



Capstone Final Report

Project: UWT 2040

Students' urban design vision for a public university campus

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Urban Design Capstone 2024

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A NEW KIND OF URBAN CAMPUS

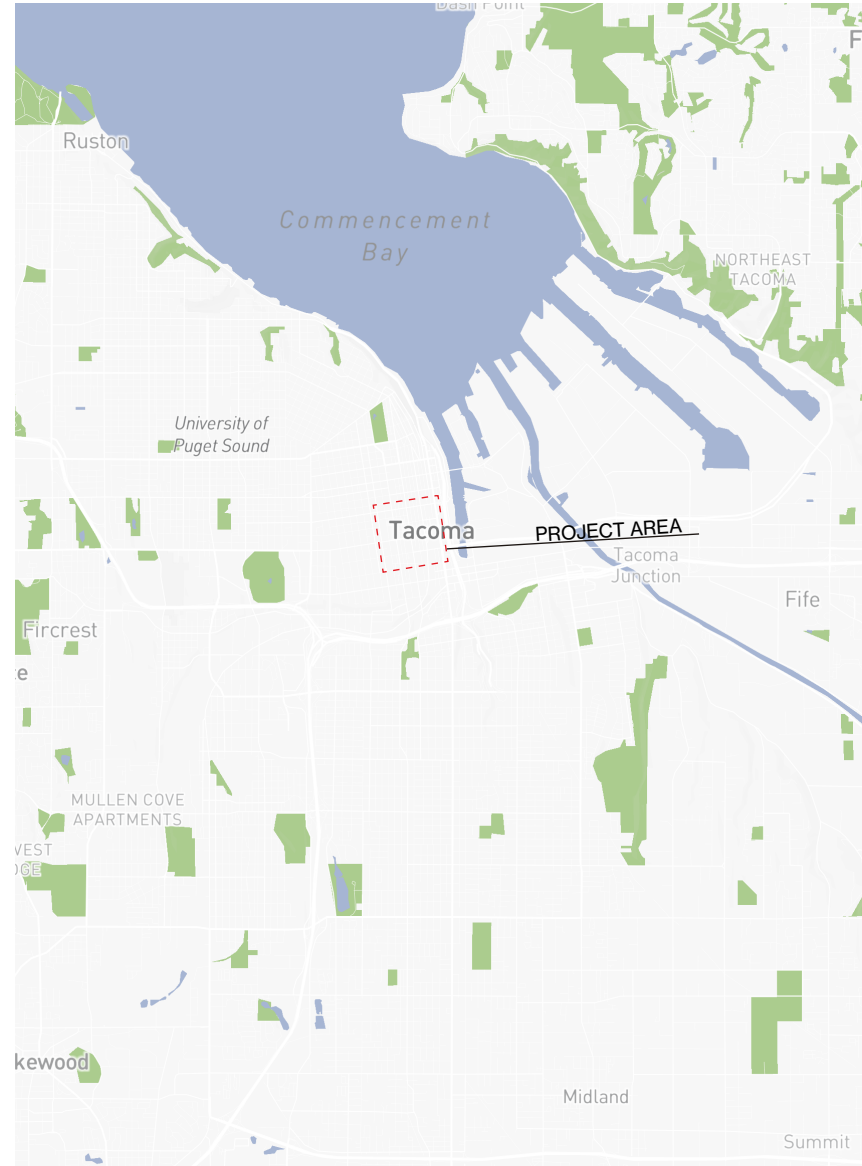


Figure: Highlighted section showing the project area in relation to the region.

The educational district resonates with a captivating history. Warehouses and factories once thrived where buildings now stand. The Prairie Line Trail whispers tales of a bygone era, tracing the route of a major cross-country rail line. Landmarks like the Tacoma Buddhist Temple stand as vibrant reminders of the area’s rich history and its significance in Japanese American life.

Beyond Tacoma Avenue, the historic Hilltop and Medical districts grapple with the complexities of transformation and potential displacement. Campus itself has been a catalyst for downtown Tacoma’s revitalization. As the area charts its course for the next decade, a thoughtful approach to the campus and its unique assets is paramount. Shaping the future hinges on a deep appreciation for its historical context and the preservation of its distinct character.



Aerial View of Campus / Campus Drone Shots // Noah Carr 2023

OUR TEAM



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Professor



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Minor - Sustainable Urban Development
GIS Certificate



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Meet the Team

Process:

Our cohort embarked on a multi-week campus engagement process. We divided into teams and took on various roles in development and administration, including survey design, banner and visual branding, website creation and maintenance, and more. During the initial weeks focused on visioning, the team led workshops and design charrettes with students and other interested parties.

Figure: Pictures of the Cohort and their Majors.

Project Time line

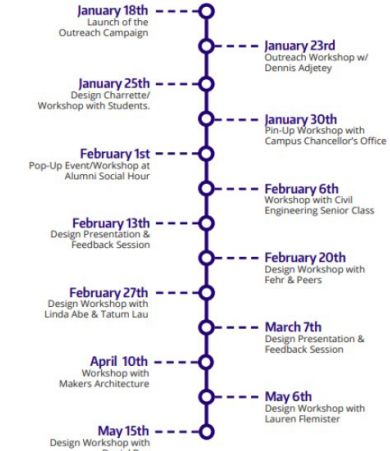
Shaping Our Campus Identity

The University of Washington Tacoma (UWT) campus is going through a visioning process to imagine its future over the next 20 years. The University, which is currently functioning as more of a commuter campus, looks to expand west of its current location in order to evolve into a more residential, urban-serving university.

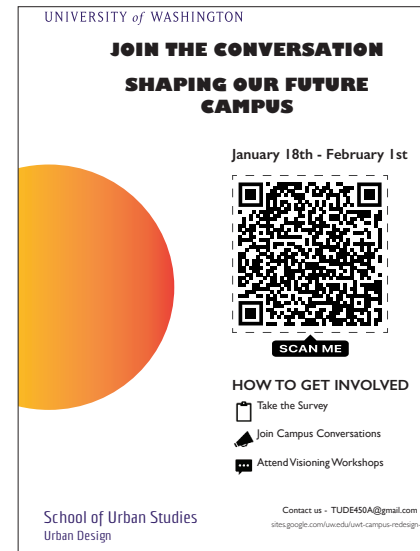
Campaign Focus

The UW Tacoma senior Urban Design capstone project aims to envision the future of the campus over the next 20 years, ensuring it becomes an inclusive, equitable, and just part of the City of Tacoma. The project will involve creating and implementing a community engagement campaign, analyzing existing conditions on and near the campus, synthesizing analyses to identify assets, constraints, issues, and opportunities, formulating a capstone manifesto based on these inputs, and producing a range of urban design frameworks (conceptual designs).

Project Timeline



English Flyer



Community engagement

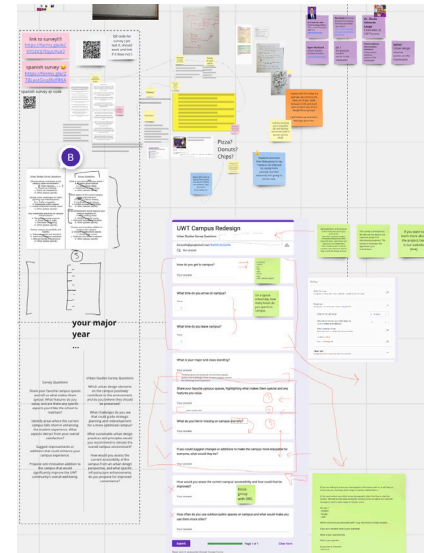
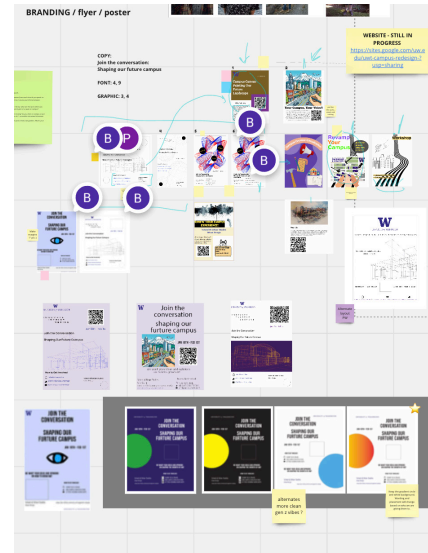
The campaign focused on understanding campus constraints, success and opportunities. With a tight deadline of only 10 weeks for creation, administration, and delivery, the process was fast-paced but ultimately rewarding. Through workshops and design charrettes, we gathered valuable input during the visioning phase. This input culminated in the creation of a capstone manifesto that captured the essence of the campaign and served as a guiding document for developing our urban design frameworks.

To maintain project alignment and momentum, our team embraced a hybrid collaboration approach, working both in-person and extensively on-line across the studio. This proved to be pivotal. We were able to receive quick updates on work progress, which allowed us to continuously refine the vision for the survey and visual deliverables.

Spanish Flyer



Spotlight on Collaboration



The Team At Work



Figure: The during various workshops // Locations - UDE Studio - Urban Studies Social hour - AECOM Seattle

Community engagement

Through workshops and design charrettes led by teams from Fehr & Peers, AECOM, McGranahan Architects, Makers Architecture, Pierce County, City of Tacoma, and many others, we gained invaluable insights that helped us refine our approaches and understand how they would interact with the capstone manifesto and the realities of an urban campus. These collaborative sessions were a wealth of knowledge and perspectives, providing us with a deeper understanding of the challenges and opportunities facing urban design. Engaging with these teams and visiting their studios was not only informative but also a lot of fun.

Figure : Project Timeline Graphic - Created By - Mathew Chastain - Mohamed Yusuf
 Figure : English / Spanish Flyers - Created By - Brian Njoroge

Survey Response

Survey Results

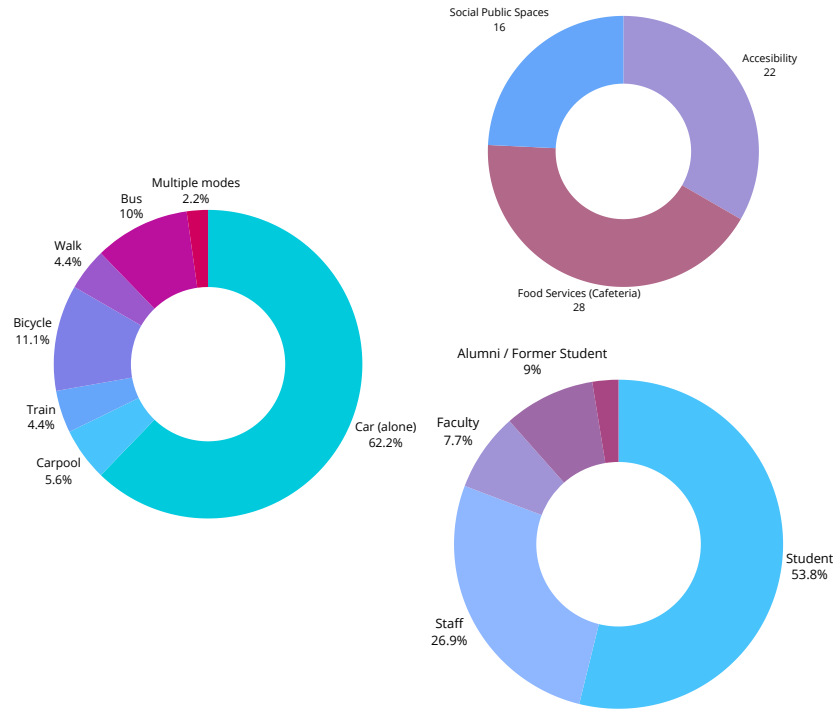
- 81 responses to the survey.
- 120 flyers distributed around the campus.
- 125 of unique visitors to the campaign site.
- Approximately 60-70 people engaged through meetings and pop-up events.
- 7.5 hrs average time spent on campus.
- 62% drive alone to campus.

Thoughts on Campus: What Isn't Working

- Social and Shared Spaces: 23 mentions.
- Food Options: 15 mentions.
- Parking Issues: 12 mentions.
- Campus Design and Accessibility: 11 mentions.

Suggestions or Additions

- Food Services or Infrastructure: 28 mentions.
- Accessibility: 22 mentions.
- Social & Public Spaces: 16 mentions.



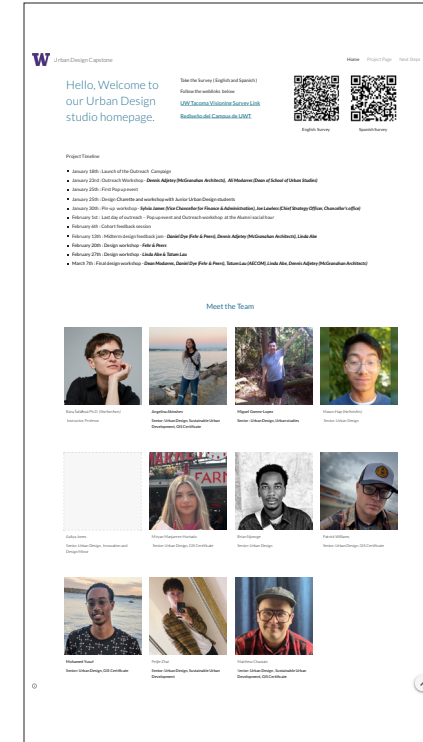
Community engagement

The survey proved to be one of the most critical pieces of information for shaping the narrative and report of our capstone project.

This comprehensive survey captured the voices of students, staff, and other stakeholders, providing us with valuable insights into their needs and aspirations. It helped us understand what aspects of the campus were valued and why, what fell short of expectations, and ultimately, their vision for the future of the campus.

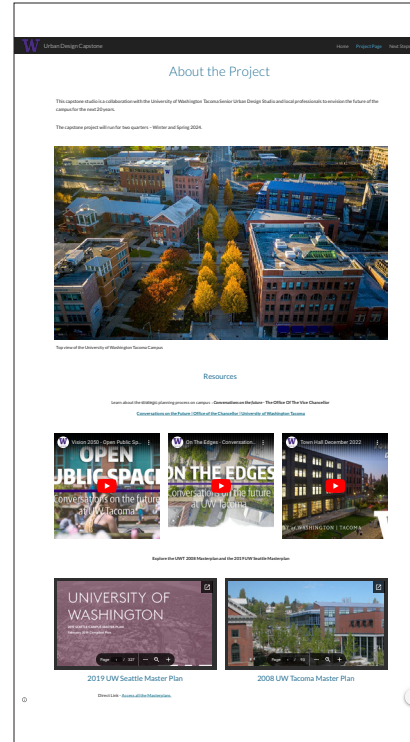
These seemingly simple yet crucial questions formed the foundation for our project development.

Project Website

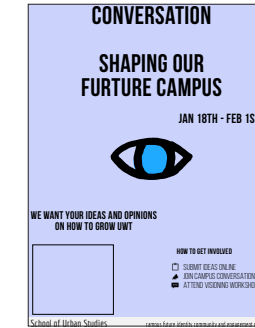
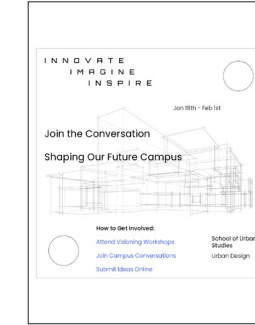


Link to the Project Website

<https://sites.google.com/uw.edu/uwt-campus-redesign-/project-page?authuser=0>



Alternate Posters Designs



Community engagement

I focused on creating a central hub for the capstone project a public-facing landing page that serves as a one-stop shop for information and resources offered by our team. I was fortunate to have the support of Patrick and Mohammed throughout the website development process. Their contributions in various aspects were invaluable in bringing the website to fruition.

Figure: Capstone Project outreach results

Figure: Snapshots of the website and Alternative Posters.

Site Context



Figure 1: View of Historic “Swiss bldg” 1970s and contrasting 2021
 Source: Stephen Cysewski “Wandering Tacoma 1970s”

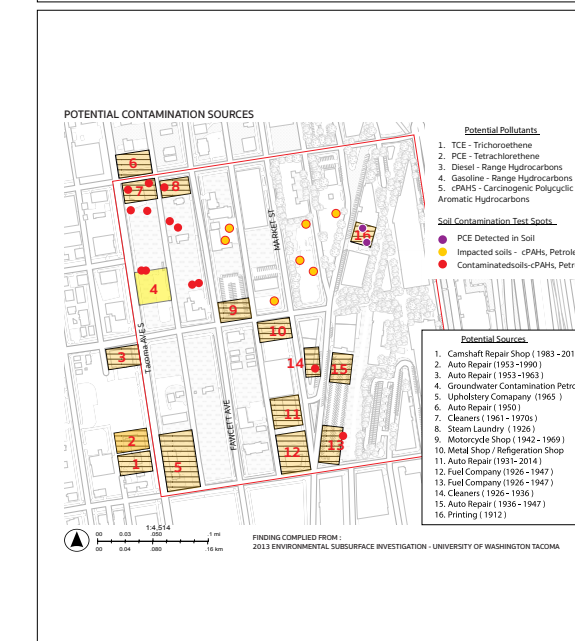
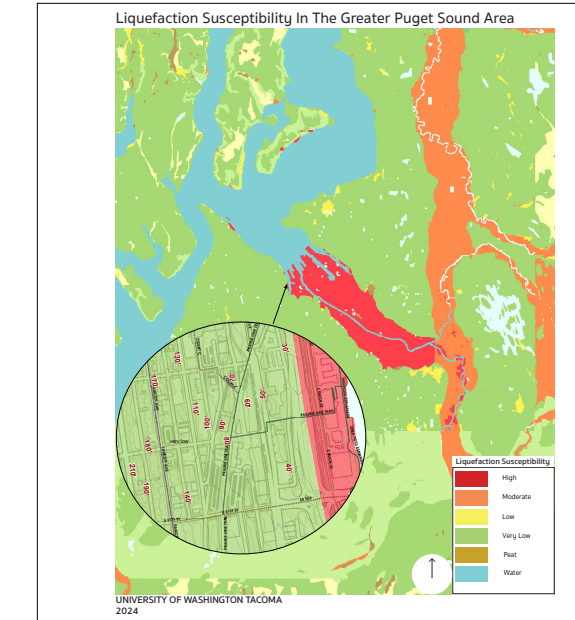
Site Context



Main Expansion Area - heading up the Hill towards Tacoma Ave S

Nestled within the city’s historic industrial sector, the urban campus boasts unique character. Adapted buildings from its industrial past now house academic functions, creating a vibrant hub of reuse. The surrounding area is undergoing rapid transformation, with multi-family developments sprouting near the school. Major roadways crisscross the campus district, while expanding districts like a convention center, hospital, brewery district, and work district border the area. The challenge lies in managing these external pressures and physical changes while maintaining the campus’s distinct identity and fostering a welcoming environment that integrates with the surrounding community.

Figure 2: Aerial View of Campus / Campus Drone Shots // Noah Carr // 2023



Site analyses

Findings:

While working on the capstone outreach project, we conducted research to gain a better understanding of the challenges and opportunities at the site. My focus was on the areas concerning water, sea, and pollution, particularly in regard to surrounding the site.

Analyses produced

- Pavement Conditions in relation to terrain and slope.
- Access in relation to terrain and slope.
- Liquefaction Susceptibility.
- Contamination sites.

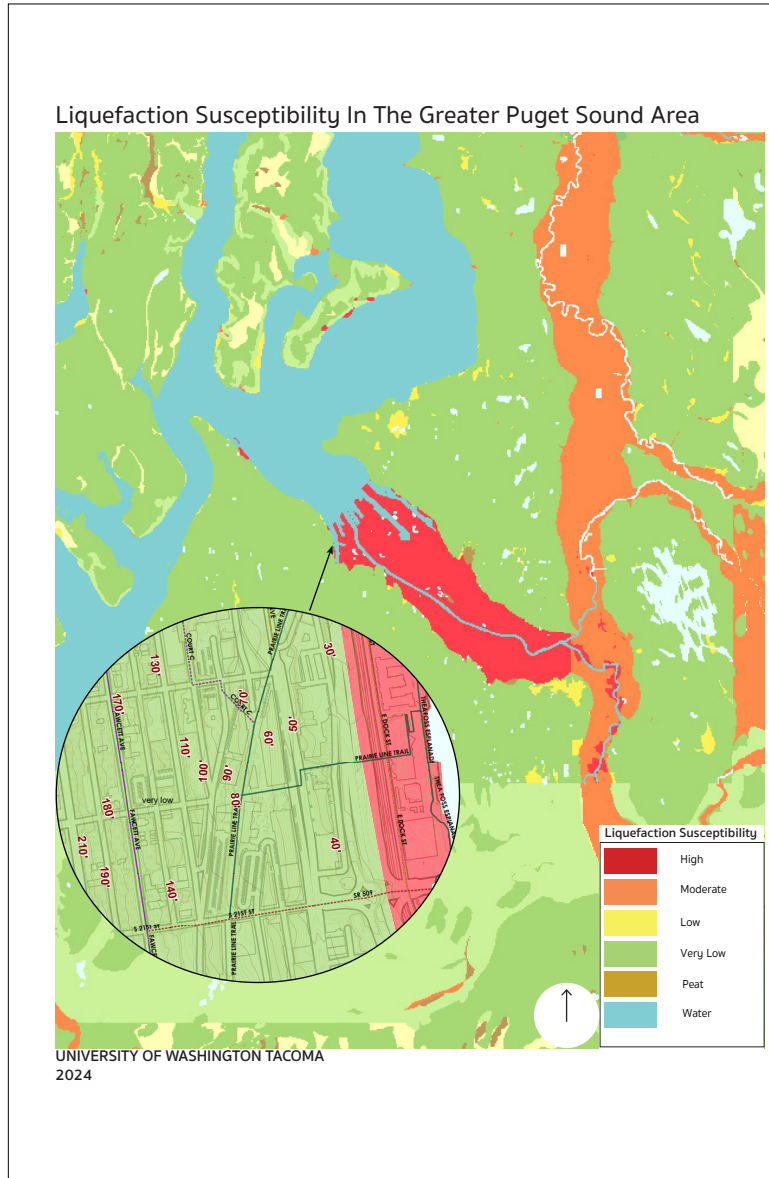


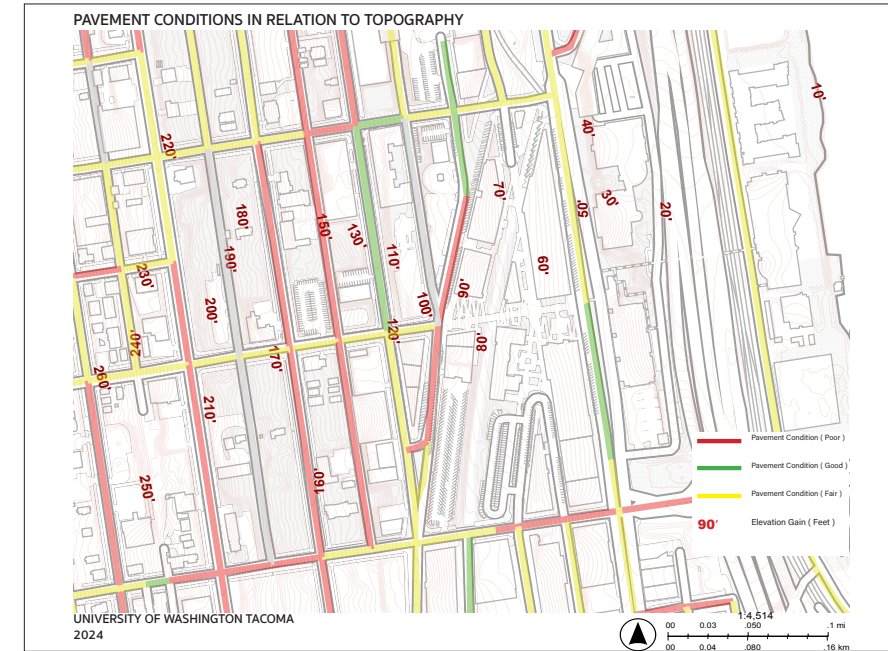
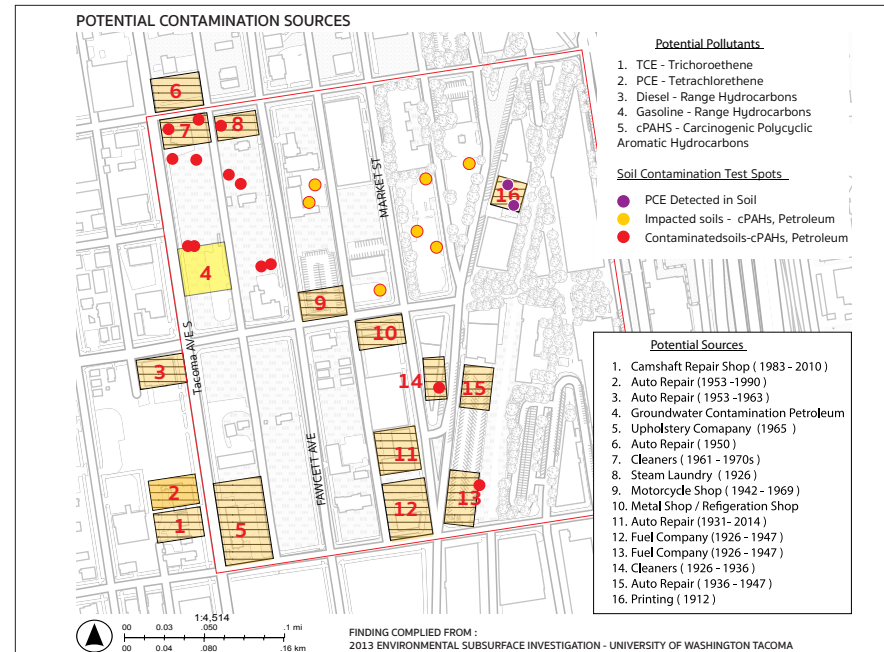
Figure 1 : Liquefaction susceptibility GIS Map showing the campus and greater region
 Figure 2 : Potential Contamination sites of the Campus.

Environment & Ecology:

My assessment indicates that the site is situated near, but not directly affected by, areas susceptible to liquefaction. The sloped terrain further minimizes the risk of the site being impacted.

Given the site's history as a manufacturing and warehouse district bordering a busy train depot, I investigated the types of businesses that once operated there. Inspired by a previous study that identified confirmed and potential contamination zones within the broader campus area, I created a graphic that combines those findings with my own research.

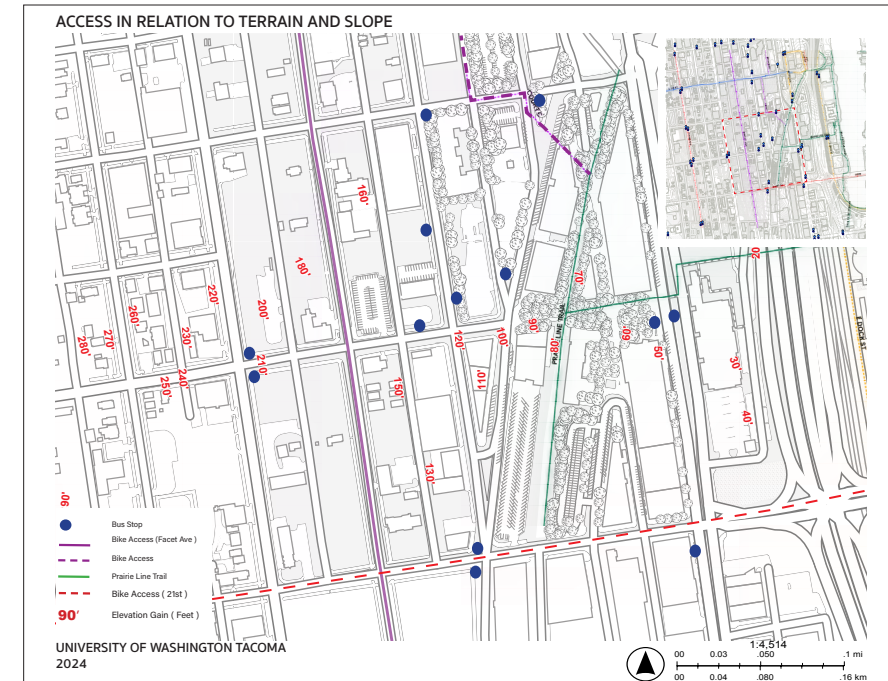
This graphic serves as a historical map, piecing together the past industrial landscape and highlighting the industrial activities that once dominated the vicinity.



Access / Slope :

My investigation into the site's topography revealed a significant elevation change, with the lowest point at around 50 feet and the highest point nearing 200 feet. This substantial elevation gradient presents a challenge for future development plans.

Furthermore, a review of Tacoma's pavement condition database indicated that most existing pavements on campus are in poor condition. This significantly hinders accessibility for pedestrians and cyclists. I also analyzed the distribution of bus stops and other public transportation options across the site to gain a comprehensive understanding of the current accessibility challenges in terms of both pedestrian movement and access to public transit.



Site Context - Aerial view of the site, slope conditions - Looking across 21st street

Figure : Aerial View of Campus / Campus Drone Shots // Noah Carr // 2023

Environment & Ecology:

An analysis of the University of Washington's Tacoma campus footprint reveals a fascinating and distinctive education district. The site's historical significance is evident throughout. Warehouses and factories once stood where current buildings reside, with the Prairie Line Trail tracing the path of a major rail line that connected America. Landmarks like the Tacoma Buddhist Temple underscore the area's rich cultural heritage, a legacy central to Japanese American life in Tacoma.

Challenges and Opportunities

Beyond Tacoma Avenue lie the historic Hilltop and Medical districts, facing the challenges of transformation and potential displacement. While the UW Tacoma campus has undeniably contributed to the revitalization of downtown Tacoma, careful attention will be crucial as the area progresses. Shaping the campus's future requires a comprehensive understanding of its historical context and the preservation of its unique character – a commitment that will ensure the district continues to thrive.

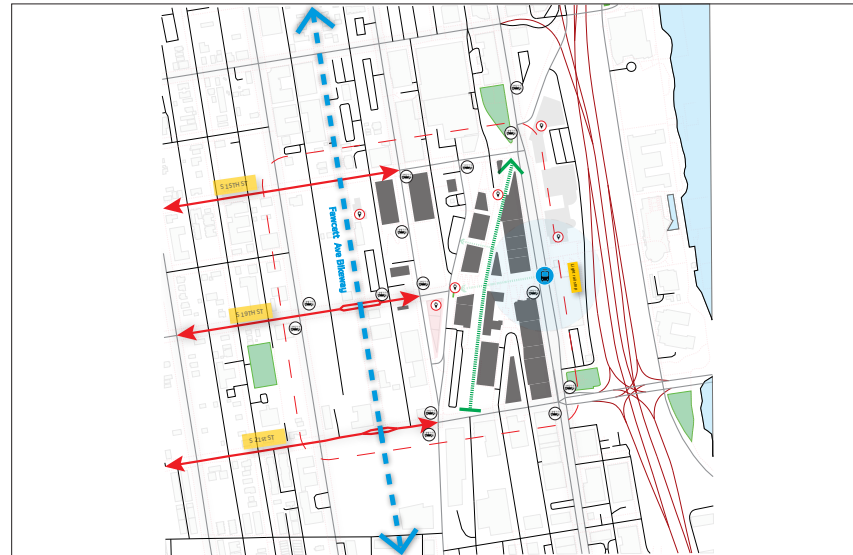


Figure 1: Site Overview with major transit stops and bike infrastructure.



Figure 2: Site Overview with major vehicle routes and bike infrastructure.



Figure: The site scoping analysis with develop-able areas and current campus highlighted .

UW Tacoma: A Thriving Campus Re-imagined

The UW Tacoma campus is poised for an exciting transformation. Nestled within a historic district, it faces both opportunity and challenge due to the growth of hospitals, housing, and breweries nearby. A thoughtful master plan is needed to navigate this evolution. This plan should prioritize new housing options, improved access, a strong sense of community, and equitable development. It should also ensure the preservation and enhancement of the area's unique character, fostering a vibrant urban campus community that thrives alongside its neighbors.

Urban design approach

The approach is rooted in our six framework focal points

Climate Action

Implementing measures to mitigate Environmental impact and foster sustainability.

ADA Access

Ensuring accessibility for all Individuals through ADA-compliant Infrastructure.

Creation of a Hub

Establishing a central nexus to facilitate Collaboration, interaction, and innovation Within the campus community.

Pedestrian Forward

Prioritizing pedestrian-friendly design Elements to enhance mobility, safety, and Connectivity.

Green Infrastructure

Incorporating environmentally friendly Features and practices to promote Biodiversity and ecological resilience.

Community Equity/Commitment

Upholding principles of fairness, inclusive, and social responsibility, fostering a sense of belonging and shared ownership among all stakeholders.

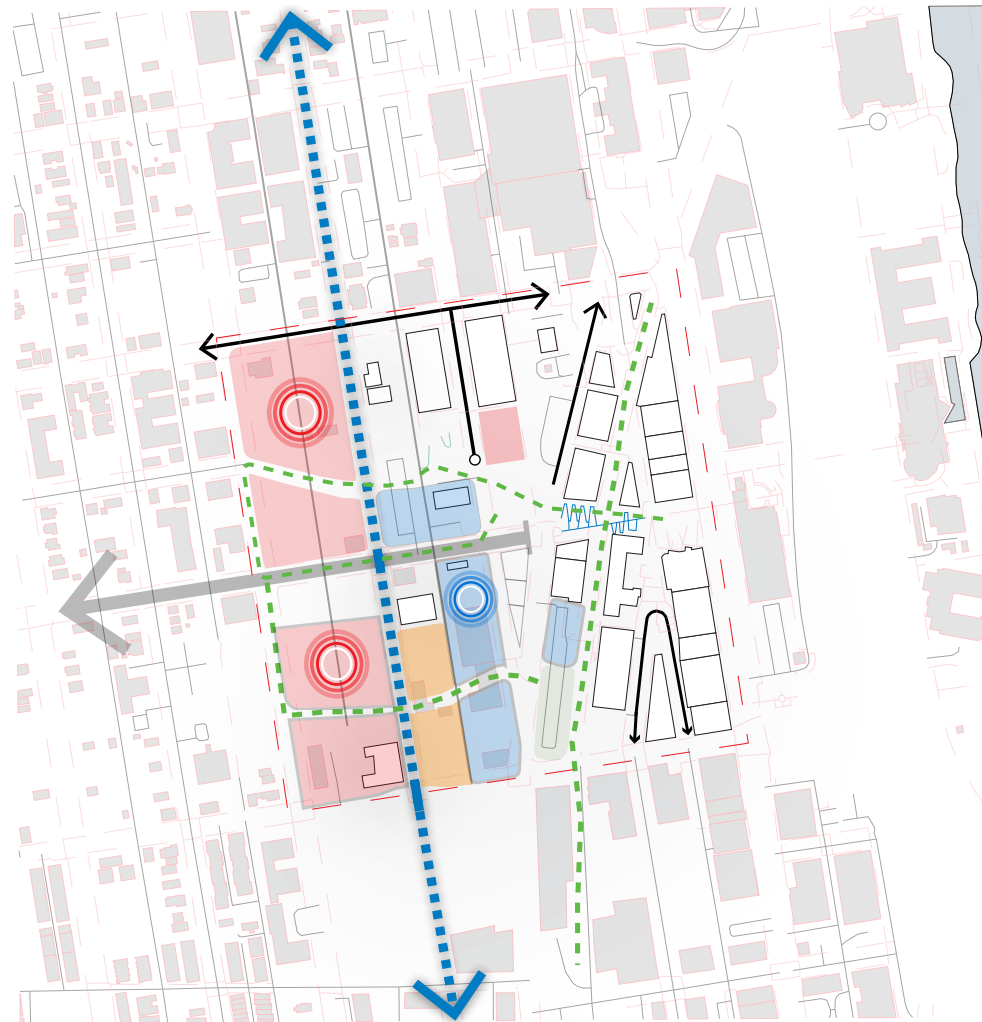


Figure: Mini Map illustrating uses and proposed access

- Red - Housing
- Blue - Academic
- Green - Pedestrian Access
- Orange - Student / Community Spaces

Urban design approach

Envisioning a Vibrant UW Tacoma Campus

The proposed master plan for UW Tacoma prioritizes several key elements to foster a thriving urban campus:

Integrated Land Uses: New developments will include a mix of housing, academic buildings, and mixed-use spaces, catering to the diverse needs of the campus community.

Urban Green Spaces: The creation of green spaces will enhance the campus aesthetic and provide much-needed areas for relaxation and recreation.

Improved Accessibility: Addressing access challenges will be crucial. Aligning the existing grid pattern with the campus contours will improve navigation and create a more seamless experience.

Enhanced Community Connections: The plan will prioritize initiatives that invite and seamlessly blend the campus with neighboring areas, fostering collaboration and a sense of belonging.



Figure: The site Framework with outlined current campus, new interventions, access and land uses.

LAYERS OF THE SITE

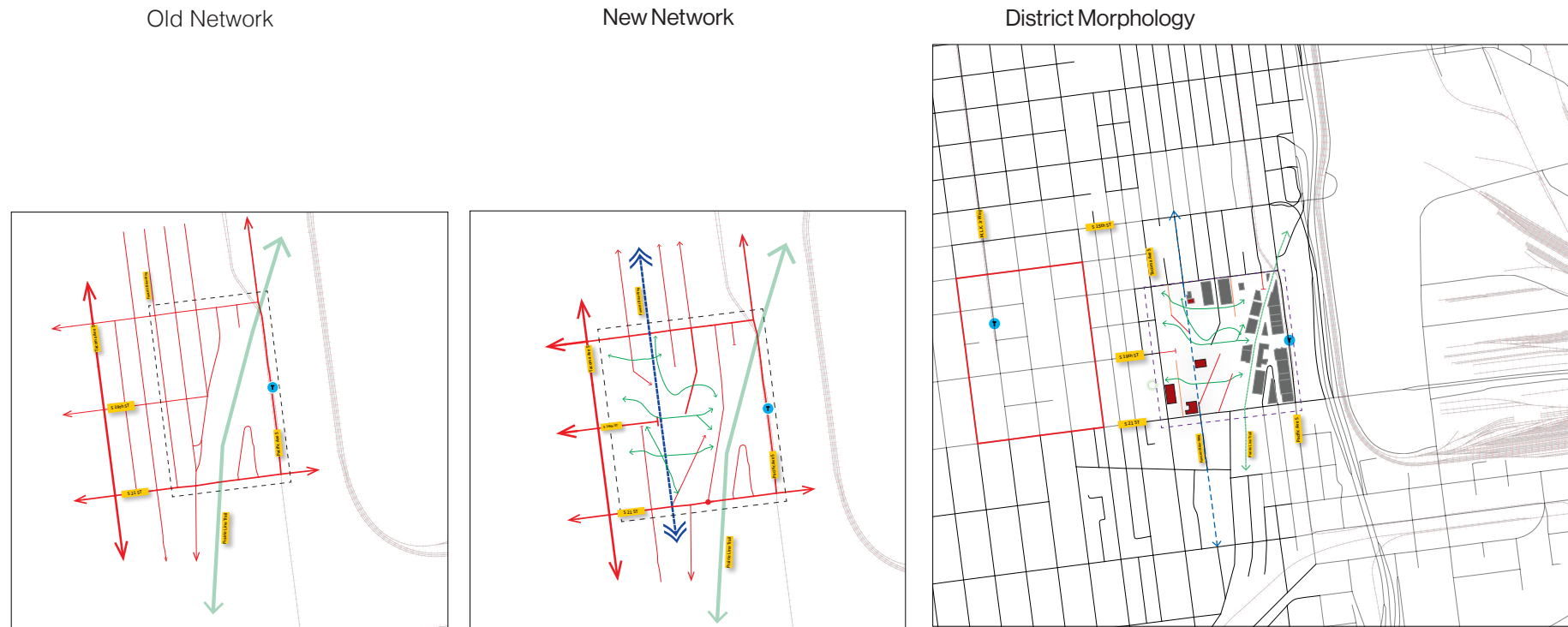


Figure: Three figures track the progression of the interventions to the site and how it integrates within the wider district.

Site Plan

The UWT master plan re-imagines the urban campus experience, fostering a vibrant community that seamlessly integrates with the surrounding district. This vision prioritizes the needs of students, faculty, staff, and the residents, workers, and visitors who animate the area.

A Cohesive yet radical Urban Campus

- We move beyond the traditional grid, taking cues from the natural slope to create an opportunity flow of access and green infrastructure, inspired by Olmsted's principles.

- The built environment will be a cohesive yet radical departure from the norm, featuring innovative building forms, expansive green spaces, and a unique connection to the surrounding urban fabric.



Figure: Proposed Site plan of the campus

Case Study

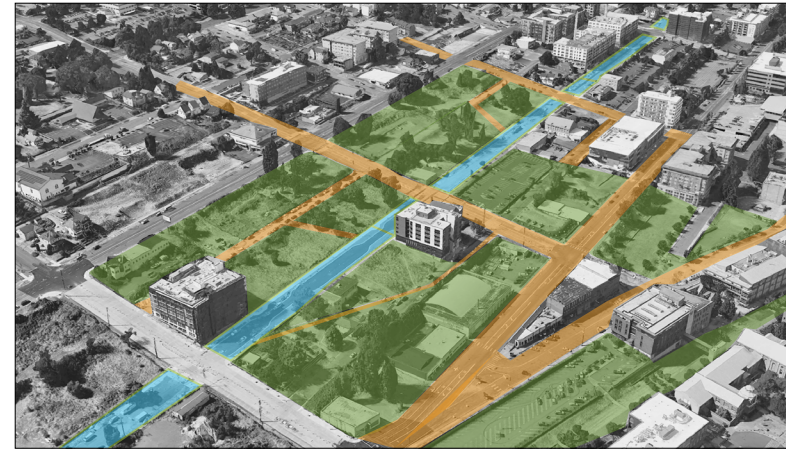


Figure: Site Context - Expansion areas



Figure: Site Context - Proposed Site Plan



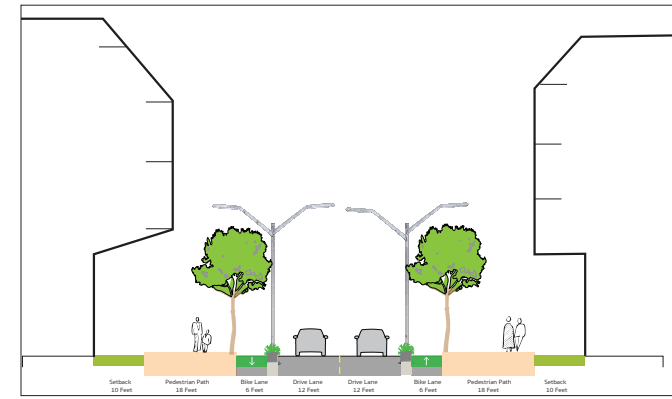
Case Study

- From the city of **Hornsbruksgatan- Sweden**, on how to utilize areas terrain. The buildings are built on terraces and in **between functional and accessible pathways** allow for access from the bottom to steps top. The spaces crafted in-between are activated and treated for **human scaled uses**. As well as an opportunity for critical **storm water and flood infrastructure to be incorporated**. The site plan of campus creates similar opportunities as shown for similar levels of treatments.

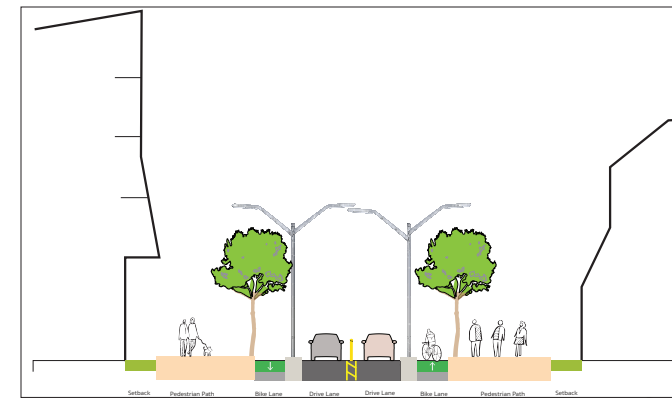


Terrace Housing / Hornsbruksgatan - Sweden / 2014
Utopia Arkitekter

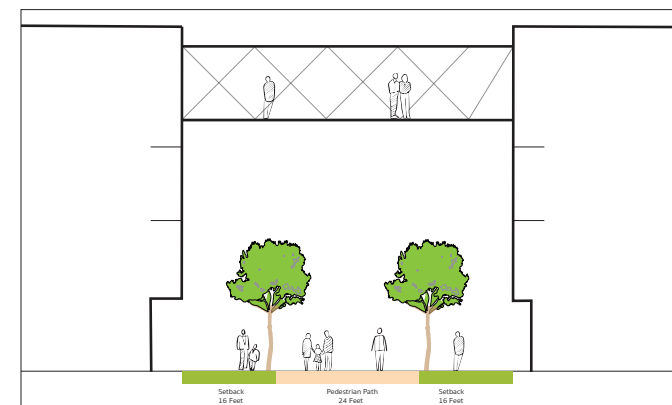
Site Sections



Section A / 19th ST



Section B / Jefferson ST



Section C / Court C



Figure: Site Plan with all section points

Case Study

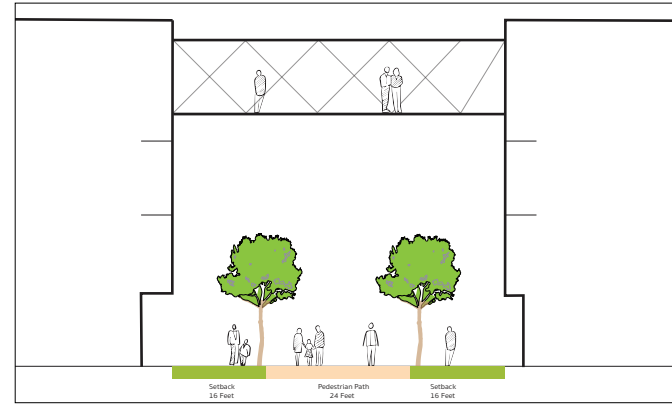
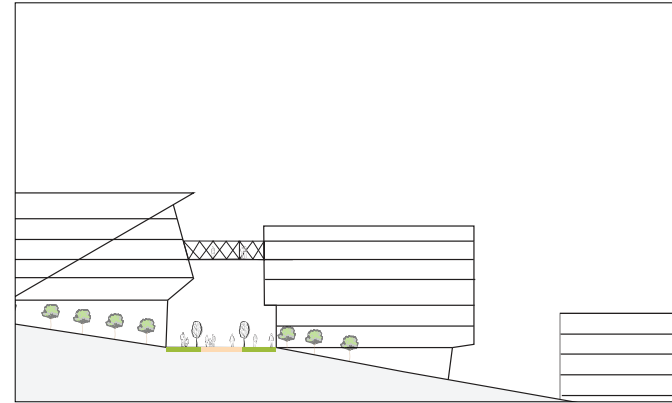
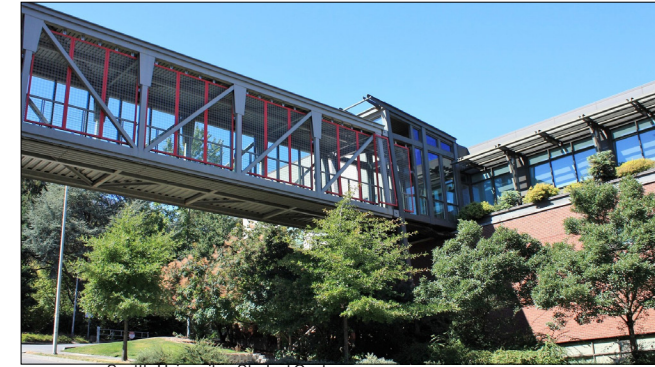


Figure: Three Images of a proposed Sky bridge and form intervention



Seattle University - Student Centre
/ Seattle / 2001 / BJSS Duarte Bryant

The UW campus presents an accessibility challenge, making it difficult to reach certain areas. This form incentives **accessibility for everyone**. This is in creating alternative ways to navigate the campus.

An approach that creates opportunities for:

- **Enhanced mobility:** Integrating a much an efficient mobility option to connect different parts of the campus.
- **Human interaction:** The design can foster areas for people to gather and interact, fostering a sense of community.
- **Reduced reliance on steep slopes:** By providing alternative routes, we can ensure everyone can easily access all campus areas.



University of Washington - Medicine Research Complex
Seattle / 2011 // Perkins+Wills

Case Study

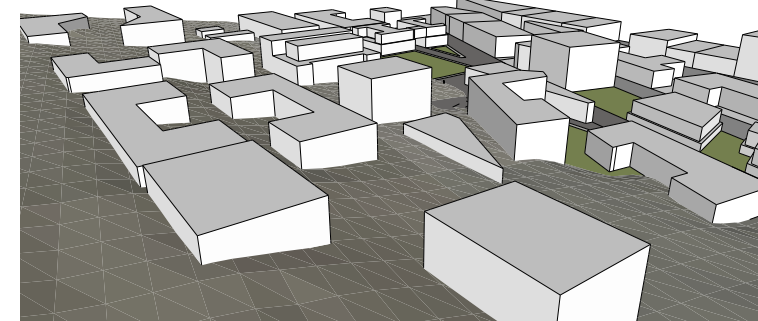
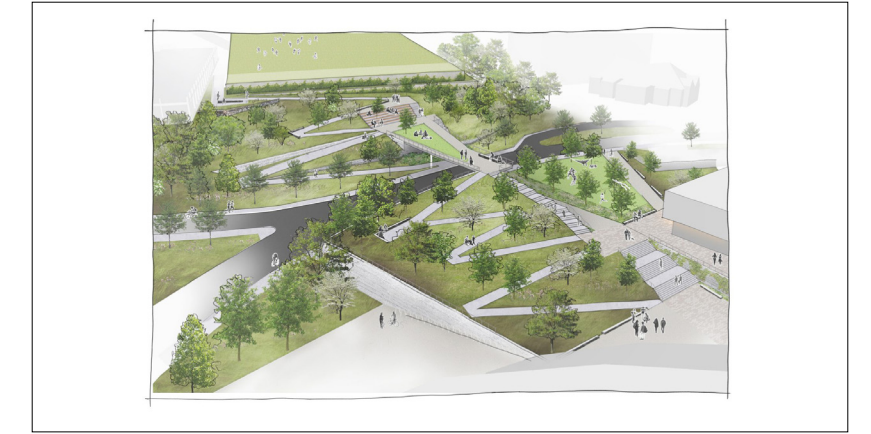
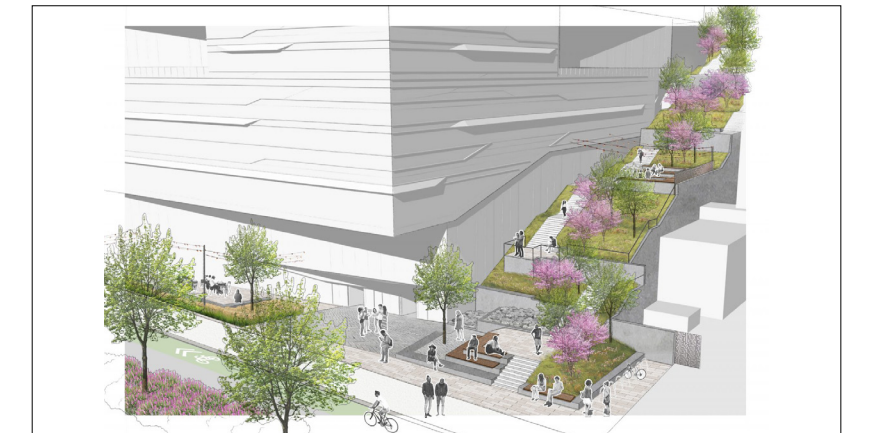


Figure: 3D Model, of the site showcasing its steep terrain and proposed land use



Turning a Challenge into an Opportunity

Our campus's steep slope, while presenting accessibility challenges, also offers a unique design opportunity. Inspired by solutions at the University of Pittsburgh, we can implement ADA-compliant features like terraced buildings, accessible pathways, and gently sloping ramps. These elements can be seamlessly integrated into the campus's urban design, creating a visually striking and functional environment that benefits the entire community.



University of Pittsburgh - Hillside Framework
Pittsburgh, PA / 2020 // Land Collective

Site Study

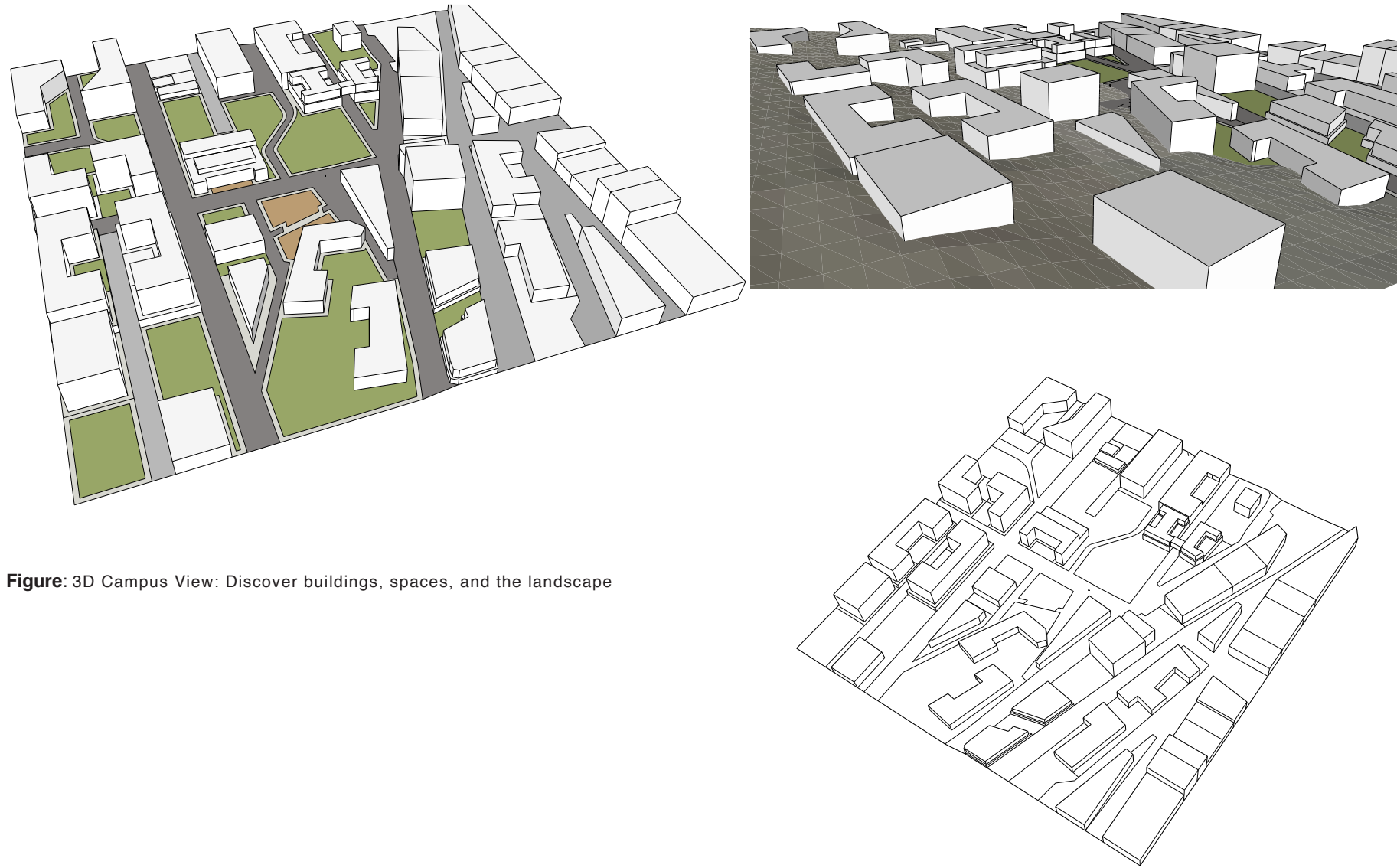


Figure: 3D Campus View: Discover buildings, spaces, and the landscape

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