



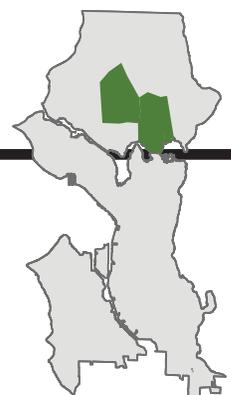
GREENLAKE / UNIVERSITY DISTRICT

University Team B

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CHARETTE PROCESS AND PRODUCTS

Key Ideas

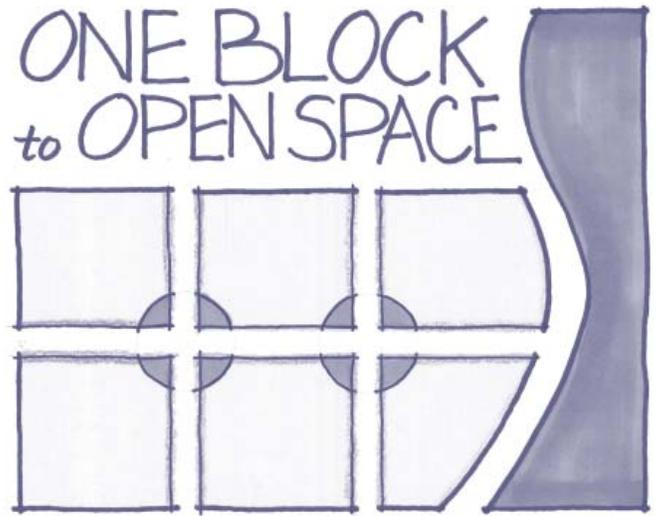
- Natural systems for organization
- Multi-layered infrastructure
- Transportation corridors as open space
- Open space to support density, preserve character
- Hierarchy of open space types and scales

Overarching Goals

- Every citizen is invested in Seattle's open space
- Livable neighborhoods: density is balanced by increased access to open/green space, including along transportation corridors
- Open space integrates ecological systems and functions into the urban landscape

Site-Specific Goals

- Revitalize the Ravenna watershed
- Reclaim I-5 for neighborhood connectivity and open space
- Integrate University with surrounding vicinity
- Reduce ecological footprint, including using natural systems for drainage
- Improve pedestrian and bicycle experience
- Extend and enhance wildlife habitat



CONCEPT: one block to open space

Concept Application

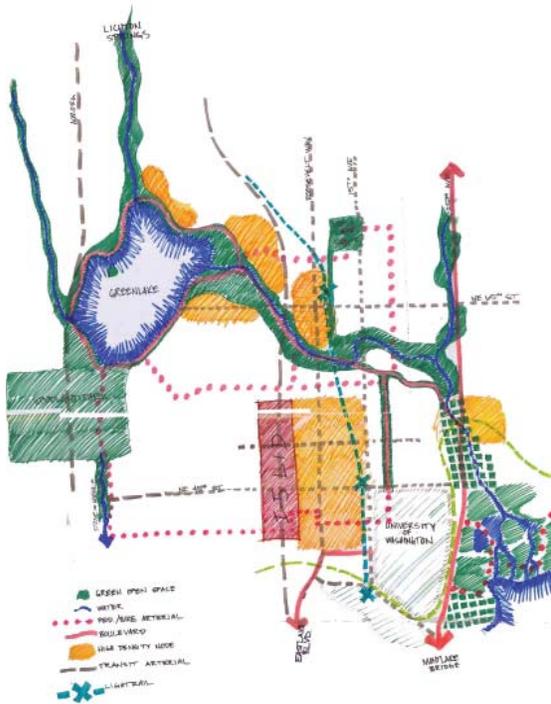
The strategy of one-block-to-open-space ensured that every citizen is personally, as well as equitably, invested in Seattle's open space system. Human-human and human-environment interactions are key to ecological and social aspects of sustainability. Integration of increased density development, active transportation, and open space make neighborhoods livable and economic sustainability viable. The city-wide network of green infrastructure and movement corridors is at the heart of block-level design. Open spaces have many forms, scales, and multiple social, ecological, and connective functions with a layered hierarchy that celebrates both our diverse environment and local culture.

Block Open-Space Plans

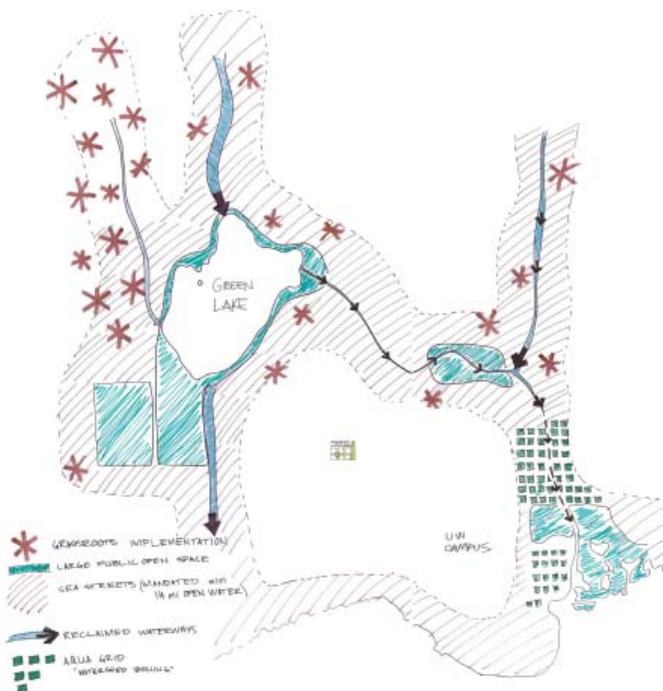
- Though new legislation of city council, every block in the city that is more than one block from open space is required to develop an open space plan to provide nearby of self-contained open space by the year 2100.
- Implementation of plans will result in every person living within one block of open space and provide ecological, social, and connective functions.
- Plans may support larger area visitors or result in inward-serving functions
- The process of approval and comparison will create political tributaries into a larger city-wide consciousness and campaign to develop a model city open space at all levels

3-5 Year Implementation

- Update code for block-level stormwater strategies
- Seattle Department of Transportation, Seattle Park and Recreation, Seattle Public Utilities must sit down at a table and figure out a working relationship for land that serves as park, transportation, and utility infrastructure
- Create a website system with interactive submittal and viewing capabilities for block-by-block, locally based open space planning
- Pass a city council resolution concerning block-scale development that incorporates open space for every block and citizen
- Designate desired lands for waterway reclamation and I-5 lid; develop a procedure for acquiring those lands over the next 100 years.



Schematic Diagram



Re-connect the Ravenna Creek System

5 Conceptual Hydrological Typologies

Grassroots Implementation

- Block level, voluntary
- Personal rainwater catchment, kinetic sculpture, green roofs, permaculture

Large Public Open Space

- Largely already acquired and managed
- Eco-educational, accessible. Examples: Greenlake, Union Bay Natural Area

(Re)Claiming Waterways

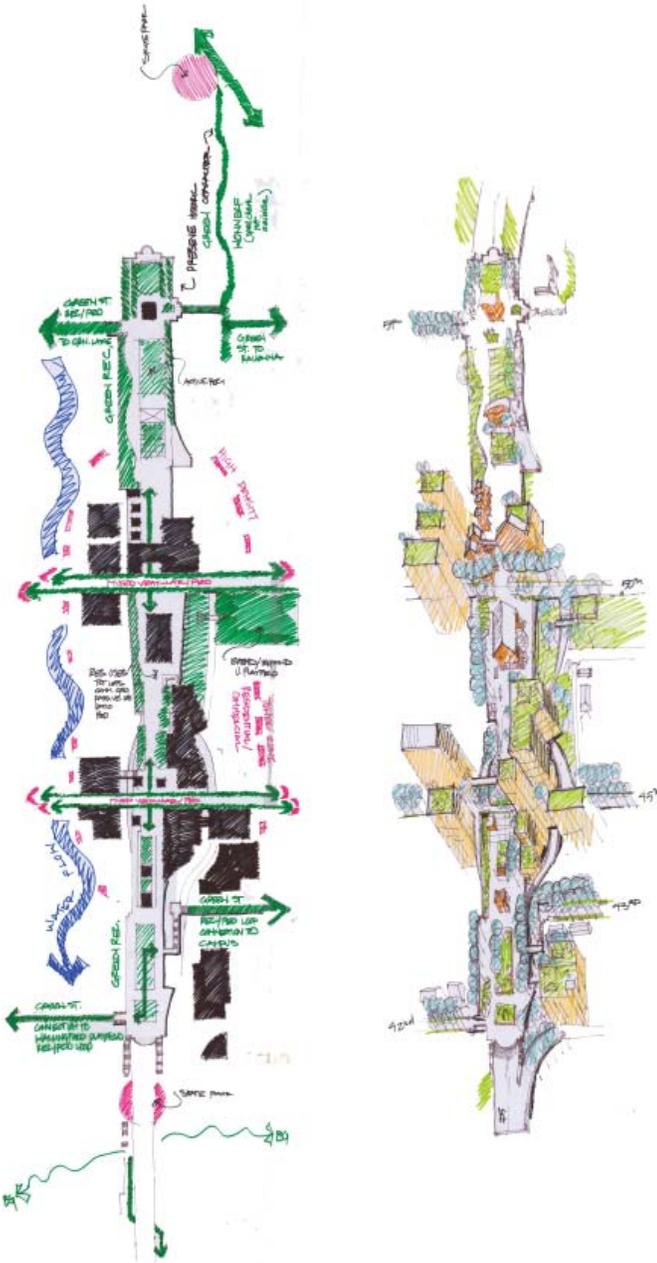
- creating mixed-use investment in public waterways
- daylighting and capitalizing on existing hazards
- historic and appropriate daylighting waterways
- organizing principle for nodes to create deeper social function and meaning; trail, active, and passive recreation

SEA Streets

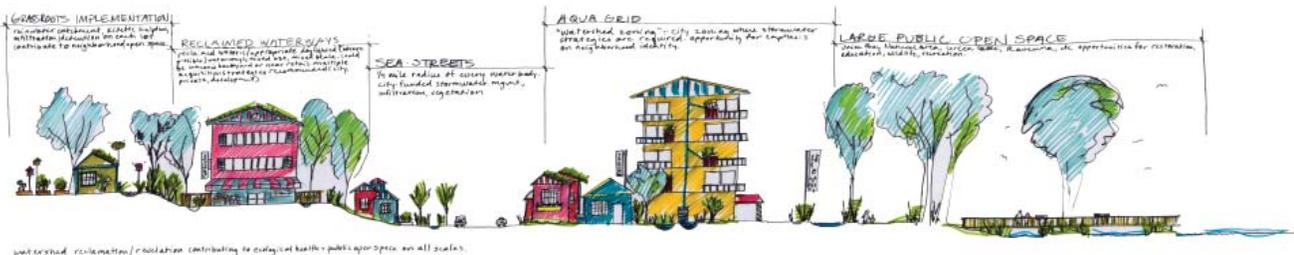
On-site water treatment mandatory within a mile of all open waterways

Aqua Grid

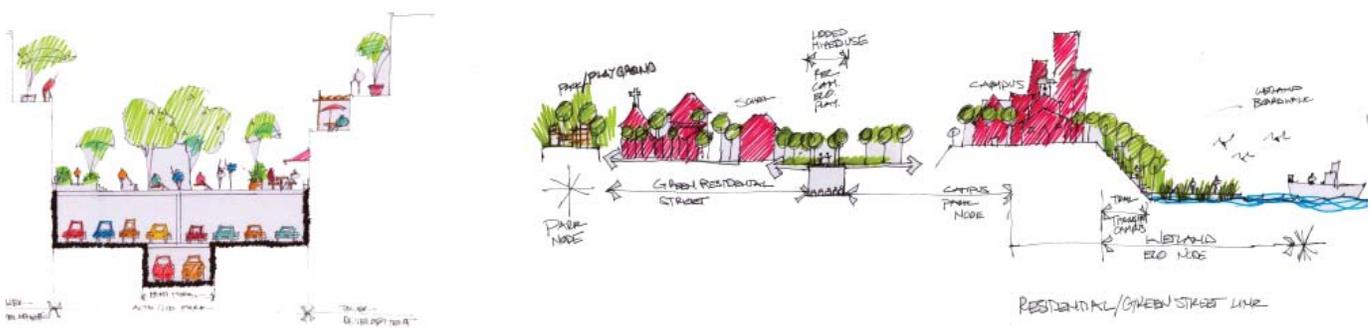
Watershed zoning through city-mandated stormwater strategies in strategic areas to restore watershed function



I-5 Lid



Ravenna Creek Tributary Typologies



I-5 Lid Sections

PROJECTED FUTURE

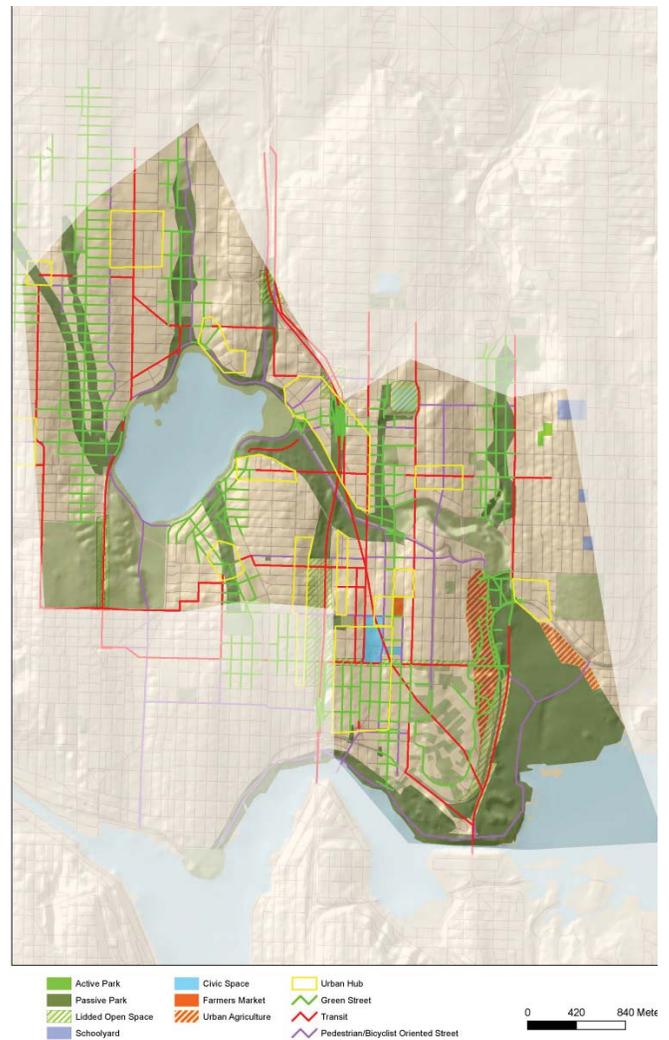
Community and Transportation



2020

Greenlake / University District

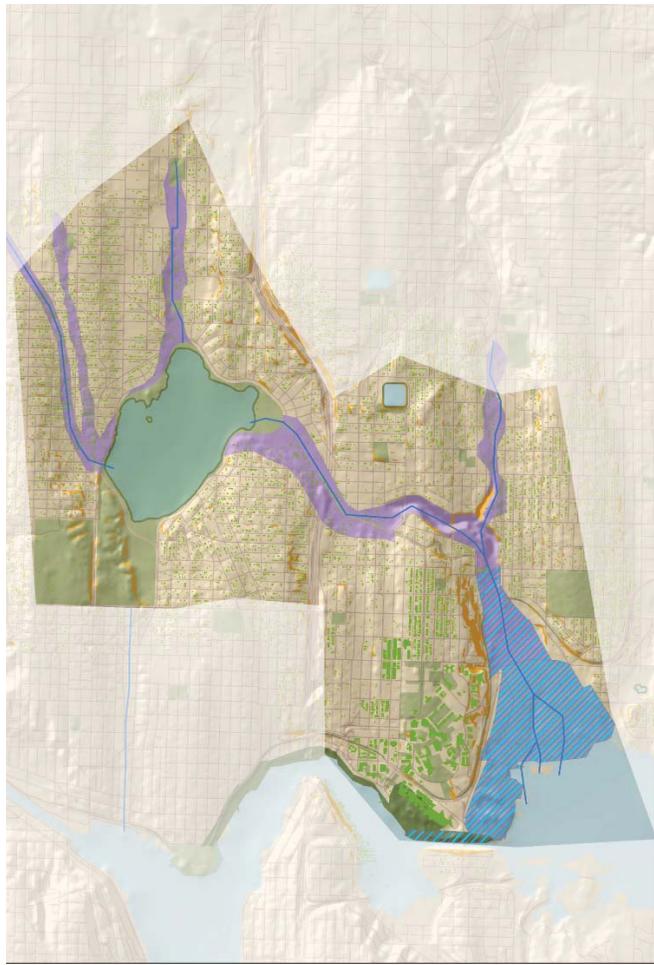
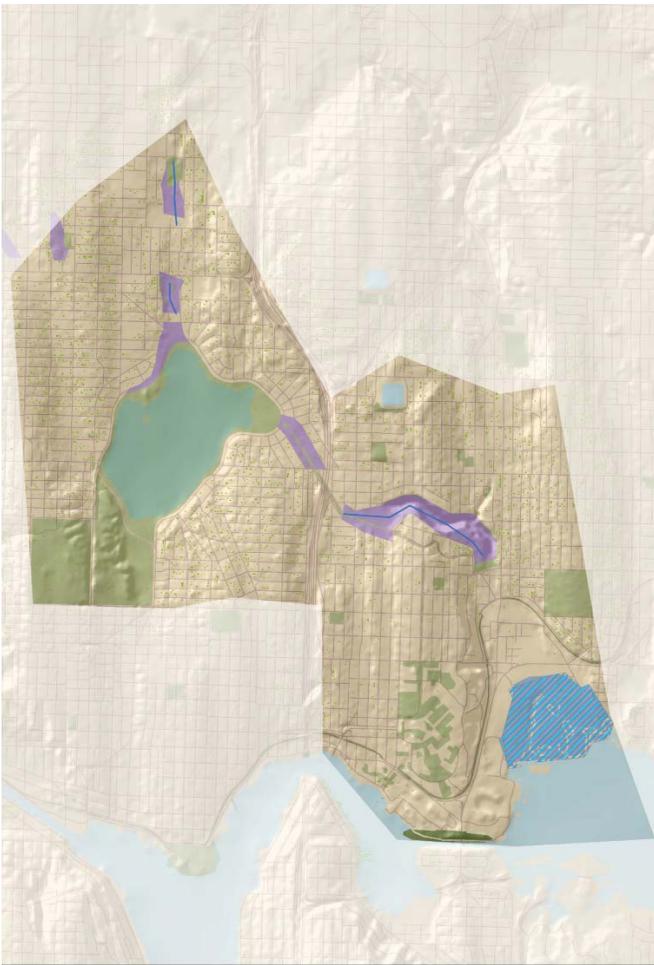
- Target areas for higher-density development are established in locations primarily related to mass-transit stations and the university campus
- Road improvements, particularly as relates to pedestrian and bicycle navigation, are focused on creating corridors between places, such as Greenlake and the university campus; the goal is to provide a system for pedestrian movements within these neighborhoods
- Focus on I-5 corridor for re-development, both for the right-of-way itself and the surrounding parcels; the goal is to provide transportation AND public open-space amenities



2100

- Several new zones of higher-density and mixed-used development are established in strategic locations, primarily as related to mass transit stations, the I-5 corridor, and the university campus
- A place-based network of pedestrian and bicycle-friendly roads is established in the Greenlake-University District neighborhoods to provide an inner-loop to the Burke-Gilman trail that links the waterfront to inland amenities such as Greenlake. This system also provides orientation and navigation for small-scale movement along protected and more sensitively designed routes.
- The I-5 corridor has become the focus of intense and innovative urban development, namely a lid over the portion currently trenched, and infill development beneath the elevated portions. This right-of-way may contain space for personal vehicles and mass transit systems (both regional and local).

Habitat and Water



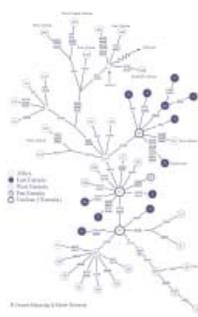
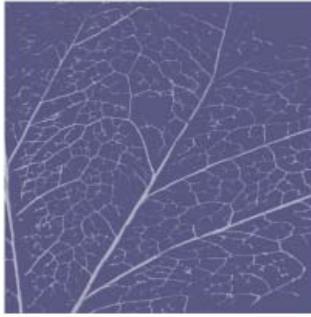
2020

- The city prioritizes the functional restoration of the Ravenna Creek watershed, including Greenlake
- The city prioritizes the acquisition of parcels necessary to establish the functional restoration of the ravenna creek watershed; these areas will also contribute to developing a connected water-based open space system
- The city prioritizes acquisition of parcels within hazardous zones, such as unstable soils and upon filled land
- Green roofs begin to appear in residential applications

2100

- The Ravenna Creek watershed is functionally restored from the stream tributaries to greenlake, through Ravenna Creek, down to the union bay natural area. This system connects not only natural drainage, but also habitat and human open-space.
- The City of Seattle has acquired parcels needed to daylight tributary streams, and also parcels located in hazardous areas as of 2000 (such as unstable soils)
- The treatment of stormwater is diffuse through the neighborhoods, with SEA street type models implemented widely (focused in those areas draining to the ravenna creek watershed)
- Green roofs are widely implemented

OPEN SPACE AND INFRASTRUCTURE: TRIBUTARY SYSTEMS



Tributary Organization

Tributary systems are interconnected networks of multiple scales, arranged in a hierarchy to ensure efficient, appropriate, and effective distribution (or collection) of resources. This

philosophy provides a descriptive goal and model for structuring and integrating infrastructure and open space system design.



Infrastructure As Public Open Space

Infrastructure and open space systems are each public amenities that are funded with public money. Additionally, the integration of infrastructure systems into publicly used spaces gives the opportunity to instill social meaning, recognition and

appreciation of urban infrastructure systems. The layering and integration of these functions in the same spaces provides the potential to increase the opportunities for creative and innovative design in each overlapping system.

Greenlake / University District



Olmsted and Infrastructure

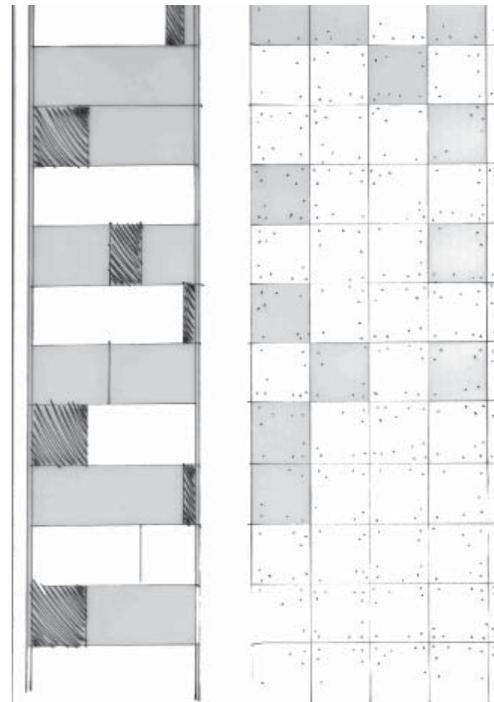
Olmsted's landscape design often included components of urban infrastructure. These elements aided in establishing function, health, and identity, and have in turn created lasting and iconic landscapes. With contemporary understandings of

engineering, hydrology, and environmental sciences, our ability to transform landscapes by restoring function can also serve to expand public access to open spaces.

STRATEGY IN A SYSTEM

Roadway Re-thinking and Re-development

- As roads are re-designed for pedestrian and bicycle safety and sensitivity, these improvements should be focused upon creating a place-based network of routes
- Targeted roadways may be of large multi-use or small residential scale
- Pedestrian and bicycle safety are prioritized, along with common design features that indicate the route as part of a navigation system
- Permeable paving and stormwater treatment are also accounted for in new roadways
- Modular paving systems are implemented, thus allowing ease of access to sub-surface utilities, ease of repair to roadway patches, and ease of designation of right-of-way priority (different paving patterns for different types of traffic)



Modular permeable paving units

Design Goal: INTEGRATE

- To connect humans to, and with, open space by layering access and activities on existent urban infrastructure systems: roadways and waterways
- To develop a connective place-based network to provide orientation, legibility, and access
- To look at infrastructure systems as integrative of built and natural systems

Target: INTERSTATE 5

- Wrap the urban forms of the city and natural functions of the land around and across this space.
- A lid over the trenched portion will reconnect human movement between the university district and Wallingford, while providing significant open space in a densifying neighborhood.
- Enclose the elevated portion of I-5 over Ravenna Boulevard to re-establish access between Roosevelt and Greenlake and encourage new activity in the reclaimed footprint.

Implementation: COORDINATE

The integration of Seattle's open space and built infrastructure will require concerted cooperative and collaborative efforts between several city officials and agencies to grow a multi-functional system.



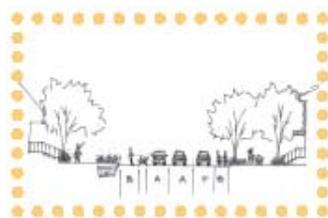
major roadways

- Major roadways carrying vehicular and pedestrian traffic
- Mass transit route
- Off-street parking only; movement is prioritized
- Surface water treatment below paved surface



moderate roadways

- Neighborhood connecting roads / mixed use development and transportation
- Smaller-scale mass transit routes
- Neighborhood parking provided
- Surface water treatment below paved surface; at surface if space allows



small roadways

- Residential roads
- Pedestrian experience prioritized
- Neighborhood on-street parking
- Surface water treatment visible in planting strips

M = mass transit
 B = bicycle lane
 A = automobile lane
 P = parking lane

INTERSTATE 5: ROADWAY AND PARKWAY

What if interstate-5, a major transportation corridor, could also serve as a public open space amenity that encourages surrounding development and draws people toward it? what if the noise, pollution, and general nuisance created by the current roadway could be mitigated, lessened, or contained? in looking to develop a pedestrian-focused navigation and orientation route through the greenlake and university district neighborhoods, can I-5 become a part of this? can we create urban open space by using urban infrastructure?

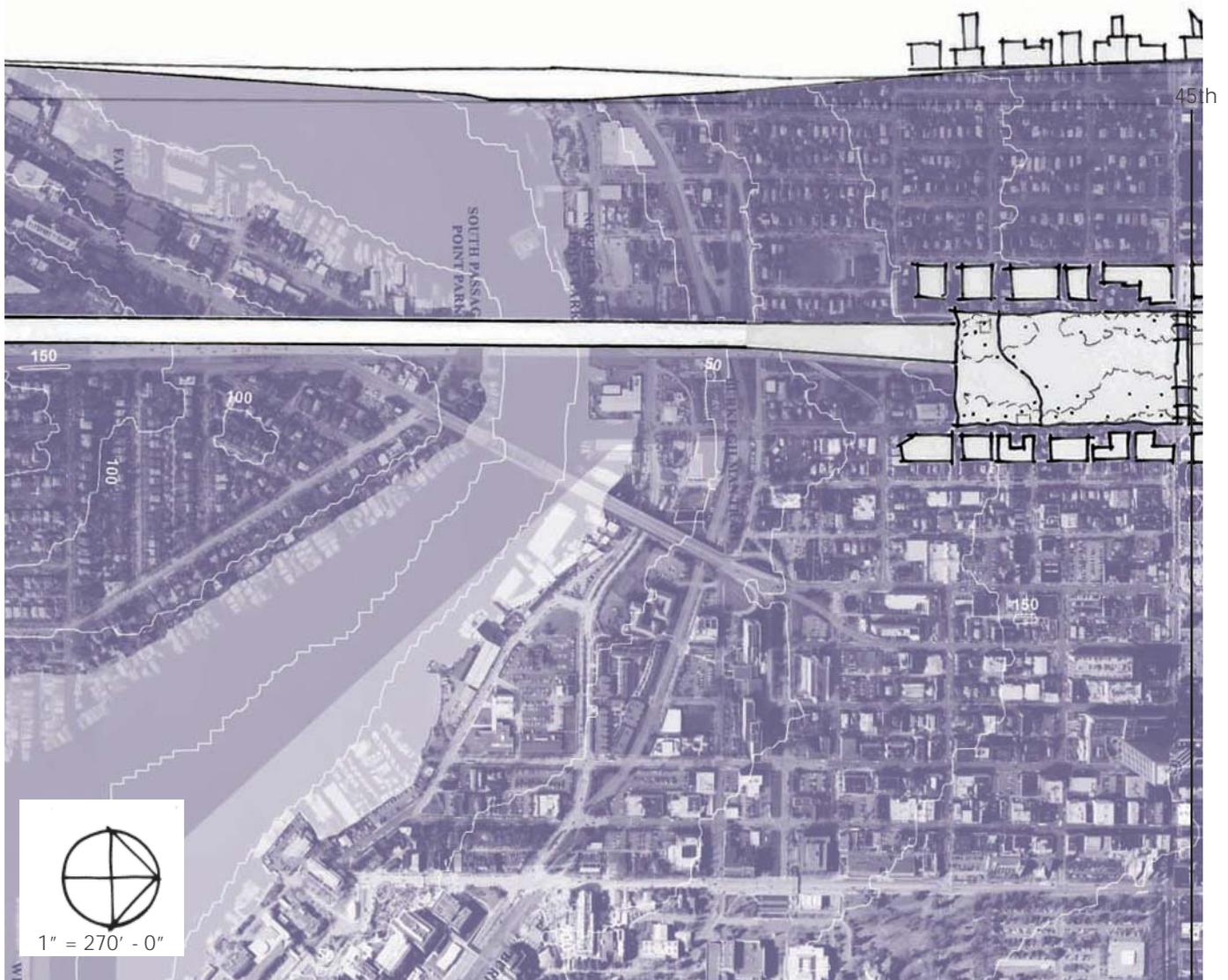


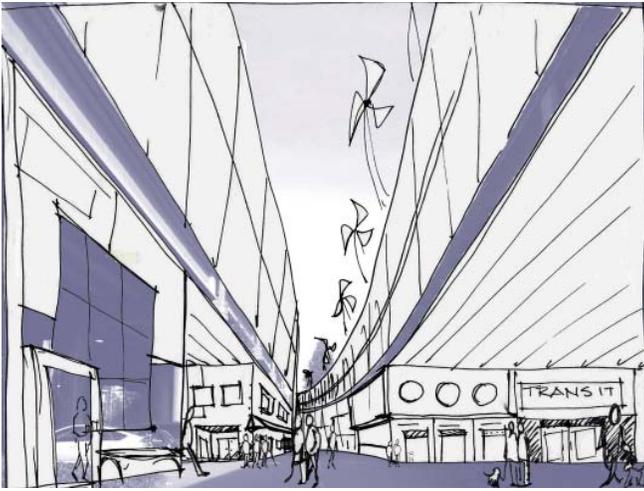
A Lid With A View

Consider a lid over I-5 from 42nd street to 57th street. This creates the potential for the equivalent of nearly 30 blocks of new public open space with a prime view to the downtown Seattle skyline. Embedded in this space may be recreation facilities, performance spaces, community garden plots, educational campuses, restaurants, small shops, and much more. Surrounding parcels may re-develop and support higher density to accommodate the growing city and take advantage of this new jewel.

Urban Open Space Infrastructure

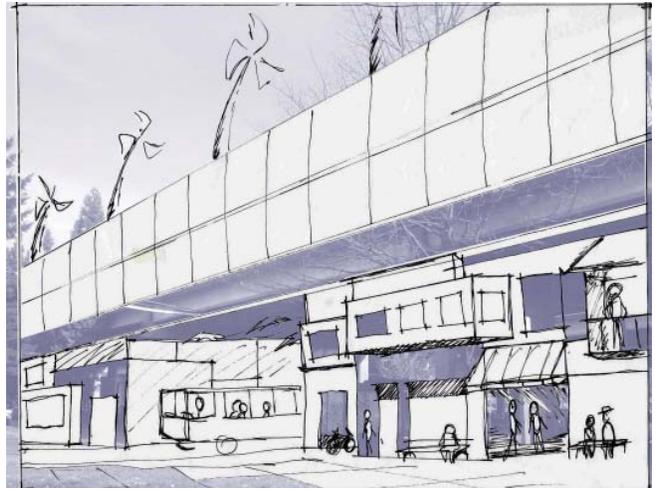
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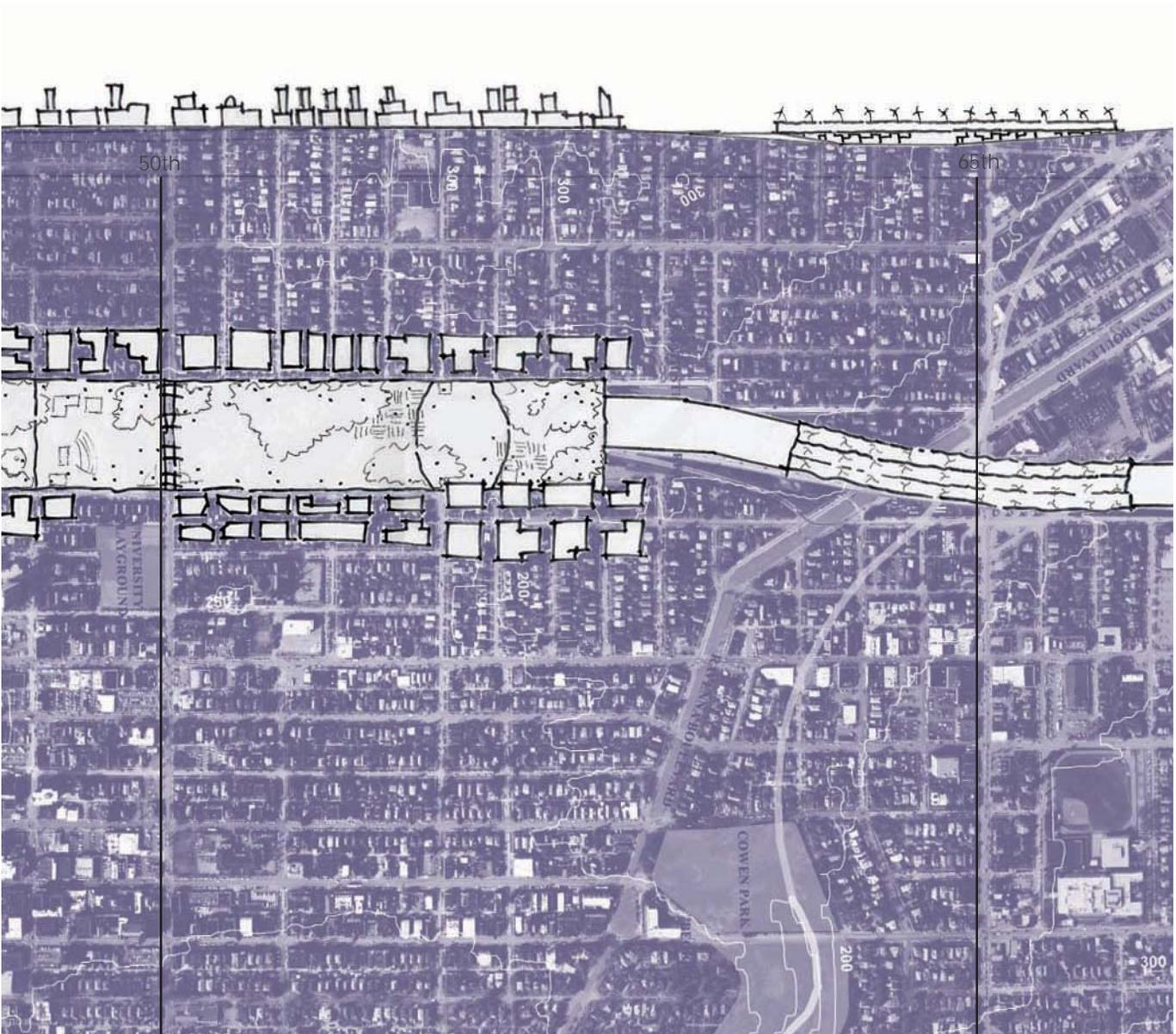
A Covered Marketplace

I-5 becomes an elevated structure between ravenna Boulevard and ne 67th street to respect the Olmstedian ravenna boulevard, but in so doing still divides the greenlake and roosevelt neighborhoods with a swath of under-utilized and unpleasant space. If the noise and general nuisance of the roadway were mitigated, such as by enclosing the roadway in a transparent tunnel, how might the space below be used? Given the Seattle climate, such an arrangement would provide much needed covered public space for activities such as year-round farmers market and pick-up basketball games. Infill development could include light industrial manufacturing, small businesses, and other pocket development. This area will also soon have a light-rail station and thus a greater intensity of neighborhood activity; this space must become a better utilized place.



The Activity of Access

We can obtain more use and enjoyment from current public infrastructure spaces through more thoughtful and layered design. Our roads should be designed for more than cars, but for people, for bicycles, for transit, for stormwater treatment, and as connective corridors between places.



Greenlake / University District