

**Fall 2009**



## **TOD at Gresham Crossings**

Integrating Ecology and Mixed-Use  
Transit-Oriented Development

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## **Acknowledgements**

This report was made possible through Portland Metro's "Nature in Neighborhoods" and "Transit-Oriented Development" programs.

Invaluable support was provided by the City of Gresham, Oregon.

## About SCI

Sustainable Cities Initiative (SCI) is a cross-disciplinary organization at the University of Oregon that seeks to promote education, service, public outreach and research on the development and design of sustainable cities.

Our work addresses sustainability issues across multiple scales, from the region down to the building, and emerges from the conviction that creating the sustainable city cannot happen within any single discipline. SCI is grounded in cross-discipline engagement as the key strategy for solving community sustainability issues. We serve as a catalyst for expanded research and teaching; market this expertise to scholars, policymakers, community leaders, and project partners; and work to create and sponsor academic courses and certificates. Our work connects student passion, faculty experience, and community need to produce innovative, tangible solutions for the creation of a sustainable society.

## About SCY

The Sustainable Cities Year Initiative is a 'partnership' with one city in Oregon per year where a number of courses from across the University focus on assisting that city with their sustainability goals and projects. The Sustainable Cities Year faculty and students work with that city through a variety of studio projects and service learning programs to: 1) provide students with a real world project to investigate; 2) apply their training; and 3) provide real service and movement to a local city ready to transition to a more sustainable and accessible future.

## About Gresham

With just over 100,000 people, Gresham is the fourth largest city in Oregon. It is bordered to the east by Portland, the largest city in the state. Gresham is home to the Mount Hood Jazz Festival and is known as "The City of Music". It is close in proximity to the Columbia Gorge National Scenic Area and Mount Hood, the highest point in Oregon. Gresham has a wide variety of neighborhoods including the Civic Center, known for its active transportation network, rapid transit connections and residential, commercial and retail mix.

## SCI Co-Directors

Nico Larco, Assistant Professor of Architecture  
Marc Schlossberg, Associate Professor of Community & Regional Planning  
Robert Young, Assistant Professor of Community & Regional Planning

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## Course Participants

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Dan Edleson-Stein, Architecture Graduate  
Jocelynn Gebhart, Architecture Undergraduate  
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Ali McQueen, Architecture Undergraduate  
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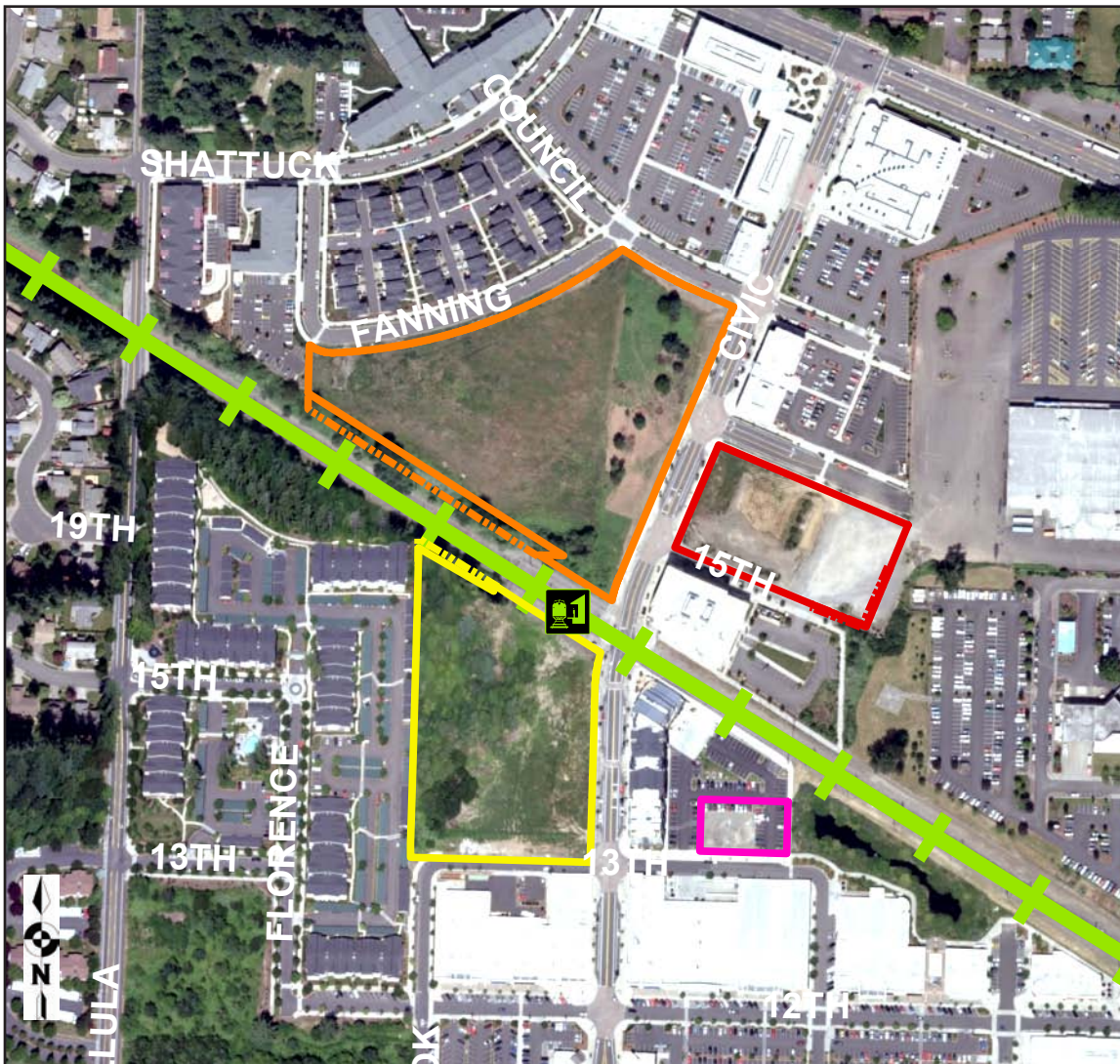
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This interdisciplinary design studio focused on scenarios for multi-story, multi-unit transit oriented development for the 4.4 acre “GCN SW” site, located across from Gresham Crossing in Gresham, OR. The studio program consisted largely of compact residential apartments (“microunits”) and shared outdoor spaces that provide value for people and nonhuman inhabitants. Many of the scenarios also propose a path system that would link the development with the adjacent, soon to be constructed, light rail transit stop (and points beyond).

To further explore potential synergies between transit-oriented development (TOD) and habitat sensitive and habitat integrated design the studio worked with members of Portland Metro’s “Nature in Neighborhoods” and “Transit-Oriented Development” programs and with Josh Cerra, a Portland-based ecologist and environmental designer.

Through these partnerships, this studio ultimately demonstrated that vibrant, dense development in an urban setting can provide green amenities and sustainable building features and infrastructure that benefit people and wildlife. The scenarios showcase these applications of low impact, nature-friendly, development practices for built structures, stormwater management and natural spaces.



Aerial view of project site (outlined in yellow) and surrounding context.



Too often when people hear the word density, they think of concrete jungles and tall skyscrapers. Metro's Transit Oriented Development program, the Nature in Neighborhoods program, Josh Cerra, and this studio collaborated together to demonstrate that vibrant, dense development can provide green amenities and sustainable building features and infrastructure that benefit people and wildlife. 'Green' density is possible. Collectively, this studio's work showcases applications of low impact, or nature-friendly, development practices in a highly urban setting for built structures, stormwater management and natural spaces.

### Studio Objectives

- To create a rich, collaborative and interdisciplinary studio culture
- To incorporate habitat and ecological issues in and throughout the design process in a way that inspires our thinking as to what transit oriented development can be
- To articulate a clear position (to be able to describe one's intentions) as far a thoughtful relationship of the mixed use project to the City of Gresham, the light rail stop and station, and the regional urban and ecological systems to which it is connected
- To consider how an integrated approach to architectural and landscape architectural design can contribute to a broad, participatory dialogue about the future of urban development
- To continue to develop and improve explicit and effective working methods and design processes
- To develop rich graphic representations in close association with a clear statement of design intentions
- To express enthusiasm about what you are doing and demonstrate the tenacity to forward and develop your scheme
- To help Portland Metro explore and articulate meaningful, synergistic relationships between its "Nature and Neighborhoods" and Transit-Oriented Development" policies and initiatives (see program)

## **Metro's Transit Oriented Development Program**

Metro's Transit Oriented Development (TOD) Program purchased this parcel, and three other parcels in the vicinity, in order to create a vibrant, transit-oriented urban village as envisioned by the City of Gresham in the Gresham Civic Neighborhood Plan, adopted in 1995. Transit oriented development plays a key role in implementing the region's long range plan, the 2040 Growth Concept, which calls for a significant amount of the region's growth to be concentrated in higher density mixed use, walkable urban centers and corridors linked by high quality transit service. The benefits of transit-oriented development include: increased transit, bike and walk trips; improved air quality; reduced auto traffic congestion; greater cost-effectiveness of overall public investments in transit systems; increased variety in housing choices, particularly in suburban areas; increased economic development near light rail stations; enhanced livability through convenient and inexpensive access to jobs and services; and improved affordability of combined housing and transportation costs.

Given the complexity and cost of compact mixed-use development, planning and zoning alone cannot stimulate the private investments need to build dynamic communities near transit. To help overcome market barriers, Metro offers incentives through the TOD Program that foster the public-private partnerships needed to catalyze transit oriented development. Metro's innovative program helps offset the private sector costs of high quality dense and vertical mixed use development by purchasing TOD development easements from developers and, in some cases, by acquiring and selling land near transit at a reduced cost. These easements and land sales carry with them conditional requirements such as minimum densities, floor area ratios and/or building heights, mixed land uses, pedestrian friendly design and amenities, and reduced parking ratios.

TOD is often characterized by a trinity of key land use components – density, diversity and design. The first “D” of TOD is density: there is a large and growing body of academic research evidence that indicates that density is the primary determinant of transit ridership. For example, 23-33% of Portland area residents of transit-oriented developments use transit as their principle commute mode, and there are 50% fewer car trips from housing developments located near transit than conventional housing. The second “D” of TOD after density is diversity, or a mix of land uses. By providing retail, services and employment opportunities, a diverse TOD enhances the viability of a transit lifestyle. The third land use-related “D” of TOD is design, the urban form and character of a station area. Pedestrian friendly design is what separates TOD from transit adjacent development (TAD). That is, a dense mix of uses may be near a transit station, but if they are not functionally linked to the station via pleasant and comfortable pedestrian connections, they are not likely to fulfill their full ridership potential. Minimum building heights and maximum setbacks, for instance, can be employed together to foster a sense of safety and enclosure for pedestrians, thereby creating an “outdoor room” effect. To add visual interest and to provide more visibility or “eyes on the street”, design standards may include requirements for “transparency” and/or active ground floor uses.

## **Metro's Nature in Neighborhoods Program**

The Portland metropolitan region is set in an exceptional natural landscape. It is surrounded by hills and mountains and laced with rivers and streams. It is a region of national distinction for clean water, clean air, outdoor recreation, and an abundance of green; a place where nature is always nearby. This tremendous natural inheritance sustains residents' health, fosters the region's economy, provides healthy activities for all and is central to the region's identity. Metro is the directly elected regional government that serves 1.4 million people who live in the 25 cities and three counties of the Portland metropolitan area. Metro programs and planning tools help protect the region's air, water, parks, natural areas, fish and wildlife habitat.



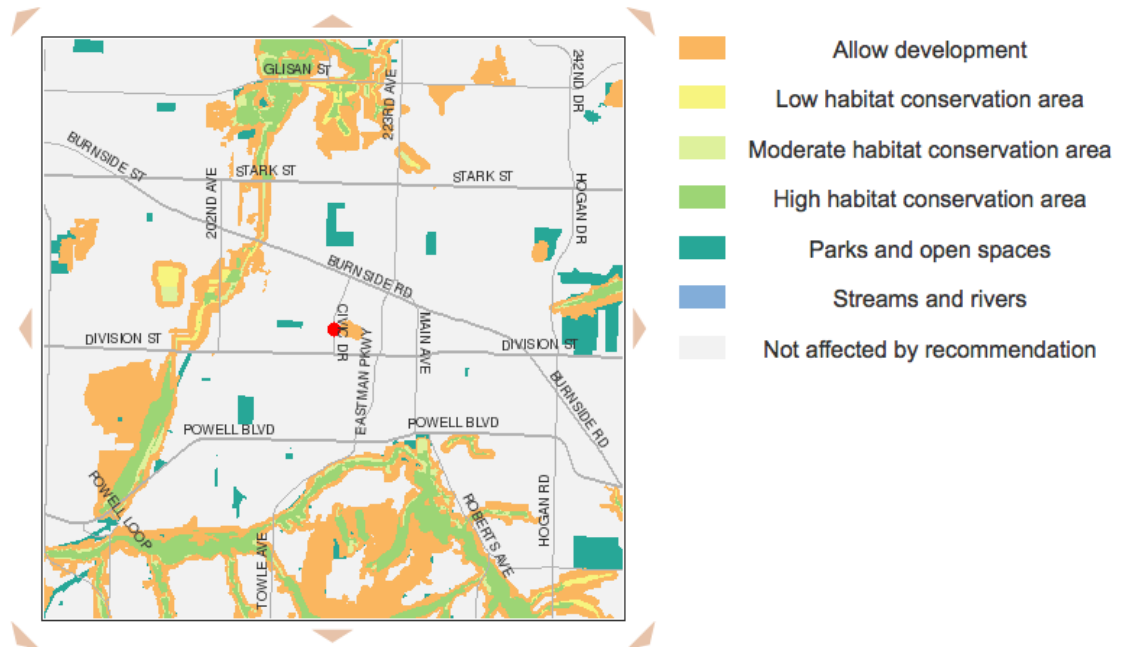
One such example is the Nature in Neighborhoods initiative. Nature in Neighborhoods is a region-wide fish and wildlife habitat protection initiative that:

- Brings people and government together to ensure a healthy urban ecosystem by using inter-agency collaboration and financial and technical resources to advance and inspire habitat conservation and restoration.
- Includes a suite of regulatory and non-regulatory, incentive-based strategies, such as flexible design and development standards, innovative partnerships, education, restoration and nature-friendly development practices to encourage and empower conservation groups, developers, businesses, homeowners and other regional stakeholders to protect and improve water quality, watersheds and wildlife habitat in developments and backyards alike.
- Was developed with the premise that it is vital to not only protect large tracts of natural areas, but to maintain nature in our urban areas as well.

These programs challenge traditional development processes by weighing the needs of wildlife, humans and the environment on the same scale and using innovative, collaborative projects and partnerships to protect and improve our regional quality of life for this generation and those to come. Because of this innovative, unconventional approach, Nature in Neighborhoods has become a successful region-wide movement that places habitat protection and restoration within our region's most important development goals and creates healthier homes for people, fish and wildlife. Metro's Nature in Neighborhoods program offers innovative, flexible, incentive-based approaches and site design options that encourage nature-friendly development practices. Of primary focus are the zones designated as habitat conservation areas (HCAs). HCAs are categorized under three levels: high, moderate and low quality. These designations are based on quality of vegetation, proximity to sensitive areas, and the economic value of the property. Site designs should avoid development in HCAs. If development cannot be avoided, site designs should minimize the development disturbance to the HCA. Where conservation of a portion of an HCA is not possible, mitigation, requiring the creation of like habitat elsewhere on site, is viewed as a 'last resort' option" (Metro, 2007). While there are no Habitat Conservation Areas (HCA's) on this site, it is useful to understand the conservation elements proposed within the Title 13 Metro Nature in Neighborhoods "Habitat Conservation Area Regulations and Incentives," as many of these principles can still be applied to sites without existing HCA's. Title 13 Habitat-based code requirements:

- Protect urban stream and wetland water resources and improve function and quality of aquatic habitat via bank stabilization, riparian vegetation for future large wood recruitment, and stream shade.
- Encourage development of large patches of terrestrial habitat such as interior and core forest and woodland habitat.
- Provide connectivity corridors to water and other habitat areas. Title 13 Development-based code requirements:
- Allow and encourage nature-friendly development, while minimizing the impact on fish and wildlife habitat functions.
- Provide incentives for protection and restoration of local and regional ecosystems during development.
- Provide acceptable designs within jurisdiction evaluation standards for nature-friendly development practices during the land-use development review process.





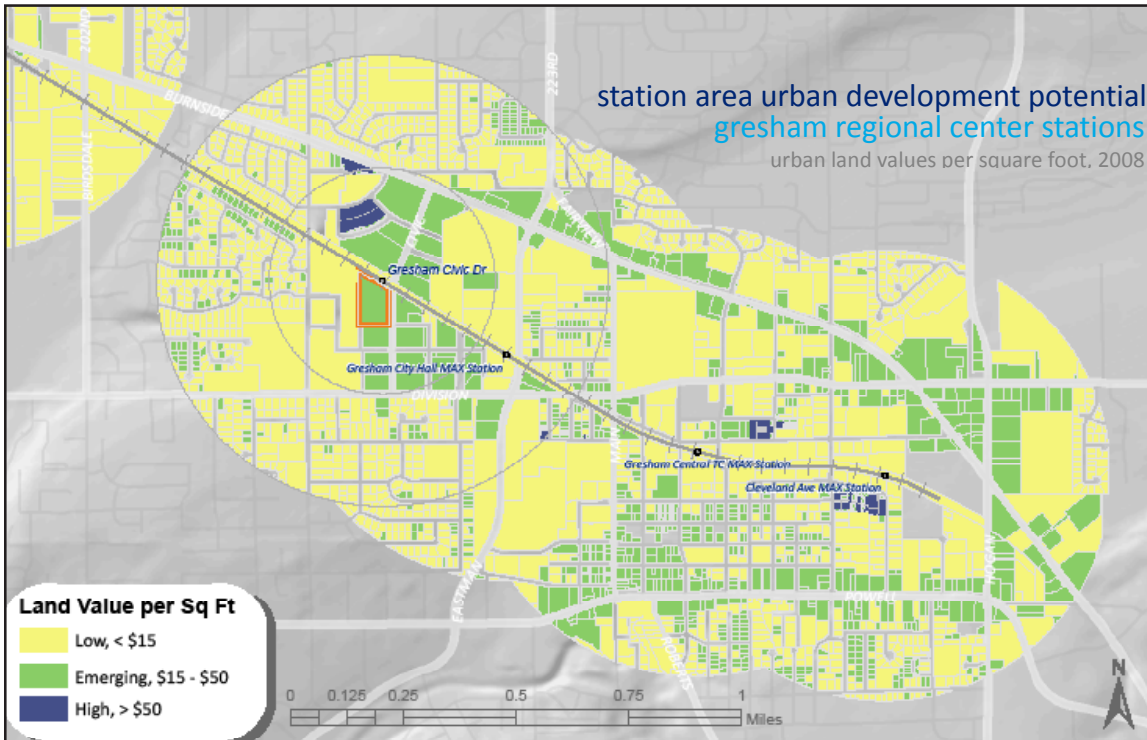
Habitat analysis for project site (in red) and surrounding area. Project site is in close proximity to two substantial habitat corridors. Source: City of Gresham website.

### III. Review of Existing Conditions

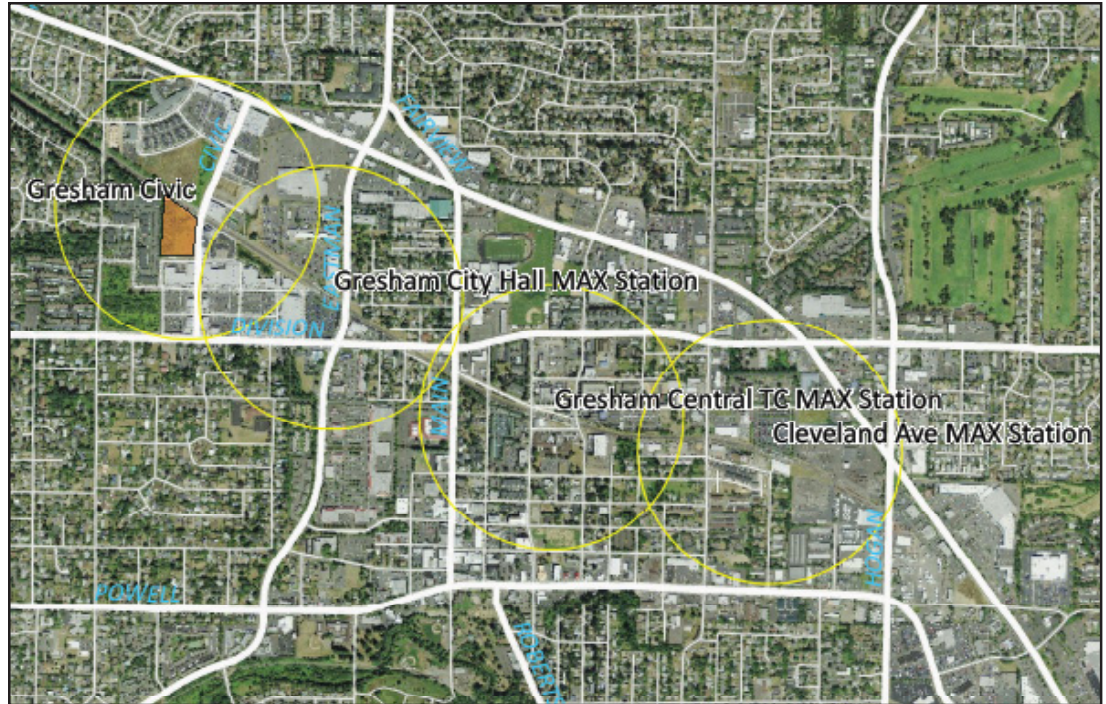
The 4.4 acre “GCN SW” site is owned by METRO and located across from Gresham Crossing in Gresham, OR. It is mostly flat and the western half, bordering a property with multi-family housing, is thickly forested with riparian and Douglas-fir mixed woodland. Some of the Douglas-fir on site are estimated to be close to 80 years old. The eastern edge, along Civic Dr., is 8 feet below grade. The site’s neighbors include the Center for Advanced Learning, another site owned by Metro, Gresham Station, and a site owned by Seattle-based American Properties.



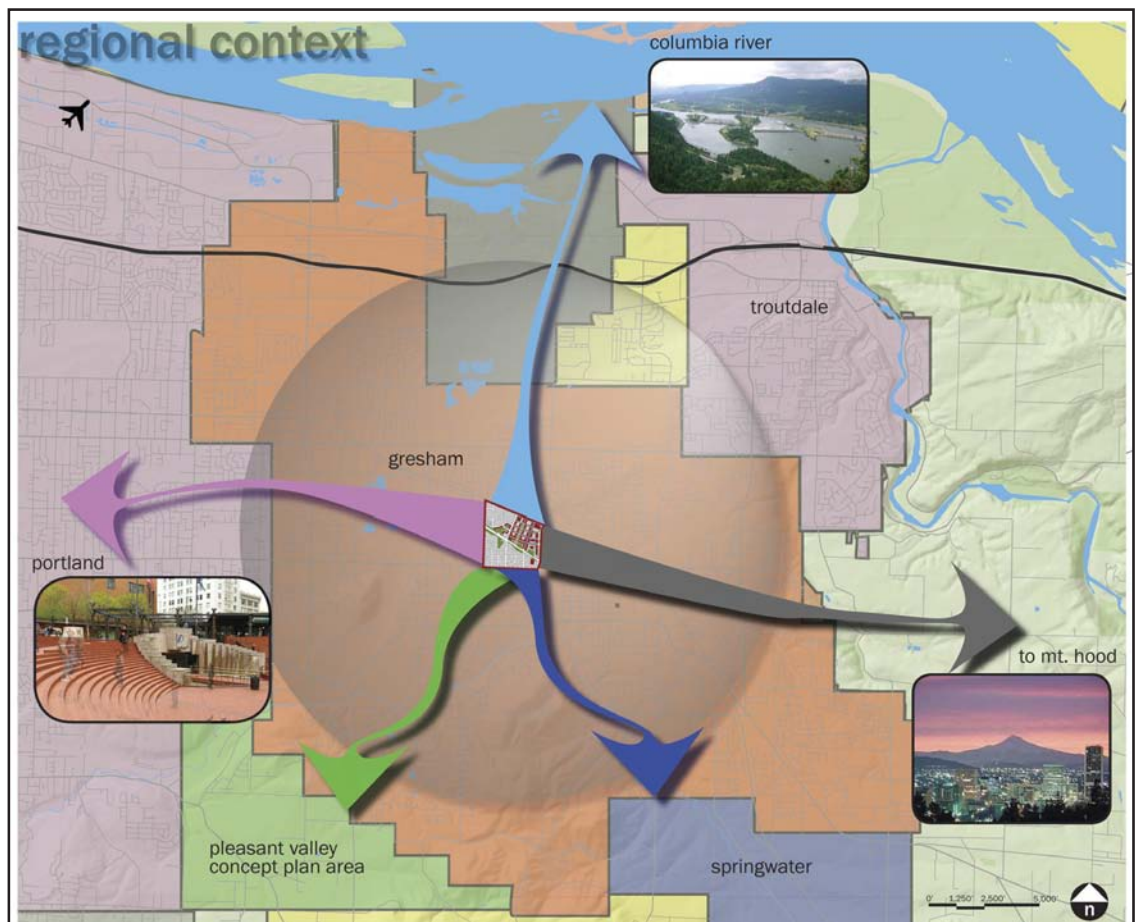
Looking east from northwestern corner of the project site



Urban development potential of and around site. Project site outlined in orange.



Overview of site context.



Regional context. Note: from former, project need to site.

## Building Program

Residential Minimum 200 units

- 70 Studio “micro-unit” apartments @ 450 SF/Unit = 31,500 SF
- 70 1-Bedroom apartments @ 650 SF/Unit = 45,500 SF
- 60 1-Bed+ or 2-bedroom units @ 850 SF/Unit = 51,000 SF
- Net Total Residential = 128,000 SF

Bike & Recreational Equipment Storage

- 100 Private storage units for those without garages @ 50 SF/space = 5,000 SF

Commercial / Commercial Shared Space

- Office/studio / work-live = 7,500 SF
- Meeting room/banquet/community space = 2,000 SF
- Restaurant/cafe = 1,500 SF
- Net Total Commercial = 11,000 SF

Net Total Building Program = 144,000 SF (note figure does not include circulation).

Maximum building height is 85'; at least two stories are required along Civic Drive.

## Exterior Space Program

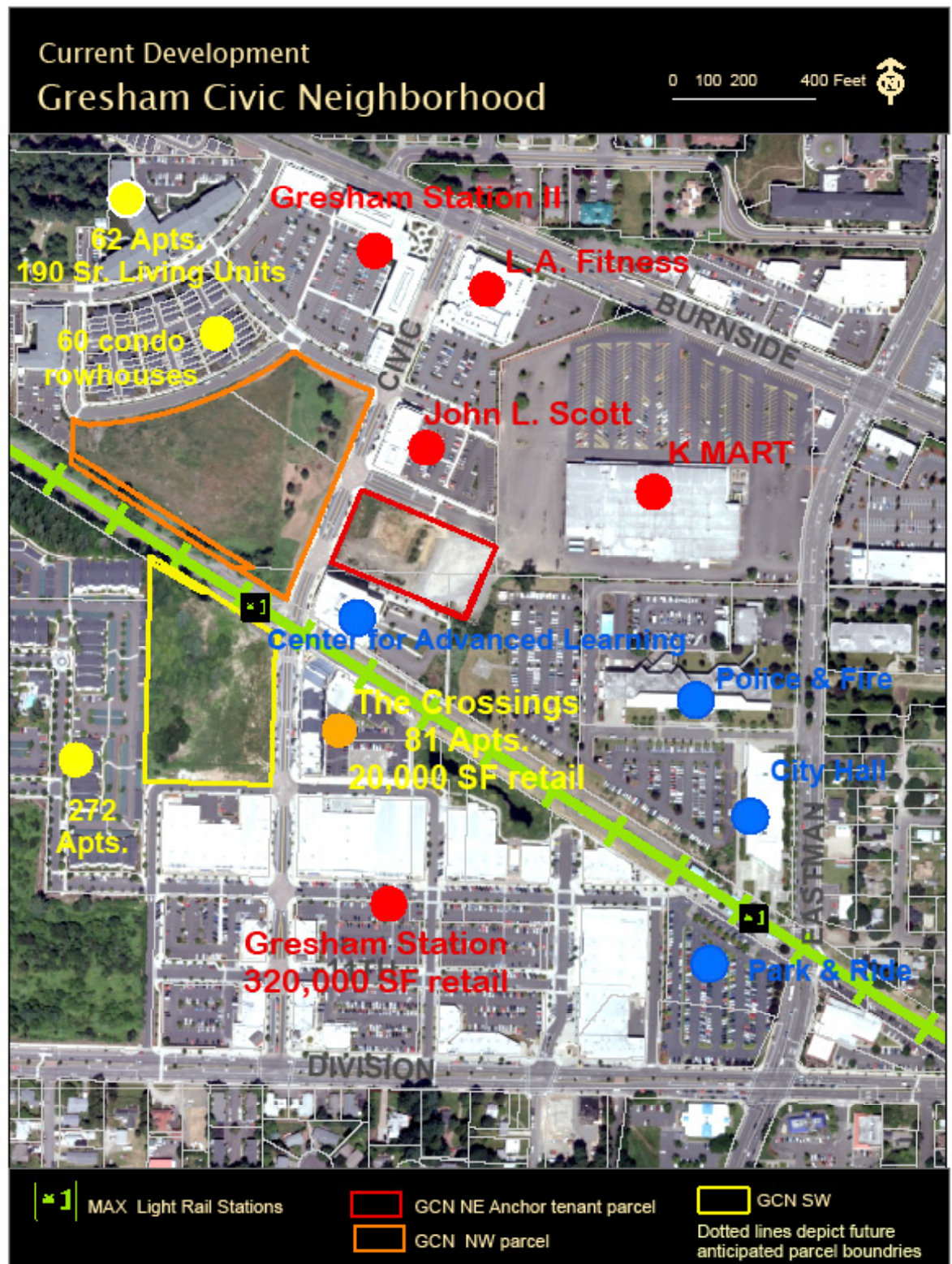
Vehicular Parking and Circulation

- Car parking = 38,850 SF
- Assumes 1 space for every 2 residential units (100) plus roughly 1 space per every 1000 SF of commercial/shared (11) so approximately 111 total spaces; also assume 350 SF/space including all aisles and access roads

Outdoor Recreational Space and Path System

- Outdoor recreational space for inhabitants/community = 20,000 SF (This is can overlap with the ecological program, to the extent this is viable.)
- A system of bicycle and pedestrian paths is also required to: (1) promote site scale circulation dynamics, (2) link the development with the light rail station and surrounding neighborhood and (3) improve connectivity between the light rail station and surrounding neighborhood.





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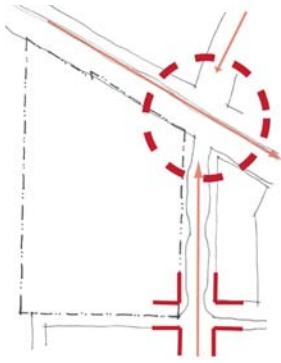
### Scenario 1: Glimpses of Green

Ali McQueen, James Robinson, Amy Ueno





**Three main goals:** Strengthen Connectivity, Facilitate Cohabitation, Stormwater Management



Strengthen Connectivity



Facilitate Cohabitation



Stormwater Management

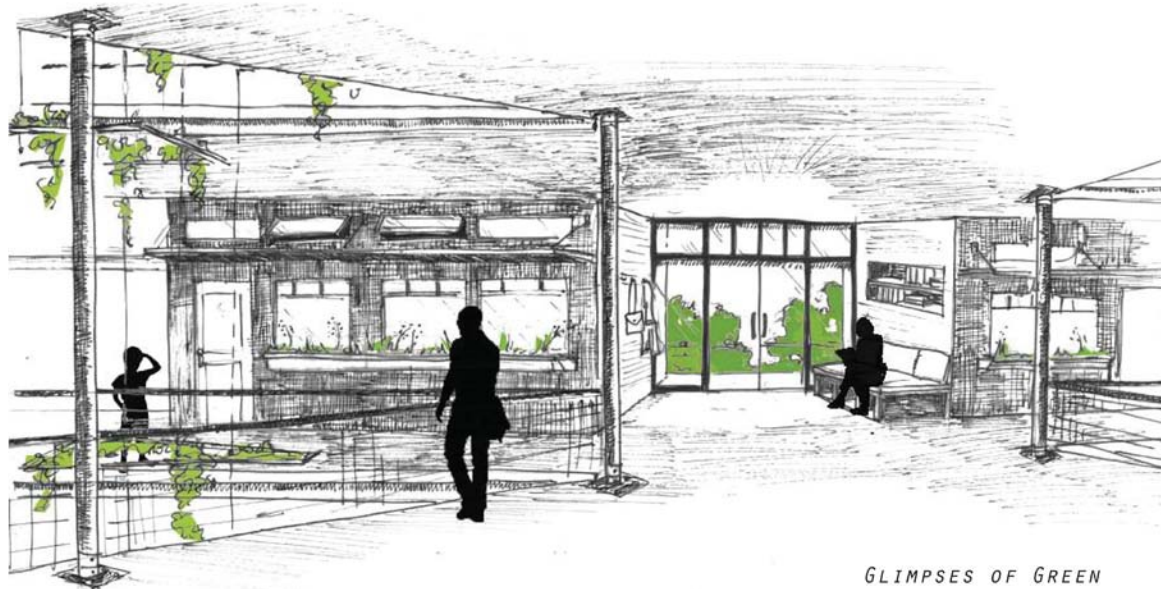
**Strengthen Connectivity** - The northeast corner of the site is addressed in this scenario as having the most potential for public interaction, while the southeast corner of the site acts as a thru-way. This scenario purposes to enhance interaction at the NE corner of the site where the MAX line and Civic Drive intersect.



Looking west

*Scenario 1 - Glimpses of Green*

**Facilitate Cohabitation** - Glimpses of the habitat core on the western portion of the site are created to spark curiosity and encourage social interaction within and around the space. A lower streetscape offers additional views from The Gresham Crossings.



Glimpses of green within interiors

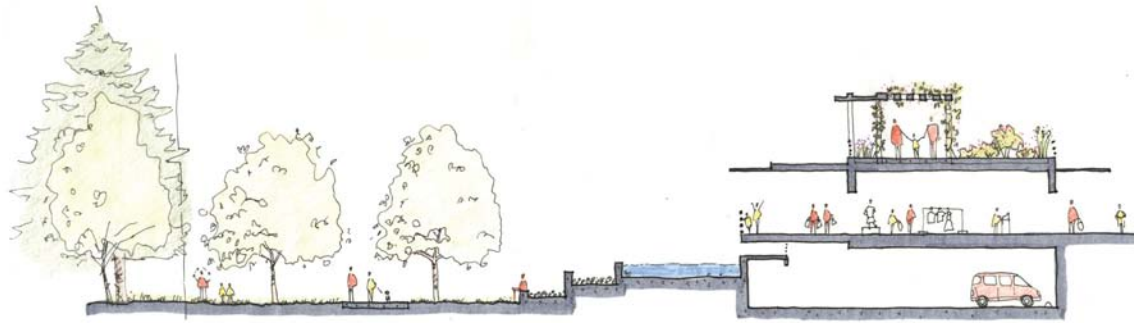
This scenario focuses on reserving as much of the existing vegetation as possible, while offering opportunities for inhabitants of the multiuse units to coexist with the native habitat.

Scenario 1 - Glimpses of Green



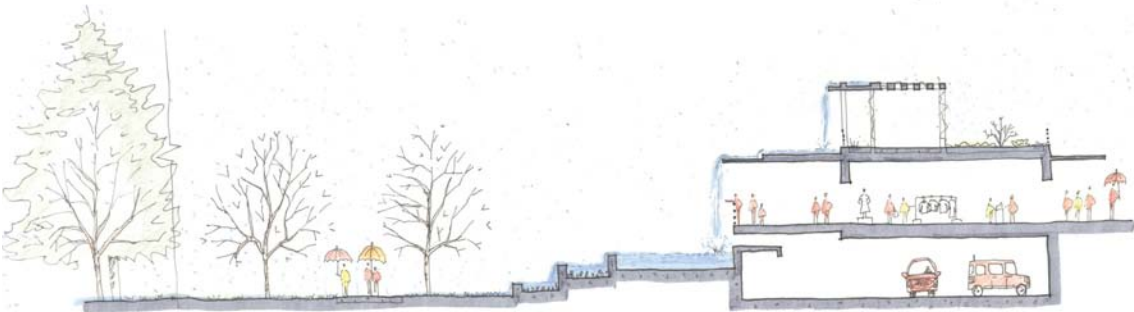
Birds view - looking northwest

## Stormwater Management.



Summer - looking north

**SUMMER**  
THE WATER FEATURE ACTS AS A BARRIER  
AND CREATES A MICROCLIMATE TO REGU-  
LATE HEAT ON THE BOARDWALK.  
1"=8'



Winter - looking north

**WINTER**  
THE WATER FEATURE ACTS AS A STORMWA-  
TER RETENTION DEVICE, AS WELL AS  
PROVIDES AN AESTHETIC AND AN INTER-  
ACTIVE ATTRACTION.  
1"=8'

Total Catchment Capacity:	2000 cubic ft.
Translates to:	149,000 gallons
Total Built Surface Area:	37,500 sq. ft.
Potential Rainwater Catchment:	1,050,000 gallons/year
Gresham	
total average rainfall:	44.85 inches/year
highest monthly average:	6.6 inches/month (Dec.)



Seasonal water features utilize stormwater

Scenario 1 - Glimpses of Green

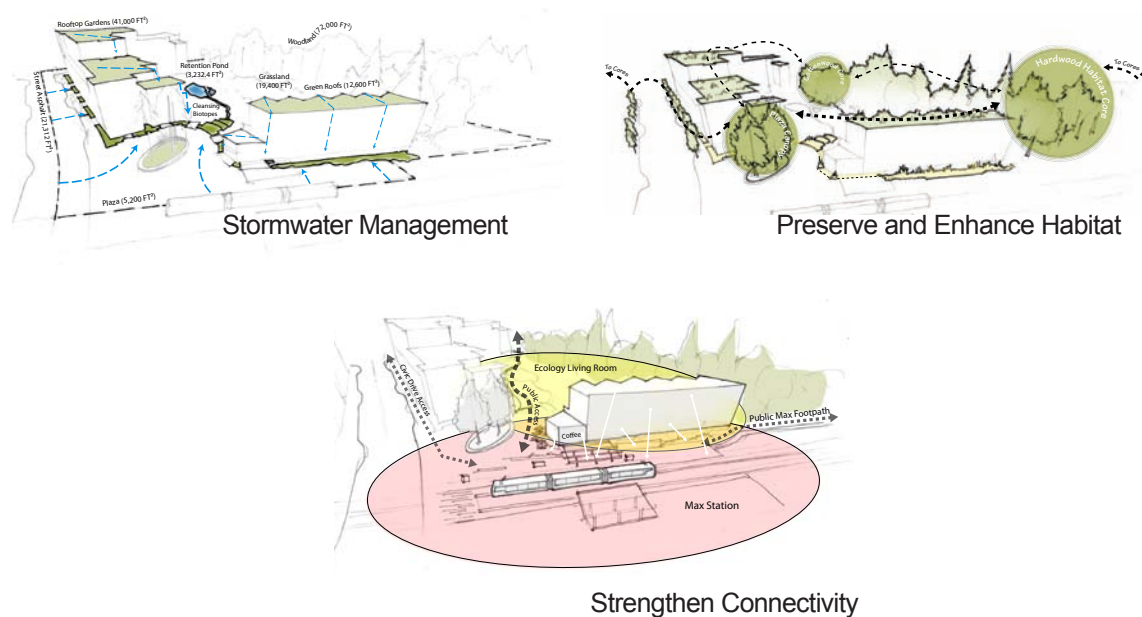


## Scenario 2: Cascading Transitions

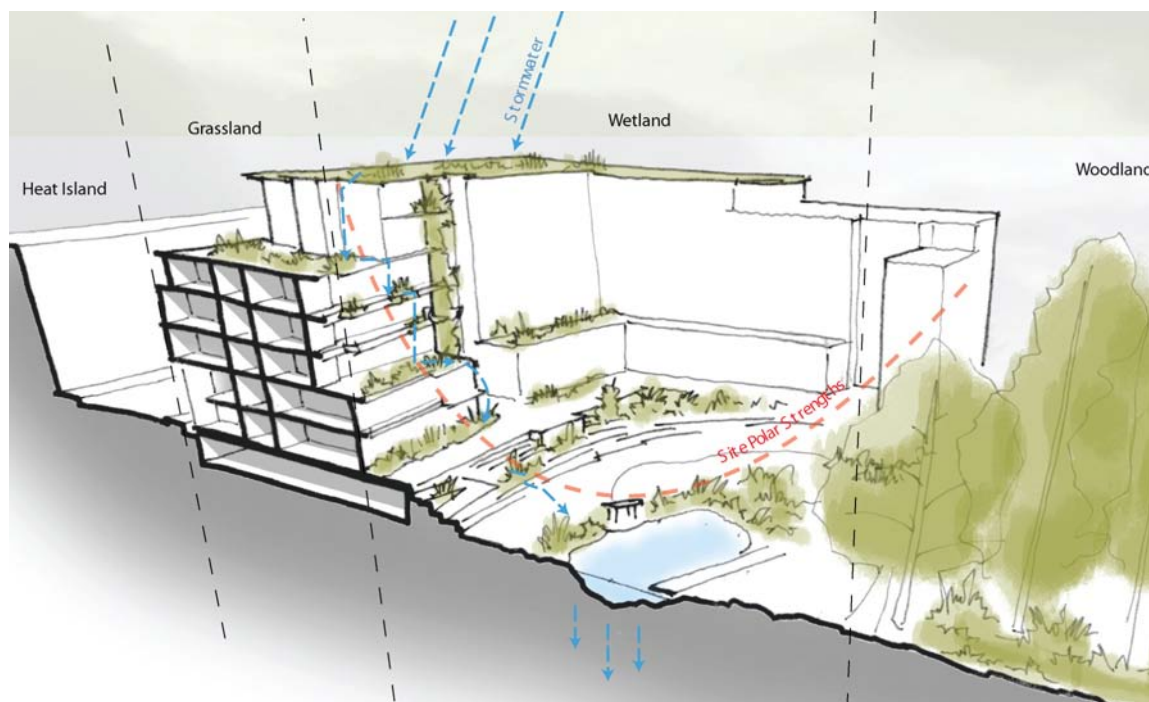
Lisa Koch, Tara Velarde, Samuel Yerke



**Three main goals:** Stormwater Management, Preserve and Enhance Habitat, and Strengthen Connectivity



**Stormwater Management** - greenroofs and a retention pond collect and store stormwater.

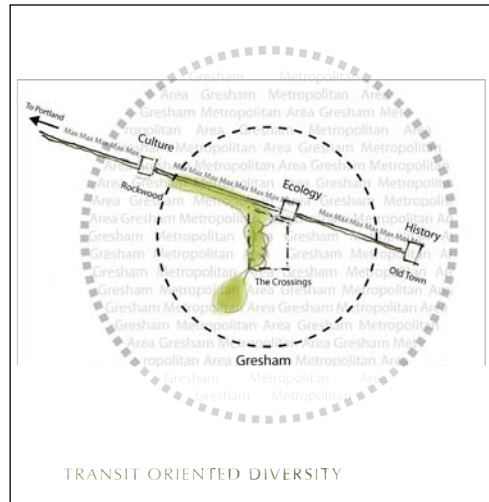


Looking southeast - rainwater is collected on rooftops and feeds into an on site retention pond.

*Scenario 2 - Cascading Transitions*



## Preserve and Enhance Habitat



### PLANT PALETTE

An example of a series of plants that can be found in each area of the site

#### EXISTING CORRIDOR PLANTS

ORBSO LASH (POPPUS SALICIFOLIA TRECCAPRA)  
DOUGLAS FIR (PODDOTUSA NUDICA)  
WESTERN RED CEDAR (THUJA PLICATA)  
SNOWBERRY (SYMPHORICARPOS ALBUS)

#### PLAZA TREES

WESTERN HEMLOCK (TSEUGA HETEROPHYLLA)

#### WETLAND PLANTS

LADY FERN (ATHRUM FILIX-FEMINA)  
SNOW SALICATA (CYPERUS LOLIDUS)  
CRISP BUTTERCUP (RAUNICULUS REPENS)  
SHORE GRASS (CARPUS CARYOPHYLLA)  
SNOWBALL VIBURNUM (VIBURNUM OPULUS STERILE)

#### PRAIRIE PLANTS

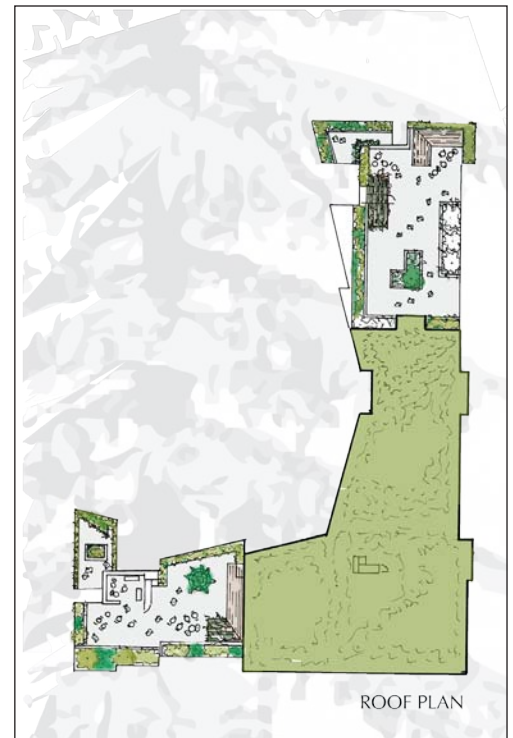
SHORE BUTTERCUP (AGROSTIS DISCOIDUS)  
WESTERN COLUMBINE (ADONIS AROMATICA)  
CALIFORNIA CATERPILLAR (PANTHERA CALIFORNICA)  
PRAIRIE CATERPILLAR (ADONIS MACRATA)  
ROSE CATERPILLAR (ADONIS VIRGATA)

#### ROOF GARDEN SUB-ALPINE PLANTS

SNOWBERRY (SYMPHORICARPOS ALBUS)  
SHOOTER STAR (DODONAEUM PULCHELLUM)  
BIRCHHEAD SPIRA (SPIRA BETULIFOLIA)  
WESTERN MEADOW RUS (THALICTRUM OCCIDENTALE)  
STOCK CROP (SEDUM ALBUM)

#### SHADE TOLERANT PLANTS

GOLDEN HOSTA (HOSTA FORTUINI)  
SNOWBERRY (SYMPHORICARPOS ALBUS)  
VIB MAPLE (ACTINERIGLUTUM)  
EASTERN REDWOOD (CERCO CARADENSIS)



Scenario 2 - Cascading Transitions

Focusing on native vegetation strengthens habitat integrity and connectivity

A green roof creates habitat patches within the built environment.

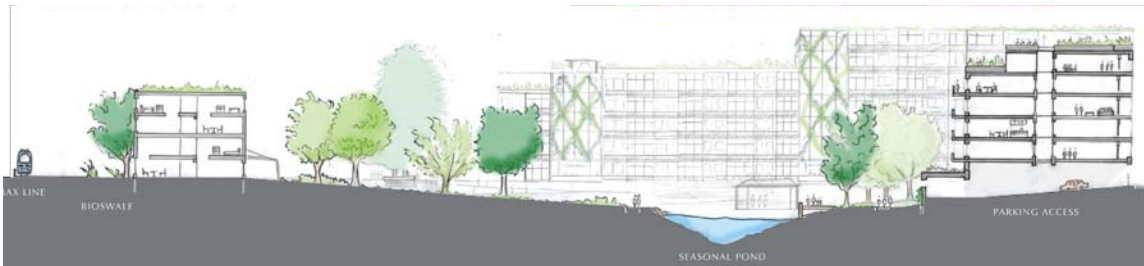
## Strengthen Connectivity



Looking southwest



INTERIOR VIEW THROUGH A STUDIO UNIT



Looking west

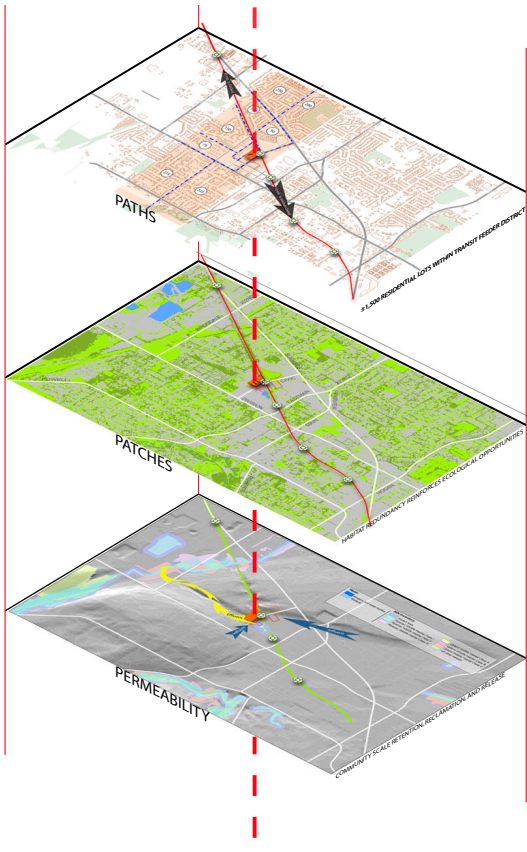
*Scenario 2 - Cascading Transitions*



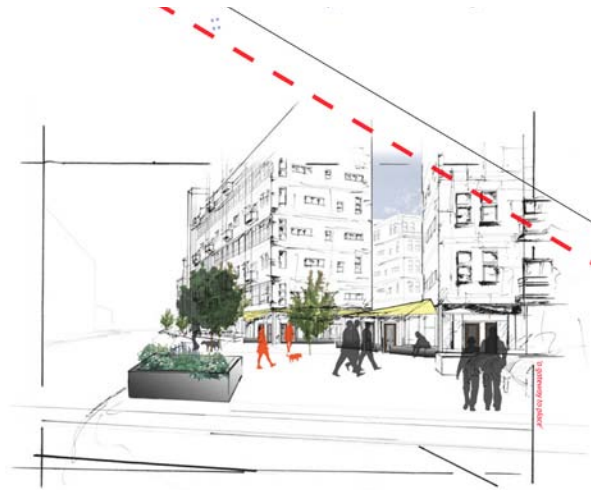
**Scenario 3: Activation / Percolation**

Alison Moore, Thomas Veed





**Three main goals:** Strengthen Connectivity, Preserve and Enhance Habitat, and Maximize Solar Access



Looking south

**Strengthen Connectivity** - civic space is created on northeastern edge of the site enhancing interaction where the MAX line and Civic Drive intersect.



Scenario 3 - Activation / Percolation



**Preserve and Enhance Habitat** - focus is on maximizing open space by keeping all parking underground and on the street. Existing native vegetation is preserved and additional plantings are native.

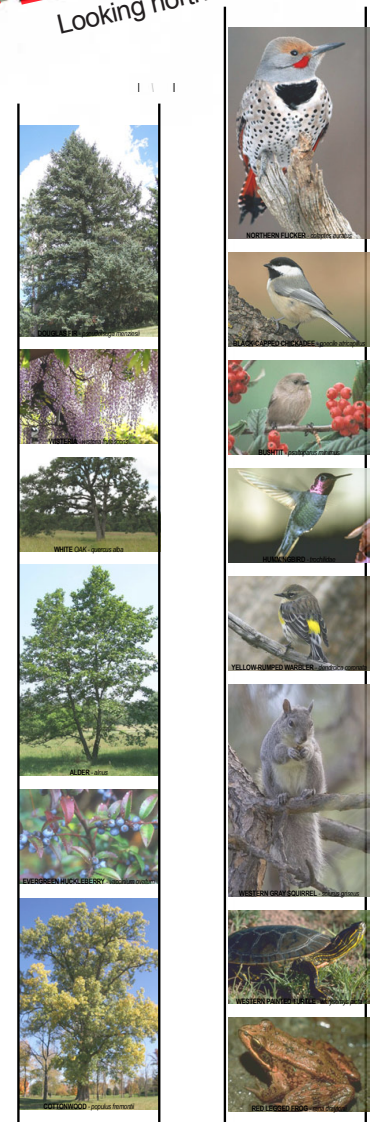


Looking northwest - underground parking maximizes space available for wildlife habitat.

Scenario 3 - Activation / Percolation



Site textures reflect native vegetation and elements of surrounding context

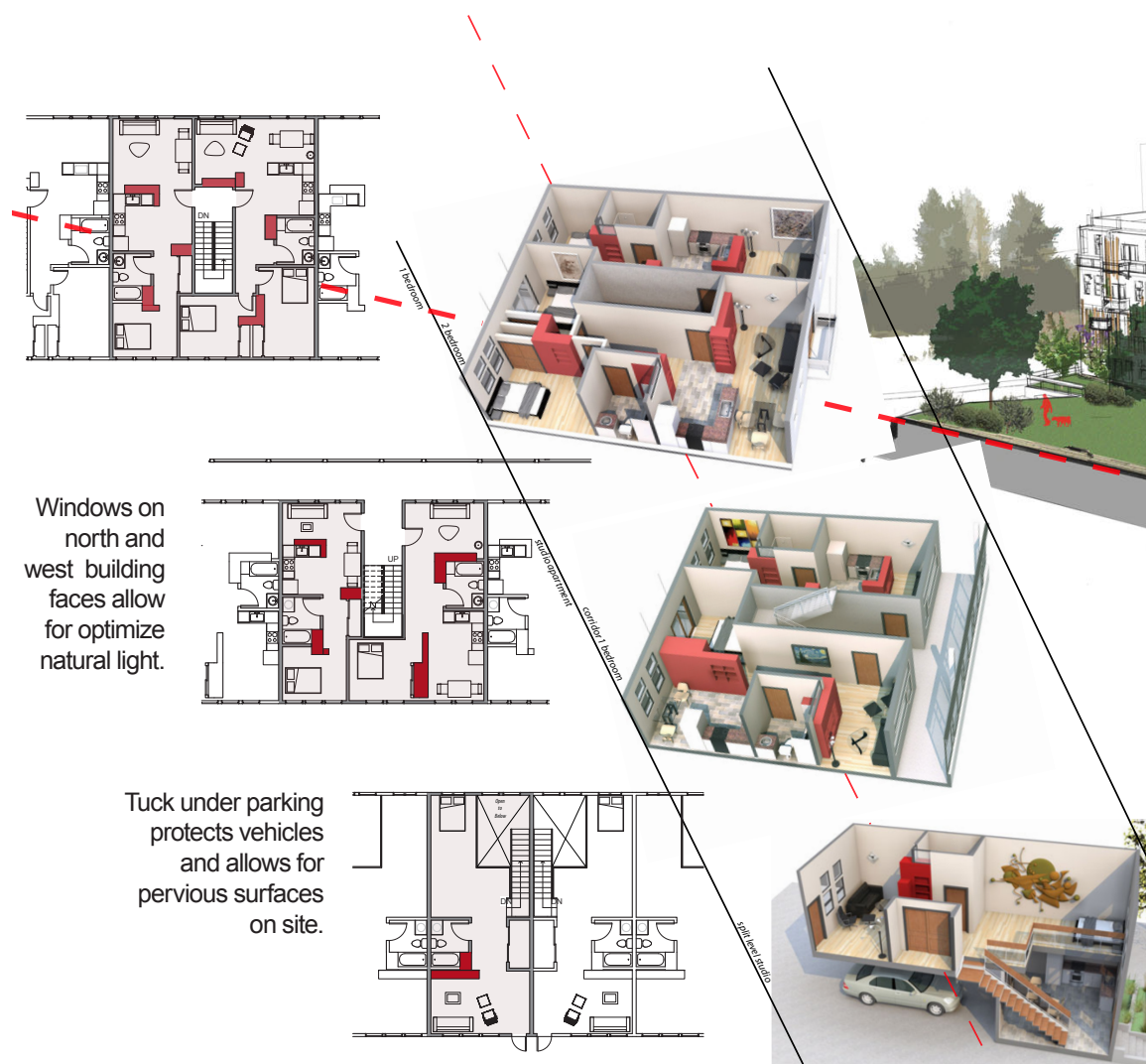


Vegetation preserved and additional plantings are all native species attracting native wildlife.

**Maximize Solar Access** - buildings are arranged smallest to largest south to north maximizing solar access. Residential units are designed to allow natural light into main rooms.



Looking west



Windows on north and west building faces allow for optimize natural light.

Tuck under parking protects vehicles and allows for pervious surfaces on site.

Three-story units allow easy access to parking and surrounding open space.

*Scenario 3 - Activation / Percolation*

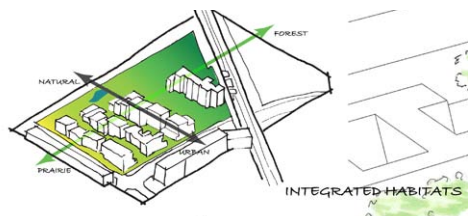


### Scenario 4: A Civic Watershed

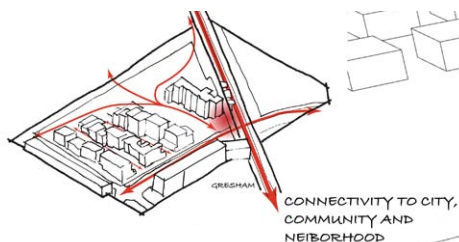
Andrew Cusack, Shawn Sanes, Aaron Weiss



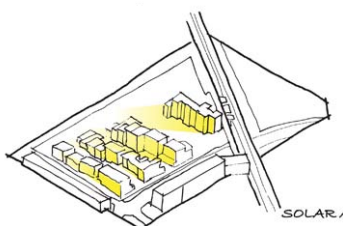
**Three main goals:** Facilitate Cohabitation, Strengthen Connectivity, and Maximize Solar Access



Facilitate Cohabitation



Strengthen Connectivity



Maximize Solar Access

**Facilitate Cohabitation** - emphasis on bringing native vegetation into housing area with green screens hanging from balconies.

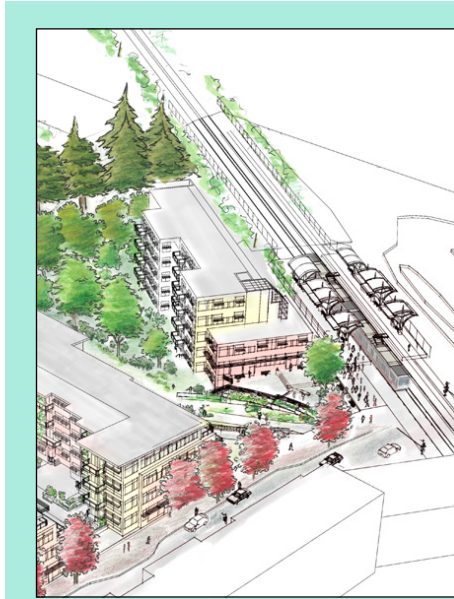


Looking west through alleyway

Scenario 4 - A Civic Watershed



**Strengthen Connectivity** - civic space is created on northeastern edge of site in respond to the proposed max station and to heighten street and on site activity.



Looking northwest



Looking southwest - civic space engages pedestrians and encourages "eyes on the street" creating a safer space.

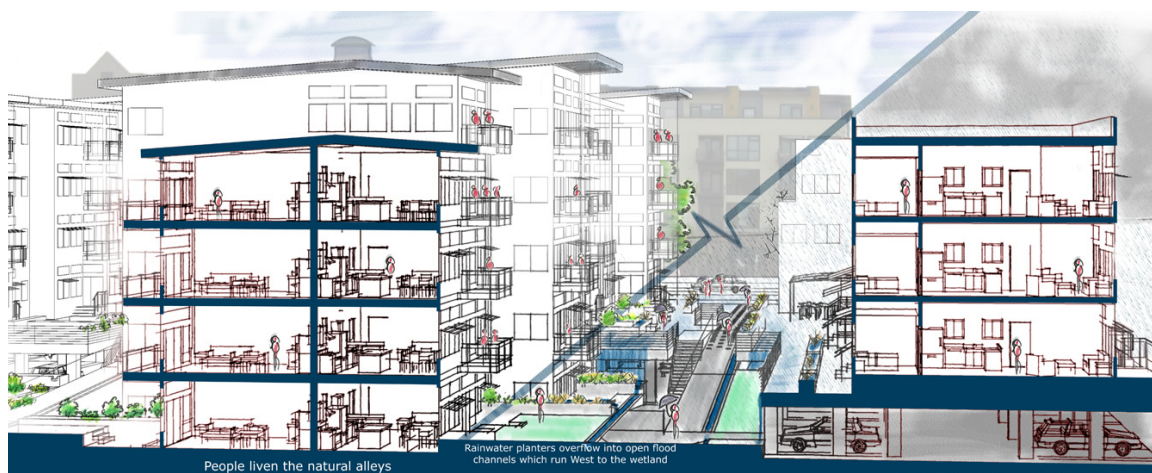
*Scenario 4 - A Civic Watershed*



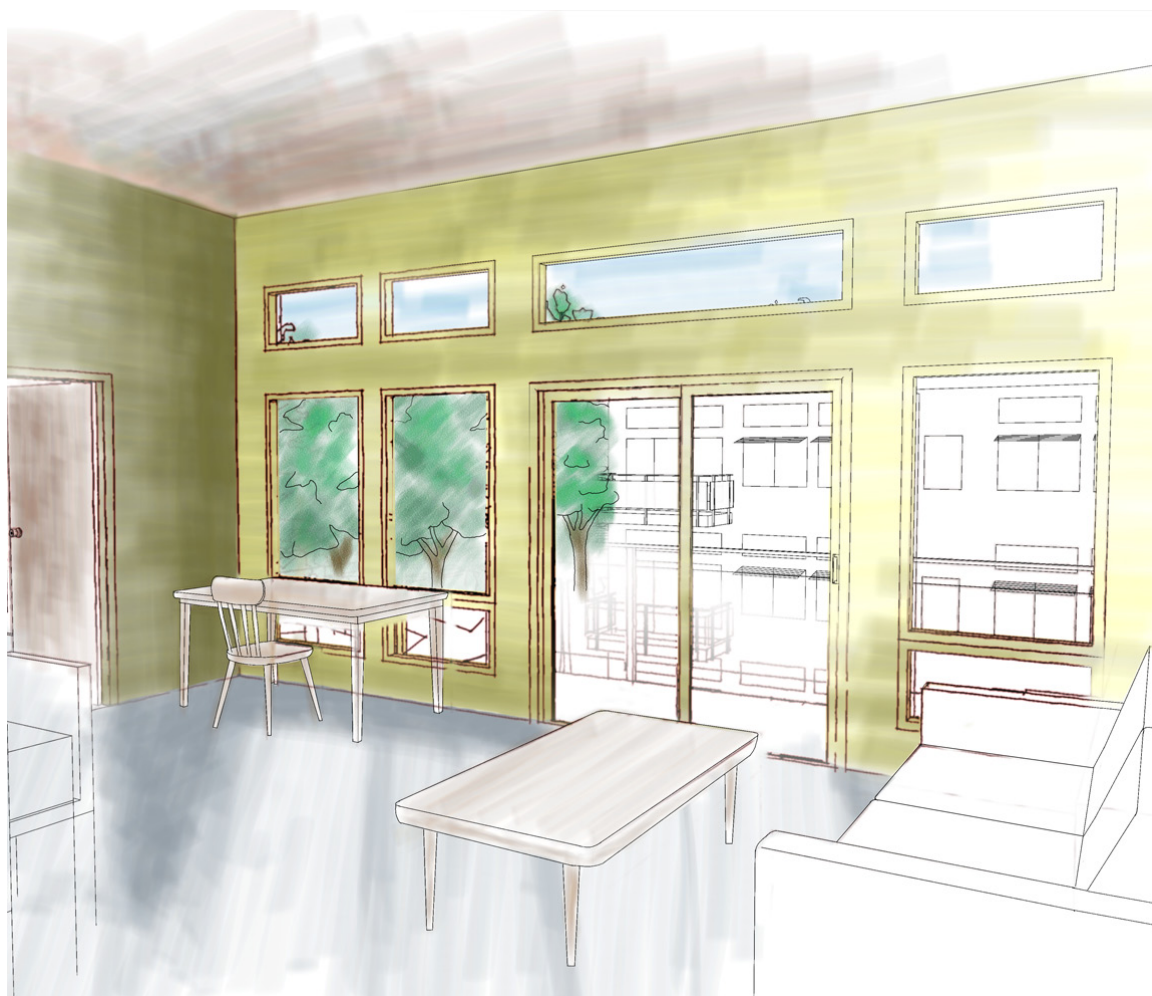
Looking northeast



**Maximize Solar Access** - building orientation and unit design maximize access to natural light. Large windows and high ceilings in units create well lit spacious spaces.



Looking east through alleyway



Residential unit interior - large floor to ceiling windows maximize natural light.

Scenario 4 - A Civic Watershed

## Scenario 5: An Urban Housing Forest

Dan Edleson-Stein, Tobin Newburgh, Matthew Sillaman





**Three main goals:** Facilitate Cohabitation, Strengthen Connectivity, and Maximize Solar Access

**Facilitate Cohabitation** - existing native vegetation is preserved and enhanced with an oak woodland and a wetland area. Terraced gardens line the natural site and move into the built arena creating spaces to cohabitat and engage.



Looking northeast



Looking northeast

*Scenario 5 - An Urban Housing Forest*

**Strengthen Connectivity** - a civic space is created on the northeast corner to welcome commuters arriving by the MAX line. A sky bridge connects the buildings on site connecting commercial space to residential space.



Looking south toward skybridge over civic space

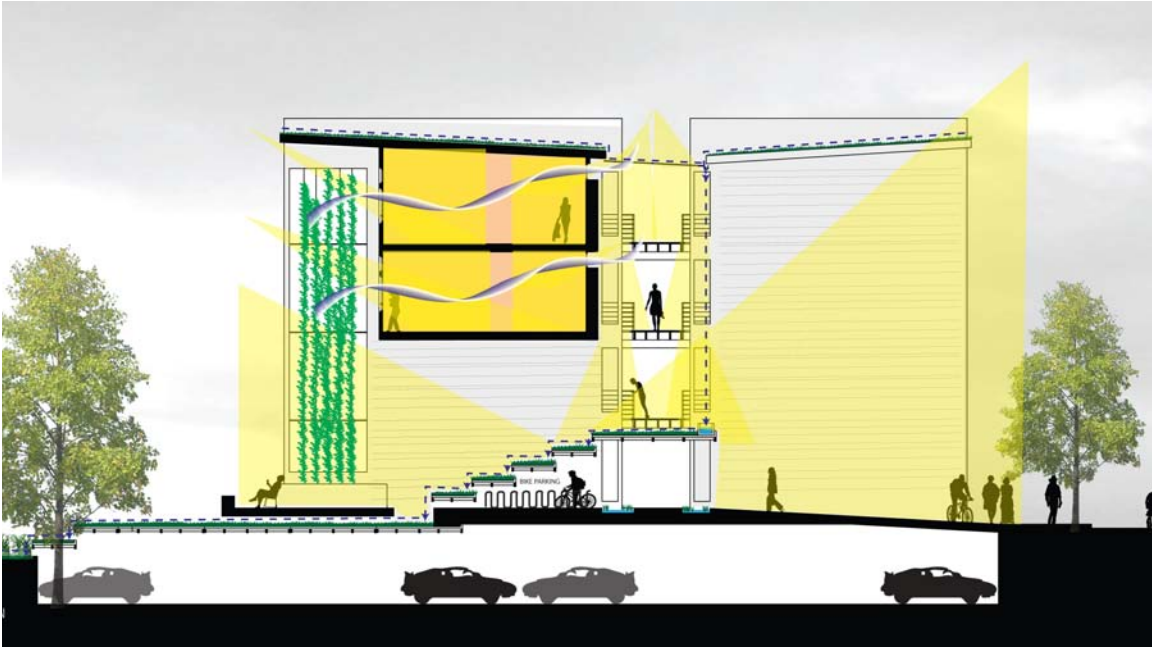
*Scenario 5 - An Urban Housing Forest*



Looking east from MAX stop toward Gresham Crossings



## Maximize Solar Access



East / south section showing how buildings maximize solar access



Looking west toward proposed residential units

*Scenario 5 - An Urban Housing Forest*

## Scenario 6: Serpentine meets Cellular

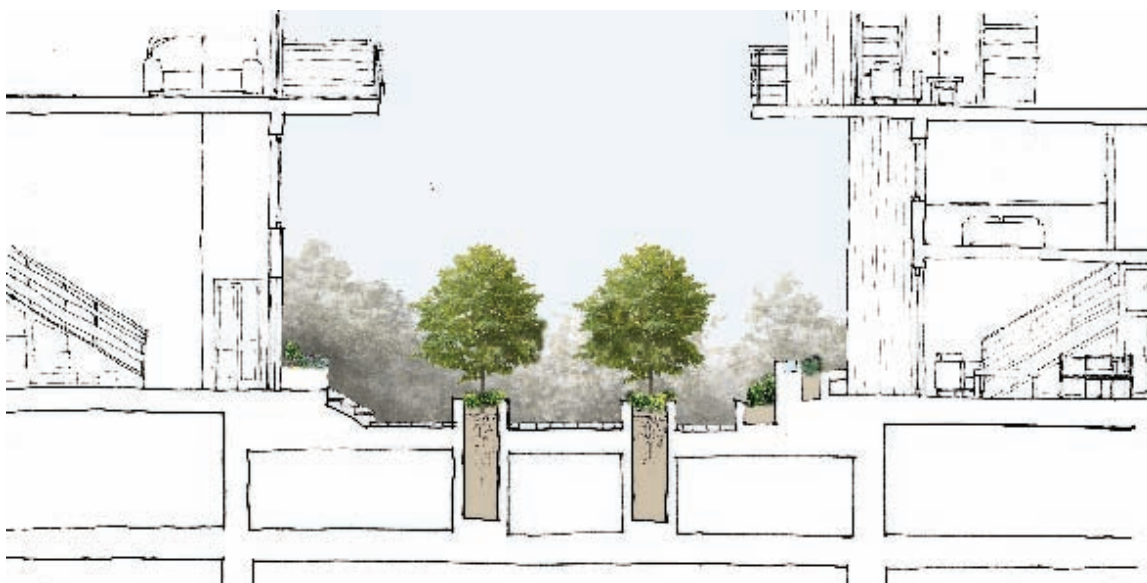
Ali Clark, Brad Cooley, Rena Schlachter



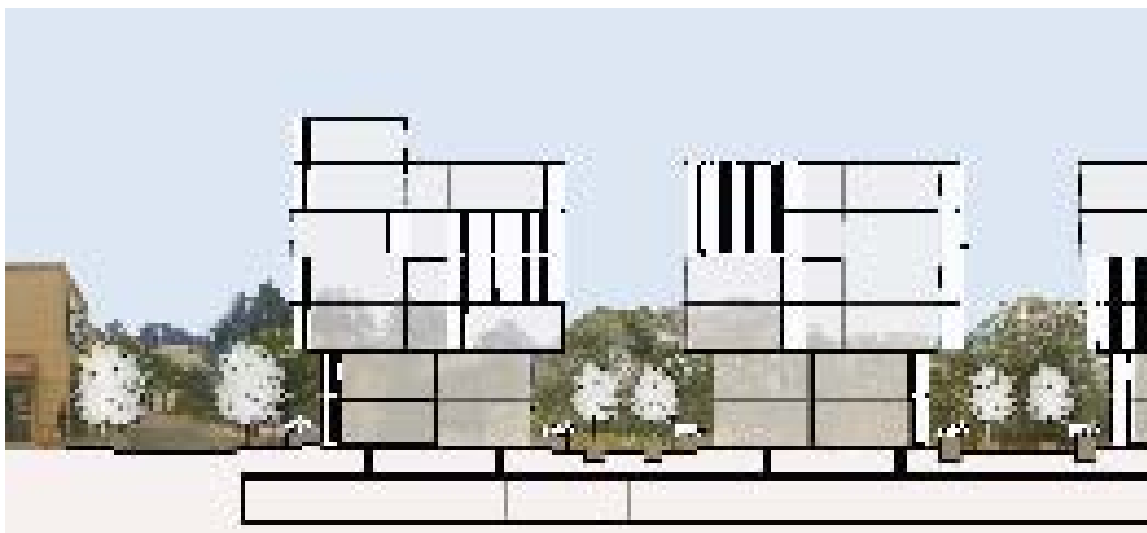


**Three main goals:** Facilitate Cohabitation, Stormwater Management, and Strengthen Connectivity

**Facilitate Cohabitation** - “green alleyways” between proposed buildings bring nature into the built environment. The alleyways are filled with native plantings with planters that are linked to stormwater catchment system that feeds into the on site constructed wetland.



South / North section of green alleyway



South / North section of buildings and green alleyways

*Scenario 6 - Serpentine meets Cellular*

**Stormwater Management** - a constructed wetland on the southeastern portion of the site collects storm water from the proposed building and from the streets.



West/ north section of constructed wetlands



#### BOARDWALK

Elevated boardwalk runs from base of oak savanna area through wetland and connects to neighboring residential.



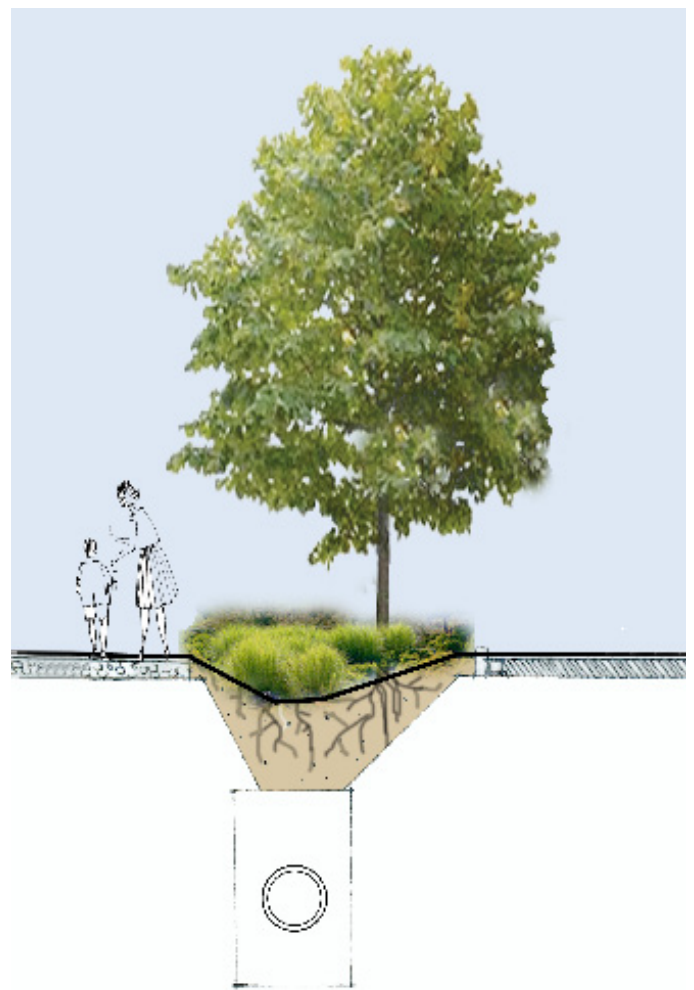
#### CONSTRUCTED WETLAND

Wetland is composed of multiple pools of various depths to accommodate many different native plants and animals.



#### BIRD-WATCHING SHELTER

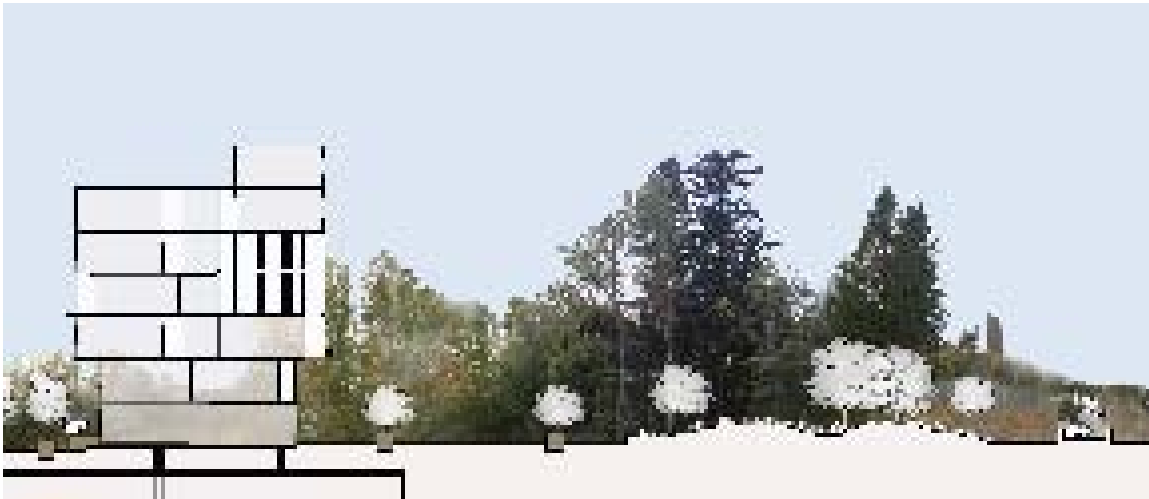
Along the boardwalk are bird watching shelters. A place for people to stop, sit and enjoy the wildlife in the wetland.



On street bioswales collect stormwater

Scenario 6 - Serpentine meets Cellular

**Strengthen Connectivity** - a large civic space on the northern portion of the site welcomes transit riders into the sites built and natural spaces.



South / north section of showing civic space on the northern portion of the site

Street trees help activate the streets.



Green alleyways engage street life and wildlife

Scenario 6 - Serpentine meets Cellular

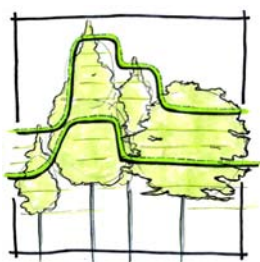


## Scenario 7: In [habit] at Gresham

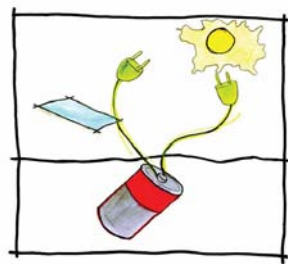
Daniele Cohen, Jocelynn Gebhart, Erik Hegre



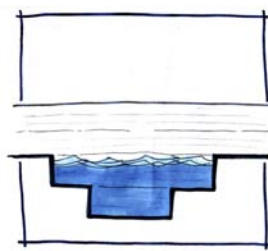
**Three main goals:** Strengthen Sense of Community, Facilitate Cohabitation, Stormwater Management



Facilitate Cohabitation



Strengthen Sense of Community



Stormwater Management

## Strengthen Sense of Community



Looking southwest



Looking southwest



Looking east - on outside patio of restaurant

Scenario 7 - In [habit] at Gresham



## Facilitate Cohabitation



Looking north



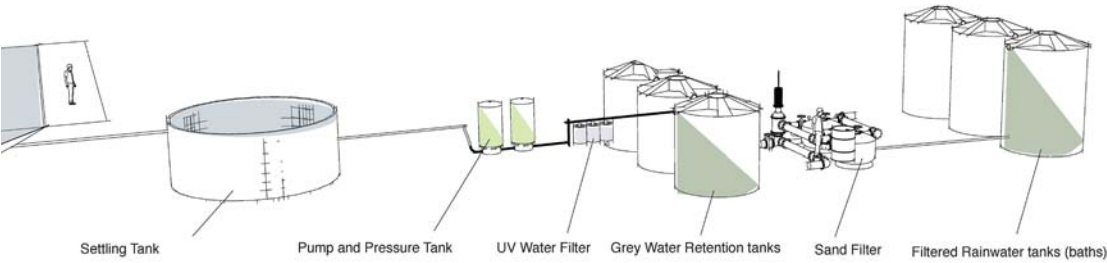
Section/Elevation Looking North

Looking west

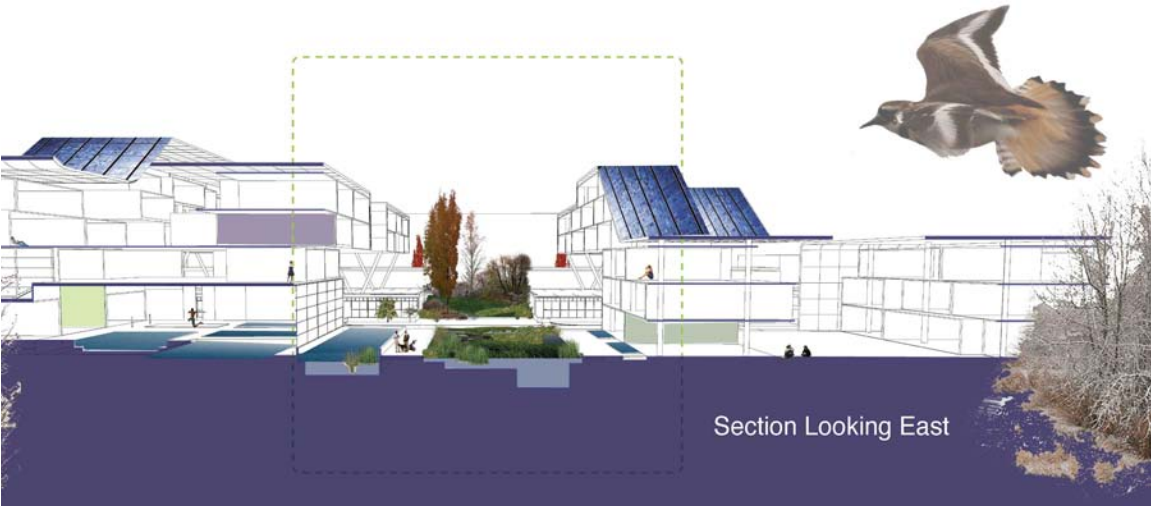
*Scenario 7 - In [habit] at Gresham*



Stormwater Management



Water Filtration Diagram

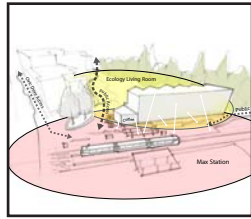


Looking north

Scenario 7 - In [habit] at Gresham

## V. TOD Crossings Design Principles

Key design principles for the TOD at Gresham Crossings studio:



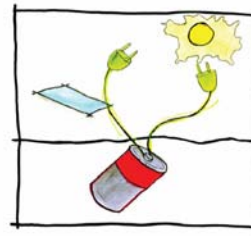
### Increase Connectivity

- Increase social, economic, and ecological connections.



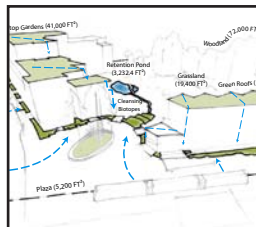
### Facilitate Cohabitation

- Equally address the demands of high-density development and wildlife habitat in an urban setting.
- Create a place where human inhabitants can appreciate and benefit from urban ecosystem services.



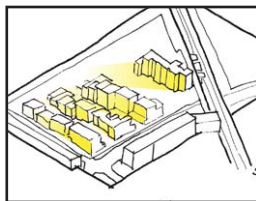
### Strengthen Sense of Community

- Welcome community interaction and activities.
- Celebrate the vibrant economic, social, and cultural life of Gresham's community.



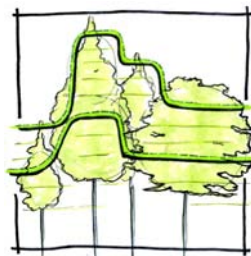
### Stormwater Management

- Facilitate collection, treatment, and reuse of on-site stormwater.
- Limit impervious surfaces to reduce stormwater pollutant loads.
- Maintain groundwater recharge and quality.



### Maximize Solar Access

- Design buildings and infrastructure to take advantage of solar access.



### Preserve and Enhance Habitat

- Preserve and enhance existing habitats.
- Define and preserve sensitive species and legacy trees.

This joint architecture and landscape architecture studio worked with members of Portland Metro's Transit-Oriented Development (TOD) and Nature in Neighborhoods programs to innovatively address many of the challenges that are faced when trying to achieve transit-oriented development while integrating habitat sensitive design. The partnership between TOD and Nature in Neighborhoods inspired students to find fresh and tangible solutions in designing and defining a relationship between the proposed Gresham Crossing transit-oriented mixed-use program, the planned Gresham Crossings light rail stop and station, and the regional urban and ecological systems to which it is connected

This studio ultimately demonstrated that through thoughtful interdisciplinary collaboration and the application of sustainable design principles, vibrant development in an urban setting can simultaneously benefit people and wildlife. We hope that this studios work inspires TOD and Nature in Neighborhoods to continue a working relationship that encourages future projects to integrate transit-oriented and habitat sensitive design.



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