



MILlicAN-OGDEN VISION BRIEF

ADVANCED PLANNING STUDIO | **APRIL 2022**

ACKNOWLEDGEMENTS

PROJECT TEAM

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Robert Dickinson (Neighbourhood Partnership Coordinator | Neighbourhood Support | Calgary Neighbourhoods | The City of Calgary)



UNIVERSITY OF CALGARY
SCHOOL OF ARCHITECTURE,
PLANNING AND LANDSCAPE

LAND ACKNOWLEDGEMENT

We would like to take this opportunity to acknowledge the traditional territories of the people of the Treaty 7 region in Southern Alberta, which includes the Blackfoot Confederacy (comprising the Siksika, Piikani, and Kainai First Nations), as well as the Tsuut'ina First Nation, and the Stoney Nakoda (including the Chiniki, Bearspaw, and Wesley First Nations). The city of Calgary is also home to Métis Nation of Alberta, Region 3.

EXECUTIVE SUMMARY

Ogden is a residential inner-city community in Calgary's south-east quadrant, a legacy of the Ogden Shops Industrial and the employment provided by CP Rail. As an older community, Ogden faces common challenges to similar communities, chief among them an aging and declining population. While Ogden's circumstances are in some ways unique, with soil contamination leading to a loss of nearly 1000 residents in just a few years, there are known solutions to many of the issues we see today. With the approval of the Green Line and two stops in Ogden, it will face inevitable change, and how we manage that change will help direct the evolution of this community.

This document is a comprehensive account of the work done by Prairie Mountain Planning for the community of Ogden, from site analysis through to design concepts, strategies, and interventions which may provide the community with a resource and inspiration to work with the City of Calgary in the development of a new Area Redevelopment Plan. Specifically, our team has addressed concepts of Land Use, Mobility, Open Space and Recreation, Water Stewardship, and Placemaking, with special consideration for Heritage, Climate Adaptive Design, and Winter City Considerations. Our work was driven by the guiding principles of Diversity, Connection, and Ecology, forming the foundation of community resilience in Ogden.

The people of Ogden have the opportunity to direct their community's growth and transformation, creating a resilient and revitalized community into the future. Our design concepts and strategies in this document can provide a framework for this transformation.





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PROJECT INTRODUCTION

As an academic project we are students acting as professionals, learning the process of planning with a real world community. In this final project, we are learning to balance the professional expertise of the steering committee, the lived experience of the community, and the overarching goals of the City of Calgary as they relate to growth and sustainability. The plan has been developed with ideas and strategies driven by the community to inform the City of Calgary's local area planning process, integrating a variety of elements to improve the overall community experience. This document will provide recommendations for the Millican-Ogden Community Association.

PROJECT TEAM



HAILEY BLOOM

MPLAN (2022)
BSc BIOGEOSCIENCE (2016)

Hailey is a second year Master of Planning student at the University of Calgary. With an undergraduate degree in climatology and biogeography, she is interested in the intersection between climate change resilience, ecology, and urban design.



MEGAN HORACHEK

MPLAN (2022)
MSc ECOLOGY (2016)
GIS-CARTOGRAPHY (2013)
BSc BIOLOGICAL SCI

Megan is a second year Master of Planning student at the University of Calgary. She brings experience in GIS, research, and ecology, and is interested in planning as a critical tool for ecological design and addressing the climate crisis.



KIRANDEEP KAUR

MPLAN (2022)
BARCH (2007)

Kiran is a second year Master of Planning student at the University of Calgary. She brings over a decade of experience in architecture and is interested in planning as a tool for equity in housing and public transit.

REPORT STRUCTURE



Project
Introduction



Site Analysis



What We
Heard



Guiding
Principles

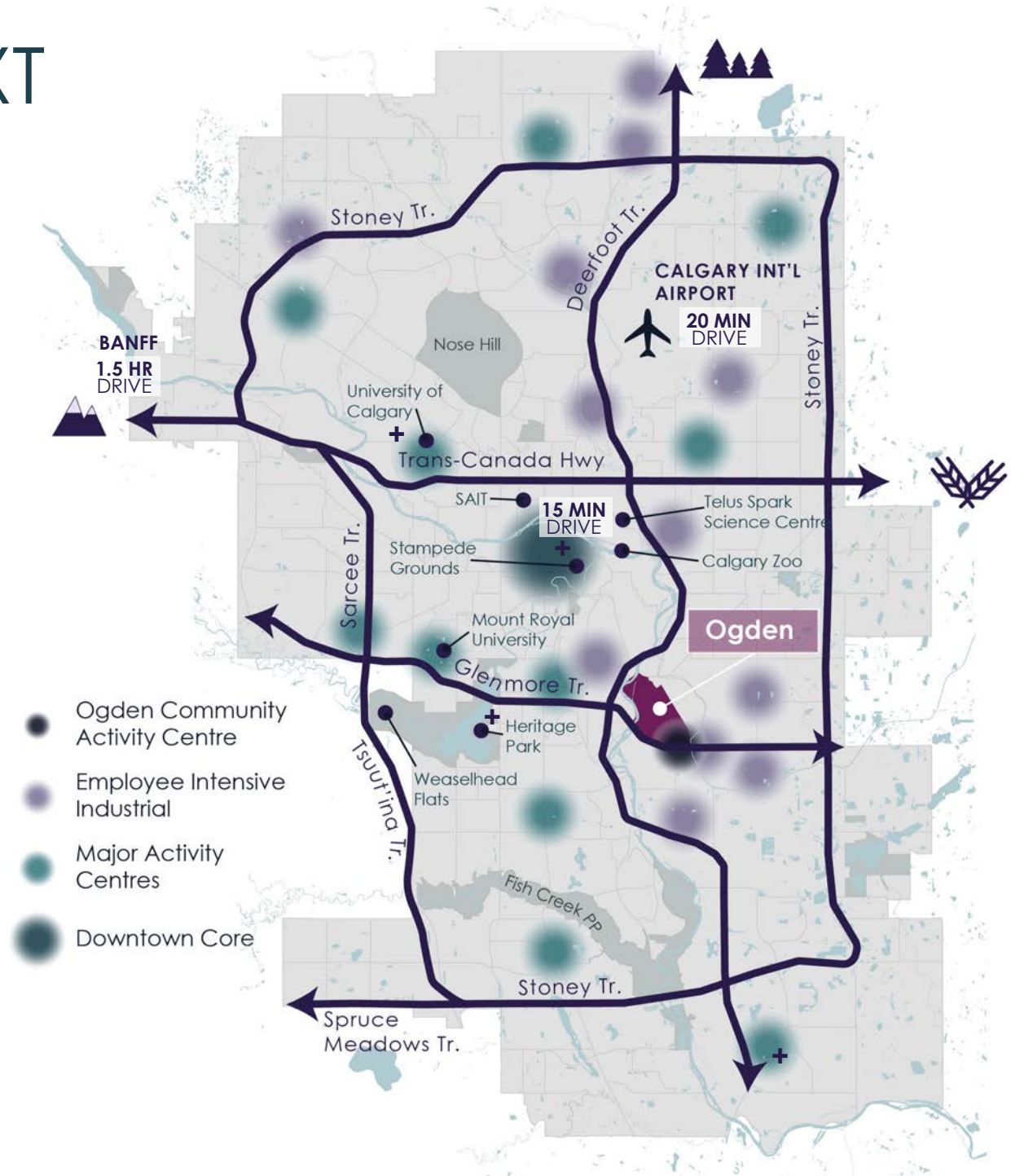


Design
Interventions

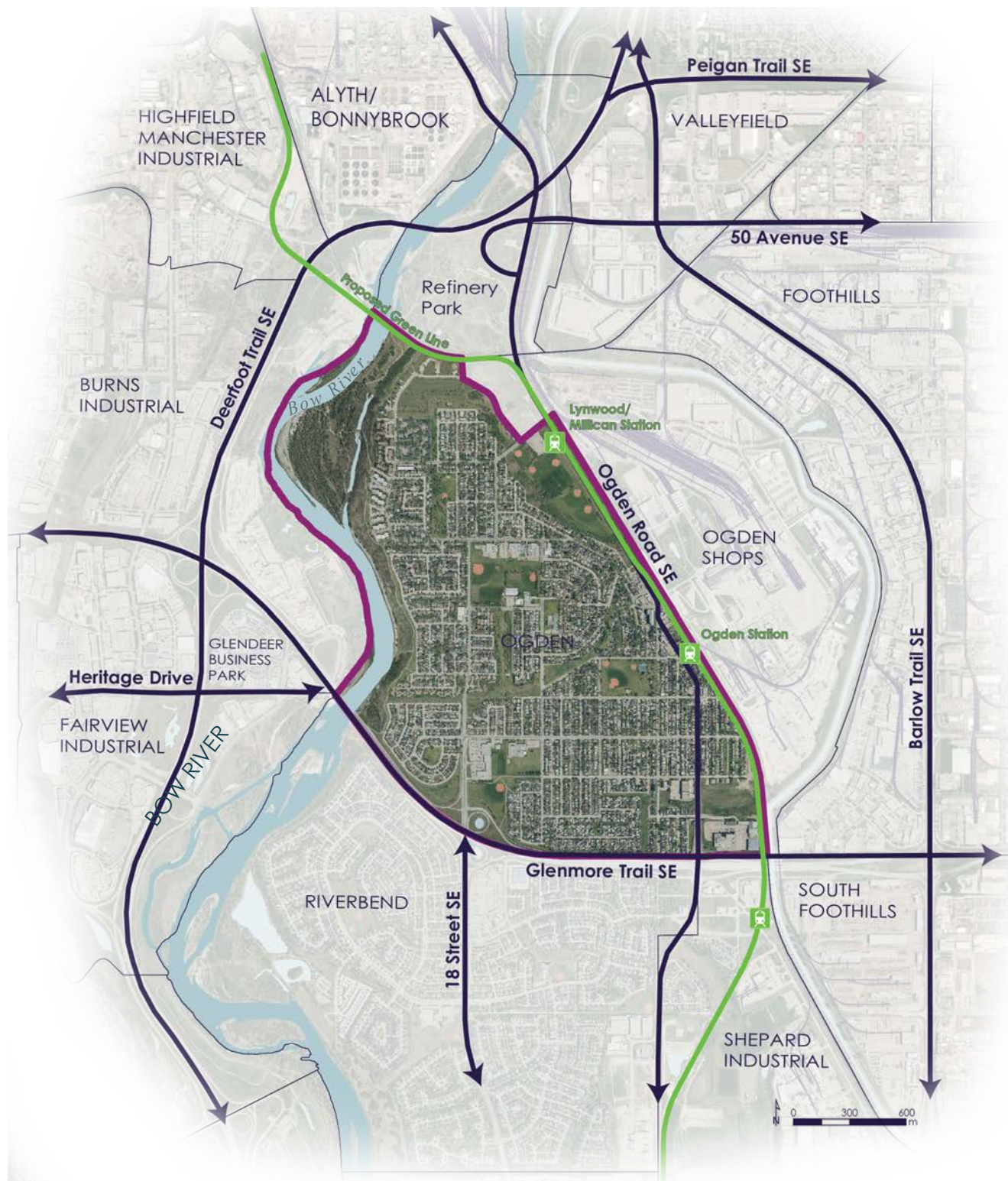
This report is structured as a way for decision makers to understand the rationale behind each design recommendation. The site analysis provides the foundation from which design interventions were made, with understanding of community desires through public engagement guiding each decision. Our design interventions act as recommendations that can be implemented across Ogden, with examples of specific sites.

SITE CONTEXT

Ogden is a residential inner city community in southeast Calgary, east of the Bow River. Major highways connect Ogden to the City of Calgary, such as Deerfoot trail and Glenmore trail, which also present major barriers to non-vehicular mobility.



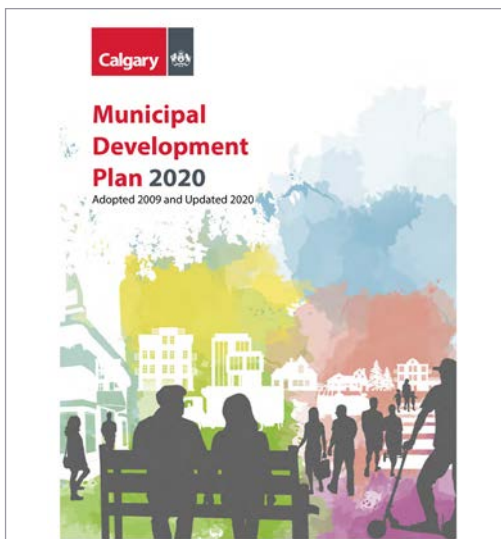
Adjacent to Ogden are several important industrial areas, including the historically significant Ogden Shops, as well as the proposed alignment of the Green line along the eastern edge.



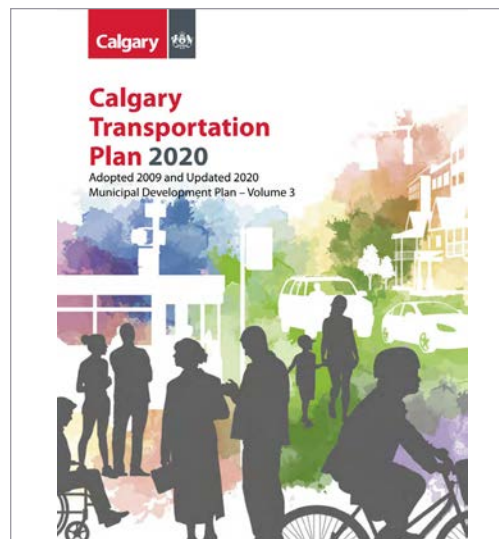
POLICY FRAMEWORK

Several statutory and non-statutory documents from the City of Calgary were referenced throughout this project to provide guidance and direction in order to address the key issues identified within the community of Ogden. The MDP provides high level guidance on housing and mobility to direct community growth and sustainability in the City of Calgary. The City of Calgary is moving towards a more sustainable development pattern. With the Ogden community featuring two new LRT stops along the Green Line, there is strong potential for Ogden to transform into a vibrant, connected, and resilient community.

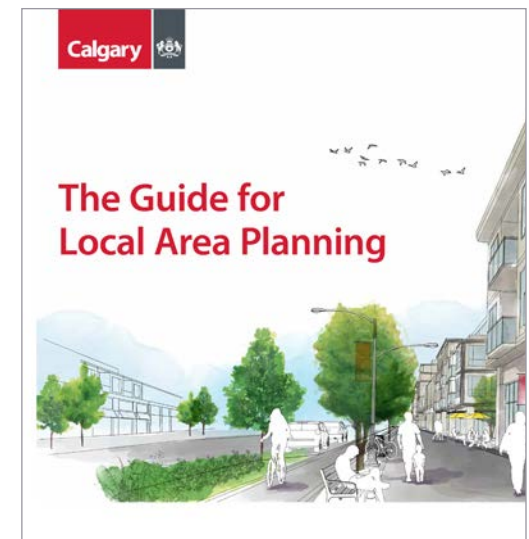
MUNICIPAL DEVELOPMENT PLAN (MDP)



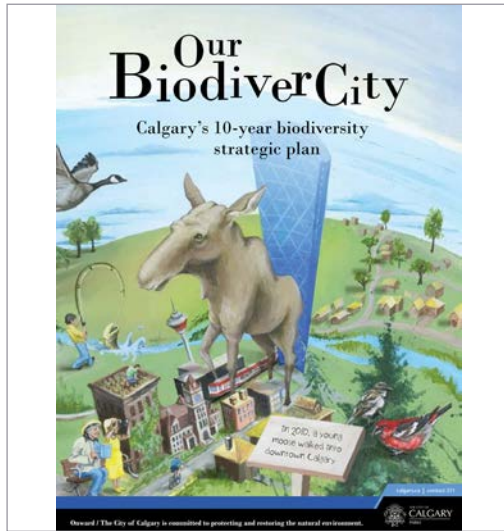
CALGARY TRANSPORTATION PLAN (CTP)



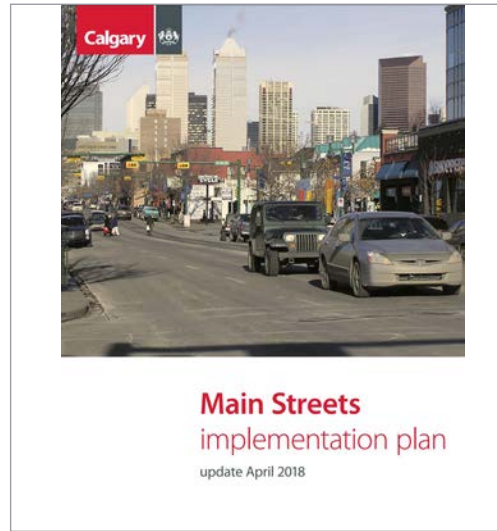
GUIDE FOR LOCAL AREA PLANNING (LAP)



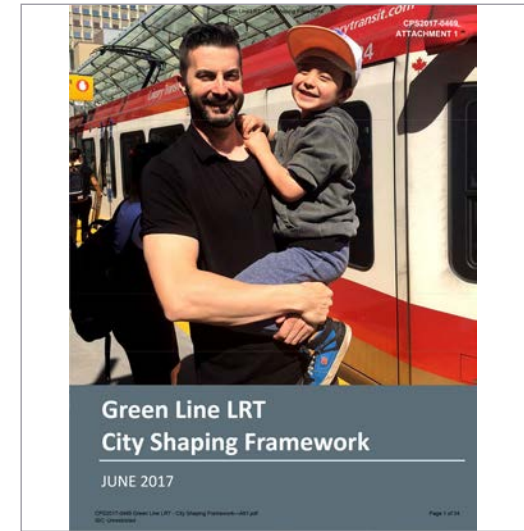
CALGARY BIODIVERSITY STRATEGIC PLAN



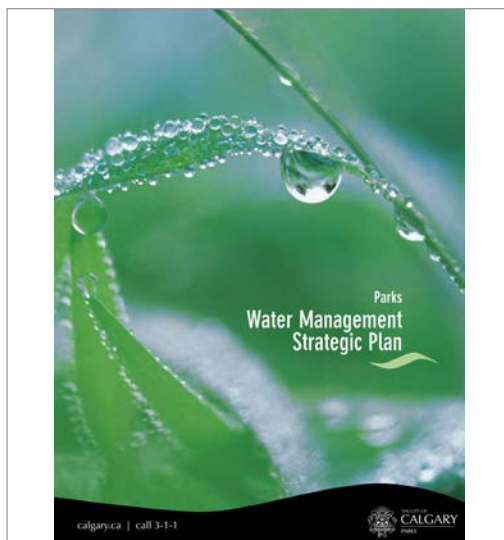
MAIN STREETS IMPLEMENTATION PLAN



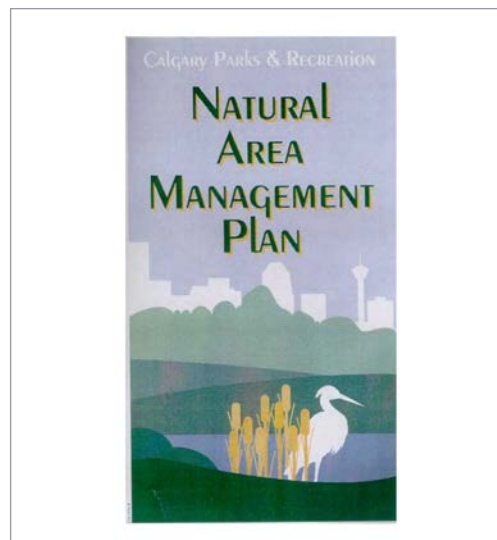
GREEN LINE LRT FRAMEWORK



WATERSHED MANAGEMENT PLAN



NATURAL AREA MANAGEMENT PLAN



CALGARY CLIMATE RESILIENCE PLAN

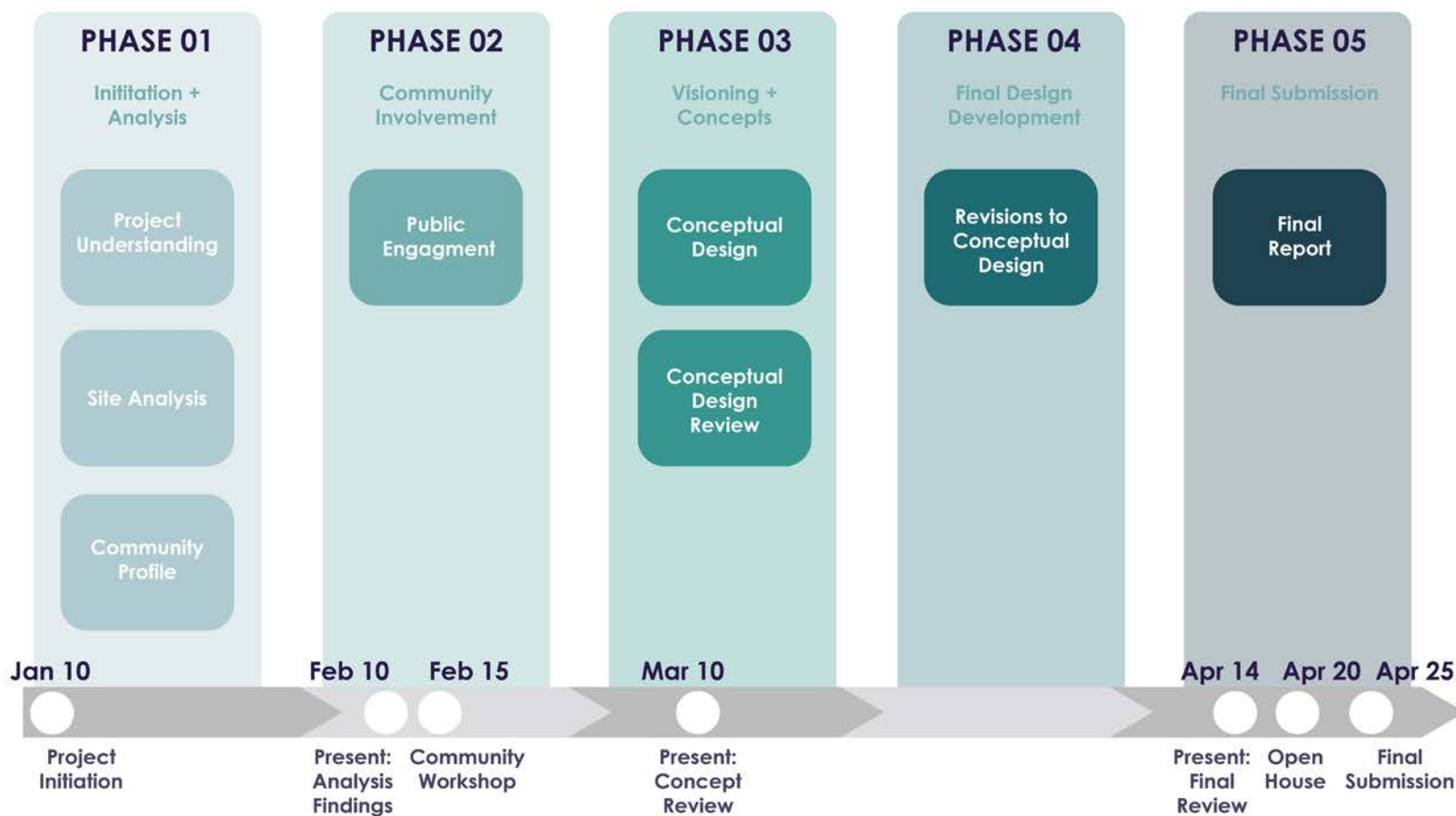


METHODOLOGY

Our process began with a thorough analysis of the Ogden community, through desktop research, various site visits, GIS analysis, and exploration of census data. Through this site analysis we identified key issues to which needed to be addressed in future plans for Ogden. Key issues were revised or solidified through feedback from the steering committee and the community following an initial online open house. With our feedback and key issues in mind we drafted community concept designs to guide the future of Ogden. The steering committee provided comments on initial concepts and these were then further developed and refined for the Final Community Concept. A final open house was held to share with the public and residents of Ogden, as well as to incorporate any final feedback into the design concepts.



PROJECT PHASING



WORK PLAN

Phase 01: Initiation + Analysis

Project Understanding

- Legal + regulatory framework
- Photo inventory
- Base mapping
- Project timeline + budget

Site Analysis

- Guided site visit
- Environmental analysis
- Land use + functional analysis
- Historic evolution + timeline
- Infrastructure + traffic analysis
- Housing + building typology
- Public realm inventory + walkability

Community Profile

- Socio-demographic analysis
- Socio-economic analysis
- Presentation

Phase 02: Community Involvement

Public Engagement

- Online or in-person workshop
- Review of findings
- Community mapping
- Opportunities + constraints
- What we heard report + open house

Phase 03: Visioning + Concepts

Conceptual Design

- Site visit
- Land use + growth
- Housing diversity
- Public realm + community
- Mobility + connectivity
- Parks, open space + natural assets
- Climate resilience
- Digital 3D model

Conceptual Design Review

- Presentation to steering committee

Phase 04: Final Design Development

Revisions to Conceptual Design

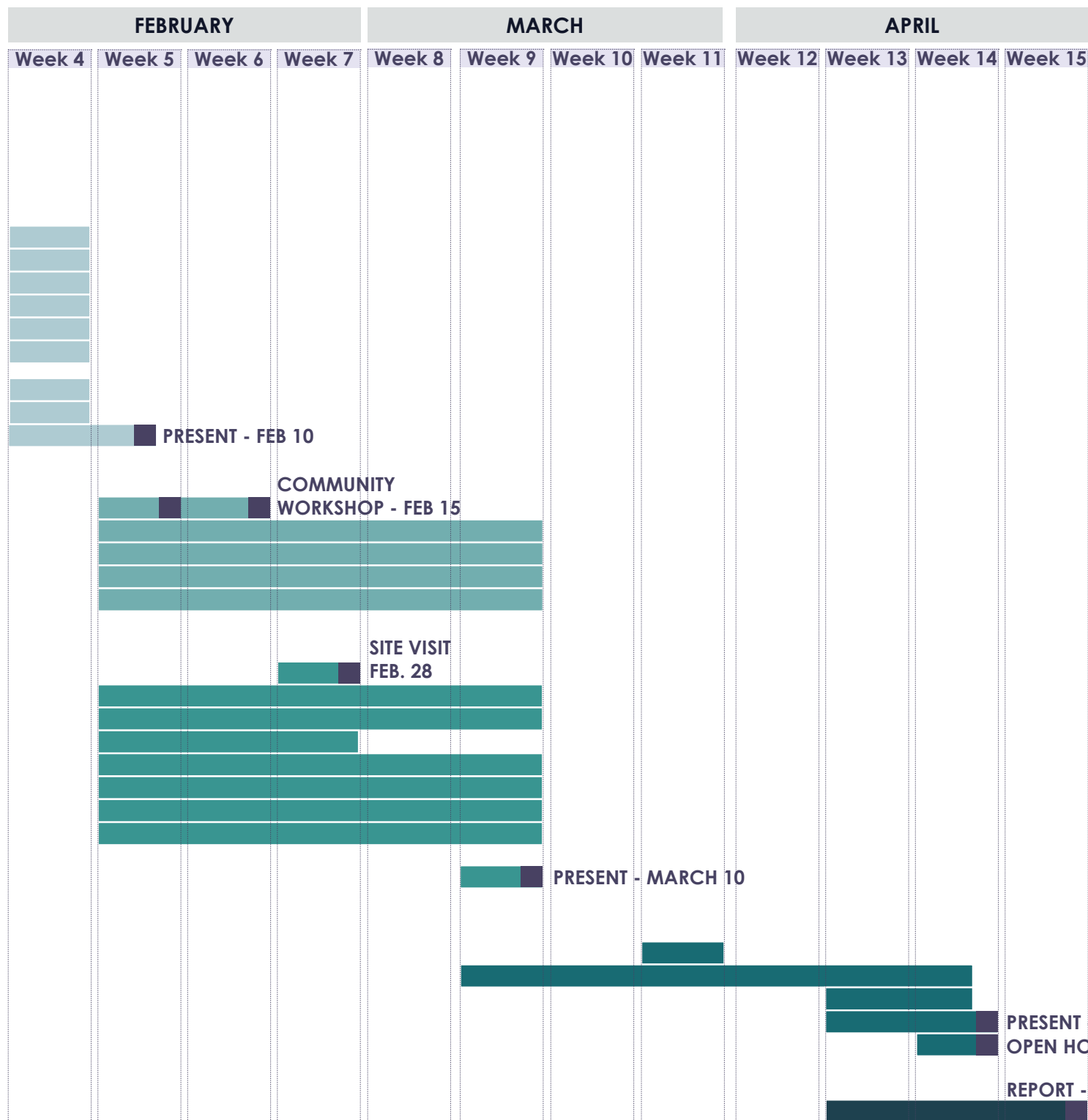
- Site visit
- Adjust + finalize design concept
- Physical model
- Final presentation
- Final open house

Phase 05: Final Submission

Final Report

- Final report + poster submission

	JANUARY		
	Week 1	Week 2	Week 3
Hailey (Jr)			
Kiran (T)			
Kiran (T)			
Megan (Sr)			
Team			
Kiran (T)			
Hailey (Jr)			
Hailey (Jr)			
Kiran (T)			
Kiran (T)			
Hailey (Jr)			
Megan (Sr)			
Hailey (Jr)			
Megan (Sr)			
Megan (Sr)			
Hailey (Jr)			
Kiran (T)			
Hailey (Jr)			
Team			
Team			
Megan (Sr)			
Megan (Sr)			
Hailey (Jr)			
Kiran (T)			
Hailey (Jr)			
Hailey (Jr)			
Kiran (T)			
Megan (Sr)			
Hailey (Jr)			
Megan (Sr)			
Kiran (T)			
Megan (Sr)			
Hailey (Jr)			
Megan (Sr)			



SITE ANALYSIS



CULTURAL LANDSCAPES



NATURAL SYSTEMS



BUILT FORM



INFRASTRUCTURE

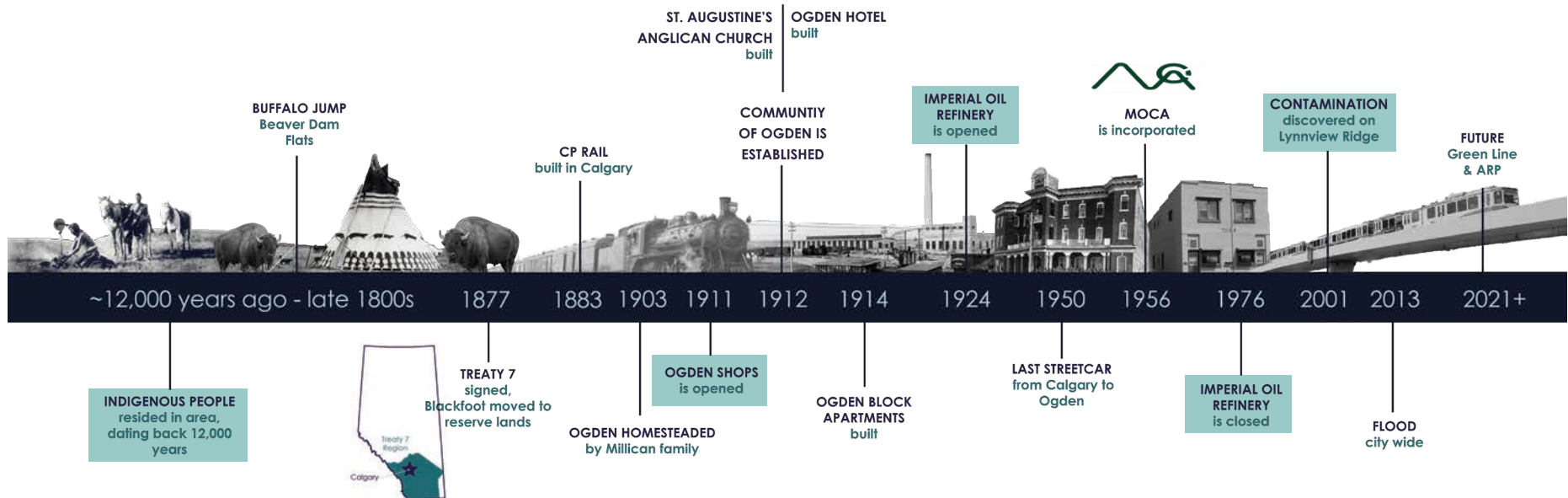
***“Future vision is what sets planners
apart from other professionals.
We are the stewards of what will be.”***

-Teresa Goldstein, 2021

CULTURAL LANDSCAPES

Prior to colonization, the area of Ogden was utilized by the Blackfoot until the signing of Treaty 7 in 1877. CP Rail was established in Calgary in 1883, and Ogden Shops was opened as the only locomotive repair facility between Vancouver and Winnipeg. North of Ogden, in the present day refinery park, Imperial Oil operated an oil refinery from 1924 to 1976. The residential development of Lynnvew Ridge was built on the former refinery site, only to be demolished years later after the discovery of soil contamination. The future of Ogden includes the arrival of the proposed Green Line LRT to the community.

HISTORICAL TIMELINE



CULTURAL LANDSCAPES

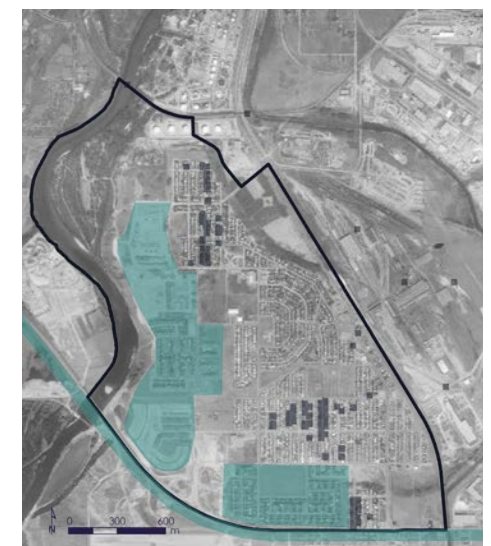
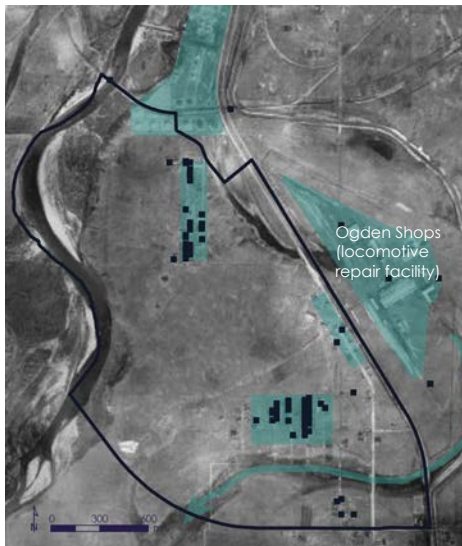
■ Historic structures

1924

1948

1966

1975



The community was homesteaded in the early 1900s and people were drawn to the area having Ogden Shops CP Rail employment nearby. Some of the historic buildings found in the community were constructed in the early 1900s and many have been identified as potential heritage sites.

DEVELOPMENT HISTORY

1982



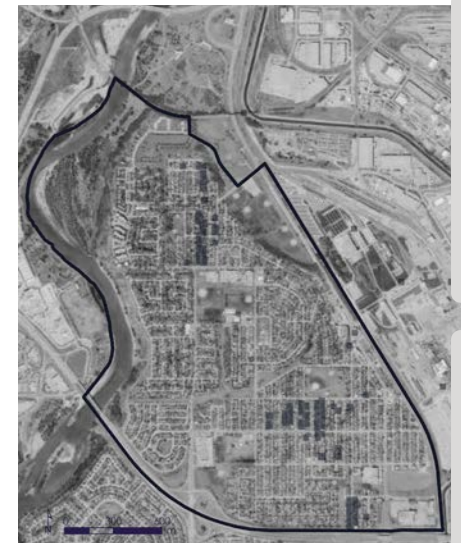
1999



2008



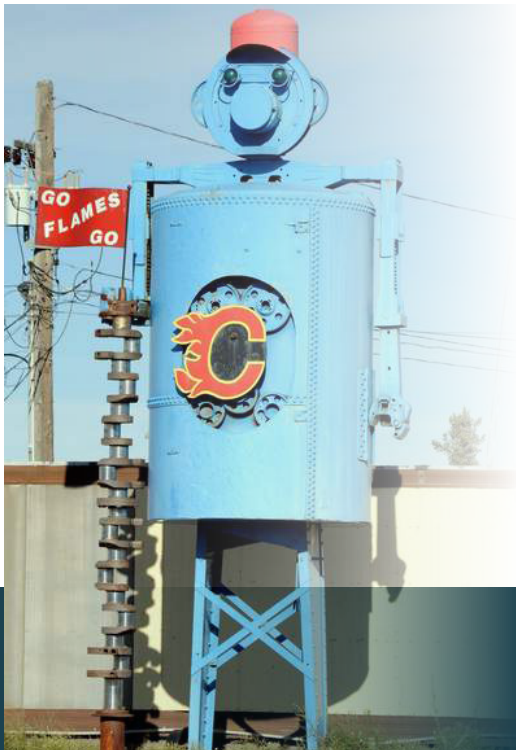
2021



Residential development continued to increase and by 1999 Ogden was nearly built out. A hydroponic greenhouse was built in the late 90s on the former refinery site and this triggered the discovery of soil contamination as the plants were unable to grow. Following this discovery, most of the community of Lynnview Ridge was demolished as it was deemed unsafe for residents to live in the contaminated area.

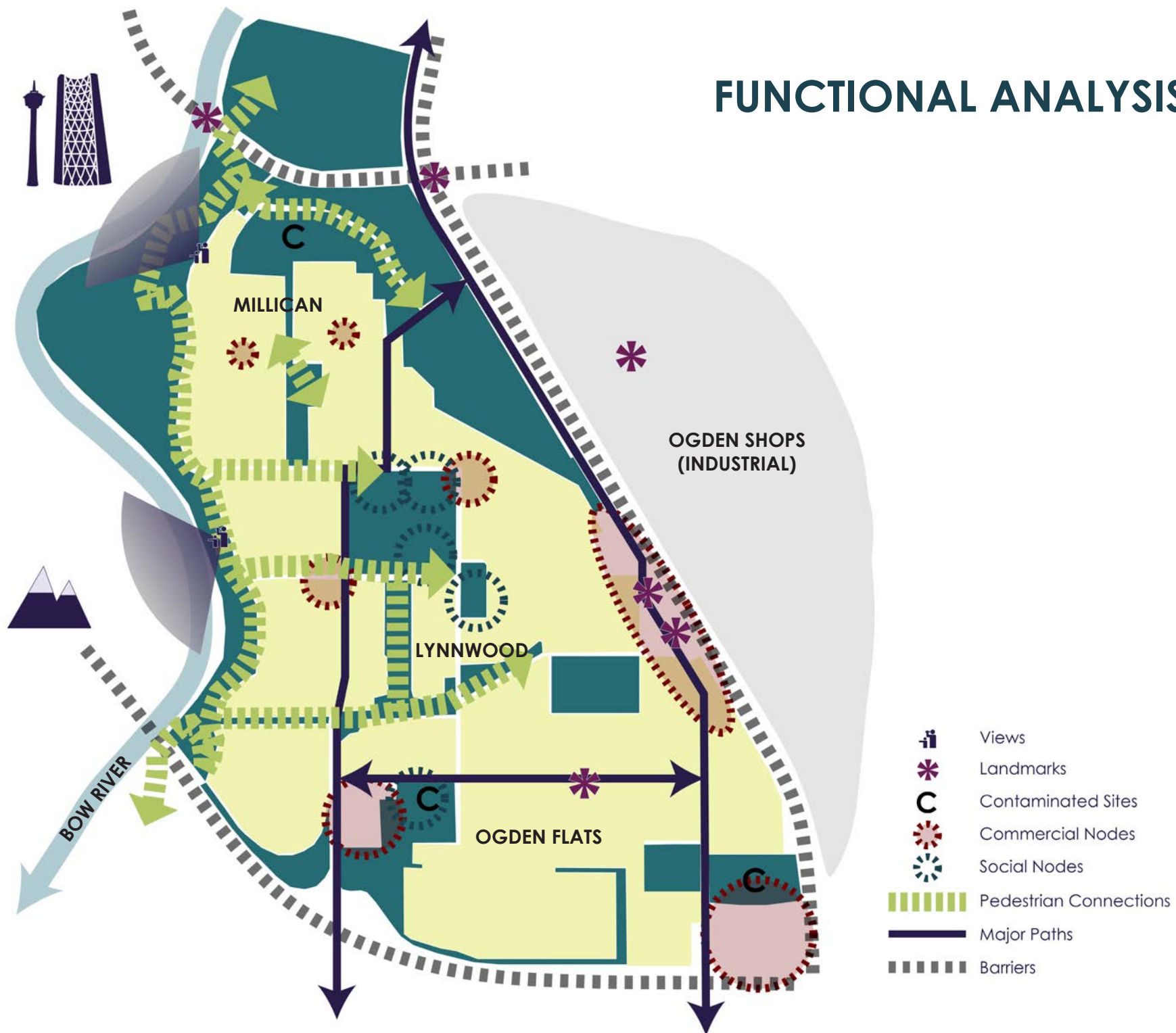
CULTURAL LANDSCAPES

The western edge of Ogden provides spectacular views of the mountains and downtown, and connects to regional trail networks via the Bow River and Trans Canada Trails. Small commercial nodes are scattered throughout a sea of low density residential buildings and Ogden Road offers a commercial main street. Major linear paths, such as Glenmore Trail and the Bow River, isolate the community creating a car dependent island in the city. Connectivity to Ogden Shops is minimal as there is currently only one entrance point off Ogden Road.



Oogie is a beloved cultural piece for Ogdenites that once greeted residents and visitors along 69th Ave SE.

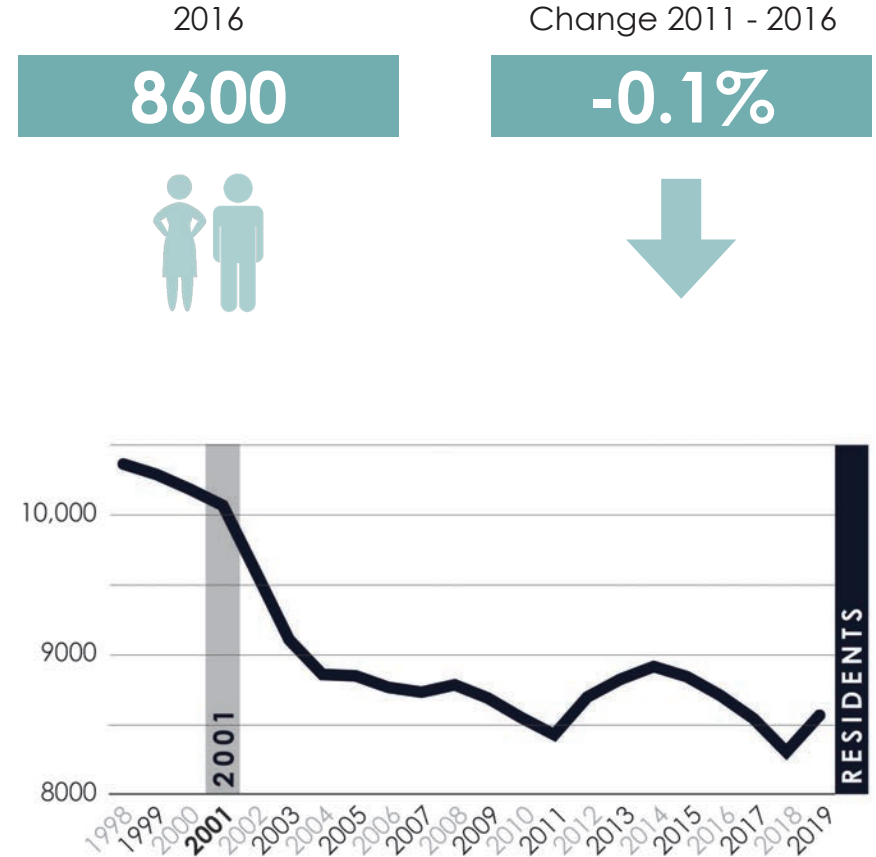
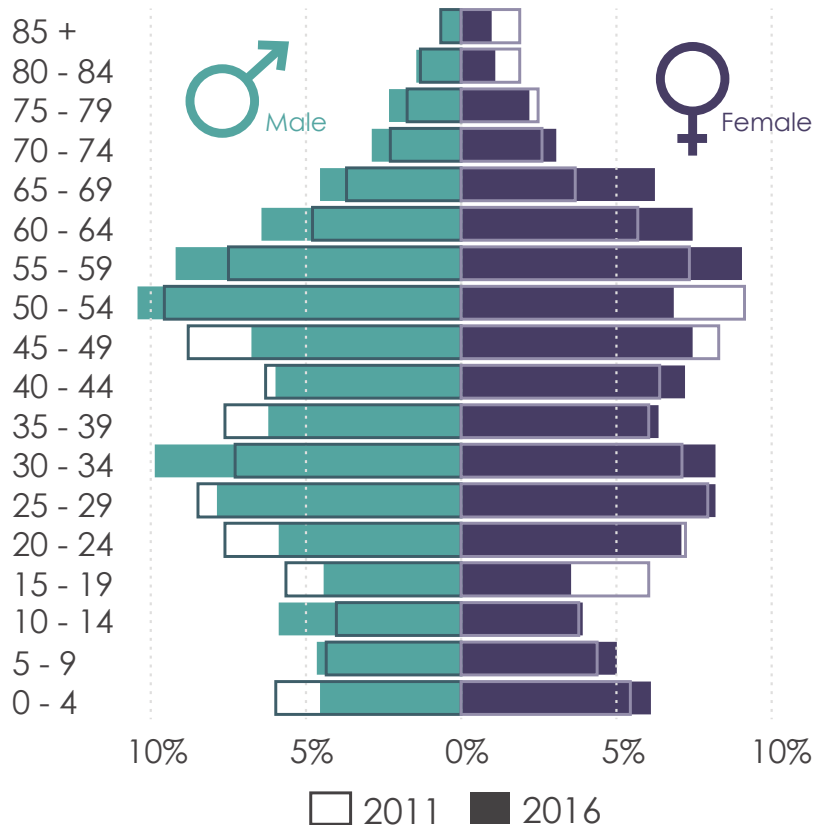
FUNCTIONAL ANALYSIS



CULTURAL LANDSCAPES

POPULATION

Ogden's population experienced a sharp decline in 2001 after Lynnvview Ridge was forced to evacuate due to discovery of contamination. The population has stagnated since 2011, with no influx of new residents.



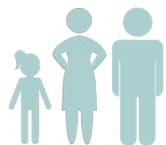
COMMUNITY PROFILE

FAMILY STATUS

Most residents of Ogden have children though there is concern around a loss of families and resultant school closures. The average family size in Ogden is 2.3, slightly below Calgary's average.

Census families with
children

58%



Average Age of
Community

40



FAMILY SIZE

Ogden

2.3



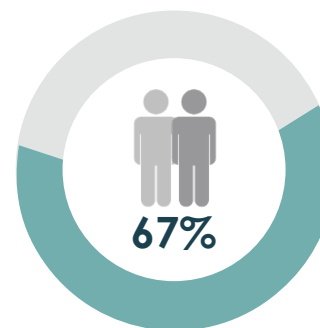
Calgary

2.6

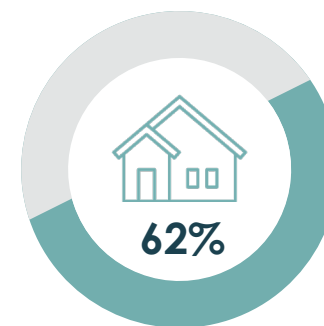


HOUSING TENURE + DISTRIBUTION

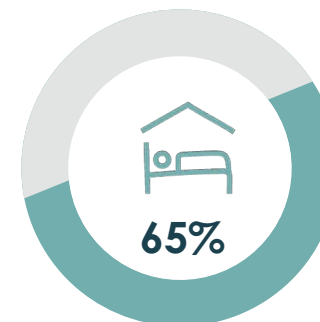
1 or 2 person
households



Ogden Home
Ownership



Dwellings with
3 or more bed-
rooms



CULTURAL LANDSCAPES



REAL ESTATE

Current average list price

\$382,782.00

Median sale price 2021

\$327,535.42



AFFORDABILITY

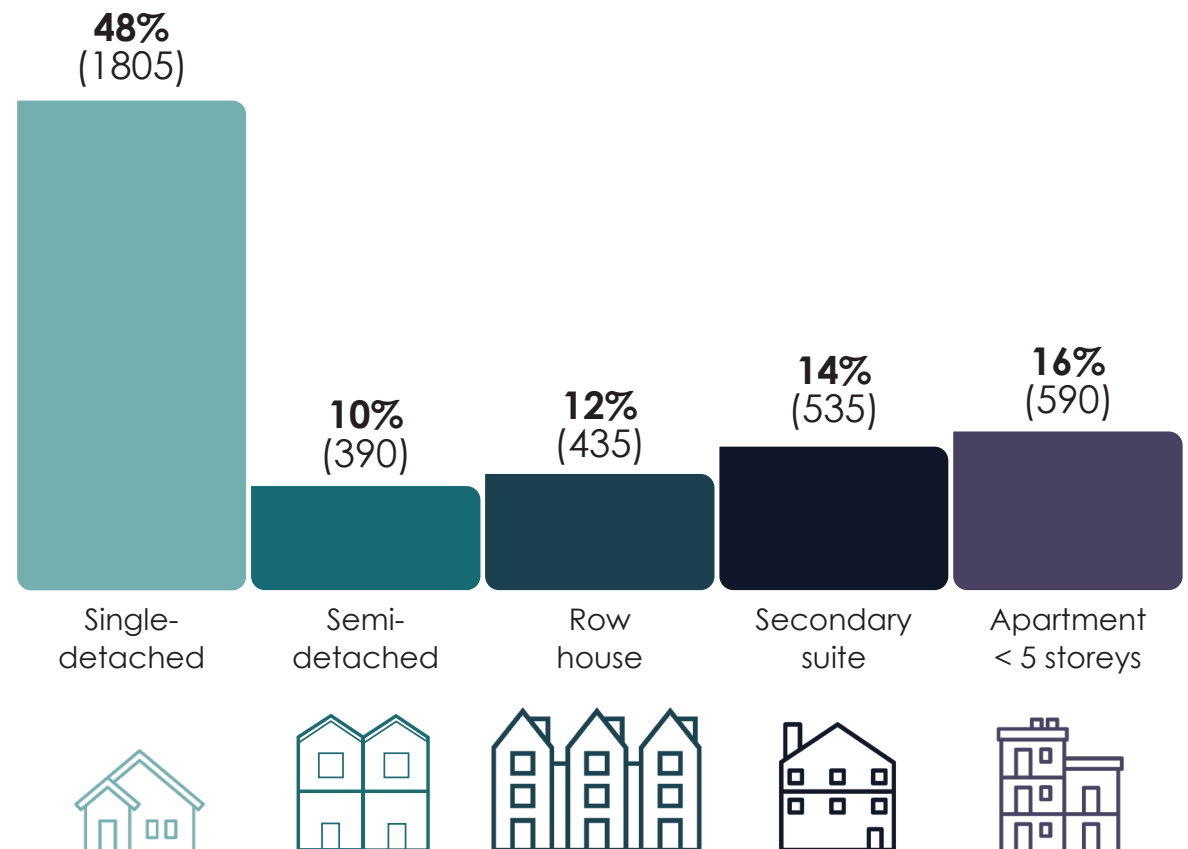
Ogden **26%**

Calgary **22%**

**Spend >30% of income
on shelter costs**

HOUSING TYPES

Ogden has predominantly an older housing stock of single detached homes and a lack of housing diversity in most areas of the community. Data shows there is a gap in affordable rental accommodations, especially for seniors.



COMMUNITY PROFILE

EMPLOYMENT
TOP 3 INDUSTRIES

MEDIAN HOUSEHOLD INCOME

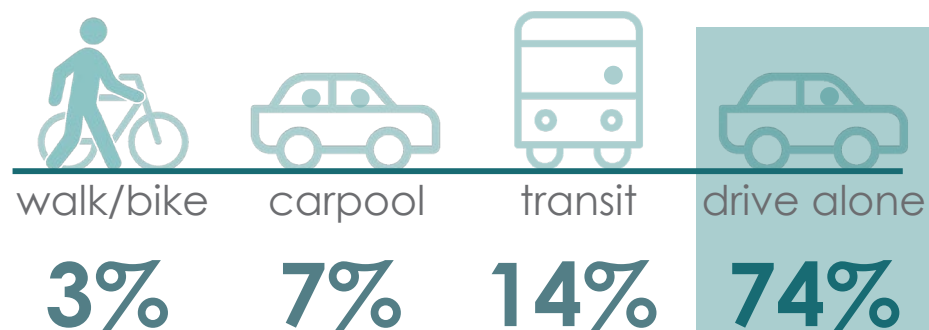
OGDEN

~ \$73,000

CALGARY

~ \$98,000

MOBILITY TYPE

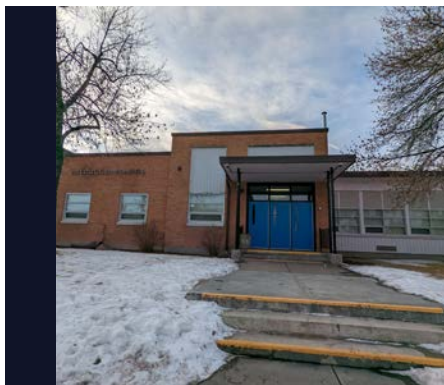


Ogden is a car-oriented community by necessity, as most residents must leave Ogden for work.

CULTURAL LANDSCAPES

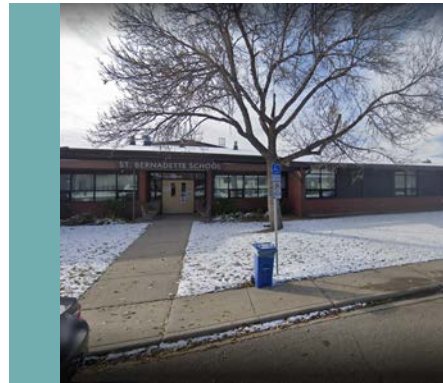
SCHOOL ENROLLMENT

% CHANGE OF ENROLLMENT (2016 - 2021)



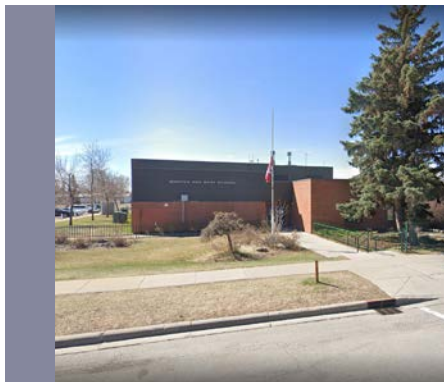
SHERWOOD | 4 - 9
2022 Enrollment: 377

↓ 10%



ST. BERNADETTE | K - 6
2022 Enrollment: 100

↓ 35%



BANTING & BEST | K - 3
2022 Enrollment: 161

↓ 23%



ALMADINA CHARTER | 5 - 9
2022 Enrollment: 695

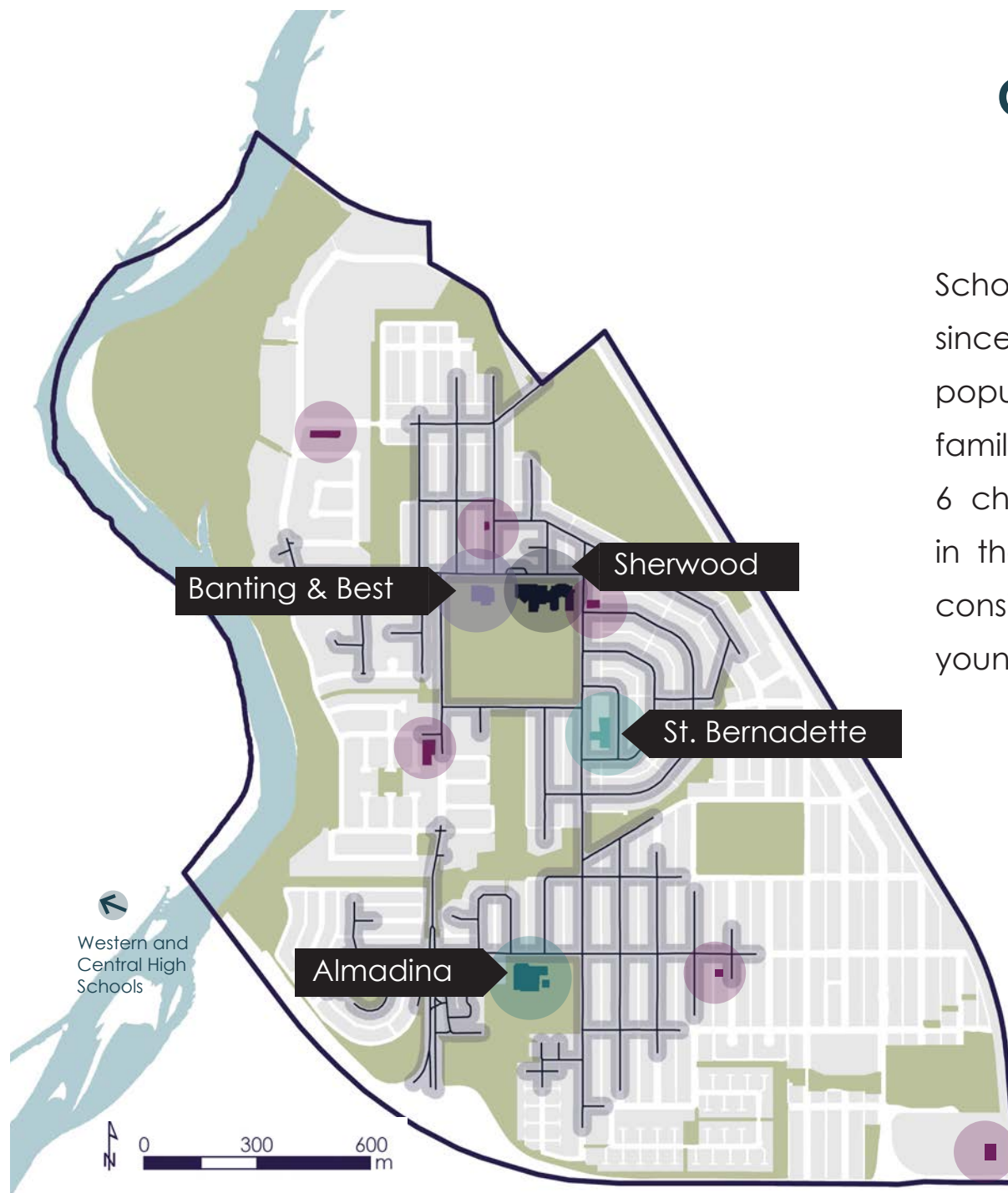
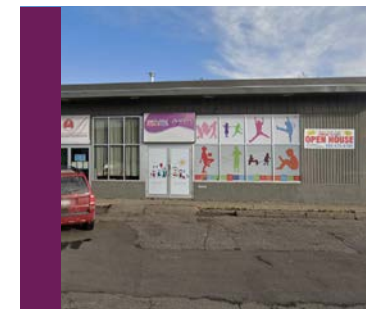
↑ 7%

COMMUNITY PROFILE

School enrollment has declined since 2016, likely due to a stagnated population and lack of young families. One youth facility and 6 child care facilities are present in the community, which is a key consideration for attracting new young families.

CHILD CARE FACILITIES/ YOUTH FACILITIES

6 TOTAL



NATURAL SYSTEMS

***“First life, then spaces, then buildings –
the other way around never works.”***

-Jan Gehl



NATURAL SYSTEMS

Ogden has ample greenspace, with over 31% of the land being open space and a diversity of park types, from Beaver Dam Flats natural area, to Pop Davies Park Athletic Park. Many of the large open spaces lack programming for a diversity of activities for all age groups. Remediation efforts have been made for the Refinery Park through clay capping, and the city has future concepts for this area.



NEIGHBOURHOOD PARK

Public manicured greenspace accessible to the community for leisurely activities. Some locations act solely as open grass field.

Common Structures: bench, playground



NATURAL AREA

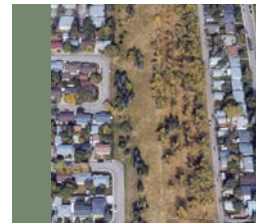
Naturalized greenspace with trails for public use. An endangered bumble bee (*Bombus bohemicus*) was discovered at Beaver Dam Flats in 2020.



PLAYING FIELD

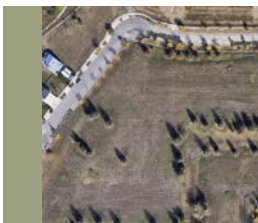
Greenspace with public sports facilities on site.

Common facilities: Soccer field, baseball diamond, tennis court



GREEN CORRIDORS

A long linear shaped park that often acts as a corridor connecting other green areas.

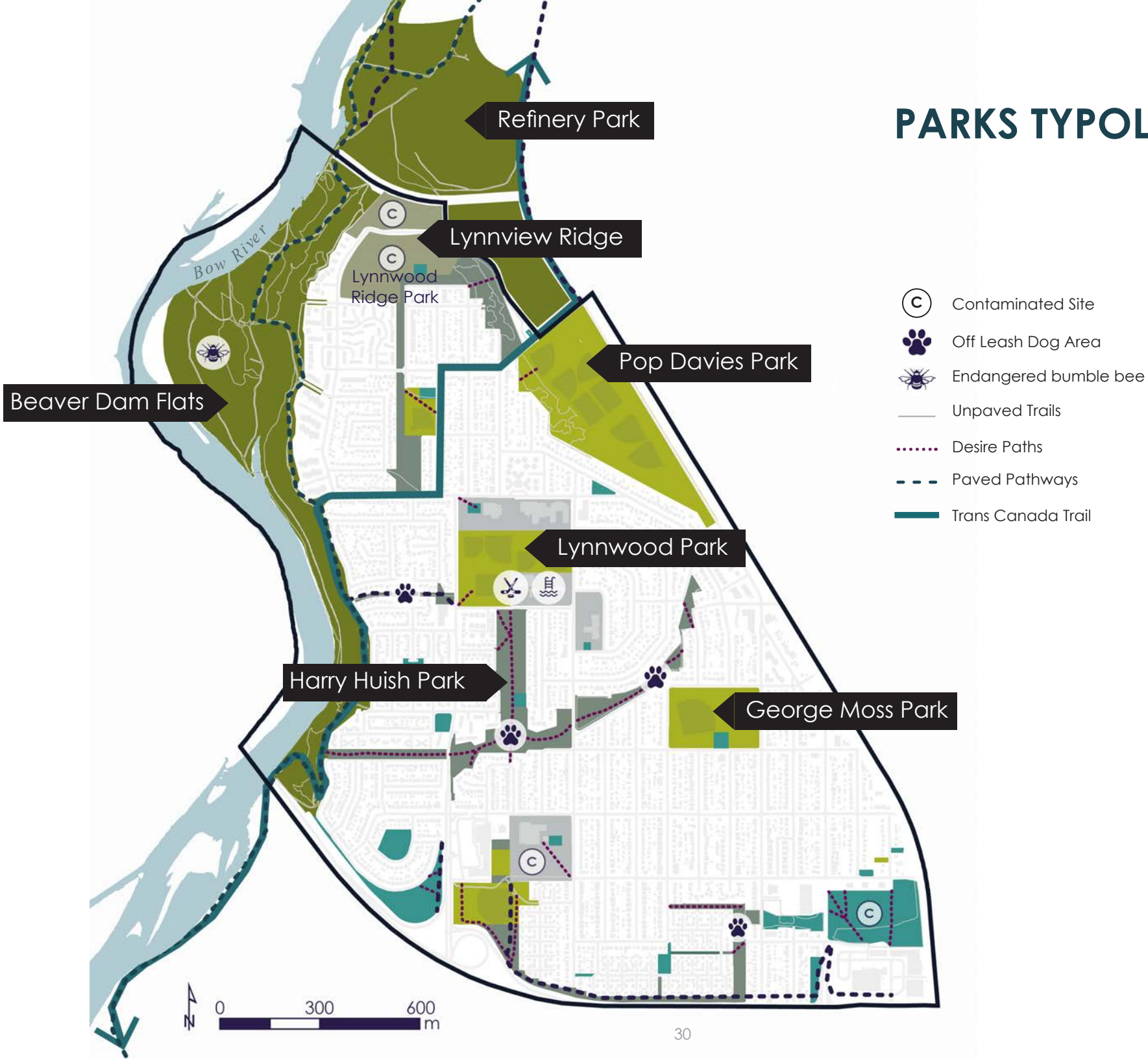


CITY LEASED LAND

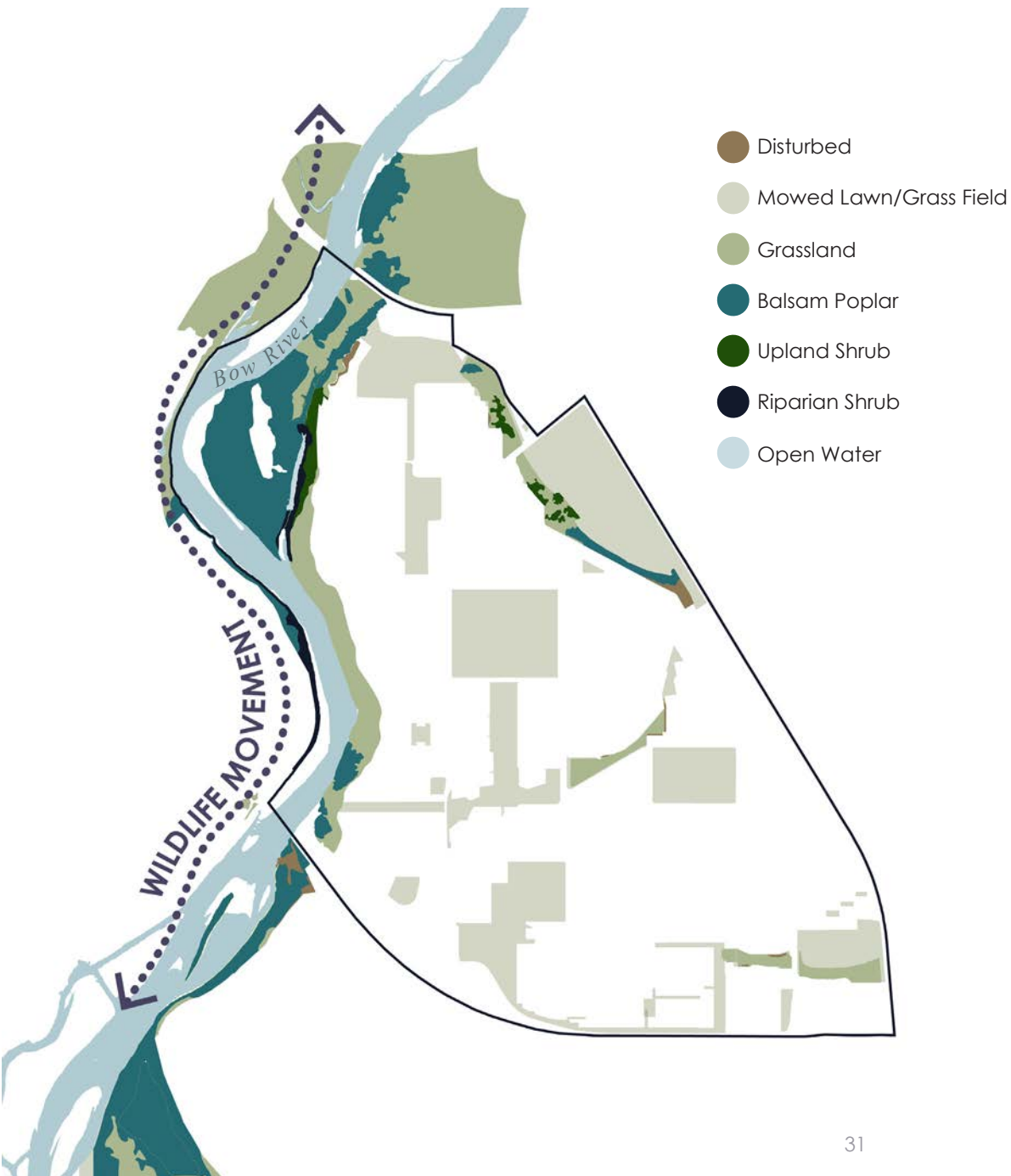
Formerly contaminated land that is limited for development.

Desire paths through many green spaces show a need for more formal pedestrian connections across the community.

PARKS TYPOLOGY



NATURAL SYSTEMS



HABITAT TYPOLOGY



Balsam Poplar
(Flood Tolerant)



Riparian Shrubs



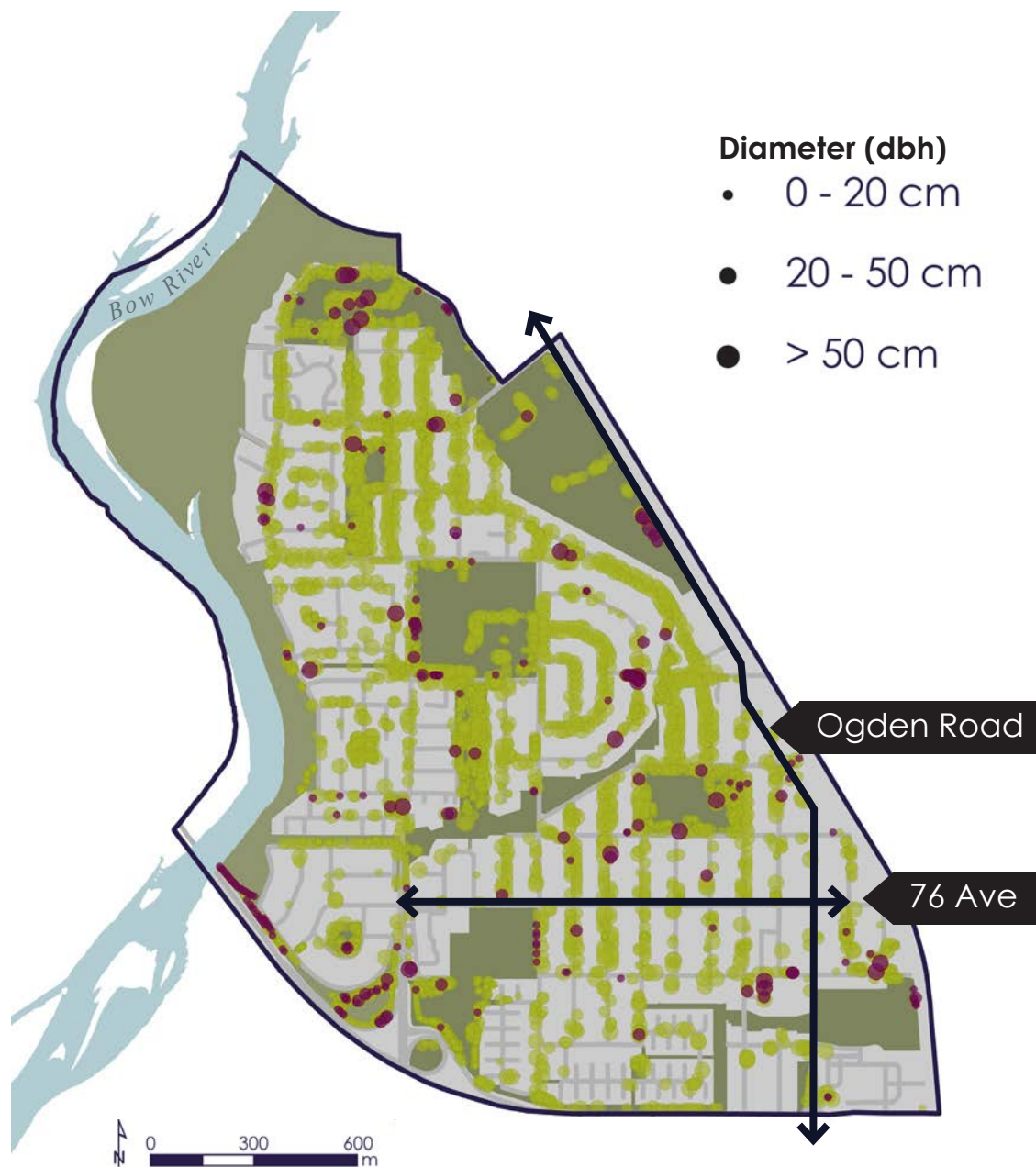
Upland Shrubs



Grassland
(Drought Tolerant)

URBAN FOREST

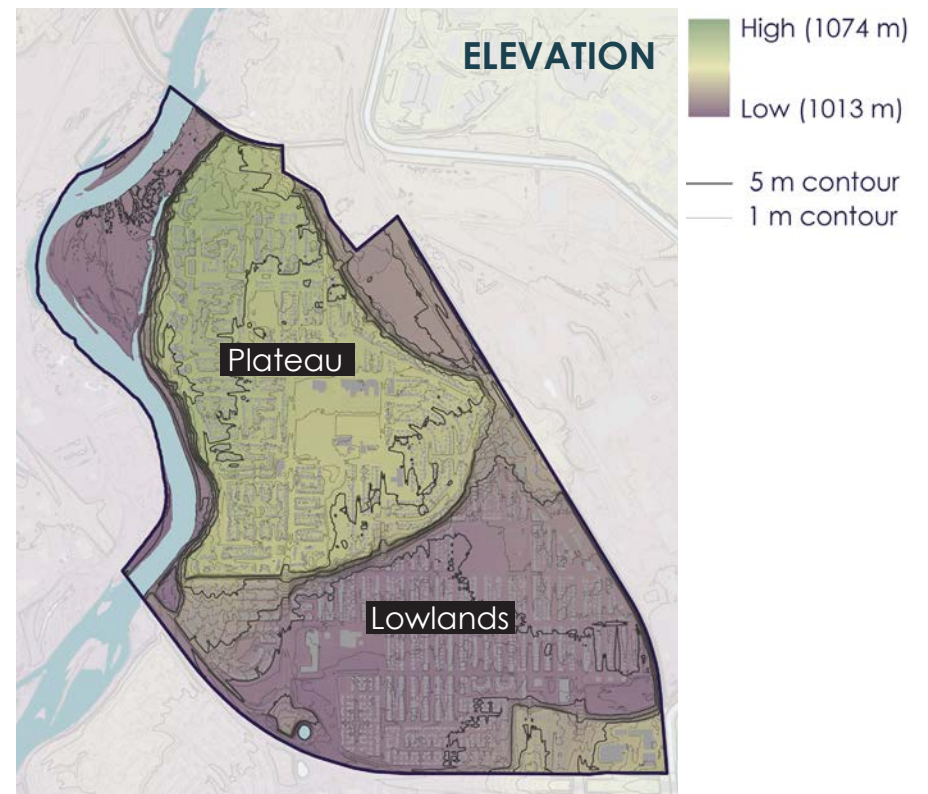
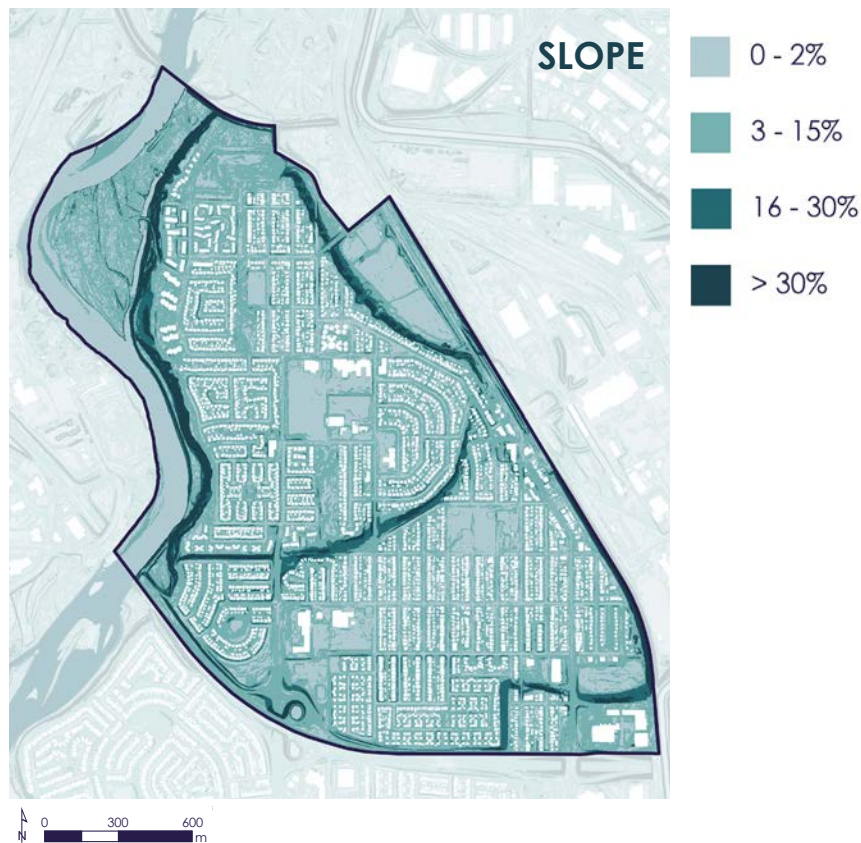
Ogden has good urban tree canopy coverage at 14.6%, comparable to Calgary's 16% goal, though tree canopy is somewhat lacking in the southeast and southwest neighbourhoods, as well as along Ogden road. Redevelopment can pose a threat to the tree canopy and efforts to protect community tree cover should be made.



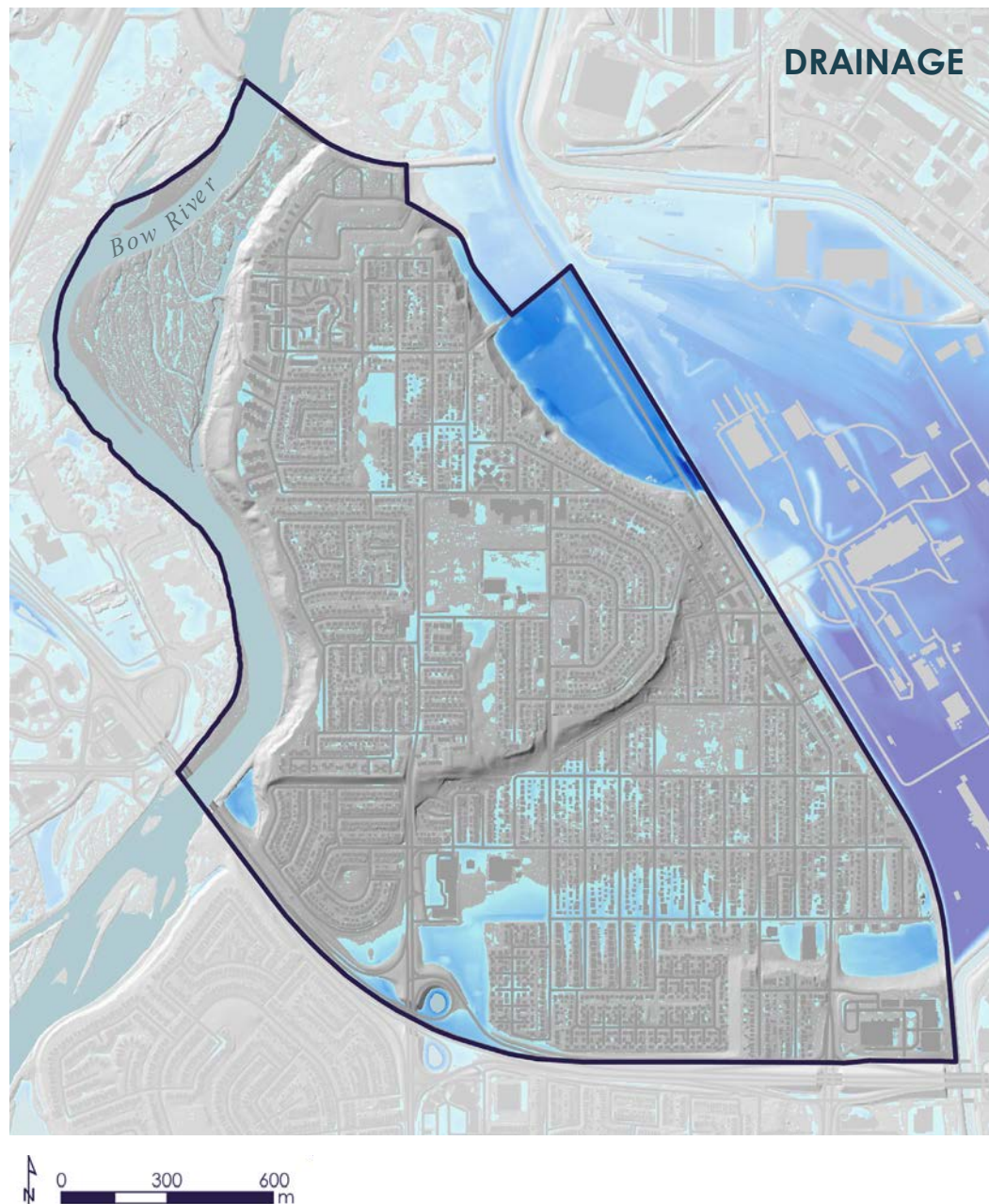
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NATURAL SYSTEMS

The Ogden landscape consists of a plateau in the north which sits above the lowland “Ogden Flats” to the south. The plateau is surrounded by slopes exceeding 16%, defining some of the road layouts. There is a lack of natural streams in the area, suggesting water movement is largely through groundwater.



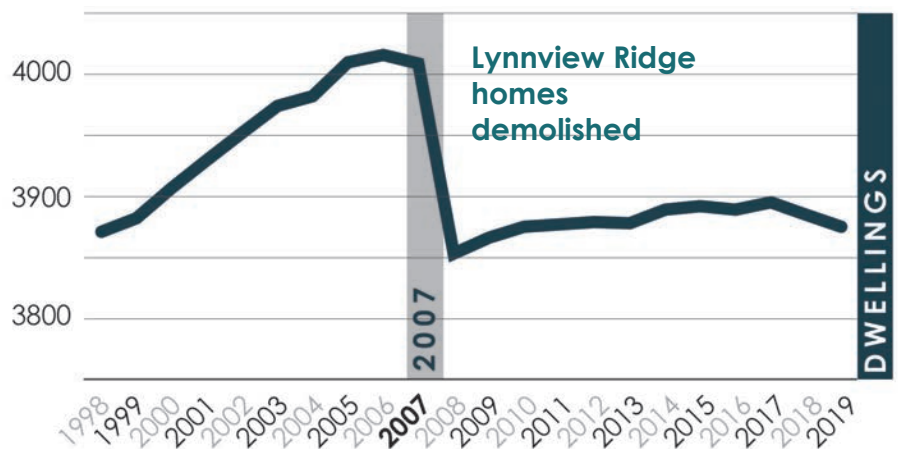
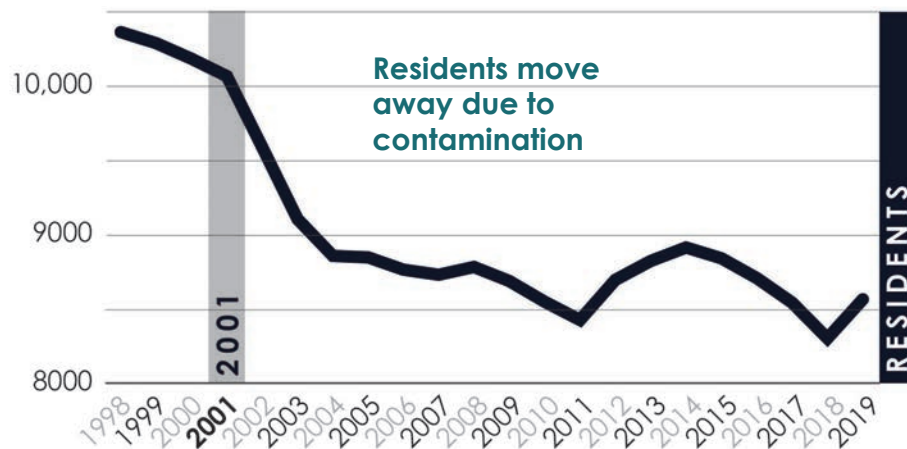
SLOPE + TERRAIN



Lack of streams connecting to the Bow River suggests drainage is primarily through groundwater infiltration. Local depressions indicate where water tends to pool on the landscape.

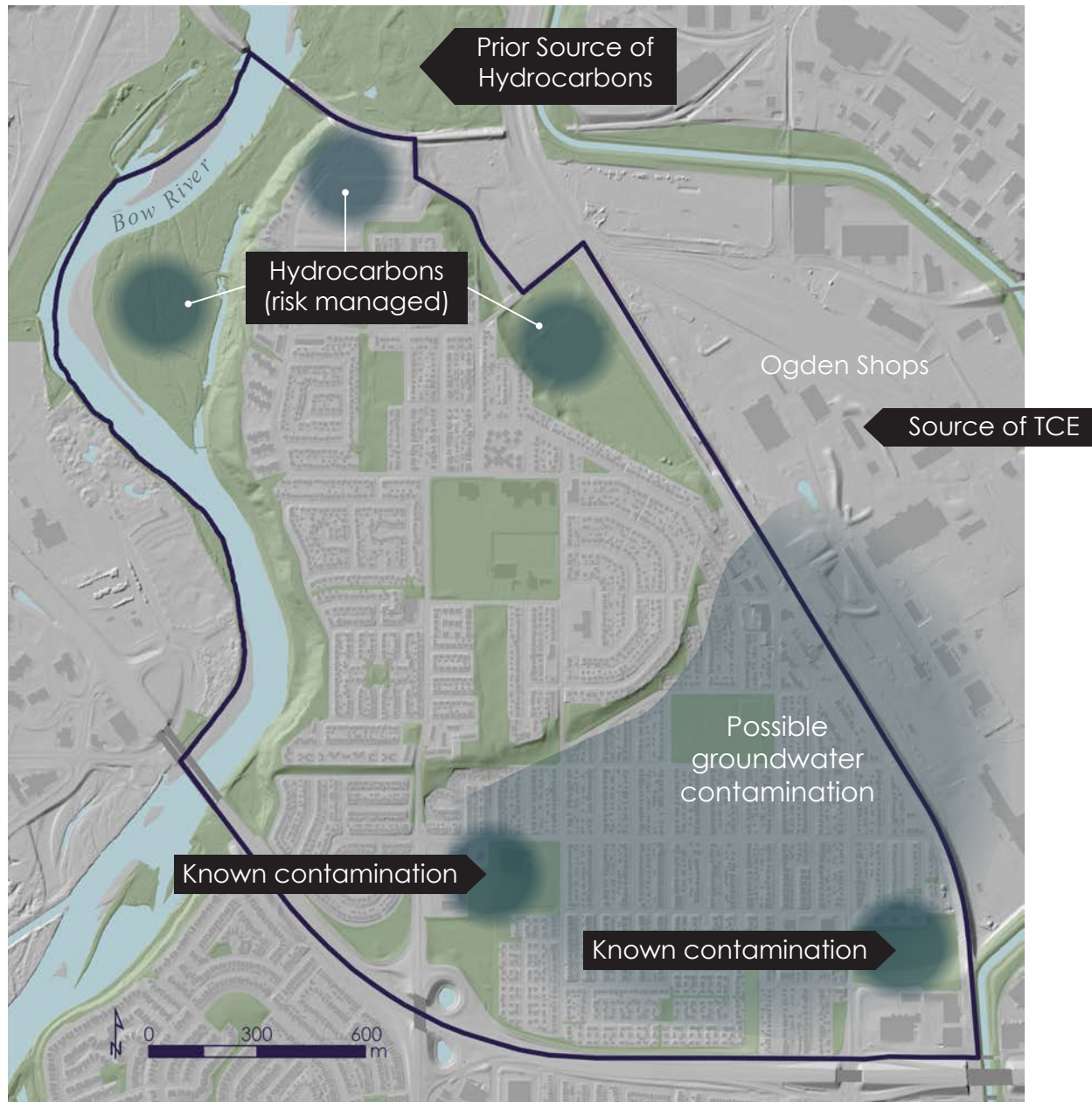
NATURAL SYSTEMS

Ogden has two known sources of contamination: hydrocarbons from the Imperial Oil refinery which led to a buyout and the subsequent demolition of the community of Lynnview Ridge, and trichloroethylene or TCE, an industrial degreaser and carcinogen used by CPR, contaminating the groundwater. There are two known sites affected by TCE, but the entire low lying area in the south of Ogden is likely affected. TCE can be managed with appropriate measures, but does pose a challenge. Bioremediation may be possible, but will require further study for this context.



There was an exodus from the community following discovery of hydrocarbon contamination in 2001 and the population has not recovered after the loss of housing stock due to demolition.

SITE CONTAMINATION



NATURAL SYSTEMS

FLUVIAL PROCESSES

The developed area of Ogden is not impacted directly by floods due to the plateau acting as a natural barrier. However, natural fluvial processes will continue to alter the river shape over time through erosion and deposition, affecting the natural area near Beaver Dam Flats available to the community. The isolation of Ogden was an issue during the 2013 flood as 2 of 3 access points were under water and the community was largely cut off from the city.



1924

Rivers slowly become more meandering over time.



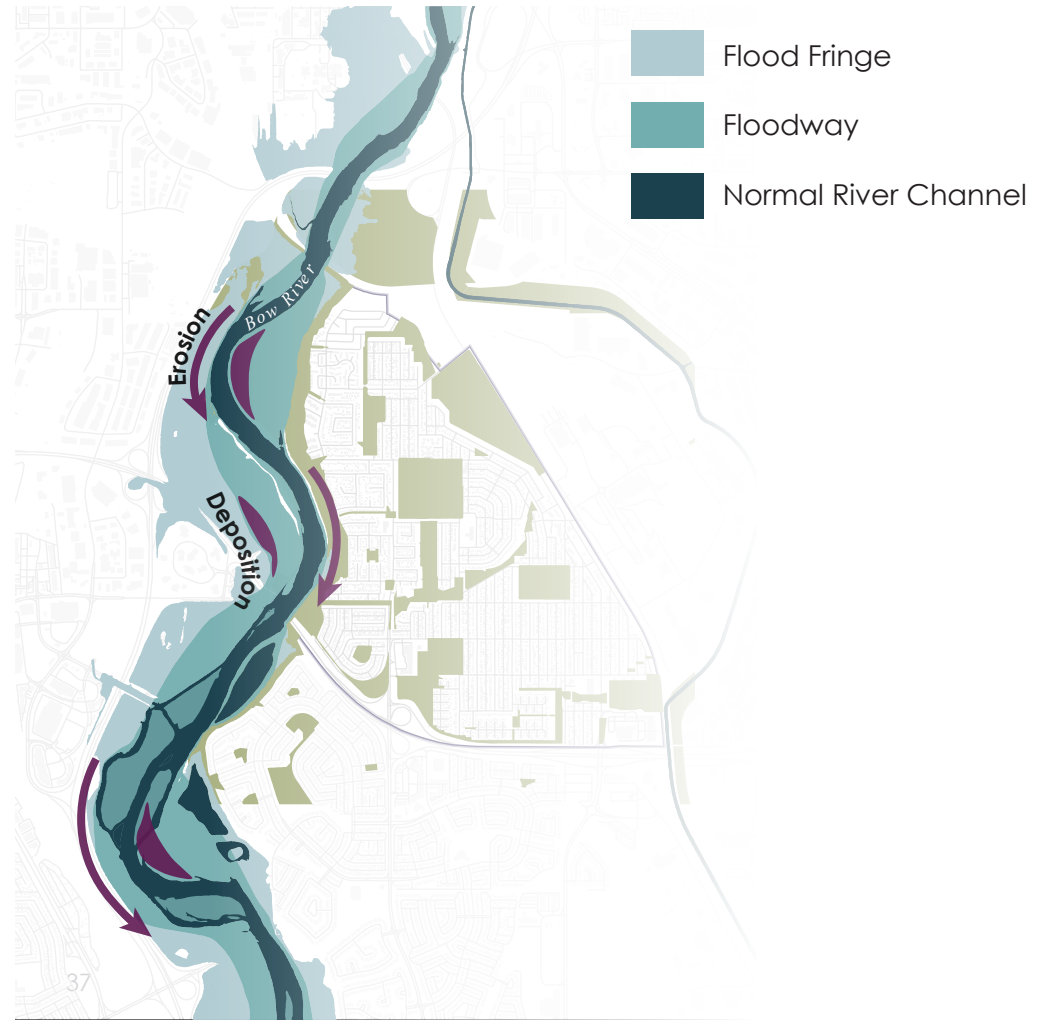
1953

Sediment is deposited along the slower moving edges, and eroded on outer edges due to greater flow velocity.



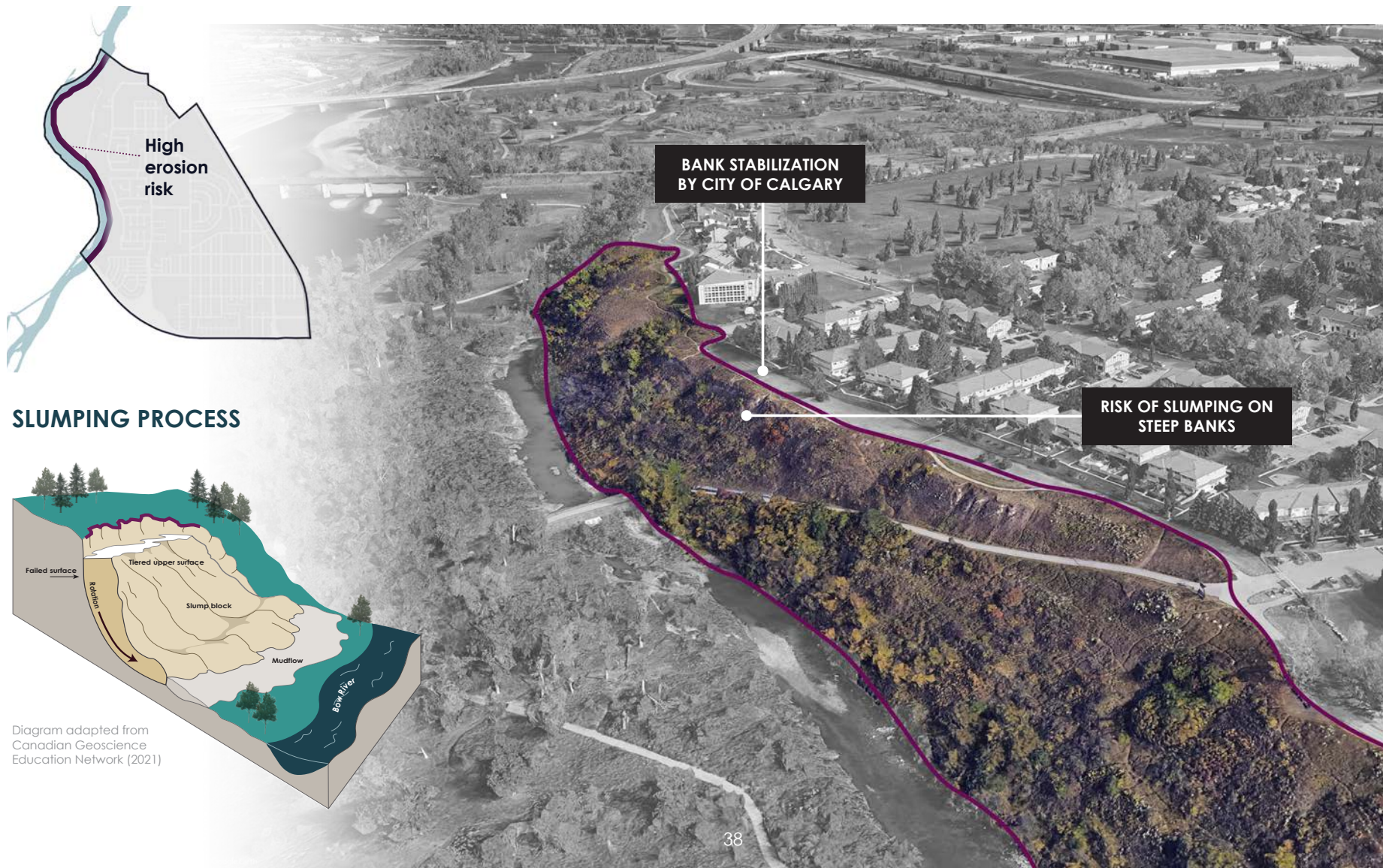
2013

Following the 2013 flood, erosion and deposition is evident due to fast moving currents.



EROSION






The western edge of the plateau is at high risk of erosion due to natural and anthropogenic forces. The fluvial processes combined with slumping, pose no immediate risks, though may have a long term impact on the western edge and limit development.



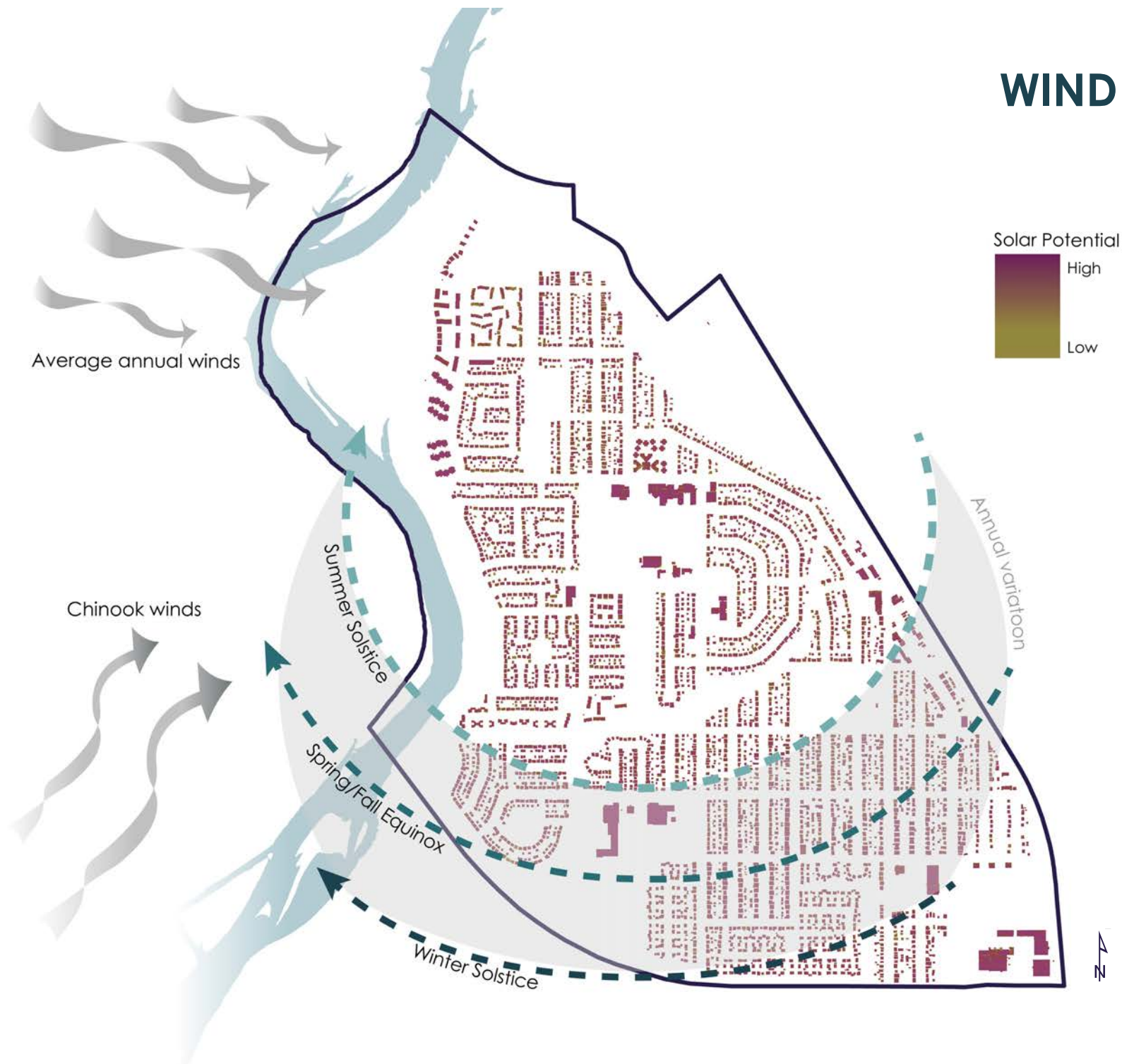
NATURAL SYSTEMS

CLIMATE CHANGE

Much like the rest of Calgary, Ogden has high solar potential, with harsh western cross winds in the winter season. Climate change projections could be planned for within the urban environment through resilient design strategies. On average, Calgary is expected to experience more extreme heat, prolonged drought conditions, and severe storms in the coming decades, which can be strategically planned for at the community scale through urban design interventions.

	 DAYLIGHT HOURS	 AVERAGE PRECIPITATION	 AVERAGE TEMPERATURE
Summer	16 h	66.7mm	15°C
Equinox	12 h	30 mm	4°C
Winter	8 h	16.7 mm	-8.3°C
Climate Change Projections	N/A		

WIND + SOLAR



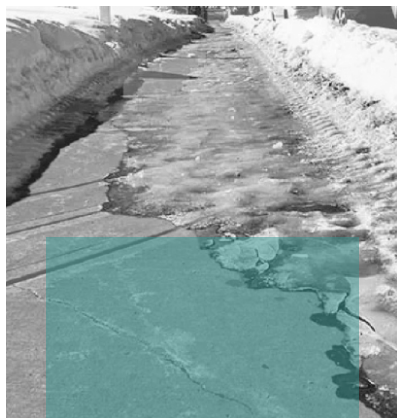
SHADOW STUDY

A map of the City of Seattle, Washington, showing the city's outline and major water bodies. A purple square highlights the location of the proposed project area in the northwestern part of the city, near the waterfront.



CONSIDERATIONS FOR WINTER CITIES

North facing sidewalks are likely to experience ice build up, presenting a safety hazard. Drainage issues in Ogden are evident where water collects and freezes in some areas, creating icy patches which has affected mail access in some areas of the community. Windrows are a common occurrence across the city, and harsh cross winds are considerations to be addressed moving forward to create a positive pedestrian experience.



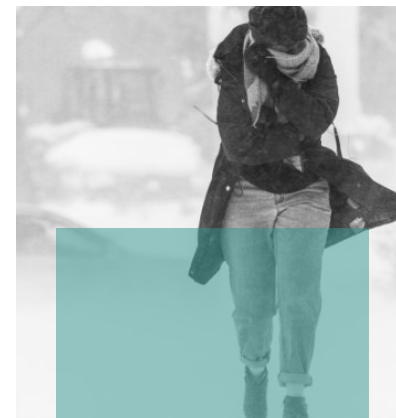
**SAFETY
HAZARDS +
LIGHTING**



**MAIL
ACCESS**



WINDROWS



**WINTER
WIND**

BUILT FORM

MASSING

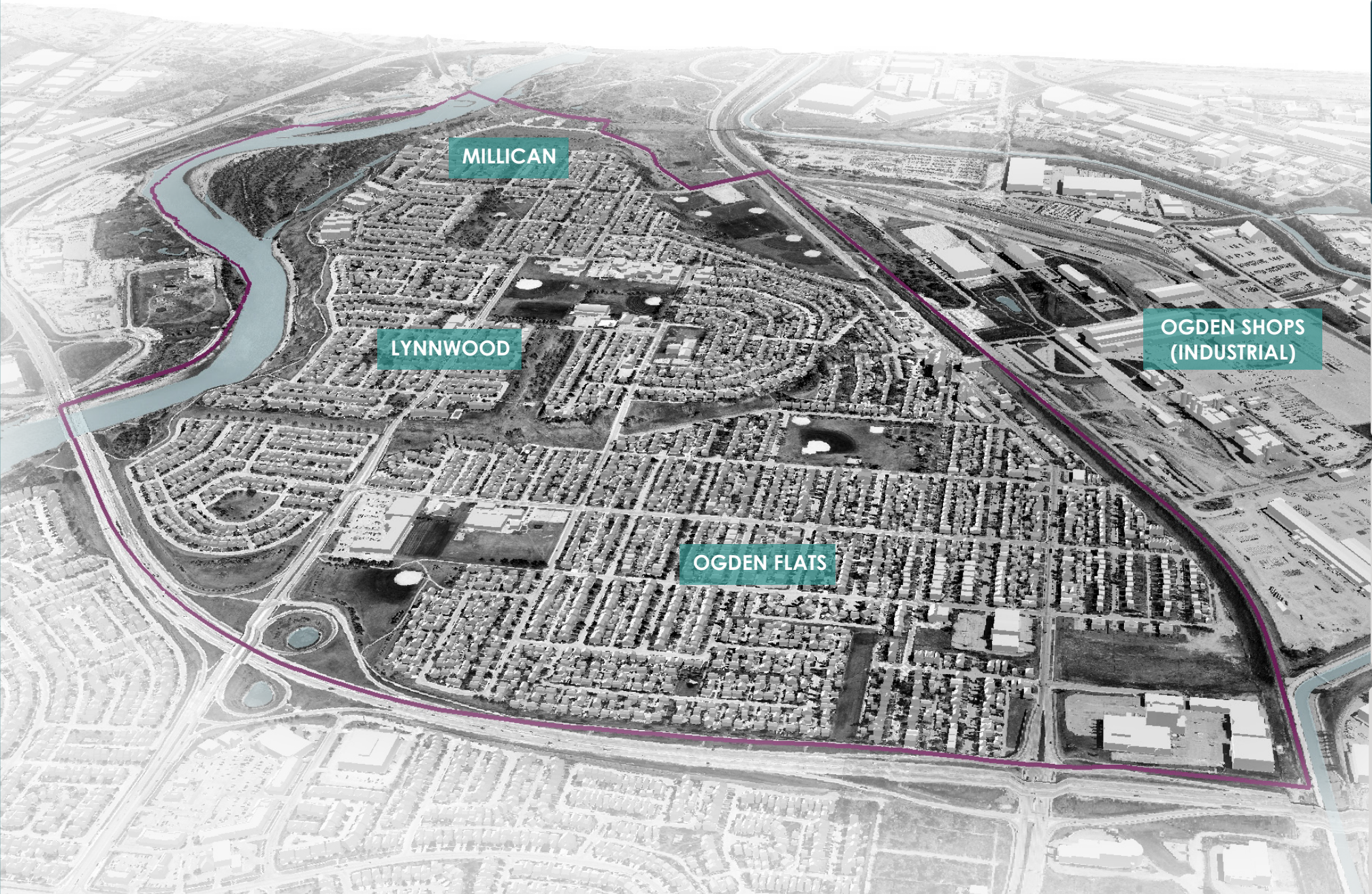
PROJECT
INTRODUCTION

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PRINCIPLES

DESIGN
INTERVENTIONS



MILlicAN

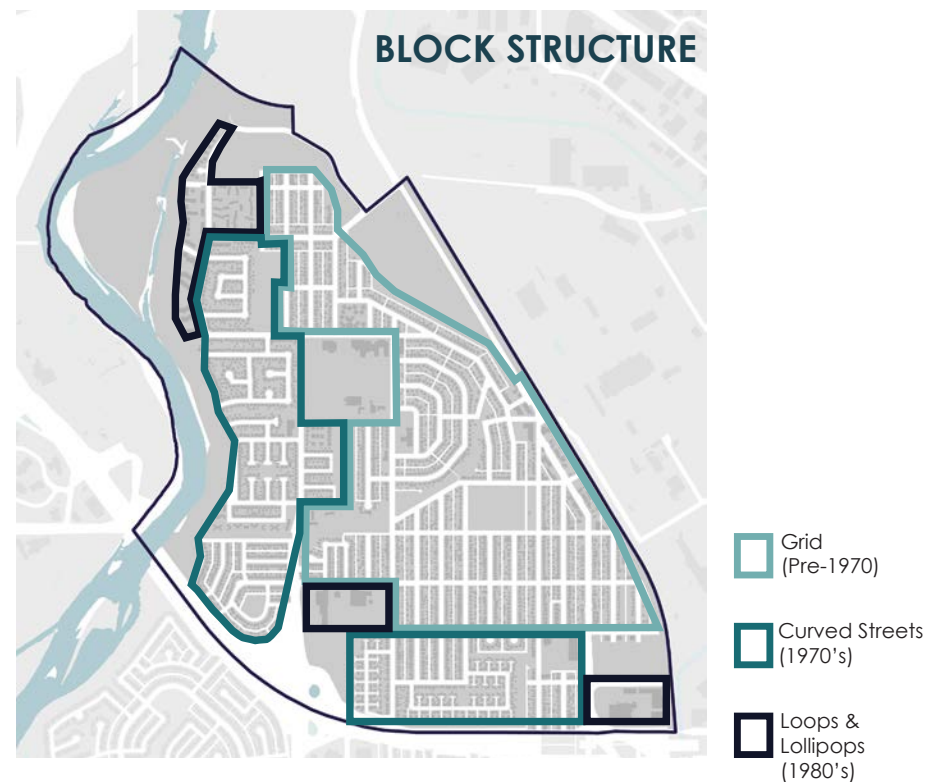
LYNNWOOD

OGDEN FLATS

OGDEN SHOPS
(INDUSTRIAL)

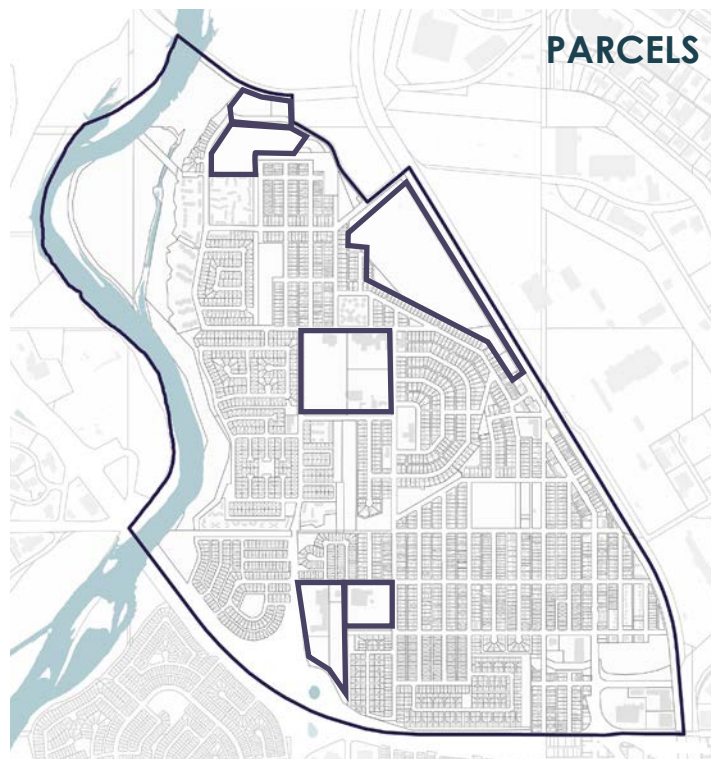
BUILT FORM

There is a high proportion of open space within Ogden, and predominantly small low density building footprints. Ogden has a diverse block structure. The neighbourhoods built before the 1960's had a classic grid structure, in the 1970's they revolved around a central green space consisting of municipal reserves and school sites, and in the 1980's they followed market demand, resulting in the loop and lollipop formation.



COMMUNITY STRUCTURE

Ogden consists mostly of small, privately owned residential parcels. There are many city owned large parcels within Ogden, largely consisting of greenspace and often underutilized public spaces, but valuable pieces in the open space network.

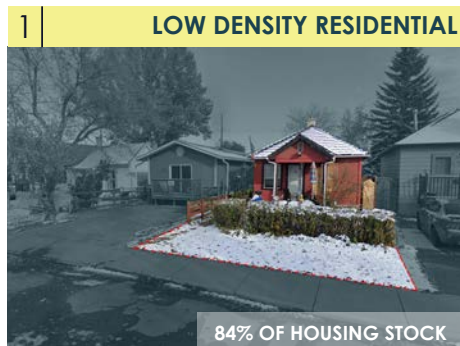


Adjacent to Ogden are large, privately owned parcels, presenting challenges to the connectivity of Ogden to its surroundings, and potentially limiting future development opportunities.

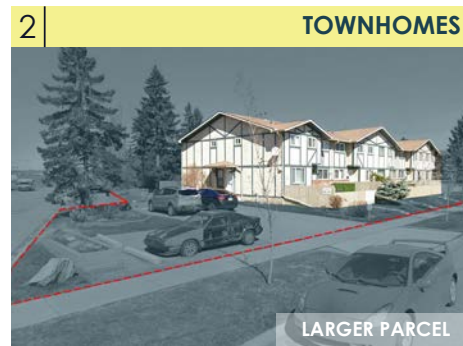
□ Larger parcels

BUILT FORM

Low density residential is the most prevalent building use in Ogden, though some of the land use designations require updating, notably the former Lynnview Ridge neighbourhood. There is a special purpose designation on a portion of Lynnwood Park with scope for community services, and small scale, indoor and outdoor public recreation facilities. Beaver Dam Flats is not zoned as Urban Nature, but rather as recreation which is primarily intended for private recreation facilities. There is no mixed-use allowance currently within the community.



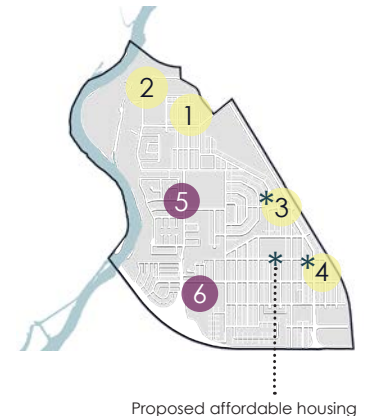
- Typically 1 to 2 storeys
- Predominantly single family



- Typically 3 to 4 storeys
- Share 1 to 2 walls with adjacent properties in a complex, independent entrances



- Typically 3 to 4 storeys
- One structure with multiple units



- Typically 3 to 4 storeys
- Groups of nearly identical low rise attached homes



- Local scale, serves immediate area
- Car oriented commercial block



- Larger scale, serves greater community
- Car oriented commercial block

ZONING + BUILDING USE



Current Building Use

- Residential - Low Density
- Residential - Medium Density
- Commercial
- Home Business
- Institutional
- Demolished
- Vacant

Land Use Code/ Zoning

- C-C1 Commerical, Community 1
- C-COR1 Commercial, Corridor 1
- C-COR2 Commercial, Corridor 2
- C-COR3 Commercial, Corridor 3
- C-N2 Commercial, Neighbourhood 2
- DC Direct Control
- I-G Industrial, General
- M-C1 Multi-Residential, Contextual Low Profile
- M-CG Multi-Residential, Contextual Ground Oriented
- R-C1 Residential, Contextual One Dwelling
- R-C1s Residential, Contextual One Dwelling, Secondary Suite Provision
- R-C2 Residential, Contextual One/Two Dwelling
- R-CG Residential, Grade-Oriented Infill
- S-CI Special Purpose, Community Institution
- S-CRI Special Purpose, City + Regional Infrastructure
- S-CS Special Purpose, Community Service
- S-R Special Purpose, Recreation
- S-SPR Special Purpose, School, Park + Community Reserve
- S-UN Special Purpose, Urban Nature

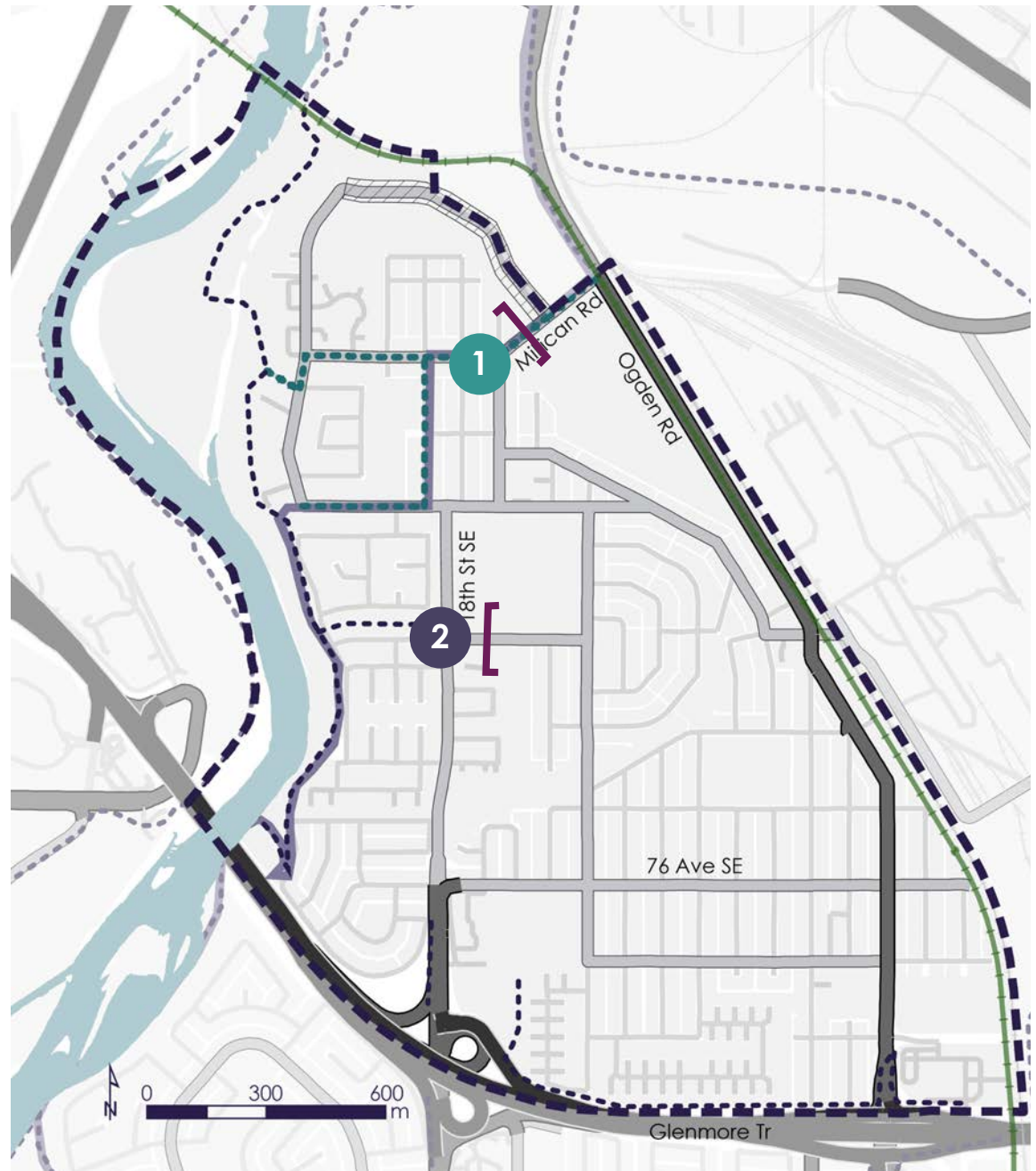
INFRASTRUCTURE



INFRASTRUCTURE

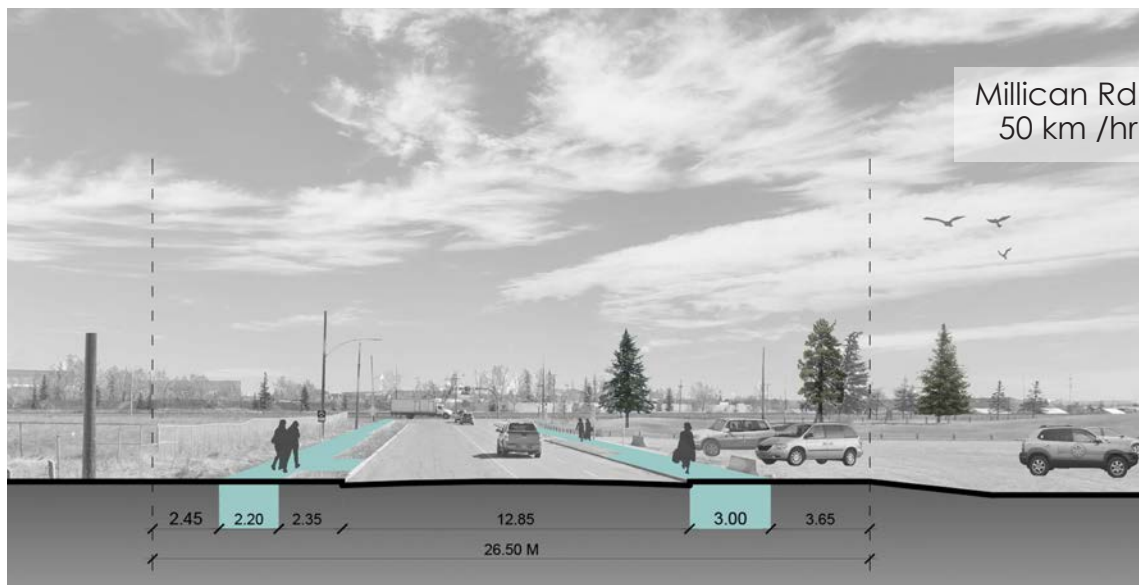
Most streets in Ogden have a speed limit of 40 km / hour, with low traffic observed. Collector roads connect the major arterial roads to residential streets. It is interesting to note the on road bike way lacks sufficient bike infrastructure; with a unidirectional bicycle gutter on one side for a portion of Millican Road. There is a multi-use path on the other side of the road though it does not extend into the community.

-  Skeletal
-  Arterial
-  Collector
-  Street
-  Trans Canada Trail
-  Paved Pathways
-  Bikeways
-  Future LRT
-  Closed to vehicles



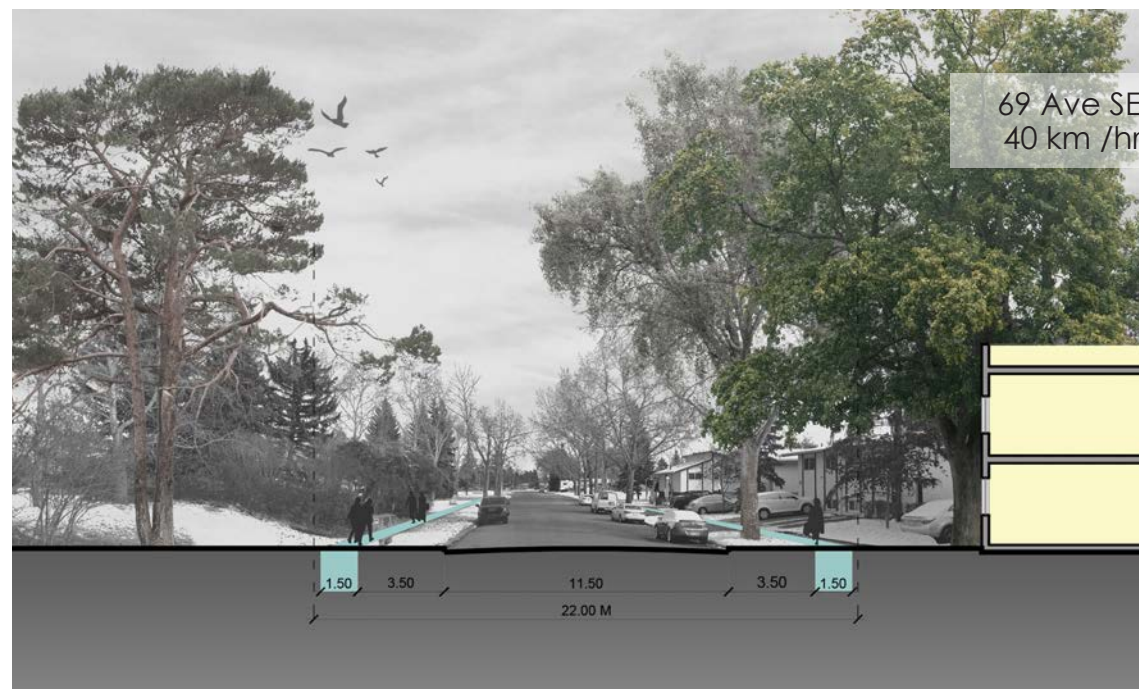
ROAD TYPOLOGY

1



**COLLECTOR
(ON ROAD BIKEWAY)**

2



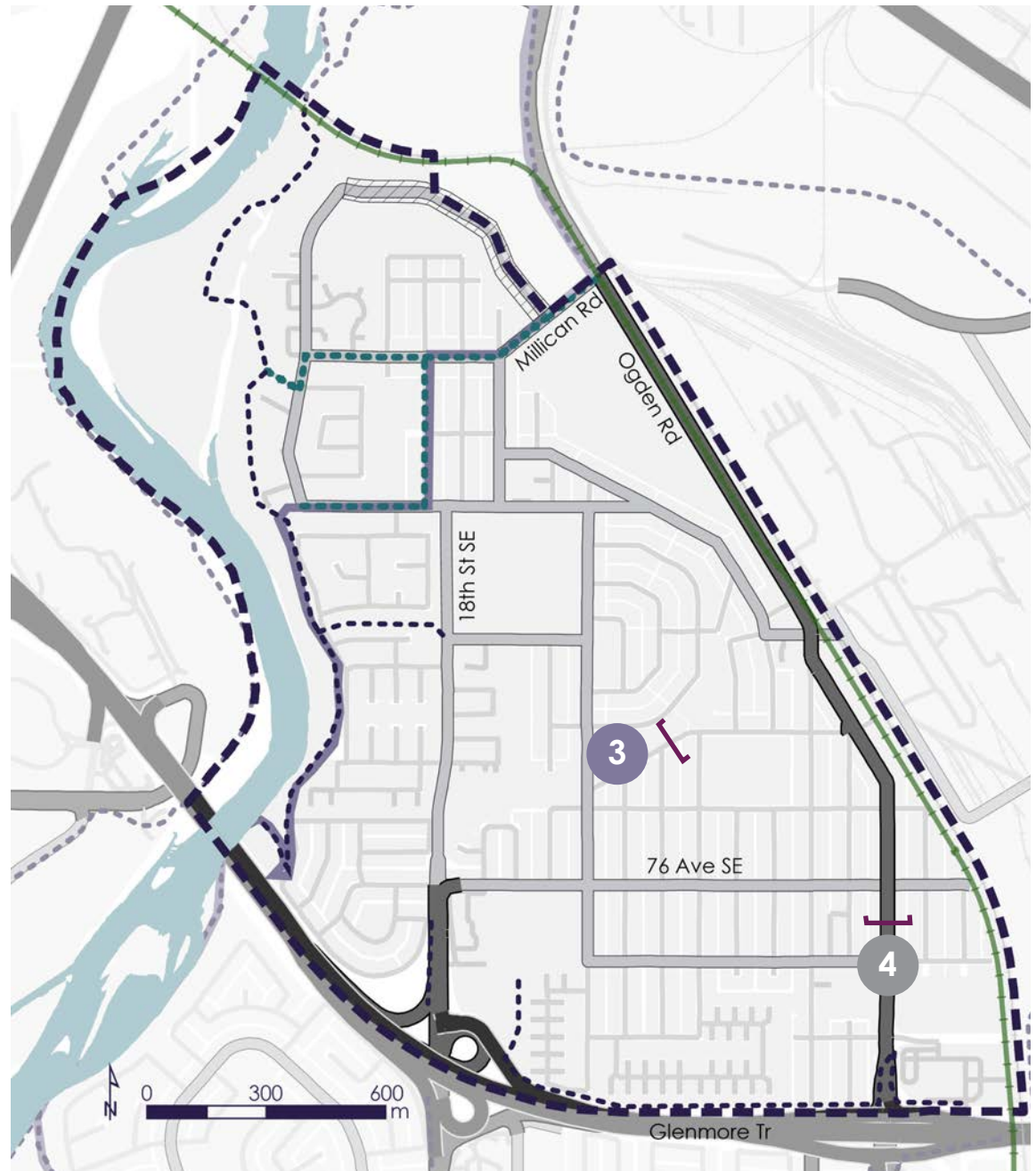
**COLLECTOR
(RESIDENTIAL)**

INFRASTRUCTURE

The Ogden Road entry to the community from Glenmore Trail where the speed limit drops from 80 km/hour to 50 km/hour is an issue for pedestrian safety.

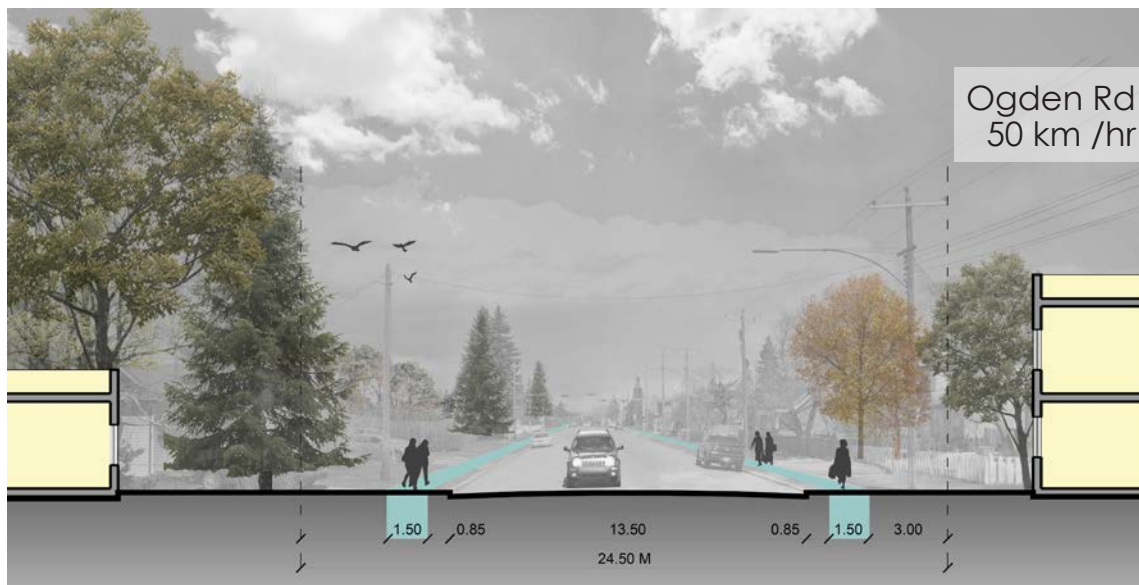
There are gaps in pedestrian infrastructure along Ogden Road and an emphasis on the private realm at the expense of the public realm, as evidenced by narrow sidewalks and little to no pedestrian prioritization.

-  Skeletal
-  Arterial
-  Collector
-  Street
-  Trans Canada Trail
-  Paved Pathways
-  Bikeways
-  Future LRT
-  Closed to vehicles

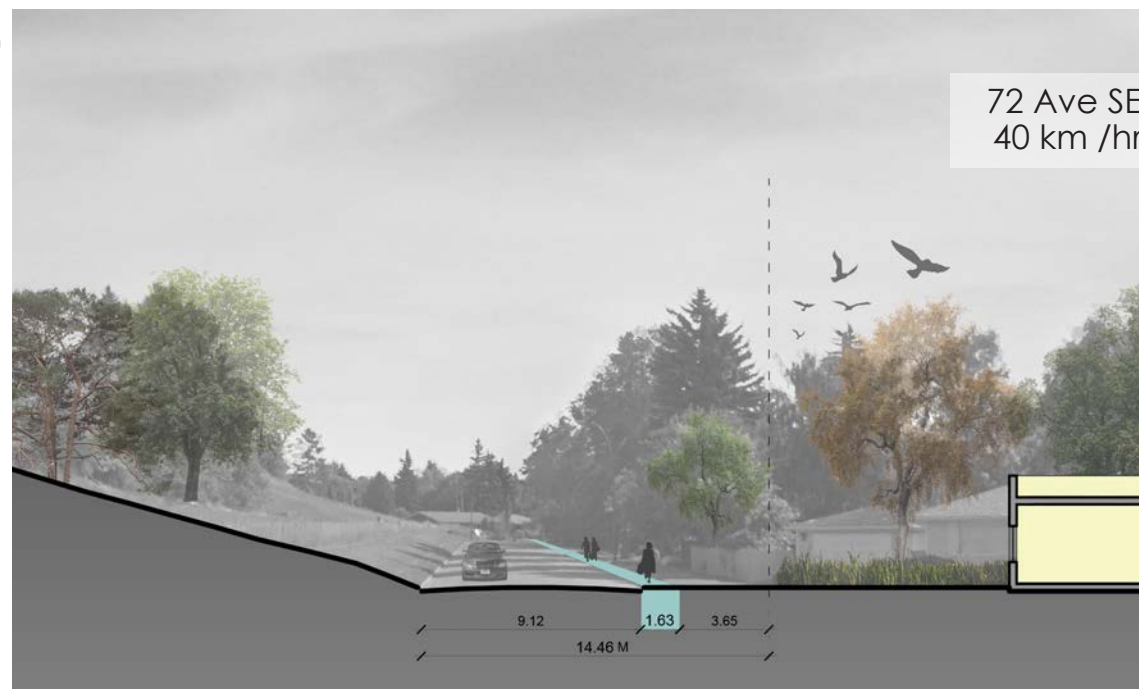


ROAD TYPOLOGY

3

**ARTERIAL**

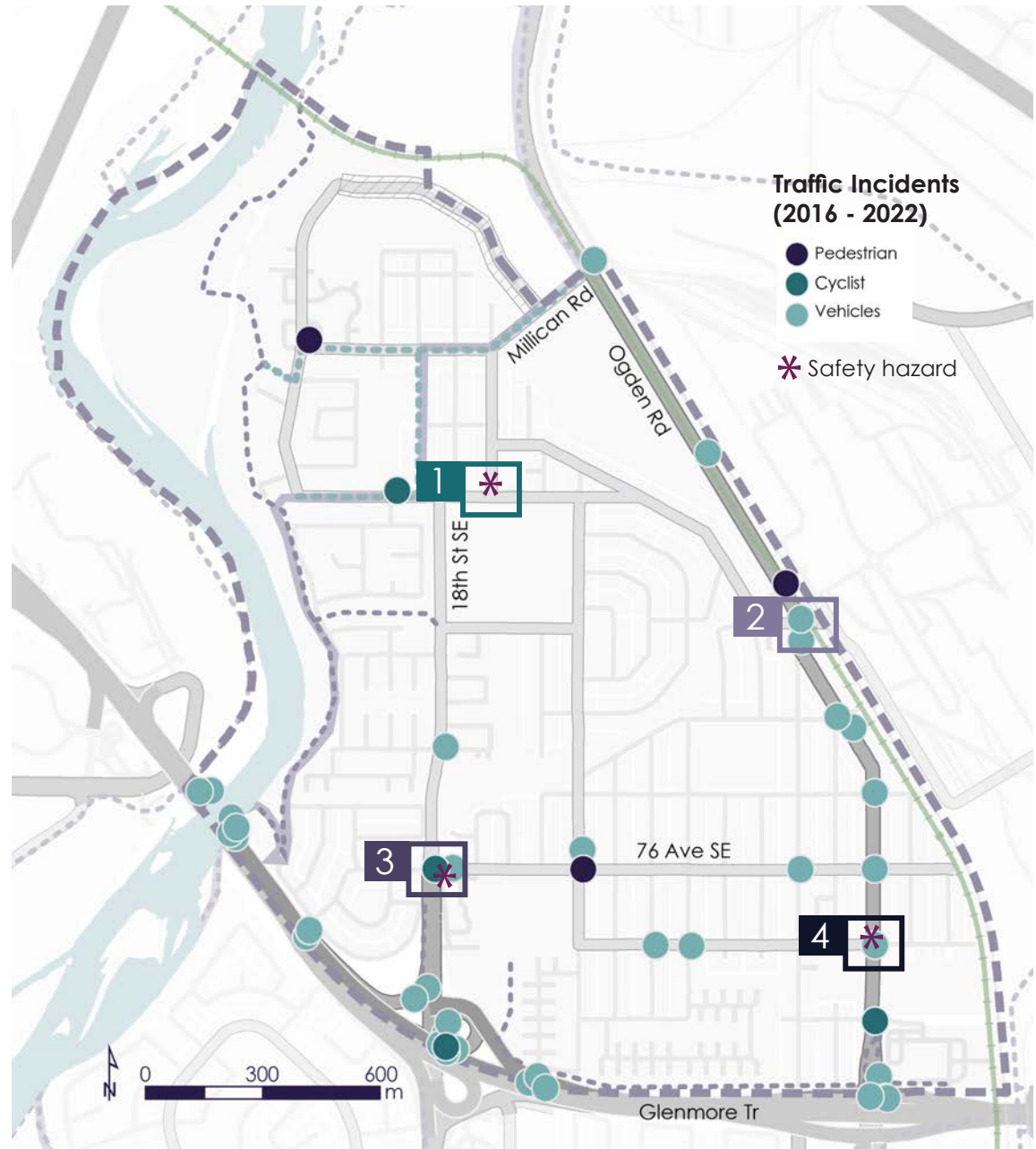
4

**RESIDENTIAL STREET**

INFRASTRUCTURE

These gaps in pedestrian infrastructure are even more evident at the intersections posing safety concerns in some areas.

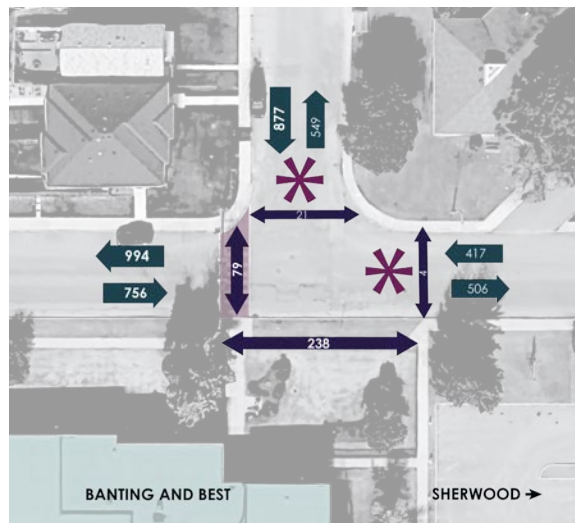
There have been both pedestrian and cyclist incidents within Ogden and opportunity exists to take measures to improve safety.



KEY INTERSECTIONS

6 hour intersection counts

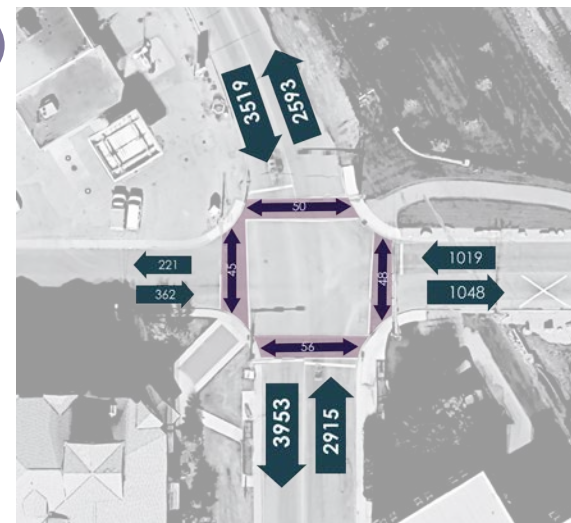
1



* Limited crosswalks

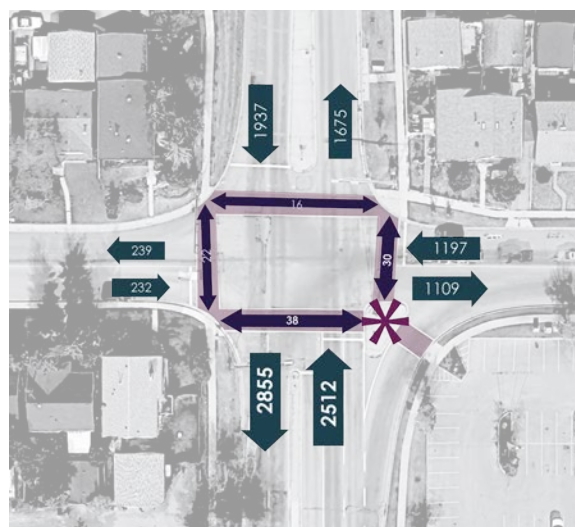
**66 AVE SE
@ 19 ST SE**

2



**ODGEN RD
@ 69 ST SE**

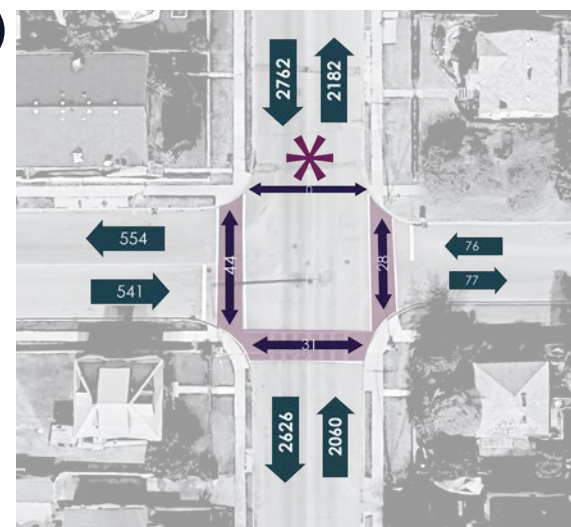
3



* Pork chop island

**76 AVE SE
@ 18 ST SE**

4



* Limited crosswalks

**ODGEN RD
@ 76 ST SE**

INFRASTRUCTURE

Like much of the City of Calgary, Ogden is a very car-oriented community. This is largely necessitated by the need to leave the community for many amenities and services that are lacking or non-existent within Ogden. Alternatives to driving are limited, particularly to reach common destinations such as the airport, downtown, or the University of Calgary. The arrival of the Green Line to Ogden will provide a much needed alternative mobility connection for some of these destinations.

Future Green Line development will make transit a viable alternative to driving, reducing dependence on personal vehicles.

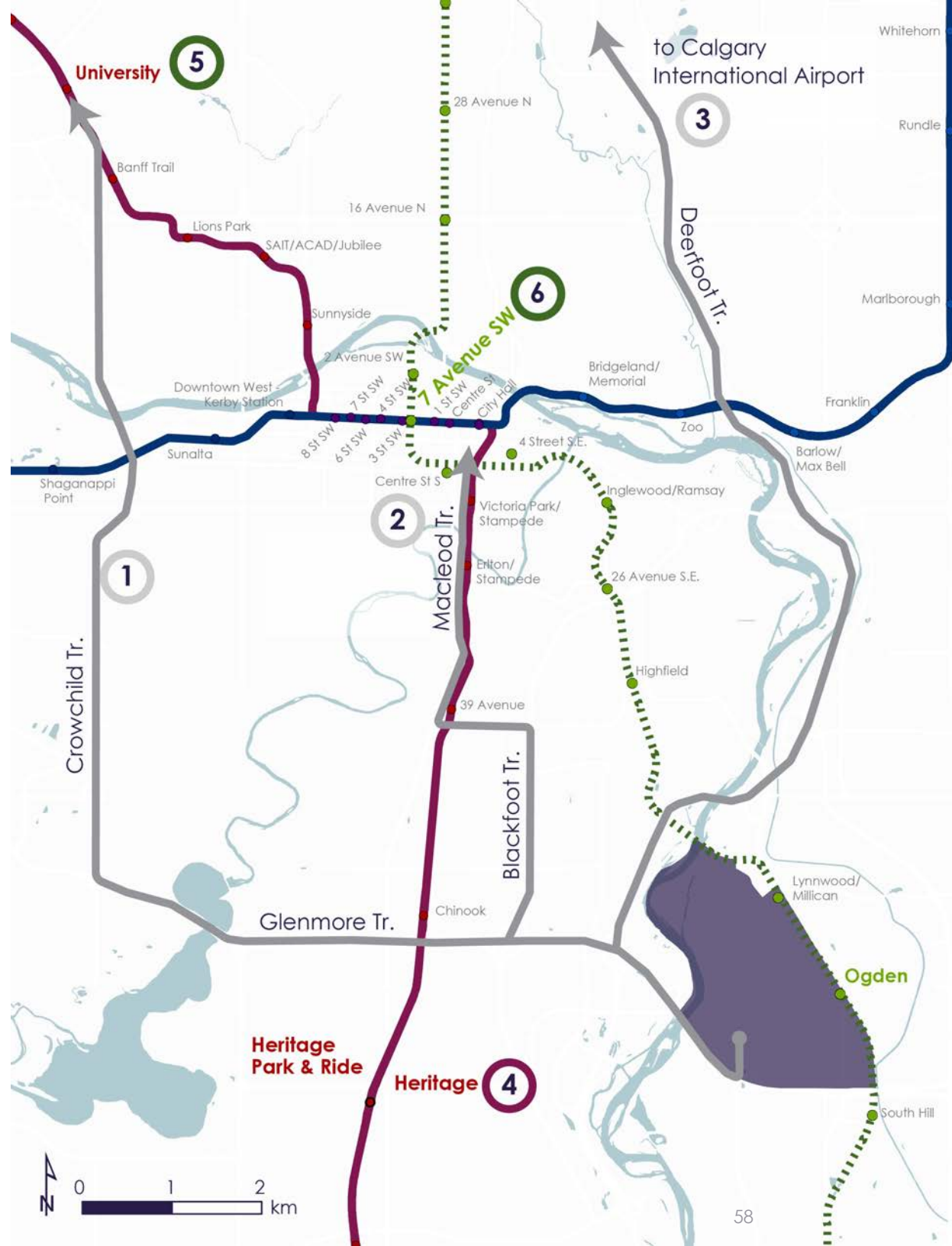
Driving Times

-  Ogden to University of Calgary
18.1 km
19 minute drive
-  Ogden to Downtown
10.3 km
17 minute drive
-  Ogden to Airport
24.3 km
20 minute drive

Transit Times

-  Heritage Station to University of Calgary
18 stops
32 minutes
-  Ogden Station to University of Calgary
17 stops
30 minutes
-  Ogden Station to 7th Ave (downtown)
8 stops
15 minutes







LRT VS. DRIVING TIMES



- Driving Route
- Red Line
- Blue Line
- Green Line (proposed)

INFRASTRUCTURE

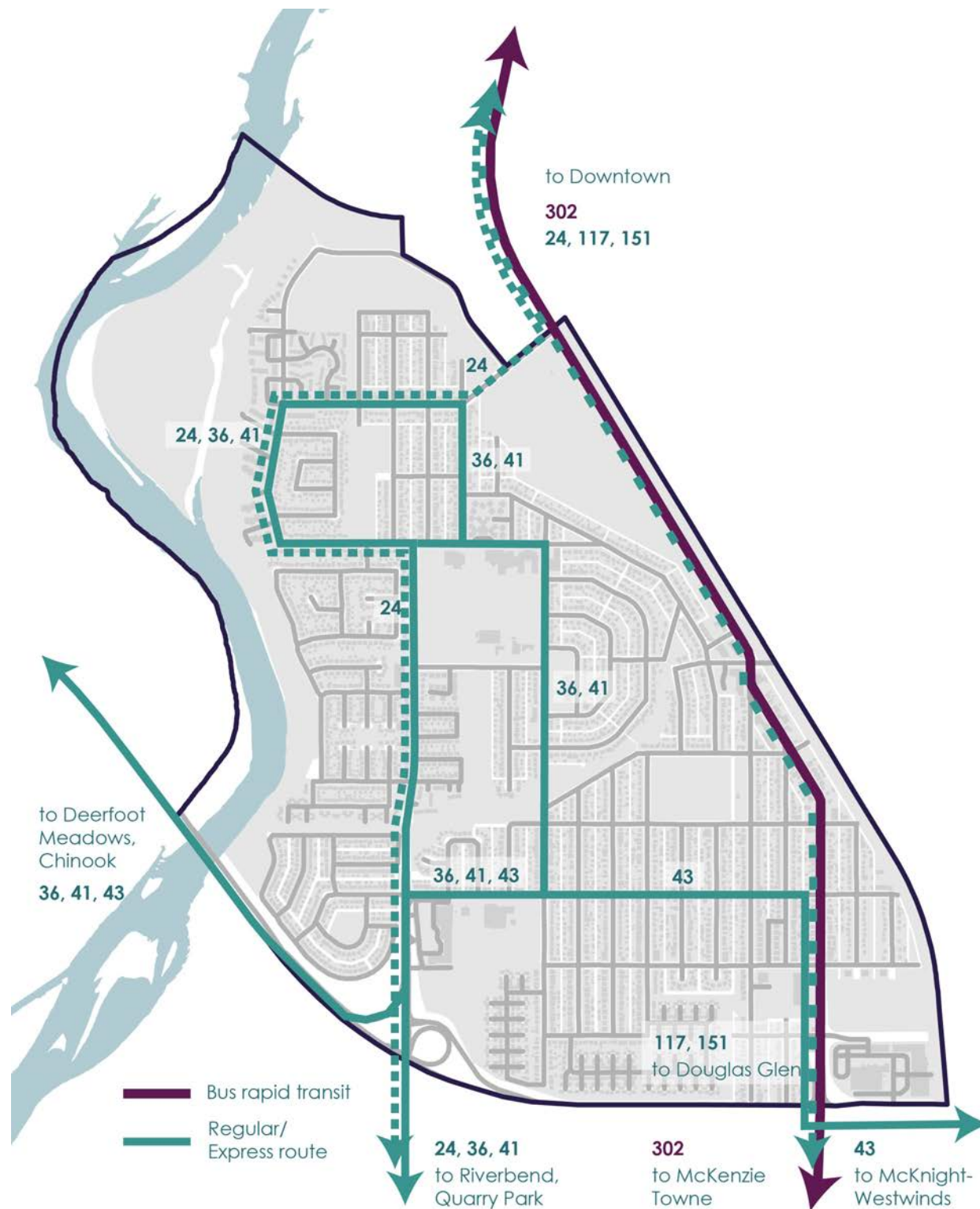
COVID-19 related cuts to the transit service led to the cancellation and consolidation of some bus routes, though the level of service provided remains more or less consistent. Infrequent service and long travel times are discouraging, leading people to choose driving as the more convenient option. Public transit is an important mobility option for residents, particularly youths and seniors, to get to facilities and services within or outside the community.

	BUS ROUTE	PEAK FREQUENCY
	302 (BRT)	30 mins
	24	30 mins
	36/41	13 mins
	43	13 mins
	117	2X per day
	151	2X per day

No weekend service

Current transit options provide six bus routes, one of which is Bus Rapid Transit. However, some routes have infrequent service which may limit use of this mobility option by the community.

LOCAL TRANSIT



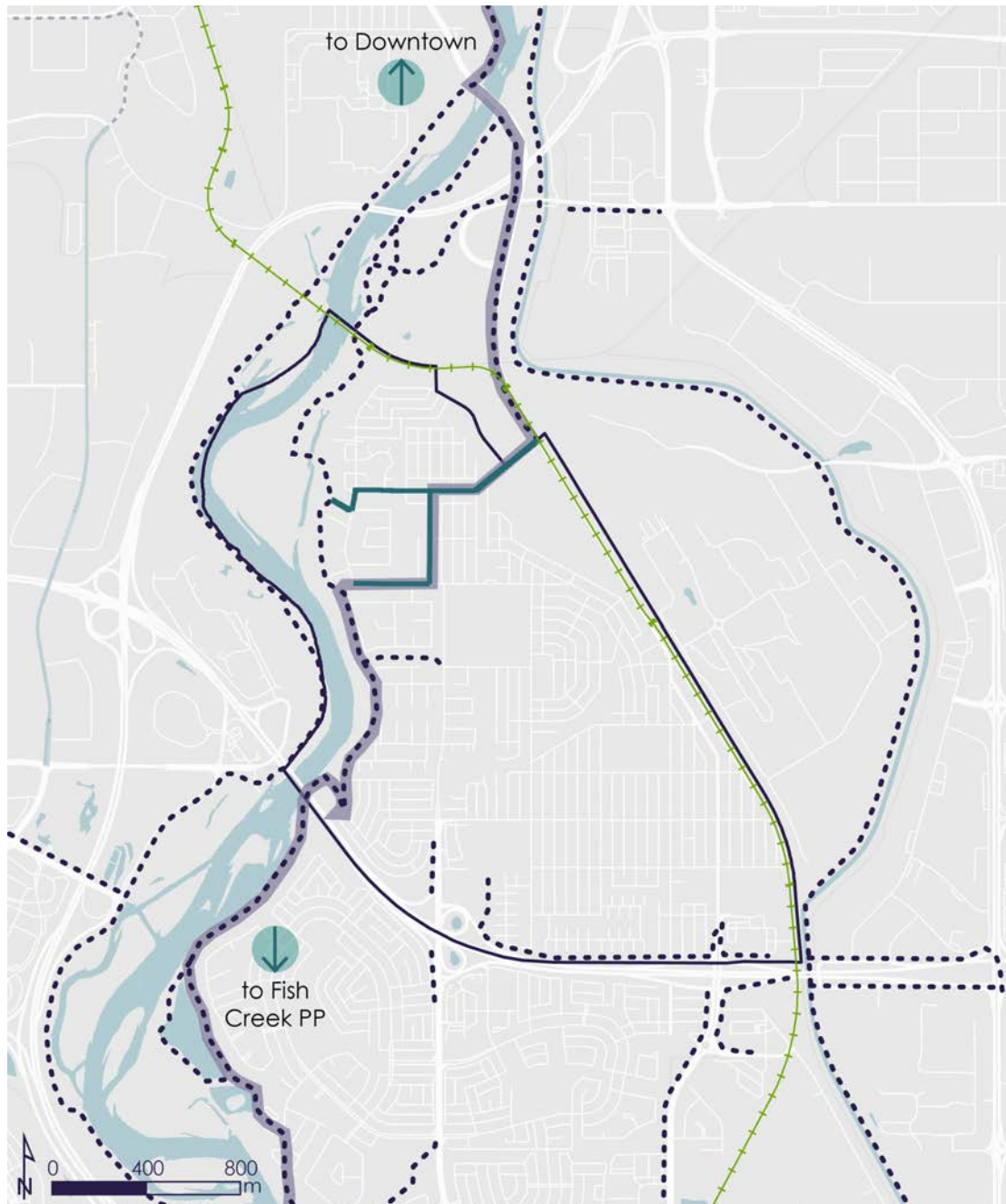
BUS TIMES

OGDEN TO AIRPORT
1.5 hrs

OGDEN TO UCALGARY
1.15 hrs

OGDEN TO DOWNTOWN
1 hr

INFRASTRUCTURE

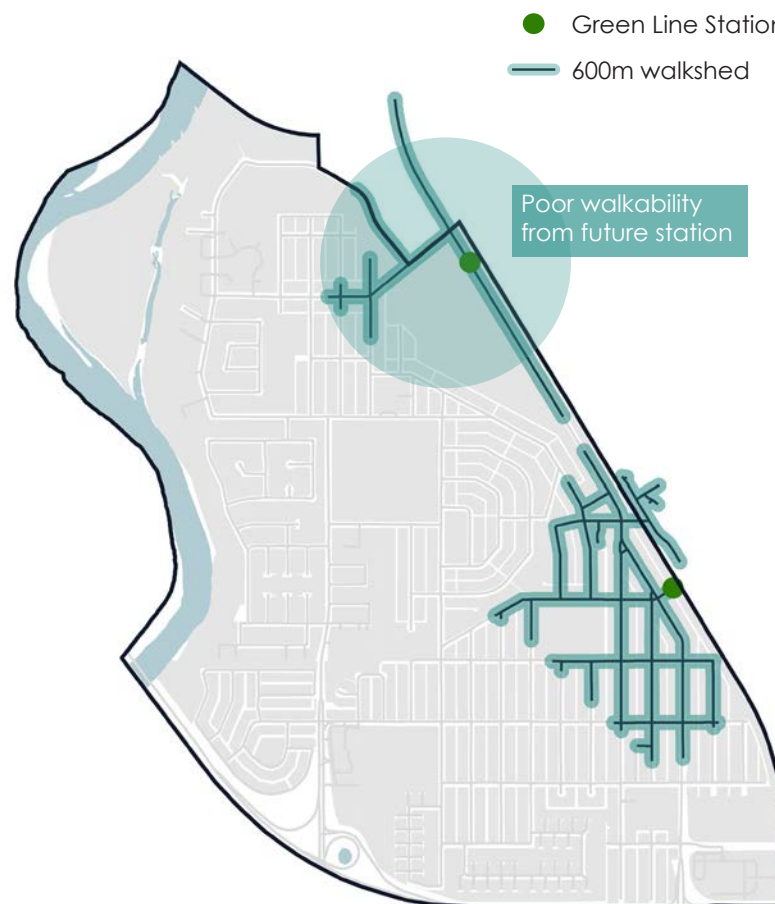
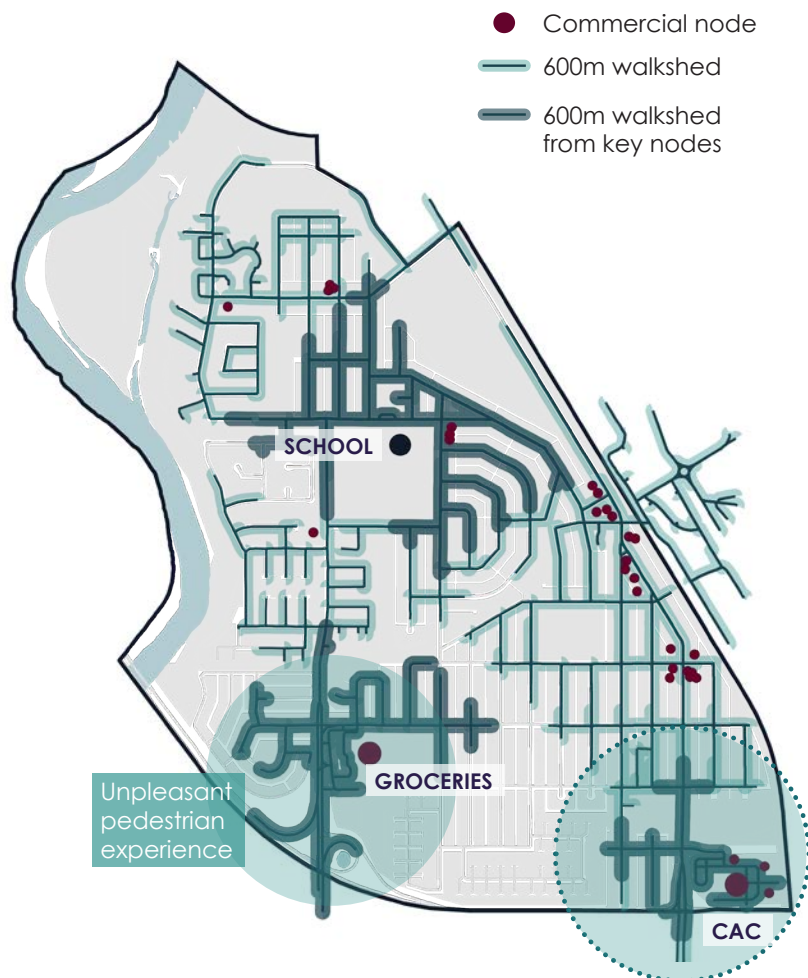


Ogden is connected to the broader city via the Bow River and Trans Canada trails, however, the walkability and public realm within Ogden is lacking in several areas. It is inconvenient or unsafe to walk or cycle through much of the community. Ogden covers a large area, and there is a need for direct and convenient pedestrian and cycling options to improve mobility for all ages and abilities.

- Trans Canada Trail
- - - Paved Pathways
- Bikeways
- + + + Future LRT

PEDESTRIAN + CYCLING NETWORK

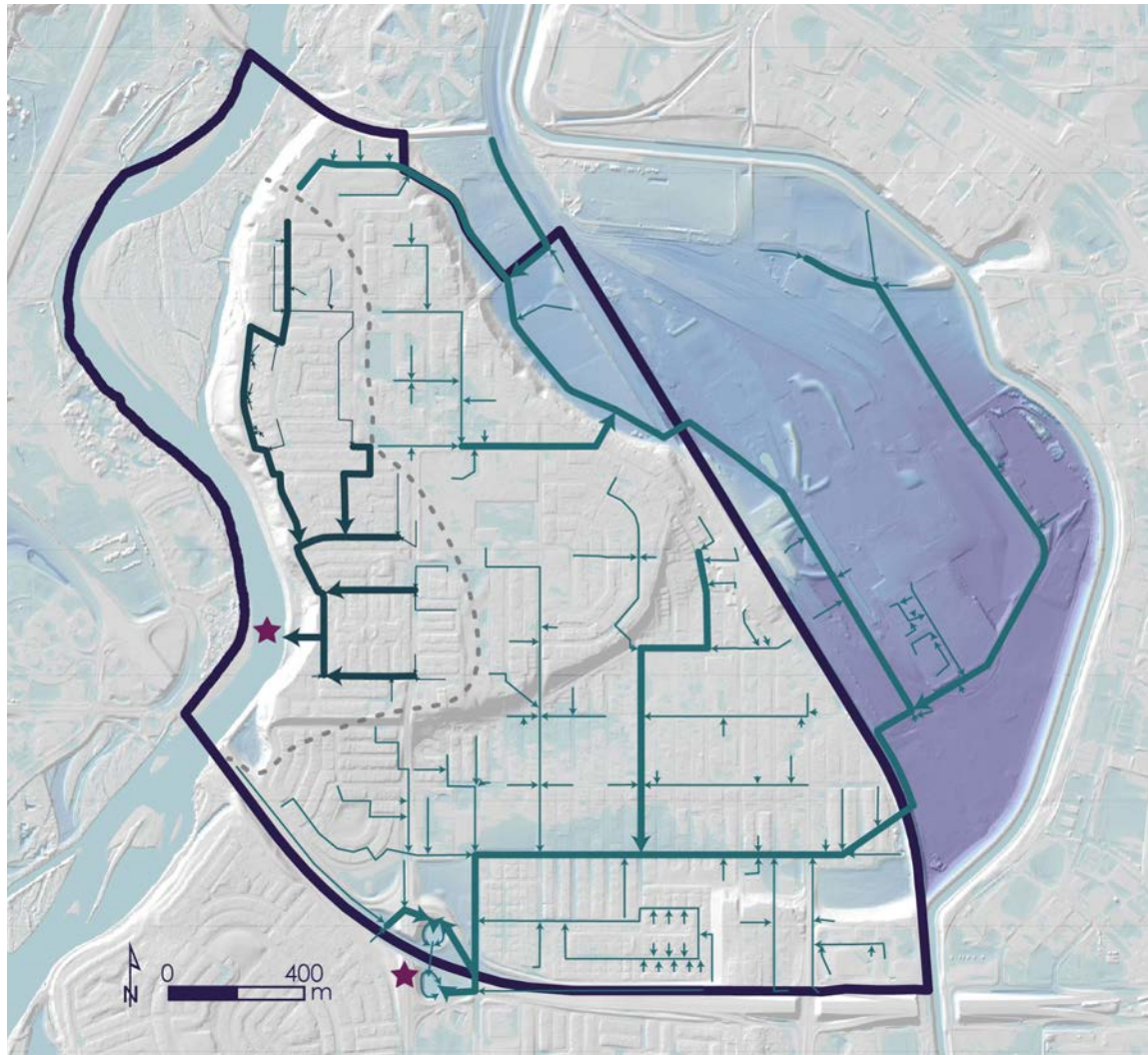
The walkability to commercial nodes is fair though not all daily needs can be met nearby. Many residents still need a car to purchase groceries from the local Safeway or to visit a medical clinic within the community.



INFRASTRUCTURE

STORMWATER

Stormwater is drained from the community via two separate networks. Ogden Shops and the east side of the community drain to two wet ponds along Glenmore Trail, following a former natural channel, while the western plateau discharges directly into the Bow River.



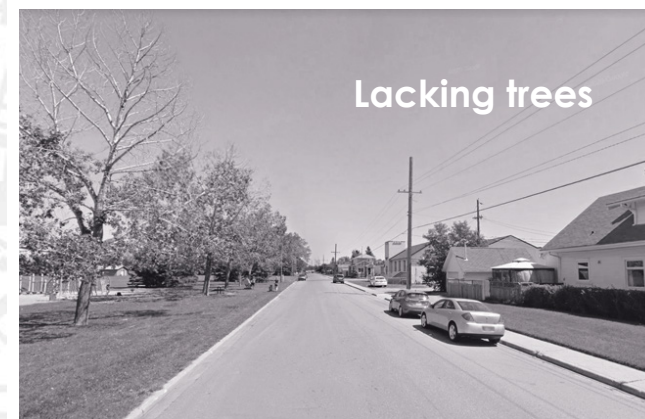
There is potential for bioswales to clean stormwater prior to entering the Bow River and improve the public realm.

- ★ Discharge/ Outflow
- Major stormwater pipe
- Minor stormwater pipe

POWERLINES

Ogden has no high-voltage power lines that present developmental setbacks. The overhead power lines are a point of concern for trees.

Older parts of the community are served with above ground power lines, mainly via alleyways. Power lines along some major roadways may present a challenge to public realm improvements.



WHAT WE HEARD



PUBLIC ENGAGEMENT PROCESS



WHAT WE HEARD SUMMARY



KEY ISSUES



OPPORTUNITIES + CONSTRAINTS

DESIGN
INTERVENTIONS

GUIDING
PRINCIPLES

WHAT
WE HEARD

SITE
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PROJECT
INTRODUCTION

PUBLIC ENGAGEMENT PROCESS

ONLINE ENGAGEMENT

FEBRUARY 15, 2022

Our first community engagement event was held over Zoom on the evening of February 15th, 2022. Approximately 30 community members participated in the activities, which included small group breakout rooms where participants were asked a series of questions about the conditions and experiences in Ogden at present, and what they would like to see in the future. In addition, an online survey was available for one week following the engagement event for community members who were unable to attend. Community feedback was compiled on maps and in written summaries, providing important insight about how the community functions and the lived experience of residents to help us direct our design efforts.

COMMUNITY OPEN HOUSE

APRIL 20, 2022

Our second opportunity for community engagement took place at the Millican-Ogden Community Association from 6:30-8:30 pm on Wednesday April 20th. The event was shared with the community via the Community Association and social media, and approximately 34 residents participated. The five project teams shared their work on poster boards. Community members were able to browse student work, leave notes and suggestions, as well as ask more in depth questions of the student teams. Feedback was compiled and incorporated into a written summary, and specific details were added to the final design concepts where possible.



DESIGN
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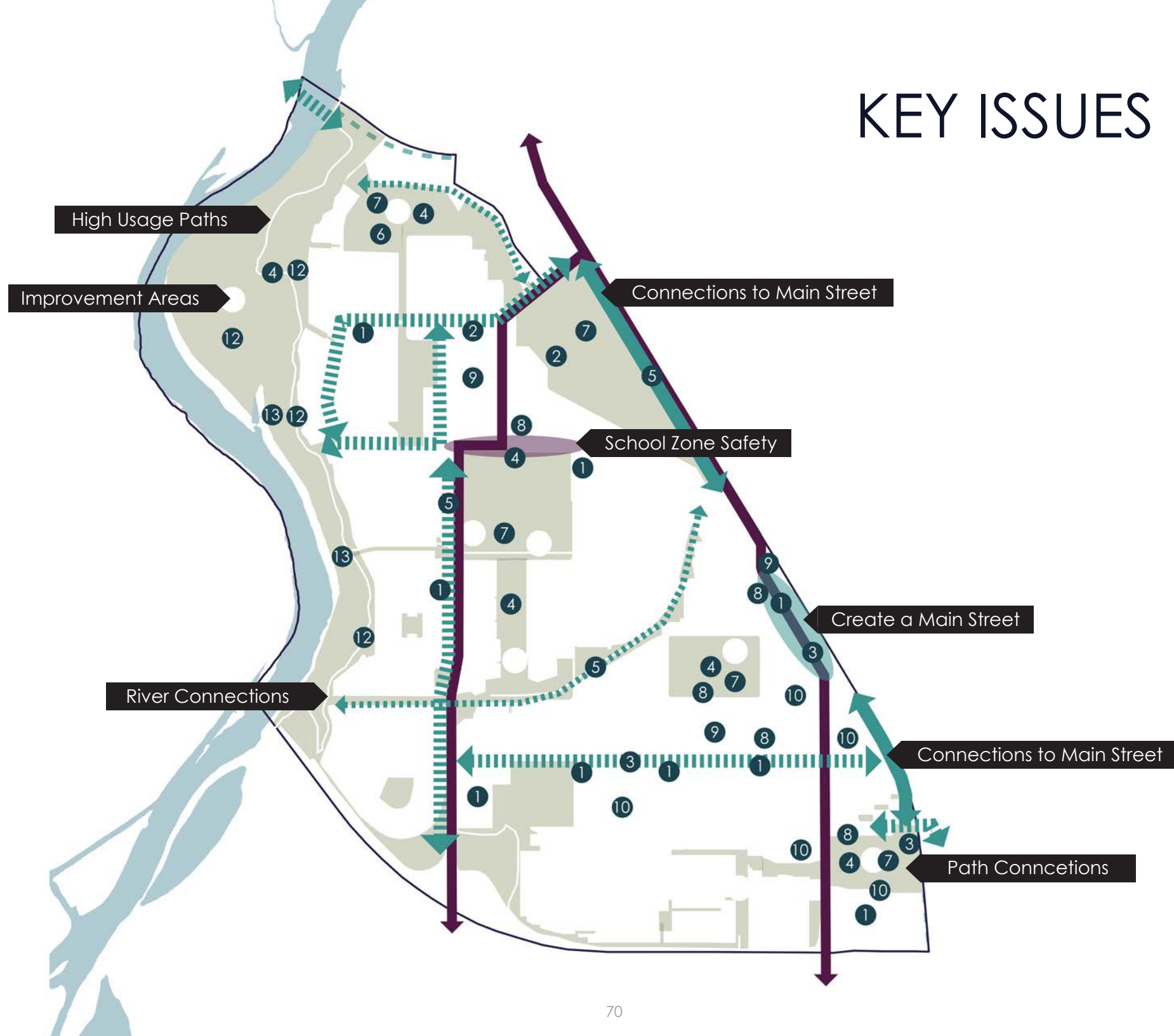
PROJECT
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WHAT WE HEARD SUMMARY

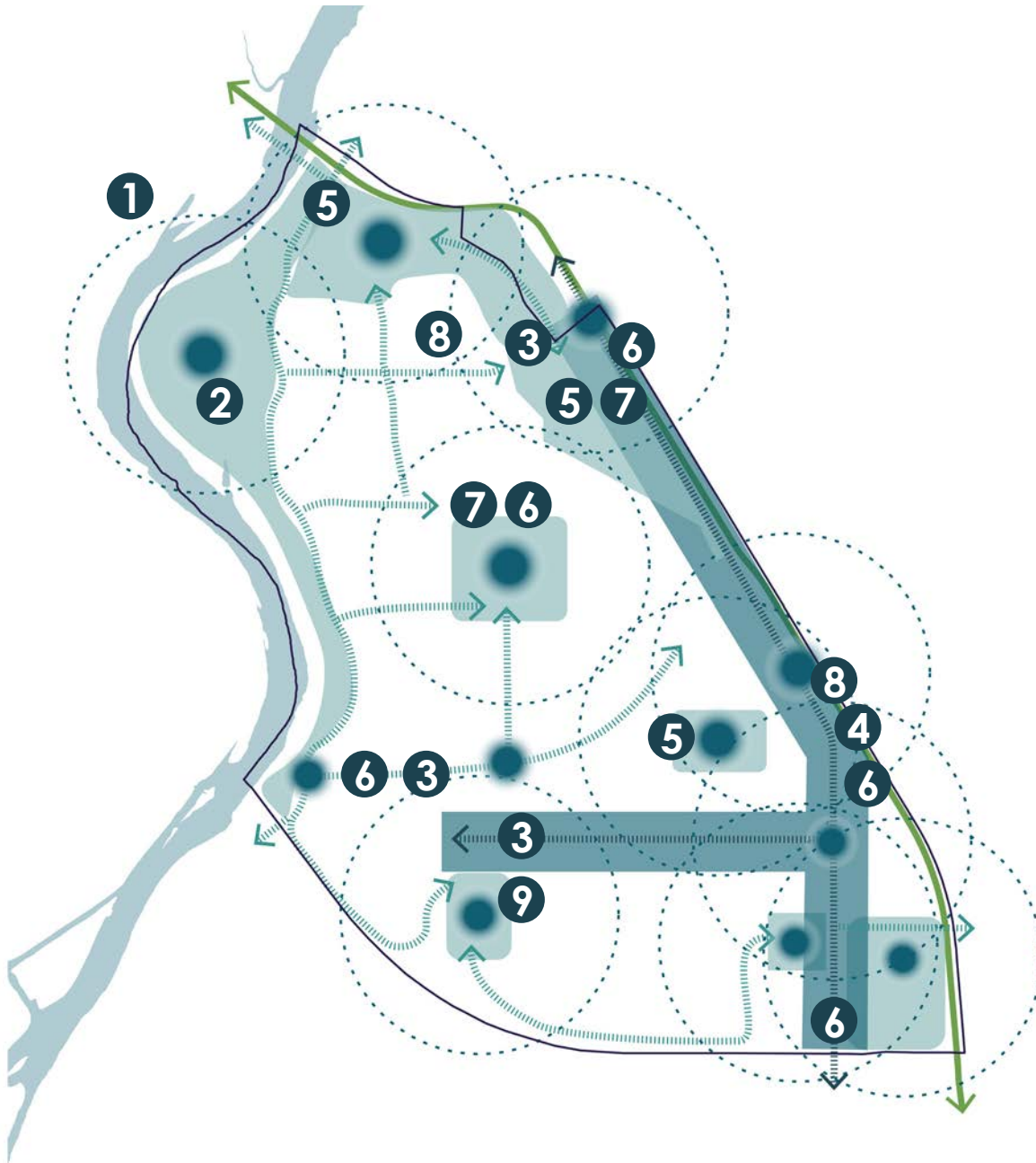
During our first engagement session, community members shared challenges they experience in their community and their vision for the future of Ogden. Some areas of community input were focused on declining school enrollments, safety concerns, a lack of retail amenities, lower housing diversity, inclusivity for all ages, under programming of parks and open spaces, and a lack of third places. A common theme was a lack of amenities in parks, such as picnic tables, garbage cans, and gathering spaces. More connections to the river were desired, as well as better pedestrian connectivity.



KEY ISSUES



OPPORTUNITIES + CONSTRAINTS

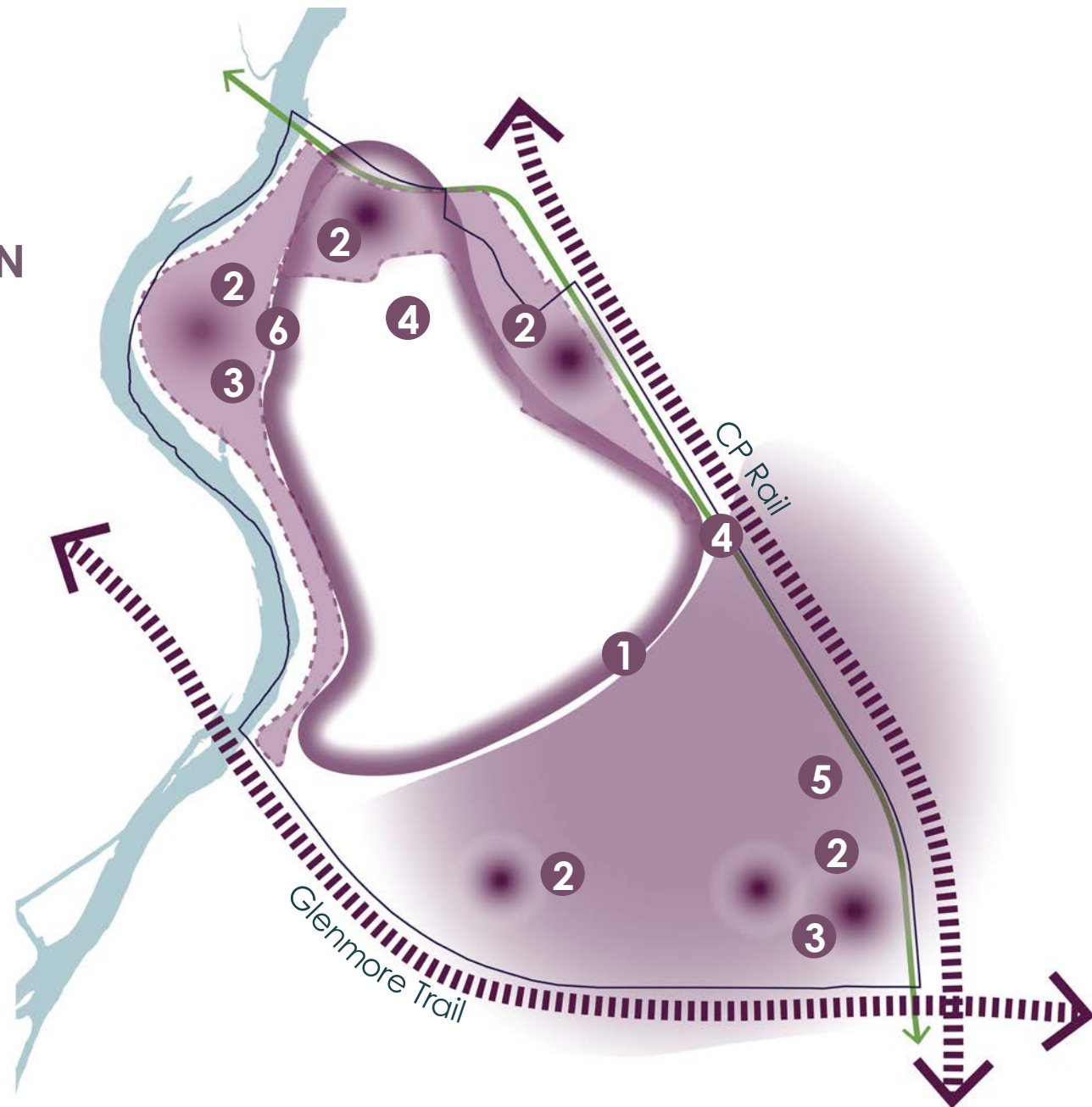


OPPORTUNITIES

- ① VIEWS
- ② NATURAL SYSTEMS
- ③ MOBILITY NETWORK
- ④ GREEN LINE
- ⑤ RECREATION
- ⑥ ACCESSIBILITY
- ⑦ WINTER RECREATION
- ⑧ HERITAGE
- ⑨ COMPLETE COMMUNITY

CONSTRAINTS

- ① TOPOGRAPHY
- ② CONTAMINATION
- ③ FLOODING
- ④ HERITAGE PROTECTION
- ⑤ URBAN FOREST
- ⑥ EROSION



GUIDING PRINCIPLES



CLIMATE CHANGE + RESILIENCE



DESIGN DRIVERS



KEY THEMES

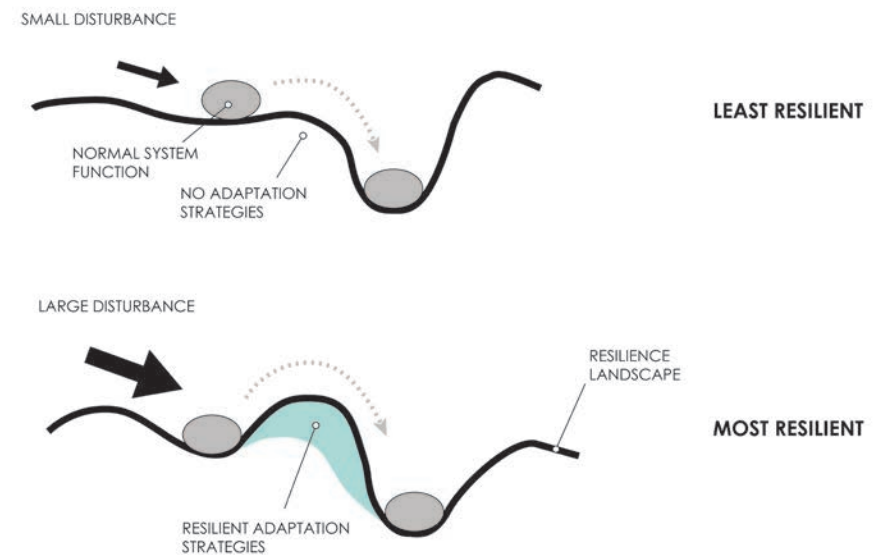
“The inevitability of future climate change requires The City of Calgary to integrate climate resiliency across the organization to maintain the level of services and minimize costs.”

*Climate Resilience Strategy
City of Calgary, 2018*

CLIMATE CHANGE + RESILIENCE

The City of Calgary has prioritized resilience as a key strategy for climate change adaptation. Resilience is a concept that is not well understood, despite how commonly it is used. It has its roots in ecology where it was first coined by Holling in 1973, but has since been adopted across disciplines with varying degrees of vagueness in its conception. In planning, we require a social-ecological definition, which treats humans as part of the natural system. With this definition in mind, we identified three components which form the guiding principles of our design interventions: Diversity, Connection, and Ecology.

WHAT IS RESILIENCE?



Adapted from Döring *et al.* 2015

“Responding to climate change is a strategic priority for the City of Calgary”

City of Calgary, 2021

Ridge pathway at sunset, Ogden

DESIGN DRIVERS

DIVERSITY

choice, options, variability

CONNECTION

social networks, mobility, community

ECOLOGY

natural infrastructure, biodiversity, ecological integrity

KEY ISSUES



DECLINING POPULATION



CONTAMINATED LAND



LIMITED MOBILITY OPTIONS



AGEING IN PLACE



HOUSING DIVERSITY



ACCESSIBILITY OF AMENITIES



PEDESTRIAN CONNECTIVITY



COMMERCIAL DIVERSITY



COMMUNITY SPACES



NATURE

DIVERSITY



CONNECTION

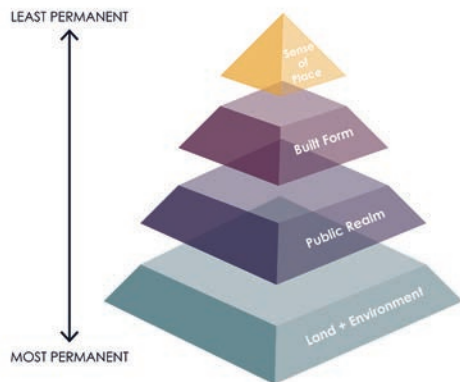


ECOLOGY



KEY THEMES

Communities are not so different from ecosystems. By addressing social and built form diversity and connection, we help create the conditions for a resilient community, with ecology permeating all aspects of the community's evolution.



KEY THEMES

PLACEMAKING

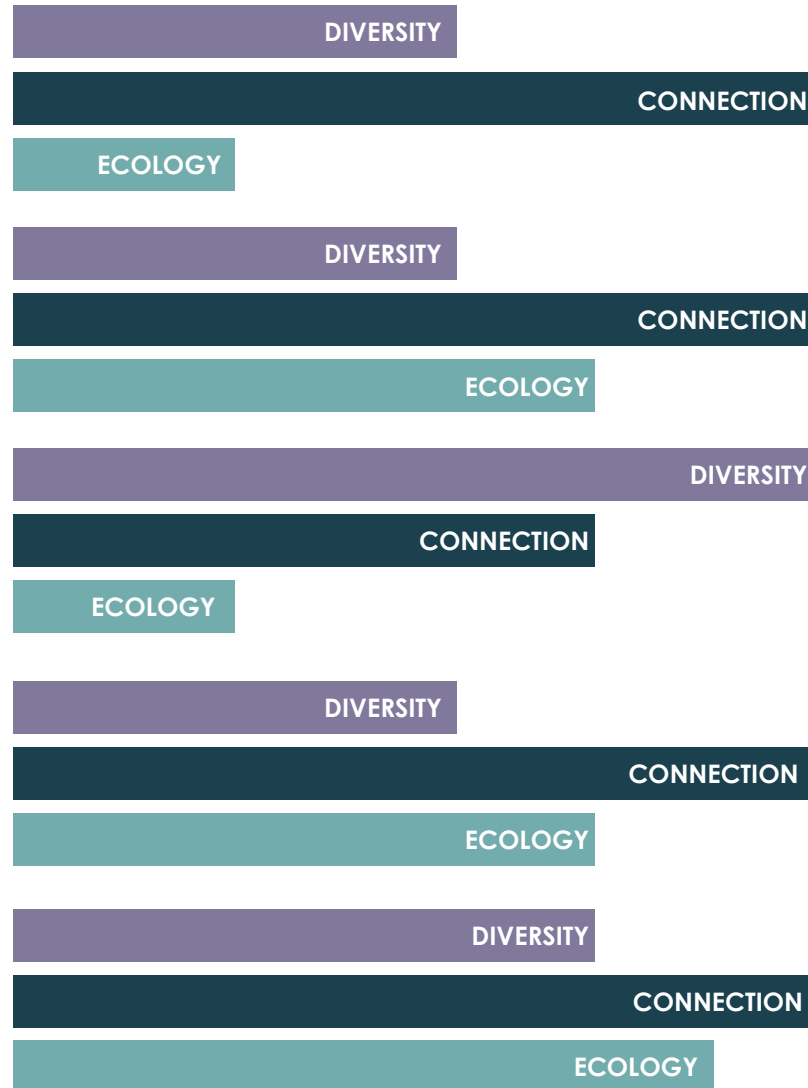
MOBILITY + CONNECTIVITY

LAND USE

WATER STEWARDSHIP

OPEN SPACE + RECREATION

RELEVANCE OF PRINCIPLES



DESIGN INTERVENTIONS



OPEN SPACE



WATER STEWARDSHIP



LAND USE



MOBILITY



PLACEMAKING

“How do we slow down what matters the most and speed up what benefits change and progress? We don’t want to impede progress, but we are seeking reconnection to ourselves, to each other, and with the world.”

-John Maeda

OPEN SPACE + RECREATION

Ogdenites value the abundance of greenspace their community offers. The main issues surrounding parks were a lack of programming in most spaces, along with an oversupply of amenities for particular activities. Parks are key amenities for attracting young families to Ogden, but also require programming for all ages and abilities to keep these spaces active across times and seasons. This requires not only a diversity of programming within spaces, but a diversity in the character of parks spaces. The concepts of **Play**, **Connect**, and **Reflect** provide a thematic approach to parks typology in Ogden.



OPEN SPACE TYPOLOGY

PLAY

Providing a diversity of recreation options for all ages and abilities.

CONNECT

Enhancing gathering spaces to connect new and existing community members.

REFLECT

Low impact recreation protects habitat and provides places to learn and reflect.

OPEN SPACE + RECREATION

PLAY

Parks prioritizing 'Play' provide a variety of sports, games, and other activities for people of all ages, abilities, and interests to meet and interact, and can act as a draw to bring young families to the community.

PLAY SPACE IDEAS



Playfields



Low Intensity Activities



Adult Outdoor Fitness



Winter Programming



Dog Agility Course



Natural Playground



All Abilities Design



All Ages Activities



Millen Woods Primary School, Waterloo, Ontario

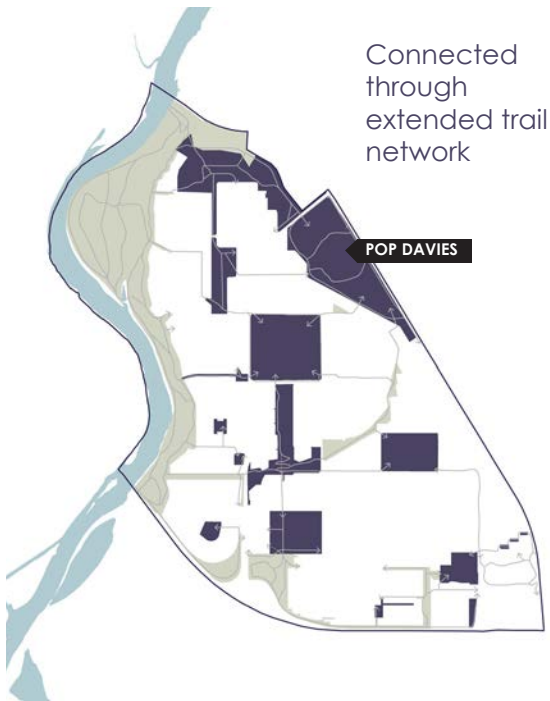
OPEN SPACE + RECREATION

PLAY

SPECIAL SITE: POP DAVIES ATHLETIC PARK

“THE PLAYGROUND”

‘The Playground’ at Pop Davies athletic park is a special case of ‘Play’, as it is currently one of 12 athletic facilities which serve the City of Calgary. We are proposing a transition from a Class C facility, to a Class A facility, with the addition of upgraded amenities, and a new recreation centre, which acts as a city wide draw for all-season transit accessible recreation. The upgraded Pop Davies would provide equitable access to recreation within Ogden and across the city.



TRANSIT ORIENTED DESTINATION

Harry Jermon Rec Centre,
North Vancouver



Adventure play zone
Risskov School, Denmark



Seating area



Playing fields



OPEN SPACE + RECREATION

PLAY



SPECIAL SITE: POP DAVIES ATHLETIC PARK

"THE PLAYGROUND"

OPEN SPACE + RECREATION

CONNECT

Community gathering spaces and open spaces which facilitate connectivity of our proposed mobility network (page 157) are at the heart of the 'Connect' concept, helping to create strong and supportive social networks which allow for community resilience.

CONNECT SPACE IDEAS



Pathway Connections



Fire Pits



Community Gardens



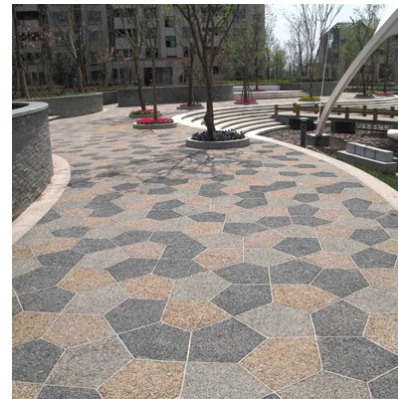
Family Oriented Spaces



Outdoor Yoga



Lighting



Permeable Pavement



Seating Areas



Springwoods Village Plaza, Texas

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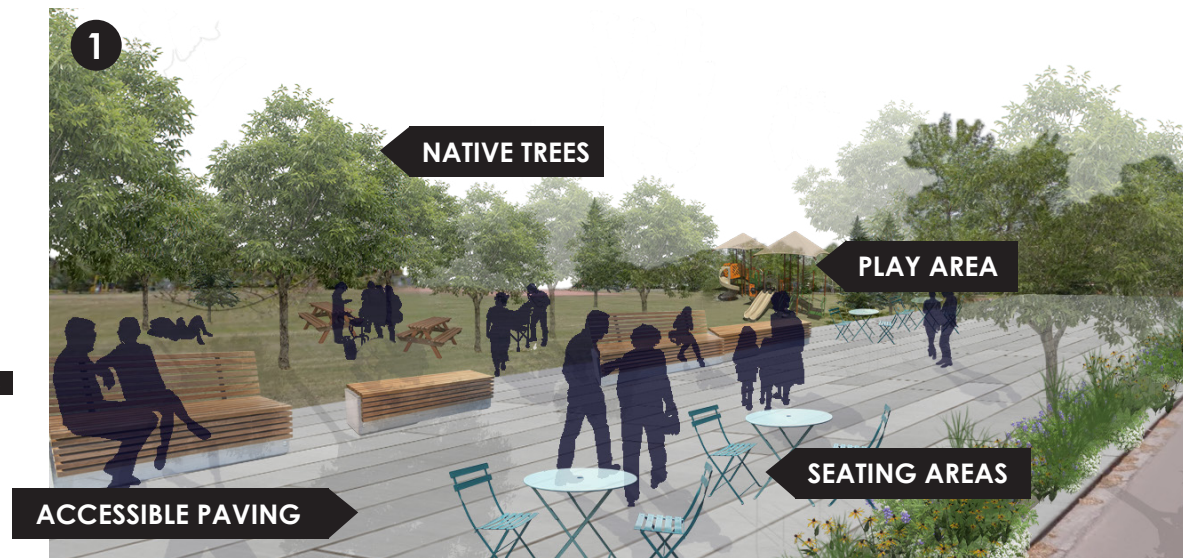
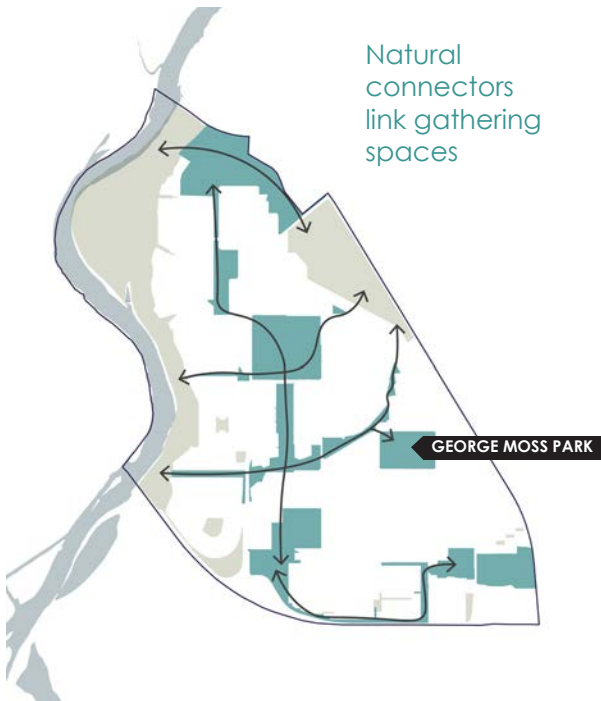
OPEN SPACE + RECREATION

CONNECT

SPECIAL SITE: GEORGE MOSS PARK

"THE COMMONS"

The transit accessible location of George Moss Park allows the opportunity to transform it into a walkable public gathering space for all community members. Additions like a community garden and a paved plaza can give people a place to connect with each other. The community can relax by the fire, or enjoy year round festivals at "The Commons", providing a vibrant, year round destination for all.



GATHERING SPACE DESTINATIONS



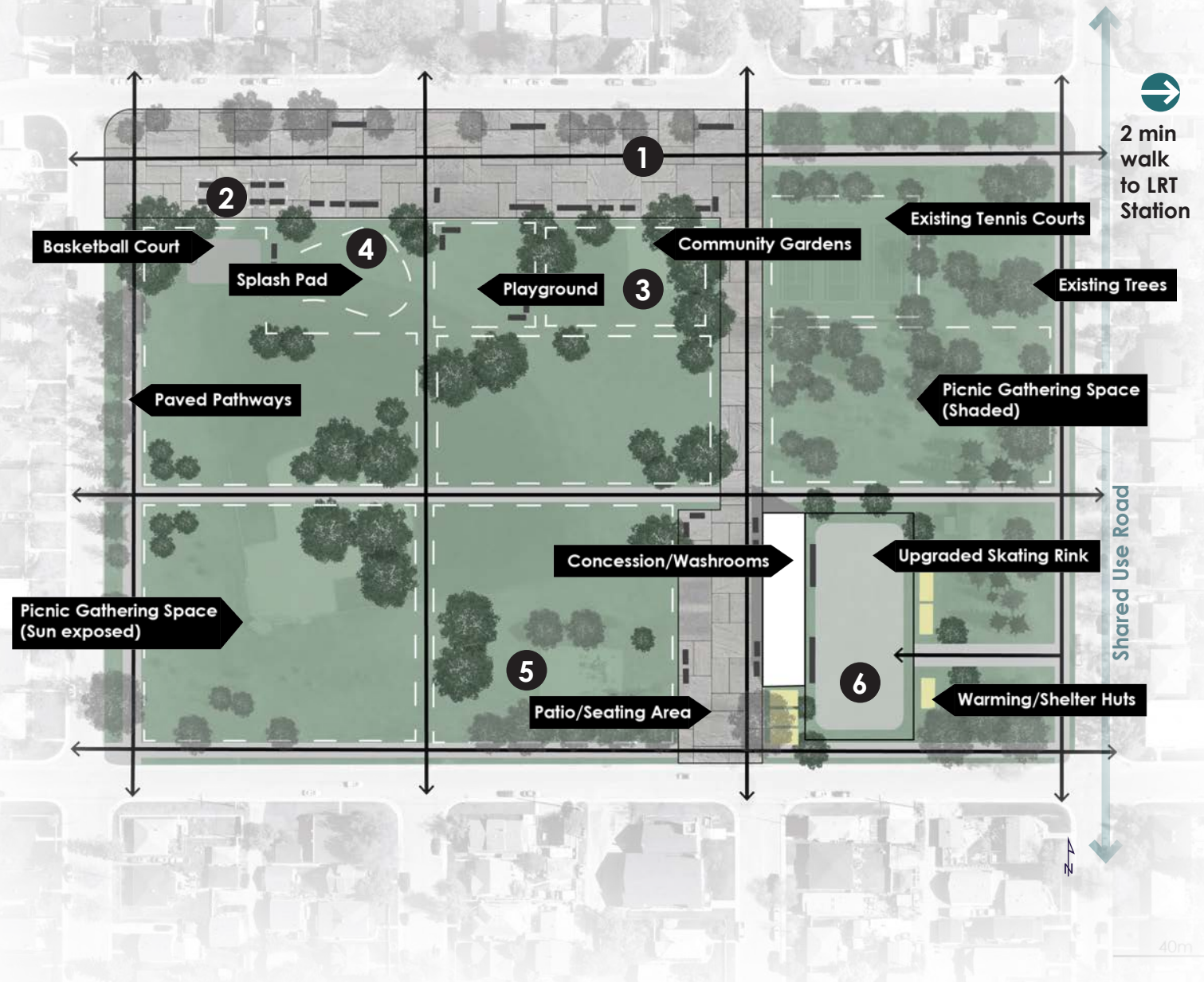
Board Games Area



Community Garden



Splash Pad



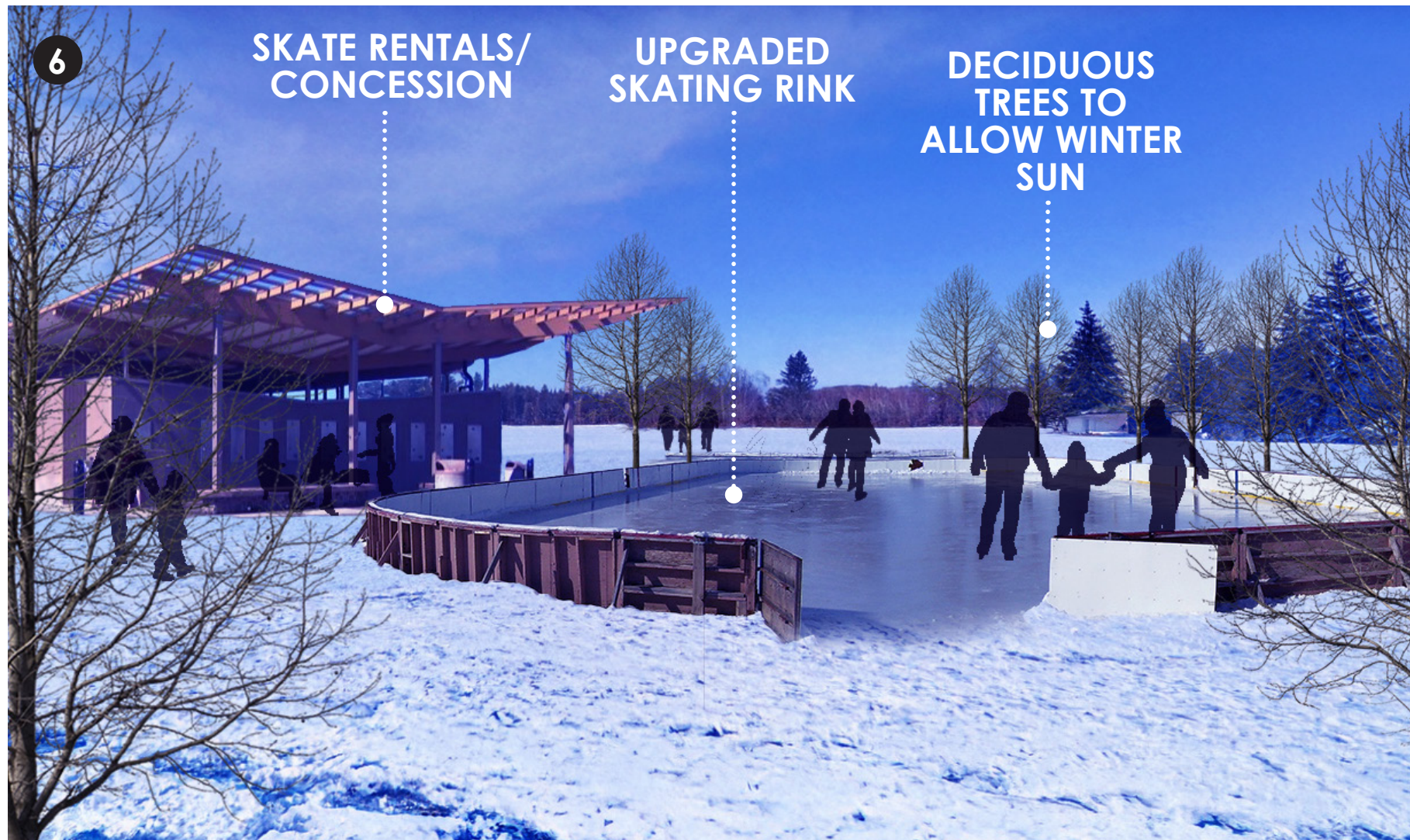
OPEN SPACE + RECREATION

CONNECT



SPECIAL SITE: GEORGE MOSS PARK

"THE COMMONS"



OPEN SPACE + RECREATION

REFLECT

Finally, ecology inspires the reflective nature of the final park concept. Our interventions propose a balancing between human enjoyment of these spaces, and the protection of ecological integrity, through low-impact recreation.

REFLECT SPACE IDEAS



Stairs to Bow River



Low Impact Activities



Lookout Platforms



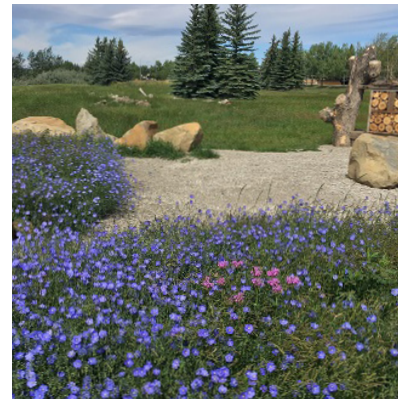
Seating Areas



Osprey Platform



Native Bee Nest Sites



Pollinator Gardens



Naturalization



Seating along Ridge Pathway, Ogden

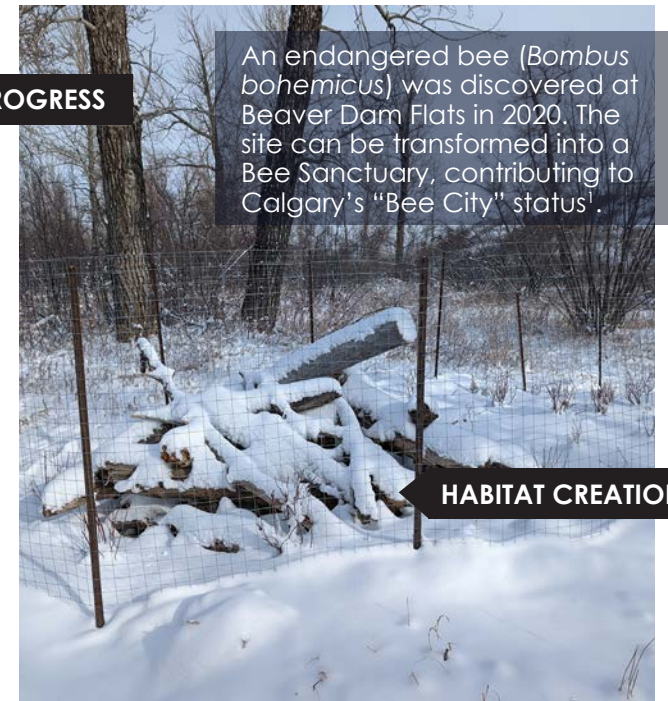
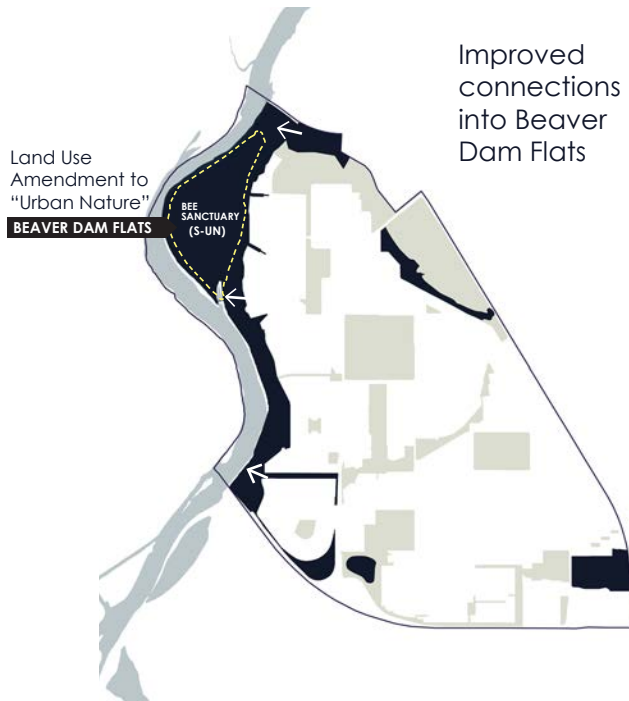
OPEN SPACE + RECREATION

REFLECT

SPECIAL SITE: BEAVER DAM FLATS

Beaver Dam Flats is a cherished space in Ogden with high ecological value that requires protection. While we support the use of more natural spaces, like Beaver Dam Flats, we understand the sensitivity of these ecosystems to human interaction. Educational opportunities are proposed in the form of interpretive trails, such as Discovery Trail, to enhance appreciation and community pride in the unique ecological conditions we find at Beaver Dam Flats.

"THE SANCTUARY"



¹Visit <https://beecitycanada.org/> for more information on Bee City Canada

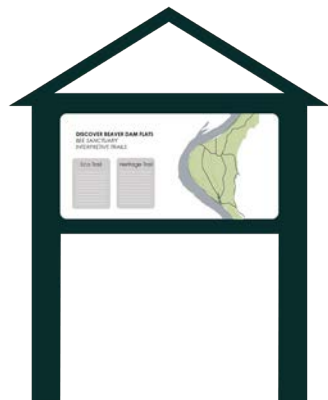
DISCOVERY TRAIL



Picnic Platforms

2 UNSTABLE SLOPE:
RESTORATION
IN PROGRESS

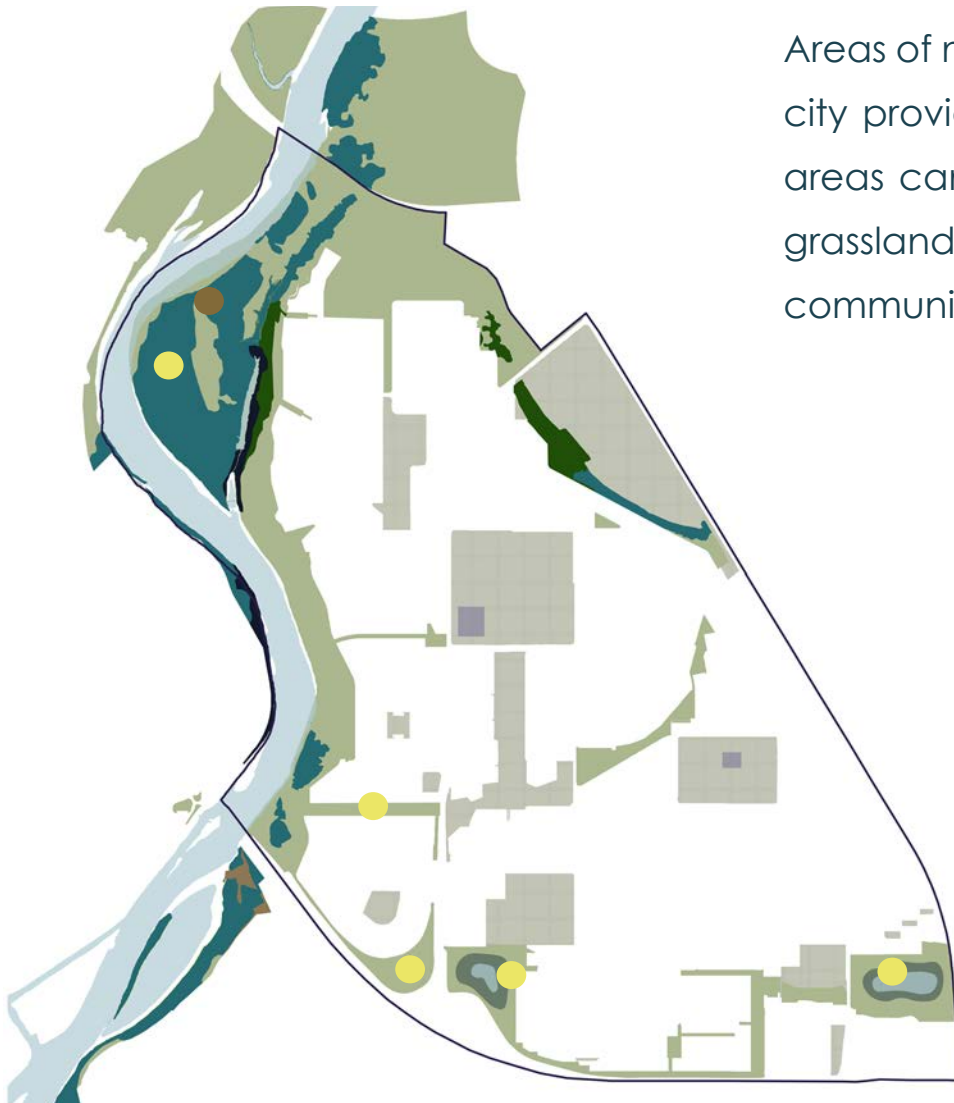
3 INTERPRETIVE TRAIL SIGNAGE



OPEN SPACE + RECREATION

REFLECT

HABITAT CREATION



NATURALIZING THE LANDSCAPE

Areas of mowed grass that require maintenance by the city provide little benefit to ecological function. These areas can be naturalized with native drought tolerant grassland species, creating attractive meadows for the community (and wildlife) to enjoy.

- Proposed Bee Nesting Sites
- Proposed Osprey Platform
- Native Grassland (Drought Tolerant)
- Balsam Poplar (Flood Tolerant)
- Upland Shrub
- Riparian Shrub
- Open Water
- Wetland Emergent Vegetation
- Manicured Community Garden

WHY DOES NATURALIZATION MATTER?

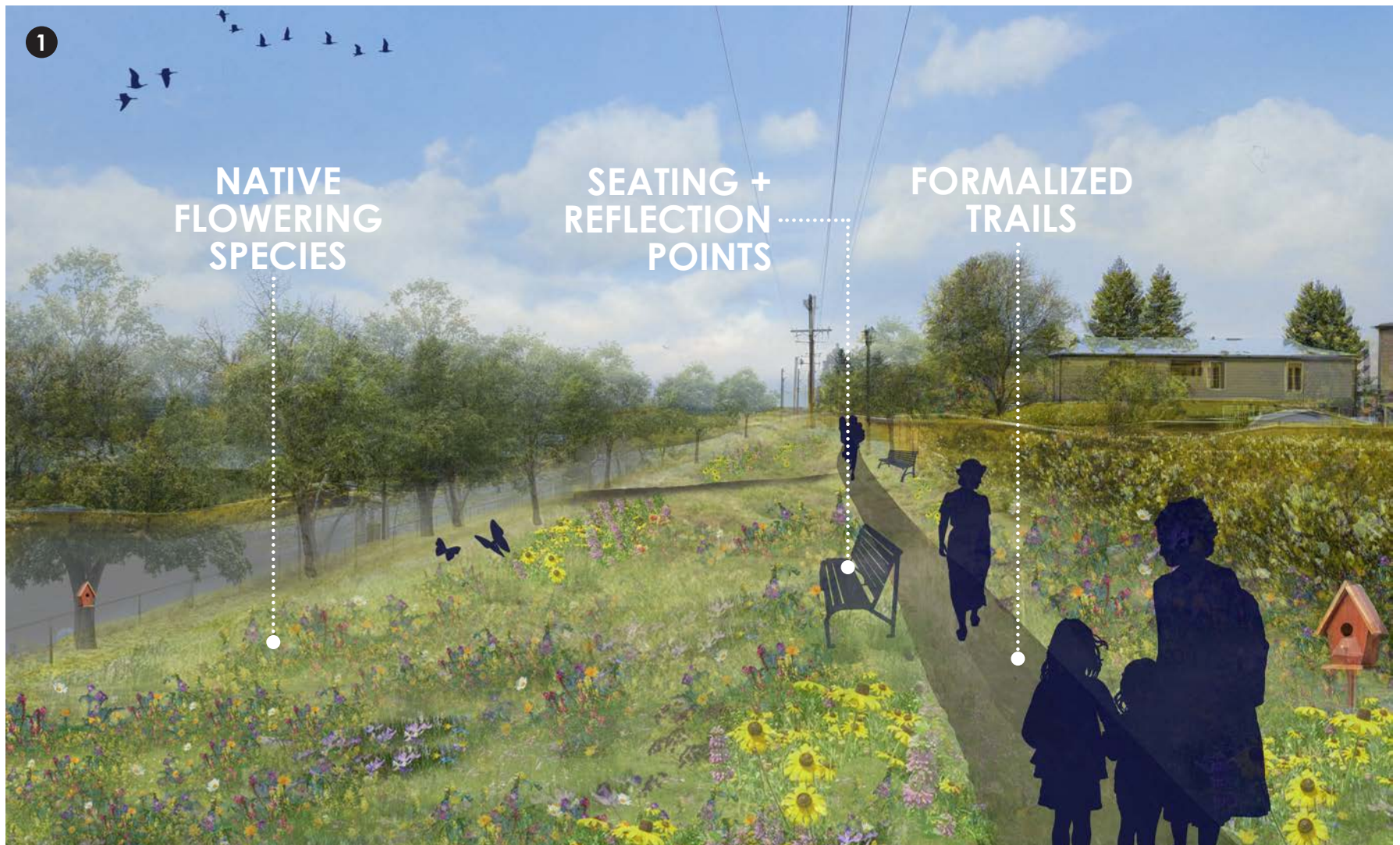
Planting native trees, shrubs, and other plants in otherwise mowed spaces provides economic, social and environmental benefits to the community. Native plants, such as drought tolerant grassland species, require less maintenance and watering, saving the city and citizens on maintenance fees. Native plants also provide essential food for different types of wildlife, stabilize slopes through root growth and act as carbon sinks in the face of climate change. Naturalized spaces can also beautify otherwise empty locations and can create educational opportunities for community members. They are places where people can connect and spend time in nature, producing positive mental health benefits.

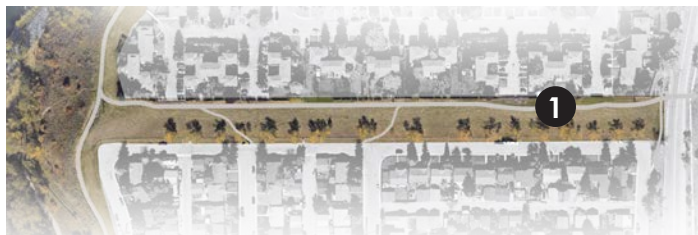


OPEN SPACE + RECREATION

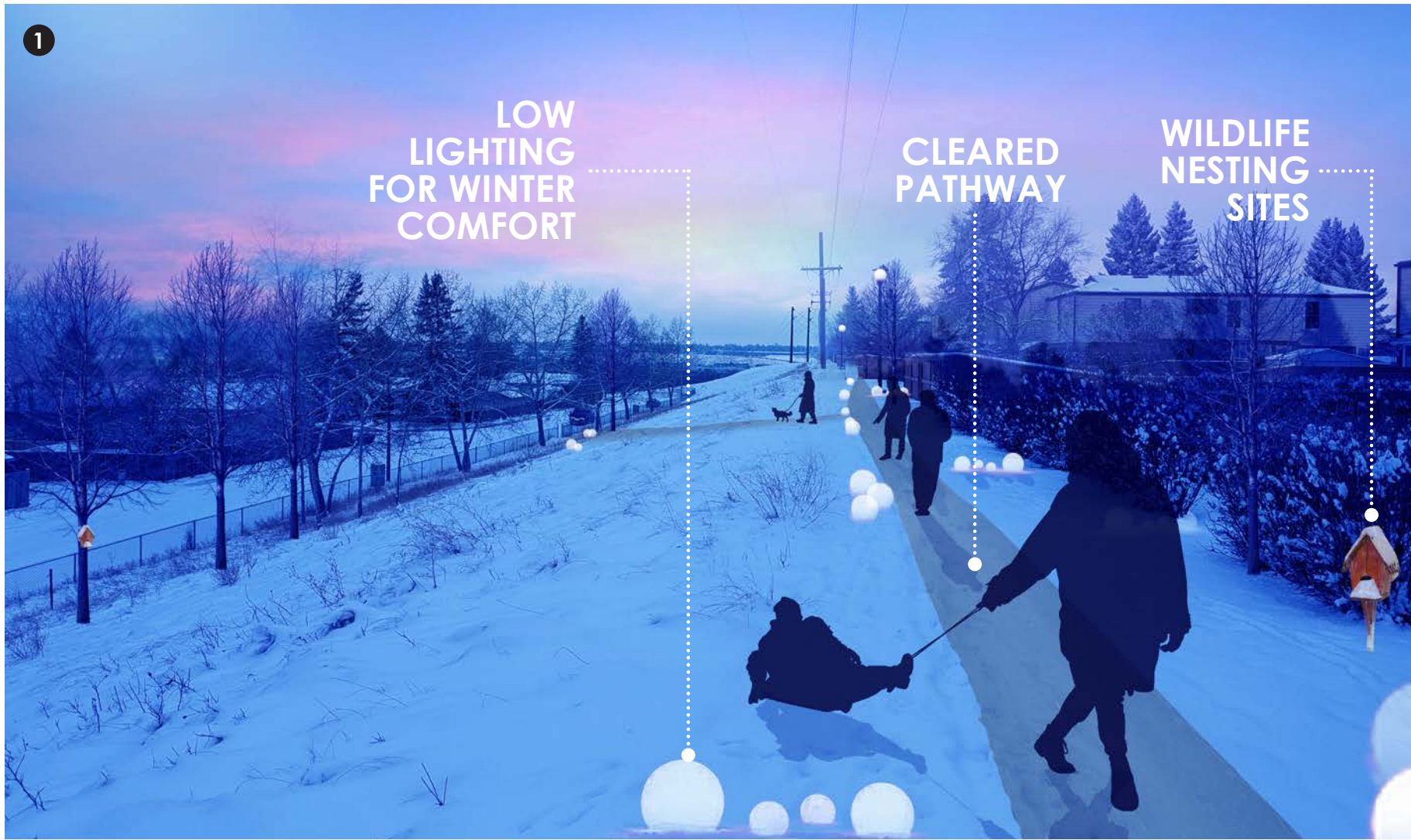
REFLECT

NATURALIZING THE LANDSCAPE





"THE MEADOW"



OPEN SPACE + RECREATION

SEASONAL PLANTING GUIDE

GRASSLAND PLANTS FOR LANDSCAPE NATURALIZATION

SPRING



Prairie crocus
Anenome patens



Shooting star
Primula conjugnes



Prairie rose
Rosa acicularis



Alpine aster
Aster alpines



Golden bean
Thermopsis rhombifolia



Blue-eyed grass
Sisyrinchium montanum



Blanketflower
Gaillardia aristata

SUMMER

Below is a non-exhaustive list of flowering plants attractive to pollinators by seasonal bloom time. Providing a diversity of flower colours, types, and bloom times offers food for many insects and animals throughout the growing season. This a key component of biodiversity and creating resilient ecosystems.

AUTUMN



Beebalm
Monarda fistulosa



Purple coneflower
Echinacea purpurea



Goldsturm black-eyed susan
Rudbeckia fulgida



Meadow blazingstar
Liatris ligulistylis



Shrubby cinquefoil
Dasiphora floribunda



Goldenrod
Solidago nemoralis

Note: species range shifts will occur with climate change and planting lists may require updates.

OPEN SPACE + RECREATION

PLANTING GUIDE

TREES



Balsam Poplar

Populus balsamifera

- Full sun
- Flood tolerant, hardy species
- Wind/snow block



Trembling Aspen

Populus tremuloides

- Full sun
- Well drained loamy soils
- Hardy, drought tolerant
- Reproduces vegetatively



Dropmore Linden

Tilia x flavescens

- Full sun
- Well drained soil
- Attracts pollinators
- Fragrant



Laurel Leaf Willow

Salix pentandra

- Not drought tolerant
- Can withstand flooding
- Wind/snow block
- Support wildlife



Rosthern Crabapple

Malus baccata

- Good for small yards
- Plant away from streets and sidewalks
- Full sun, average to moist soil



American Elm

Ulmus americanum

- Full to partial sun
- Moist deep soil
- Large with broad canopy
- Excellent street tree



Manitoba Maple

Acer negundo

- Prefers full sun
- Good for soil stabilization and wind breaks
- Hardy, fast growing



Green Ash

Fraxinus pennsylvanica

- Full sun, moist soil
- Extremely hardy and fast growing
- Grows in clay soils, survives extreme climates

SHRUBS



Saskatoon Berry
Amelanchier alnifolia



Western Snowberry
Symphoricarpos occidentalis



Wolf Willow
Eleagnus commutata



Mountain Ash
Sorbus decora



Red-Osier Dogwood
Cornus sericea



Chokecherry
Prunus virginiana

GRASSES



Sweetgrass
Hierochloa odorata



Rough fescue
Festuca campestris

Above are examples of plants that grow well in Calgary's climate and provide habitat for a variety of species. Refer to City of Calgary for complete planting guide¹.

¹ City of Calgary Yard Smart Guide

OPEN SPACE + RECREATION

LOCAL PARK POLICY RECOMMENDATIONS

Development within local park spaces shall:

- a. Ensure pedestrian and pathways connect to other green spaces within the community.
- b. Provide proper wayfinding signage for legibility and navigation of park space and surrounding community.
- c. Provide safe and accessible environments for all abilities through:
 - Adequate lighting
 - All season maintenance
 - Appropriate surface materials (ie. paved pathways for accessibility)
 - Use of permeable paving for park plazas, parking lots, and secondary connections
 - Ensuring a diversity of activities for all age groups
- d. Provide opportunities for all season activities.
- e. Align with community identity.
- f. Provide opportunities for social connection with gathering spaces.
- g. Provide seating near play spaces and in other green spaces.
- h. Provide adequate waste disposal receptacles within park spaces.
- i. Avoid removal of existing trees unless deemed unsafe by an arborist.
- j. Use native, drought tolerant species for planting (refer to Planting Guides on pages 105-108).

NATURAL AREAS POLICY RECOMMENDATIONS

For general natural areas, as outlined on the Habitat Typology map (page 101):

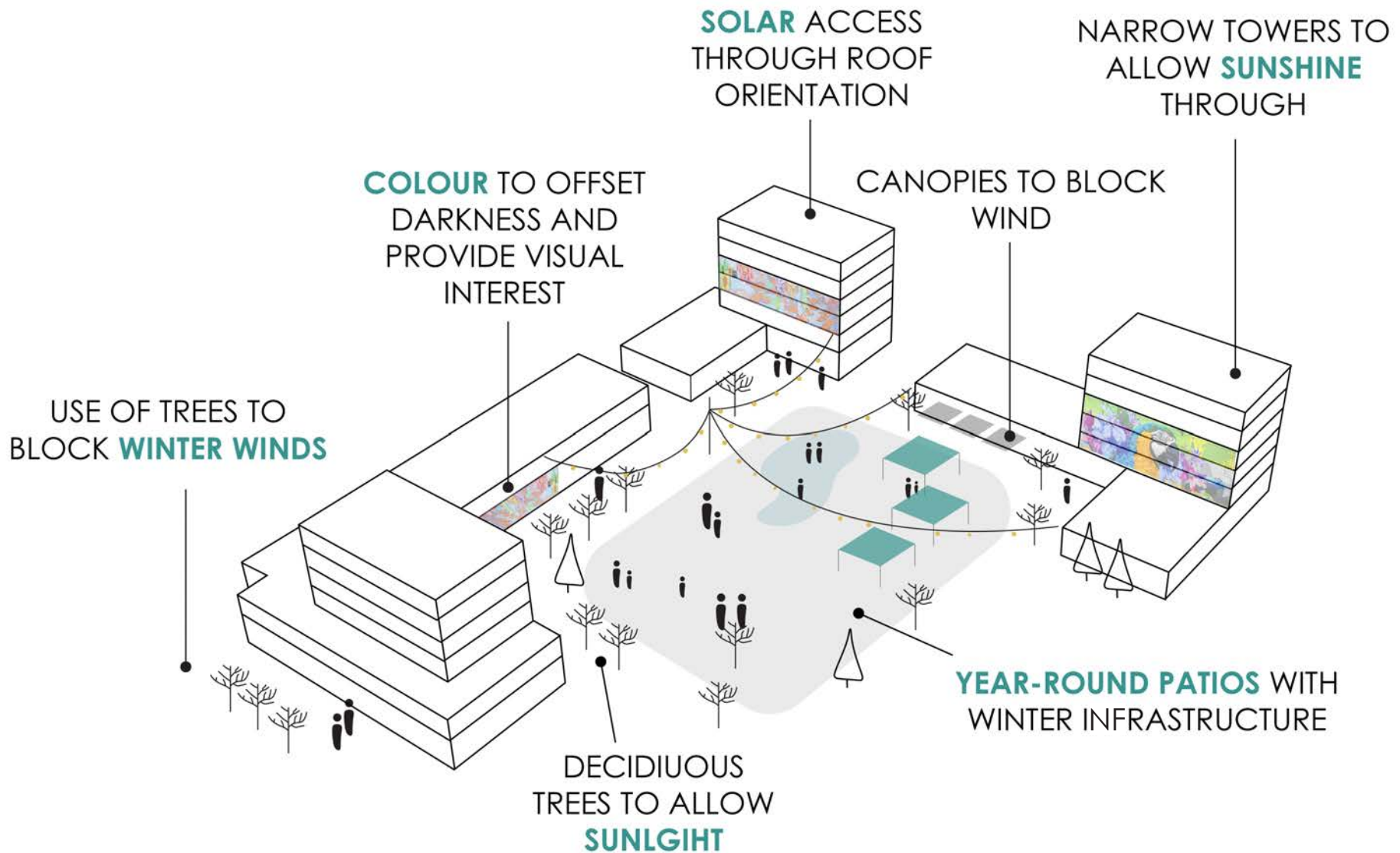
- a. Underutilized degraded land shall be naturalized¹ with native plants based on habitat zone (refer to Planting Guides on pages 105 -108 for species information).
- b. Existing trees shall be protected unless deemed unsafe by an arborist.
- c. Habitat areas outline on Habitat Typology map shall be restored and/or protected.
- d. Ridge pathway shall maximize views to mountains and downtown.
- e. River connections shall be improved in strategic locations along ridge pathway.
- f. Provide lookout platforms along ridge pathway at locations which are not susceptible to erosion.

Beaver Dam Flats designation area shall:

- a. be amended to S-UN (Urban Nature) (see City of Calgary Land Use Bylaws for rules and regulations of use).
- b. Ensure seating platforms be placed along trail network to prevent off trail human activity.
- c. Protect existing bee nesting sites throughout the area with signage and fencing.
- d. Provide interpretive signage and wayfinding along Discovery Trail Network.
- e. Provide adequate waste disposal receptacles along trail network.

¹City of Calgary Naturalization Guidelines (2017)

OPEN SPACE + RECREATION



WINTER CITIES DESIGN GUIDELINES

Winter city design shall be incorporated through:

- a. Providing a diversity of winter recreation opportunities such as:
 - Upgraded outdoor skating rinks
 - Cross-country ski trails
 - Skating trails
 - Winter cycling
 - Sledding hills
- b. Use of snow and ice to create public art.
- c. Providing warming huts and fire pits in public space to offer resting places.
- d. Providing access to year-round public washrooms in public spaces.
- e. Encouraging year-round food and beverage vendors.
- f. Prioritizing snow clearing on pedestrian and cycling paths and ensuring snow is not dumped onto pedestrian or cycling paths.
- g. Creating winter friendly transit shelters (i.e. heated bus shelters).
- h. Creating snow-ways next to cleared sidewalks for winter mobility options (i.e. sleds or skis).
- i. Providing winter wayfinding resources for ski routes, sled hills, and snow-ways.
- j. Ensuring that all-season storage facilities and changing areas are available.
- k. Providing year round patios.
- l. Ensuring greater use of colour in outdoor design.
- m. Providing pedestrian scale, low lighting for reduced light pollution.

For the Love of Winter: Strategy for Transforming Edmonton into a World Leading Winter City (n.d.)

WATER STEWARDSHIP

“Water is the driving force of all [life]”

~Leonardo Da Vinci



WATER STEWARDSHIP

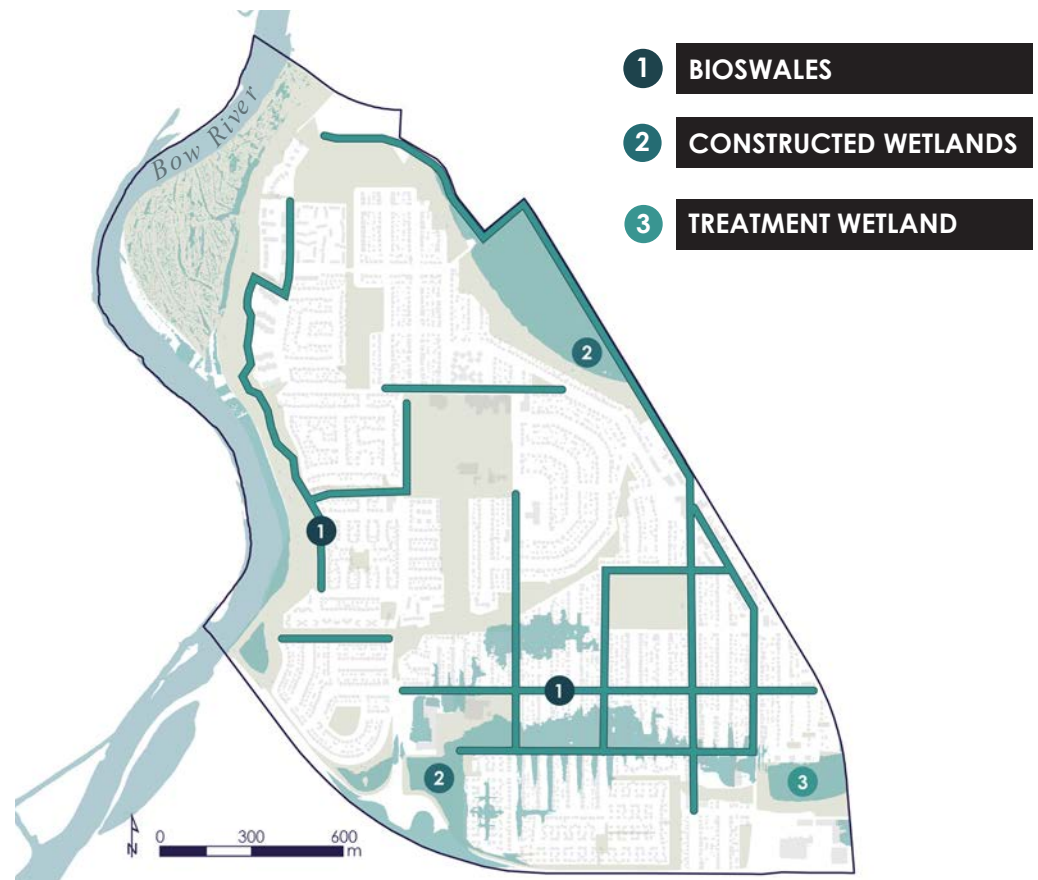
NATURAL INFRASTRUCTURE

Water security is one of the most prominent issues we face in Southern Alberta. It is an already dry prairie climate which projects to experience an increase in drought and extreme weather events. Water is our most valuable natural resource and its stewardship is a key component of a sustainable and resilient community. We need to be proactive to ensure the quality of our water resources for the future.

DRAINAGE ISSUES



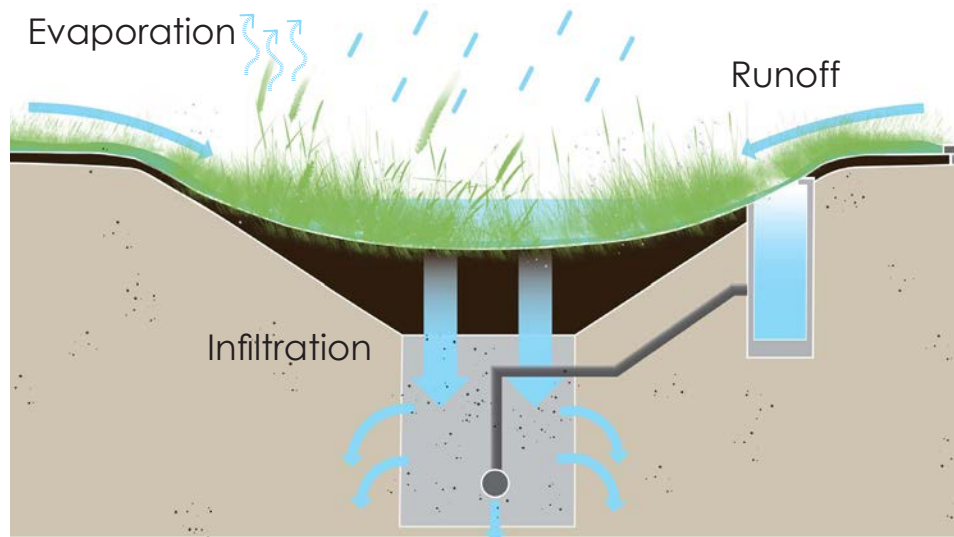
The local depressions identified in the landscape are key areas to improve stormwater management, through natural infrastructure like bioswales and constructed wetlands.



1

BIOSWALES

Bioswales are a low impact development practice which consists of gently sloped channels designed to catch, store and filter stormwater. They also beautify streets while providing habitat for beneficial insects and birds, increase biodiversity, and slow the flow of water during major precipitation events.



Adapted from Boogaard et al, 2006

SLOW THE FLOW**STORMWATER MANAGEMENT**

Bioswale in Wisconsin

BEAUTIFY STREETS

Indianapolis Cultural Trail

WATER STEWARDSHIP

2

CONSTRUCTED WETLANDS

Constructed wetlands provide stormwater capture and treatment, while also creating new habitat supportive of increased biodiversity. Wetland zones identified by key indicator plant species are derived from the Stewart and Kantrud system for wetland classification, mimicing natural vegetation stratification from open water to upland. Low-lying areas and closed depressions in the landscape are ideal locations for implementation of constructed wetlands in the community of Ogden.

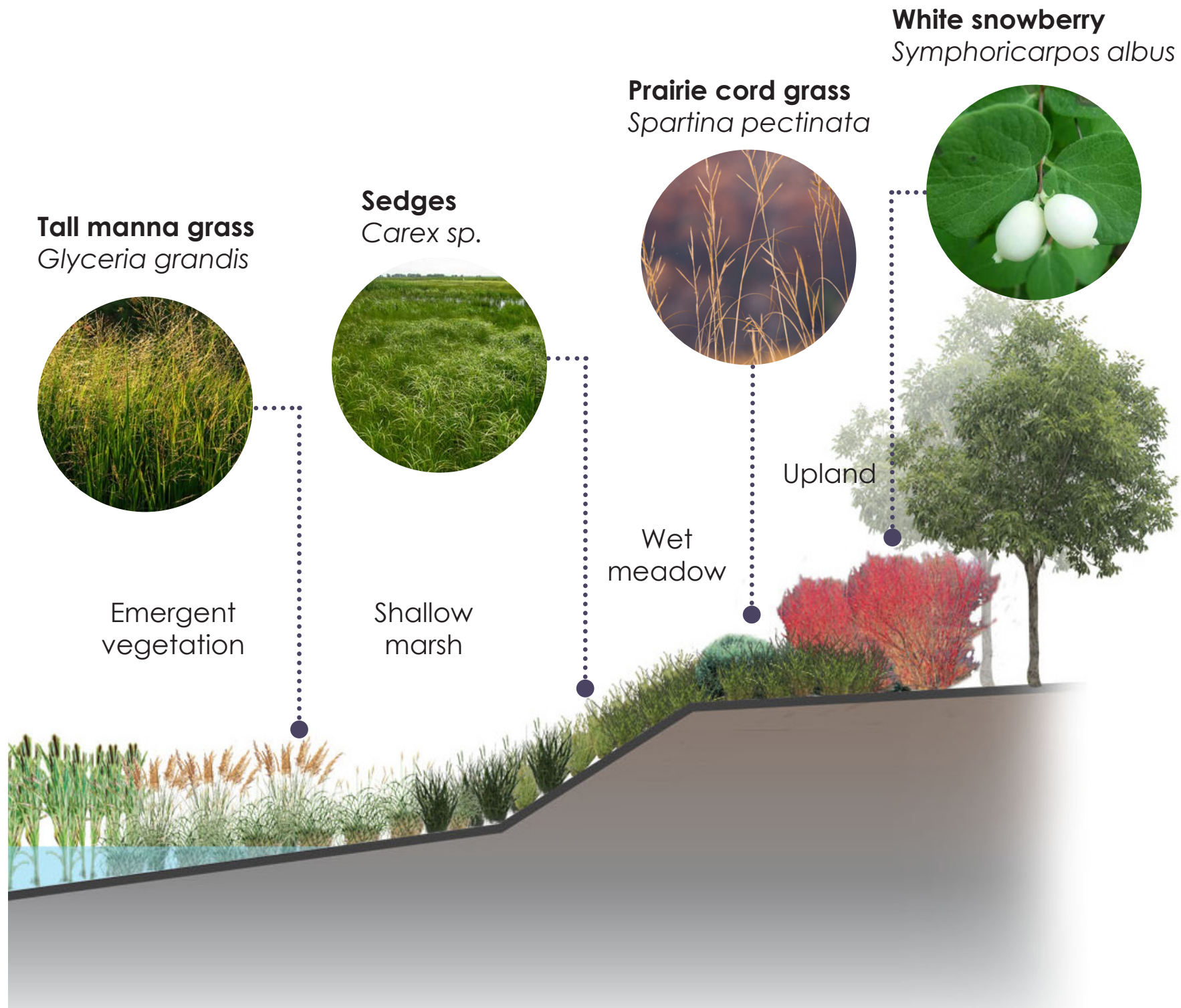


Cattail
Typha latifolia



Open
water





WATER STEWARDSHIP

3

TREATMENT WETLAND

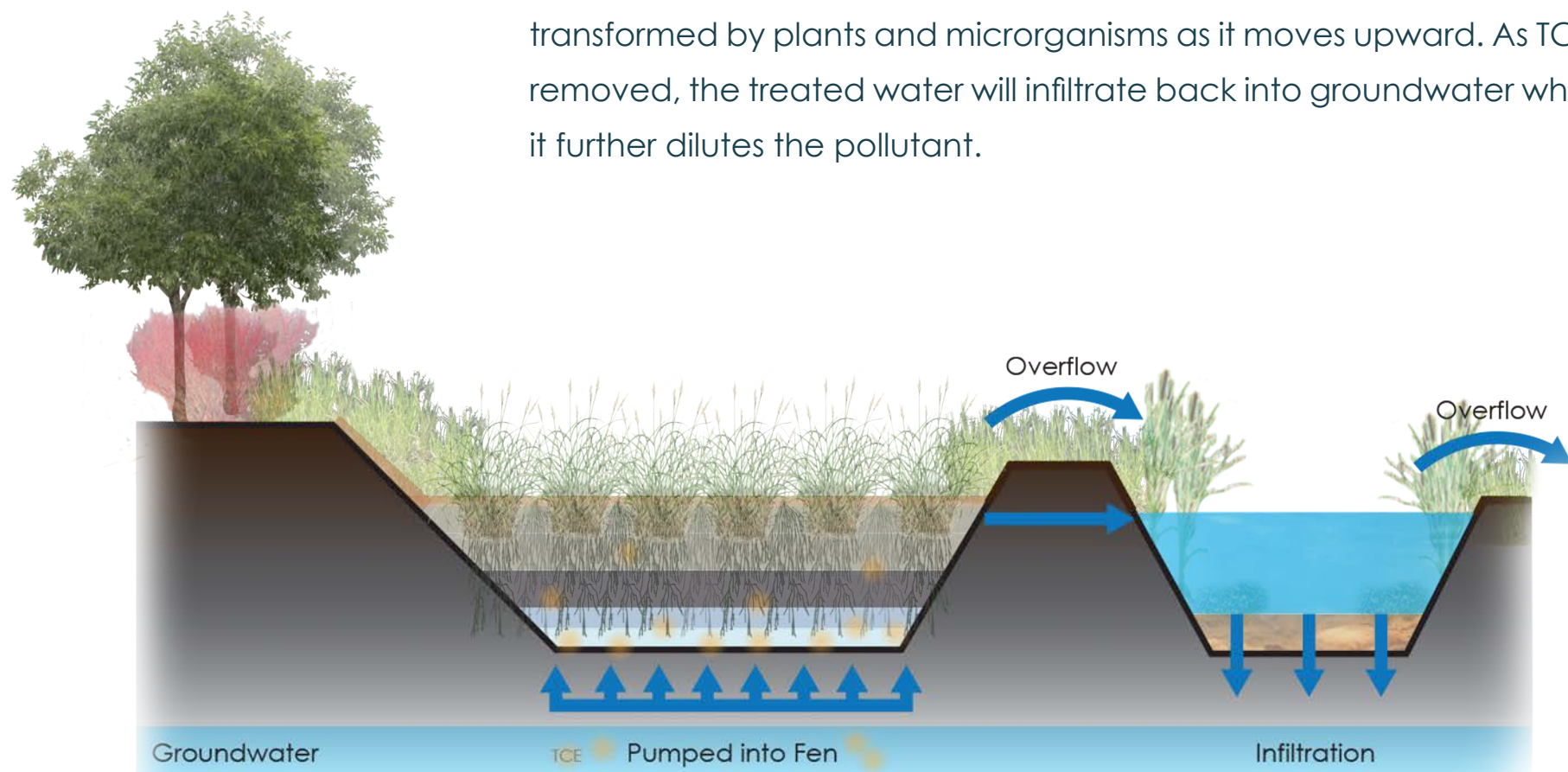
Remediation of groundwater contamination is an example of treating the issues, and not the symptoms. The treatment wetland is a special instance of a constructed wetland, where we are proposing to remediate the TCE from the groundwater supply in a system modelled after a fen. The natural removal of TCE from groundwater using wetlands has been extensively researched since the early 90's and as the most common organic pollutant in groundwater globally, a project of this nature could be precedent setting for future developments facing this challenge.



Dale Hodges Park, O2 Planning + Design
Calgary, Alberta

GROUNDWATER REMEDIATION

Contaminated groundwater is pumped uniformly up into the base of a constructed fen where water is wicked upward through the soil. TCE is transformed by plants and microorganisms as it moves upward. As TCE is removed, the treated water will infiltrate back into groundwater where it further dilutes the pollutant.



Adapted from Amon et al. (2007)

WATER STEWARDSHIP

3

TREATMENT WETLAND

Natural infrastructure can be incorporated with recreational opportunities, improving the public realm, air quality and urban heat island effect, which all contribute to the well-being of the community. Fenland Park features a treatment wetland, along with a train of constructed stormwater wetlands, along a gradient of increasing public interaction. A paved plaza space open for a flexibility of community uses, including a splash pad in summer and skating rink in the winter, offers a human interface for all ages to interact with an ecologically functional park space.

- 1 TREATMENT WETLAND/ FEN
- 2 MAINTENANCE ACCESS
- 3 RESTORED GRASSLAND
- 4 STORMWATER/ HABITAT WETLAND
- 5 PLAZA/ SPLASH PAD/ SKATING RINK
- 6 CONCESSION/ WASHROOMS
- 7 PLAYGROUND
- 8 PICNIC AREA
- 9 SLEDDING HILL



"FENLAND PARK"

DESIGN
INTERVENTIONS

GUIDING
PRINCIPLES

WHAT
WE HEARD

SITE
ANALYSIS

PROJECT
INTRODUCTION

WATER STEWARDSHIP

POLICY RECOMMENDATIONS

Water is our most valuable natural resource, and water security in terms of quantity and quality is a pressing issue which can be addressed at all scales, including the community level. Water is impacted by our everyday lives, and strategies which address the quality and conservation of our water resources are key to ensure the sustainable management of this critical resource. Calgary's Source Water Protection Plan outlines key goals for protection of our water resources, and these relate land use planning, innovation in stormwater management, leveraging key partnerships, and community education to water management.



Water stewardship in Ogden shall be promoted through:

- a. Use of bio-retention and bioswales¹, with priority in locations identified on Natural Infrastructure map (page 115).
- b. Use of constructed wetlands for stormwater treatment and habitat creation² with suggested locations identified on Natural Infrastructure map (page 115) according to local depressions prone to water pooling.
- c. Integration of stormwater management and treatment with recreational opportunities, such as wetland parks which provide opportunity for community interaction with wetland ecosystems.
- d. Promotion of awareness of water stewardship through opportunities for education and community involvement in conservation initiatives.
- e. Seeking academic and industry partnerships and funding to advance innovation in water management through the remediation of groundwater contaminated with TCE.
- f. Protection of riparian ecosystems through promotion of low impact recreation.
- g. Rainwater harvesting for maintenance and watering of parks and community gardens.
- h. Encouragement of rainwater collection on private property for the purposes of yard maintenance.
- i. Drought tolerant landscaping in parks (refer to Planting Guides on pages 105-108)
- i. Encouragement of drought tolerant landscaping on private property.
- j. Implementation of net zero water in all new development.
- k. Promotion of water conservation practices through educational opportunities and incentives.

¹Low Impact Development Guidelines, Module 2 - Bioretention and Bioswales - The City of Calgary (2016)

²Principles for Stormwater Wetlands Management in the City of Calgary (2009)

LAND USE

Resilient communities are better able to absorb the impacts of unforeseen and unprecedented changes in the environment, economy, and society. The global pandemic is a prime example of how quickly our lives and livelihoods can change. We cannot plan for everything, but we can create conditions which can help Ogden survive and thrive through whatever challenges may arise.

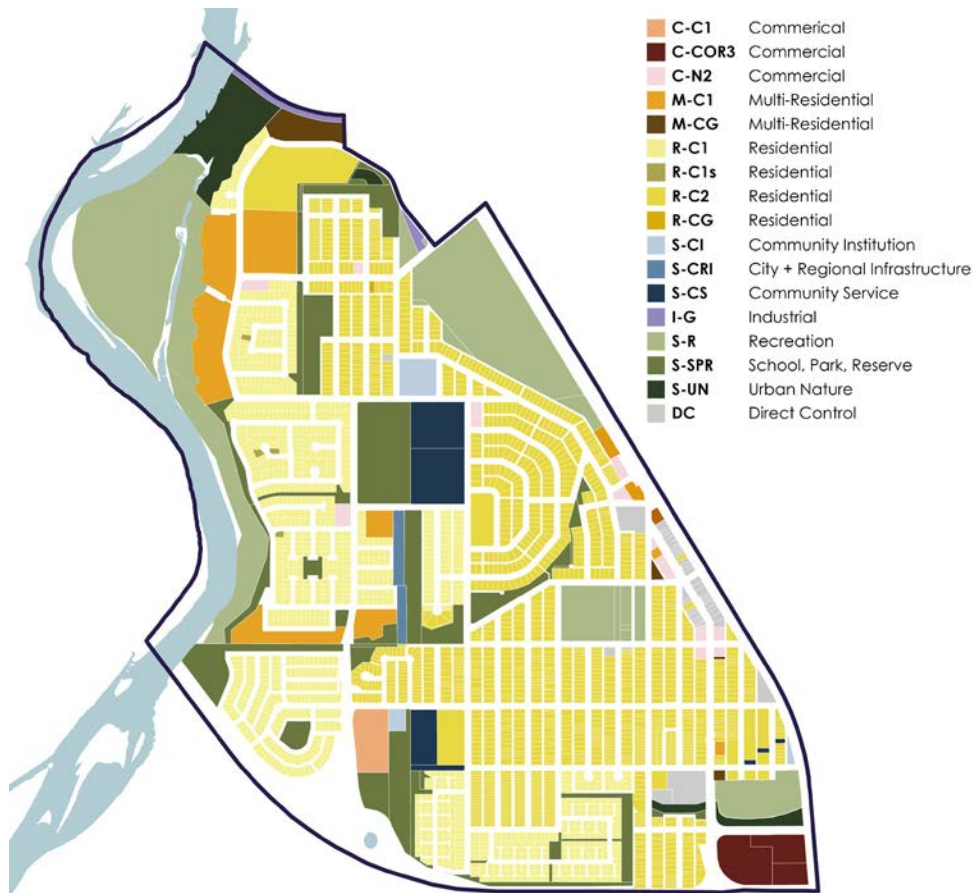


Neighbourhood Nook in Ogden

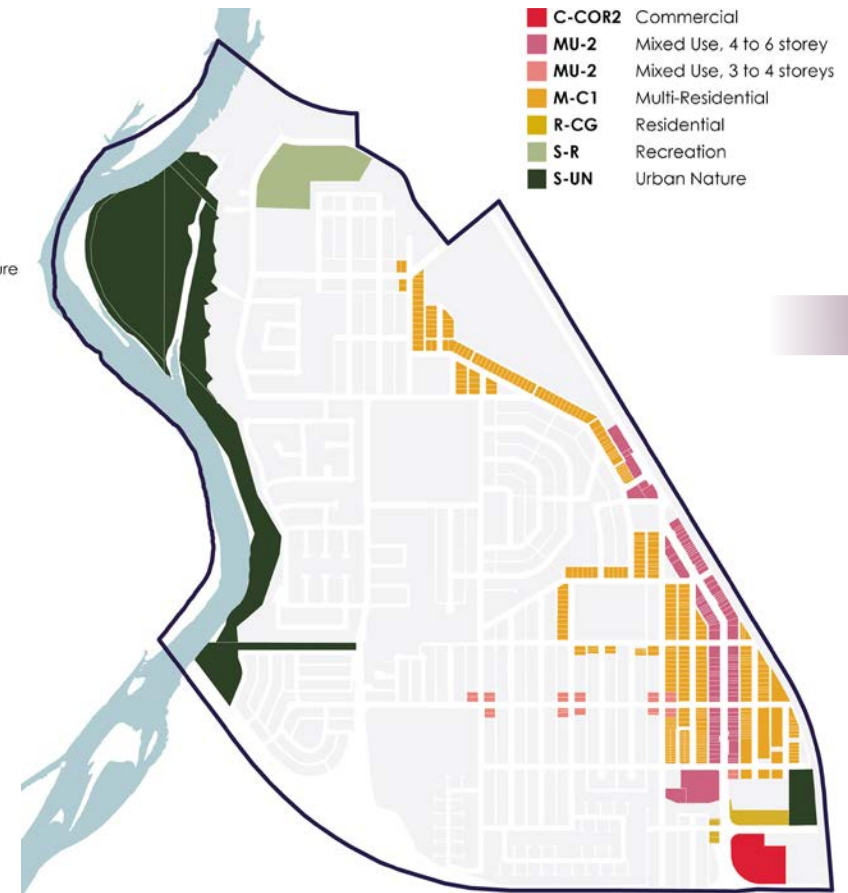
LAND USE

One of the challenges for Ogden is the decline in population which creates the risk of school closures. As Ogden moves through its own life-cycle, we need to attract a diversity of people, including young families, to the community. This is achieved through diversity in land use, housing, attainability, and affordability which suit the changing demographic and allow for current and future residents to age in place.

EXISTING LAND USE



PROPOSED LAND USE CHANGES

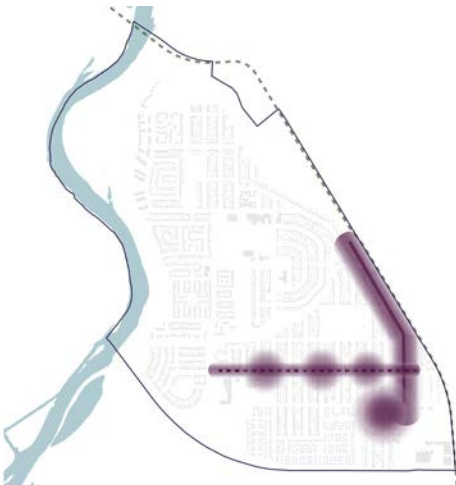


The arrival of the Green Line provides a natural concentration area for added density, appropriate to the scope of Ogden. Drawing people to Ogden is the first step towards community improvement and it starts with where they live and work.

LRT PROXIMITY



PRIORITY CORRIDORS

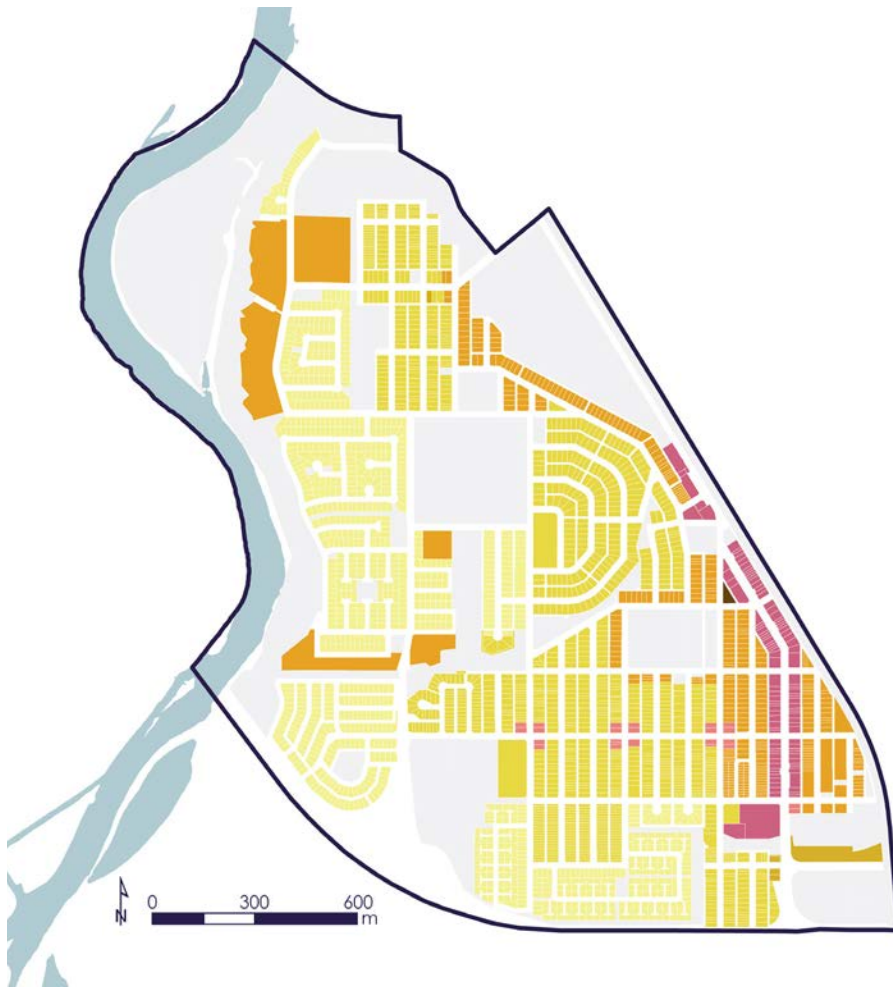


DENSITY



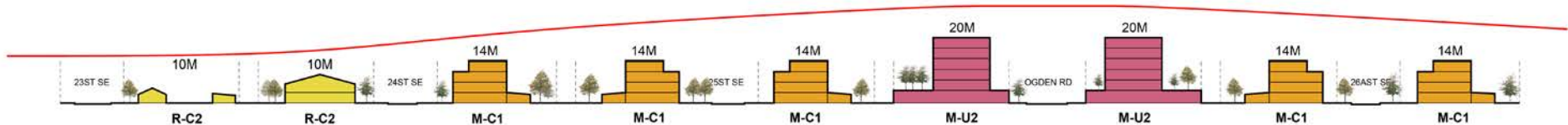
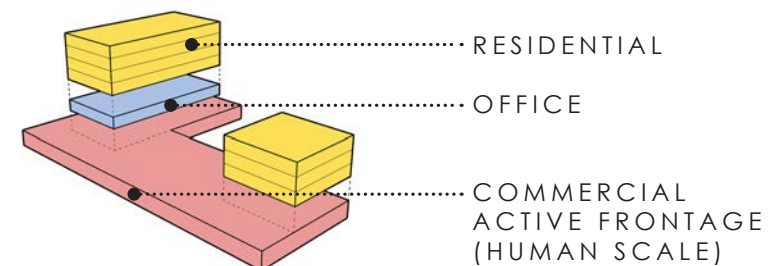
LAND USE

HOUSING DIVERSITY



We propose a vertical integration of land uses, providing diverse uses and services in concentrated activity nodes which offer walkable amenities for residents. Introducing a diversity of housing options, including mixed use integration, provides a housing stock supportive of a wide variety of needs whether the need is for space, location, or attainability.

VERTICAL MIX



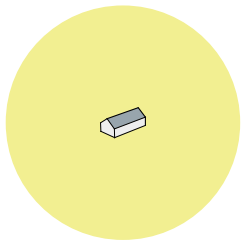


LAND USE

POLICY RECOMMENDATIONS

LOW DENSITY RESIDENTIAL

RC-1



COVERAGE: 45%

STOREYS: 1-2

DENSITY: 20 UPH



SINGLE-DETACHED HOMES

Make it easier for secondary and laneway units to be added to encourage gentle density:

- a. All RC-1 homes shall have front yard landscaping with drought resistant native species preferred (refer to Planting Guides on pages 105 - 108).
- b. Laneway homes shall be permitted on RC-1 land use, where lots have a laneway access.
- c. High quality public realm should be prioritized. Refer to Mobility + Connectivity section (page 157) for design and policy strategies to calm traffic, enhance pedestrian realm, and improve definition of the public realm on residential streets.
- d. Where a laneway exits, no front garages shall be allowed, and all parking must be located at the rear.

RC-1s



City of Calgary (2022)

SECONDARY SUITES

Utilize the existing housing stock to increase density, without affecting neighbourhood character, and provide an affordable housing option as well as a financial benefit for the homeowner by:

- a. Creating a separate entrance
- b. Not requiring additional parking with 600m from a C-Train station
- c. Allow one additional parking space for the Suite outside of the 600m zone from a C-Train station.

LANEWAY UNITS

- a. Permit laneway homes on RC-1 lots with laneway.
- b. Laneway lighting should be lit downwards to avoid light pollution.
- c. Laneway improvements shall be completed.
- d. No additional parking required with 600m from a C-Train station
- e. Allow one additional parking space for the suite outside of the 600m zone from a C-Train station.
- f. Laneway homes must follow City of Caglary guidelines for backyard suites¹.



Government of Ontario

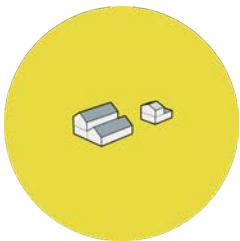
¹City of Calgary Backyard Suites How-to-Guide (2019)

LAND USE

POLICY RECOMMENDATIONS

LOW DENSITY RESIDENTIAL

RC-2 SEMI-DETACHED/ DUPLEXES



COVERAGE: 45%

STOREYS: 1-2

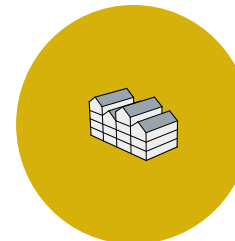
OF UNITS/PARCEL:

1 MAIN, 1 SECONDARY



MEDIUM DENSITY

RC-G TOWNHOMES / ROWHOMES



COVERAGE: 45 - 60%

STOREYS: 3-4

DENSITY: 75 UPH



AFFORDABLE HOUSING

- 30% of all housing stock should be dedicated to affordable housing.
- 10 % of affordable housing should be dedicated senior's housing.

SEMI-DETACHED/ DUPLEXES

Provide opportunities to downsize, allowing aging in place, adding gentle density, and affordable housing options.

TOWNHOMES / ROWHOMES

Support affordable “ground oriented” housing with smaller units keeping in line with demographic shifts in population.

Applicable to RC-2 and RC-G, address issues described above by:

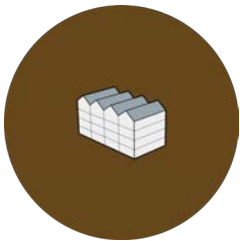
- a. Providing independent entrances for each of the secondary units.
- b. Providing independent heating systems for each of the secondary units.
- c. Encouraging front yard landscaping with drought resistant native species preferred (Refer to Planting Guides on pages 105-108).
- d. Prioritizing high quality public realm (refer to Mobility + Connectivity section on page 157).

LAND USE

POLICY RECOMMENDATIONS

MEDIUM DENSITY

MC-G



COVERAGE: 60 - 70 %

STOREYS: 3-4

DENSITY: 111 UPH



3 TO 4 STOREY APARTMENTS

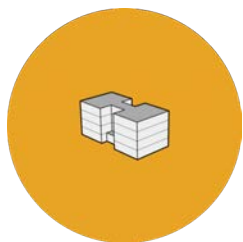
Provide a mix of housing options suitable for a range of income levels, family units and lifestyles by:

- a. Prioritizing high quality public realm (refer to Mobility + Connectivity section on page 157).
- b. Ensuring some or all units provide direct access to grade.
- c. Ensuring ground accessible follow city design standards^{1,2}.
- d. Providing parking underground or a rear garage accessible through a laneway.
- e. Ensuring all non-grade accessible residential units have balconies for each unit.
- f. Preserving sunlight access and landscape views to all open spaces and parks in the community.

¹City of Calgary Access Design Standards (2016)

²City of Calgary Barrier-free Design Guide (2017)

MC-1



HEIGHT: 14M

DENSITY: 148 UPH



3 TO 4 STOREY APARTMENTS

Provide a mix of housing options suitable for a range of income levels, family units, and lifestyles by:

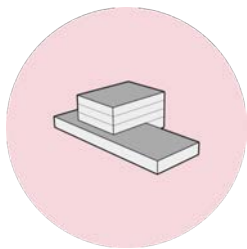
- Prioritizing high quality public realm (refer to Mobility + Connectivity section on page 157).
- Providing parking in underground or rear garage accessible through a laneway.
- Ensuring each residential unit has an accessible balcony.
- Preserving sunlight access and landscape views to all open spaces and parks in the community.

LAND USE

POLICY RECOMMENDATIONS

MEDIUM DENSITY

CN-2



ACTIVE FRONTAGE

MIXED USE

FAR: 1

HEIGHT: 10M



3 TO 4 STOREY MIXED USE

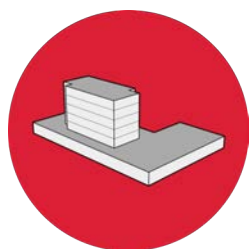
Provide affordable housing options suitable for a range of income levels, in close proximity to amenities in neighbourhood commercial zones by:

- Providing parking in underground or rear garage accessible through a laneway.
- Ensuring each residential unit has an accessible balcony.
- Preserving sunlight access and landscape views to all open spaces and parks in the community.

MIXED USE

Choice and variety suit the needs of changing lifestyles as people age, allowing for residents to stay in their community. Mixed uses bring people and services together, keeping streets active, safe, and lively throughout the day and night.

C-COR2



ACTIVE FRONTAGE

FAR: 2.0

HEIGHT: 14M



4 STOREY MIXED USE

Allow a diversity of uses to activate commercial centres and offer long term resilience by:

- Ensuring a vertical mixed use with active frontage retail on ground floor, with offices and/or residential above.
- Encouraging clustered development; buildings shall be located on parcels in such a way to create a defined and continuous block face on the commercial street with permeable and pedestrian oriented active uses at street level.
- Discouraging uses that negatively impact on street permeability and activity.

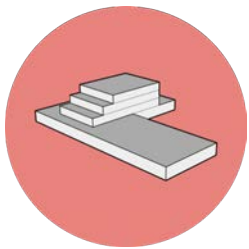
LAND USE

POLICY RECOMMENDATIONS

MEDIUM DENSITY

MU-2

4 STOREY MIXED USE



ACTIVE FRONTAGE

FAR: 2.25

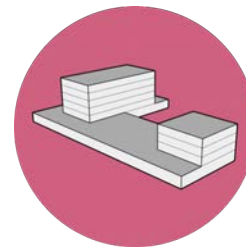
HEIGHT: 14M

*PREFERRED STREET WALL



MU-2

6 STOREY MIXED USE



ACTIVE FRONTAGE

FAR: 3.25

HEIGHT: 20M

*MANDATORY STREET WALL



Ensure a diversity of uses to activate the main street and offer long term resilience by:

- a. Ensuring a vertical mixed of uses with active frontage retail on ground floor, with offices and/or residential above.
- b. Encouraging clustered development; buildings shall be located on parcels in such a way to create a defined and continuous block face on the commercial street with permeable and pedestrian oriented active uses at street level.
- c. Maintaining the street wall, which can have gaps up to 20% to allow for high quality pedestrian connections, building entrances and public plaza amenities that enhance the public realm.
- d. Maintaining human scale at the street level; residential floors should be separated from the active ground level street wall, using step-backs or other architectural design elements.
- e. Ensuring buildings respect adjacent built form by maintaining step-backs and rooflines to maintain the quality of massing and character along the active main street.
- f. Prioritizing high quality public realm (Refer to City of Calgary policies, plans^{1,2}, and land use bylaws).
 - Uses that negatively impact the active street frontage are not permitted. Larger stores must allow for greater permeability.
 - Preferred uses are retail shops, restaurants, coffee shops, convenience food stores, fitness centres, information service providers, libraries, pet care services, print centres, protective and emergency services, retail and consumer services, specialty food stores, takeout food services, artist studios, health care services, instructional facilities, offices, service organizations, and veterinary clinics.
- g. Preserving sunlight access and landscape views to all open spaces and parks in the community.
- h. Ensuring parking and entrance ramps are located at the rear of buildings.

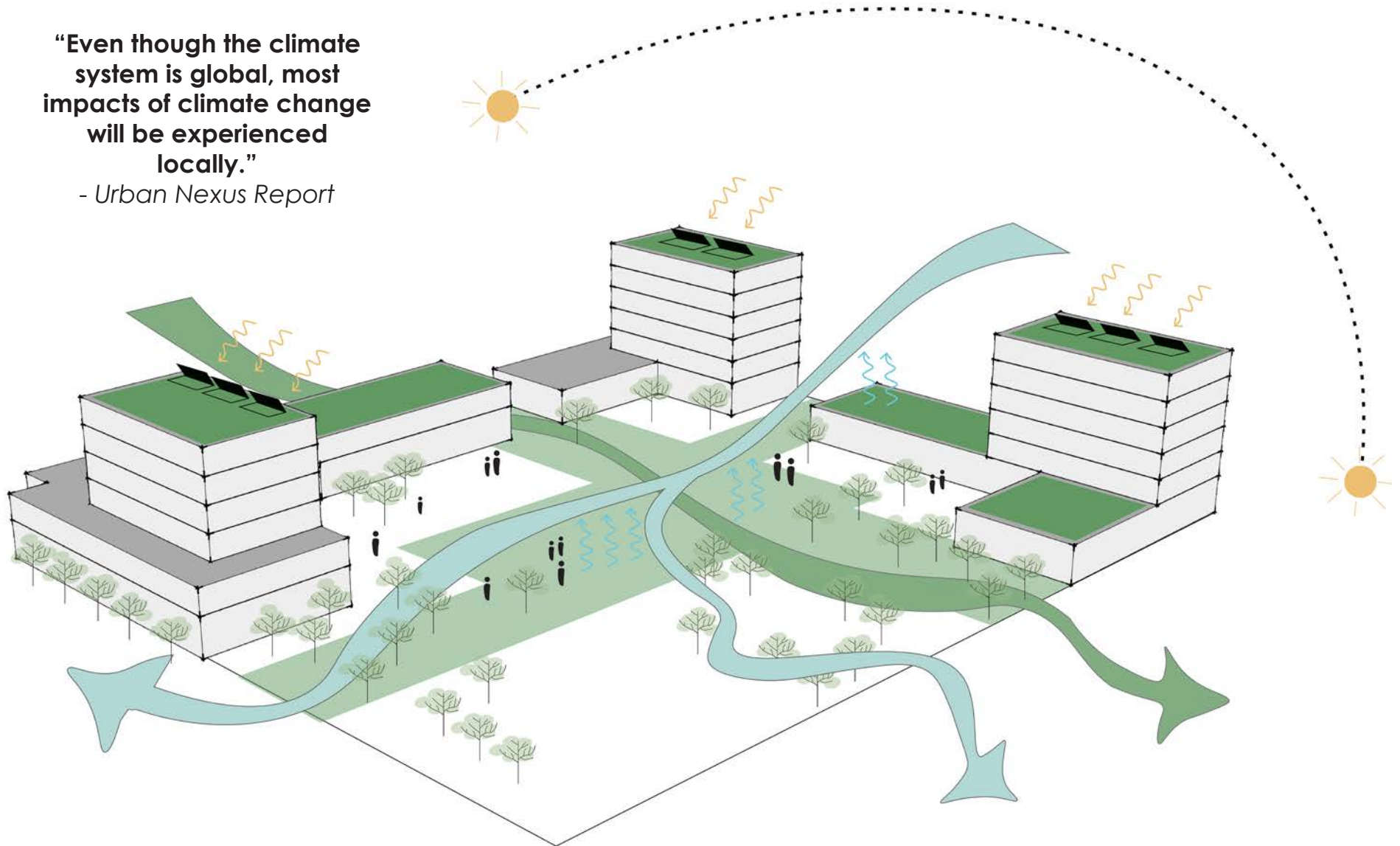
¹Complete Streets Policy, City of Calgary, 2014

²Main Street Implementation Plan, City of Calgary, 2018

LAND USE

“Even though the climate system is global, most impacts of climate change will be experienced locally.”

- Urban Nexus Report



Adapted from Climate Change and Cities (2018)

CLIMATE RESILIENCE DESIGN GUIDELINES

Any future Area Redevelopment Plans should require consideration of climate adaptive design strategies with direction from the City of Calgary and climate change experts.

Community resilience shall be supported through climate adaptive design strategies:

- a. Assess and map current community resilience to identify areas for improvement or intervention¹.
- b. Engage community members in development of climate adaptive and resilience strategies at the community level¹.
- c. Increase vegetative cover through tree planting and green roofs to provide a cooling effect on the micro-climate through increased evapotranspiration, provides carbon sequestration, and improves water quality².
- d. Ensure thoughtful building orientation to provide cooling and ventilation allowing for reduced energy usage and improved airflow for coping with increased heat stress under a changing climate².
- e. Support energy efficiency in new developments to reduce greenhouse gas emissions and transition to the utilization of renewable energy sources².
- f. Explore implementation of storm resistant design of buildings and public spaces².
- g. Support local food production through community and rooftop gardens².
- h. Develop emergency preparedness plan in the event extreme weather events or disasters¹.

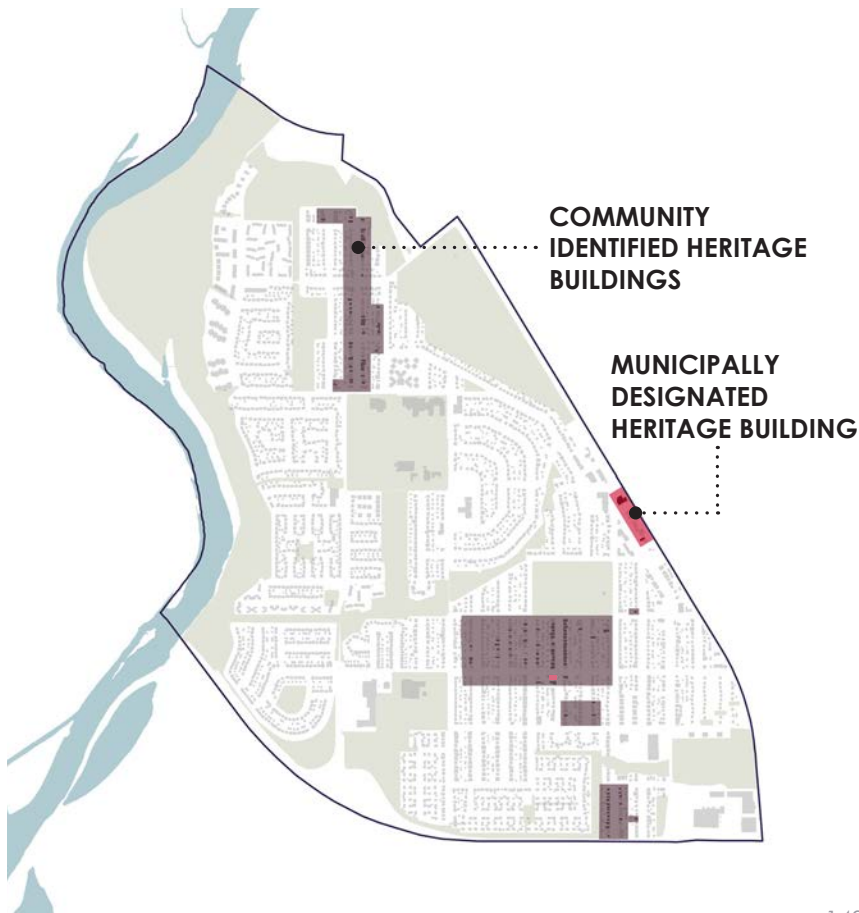
¹Resilient Neighbourhoods Toolkit - City of Vancouver

²Climate Change and Cities, Chapter 5 - Urban Planning and Urban Design (2018)

LAND USE

HERITAGE

Heritage is of clear importance to Ogdenites, as they recently undertook a process to identify community heritage assets which are not currently designated by the city or province. A heritage overlay is a tool which would offer protections to these community assets. This is an important aspect of sustainability in city building, as these heritage buildings show their resilience by providing opportunity for adaptive reuse, enhancing sense of place, and offering cultural and economic vitality.



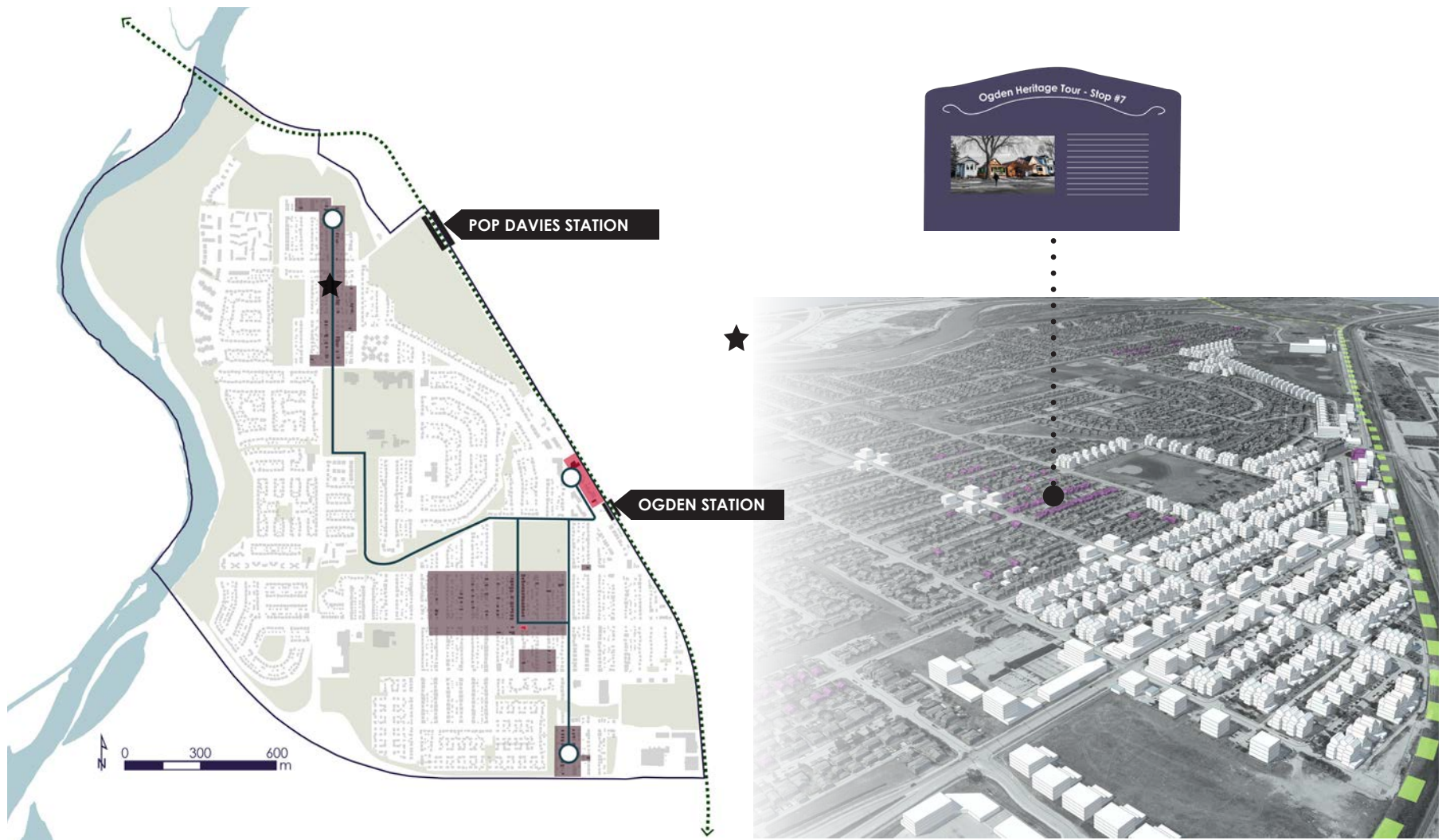


Heritage Home in Ogden

LAND USE

SELF DIRECTED HERITAGE TOUR

With the addition of a self-directed heritage tour, we can encourage cultural tourism and celebrate the pride that Ogdenites feel in their community, while passing it on to future generations.





LAND USE

HERITAGE POLICY RECOMMENDATIONS

Create and enhance a sense of place by preserving streetscapes, historic block patterns, and significant tree canopies. Character-defining elements include materials, forms, location, spatial configurations, uses, and cultural associations or meanings that contribute to the heritage value of a historic place.

For protected buildings on the Inventory of Heritage Resources, protections are applied through the City of Calgary regulations and Canadian Standards¹.

HERITAGE OVERLAY

COMMUNITY IDENTIFIED HERITAGE ASSETS – NEW DEVELOPMENTS

- a. New buildings in heritage overlay areas should be compatible with the context of abutting sites on the Community Identified Heritage Inventory.
- b. All buildings in the heritage overlay areas should be built to the street line to the same setback from front and rear property lines as their neighbours.
- c. The language and character of the proposed buildings in the heritage overlay areas should use the elements within the existing buildings to inform the design character or proportion of development to maintain heritage streetscapes.

¹Standards and Guidelines for the Conservation of Historic Places in Canada

COMMUNITY IDENTIFIED HERITAGE ASSETS – EXISTING BUILDINGS

- a. Repairs; Original windows, roofs, materials, cornices, porches, facades, and other heritage features should be repaired, where possible. If necessary to replace, replacement should be done in the same style, materials, workmanship, and colours as the original elements.
- b. Language and character of the proposed additions to heritage buildings in the heritage overlay areas should use the elements within the existing buildings to inform the design character or proportion of development.
- c. New amendments to heritage assets should be built such that removing them does not impact the heritage building.

TRANSFER OF DENSITY

Density unused by buildings on community identified heritage inventory, may transfer unused development intensity to buildings within 300 m of the C-Train station, or in any other such are identified for the transfer of development rights as per the City of Calgary.

ADAPTIVE REUSE

The community heritage buildings are eligible for adaptive reuse to financially incentivise restoration and preservation of such assets.

LAND USE

COMMERCIAL NODES



Retail and commercial options at four different scales, allow for a diversity of retail amenities supported by an increase in population.

	C-C1	Commercial
	C-COR2	Commercial
	C-COR3	Commercial
	C-N2	Commercial
	MU-2	Mixed Use, 4 to 6 storey
	MU-2	Mixed Use, 3 to 4 storeys



Henry S Miller, Main Street, Hudson, Ohio

LAND USE

1 NEIGHBOURHOOD NOOK

LOCAL BUSINESS IN RESIDENTIAL BUILDINGS CREATE SMALL COMMUNITY HUBS

Allow for low traffic businesses and live-work in residentially zoned areas, providing flexibility for people moving to work from home.

Before



After



2 NEIGHBOURHOOD NODE

NEIGHBOURHOOD COMMERCIAL WITH RESIDENTIAL ABOVE

Proposed at current strip mall locations, re-purposing these spaces for mixed use development with affordable housing.

Before



After



COMMERCIAL NODES

3 THE MARKET (COMMUNITY FLEX AREA)

SAFeway PARKING LOT TRANSFORMED INTO A VIBRANT POP-UP PLAZA WITH MARKET VENDORS

Transforms the Safeway parking lot into a community flex space, with opportunity for pop-up events without a permanent loss of parking.

Before



After



4 THE VILLAGE

NEW MIXED USE DEVELOPMENT, ACTIVE FRONTAGE, LIVELY COURTYARD

The Village at the former Legion site brings additional density to the community as a book end to the main street, with a vibrant community courtyard.

Before



After



LAND USE

MAIN STREET



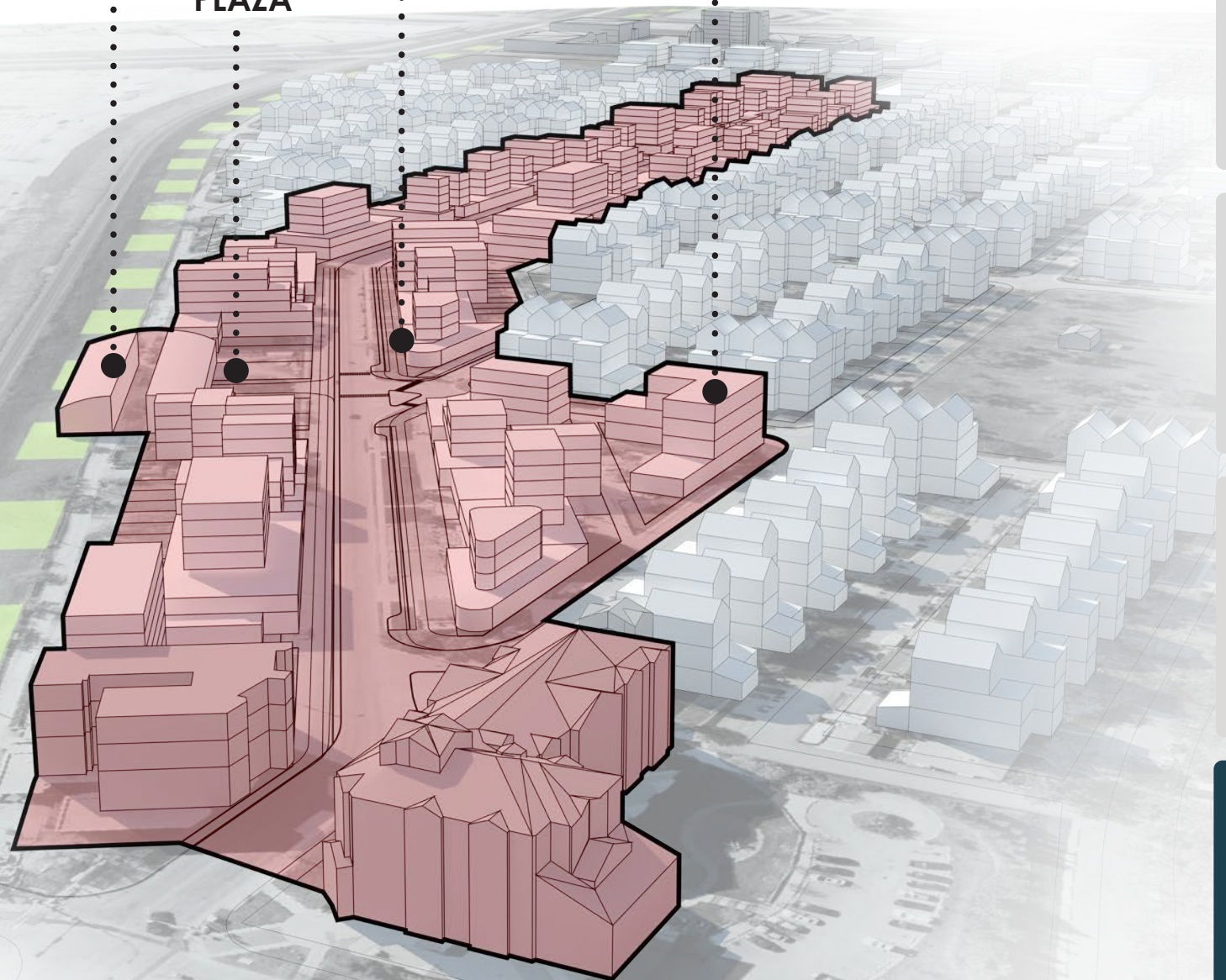
Ogden road presents an opportunity to create a vibrant main street in the community, with a fine-grained pattern of retail and active frontage on both sides, up to 850 m long. The heritage buildings provide a backdrop for new development, highlighting the past while embracing the future.

OGDEN LRT
STATION

PUBLIC
PLAZA

MAIN STREET
ACTIVE
FRONTAGE

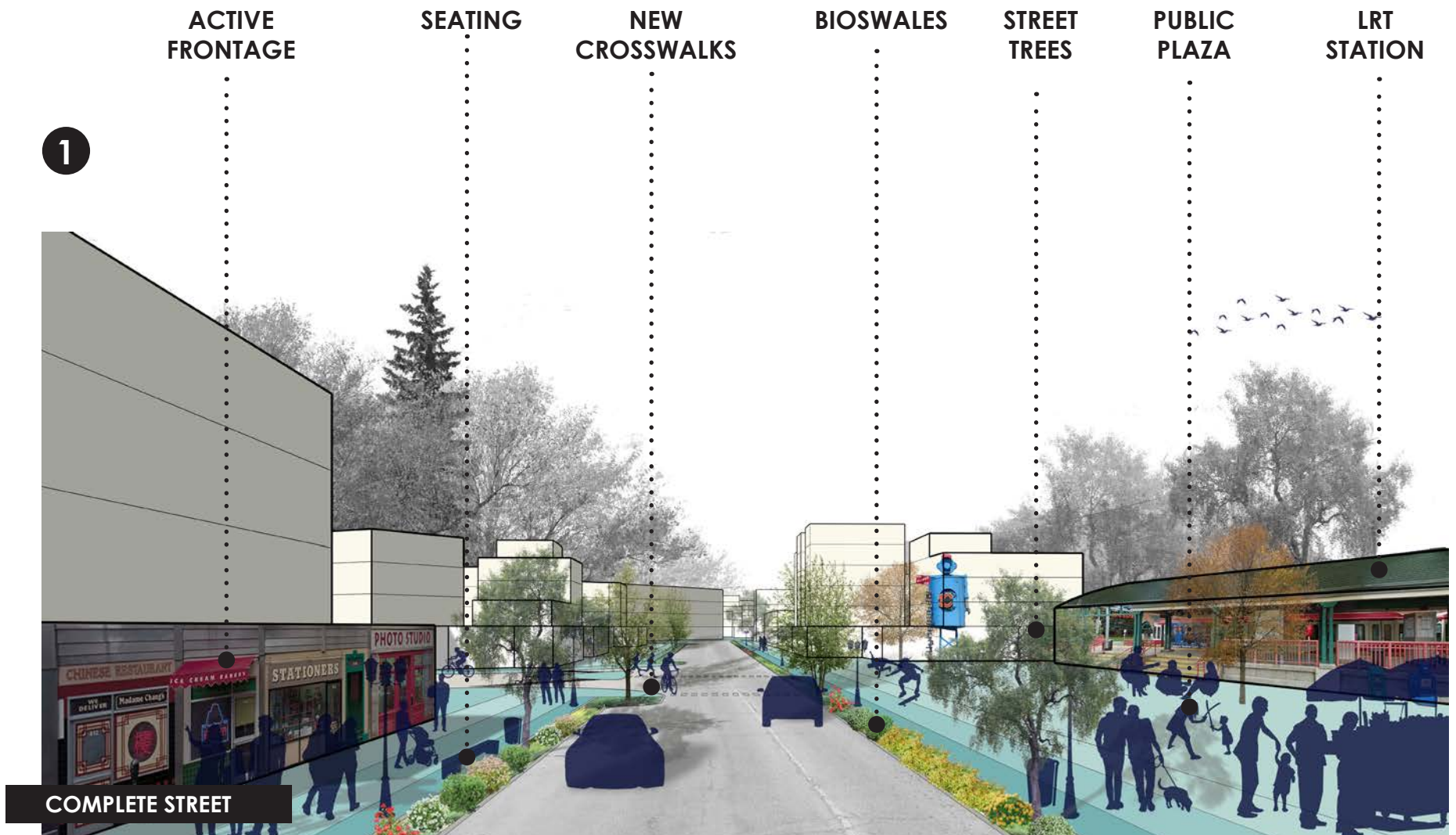
RESIDENTIAL
ABOVE



LAND USE

MAIN STREET

A vibrant main street with easy access to the Green Line LRT can be a catalyst that brings new people to the community.



Street enhancements improve the pedestrian experience, with a reduction of traffic lanes in favour of wider sidewalks, bioswales, street trees, and a public-private flex zone for spillover activity, such as small patios. Public life is additionally supported with a plaza space at the C-Train station. Active street life is supported by mixed use developments up to 6 storeys in the vicinity of the Green Line, with gentle transition from adjacent residential areas.



MOBILITY + CONNECTIVITY

“The best movement is the one that is not motorized”

~Catherine Morency
Canada Research Chair in the Mobility of People



Ridge pathway, Ogden

MOBILITY + CONNECTIVITY

- Shared-use road
- Bi-directional bike lane
- Multi-use path

EXISTING NETWORK

Slopes to plateau exceed 5%



PROPOSED AAA NETWORK



~15 km



OF AAA FACILITIES
CONNECTING
OGDENITES



MULTI-USE PATH



BI-DIRECTIONAL BIKE LANE



SHARED-USE STREET

ALL AGES + ABILITIES NETWORK

At the heart of our mobility interventions is the prioritization of pedestrians and cyclists. We recognize that Calgary is a city designed around the personal vehicle, and cars are not going anywhere any time soon. There is a push for electric vehicles to combat climate change, but this does not address other issues that come with vehicles such as traffic congestion, noise, and safety. Our solution is an All Ages and Abilities network to connect Ogden, with precedent from the City of Vancouver, which is all about flipping the priority from cars to people. If we can make the choice to not drive the more convenient, accessible and enjoyable option, more people are likely to make this choice.

MOBILITY + CONNECTIVITY

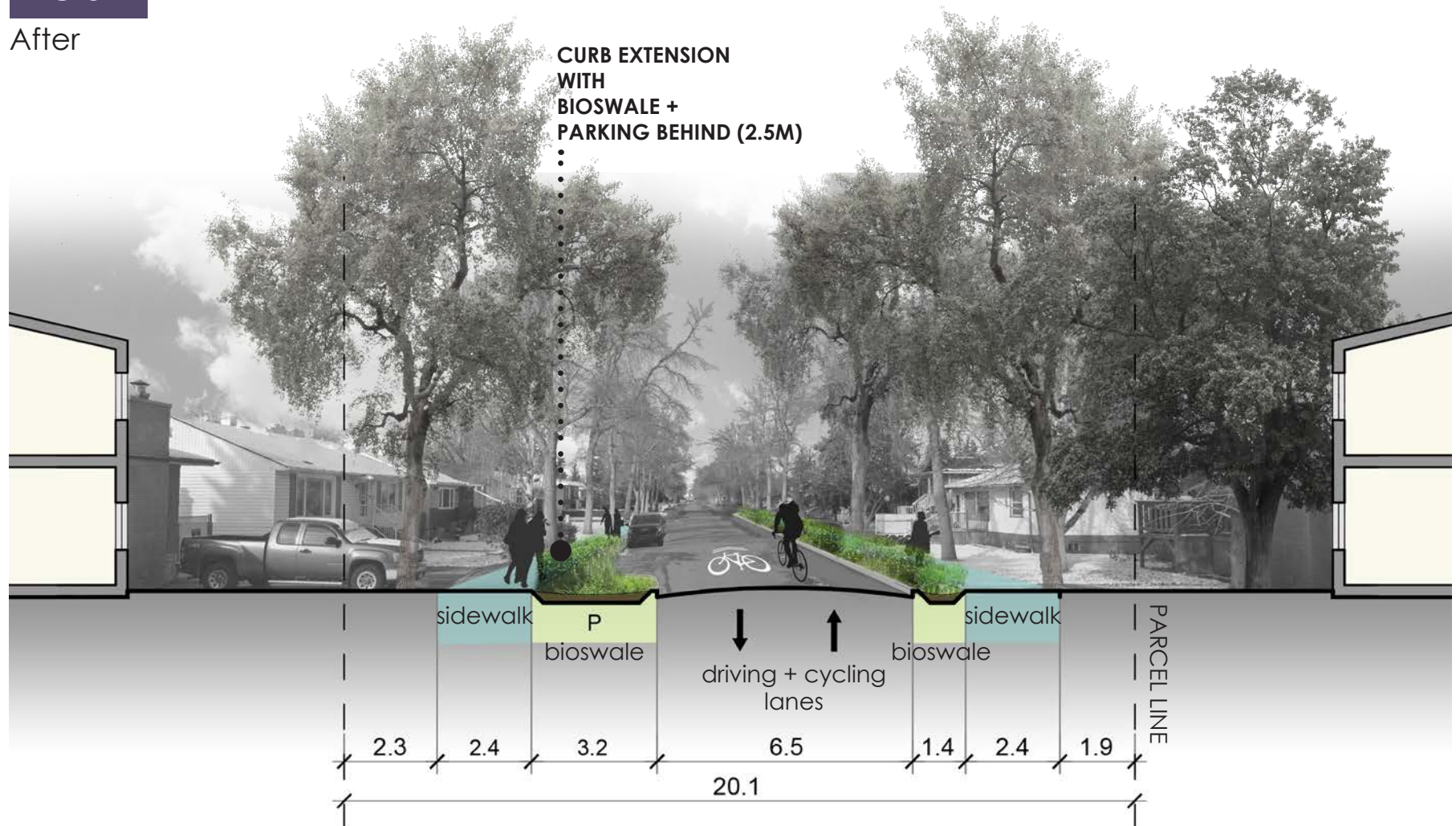
1

SHARED-USE STREETS

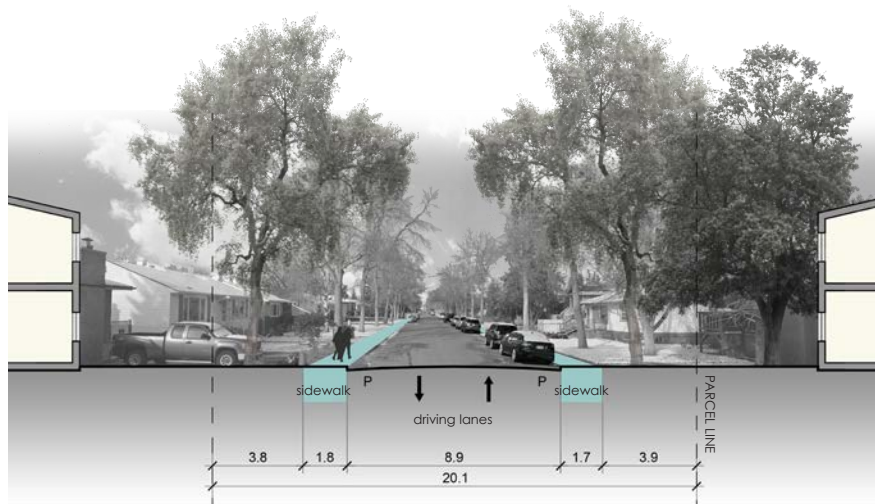
18 ST

After

Shared use streets require slow travel speeds (<40km/h) and space for bikes and cars to safely pass, with improvements to pedestrian sidewalks which accommodate the existing tree canopy.



Before



Street parking is retained on half of the street, with flexibility for streets with higher parking needs and the ability to adapt to future needs. Shared use streets require little initial investment beyond some paint and barriers.

After



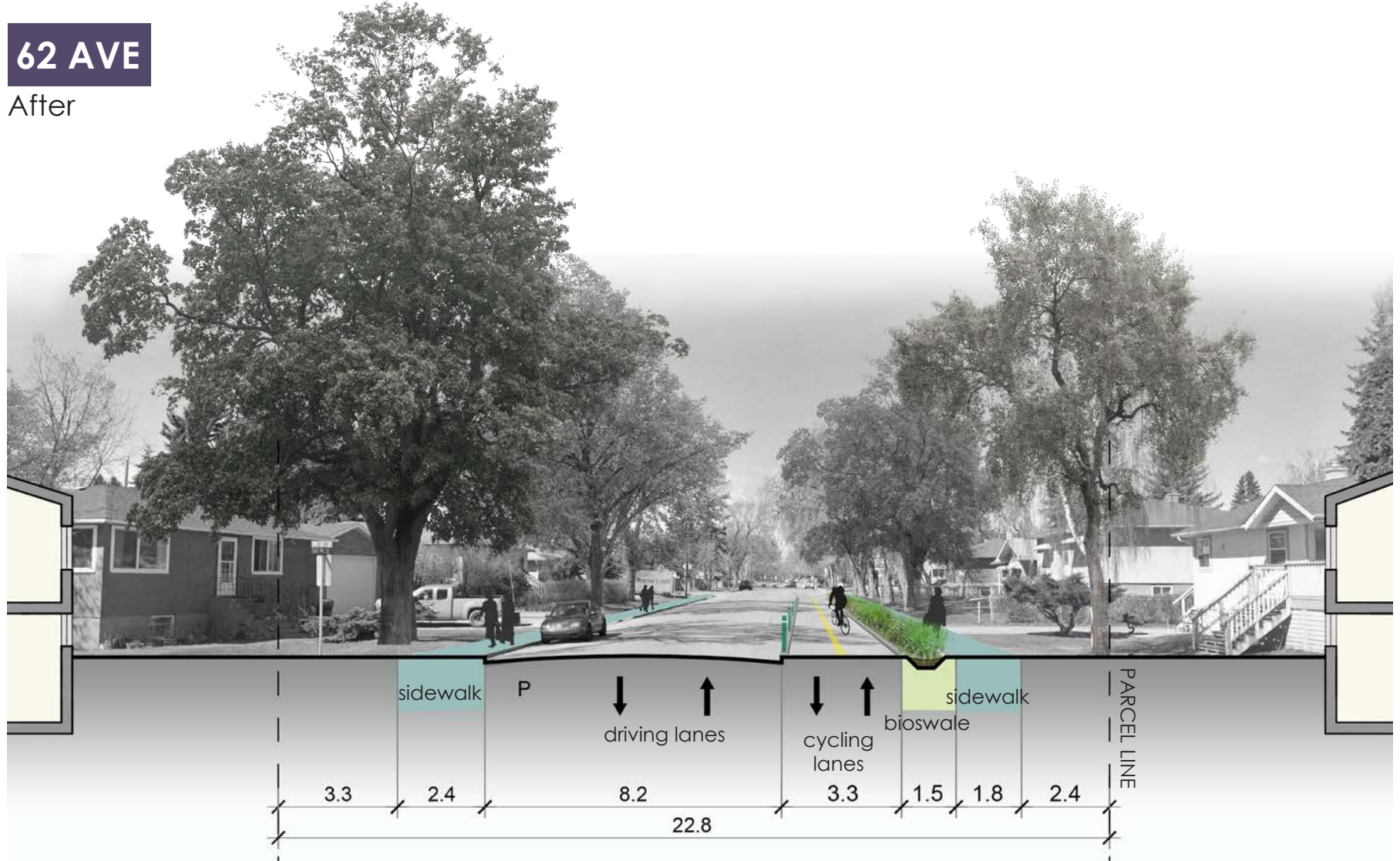
MOBILITY + CONNECTIVITY

2

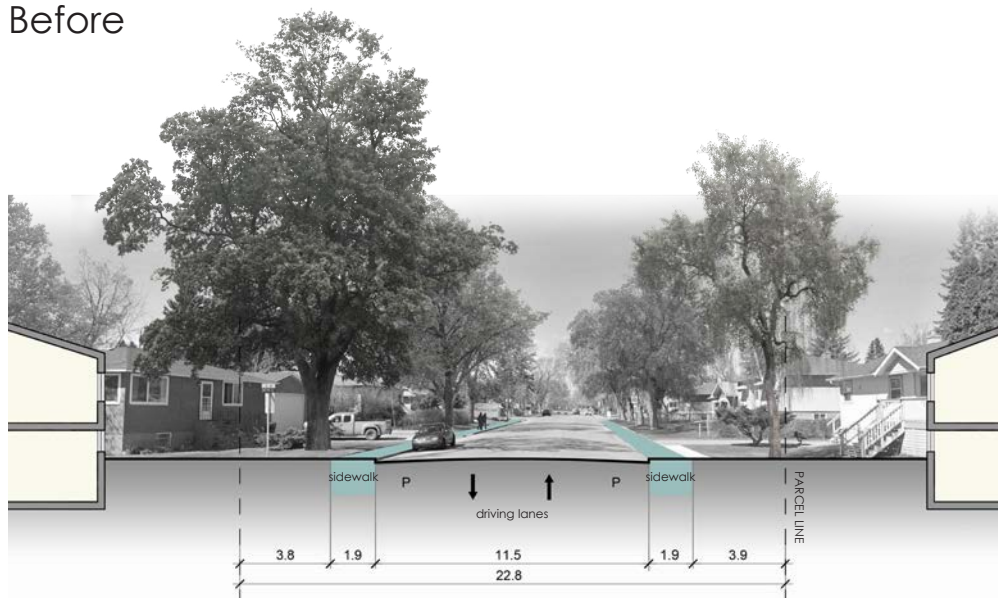
BI-DIRECTIONAL BIKE LANE

62 AVE

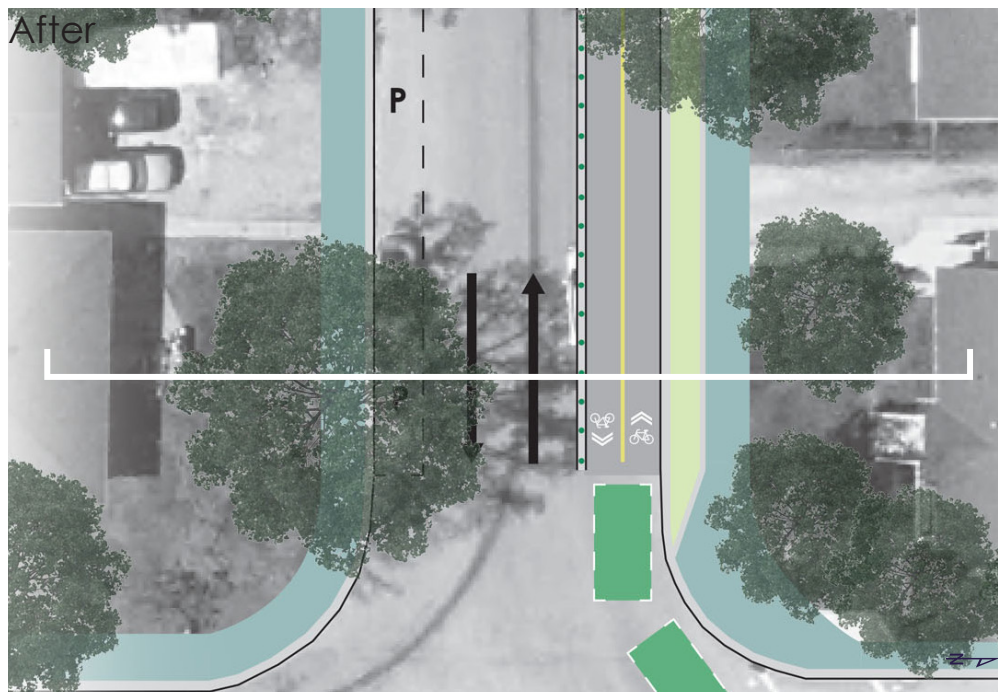
After



Before



After



Bike lanes and multi-use paths offer greater user comfort than shared streets, but both require greater investment in infrastructure. In Ogden, we propose bi-directional bike lanes only in areas where a transition is required between a shared street and a multi-use path, with the flexibility to expand into shared streets if demand exists in the future.

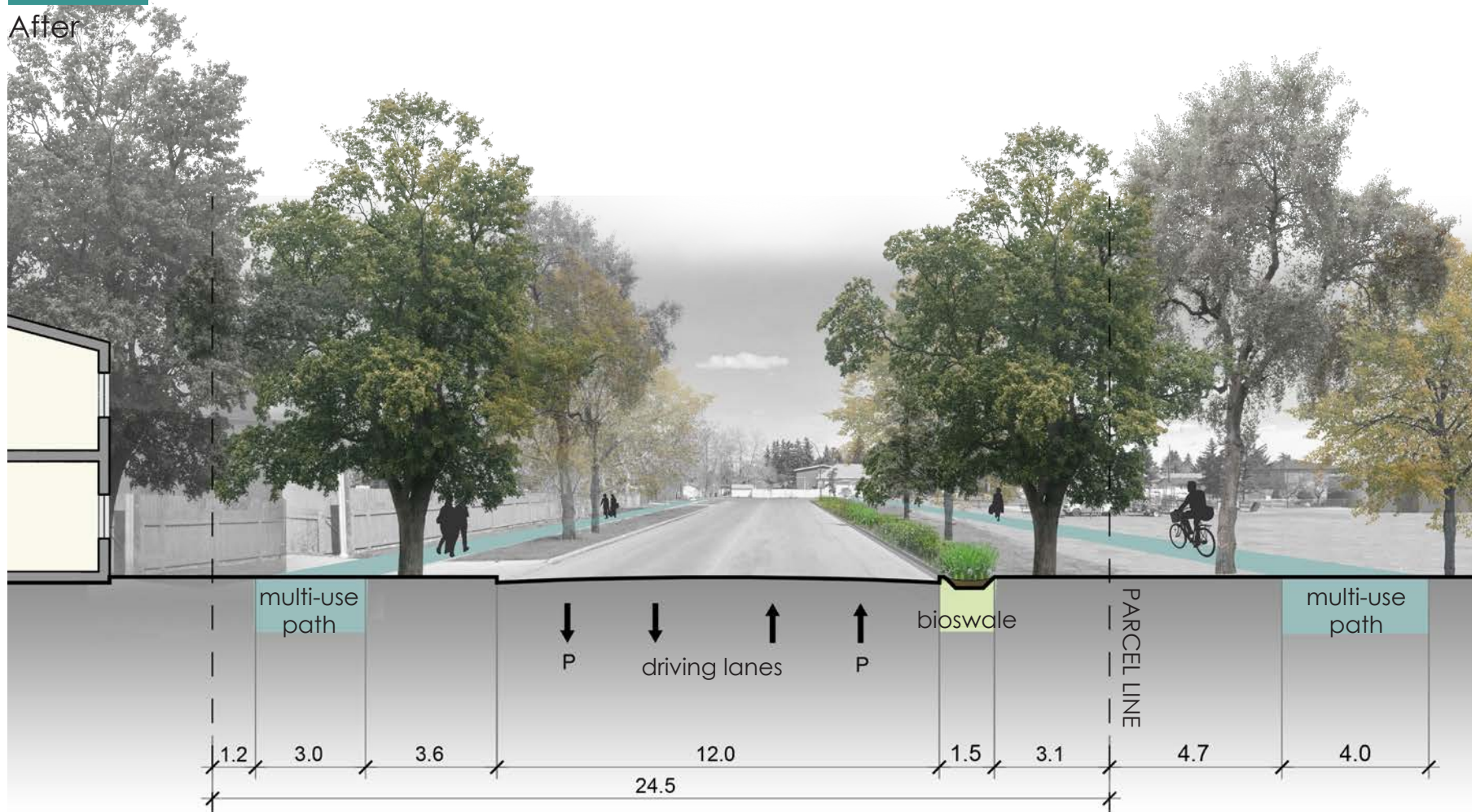
MOBILITY + CONNECTIVITY

3

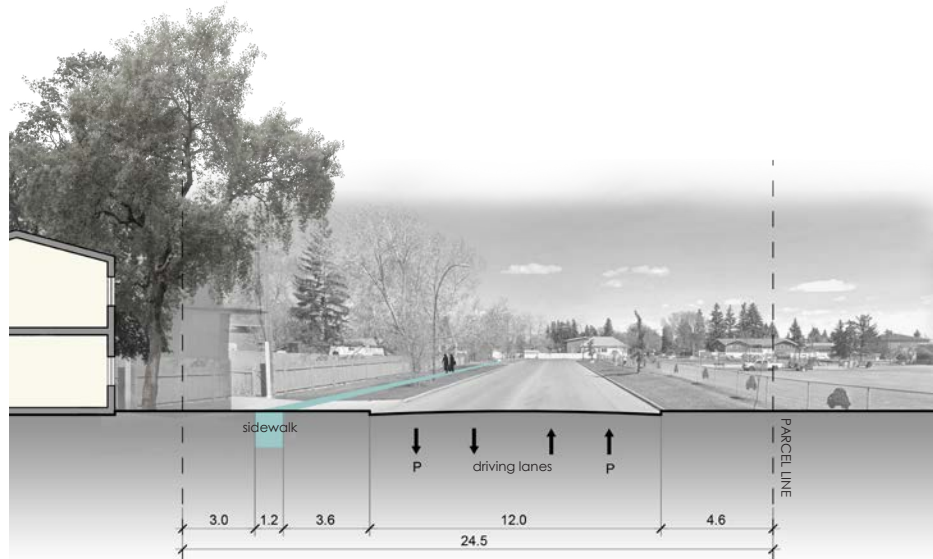
MULTI-USE PATHS

18 ST

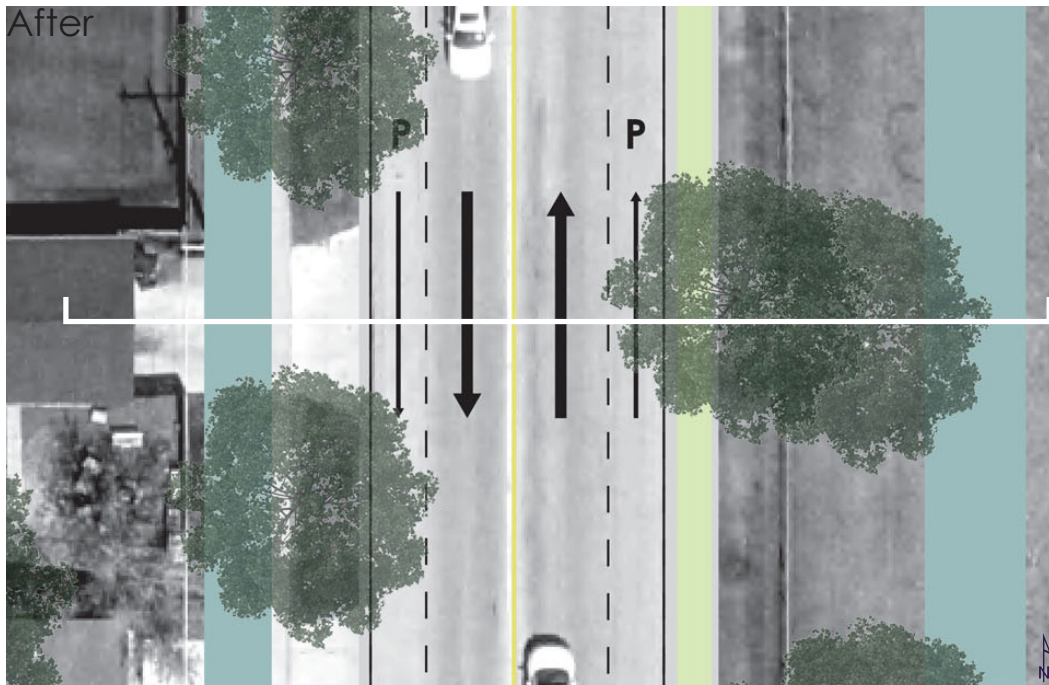
After



Before



After



Multi-use paths are the most comfortable for all users, providing ample space for side-by-side riding and passing. The open space network provides opportunity for implementation of multi-use paths which provide important north-south linkages through Ogden. Bike parking and repair stations should be provided at key locations throughout the network. Together 15km of AAA network will help provide Ogden with a diversity of mobility options.

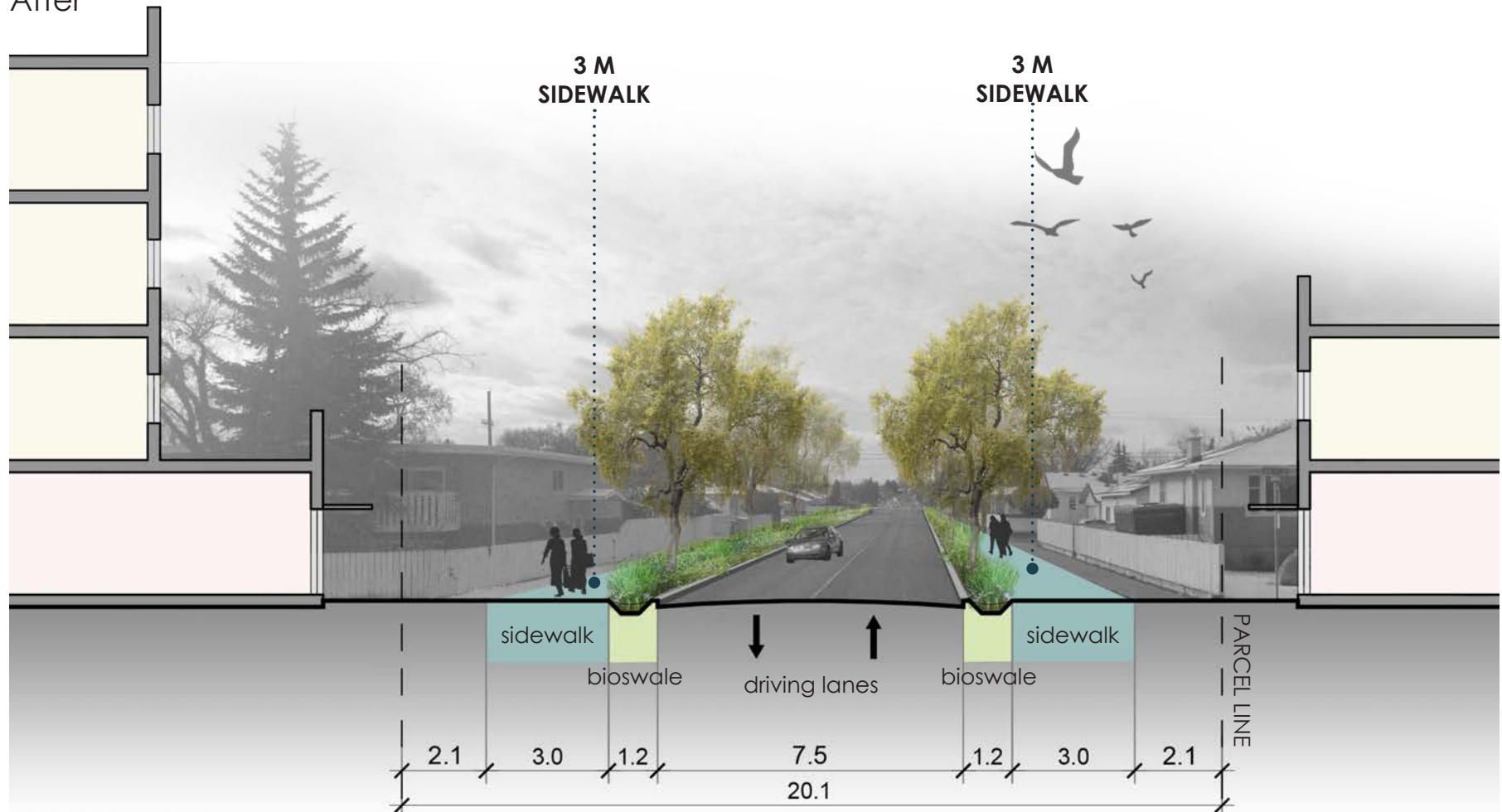
MOBILITY + CONNECTIVITY

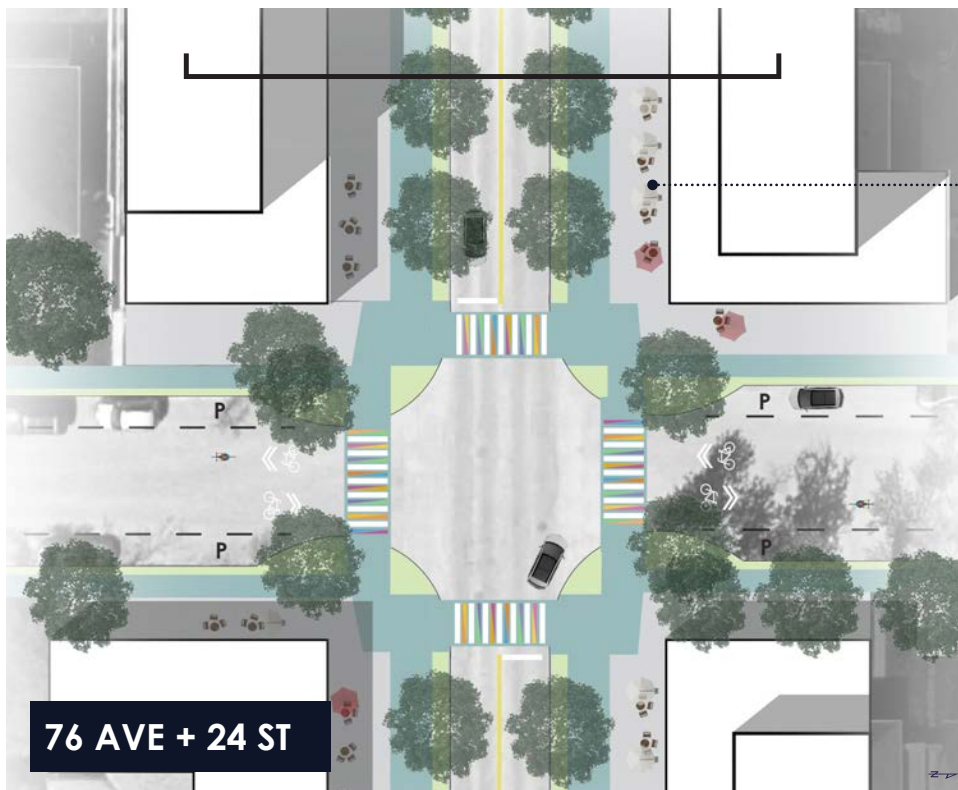
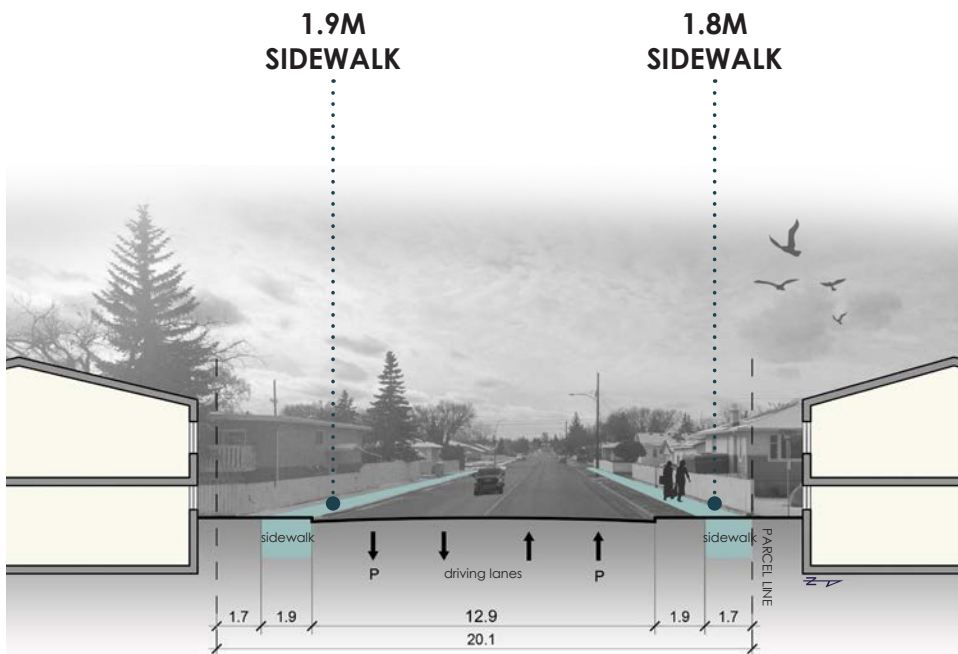
PEDESTRIAN EXPERIENCE

We propose to establish pedestrian corridors along 76 Ave and the Ogden road main street, with priority around intersections where the pedestrian corridor meets portions of the AAA network.

A 76 AVE

After





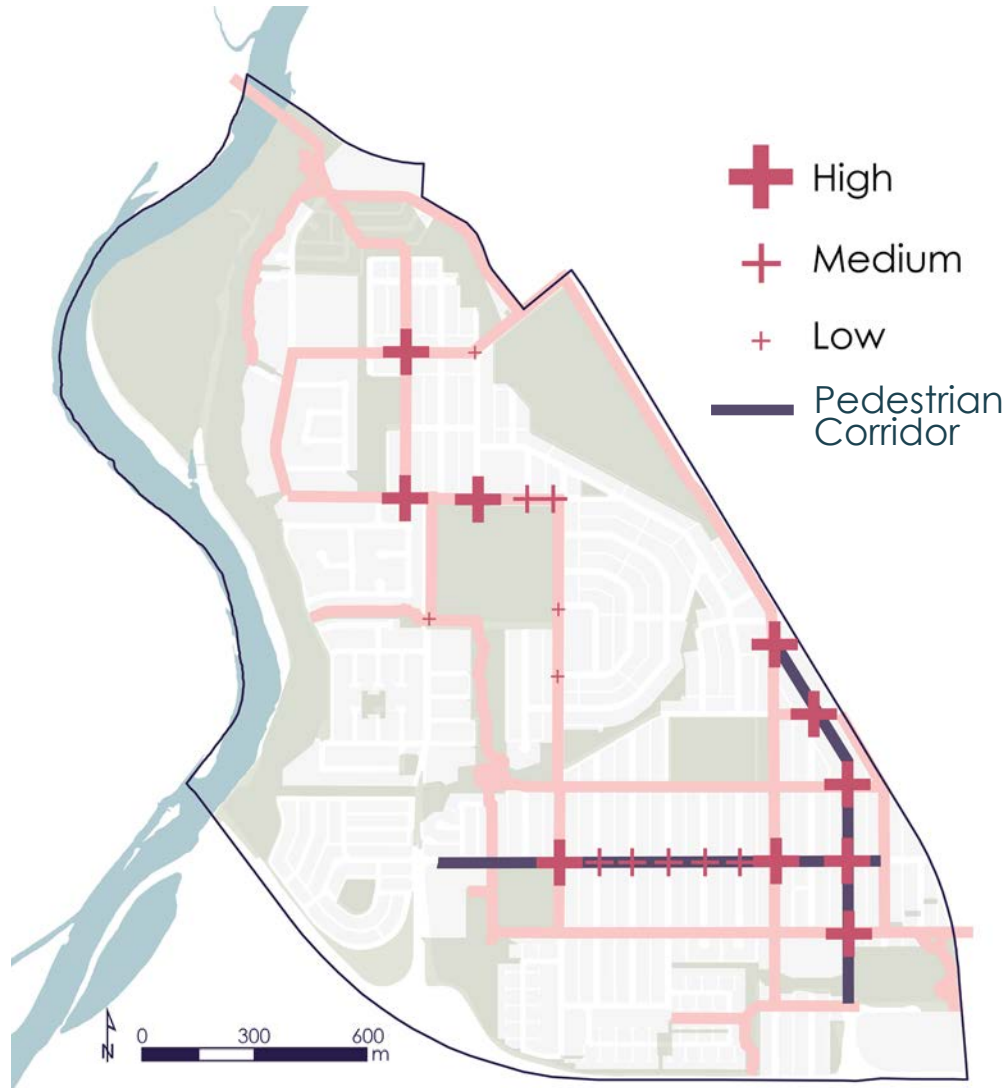
MAIN STREET, PORTLAND

Pedestrian corridors transform vehicle oriented space into a comfortable pedestrian experience, through widened sidewalks, seating at regular intervals, trees and bioswales, and improved lighting. At key intersections the neighborhood nodes provide commercial opportunities and active frontage contributes to a vibrant street life.

MOBILITY + CONNECTIVITY

PRIORITY INTERSECTIONS + PEDESTRIAN CORRIDORS

Intersections are often areas of conflict between motorists and pedestrians, and minimizing conflicts is essential to ensure the safety and comfort of the pedestrian.





TRAFFIC CALMING

At certain junctions with Ogden Road, we propose to close vehicular access to the main street, to allow for the creation of plaza spaces which add vibrancy and maintain the rhythm of the main street.

B 24 ST + 72 AVE

Intersection with
Ogden Road



MOBILITY + CONNECTIVITY

STREET TREATMENT

The issue of traffic and safety around the school zone at the north end of Lynnwood Park is addressed with traffic calming measures at two intersections along 62 Ave, to create safe spaces for pedestrians and children to access Banting and Best and Sherwood Schools.

RAISED CROSSWALKS



LIGHTING



WIDE SIDEWALKS



CURB EXTENSIONS



BIOSWALES



C 66 AVE

SCHOOL ZONE INTERSECTION TREATMENT

Raised crosswalks provide a clear indication to vehicles that they are in a pedestrian zone, and fun painted designs can be co-designed with input from children, the community and the schools.



PEDESTRIAN PRIORITY



MOBILITY + CONNECTIVITY

POLICY RECOMMENDATIONS

ALL AGES + ABILITIES NETWORK

The All Ages and Abilities (AAA) network shall:

- a. Consist of shared-use streets, bi-directional bike lanes, and multi-use paths as identified on Proposed AAA Network map (page 159).
- b. Shared-use streets should be designed to slow traffic to maximize cyclist comfort by:
 - Being located on residential streets with a speed limit of < 40 km/h.
 - Allowing for street parking on one or both sides, dependent on road width (8m accommodates one parking lane, 10m accommodates two).
 - Utilizing road paint and clear signage to indicate the shared nature of street.
- c. Bi-directional bike lanes should provide a safe transition between shared streets and multi-use paths with:
 - A minimum width of 3m.
 - A physical barrier providing separation from vehicular traffic.

d. Multi-use paths should be primarily located in the open space network with:

- A preferred width of 4m and minimum width of 3m.
- Provide separation of pedestrians and cyclists in high traffic areas and where space permits.
- Provide smooth surfaces and transitions for comfortable cycling and walking.
- Consist of grades less than 3% for longer distances (> 1km) and up to 5% over short distances (up to 500m)¹ where grades exceed 5% make use of switchbacks, provide flat landings every 100m for resting, and a widened path to allow for weaving.
- Provide clear signage on direction of movement and right-of-way, particularly at intersections.
- Be prioritized for maintenance, such as snow clearing.
- provide bike parking and repair stations at key destinations and rest locations, and in particular at the C-Train stations

¹City of Vancouver Transportation Design Guidelines: All Ages and Abilities Cycling Routes (2017)

MOBILITY + CONNECTIVITY

POLICY RECOMMENDATIONS

PEDESTRIAN EXPERIENCE

Pedestrian comfort and safety shall be promoted through:

- a. Prioritization on pedestrian corridors identified on Priority Intersections + Pedestrian Corridors map (page 169) and shared streets identified on Proposed AAA Network map (page 159) using:
 - Widened sidewalks with a minimum width of 2m
 - Seating at regular intervals along the AAA and pedestrian network
 - Reliable and consistent lighting along the AAA and pedestrian network, with special attention on lighting at intersections
 - Planting of street trees to impact micro-climate through shade and evapotranspiration (refer to Planting Guides on pages 105-108)
 - Bioswales for street beautification, micro-climate conditions, stormwater management, and habitat creation
- b. Traffic calming interventions with priority at school zones and where the AAA network intersects the pedestrian corridor using:
 - Raised crosswalks which match the height of adjacent sidewalks
 - Painted crosswalks which define higher pedestrian traffic zones
 - Curb extensions which reduce driving lanes by creating a permanent parking lane



PROJECT
INTRODUCTION

SITE
ANALYSIS

WHAT
WE HEARD

GUIDING
PRINCIPLES

DESIGN
INTERVENTIONS

Beacon Avenue, Sidney, BC (photo credit Michael McArthur/CBC)

PLACEMAKING

“Cultures and climates differ all over the world, but people are the same. They’ll gather in public if you give them a good place to do it”

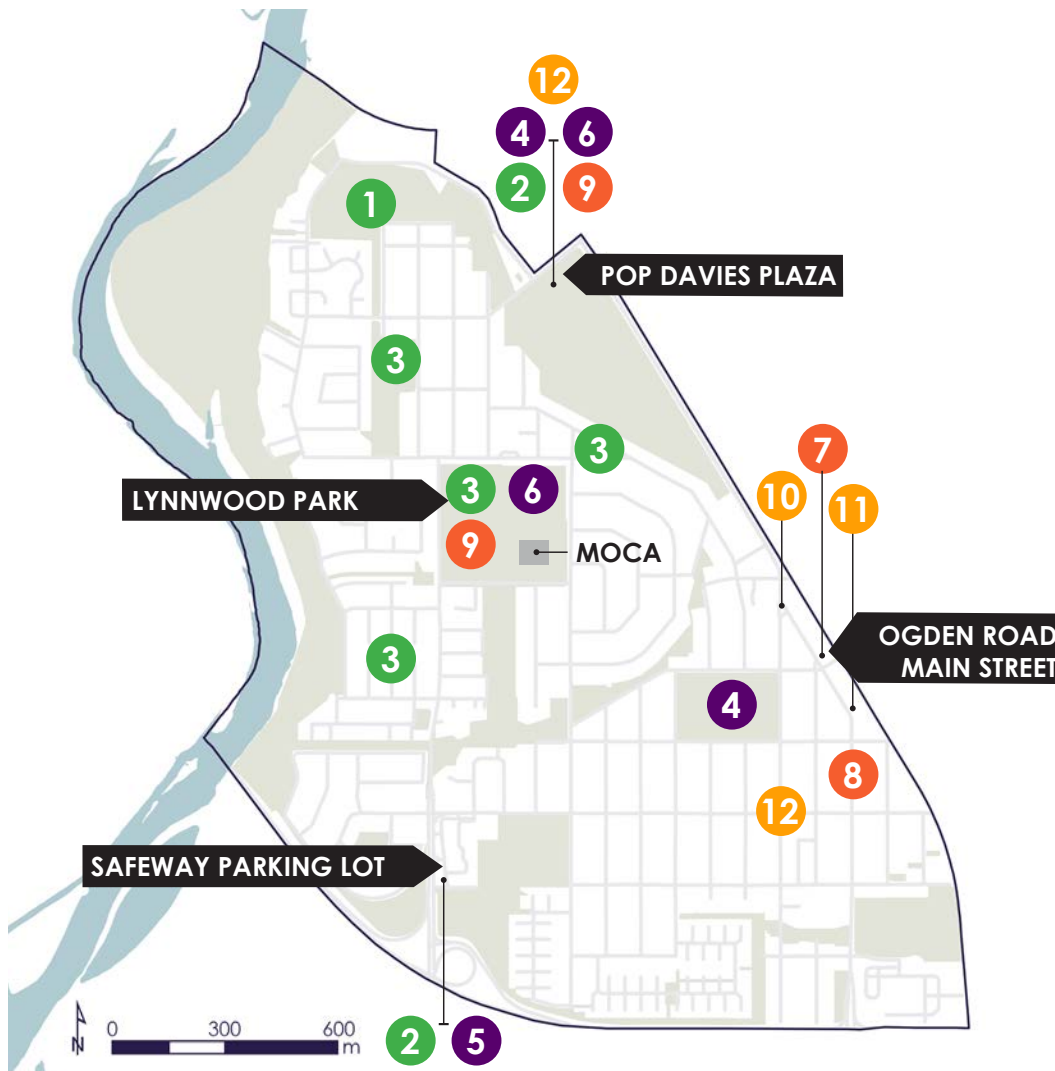
~Jan Gehl



PLACEMAKING

TACTICAL URBANISM TOOLKIT

As a final ingredient for creating a vibrant community atmosphere which will attract people to Ogden, to live, work or play, we propose a range of tactical urbanism interventions, along with the addition of community amenities which add value to Ogden's public spaces.



We draw inspiration from within Calgary, with pop-up basketball courts which can travel to underutilized surface parking lots to activate these spaces when not in use. These community flex areas can provide on-site storage adding ease to the flexibility of uses. More permanent installations, like public art, help create a sense of place in Ogden, especially Oggie at the entrance plaza of Ogden Station. These ideas form a toolbox for the community to pick and choose as they see fit, with suggestions provided by our team.



EXERCISE



GAMES



ART



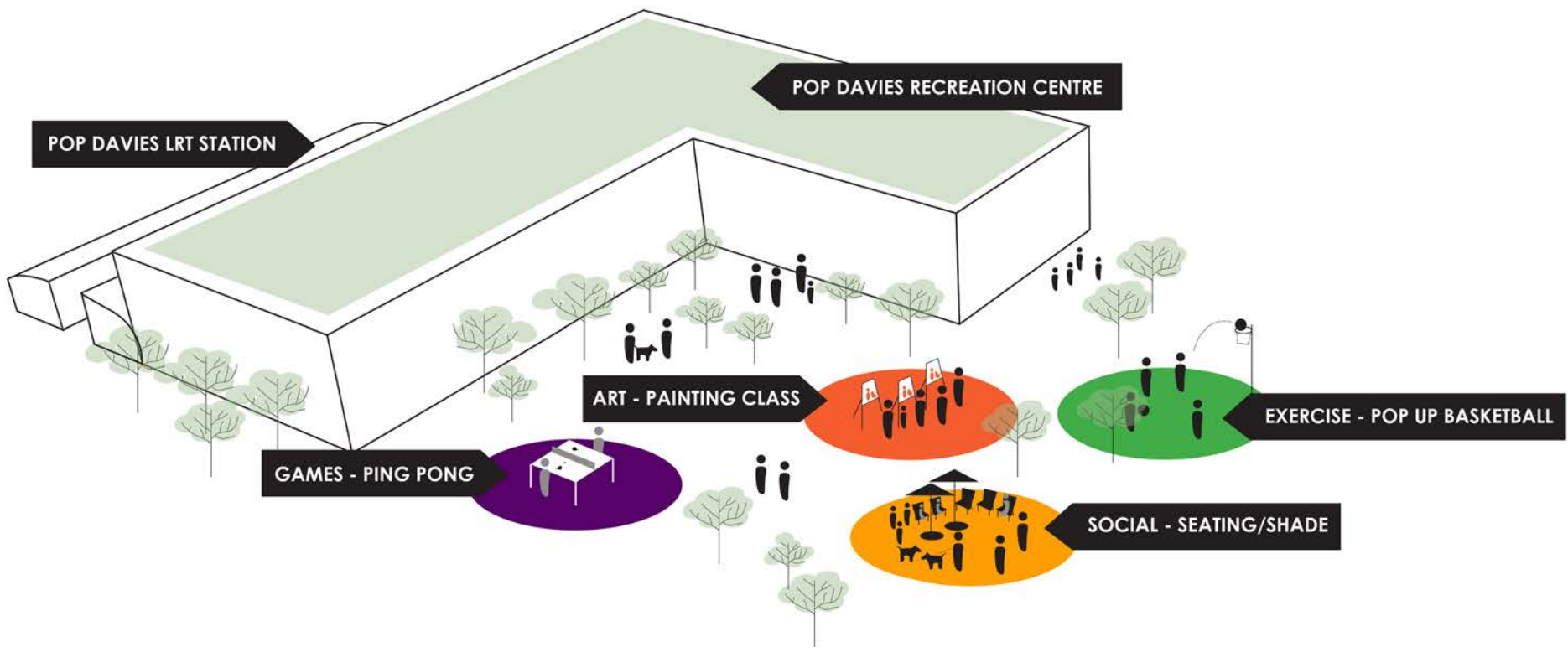
SOCIAL



ACTIVITY

PLACEMAKING

EXAMPLE:
POP DAVIES ACTIVITY PLAZA



RECOMMENDATIONS

Placemaking in Ogden can be accomplished through a tactical urbanism approach to activate underutilized public spaces and create community gathering places. Space activating interventions can range from pop-up games and markets in surface parking lots, to more permanent installations such as public art. The versatility of tactical urbanism solutions can empower community members to take charge on implementation, with many cost-effective options from which to choose. Our toolkit provides suggestions at a range of scales and permanence, but is merely a launching point to provide inspiration.

A tactical urbanism guidebook¹ provides helpful strategies on materials, budget, and implementation to assist the community in activating the public realm.

¹Street Plans Collaborative, Tactical Urbanist's Guide to Materials and Design

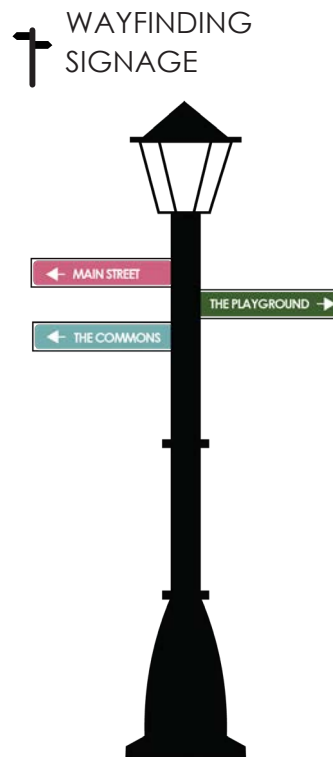
PLACEMAKING

WAYFINDING + AMENITIES

Improved entrance signage and consistent wayfinding throughout Ogden will help residents and visitors navigate the community. Signage can be co-designed by the community through a design charette or competition. Key locations for signage are indicated on the map, as well as key destinations for inclusion. Signage should be clear and vibrant following the hierarchy outlined below:

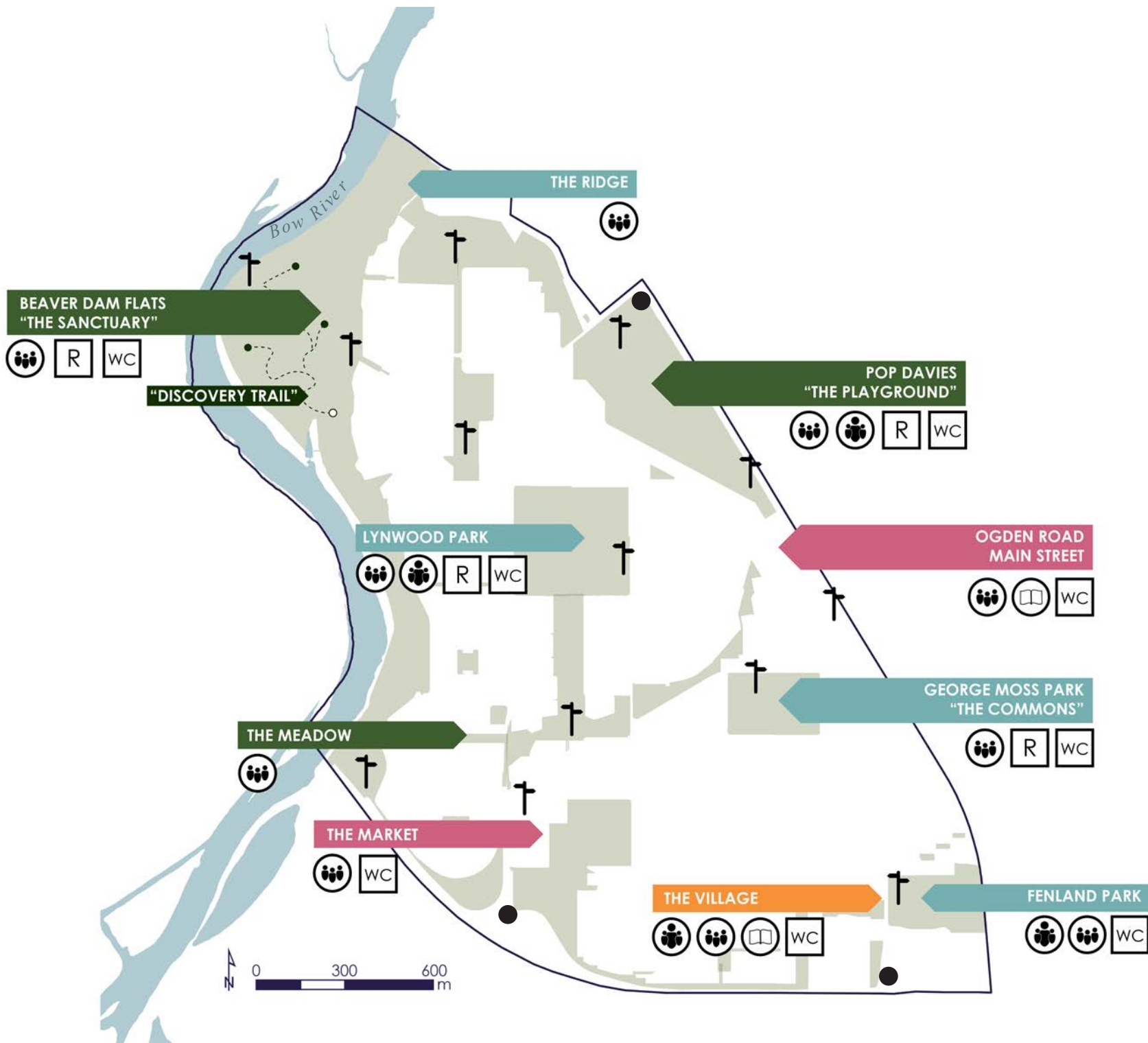
-  PUBLIC ART
-  LEARNING CENTRE
-  CHILDCARE SERVICES
-  COMMUNITY GATHERING SPACE
-  PUBLIC WASHROOMS
-  PUBLIC RECREATION FACILITIES

● ENTRANCE SIGNAGE



Wayfinding tools support the legibility of the community, helping residents and visitors alike navigate the future of Ogden.





REFERENCES

GENERAL

Document resources:

Calgary Municipal Development Plan
Calgary Transportation Plan
Guide for Local Area Planning
Urban Design Guidelines
City of Calgary Environmental Policy
Plan it Sustainability Principles
Bird Friendly Urban Design Guidelines

Web resources:

<https://www.calgary.ca/csps/parks/planning-and-operations/sport-fields.html>
<https://www.wintercityedmonton.ca/>

RESILIENCE

Document resources:

Calgary Climate Resilience Plan
Resilient Neighbourhoods Toolkit - City of Vancouver
Climate Change and Cities, Chapter 5 - Urban Planning and Urban Design
Climate Projections for Calgary

Academic sources:

Brand, F. S., and Jax, K. (2007). Focusing the meaning(s) of resilience: resilience as a descriptive concept and a boundary object. *Ecology and Society* 12(1): 23. [online] URL: <http://www.ecologyandsociety.org/vol12/iss1/art23/>

Döring, T.F., Vieweger, A., Pautasso, M., Vaarst, M., Finckh, M.R., and Wolfe, M.S. 2015. Resilience as a universal criterion of health. *Journal of the Science of Food and Agriculture* 95: 455–465. doi:10.1002/jsfa.6539.

Holling, C.S. (1973). Resilience and Stability of Ecological Systems. *Annual Review of Ecology and Systematics*. 4:1-23.

Web resources:

<https://www.calgary.ca/uep/esm/climate-change/climate-actions.html>

OPEN SPACE + RECREATION

Document resources:

Natural Area Management Plan - Calgary
Biodiversity Strategic Plan - Calgary
Naturalization Guidelines - Calgary
YardSmart Plants - Calgary
Open Space Plan - Calgary
Sports Field Strategy - Calgary
Winter City Design Guidelines - Edmonton
For the Love of Winter - WinterCity Strategy Implementation Plan - Edmonton

Web resources:

<https://www.calgary.ca/csps/parks/planning-and-operations/sport-fields.html>

Images:

<https://howtheyplay.com/team-sports/The-Problem-With-American-Youth-Soccer>
<https://weyburn.ca/disc-golf/>
<https://www.cbc.ca/kids/articles/canada-invents-a-new-game-introducing-croki-curl>
<https://wigglesandwags.co.uk/blogs/news/is-dog-agility-training-safe-for-my-dog>
<https://calgaryplaygroundreview.com/natural-playgrounds-around-calgary/>
<https://www.nvrc.ca/arts-culture/public-art/public-art-calls/harry-jerome-community-recreation-centre-front-entrance>
<https://www.earthscapeplay.com/project/natural-playground-equipment-waterloo/>
<https://iaks.sport/news/playground-slope-risskov-school-aarhus-denmark>
<https://www.istockphoto.com/search/2/image?phrase=community+garden+kids>
<https://www.woodforesttx.com/>
<https://www.pexels.com/search/fruits%20and%20vegetables%20basket/>
https://www.reddit.com/r/chess/comments/p32c8o/finally_proper_outdoor_chess_in_london/
<https://structura.com/products/aura-ring>
<https://cityplacenow.com/>
<https://www.latimes.com/health/la-he-walks-eldred-stairs-html.htmlstory.html>
<https://www.newlineskatoparks.com/project/909/>
<https://outdoortroop.com/7-best-fly-fishing-rod-and-reel-combos-for-beginners/>
<https://batlab.hu/ika>
<https://www.calgary.ca/csps/parks/planning-and-operations/bee-boulevard.html>
<https://www.calgary.ca/csps/parks/planning-and-operations/Naturalization-projects.html>
<https://www.pexels.com/photo/an-elderly-couple-meditating-in-the-park-8940499/>

PLACEMAKING

Web resources:

<https://www.visitcalgary.com/things-to-do/stories-from-calgary/trains-in-calgary>
<http://tacticalurbanismguide.com/>

Images:

<https://www.rios.com/projects/sunset-triangle-plaza/>
<https://nl.pinterest.com/pin/136445063697717569/>
<https://www.calgaryparking.com/PARKPARK>
<https://www.re-thinkingthefuture.com/city-and-architecture/a3277-an-integrated-approach-to-tactical-urbanism-in-architecture/>
<https://globalnews.ca/news/4176528/peterborough-outdoor-adult-gym/>
<https://www.napier.govt.nz/napier/grants/placemaking-napier/>
<https://www.pinterest.ca/pin/184647653451072537/>
<https://www.pps.org/article/flyover-park-empowering-the-next-generation-of-city-builders-in-calgary>
<https://www.jiangekj.xyz/products.aspx?cname=big+chess+set&cid=10>
<http://www.comicbookandmoviereviews.com/2014/08/son-of-god-may-mercy-be-laid-on-thy.html>
<https://www.flickr.com/photos/volvob12b/51439434915>
<https://linda-hoang.com/guide-instagrammable-walls-calgary/>

WATER STEWARDSHIP

Academic sources:

Amon et al. (2007). Ecological Engineering. 30(1): 51-66. DOI:<https://doi.org/10.1016/j.ecoleng.2007.01.008>

Patent: <https://patents.justia.com/patent/8894849>

Boogaard F., Bruins G., Wentink R.; Wadi's - Aanbevelingen voor ontwerp, aanleg en beheer; Stichting RIONED, Ede, 2006

Bourg et al. (1992). Quarterly Journal of Engineering Geology. 25: 359-370. Retrieved from: <https://qjgehl.lyellcollection.org/content/qjgehl/25/4/359.full.pdf>

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Kassenga et al. (2003). Ecological Engineering. 19(5): 305-323. DOI: [https://doi.org/10.1016/S0925-8574\(02\)00122-2](https://doi.org/10.1016/S0925-8574(02)00122-2)

Stewart and Kantrud. (1971). Classification of Natural Ponds and Lakes in the Glaciated Prairie Region. Northern Prairie Wildlife Research Centre, Division of Wildlife Research, Bureau of Sport Fisheries and Wildlife, Washington.

Document resources:

2020 Watershed Management Report - Calgary

Calgary Wetland Conservation Plan

Principles for Stormwater Wetlands Management in the City of Calgary

Low Impact Development Guidelines, Module 2 - Bioretention and Bioswales

Watershed Management Strategic Plan

Source Water Protection Plan

General Design Guidelines for a Constructed 'Habitat' Wetland - Grasslands Natural Region of Alberta

Manitoba Prairie Wetland Classification Guide

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<https://trca.ca/conservation/restoration/wetlands/>

<http://www.wetlandpolicy.ca/stewart-kantrud-system>

<https://pub-calgary.escibemeetings.com/filestream.ashx?DocumentId=91400>

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<https://indyculturaltrail.org/2015/06/02/bioswales-sustainability-along-the-trail/>

https://www.illinoisfloods.org/content/documents/3c_bioswale_presentation_iasfm_mar_09.pdf

<https://ccag-eh.ucanr.edu/files/241439.pdf>

<https://www.urbangreenbluegrids.com/measures/bioswales/>

LAND USE

Document resources:

Access Design Standards

Barrier-free Design Guide

Calgary Land Use Bylaw

Main Streets Implementation Plan

Images:

<https://engagerndsqr.com/faq>

<http://jrtarchitecture.com/multi-family-design-plans>

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<https://www.loopnet.ca/Listing/1410-9th-Ave-SE-Calgary-AB/21899087/>

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<https://www.heritagecalgary.ca/walking-tours>

MOBILITY

Document resources:

Complete Street Policy, City of Calgary

Design Guidelines for All Ages and Abilities Cycling Routes, City of Vancouver, BC

<https://vancouver.ca/files/cov/design-guidelines-for-all-ages-and-abilities-cycling-routes.pdf>

NACTO Transit Street Design Guide

<https://nacto.org/publication/transit-street-design-guide/>

Web resources:

<https://gvcc.bc.ca/help-make-north-saanichs-active-transportation-plan-work-for-all-ages-and-abilities/>

<https://blog.altaplanning.com/building-complete-and-connected-networks-a861710d5eeb>

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<https://azmag.gov/Programs/Transportation/Active-Transportation/Active-Transportation-Plan/Active-Transportation-Toolbox/Intersections-and-Street-Crossings/Curb-Extensions>

<https://www.nycstreetdesign.info/geometry/curb-extension>

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2523015	3523015	2423015
3623015	2823294	2623015
3323294	2323015	2123294

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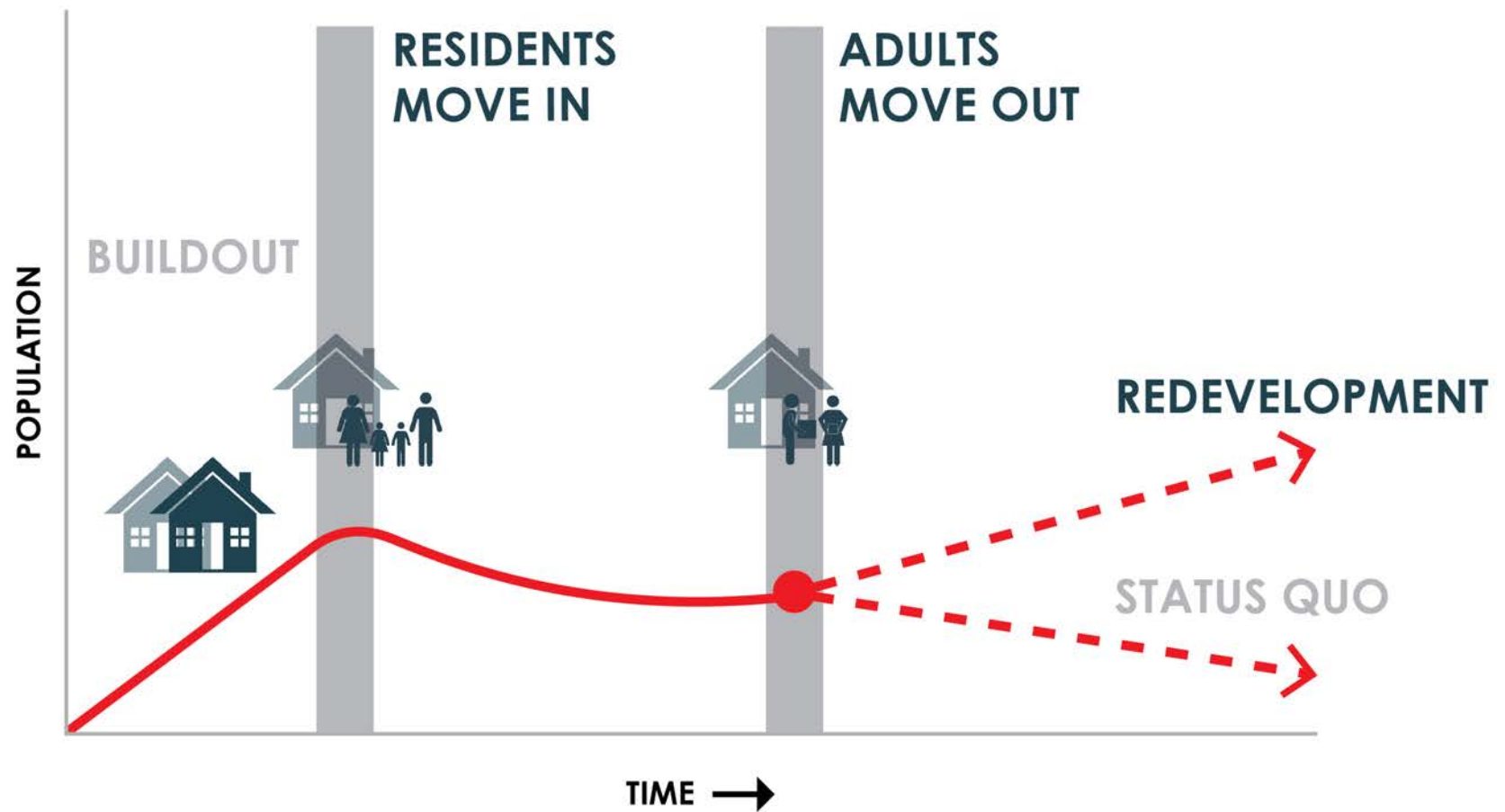
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APPENDIX

SUPPLEMENTARY MATERIALS

NEIGHBOURHOOD LIFE CYCLE



POP DAVIES WALKABILITY

BEFORE



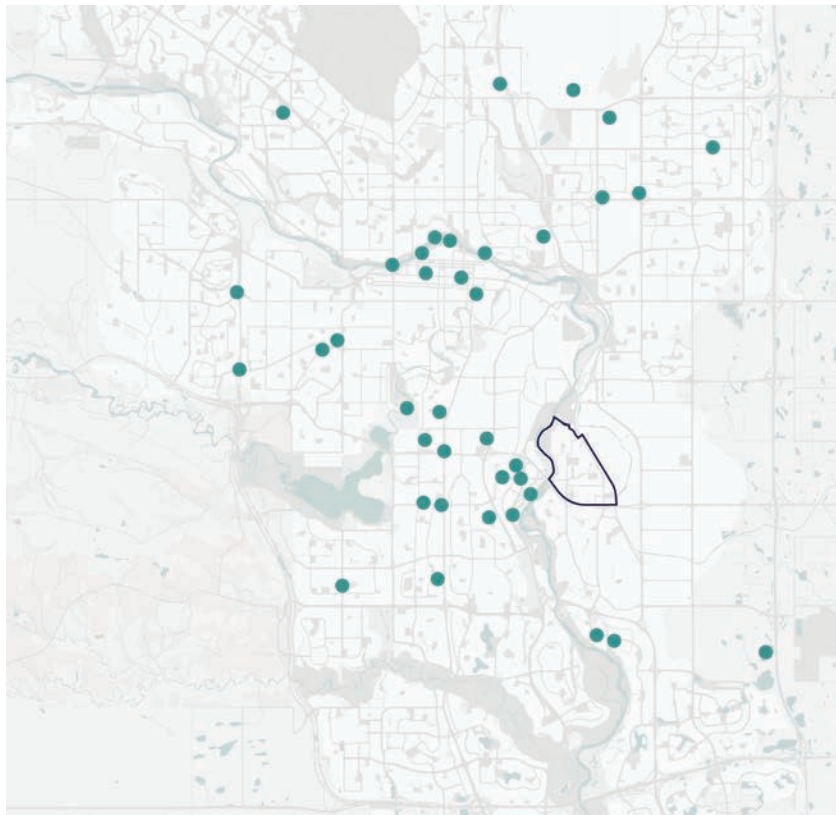
AFTER



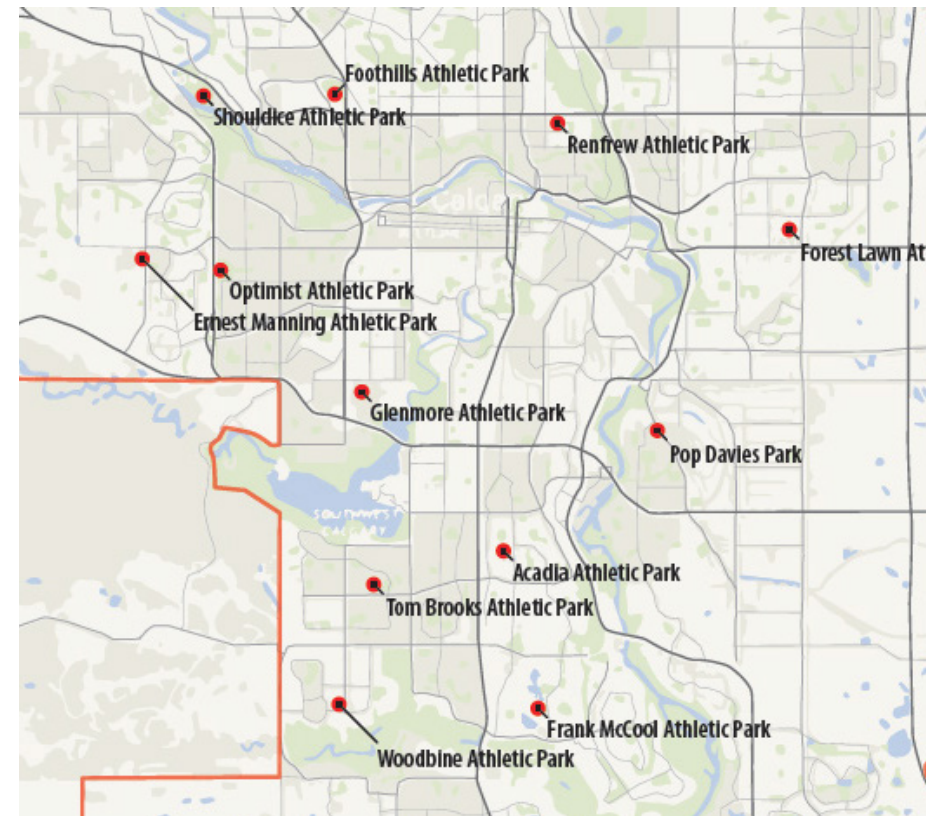
APPENDIX

SUPPLEMENTARY MATERIALS

CALGARY ELECTRIC VEHICLE CHARGING STATIONS

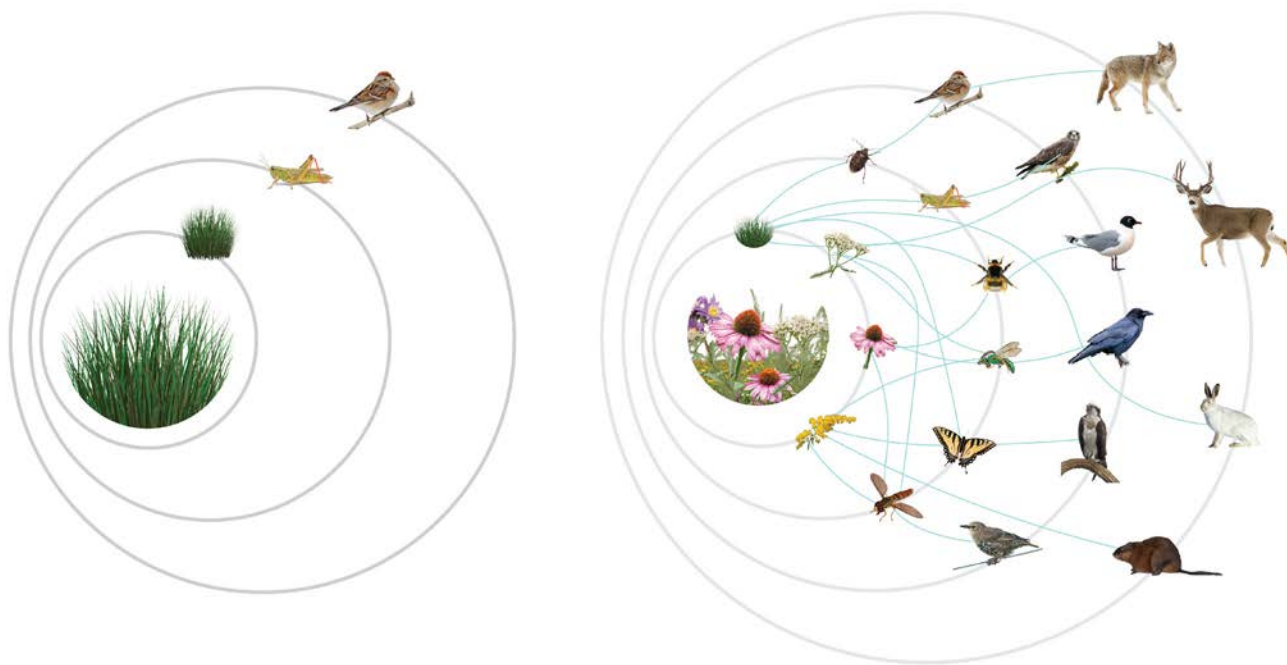


CALGARY ATHLETIC FACILITIES



City of Calgary Sports Field Strategy Research Document (2016)

OGDEN BIODIVERSITY WITH NATURALIZATION





UNIVERSITY OF CALGARY
SCHOOL OF ARCHITECTURE,
PLANNING AND LANDSCAPE