized.

In this incredibly diverse neighborhood, how will existing and potential resource networks leverage the impacts of increasing housing demand? Key assets correspond to the following imperatives of the Living Community Challenge:

- **BEAUTY**
- **EQUITY**
- **WATER**
- **HEALTH + HAPPINESS**
- **PLACE**
- **ENERGY**
- **MATERIALS**

ANALYSIS: SW Quadrant
Nearly 60% of the area is parking, vacant lots & ROW. Future improvements can transform these underutilized spaces to grow, reconnect & energize residents to form a resilient community.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Neighborhood-scale energy self sufficiency is possible by utilizing existing and new building surfaces for solar panels and realizing reductions in energy demands from efficiency retrofits and innovative building techniques. The area's southwest facing slope is optimal for solar gain in summer and open to southwesterly prevailing winds in winter and open spaces can host geothermal well banks for district heating making a cohesive strategy for small-scale, diversified energy production.

**GROWING.** Danny Woo Community Gardens contain foods from Asian homelands, while Yesler Terrace P-Patch caters to additional peoples. Demand for arable space is high with several additional squatted garden spaces. Numerous grocers and flower shops are present in the area but have little connection to local production.

**RECONNECTING** Often forgotten areas along I-5 and the Dearborn Regrade can integrate of green infrastructure, conservation, and equitable access to green space. The Nickelsville eco-village is a model of light living in an urban green space that presents opportunities for integration.

**SUSTAIN** As development densifies, habitat exchange can broaden restoration efforts in perpetuity by establishing bioregional sites in the Green-Duwamish watershed and Puget Sound, as well as in mitigation banks state-wide through Washington Department of Ecology.

SDOT street redesign at Bailey Gatzert Elementary School

East Yesler Way, between 12th and 13th Avenues. Multimodal transportation provides equitable access to neighborhood amenities and incorporates green space at the streetscape level.
Murals grace many of the building walls and illustrate the community’s appreciation of and love of nature.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
New developments are not reaching the LCC goals for local and sustainably sourced materials. However, there is a strong culture of re-use on the individual level with a often busy recycling center and exceptionally large Goodwill nearby.

ARTS ON THE GROW. The SHA’s Resident Artist program plans to house and assist artist’s in the production of public artworks. The path surrounding the campus will contain art that is integrated directly into the pathways, seating, and garden features of the neighborhood. Career assistance for artists and craftspersons is also a target goal of the new development.

RESILIENCE THROUGH REDUNDANCY.
There are city services to assist the community in case of a range of disasters, but the area’s real strength comes from it’s dense network of community centers and neighborhood-scale, culturally relevant health services. The community centers and churches form much of the heart of the area also providing a range of activities from sewing clubs to health chats.

Not limited to these organizations for outreach and entertainment, the area also has a number of small shops, restaurants, clubs, and many printed publications that cater to a multitude of languages and interests.
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Culture + Community

The SE Quadrant of the study area encompasses a neighborhood steeped in a rich history and saturated with cultural landmarks. Its ever-shifting demographics provide the community with a deeply diverse culture while also speaking to a legacy of displacement. The area hosts a dense concentration of community organizations.
Existing Amenities
The neighborhood contains a mixture of residential, commercial, and mixed use functions. Yesler Way and S Jackson St serve as the commercial corridors, with businesses that range from welding to map and globe sales. The area is served by infrequent bus lines and is part of both the Seattle streetcar line and the bike master plan. Though in the midst of rapid development, not much by way of sustainable initiative is evident in the landscape.

Street art, traditional religious imagery, and ornamental gardens give life to the built environment. The broad reach of community services offered in the quadrant further reflect the dynamism and diverse needs of the study area.
Uncertain Future
The neighborhood is targeted by a number of action plans that see the area as having vast potential for pedestrian-scale, small business-based commercial activity. Initiatives at a range of scales claim the community in their urban visions.

With such a vast potential for public life and urban connectivity, the neighborhood is currently in the throes of gentrification and significant up-zoning. New development contrasts sharply with historic brick buildings, as the area braces itself for yet another wave of change.
Looking Forward

The area currently faces a pivotal moment as it faces swift redevelopment increasing density. In addition to an enrichment of public life in the quadrant—an initiative already in motion by a number of community groups—the opportunity for connectivity through ecological processes, renewable energy, and a focus on water reveal themselves as a somewhat overlooked, yet prime opportunity for future action.
Final designs were inspired and informed by a range of resources. These include Copenhagen’s approach to neighborhood “lifting” by providing arts and cultural facilities in every neighborhood for all ages, the city’s approach to conjoin climate resilience with cultivation of a good and equitable city and the goals of the Living Community Challenge (LCC).

Students have employed site program ideas from our travels, from children’s arts centers, to vertical schools, to urban productive gardens and “cloudburst” parks, layering programs with forms that have been generated by the LCC criteria.

The selected project site and surrounding neighborhood in the First Hill district is destined to change in the next decades as the neighborhood intensifies, with streets already beginning to accommodate multi-modal transit. Students considered the quality of public life -- both moving through and staying in -- the public realm of streets, parks and leftover spaces. The final designs were developed at all scales and show detailed and integrated resolution at the levels of district, site and building.
Harvest is a place to grow, prepare, and distribute food. Building on the desire for more growing space within the community, Harvest not only produces greater food access but incubates economic and educational opportunities through other food-based programs. Agricultural job training, community kitchens, and resource libraries set the table for better understanding of local urban food production. And when the meal is ready, Harvest provides a host of opportunities to consume the local food, and culture within an ecologically appropriate urban context. Harvest is constantly reshaped by seasonal growing cycles, reflecting neighborhood voices. Harvest is an asset to retain and sustain historic community character and connectivity while growing towards a regenerative future.
Local Grown Food Access | Life Skills | Jobs Training | Employment

NEARBY GARDEN RESOURCES
COALITION OF PARTNERS

* Puget Sound and Rec
  Restoration Fund

* Seattle Parks and Rec
  Pile Place Market

* Seattle U. Center for
  Community Engagement

* Capitol Hill Farmers Market

* Saba Ethiopian
  King County Archives

Danny Woo Garden

1 Mile

1.5 Miles

2 Mile

1/2 Mile

* Fare Start
  New Orleans
  Precedent
  Youth-Centered Farm
  Education Program
  Current

* FARE START
  Seattle
  Culinary Training for
  Youth and Adult At-Risk Populations

* Proposed

* Maintained

Saba Ethiopian

King County Archives
PRODUCE
- FOOD FOREST
- P-PATCHES
- URBAN EDUCATION FARM
- URBAN PRODUCTION FARM

+ INCUBATE
- YOUTH - ADULT FARM EDUCATION
- RESOURCE LIBRARY
- FARM JOBS TRAINING
- COMMERCIAL KITCHEN
- START-UP RESTAURANTS
- SMALL-BUSINESS RETAIL/OFFICE

+ CONSUME
- CSA FARM DISTRIBUTION
- COMMUNITY + PERFORMANCE
- EVENTS KITCHEN
- ESTABLISHED RESTAURANTS

SUSTAIN
- INDOOR/OUTDOOR EVENTS
- PLAY SPACE
- FEMA SAFE HAVEN

- REGENERATIVE WATER MGMT
- GEOTHERMAL CONDITIONING
- PHYTOREMEDIATION

DESIGN: HARVEST
Lying at the intersection of Seattle’s International District, Yesler Terrace, Squire Park, and Central District neighborhoods, Harvest links local residents through celebration of common components: food, culture, and recreation. Harvest is analogous to an allotment garden for an entire food web: accessible and engaging production of food, incubation of skills to grow or distribute, and consumption of goods in a social setting that engages residents toward greater social cohesion.
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft

**Food Forest**
- Public
- Grow-able Space: 17,000 SF (0.4 Acres)
- 15 species of fruit tree
- 8 species of nut tree
- 60 perennials
- Spring: fruits, berries, shoots, buds, bulbs, roots, nuts

**P-Patches**
- Semi-Public
- Grow-able Space: 5,600SF (0.1 Acres)
- 9 x 30sf senior plots
- 42 x 50sf plots
- 7 x 100sf plots
- Summer: herbs, leafy greens
- Autumn: root vegetables

**Education Barn**
- Semi-Public
- Grow-able Space: 15,000 SF (0.35 Acres)
- 45 Member CSA
- 2 Farmers Markets
- Winter: nightshades, leafy greens, root vegetables

**Grow-able Space**
- 17,000 SF
- 0.4 Acres
- 15 species of fruit tree
- 8 species of nut tree
- 60 perennials
- 5,600SF
- 0.1 Acres
- 9 x 30sf senior plots
- 7 x 100sf plots
- 15,000 SF
- 0.35 Acres
- 45 Member CSA
- 2 Farmers Markets
- $10k - $20k
Production Farm

Private

Grow-able Space:
34,000 sf
0.8 Acres

34 x 1000sf Plots
$40k-$60k

Existing P-Patches in the neighborhood have long wait lists. Harvest will add 58 new plots for residents, with varying sizes for different production needs and specific designs for access by elderly residents. The Production Farms serve as the next level of local food distribution to the neighborhood. Individuals trained by the Education Barn program and those who are interested in farming as a career can rent these plots for more intensive production. Specialty foods, selling to on-site restaurants, and production of food for processing in the community kitchens and sold locally is highly encouraged.

Economics of Food Production

The diversity of food production systems speaks to a diversity of needs. The Food Forest provides berries and nuts to whomever is enjoying the space and is maintained by the programs hosted at the Education Barn. The Barn uses a sliding-scale Community Supported Agriculture model as a means of neighborhood food production as well as a source of funding for education programs for youth and adults alike. The programs tie in closely with the Harvest Community Center resources.
At the Harvest Education Barn, we sustain food production through job training. Using the local Beacon Food Forest in Seattle and youth programs such as Grow Dat in New Orleans as precedents, we educate individuals, families and teens about how to grow food. The production farm on the roof is the classroom and all food produced is sold through a sliding-scale CSA. We partnered with local schools like Bailey Gatzert Elementary, across the street; teachers bring their class over and we hold lessons about healthy and locally produced food. Students get their hands dirty on the roof production farm and eat veggies in the greenhouse. They are encouraged to wander around the site after school and eat from the food forest with their parents.
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft

EDUCATION BARN: OPEN CLASSROOM, SECOND FLOOR

EDUCATION BARN SECTION: FACING NORTH
Consumption: food, drink, goods, experiences. These acts exist at the meeting point of meaningful time and space. People associate through shared activities, and Harvest is a meeting place at the intersection of diverse neighborhoods - past, present, and future.

With movable seating throughout Harvest, there is always a seat at the table of your choosing. Food awaits on hand, whether you would like to purchase, pick, or prepare for others. Vendors used the industrial kitchen to make that ginger cream sauce dripping on your shirt. Don’t worry - your neighbor runs a used clothing shop next door! By providing resource access to prepare, distribute, and consume goods, Harvest localizes and activates economies.
Breathe deep as you read in the Food Forest. Watch waterfowl and savor lunch from Harvest’s rotating kitchen stand. Play dominoes as your kids scramble on driftwood. Sip soup while waiting for your daughter to finish art class. The King County Archives is now “the Table”: a gathering space anchoring surrounding uses.

Saba Ethiopian Restaurant is a neighborhood cornerstone, sourcing food from its roof. Below, independent storefronts of multiple sizes ensure affordability for vendors, creators, and consumers.
COLLECT, FILTER, STORE, USE

Harvest lies on a narrow shelf in the trough of a South-flowing watershed, with ridges defined by Broadway, 20th Ave S, and E Union St. The site can catch and store massive amounts of stormwater, relieving pressures on a combined sewer system and conserving water in the face of decreased snow pack supplying Seattle’s Cedar River water supply.

Harvest’s underground cistern can store 1.25 million gallons of potable water: enough to support 20,000 people’s hydration and sanitation needs for a month while also supplying the site’s agricultural needs.

Harvest is set to function as a FEMA “Safe Haven” in case of disaster. Located adjacent to dense neighborhoods in the high-risk earthquake liquefaction and Tsunami Hazard Zones, Harvest provides shelter, water, food, and organizing provisions in a post-disaster scenario.

The food forest, phytoremediation plantings, and wetland connect habitat corridors, linking a city-wide pollinator pathway with the Mountains-to-Sound Trail and undeveloped space surrounding I-5.
Stormwater runoff from off-site sources is collected by drains at traffic-calming raised intersections, which prioritize pedestrian paths over automotive traffic and provide a block-party plaza for Washington Hall. An extensive phytoremediation planter series cleans runoff before it reaches central wetlands with potable storage below, supplementing an annual collection of 2.25 million gallons of direct site-sourced rainfall.
OFF-SITE STORMWATER:
Stormwater is picked up along roadways and through permeable paving between plantings, then channeled into a continuous trench filled with a filtration planting medium and water cleansing plants. At the end of each catchment trench the clean water is piped to the site’s internal treatment areas for additional cleansing, storage, and use.
**ON-SITE STORMWATER:**
Internally, water is collected from roofs and paved areas, then passed through filtration plantings to the wetland meadow. Here the water is cleansed further by plantings and filter-feeder circulation. Water eventually reaches the cistern below, where it is stored until use for irrigation and flushing. Inline filters allow for potable use.

**AQUACULTURE:**
mussels and other filter feeders provide filtration, education, food, and entertainment.

**FILTER, STORE, USE**
13th Ave and E. Fir Street: Nestled in the northeast corner of the site, this mid-block alley intersection serves as a hub for larger gathering and performance events. A raised street grade along E Fir Street hosts block parties spilling out of Washington Hall while prioritizing pedestrian travel. Concrete prisms and table-like platforms provide amphitheater-style seating as well as a fun place for children to scramble and run around. A gentle, ADA accessible path leads from the ground level through the amphitheater to shops, restaurants, and all the activity that Harvest has to offer.

**LEGEND**

1. Concrete Pavers
2. Concrete Prisms
3. Tabletop Wood Seating
4. Concrete Seating
5. Prism Planter
6. Precast Concrete Bench
7. ADA Accessible Sloped Path
8. Restaurant Terrace
9. Community Center Deck
10. Facility Storage and Utilities
11. P-Patches
12. Transition Street Edge
13. Neighborhood Art
12th Ave. and E. Yesler: The intersection of 12th Avenue and East Yesler Way— the busiest intersection of the site— frames Harvest. Passers-by join in the vibrant activities, whether they be a farmer’s market, planting or harvesting festival, a community celebration, or an average day of children playing, people meeting, and relaxing in the garden. At night Harvest transforms into a lively hub of restaurant activities, vendors selling goods, or an event at the Table. The prisms are used to negotiate the grade change at 12th Avenue and East Yesler while creating playful forms for climbing, skating, or sitting. Additionally, artists from the community are invited to paint on the prisms to add color and character to the changing landscape of Harvest.

LEGEND

1. Concrete Pavers
2. Concrete Prisms
3. Sand Setting Bed
4. Compacted Gravel Base
5. Concrete Base
6. Concrete Footer
7. Precast Concrete Bench
8. Prism Planter
9. Planter Drain
10. Phytoremediation Planter
11. Raised Planter
12. Restaurant Terrace
13. Movable Chairs (spring + summer)
A Lively Village Center

Like the heart of a traditional village, Village Market Square is a place where many people live and many others come from the surrounding area to meet, to trade, to buy and sell their wares, and to see other people who are like and different from themselves.

Located in a low-income international neighborhood and across the street from and elementary school, this site is an ideal location for low-income housing focused on families. Flat roofs and upper balconies offer shared outdoor space for residents, while the ground level remains a bustling public square.

The central covered marketplace and surrounding small shops and restaurants and live-work spaces provide diverse business opportunities for small entrepreneurs from all over the world.

Balancing the needs of residents, sellers, and shoppers is essential to the success of Village Market Square.
Who are the people? What do they need?

**EDUCATION + EMPLOYMENT**

- **Families**
  - High School Graduate: Neighborhoood 80%, Seattle 41%
  - Bachelors Degree: Neighborhoood 93%, Seattle 58%
  - Graduate Degree or +: Neighborhoood 14%, Seattle 23%

- **Children**
  - Soft surface
  - Hard surface
  - Play Equipment

- **Small Shop Owners**
  - Shelter

- **Market Vendors**
  - Food and Drink

- **Neighborhood Residents**
  - Transportation

**HOUSING + INCOME**

- **Single Person Households**
  - Neighborhoood 62%, Seattle 38%

- **Group Households**
  - Neighborhoood 14%, Seattle 86%

- **Family Households**
  - Neighborhoood 14%, Seattle 86%

- **Non-Family Households**
  - Neighborhoood 86%, Seattle 14%

Among the 350 students at Bailey Gatzert School:
- Student’s families come from at least 35 countries.
- 25 languages other than English are spoken at home.
- 43% are English Language learners.
- Over 94% qualify for free or reduced price lunch.
- 15% are homeless.

Key to icons:
- Soft surface
- Hard surface
- Public Space
- Private Space
- Kids Space
- Semi-Private or Semi-Public Space
- Earn Money
- Shelter
- Transportation
- Seating
- Food and Drink
- Play Equipment
- Plants
Building Massing and Site Program

- person on rooftop
- person on ground

Big Market Day  Weekday Afternoon  Cultural Festival Day

DESIGNS: Village Market Square
Design Strategies

Defining, Separating, and Connecting Spaces

- Bridges connect rooftop spaces
- Edges offer places for people to stay
- Separate spaces by level: semi-private above, semi-public below
- Residents share rooftop outdoor open space with each other but not the public

Enclosed and Open to the Public

- Buildings should define but not enclose square too much.
- Inviting passages welcome people in and through the square.
- People can move through on many routes, quickly or lingering.

Private and Public

- Market and library bring many people from the neighborhood and beyond.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Qualities of Market Spaces

Spaces clearly defined  Flexible to expand for Big Market Days  Shelter from weather  Light and open Not closed or dark

Spaces designed for small sellers
Taking cues from marketplaces around the world, the market square offers spaces where small scale entrepreneurs with as little as a rolling suitcase or as much as a small truckload of things to sell can set up shop.

- Existing market tables line the arcade and area under the market hall roof.
- Larger 10x10 stall spaces are available under the roof and in the open for vendors who bring their own tables and pop-up canopies.
- Small shops and restaurants surround the square.

Arcade and Covered Market Hall
offer vending spots for micro-sellers. Open spaces can host larger booths on big market days, or flex to other uses.

Public Square offers open and sheltered public places where neighborhood people from all over the world can see and be seen, and can gather to share culture and sell what they produce.
Small Diverse Commercial Spaces

A progression of sizes of outdoor vending space and indoor shops allows small independent vendors and shopkeepers to choose the size space they need. A vendor who starts with a suitcase of goods to sell at a small table could grow to two tables, then a 100 ft market stall, then move inside to a micro-shop or tiny shop as their business grows, all without leaving the neighborhood.

Very Small Shops, Restaurants, and Galleries offer local independent business people a place to start small.

Small storefronts discourage franchises.

Frequent shop entrances, variety and abundance of small vendors, and spots for buskers enliven the plaza and create an inviting pedestrian street scape.

Inviting passages lined with shops encourage passers-by to explore the interior of the block and make clear that the interior of the block and the market are open to everyone.

Arcade Spaces surround the square providing sheltered outdoor dining and vending space and places for people to linger.

Tucked-in areas between planters host seating, market stalls, small food carts, or outdoor dining.

Patterned pavers suggest placement for tables, stalls, and aisles.

Outdoor Selling Spaces:

- Table vendors: under 30 sqft
- Tent vendors, small carts: 100 sqft
- Busker spots

Indoor Shops:

- Micro-Shops: under 300 sqft
- Tiny Shops: 300 - 500 sqft
- Small Shops: 500 - 750 sqft
- Mid-size shops, cafés, and restaurants over 750 sqft

Movable convertible market tables adapt from market displays to benches to tables and keep space flexible for many uses.
Site Use Plan: Commercial and Public Uses of Ground Floor Indoor and Outdoor Spaces

**Small local grocery store** brings everyday neighborhood shoppers and serves residents’ daily needs. **Big market days** bring more of everyone.

**Live/work units and shared workshops** allow diverse opportunities to work on the block. Live/work residents and makers collaborate to run shared workshop and gallery spaces.

**Neighborhood library** featuring international language resources provides many opportunities for learning and job training, and indoor spaces for community gathering.
Relax and Play
A garden for the community
Xia Yu
5-foot high grass slope provides a gentle divider between the busy market space and the more relaxing garden space. The grass slope provides a place for people to relax and play and extra room for big market days.

Garden near the library is a community space to sit down, and to tell stories to each other. Movable furniture can be arranged for different activities.

Winding Pipeline is the main element in the garden plaza. It links the arcade space and the two parts of the garden together. The Pipeline contains swings, hanging ropes, a misting water feature, and lighting, and uses very bright colors to create playful spaces for kids.
DESIGN: Village Market Square: Relax and Play

- Hanging ropes
- Swing
- Misting water feature
- Seating
Pacing Change, Preserving Community

The neighborhood surrounding the site has been consistently evolving from its initial state as Seattle’s original source of timber. A world class hospital, innovative public housing, an incredibly diverse demographic and a unique typology all work to make the urban realm unique here. In recent years development forces have begun to put pressure on the built environment, with over 2000 new residential units planned or in construction. Understanding that such change is largely inevitable in the modern city, this site design embraces growth while simultaneously preserving and enhancing the existing community. Public spaces inside and out provide services to residents as well as a plethora of opportunities for neighbors to interact, while commercial and residential functions provide capital to support these amenities. Development is phased over multiple years to ensure success and reduce any potential shock to the community.
Reclaiming Place-Based Identity

Slope is essential to the materiality of the site, from the timber slides of early settlers to its massive regrade. Scaled down to the human dimension, these forms provide surfaces that encourage active movement and unconsciously catalyze play. Users navigate the site much as water through a valley, gaining a sense of place through eddies of community gathering and diverse interaction. This focus on dynamic movement and social intersections is supported by a deep sensitivity to the site’s ecology. Contaminated soil becomes public space through educational remediation, and stormwater is both harvested and infiltrated in a net positive balance.
VIBRANT URBAN EXPERIENCE:
COMMUNITY RESILIENCE THROUGH DIVERSE INTERACTIONS

POLLINATOR SPECIES

ELEMENTARY STUDENTS

SITE RESIDENTS

COMMUNITY MEMBERS

PUBLIC VISITORS

ELDERLY NEIGHBORS

INTERSECTIONS

ENTRIES

CIRCUIT SPEED

ALLEY TYPOLOGIES

COZY CORRIDOR

PEDESTRIAN PROMENADE

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
HUMAN-SCALED DESIGN:
UNCONSCIOUS PLAY + FLEXIBLE USES

- 20” TODDLER COUNTER HEIGHT
- 20” SEATING FOR MOBILITY
- 20” STANDARD BOX JUMP HEIGHT

ACTIVATED SPACES ENCOURAGE CIRCULATION
TRAMPOLINES CATALYZE PLAY
BENCH HEIGHT FOR SCHOOL-AGE USERS
ANGLED EDGES ENHANCE STRETCHING
WILDFLOWERS ATTRACT POLLINATORS

DESIGN: Embodied Energy; Situated Slope
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft

PHYTOREMEDIATION AS ADAPTIVE REUSE

VOC / PAH / HEAVY METAL CONTAMINATION

UPTAKE FROM NATIVE POPLARS AND WILLOWS

REINTRODUCTION AS PUBLIC SPACE

TREATED SOIL INFLTRATES STREET RUNOFF

GREEN ROOF SEDUM

POLLINATOR PALETTE
RAINWATER: HARVEST AND RECHARGE

ROOFTOP COLLECTION
- GREEN ROOF
- URBAN AGRICULTURE
- HARVESTING CISTERNS FOR POTABLE USES

SURFACE RUNOFF
- GROUND SURFACE
- FILTRATING PLANTERS WITH PERFORATED PIPE
- RAIN GARDEN INFILTRATION
- OVERFLOW CISTERN FOR IRRIGATION

DESIGN: Embodied Energy: Situated Slope
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft

- **PEDESTRIAN ORIENTED ZONE**
- **PHYTOREMEDIATION PARK**
- **LARCH COURT PARK**
- **NEW EXISTING COMMUNITY SERVICES**

**DIVERSITY & HOUSING TYPE**

- **STUDIO + 1-BD**
- **85% OF NEW**
- **2-BD+15%**

**SUN & WIND**

- **CIRCULATION PATHS**
- **ADJACENT FORCES**

**SUNSET JUN 21**

**SUNRISE JUN 21**

**SUNSET DEC 21**

**SUNRISE DEC 21**

**US Citizen**

**Immigrant**
Through community involvement, the block at 12th Avenue and Yesler Way will be reconstructed to provide public space and service for the growing and changing community. The Struves Building will be re-purposed to house offices and the on-site Neighborhood Renewal Office. The 12th Ave Commons will be co-housing in which all shared spaces are organized so that bedrooms and private space are minimized to foster a true community system dependent on the individual and the whole. The bottom two floors will focus on engaging the diversity of the surrounding area and neighborhood through an International street food market that uses shared kitchens to centralize and economize energy use.
Precast concrete double tees
Precast concrete inverted T beam
Precast concrete column
Concrete topping with radiant heat
OWSJ
HSS roof canopy
Existing masonry load bearing walls
Concrete topping with radiant heat
Existing heavy timber columns
Galvanized HSS steel columns
HPL fiberboard panelized rain screen
Galvanized steel grate catwalks

1. NATIVE PLANTS
2. CLERESTORY
3. STACK VENTILATION
4. UNCONDITIONED CIRCULATION
5. SHARED KITCHEN SYSTEMS
6. OPERABLE WINDOWS
7. SOLAR/PV PANELS
8. BICYCLE PARKING
9. COMPOSTING & RECYCLING
CO-HOUSING: PRIVATE
CO-HOUSING: COMMONS
MARKET/RESTAURANT
OFFICES

12 AM
9 AM
12 PM
3 PM
6 PM
9 PM

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
YESLER TERRACE
This neighborhood is rapidly densifying. The Seattle Housing Authority estimates the population of this small neighborhood will expand from 1,200 to 12,000, a 10X growth in just a few years. This is an incredibly diverse neighborhood comprised of dozens of nationalities within a 5 block radius.

KING COUNTY ARCHIVES
The King County Archive warehouse occupies 2/3 of a block on E. Yesler Way. The 1950s era warehouse was built with old growth timber trusses and tilt-up concrete walls. The building was designed as an equipment warehouse, not an archive and is too small for the city’s growing need. As the archives move to a new site, the warehouse can be reused to support the Yesler Terrace Community.

BAILEY GATZERT ELEMENTARY
The local elementary school serves neighborhood children and is one of the lowest-income schools in the school district. Over 90% of students receive free or reduced lunch. There are over 40 languages spoken in the school. The elementary school is currently near capacity. When the neighborhood grows 10X, the school will be insufficient for the neighborhood’s needs.
ADAPTIVE REUSE

To meet the Net Zero Waste goal of the Living Community Challenge, the archive warehouse is reused in service of the neighborhood. The timber trusses are left in place; additional columns and bearing walls are inserted as needed. Windows are added to the exterior wall for daylighting.

1. Existing western elevation of the King County Archive warehouse. Currently only serves the city; feels closed off from the neighborhood.

2. Renovate south end of warehouse into flexible spaces for after-school programs. Can be converted into classrooms for elementary school expansion in the future.

3. Strategic warehouse dissection to create pedestrian alleys connected to the residential neighborhood (to the NE) and Washington Hall.

4. Increase density by adding residential co-housing units. Ground floor supports community development through small offices, retail, and grocery.
Who's There? A Day in the Life of Residents and Visitors

Oliver
- Lives in co-housing.
- Walks with friends to school.
- Goes to after-school art classes.
- Is learning to bike on the pedestrian alley.

Violet, Ethan, Ava
- A family of 3 living in co-housing.
- Children go to elementary school.
- Works in the ground-level grocery store.
- Manages the volunteer-run urban farm.

Cooper
- Works in ground-level office.
- Commutes via street car.
- Goes to happy hour around the corner with coworkers.

Leon
- Runs through the area with his dog in the morning.
- Works in a ground level co-working space.
- Meets friends for happy hour.

Alice
- College student at nearby campus.
- Eats lunch onsite during nice weather.
- Tutors elementary school students.
- Meets a date for dinner in the neighborhood.
FLEXIBLE FURNITURE
LOW-FLOW VENTILATION
OPERABLE WINDOWS
SCHOOL EXTENSION CLASSES
COMMUNITY CLASSES
AFTER-SCHOOL CLASSES
COMMUNITY EVENTS
ACTIVE PLAY
INDOOR GYM
REUSE OF MATERIAL
PUBLIC TRANSIT ORIENTED

DESIGN: Embodied Energy: Adaptive Reuse
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Flexible Classroom Space
The site sits at the crossroads of a number of major transportation systems; buses, protected bike paths, streetcars and a pedestrian overlay district all vie for priority within the area. By restructuring mode hierarchy along primary streets and enhancing pedestrian travel along secondary ones, conflicts are kept to a minimum while still providing efficient movement of each form of transportation.

Conflicts exist largely at intersections and along secondary streets where pedestrians are considered incidentally.

The improved site design allows for efficient travel across different modes, creating safe spaces for all user types.
Rapid change and development is affecting the neighborhood and the risk of displacement is high in this demographically unique part of Seattle. However, opportunities exist to provide a sustainable and inclusive supportive framework for this ethnically, socially and economically diverse community.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Cultivating the Community Commons

In The Co-op, residents help to establish and maintain a supportive social and economic environment. Uniquely situated at a nexus between many distinct neighborhoods, our site provides the opportunity to meet a variety of needs symbiotically. A mix of incomes and skill sets helps the intentional community work together to shape their own future. The physical facilities are reinforced by informal connections through the exchange of knowledge and community engagement, on both community and neighborhood scales. In turn, these social and economic connections shape the built environment as the cooperative organization develops to meet their own changing needs.

SITE AERIAL WITH FUTURE CONTEXT
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft

Existing Conditions
- Demolish Buildings
- Re-grade Site
- Install geothermal well field and below ground cistern
- Construct Co-Op housing, underground parking and water storage
- Refurbish market building, Construct addition and market canopy
- Construct pre-school and co-work space
- Complete landscape and connect water systems

SITE CONSTRUCTION PHASING

4 years
Geothermal wells drilled 400 feet deep. Well field scaled for future community tie-in.

Solar photovoltaic power generation

Urban Agriculture integrated with building

Central bioswale treats and infiltrates storm water

Green roofs reduce heating/cooling loads, and filter stormwater prior to storage

Rainwater collected from rooftops

Landscape water storage collected from stormwater. Bio-filtered and used for irrigation of urban agriculture plots

Recycle, compost, and trash

Building water storage

Geothermal wells drilled 400 feet deep. Well field scaled for future community tie-in.
The welcome vista draws people to the Co-op and market and celebrates the connection with the surrounding environment. Pathways lead down stairs to the market and through the urban agriculture fields where co-op members can partner with non-profit groups like Seattle Tilth to sell produce to the community.
One of the most important concerns for our group when exploring the site is to maintain the view and also the energy from the northwest corner, the highest point of the whole site. After nailing down the program, I started to think about how to define the central public area, and how to create high-quality open space that is appreciated by different users at different times. Generally, the central area will serve as the ecological and also social core of the community, contributing to the sustainability self-development and build community identification.
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft

THE STALL
- Stalls for storage but also for sitting and movable planters
- Creative combination!
- To be collaborative!
- Make it by yourself!
- Magical Market!

THE CANOPY
- Glass cover
- Wooden structure
- Unique paving pattern
- Define central area
- Playful public space
- Movements and artistic infrastructures help to build community identification!
for plants that prefer drier conditions  ZONE 3
for plants that can tolerate occasional standing water  ZONE 2
for plants that can tolerate wetter conditions  ZONE 1

- *Aquilegia formosa*
- *Juncus tenuis*
- *Carex Obnupta*
- *Iris tenax*
- *Juncus ensifolius*
- *Aster modestus*
- *Lupinus*
- *Holodiscus discolor*
Within our cooperative community framework, the Co-Work Co-Play project exists at the intersection of the workspaces and resources. The form is essentially two separate buildings that maximize efficiency by sharing a structural system and other physical resources like egress and plumbing systems. Both program elements were needed at that site, and the functional reasons that brought them together are reinforced through the complementary program. Half of the building is cafe and co-work space, the other half is a flexible childcare and learning facility to meet the expansion needs of the elementary school across the street and serve as a resource for co-op families. The co-work and school spaces have only visual connections, ensuring child safety and parent productivity. The building is a hybrid CLT and GluLam structure, which meets the ethical needs and future growth potential of the intentional cooperative community.
CLOSE UP ON THE CIRCULATION: LAYERS OF USE

The exterior building steps create a place for a variety of activities. Walking and running are the most obvious, as they connect the ground level to the roof and Learning Garden, but the southwest-facing steps also welcome more sedentary activities.

The size and aggregation of stair heights encourage users to scale them in different ways... or a mix of ways. Active play is encouraged!

More than circulation, the steps are also a place of repose and visibility: a centrally-located public meeting point for those within and around the site. In this way, the formal, physical built environment provides opportunity to help to strengthen informal social connections within the community, thereby reinforcing the central tenets of the cooperative structure.

LAYERED PROGRAM

Multiple paths of scaling the building provide users a playful way to circulate with multiple perspectives of prospect over the community. The stepped shape of the building took site and sun angles into consideration, and facilitates interaction and prospect across the site.
**Layered Function**

The space under the steps is not wasted. With an exposed CLT building interior, hidden spaces to put mechanical, electrical and plumbing systems are appreciated. Other opportunities for MEP are in the low ceilings that provide a sense of vertical compression and expansion in key locations in the plan. These spaces will also house some of the site's water filtration and storage system.
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft

CO-WORK
- conference room
- co-work desks
- bathrooms
- kitchen
- deli + coffee shop + bar
- lunch tables
- lounge area
- viewing platform
- co-work space
- resources
- bathrooms

LEVEL 1 PLAN
- entry
- office
- flexible childcare space
- teacher’s lounge
- courtyard
- bathrooms

LEVEL 2 PLAN
- after school teen lounge
- traditional classroom space
- computer lab + library
- bathrooms
- courtyard access

ROOF PLAN
- seating
- learning garden

CO-PLAY
- seating
- learning garden
MASS TIMBER CONSTRUCTION

The building is an exterior insulated mass timber panel assembly design which relies mainly on 10 x 30' CLT panels and GluLam beams on concrete footings. The interior CLT walls and floors are left exposed with a light finish. The exterior has the insulated rain screen assembly and horizontal cladding over the steps, walls and roof, which has a modified flat roof assembly to accommodate the roof garden. The typical wall thickness is 13” in total.

WALL -TO-FLOOR CONNECTION
using metal brackets and self-tapping screws

- 4” thick rigid insulation
- 2 layers 1x3” furring screwed through insulation screwed through the insulation into the CLT
- horizontal panelized wood cladding nailed to furring strips
- cross-cavity flashing

FLOOR -TO-FLOOR CONNECTION
using screws and a single internal spline

- 5 ply CLT panel (6 7/8” thick routed, sanded and sealed)
- self-adhering vapor permeable sheathing barrier
- ventilated and drained cavity
- plywood single internal spline
- 5 ply CLT floor assembly (routed)
- 2 self-tapping screws (along connection)

Left are preliminary plans showing structural intent and organization on a conservative 10 x 10’ grid for mass timber construction.
LIGHTING ANALYSIS

FIXTURE GROUPINGS BY CALCULATION AREAS

A: cowork downlights
B: window dining pendants
C: primary employee lighting
D: lounge lighting
E: main dining area
F: secondary employee lighting

BUILDING SYSTEMS AND LIGHTING ANALYSIS in section through cafe + co-work area

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
ANNUAL SUN PATH AND SHADOW RANGE

SECOND FLOOR CONFERENCE ROOM view of courtyard and classrooms

DESIGN: The CO-OP: Co-Work Co-Play
The Yesler Terrace neighborhood is undergoing a period of profound transition. It has long been a refuge for marginalized communities with many vibrant cultural institutions, but few amenities like green space and access to healthy food and recreation. As the demographics of the community change, we have endeavored to provide a dynamic space that provides a place for everyone including community agricultural production, gathering space, and extracurricular space for students from across the street. SuperGreenhouse is a space of healing, growing, and wonder.
A community center to provide meeting spaces and classroom space.

Growing space was maximized across the site.

The jungle "islands" offer a unique and immersive experience.

Public space was woven throughout the site.

A working hydroponic greenhouse capable of providing both food, jobs, and learning opportunities to the community.

A children's center offering learning, cooking, eating, and play areas.

Street side market stalls to support small local businesses and sell the site's produce.

The design works to integrate 3 distinct programs: community, cultivation, and children.

Each of these functions is given a "house" whose program reverberates outwards and intermingles with other program elements.

The design integrates community, park, agriculture, commerce and learning to create a public space that operates also as public infrastructure.
Twin biodigesters to process human and plant waste

2 million gallon cistern

A venting system provides comfort even during the warm summer months.

Water collection is paramount; the roof allows for integrated water collection, capable of providing for the entire site.
Rapid change should mean productive change for Yesler Terrace. Providing a place for all season growing, gathering, and learning experiences aims to put public park and public infrastructure together to help sustain and enliven the community.

**PROVIDE A FORUM FOR THE COMMUNITY TO GATHER, SHARE, AND LEARN**

**PROVIDE LOCAL FOOD AND JOBS THAT EARN MONEY AND HELP THE ENVIRONMENT**

**PROVIDE A SAFE PLACE FOR CHILDREN TO ENGAGE WITH EACH OTHER & LEARN**

DESIGN: SuperGreenhouse
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft

CANOPY WALK

JUNGLE IMMERSION

WANDER

COMMUNITY HEART
At the heart of SuperGreenhouse is a protected community gathering space and tropical public park. There is space for active play, exploration in an immersive jungle experience, spaces to meet friends and family and more intimate places perfect for studying or quiet meditation. It is a conservatory where the community is invited inside the exhibit. Visitors have the opportunity to experience the jungle from above on the canopy walk pathway. There are also passageways underneath the jungle covered “islands” that allow for fluid circulation throughout the space as well as opportunities for enclosed, climate-controlled exhibits. At the center lies a large gathering space surrounding a banyan tree, which provides shade, climbing opportunities and a sense of magic unique in the city.
An exhibition space near the entrance is nestled beneath the meadow and provides opportunities to showcase orchids, ikebana, and botanical prints.

The canopy walk allows visitors to experience the jungle and park from the treetops, 15 feet above the ground.
Accessible through a passageway beneath the jungle and adjacent to the community agriculture area is a space perfect for farmer’s markets, community BBQs, and soaking in the sun, no matter the temperature outside.
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Edges + Layers

Andrew Prindle + Christian van Waasen

DESIGN: SuperGreenhouse: Edges + Layers
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Super Green Community Center
Mattias Bailey
Super Green Community Center was designed as an education center for the Super Green house mega-structure. The design was focused on creating an easily understood, accessible and quiet building to complement the greater site design. The community center houses an auditorium, computer lab, meeting rooms, as well as access to the second level of the Green House structure. Reservations and information can be found at the front desk on the northwest side of the building.
A thickened wall acts as the main HVAC corridor. The wall's adjacency to the interior of the greenhouse allows for ventilation of the greenhouse and air exchange between the greenhouse interior and community center. Additionally, the height of the wall enables it to function as a solar chimney in the warmer months.
The facade system was developed using a modular brick. Turning select bricks 90 degrees, the facade offers vertical support to vining plants, including hydrangeas, seen to the right.

Interior planters enliven the space, while also providing food for community members and staff. Drainage runs to on-site greywater treatment, seen in the systems page.
BUILT OUT TO 65' MAX HEIGHT THROUGH ENTIRE BLOCK

COURTYARD CENTER

SETBACKS AND PASSAGES INTO COURTYARD

ADJUST HEIGHT OF SOUTHERN PUBLIC BUILDINGS

LARGER GATHERING SPACES THAT ENGAGE WITH SIDEWALK

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft

Senior/Youth Resources

Familial Resources

Bustling Centers
The current paradigm of multifamily housing development in Seattle focuses on providing single-occupancy studio and one-bedroom apartments. This has created a lack of affordable, family-sized housing and options for the elderly. This pattern ignores and even prevents something that many cultures have intuitively known for eons - the benefits and importance of Intergenerational Living. It is upon this concept that this affordable housing development is designed - the educational, cultural, emotional, and economic benefits of providing large, family-sized affordable units interspersed with studios designed solely for one or two aging seniors, allowing different generations to learn and grow.
Site Section - Mix of Space, Mix of Life

Vibrant pedestrian street-edge, with active commercial spaces

Mixed housing types to cater to families and seniors

Running and walking track to promote physical activity and health

Cistern to collect rain water and slow infiltration

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft

Fir Street

Site Section - Facing East

Mixed Use

Resident Courtyard

Project Partners

Seattle City Light

the bike shack

Senior Services

Seattle Public Utilities

FARM
Community club house, neighborhood office, and indoor winter garden

Transportation hub integrated with green stormwater infrastructure

Protected interior courtyard, covered transit waiting area, traffic calming on Yesler Way

Accessible seating, walking & running track, quiet community-overseen courtyard

Vegetable and flower gardens, sunny and shady seating areas

Opportunities to Enjoy Positive Aspects of Climate

Opportunities for Play and Exercise

Protection from Unpleasant Sensory Experiences

Opportunities to Stand/Stay

Opportunities to Sit

Opportunities to Talk and Listen

Opportunities to Walk

Opportunities to See

Scale

Positive Sensory Experience
Cultivating the Community Commons: Climate, Culture and Craft
1. Multicultural Food Stands
2. Bike Share & Repairs
3. Townhomes
4. Wellness & Yoga Center
5. Protected Bike Parking
6. Stockbox Grocery Store
7. Walking & Running Track
8. Resident Courtyard
9. Agriculture Education
10. Green Stormwater Infrastructure
11. Community Club House
12. Winter Garden
13. Community Services & Gathering
14. Multimodal Transportation Hub
15. Bailey Gatzert Annex
This courtyard was designed to accommodate people of all ages and abilities. Accessible terrain, garden and play elements are paired with rich natural textures to create a space that is educational and engaging to both young and old. Accessible spaces for gardening are intertwined with simple physical exercises.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft

1. Flexible Community Gathering Space
2. Communal Porches
3. Resident Porches
4. Resident Raised Beds
5. Accessible Table Top Beds
6. Gravity Cistern
7. Central Solar Gathering Space
8. Food Forest Play Area
9. Agriculture Education
10. Compost Area
11. Chicken Area
12. Tool Sheds
Actively Growing Together

Jess Hamilton

DESIGN: Intergenerational Living: Actively Growing Together
Cistern overflow runs to food forest river runnel

Trellis supported downspout carries water from roof to above ground cistern

Above ground cistern provides resident gardeners with gravity fed water supply

Covered outdoor gathering space harnesses solar power and collects rainwater

Western Raised bed area provides larger plots for residents

Border runnel guides porch bed overflow to cisterns
Underground cistern collects water from surrounding roofs to the north. Four unique pump systems (with a solar powered backup) allow for users of all abilities to actively participate in the growing that takes place in the raised beds on the eastern half of the courtyard.
Seasonal Flavors

Summer
- Tomato
  *Solanum lycopersicum*
- Pole Beans
  *Phaseolus vulgaris*
- Radish
  *Raphanus sativus*

Fall
- Brussels Sprouts
  *Brassica oleracea var. gemmifera*
- Tomato
  *Solanum lycopersicum*
SUPPORTING AN ACTIVE YESLER AVE.

The introduction of deeper swales on Yesler are geared toward providing safety for pedestrians, and the potential to retain and evaporate larger amounts of water. Yesler Ave’s rain gardens are intended to take advantage of the sun they will receive to retain and evaporate as much stormwater as possible. The water that is not evaporated or infiltrated would be channeled into the rain cell as the culminating water element. The rain cell is the final opportunity for water to infiltrate and evaporate before being sent into the municipal overflow system.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
SUPPORTING PUBLIC LIFE
To interact with the presence of Washington Hall, there have been several small scale performance spaces introduced into 13th Ave, as well as Yesler Ave. This is intended for informal performances by those receiving training sessions at Washington Hall.

CHANNEL, RETAIN, EVAPORATE
By taking advantage of Yesler’s sun exposure, we look at this street as a place which would receive excess water from rain gardens along 12th Ave, and Fir. Yesler serves as a great place to have water channeled into, for evaporation, before entering into the rain cell.

PEDESTRIAN AND CYCLING SAFETY
By introducing a bus stop, crosswalk, and separated bike lanes, we are encouraging the slowing of traffic along Yesler, considering the heavy amounts of transit modes present at the site.

Concept:
This individual project asks three simple questions when addressing the site edges:
How are the edges supporting a social function? How are the edges intercepting and treating water? How are the edges providing safety for pedestrians? Finally, urban runoff ends at the corner of 13th and Yesler, before it overflows into the municipal system. It is essential to retain as much water during wet season, to release it in dryer periods to prevent overflowing into Combined Sewage Overflows.
ARTICULATING A LOCAL 13TH AVE.

Our larger project introduces townhomes into 13th avenue. By embracing this residential street typology, it is crucial to provide spaces for outdoor leisure. Also, to support a leisurely and safe street, a one way directional change is proposed, as well as a curb extension mid-street to slow traffic down.
Design Elements

**Pedestrian Crossing**
Material and texture change to signal mixed modal priority. Lights embedded in ground help provide a clear visual indication of a change of space and use.

**Movable Play Blocks**
Heavy, stable, wooden blocks scattered around transit stop provide play opportunities for children and overflow seating for peak travel times.

**Solar Lighting**
Solar panels on roof of transit shelter collect energy during the day, which is used to power an off-board ORCA card reader and lights at night to improve visibility and safety.

**Public Art**
Colorful spire mirrors public art of a similar style at the Yesler Community center up the street.

**Multigenerational Bike Share**
Bike share facility with bikes of various sizes provides families with additional and affordable transportation options.

**Real-Time Information Sign**
Screen streams OneBusAway application to provide information on transit arrivals and departures.
Connections to the City

**Connections:**
Yesler Terrace, Capitol Hill, International District, Pioneer Square, Downtown (Future), South Lake Union (Future)

**Connections:**
Capitol Hill, International District, Pioneer Square, Downtown, Belltown, Lake Washington, Rainier Valley

**Connections:**
Yesler Terrace, Capitol Hill, International District, Belltown, Leschi, Madrona, Atlantic, Madrona

**Connections:**
Bailey Gatzert Elementary School, Rising Produce, Wisteria Park, Washington Hall, Vietnamese Catholic Community Church

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
The project site is in a highly centralized location, with alternative transportation options available for use to Downtown, the International District, Capitol Hill, Rainier Valley, and many other neighborhoods and attractions within the city. Promoting and making these connections more accessible is crucial when creating an affordable housing development, as car ownership is likely to be less than average. As this multimodal transportation hub will be used by the elderly and families with children, safety is of utmost concern. The spatial orientation of the infrastructure elements and the mixing of different modes of transportation, as well as seating, lighting, and visibility, all help provide safe, multigenerational, multimodal transportation options to and from the site.
Users & Uses

Crossing between Bailey Gatzert and North Annex, stormwater education at transit stop bioswales

Transit to Downtown for recreation and shopping, bike share and bike parking on weekends, picking up kids from school on foot

Mid-afternoon strolls, transit rides to needed services, use by other senior facilities in the area

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Seasons & Times of Day

Sunny Day

Weekday Commute

Rainy Afternoon

Winter Morning
FORCES SHAPING FORM

starting volume

separate volumes through height change

carve into volume at ground level

roof slope for rainwater and solar energy capture

FLOW/CIRCULATION

WINTER GARDEN = HINGE

PROGRAM LAYOUT

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Located at the corner of 12th Avenue and East Yesler Way, the Community Clubhouse is a gathering place for several groups of users in three general volumes. The neighborhood focused area to the south contains spaces that serve the general public. Resident focused activities are centered around a communal "kitchen table," an area where residents of all ages and heritages may gather. The winter garden serves as a crucial hinge between the public and private user groups. Accessible at all times of the year and at all times of the day for residents, the winter garden offers both prospect looking out to the busy intersection, and refuge to enjoy spending time around other people.
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
DESIGN: Intergenerational Living: Community Clubhouse

CAFE SEATING

PODS
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
cross ventilation multiple entry points at ground level
operable windows
clerestory windows
operable pod windows
light filtering through pv panel array
minimal southern exposure southern exposure
adjustable solar panel array
DC current
charge controller
battery
inverter
AC current
AC loads
solar energy system
daylight
rainwater system
passive ventilation

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
The building then breaks apart in order to gain more sunlight towards the northern facade of the cultural commons bar. Finally the form finds key entry points for public access, thus splitting the site into three distinct buildings with thru-block access. The program travels up through the building and intersects the interior sidewalk, pushing back through and allowing for habitable green space on the rooftop.

**Concept Development**

By starting out with the idea of a maximum density, double loaded corridor building with an interior courtyard, the building pulls back at the southeastern corner to give a welcoming plaza to the school. The form then becomes more narrow, while keeping a thicker bar at the north for a residential building.
København: Strategic Inspiration

Taking lessons from more northern climates, the emphasis on daylighting design is a common principle used to re-imagine the city footprint in a different way. After looking at Copenhagen, the footprint was undeniably simple - thin building forms with large interior courtyards, and all within the bounds of a low-rise city. By applying this logic to Seattle, the Cultural Connector’s footprint is guided by three principles inspired by Copenhagen - thin building forms for at least two walls of light at all time, large interior outdoor space to engage public infrastructure as well as residents living on the site, and densifying the block through multi-functional programming.

The Cultural Connector provides multi-functional spaces such as incubator spaces, small retail and office space, as well as public gallery space with community studios for engaging the public through creative outlets. The sidewalk remains throughout the building and is brought up on each level, disappearing when programming intersects the sidewalk, and giving maximum visibility along the interior courtyard.
June 21st - 12 PM + 3 PM
The summer solstice for the central block courtyard has maximum daylighting through the afternoon and provides nicely lit spaces for residents in the north bar, which is essential in Seattle. The stepping of the cultural commons lets the sunlight through and gives less shadow all during the day, giving the most habitable, sunny places.

September 21 - 12 PM + 3 PM
September 21st still gives the southern facade of the residential building maximum daylighting, however the northern part of the cultural commons starts to have larger shadows cast, which limits the amount of spaces the public would want to inhabit, however they aren’t completely unhabitable.

December 21 - 12 PM + 3 PM
The winter generally decreases a building’s natural daylighting, however the ambient light that the buildings receive is still quite a bit. By introducing a large central courtyard, all sides receive the ambient light, while the southern facades get a bit of sunlight during the day.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Massing Subtraction and Program Layout

Guided by the sun study diagrams, the portion that is subtracted from the maximum height building form allows for sunlight to enter the courtyard and stay throughout the day while giving the southern facade of the large, northern bar area for sunlight.

The program layout consists with bringing the sidewalk along 12th Avenue and Yesler Way to the back of the building along the courtyard. By situating two key vertical access at the end and along Yesler Way, the atriums act as key locations for gathering. Throughout the building, the spaces then connect to these spaces and are along the ‘inner sidewalk,’ which disappears as the rooms intersect the space, but is held with elements such as structural columns or frosted glass floor.
Ground Floor Plan

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Facade Design

The facade incorporates a double skin system held together with wooden members and steel rods. This system allows for natural ventilation and cooling in the summer time in the atrium, community studio, and coffee shop. The wooden slats along the blank walls act as a system for green walls and vines, while also providing the guardrails for the roof decks and green spaces that occur every time a piece of program is pushed in or out.
Section Showing Atrium
Double Skin Facade + Glazing System

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Perspective along Yesler Way

DESIGN: Cultural Connector
Despite the rapid rate of gentrification in Seattle, First Hill remains a socioeconomically and culturally rich area, adding an irreplaceable vibrancy to the city. However, as development drives up the cost of in-city living, many are forced to relocate in outlying areas. Developments such as Yesler Terrace that provide low-income housing and support services are essential to the survival of the neighborhood character. This project provides the other critical factor: jobs. The one-block site is envisioned as self-sustaining, but with edges that encourage reciprocity with the neighborhood. The residents produce, market, and exchange subsistence goods on site. Utilities for living, such as laundry, are centralized to optimize resources and give opportunities for social overlap. Net zero energy and water solidify the autonomy of the site, ensuring a strong survival into 21st Century Seattle.
LIVING COMMUNITY CHALLENGE 1.0

PLACE
URBAN AGRICULTURE
HUMAN POWERED LIVING

WATER
NET POSITIVE WATER

ENERGY
NET POSITIVE ENERGY

HEALTH + HAPPINESS
BIOPHILIC DESIGN
RESILIENT COMMUNITY CONNECTIONS

MATERIALS
EMBODIED CARBON FOOTPRINT
NET POSITIVE WASTE

EQUITY
UNIVERSAL ACCESS TO COMMUNITY SERVICES
EQUITABLE INVESTMENT

BEAUTY
BEAUTY + SPIRIT

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
STEWARDSHIP
A gradient of defensible spaces that foster individual and collective stewardship.

INTERIOR-EXTERIOR
Permeable edges that blur the lines between architecture and landscape.

NEIGHBORS-NEIGHBORS
Community through adjacency and shared spaces of diverse users.

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture, and Craft

Transit Commuter
The transit stop on Yesler provides a hub for four modes of transportation - streetcar, bus, bike, and pedestrian.

Bicyclists
The transit stop on Yesler provides ample interior and exterior short and long term storage.

Urban Farmers
The plantings support the textile industries on site, with a diversity of flowering species to be used as dyes in textile production.
**Vendors**
The indoor-outdoor public market provides small stalls to sell textiles, food products, and locally produced goods.

**Performers**
The hum of the market and the backdrop of an evening sky make this small stage a low-key venue for the community, including performances by Bailey Gatzert students.

**Residents**
Affordable housing units for workers on site, with small community garden plots available just off the back porch.

_Design: The Clothesline: Edges, Spaces + Infrastructure_

Donny Donoghue
ACTIVITY OF THE SITE

Saturday Afternoon, July

Monday Morning, September

Friday Evening Event, February

EDGES

1. Residential (Courtyard)
2. Commercial (12th Ave)
3. Service Market (Yesler Way)
4. Work Yard

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
THE WORK YARD

Energy
PVs on south facing rooftops and scattered throughout the site on posts cover over 20,000 square feet.

Water
Terraced slopes, large collection swales, and runnels collect water on site before diverting to a filtration system beneath the public market.
Infrastructure

Frame and Posts are located throughout the site in order to enable flexible space and provide site essentials such as awnings, light, power outlets, and water taps.

FRAMES
An outdoor room with customizable walls & ceiling.

POSTS
A gridded framework for work, education, & play.
View from the corner of 12th Avenue and Yesler Way

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Many immigrants and refugees arrive in Seattle with valuable skills in agriculture or textile production from their native country. Jobs on site utilize these existing skills, along with training from the exchange center in sustainable technologies. To provide maximum opportunities, the building supports these enterprises at two scales: small cottage industries and large scale site-coordinated production facilities. Food and plants for textile dyes are grown in hydroponic rooftop greenhouses and in traditional soil plots. The live-work residents enjoy convenient and eco-friendly commuting to the downstairs production spaces and market stalls.
Winter at Yesler Public Market

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
TYPICAL FLOOR SECTION

5" cast-in-place lightweight concrete with radiant heat tubing

5" rigid mineral wool insulation for noise dampening

5-layer CLT slab (6 5/8")

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft

TYPICAL INTERIOR WALL SECTION

5-layer CLT slab (6 5/8") (exposed)

3" sound insulating board for noise dampening

5-layer CLT slab (6 5/8") (exposed on interior)

6-1/2" rigid mineral wool insulation

drained and vented air cavity

exterior wood rain screen (or brick cladding assembly)

TYPICAL EXTERIOR WALL SECTION

vapor-permeable water resistant barrier
Site Elevation Looking East

Typical Section at Green Roof

- Planting medium and grass paver walk
- Gravel drainage layer with filter fabric
- Waterproof membrane with concrete topping, sloped to drain
- Drain
- 8" rigid mineral wool insulation
- 5-layer CLT slab (6 5/8"

Design: The Clothesline: Production + Market
Greenhouse roofs provide more than 100,000 kWh of power per year from 11,000 sqft of pv panels. A traditional retail space could easily use 7X this amount. However, the market stalls, bermed by earth on the western edge, will operate in a mostly unconditioned, climate modified environment.

HYBRID ELEVATORS

All three elevators in the building will run on hybrid power. This self-supplying system saves, replaces, and stores clean energy.
Greenwater from roof run off is captured and processed in the building for use as potable water, hydroponics, and other irrigation. Utilizing hyroponics for urban farming uses less water, puts less load on structure, and yields higher production than conventional soil farming.
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
Reciprocity for All

In the heart of the site stands the opportunity for the mutual support and exchange of the diverse programs present. This project aims to serve the site and greater community through experimental spaces of culinary, fabrication, and educational means. From its use to its tectonically haptic experience, this proposal strives to embody the people it serves through any point in life.
CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
SYSTEMS DIAGRAM: WATER, EARTH, ENERGY

VERTICAL COMPOST HEATING
NATURAL WATER FILTRATION
WATER REUSE FOR RESTROOMS
GREEN ROOF

TUBULAR PHOTOVOLTAICS
(WATER HEAT AND SOLAR ENERGY)
RADIANT FLOORING
PASSIVE HEATING & COOLING

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
DETAIL: DRAINAGE TO NATURAL FILTRATION

WALL ASSEMBLY / LATERAL BRACING

WALL SECTION

WOOD ASSEMBLY

NLT

GLULAM

CLT PANELS
Kid's Alley
Tessellated ground plane for urban play
Outdoor trampolines
Laundry lockers
Environmental learning space Bailey Gatzert Extension

Cafe
Vertical laundromat
Rainwater cistern
Live (above) / Work (ground) units
Micro storefronts

GROUND FLOOR PLAN

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
The Laundry Chute
Connor Irick

The Vertical Laundromat
The Laundry Chute aims to create an inviting and comfortable hangout space for parents and children while tending to an everyday chore. This building serves as the utility for the neighborhood and offers the opportunity to teach students about water reclamation, wastewater treatment and solar energy. This net-zero energy and water laundromat is a blend of daily chore, playful community space, economic empowerment for the individual and environmental learning center for the youth of Bailey Gatzert.
Laundry locker
Service where locals can drop off laundry to be done by someone else for monetary compensation. An opportunity for individual economic empowerment.

Dutch Door
Detail at the ground floor cafe where parents can hang out for coffee while watching their kids play outside with the opportunity to call out to them.

Window Cubby
Comfortable quiet space while waiting for your laundry to finish.
1  
**Program Massing**
Laundromat serves as a community amenity and micro storefron ts for small local businesses

2  
**Activate Outdoor Space**
Laundromat engages Kid’s Alley while the live / work units share an outdoor workspace

3  
**Energy Response**
Roof sloped at 15 degree incline facing South for optimal solar gains. Environmental education extension for Bailey Gatzert Elementary

4  
**Rainwater Collection**
Exposed rainwater cistern to illustrate an environmental conscious solution to washing and drying clothes

5  
**Greywater Treatment**
Constructed wetland to filter greywater effluent from industrial washing machines to treat all water on-site

**DESIGN: The Clothesline: The Laundry Chute** 265
South facing drying space
Clearstory for optimal daylighting
Precast concrete structural frame for ease of assembly
Stacked industrial washing machines
Stack ventilation and laundry chutes

Unconditioned egress
Cafe at ground floor
Stacked ventilator
PV Array to reach net-zero energy
Constructed wetland to filter greywater laundry effluent
Bioswale to treat stormwater runoff

CULTIVATING THE COMMUNITY COMMONS: Climate, Culture and Craft
South facing PV array
Rainwater cistern
Private garden porch
Clearstory for daylighting and cross-ventilation in living units
Garage workspace opens to shared outdoor work space
Shared unconditioned vertical circulation

Storefront at Yesler
Garage workspace beyond storefront
Living unit above
Ideology Given Form

Urban design can be understood as ideology given form. That is, architecture, landscape architecture, and street design are the physical manifestations of different ideas and philosophies that have animated societies throughout time. From the Greek agora, to the American highway, what societies build is a reflection of their beliefs and values. The connection between design and ideology is not always a conscious one, but whether designers recognize it or not, choices about the organization and use of space are always ideological.

To design well, it is important to explicitly identify the values and beliefs that animate the design. What is the design intended to achieve? Is it primarily a place of industry and commerce? Or is it a place for people to meet, to socialize, and to find space in the public realm? While both spaces are necessary for a well-functioning society, the values that they embody are markedly different. Identifying the ideologies inherent in types of spaces and creating design guidelines to help designers corporealize their values can be a valuable foundation in the design process.

The design guidelines are based in the principles of the Gehl methodology and are informed by personal experiences in Copenhagen, Berlin, and Seattle. These design guidelines will focus on edges—the places where different spaces merge and overlap—and will use the street and sidewalk as a common example of the urban edge.

These design guidelines are not meant to be binding or overly specific; instead they are intended as a set of implementable visions that can be adapted to fit a variety of contexts. If these guidelines succeed, they will act as a flexible framework that encourages innovation and improvisation while providing structure and guidance to design projects.

Ecology of the Edge

Ecologists have learned that ecosystems have the most diversity at the edges of the system, places where the boundaries between two ecosystems overlap. Because there are no hard boundaries in nature, organisms from different ecosystems cross-pollinate and interact with each other in beneficial ways, causing ecosystem edges to be both more diverse and more resistant to threat.

Ecology can inform urban design because cities are networks of human ecosystems. Neighborhoods can be seen as distinct ecosystems, while the streets act as streams that connect these urban ecosystems. To create spaces where people want to live, work, and play, we must focus on the edge spaces because they are the connective tissue that allow ecosystems to interact with each other. The street is the primary public space in the city; by designing streets and edges that allow for interaction, we can encourage people to stop, stay, and form relationships with other people in the community.
The Democratic Street

Because the street is the most public space in a city, it is often the space in which democracy is enacted. In times of strife, streets are the space for protests, riots, and speeches. In times of peace, the space for parades and fairs. Indeed, the democracy of the street can be a daily phenomenon. A street that is designed to be democratic is one that is accessible by all modes. However, it is not enough for the street to be accessible; it must also be a space designed to meet the needs of the people. That is, streets and edges should be designed to encourage people to sit and stay as well as pass through.

If well designed, the street will encourage people to linger, watching other people, eating, or simply enjoying the sights, sounds, and smells of city life. Designers can create spaces that encourage people to spend time in the public realm and to take ownership of their common space. Doing so helps foster a community’s spirit and builds relationships that are the bedrock of healthy neighborhoods.

Guiding Concepts

This set of design guidelines uses five concepts to provide guidance for the design of streets and edges:

**Edges**

Edges of sites should be playful, engaging, and human-scaled to encourage people to sit and stay in the edge space.

**Subspaces**

The boundaries and borders of urban ecosystems should be used as active, flexible space.

**Choice**

People who use the spaces should have the opportunity to use, manipulate, transform, and appropriate the space in ways that are beneficial to both the space and the community.

**Body-Centered Design**

Site designs should incorporate elements for all senses and should consider non-graphic elements of communication.

**Safety + Well-being**

Designers should consider elements that will increase mental, physical, and social safety.

Activation will not be achieved through separating uses, but instead through creating spaces for adventure and discovery in which people must interact with each other in order to inhabit, change, and own their space as a community of diverse individuals.

“The street is the river of life of the city, the place where we come together.”

—William H. Whyte

“While in the street, people have the right not only to access the space, but to manipulate, transform, and appropriate the space, either individually or in groups.”

—Richard Sennett
Street Edge Design Principles

As part of the studio process, the five street design criteria were developed and then condensed into a set of fifteen implementation ideas that can be used to activate streets in a wide variety of contexts. The ideas can be mixed-and-matched or adapted to fit specific circumstances.

The fifteen implementation ideas cover a broad range of topics from encouraging play in the street space to using psychological cues to encourage safe driving. When used together, these principles will help to create environments that are both safe and enjoyable for people from all walks of life.

The street edge design principles were made available to all studio groups to assist in their conceptual design processes. Many groups used the criteria to think critically about their treatment of the street and site edges. Working with groups to apply the design criteria to studio projects also helped me refine and revise the design criteria. Collaboration between groups and large-picture thinking strengthened all projects involved in the process.
Edges

When the edges of urban spaces are welcoming, they become hubs of interaction and activity. Creating spaces that encourage people to sit and stay boosts use of the site, and therefore safety.

Design for Human Scale

Street spaces are ultimately intended to be used by people, and should be scaled appropriately. To that end, it is important that street edges have good lighting, a variety of textures, movable furniture, and opportunities to enter and leave buildings at frequent intervals.

Edge Activation

Playfulness

An important part of making people feel welcome is creating opportunities for play and creativity in the public realm. This can be achieved in many ways, but common ways to make streets more playful include:

- Movable street furniture such as chairs, tables, and planters.
- Temporary street games like large-scale chess or community Jenga.
- Parklets
- Permanent street furniture like trampolines, games for children, or interactive crosswalk signs.

Street Games

Invitations to Children

Engagement

Designing spaces that use elements like active facades, balconies, and urban yards facilitates pedestrian engagement.

Facades

Balconies

Urban Yards

New Orleans’ Bourbon St. teems with life on the balconies above the street.

Small yards can be beautiful transitions between public and private spaces.
**Subspaces**

Subspaces support the spatial and programmatic transitions between buildings or landscaped elements. Oftentimes the subspace is not the focus of the design process and is not given clear programming. The design of these in-between spaces directly affects the quality of life on the site. If subspaces are designed to be inviting spaces where boundaries between buildings and landscape softly merge, the overall design will be more coherent and people will find it easier to use both the main spaces and the subspaces to meet their needs.

**Public/Private Continuum**

The distinction between public and private is a continuum and shifts based on the user’s role.

**Public/Private Diagram**

Spaces can have both public and private components. The relationship between uses and users is fluid and role dependent.

**Gentle Transitions**

Use gradual changes in material and form to make transition spaces suitable for many uses.

**Recreational Subspaces**

The geometric shapes of the skate park at Charlotte Amundsens Plads blur the boundaries between passive and active recreational spaces.

**Flexible Spaces**

Create spaces that can adapt to many different uses. Leave room for communities to change and manipulate space to better suit their needs.

**Indoor Flexible Spaces**

Copenhagen’s Prismen recreation center is used for all forms of recreational activities. The flexibility of the space ensures its usefulness.

**Shared Streets**

The shared street seeks to blur the boundaries between space that is reserved for cars and space where pedestrians are allowed.

**Activation at Bell Street Park**

Bell Street Park is Seattle’s first shared street. It acts as both a park and a street and successfully blurs the edges between differently programmed spaces.

**Activation Elements**

The shared street is different from the car dominated street in several key ways:

1. Integration of sidewalk and street.
2. Use of materials with textured elements to signal the border between pedestrian space and car space.
3. Presence of landscaped elements or movable planters to act as bollards between pedestrians and vehicilists.
4. Removal of traffic lights and unnecessary street signs to help drivers learn to make contextual decisions.
Choice

For people to consistently use a space, they must feel comfortable in it. One of the best ways to make people feel comfortable in a space is to provide spatial elements they can manipulate or change to suit their particular needs.

Flexible Space
Provide various options for sitting, standing, and leaning at the edge of spaces. Doing so will allow people to remain and linger in the public space comfortably.

Informal Seating

The multi-modal Kreuzberg bridge in Berlin is a popular spot to stop and rest. Low stone bollards act as seating and the railing of the bridge provides a comfortable spot to sit or lean.

Wall Seating

A low wall provides multi-tiered seating and acts as a border between the play space and the street at a school playground in Copenhagen.

Ownership
Creating a sense of ownership of public spaces helps the space and the community thrive.

Creating a sense of ownership is two-fold: if the space is private, strong demarcations of the edge of the protected space will help the owners feel in control of the space. However, if the space is meant to be public, it should use soft edges and minimize barriers between different uses in the space to create an inclusive environment.

Private Space Ownership

The Forfatterhuset kindergarten uses long vertical bricks as a building facade and as a fencing material. This design choice creates a strong visual barrier between the school and the street.

Public Space Ownership

Superkilen is one of Copenhagen’s most popular parks in part because it explicitly is designed to appeal to diverse users. It succeeds because of its radically inclusive design.

Multi-modal Street

First Ave in New York City accommodates Bus Rapid Transit, automobile traffic, pedestrians, and bikes. The layout of the street is carefully designed to minimize conflict between different modes.

Mode Separated Network

The Burke Gilman trail is a car-free environment for biking and walking and has a much lower accident rate than other mixed-mode street designs.

Connectivity
For a space to be truly inclusive, it must accommodate all modes of travel. Whether people arrive via car, bike, bus, foot, or wheelchair the edge must accommodate them. This means that streets around the site should have infrastructure appropriate to all modes of travel. If all modes of travel have a network of accessible and completed pathways to the site, people from different user groups will find it easier to use.
Body-Centered Design

When people choose to spend time in a public space or on a street, they are responding to many stimuli, some of which are very subtle. Thinking about subtle clues that are present in the built environment can help designers create more enjoyable and more equitable spaces.

Equitable Design

Plan for the small details that will make spaces comfortable for a variety of users. Find ways to integrate accessibility into the design without sacrificing quality programmatic elements.

Street Guides

Copenhagen’s shared streets integrate trails of metal markers which help people with reduced vision to navigate. The design is both beautiful and equitable.

Problematic Intersection Curb Design

This common curb ramp design is problematic because it is oriented towards the middle of the intersection rather than the crosswalks, making navigating busy intersections difficult for many users.

Community Voice

Public art is one of the best ways to create both a psychological and visual connection between people and place. By leaving space for public art designed through inclusive public processes, it is possible to create spaces that feel like they truly belong to the community as a whole. Art can take many forms, but several approaches have already been shown to be successful in creating a sense of place on urban streets.

Seattle Street Art

SDOT’s painted intersection program allows communities to create unique designs and permanently paint them on intersections in neighborhood streets.

Park(ing) Day

Park(ing) Day gives communities a chance to create temporary parks in a parking space. Above, people in Phoenix, AZ participate in Park(ing) day.

Psychological Traffic Calming

Street design can affect the way people feel about a space and can influence the way they act in the street. Drivers respond to spatial clues like the size of the road and the speed of other cars more than they respond to posted street signs or more typical traffic management techniques. Subtle changes in the design of a street can dramatically reduce accidents and can make the street a more pleasant place to be.

Street design elements that help to reduce speed and increase awareness include:

1. Narrow road widths
2. Unmarked lanes
3. Marked or raised pedestrian crossings
4. Street trees
5. Curb extensions and parklets

These design elements are featured in the street section below.

Forty Foot Neighborhood Street

The narrow road widths and pedestrian-centered street design shown above helps slow traffic and makes drivers more cautious.
Safety is an important component of any site design. For a space to feel safe, designers should consider elements that affect perception of safety in the space as well as elements that reduce unwanted occurrences such as vehicular collisions or crime.

Mental Safety
People are more likely to spend time in places where they feel safe. Elements that increase perceptions of safety include:

1. Pedestrian-scaled lighting that illuminates building recesses and streets
2. The presence of other people at all times of the day and night.
3. Physical buffers such as landscaped elements between pedestrian spaces and high-speed vehicular traffic.

Physical Safety
While psychology plays a large role in users’ comfort in the space, it is also crucial to think about design elements that will make the street and the site safe places to be. This entails interventions that minimize conflict between vehicilists, buses, bicyclists, and pedestrians. It also includes thinking about ways to eliminate spaces that could attract crime. Elements that contribute to physical safety include:

1. Shared streets that discourage lane changing and use design elements that increase driver awareness in the street.
2. Bike and bus paths that minimize the need for left hand turns across traffic.
3. Clear places where pedestrians have priority for street crossings.
4. Mitigate buildings with small, poorly lit niches or unactivated alleyways.

Social Safety
If streets and spaces are designed to meet the needs of population groups that typically avoid dangerous situations, safety measures for the overall population will be improved. On the street level, some potential measures include:

1. Use of bollards, planters, and landscaping to create spatial distinctions between car-space and people-space.
2. Adding flexible bollards to bike paths to raise awareness of cyclists and protect against accidents.
3. Using pavement treatments at intersections to raise awareness of cyclists and pedestrians.

Narrow streets and alleys can be great spaces for play and safe movement. In this street design, no space is dedicated to automobiles.

On wider arterials, safety can be achieved through grade separation and physical buffers. Human-scaled lighting can help wider streets still be inviting to pedestrians.

Pedestrian tables can help to create a feeling of safety on larger streets through a change in materials and grade. These shifts help drivers be aware of pedestrians in the intersection and give pedestrians a sense of modal priority.
Traveling, eating, bicycling, working and playing together we all learned so much. The generous support of the Scan|Design Foundation made our trip and master studio possible, and the time and knowledge shared by professionals in Scandinavia and Seattle contributed to our learning, understanding and growth. To everyone who contributed to these experiences and to this book we say THANK YOU!
Thank you!

The group takes a class photo on the play structure at the Guldberg Byplads playground
“Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.”

- Jane Jacobs