



student projects

2023



urban design awards

CONTRAST & CONNECTIVITY: CELEBRATING THE CLASH OF HISTORY AND MODERNITY

The Strathcona Bus Garage has a rich history spanning over 70 years. Owned by the City of Edmonton, it currently operates as the Old Strathcona Farmers Market. With the market's plans to expand service to five days per week, the City of Edmonton looked to better activate the public realm around the site. The building was first used for trolleys, then buses, to its current iteration as a farmers market. We saw a common thread - movement and connection - whether it is people getting places or connecting people to their local farmers, growers, and producers. Using this as our catalyst for the new design, we analyzed the space to provide better connection while celebrating the past and keeping functionality and accessibility at the forefront.

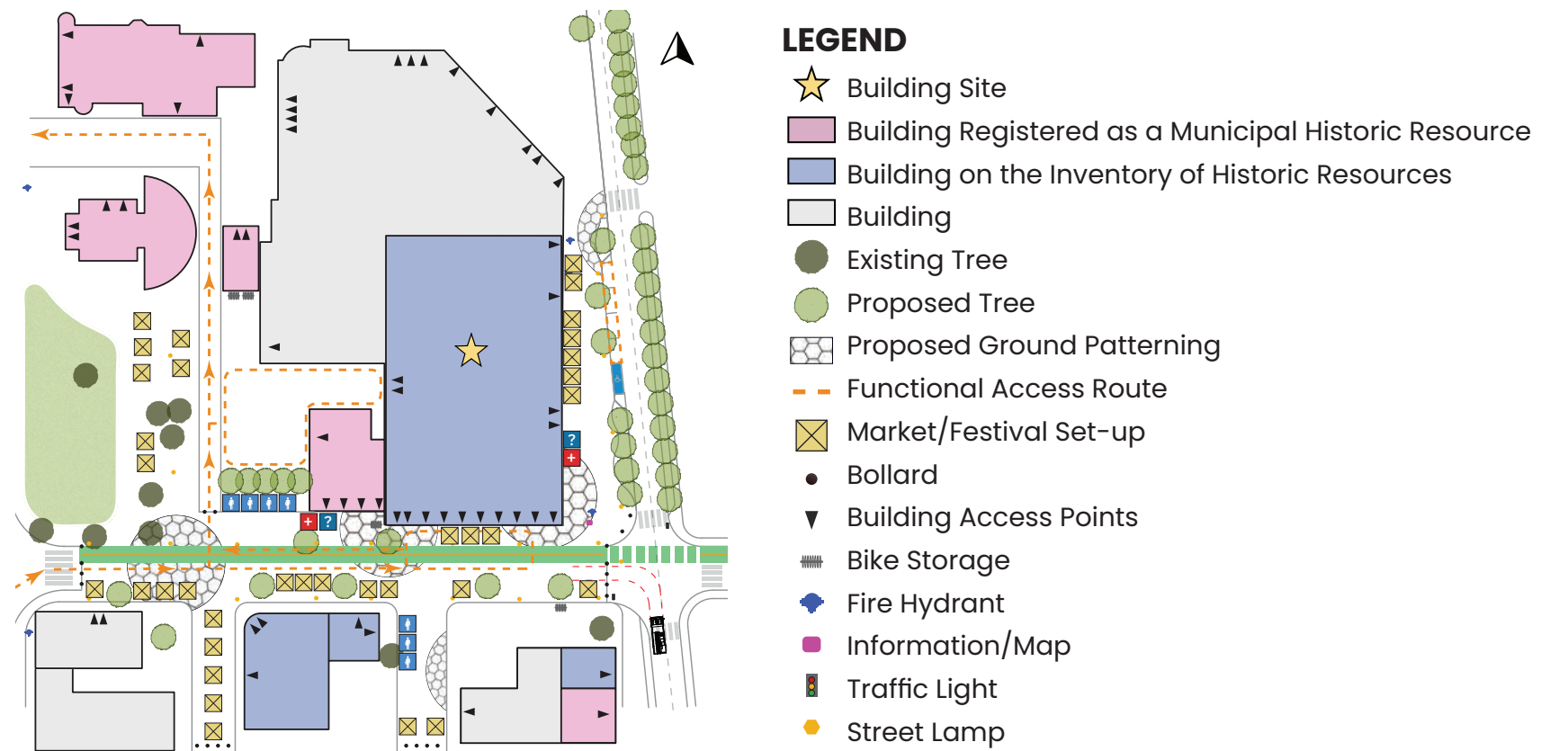
To capture a more harmonious public realm experience, we propose the permanent closure of 83 Avenue, and narrowing Gateway Boulevard to reclaim pedestrian space. The heart of our design lies in fostering a dynamic urban community where diversity thrives. The new streetscape will not just revitalize the public spaces, but enhance the area as a functional cultural hub while providing strategic access for vendors of the market and business in the area.

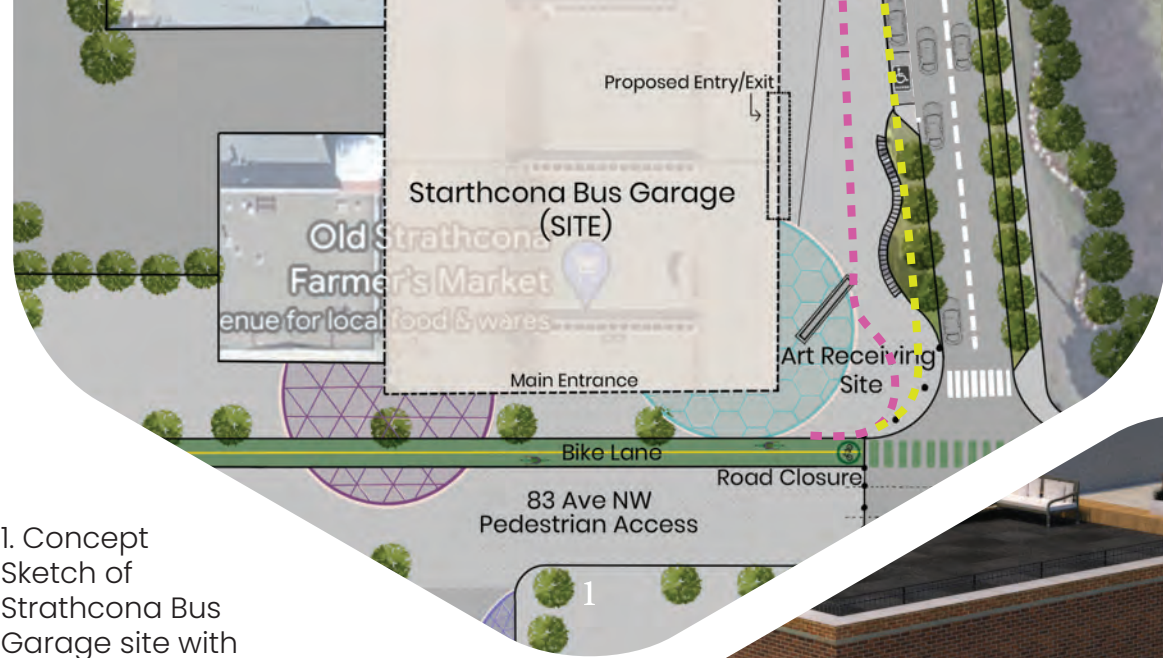
Our approach prioritizes sustainable practices, incorporating green technologies, renewable energy sources, and climate-conscious initiatives. Native plantings, rain gardens, and permeable pavements contribute to the ecological vitality of the area, creating a serene oasis amid the urban hustle. Central to our design is the creation of inclusive public spaces that cater to a diverse range of community members. Seating areas, gathering spots, and recreational zones are thoughtfully integrated, designed with ergonomic considerations to accommodate individuals of all ages and abilities.

We envision a space that strengthens community bonds, promotes civic pride, and becomes a focal point for cultural expression. This project is not just about physical design; it's about nurturing a sense of belonging and unity among all Edmontonians, fostering a brighter future rooted in the values of the past. Our design aims to create an urban environment that engages both residents and visitors while fostering a sense of community pride and shared identity.



1. Bird's eye view of site showing Gateway Boulevard narrowed, with expanded pedestrian space, curved seating, street art, and improved tree planting.

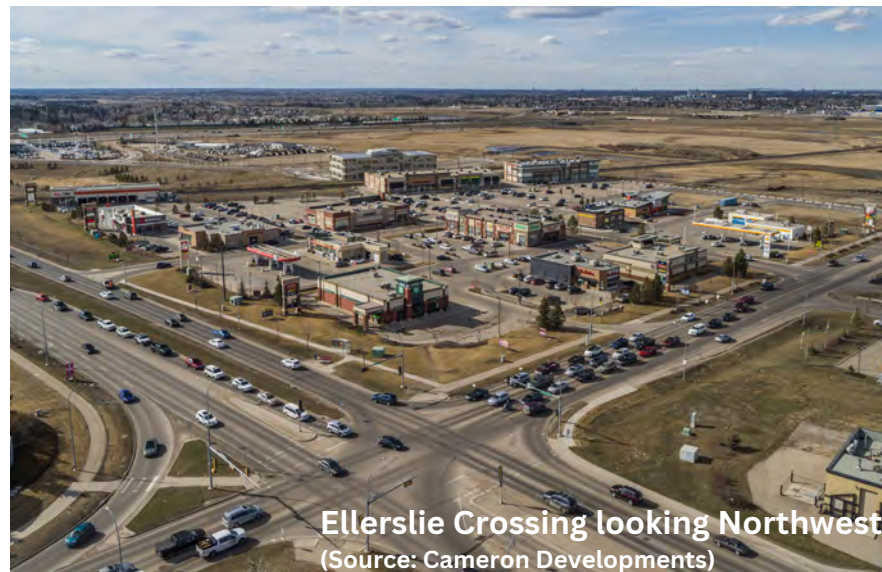




1. Concept Sketch of Strathcona Bus Garage site with improvements and through zone marking.
2. Rendering of pedestrian space along Gateway Boulevard.
3. Sketch of public seating area.
4. Bird's eye view of the corner of 83 Avenue and Gateway Boulevard, highlighting art placement, patterned street application, lighting installations, and highlighting of bike lanes.
5. Perspective along 83 Avenue, in a flexible area set up for market use and public seating.
6. Perspective of 83 Avenue facing east, with accessible and permeable pavement treatment.
7. Sketch of Gateway Boulevard facing north, highlighting lane closure and tree canopy.
8. Perspective showing intersection of connectivity between pedestrians, bike lanes, and access into the market.



Ellerslie Crossing Urban Design Master Plan



The Master Plan provides new and innovative guidelines for urban design, land use, mobility, built form, and open space in and around Ellerslie Crossing. With a vision of connection and community in and around the site, the Master Plan implements gradual changes to foster accessibility and functionality for all modes and abilities. Short-, medium-, and long-term visions for the site introduce points of interest and placemaking initiatives intended to captivate visitors to stay and linger; promoting activity and interest in the area.

Project Description

With the approval of the City Plan in 2020, Edmonton has outlined a bold new vision for what a future city of two million residents looks like. Today and tomorrow, suburban sites serve a significant portion of the population and are integral components of Edmonton's identity.

Commercial districts like Ellerslie Crossing play an important role for placemaking in suburban areas, shaping the daily interactions and experiences of local residents and visitors. Ellerslie Crossing, located at the intersection of a district node and a secondary corridor, is an entryway to Southeast Edmonton and a commercial anchor for the community. With increasing demand for more walkable, and urban-like suburbs, there is an opportunity to retrofit existing suburban commercial sites to evolve alongside changing market trends. This transition is not expected to happen overnight.

The Ellerslie Crossing Master Plan (the Master Plan) proposes short-, mid- and long-term changes that will allow the site to transform slowly alongside its tenants and customers. Embracing the principles and values outlined in Edmonton's City Plan, while incorporating guidelines linked to winter city design and complete streets will allow Ellerslie Crossing to adapt in parallel with a changing cityscape, evolving into a vibrant regional hub that is accessible to all neighbouring residents, workers, and visitors.

Market driven, incremental changes will allow Ellerslie Crossing to respond to increases in neighbourhood density and the trend toward walkable, vibrant, urban spaces. Redevelopment will be strategically utilized to intensify the site while prioritizing environmental and economic sustainability. Guidelines laid out in this Master Plan can and should be used to inform future suburban development, redevelopment, and retrofitting within the city of Edmonton.

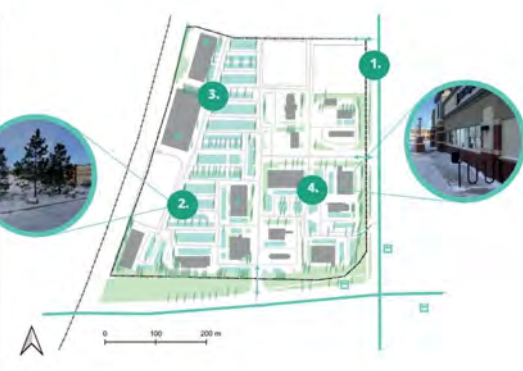


Map of Ellerslie Crossing Current State

SWOT Analysis

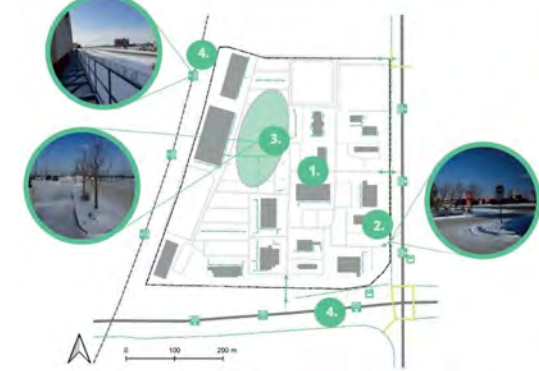
4.1 SWOT — STRENGTHS

- 1. **High Visibility** along a commuting corridor with a strong clientele base in surrounding residential areas
- 2. **Established Vegetation** provides a buffer between the site and busy surrounding streets
- 3. **Varied Uses**, such as grocery, school, restaurant and commercial retail
- 4. **Mobility network** includes transit, bike racks, wide storefront sidewalks and ample parking



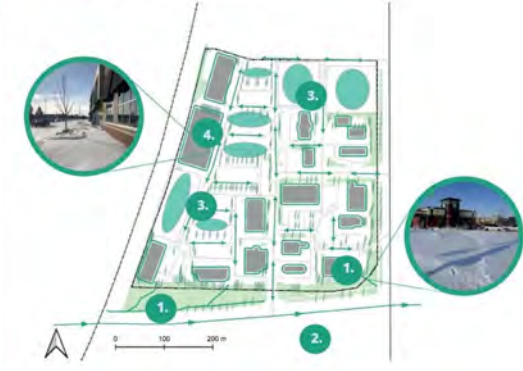
4.2 SWOT — WEAKNESSES

- Lack of Sense of Place** due to limited walkability and lack of public space
- 1. **Low Connectivity** within the site for pedestrians
- 2. **Limited Access and Egress** for all forms of mobility
- 3. **Large Site Area** leaves site spread out and unwelcoming
- 4. **Noise and Air Pollution** due to arterial roads and nearby railway



4.3 SWOT — OPPORTUNITIES

- Site Activation** to create a sense of place through urban design and development opportunities
- 1. **Increasing Connectivity** encourages lingering through a site mobility network
- 2. **2020 City of Edmonton Plan** identifies the area as a district node along a secondary corridor and district bus route
- 3. **Large Area** offers flexibility with undeveloped space
- 4. **Generous Sidewalks** create transition space around buildings



4.4 SWOT — THREATS

- Future Changes** in economic conditions or mobility shifts may cause challenges
- Financial Risk** in high risk/high reward investments
- Surrounding Area** may limit development opportunities
- Limited Tenant and Consumer Buy-In** for change from market norms
- 1. **Noise and Air Pollution**
- 2. **Mobility Networks** may remain underutilized due to the car-oriented location



Lynchian Analysis

Figure 4.1 Lynchian Analysis Map



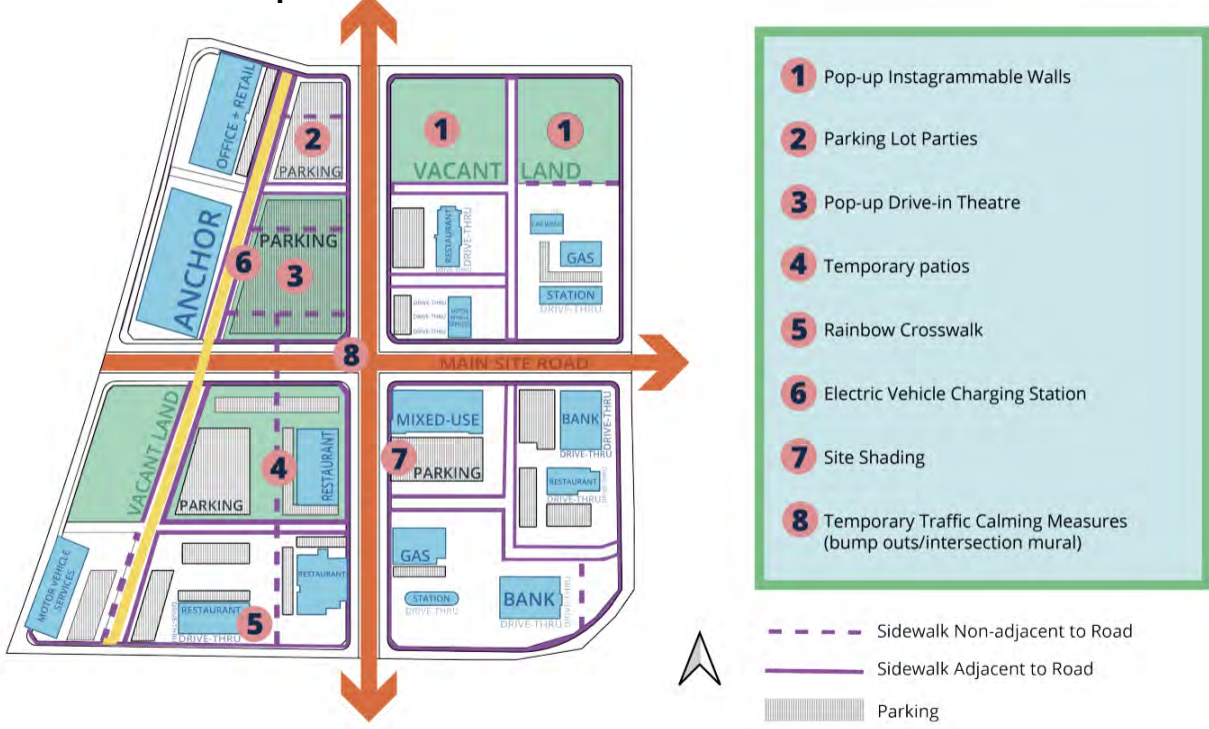
Ellerslie Crossing Urban Design Master Plan

Vision and Design Concepts

Partnering with the surrounding area and adapting to changing economic and social conditions, Ellerslie Crossing will transition into a vibrant, connected, captivating and prosperous community hub for businesses, residents and visitors.



Short-term Concept



Three design concepts (short-, mid-, and long-term) were developed with specific action items for improving placemaking, built form, mobility & pedestrian connections, and improving sustainability on the site:

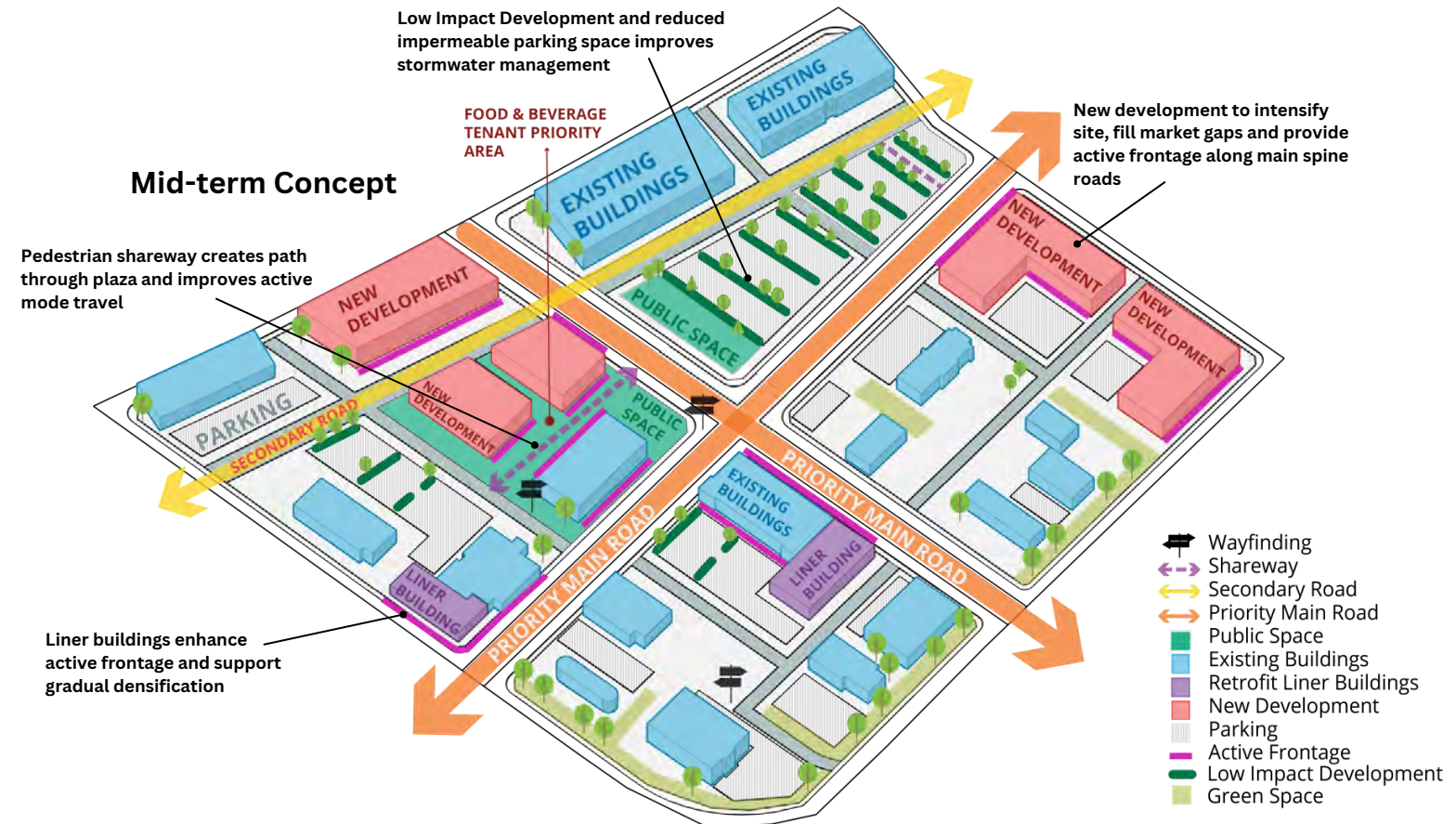
Placemaking: Attract visitors to the site through unique events, installations, and landmarks.

Built Form: Enhance the public realm through consideration of character, orientation and relationship of buildings and open spaces.

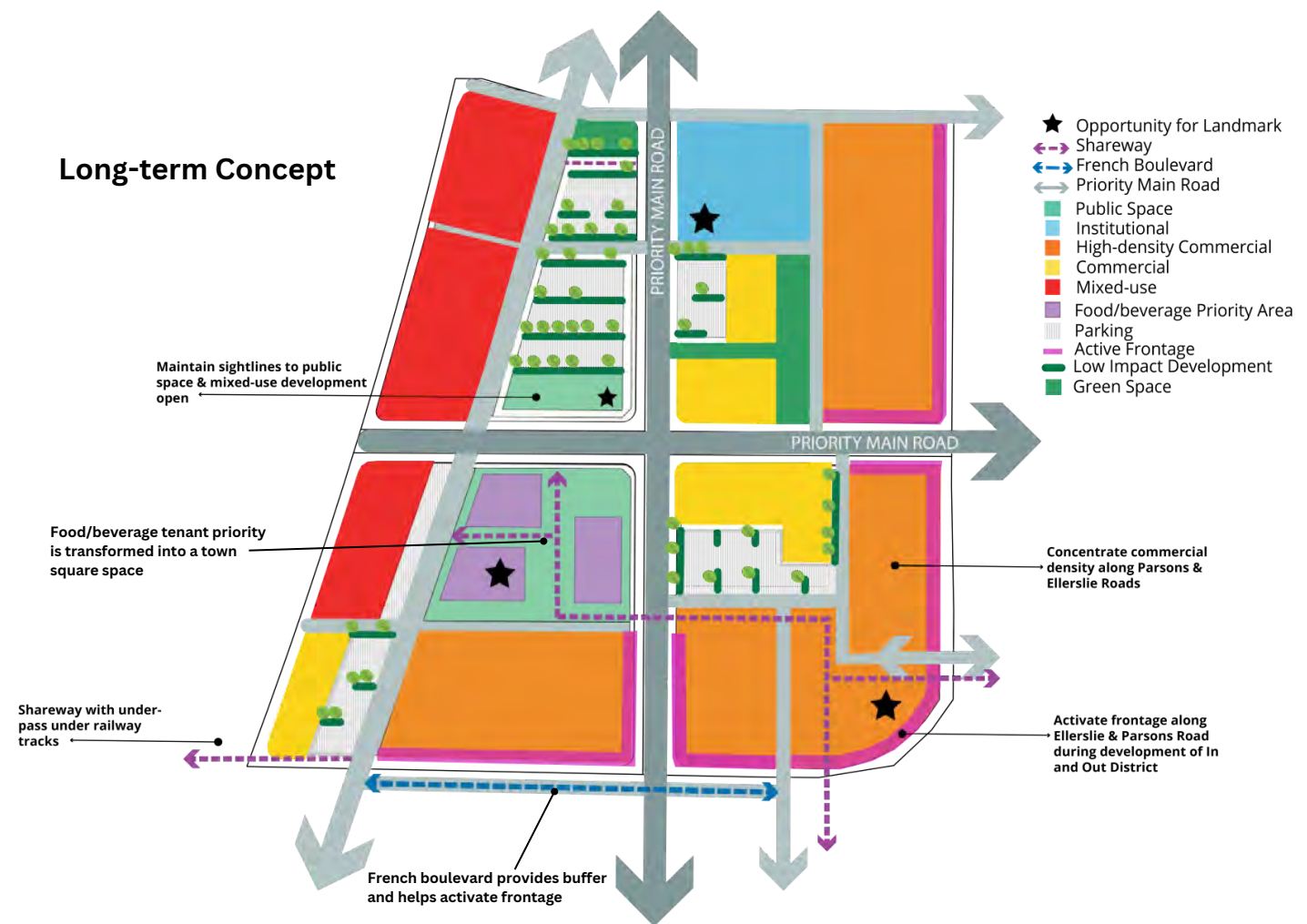
Mobility & Pedestrian Connections: Provide infrastructure for all travellers from near and far while planning for intuitive movements within the site.

Sustainability: Improve sustainability and resilience through conscious design considerations.

Mid-term Concept



Long-term Concept



WAREHOUSE CAMPUS PARK DESIGN STUDY

Climate Sensitive Urban Design of Public Open Spaces for Winter Cities: Edmonton, Canada



- A: Central Plaza
- B: Open Green Space
- C: Dog Park and Patio Space
- D: Children's Play Area
- E: Open Green Space
- F: Open Green Space
- G: Public Facilities

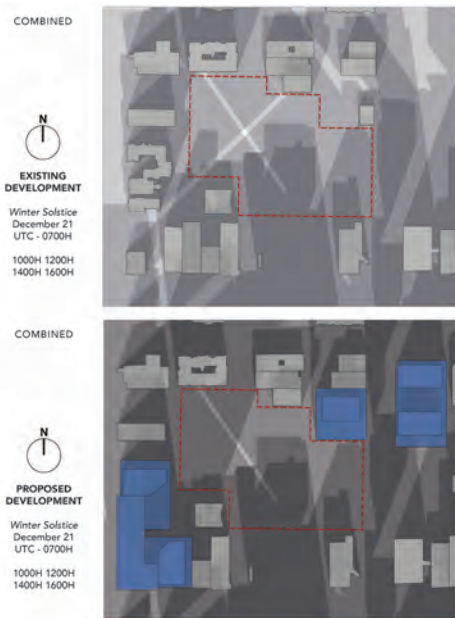


Proposed Design in Infracore with Sun Exposure on Winter Solstice

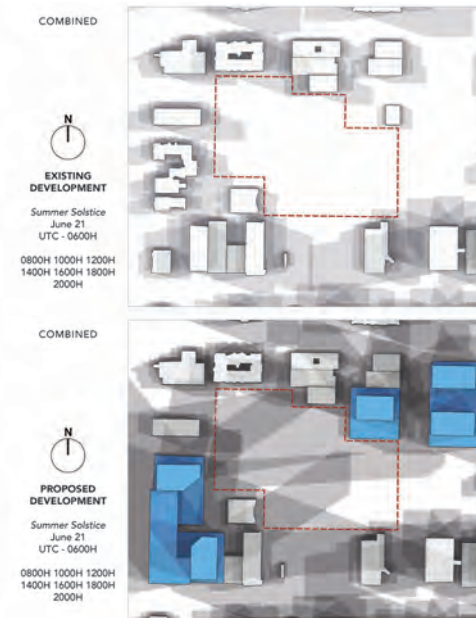


Bird's Eye View Looking North

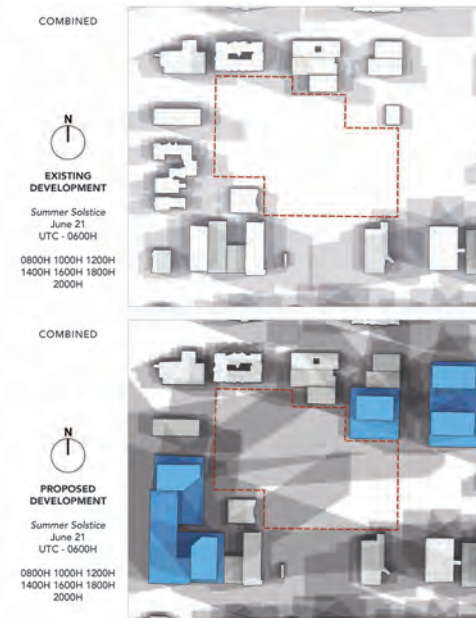
CONSIDERATIONS



Sun Shadow Analysis (Winter Solstice), Existing Conditions



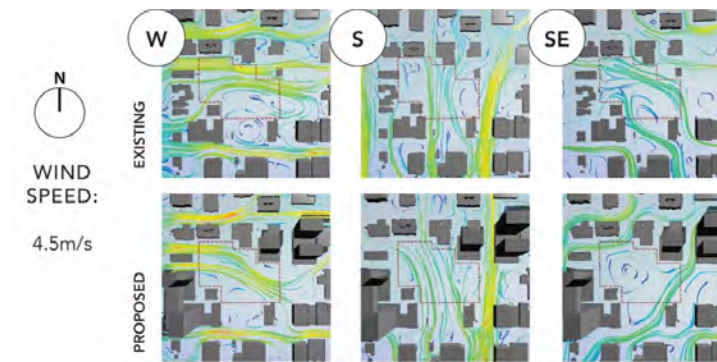
Sun Shadow Analysis (Winter Solstice), Future Conditions



Sun Shadow Analysis (Summer Solstice), Existing Conditions



Sun Shadow Analysis (Summer Solstice), Future Conditions



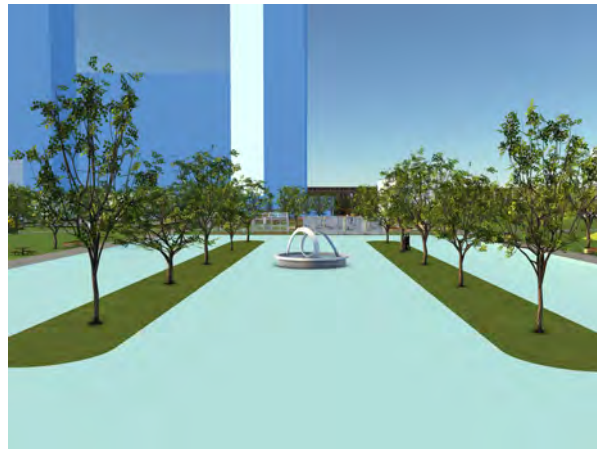
Wind Analysis of the 5 most frequent wind directions in Edmonton



Wind and Sun Summary Map

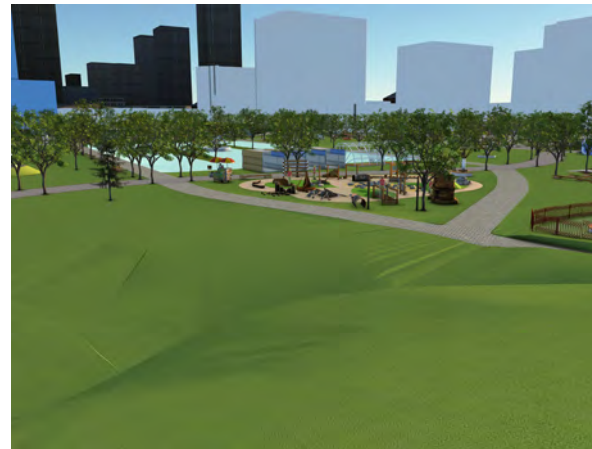
CENTRAL PLAZA (A)

A multifunctional space with a skating rink in the winter can become a fountain and open play space in the summer months.



OPEN GREEN SPACE (B)

Open space that will include berming and other topographical elements to help block the northwestern winds.



DOG PARK (C)

Off-leash dog park that will allow future residents to let their dogs roam freely in the space.



CHILDREN'S PLAY (D)

A nature-park for children recreation. This space is located near the main circulation paths within the park for increased surveillance.



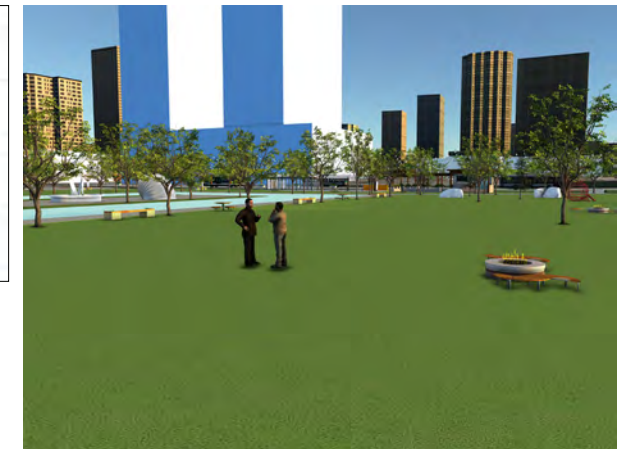
OPEN GREEN SPACE (E)

This space will get the most sun throughout the day and will have terraced seating with views of the central plaza.



OPEN GREEN SPACE (F)

The location of this space is to encourage usage from the laneways to spill out into the park.



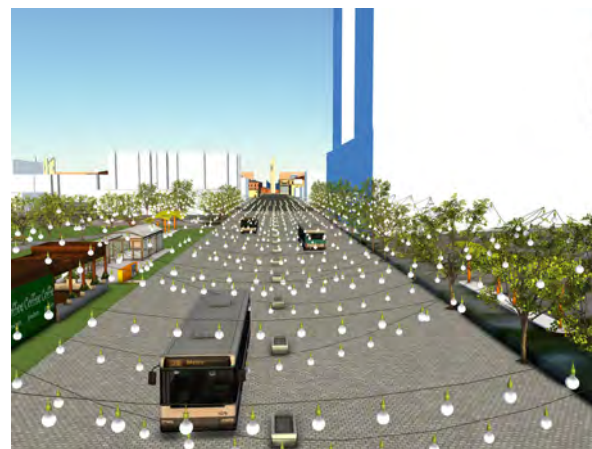
PUBLIC FACILITIES (G)

To serve as the entrance along 106 Street. It will have bike parking facilities to support users using the bike lanes to access the park.



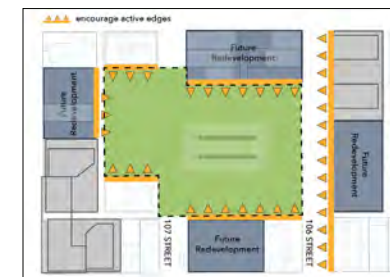
INTERNAL CIRCULATION

Idea that users will enter the park in the shortest and most natural way possible, which is to cut diagonally into the park from the corners of the site.



LANEWAYS

The laneways is a semi-public space to allow for adjacent developments to create functioning backdoor usages.



A Station of Being



Heritage Valley is the last stop on the Capital Line LRT. Approved in 2009 as a permanent Park & Ride to support the LRT development, its current site conditions are a bleak, single-use space with a minimal human scale. The west and southwest have limited development. Currently, no public nodes are around the Park 'n' Ride; however, the space is intended to be an eventual major transit node. This project is a reframing of the current and future Heritage Valley Park and Ride.

Current Photo Facing South



Our Proposal

We reimagined a challenging single-use site into a dense multi-use destination. While transit centers offer significant infrastructure to draw and move people in and out, transit users spend much of their time in liminality, particularly in winter. Providing amenities and opportunities to encourage people to linger enhances economic and social opportunities in all seasons, which enhances cultural resilience. There are also opportunities for return on investments as it increases taxation and efficient land use. A significant development slated for the area, a new hospital south of this site, leads to the potential for this space to develop as a node. Phase A—priorities multi-modal transportation, winter design principles and dense, layered land use. Non-motorized parking is located at ground level and closest to the transit center. A large public plaza with year-round vendor kiosks and covered furniture serves users' needs while waiting for their transportation or daily routine. The current surface-level parking is transformed into a multi-level bright urban landmark. It will introduce texture, light, and enclosure to the otherwise stark concrete landscape while maintaining car capacity. The building will allow for directional legibility by standing out on the horizon, blocking the cold Northeasterly wind from the public plaza, and providing an atmospheric lighting element. It is purposefully placed in the north to ensure that the public realm would have maximum sunlight from an unobstructed southern exposure. Umea Sweden's parking garage inspires it.

This redesign demonstrates a multi-purpose site, designed for winter use first, that incrementally builds capacity for future use. The plaza gives people a reason to linger. The central section is a tiered public square inset to break up the landscape, protect it from wind, and provide accessible viewing opportunities for any programming in the space. The multicoloured flooring adds a pop of colour and visually differentiates the elevation for people with visual challenges.



Vision and Principles

We drew inspiration from a station in Northeastern Sweden, where the municipality of Umeå designed a transit station with the idea that a transit stop can - and should- be more than just waiting - it should be engaging internally. Their philosophy is to make it a spot comfortable for all seasons, turning the discomfort of waiting into a meditative, transitional experience. The site, aptly named "A Station of Being," is specifically designed to both enjoy the elements and be protected from them when necessary.

The below Design Code establishes and consistently applies the essential functional requirements of designing for and with climate—texture, Light, Enclosure, Reflection, Nature, Shelter/ Exposure, Legibility, and Colour.



A major project goal is establishing a universal modality which is achieved through universal design principals and multi-modal accomadation with equal consideration to vehicular. This will increase accessibility for all people—aligning with Big City Moves and climate goals.



Reimagined Site Plan

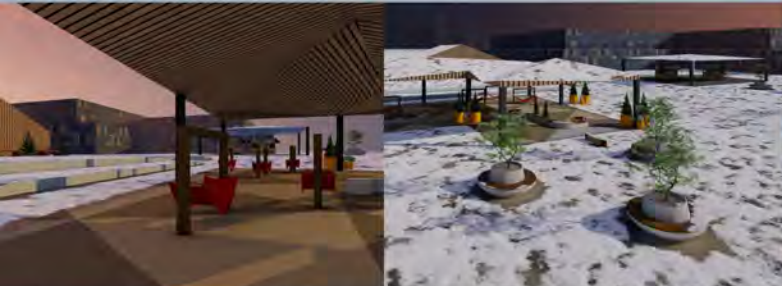
Ellerslie Rd SW



Phase A

Transit stops can, and should, be more than just waiting.

Phase 1 - Plaza



Permanent all-season commercial activity concentrated on the interface of the parking section and public plaza will allow for a seamless transition between the two realms and permit spontaneous purchase potential. The kiosk approach will provide availability for an iced coffee in the summer or a hot chocolate in the winter, enabling commuters and those looking to linger. These stalls will act as a node for activity by introducing colour, texture, and seating and allowing for more permeability than a typical commercial building strip.



The Mobility Parking Buildings give non-motorized mobility preference. They are slatted wood, visually permeable with a small footprint, and located throughout bisecting pathways. The buildings are stepped upwards away from the public plaza to add texture, enclosure and potential for solar. Benches are placed throughout to facilitate putting on or removing mobility equipment. Horticulture beds provide colour and texture, and the foliage is selected for its year-round quality.



Phase 1A - Winter Garden



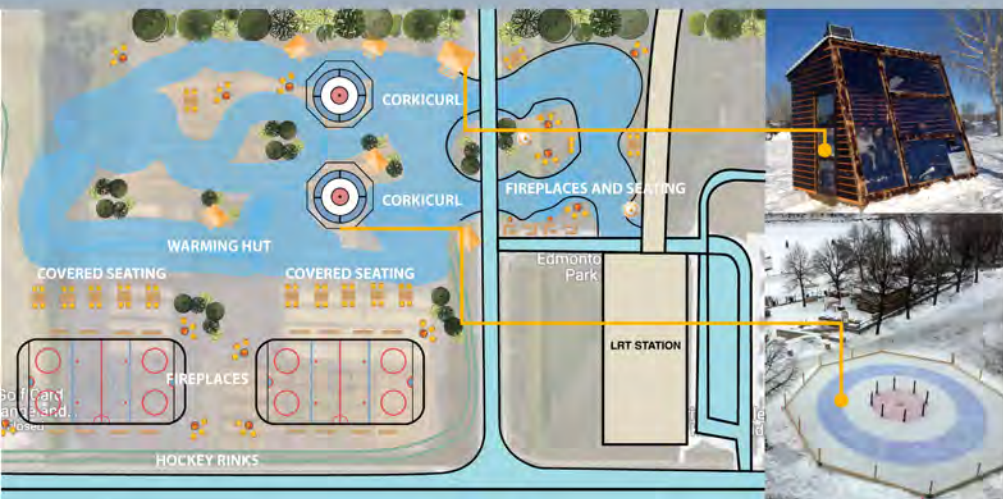
Summer View SouthEast

Winter View SouthEast

Milkweed Seedpod

This project pairs a municipal need for transportation, LRT, Bus, and Park n Ride, with socio-ecological needs, a winter-focused garden and an activity park, on the same site to create a dense, efficient and vibrant space. The transit hub's peak hours are morning and evening, and the park's peak hours are evenings and weekends. The parking structure supports both needs. The site is just south of Anthony Henday; if developed as a TOD it would financially support the maintenance of the park and gardens and provide a significant local user population. Outdoor winter gardens create activation throughout the year and entice people to come to take space in all seasons. Winter garden designs emulate the cyclical nature of life through the tangible landscape. Elements of these gardens include variations in horticulture that layer the landscape to define paths and draw the user through place using visual interest, texture and structure. They use frost and snow as additive elements to design with, not against. The horticulture was selected for how the foliage adapts throughout the seasons; yellow twig dogwood provides colour, cornflower texture, grass texture colour and height variation, and conifers shape and path distinction. Butterfly milkweed is a perennial with vivid summer blossoms and a fibrous pod in fall and winter. If left to be cut back until spring, the pod is a beautiful material texture in the winter landscape.

Phase 2- Winter Activities Park



Phase B - Where the eastern section is a smaller structured garden, there is an expansive winter activities park with flowing skating trails, winter sports and areas to relax and warm up. This park will act as a major node in the area to attract users outside peak transit time. Transportation and parking requirements are shared by pairing them with the park-and-ride. As a District Park, it will focus on winter leisure activities, including organized and individual sports and become a distinct gathering and recreational place. This District Park is paired with commercial services to provide basic amenities and access to on-site sport equipment vendors, food and washrooms. Amenities are vital infrastructure to encourage people to linger and create convenience enough to be an everyday experience. There will be pathways of skating trails, sheet ice for hockey and corkicurl, and a track set for cross-country skiing which could eventually connect to the driving range to the west. It's a planned and programmed public place with infrastructure to operate as a system with enough critical mass that encourages people to linger, explore, and even try something new.

Site Connectivity



Underpass for Connection

Footrests for User Experience

Increased site permeability and connectivity is required. By accommodating new forms of mobility, like cross-country skiing or winter cycling, Heritage Valley will become a desirable activity in itself to access the node. The current edges make this difficult from anywhere other than Ellerslie Road, but with our phased approach, we intend to further the mobility network westward and southbound. A vital intervention to this network's success is joining the abandoned 119 Street to 127th Street across the Anthony Henday with an underpass to connect 127 Street to areas north of the Henday and the more extensive District Connector Bike Network.

FRAMING EDMONTON

A vista Bench for Edmonton

THE CITY OF
Edmonton



UNIVERSITY
OF ALBERTA



The City of Edmonton is seeking for an iconic chair or bench that creates connectivity and attraction to Edmonton.

The bench is to be accessible to the broad audience in creating a connection between the community and the Landscape Presenting Framing the view bench It is designed to capture and draw attention to the surrounding environment while encouraging socialization and connection in the community in a place of informal breaks. The angled frame prevents visual restrictions, allowing people to see everything and everyone around them. Since Macdonald Drive is located in the downtown area of Edmonton and close to many attractions and hotels, the bench can act as a landmark of the space representing Edmonton and guides people to notice the natural environments through the bench frame.

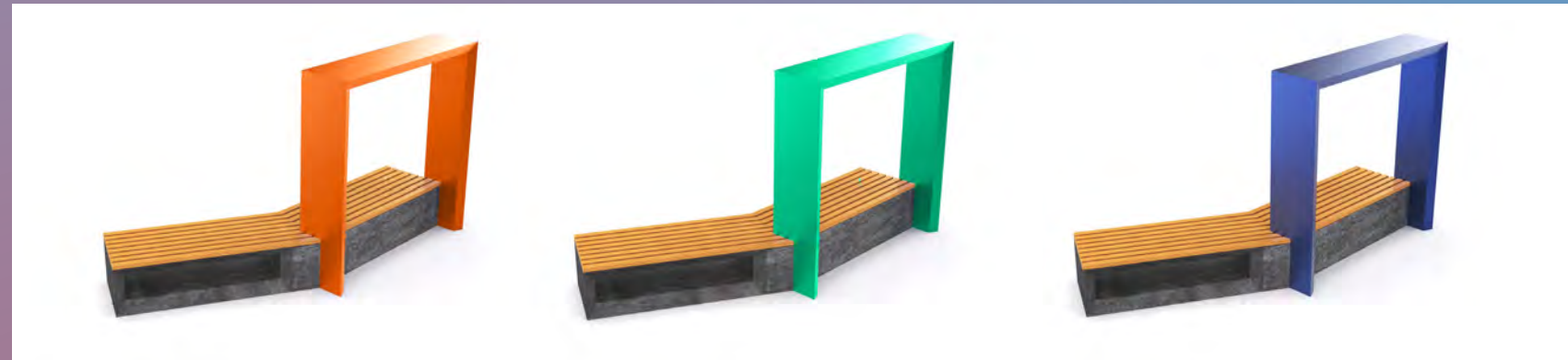
Our 3 OBJECTIVES are:

Design a bench it is universally accesible year-round to people of all ages and abilities.

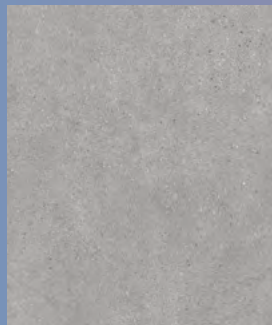
Design bench that encourages the further docovery of of and interest in the nearby area.

Design a Bench comprised of Material and Method that will last will within its context.

Color Variations

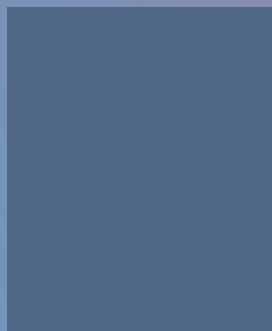


Materials



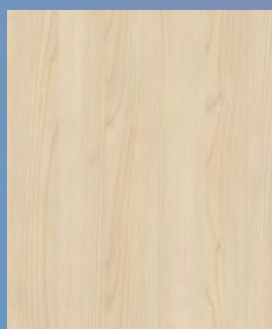
Concreat

Concrete is a sustainable material, highly durable, and can withstand multiple harsh seasonal elements.



Stainless Frame

Powder-coated stainless steel can provide a colour-durable finish that is both heavy weight and strong.



Wooden Slate

Cedar requires less maintenance than other woods and is resistant to both temperature and weather.

On one end of the bench is an angled section, directly facing the view. Here, users are meant to sit and enjoy the City's natural landscape.



On the other end of the bench is the 'metal frame', which is designed to capture the view. It creates a perfect photo opportunity, encouraging passersby.



Since the bench is angled, it also encourages conversation between the users on opposite ends of the bench fostering socialization.