

HIGHLAND PARK REDEVELOPMENT PLAN & GUIDELINES

EVDP 644

ADVANCED PROFESSIONAL PLANNING

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
PART 1: INTRODUCTION	2
1.1 Project Overview	2
1.2 Project Scope	2
1.3 Assumptions and Limitations	2
1.4 Stakeholders	3
1.5 work Breakdown Structure	3
PART 2: BACKGROUND.....	4
2.1 Context	4
2.2 Historical Overview	5
2.3 Environmnetal	6
2.4 Land Use and Built Form	9
2.5 Transportation	13
2.6 Statistics	17
2.7 Public Engagement	22
2.8 Summary of Issues and Opportunities	24
PART 3: Concept Development	25
3.1 Vision	25
3.2 Existing and Supporting Policy	25
3.3 Land Use	26
3.4 Open Space	49
3.5 Transportation	59
CONCLUSION	65
REFRENCES	66
APPENDIX	67-68

EXECUTIVE SUMMARY

This project deals with the Highland Park Community located in Calgary's northwest. Currently the community is under development pressure from the City due to market demand for inner city living. This report is to be used as a study to assist both the City of Calgary and the Highland Park community association in guiding future developments in the community, as well as an academic project for the faculty of Environmental Design at the University of Calgary.

The project consists of a land use/urban design concept plan including recommendations and guidelines for future development in the community of Highland Park. A major component of the design concept will include the recently sold Highland Golf Course.

Throughout the project, public engagement opportunities were achieved allowing us to incorporate community opinion and concerns. The proposal that we have laid out in this document meets the objectives set out by the community visioning session as well as addressed the issues laid out in our academic analysis. The three main topics that were addressed were land use, open space, and transportation.

Our concept proposes additional mixed use development and community nodes, as well as more open space, and a improved transit corridor. This document presents

a range of recommendations and design guidelines that should be considered by the City of Calgary when writing a future Area Redevelopment Plan. This document should also be used by the Highland Park golf course developers when completing their final design concept. Overall, the plan envisions a complete, unique and vibrant mixed use inner city community by balancing social, economic and environmental concern.

PART 1: INTRODUCTION

1.1 Project Overview

The main objective of this project deals with the Highland Park Community located in Calgary's northwest. Its location which is in close proximity to the City Center, provides it with unique opportunities for redevelopment. Currently the community is in transition due to City redevelopment pressures. This report is a study to assist both the City of Calgary and the Highland Park community association in guiding future developments in the community in cooperation with as well as an academic project for the faculty of Environmental Design at the University of Calgary.

This project consists of a land use/urban design concept plan including recommendations and guidelines for future development in the community of Highland Park. A major component of the design concept will include the recently sold Highland Golf Course. The golf course was bought by Maple Projects Inc. and is in need of a new land use design and development strategy as it will no longer be used as a golf course. The developer has proposed two land use concepts both of which have been circulated to the public. The two initial concepts propose multi-family homes construction along with a commercial space along Center Street. The students in the faculty of EVDS have been assigned with the task of proposing alternative designs to be brought to the public. The challenge will be to provide a comprehensive land use, urban design and development plan that takes into consideration the needs of the community and the new direction in the

City's planning approach, while taking into consideration its environmental impacts. The plan should be considered as a guide for a future Area Redevelopment Plan.

1.2 Project Scope

The scope of the project is to conduct an analysis that informs strategies for potential redevelopment and improvement for the transitioning community of Highland Park. The strategy will focus on issues of land use planning, urban design and development. It will include an analysis of the existing conditions and development considerations, suggested improvements on community design, transportation, and the production of a potential land-use concept. It will not include the actual Area Redevelopment Plan.

1.3 Assumptions and Limitations

Assumptions

- Population is growing
- Demographics are changing
- The area is in need of a new design strategy to incorporate the transition of the Highland golf course
- The community wants to maintain some open space from the golf course
- Must be in align with the City's Municipal Development Plan

Limitations

- No budget from the City or Province
- Availability of human resources
- Data availability
- Resistance to change

1.4 Stakeholders

The known stakeholders involved in this project include:

- Highland Park community members (public at large)
- Highland Park Community Association
- Federation of Calgary Communities
- The City of Calgary
- Maple Projects Inc.
- The University of Calgary

1.5 Work Breakdown Structure**Work Flow**

The project work must be adequately broken down in order to accurately determine a budget, schedule and team.

The project is broken into the following phases:

Phase 1: Project Initiation

Phase 2: Project Work Management

Phase 3: Public Engagement

Phase 4: Site Analysis

Phase 5: Draft Plan

Phase 6: Final Plan

Phase 7: Project wrap-up

WBS- Roles & Responsibilities

See Appendix A.

Project Schedule

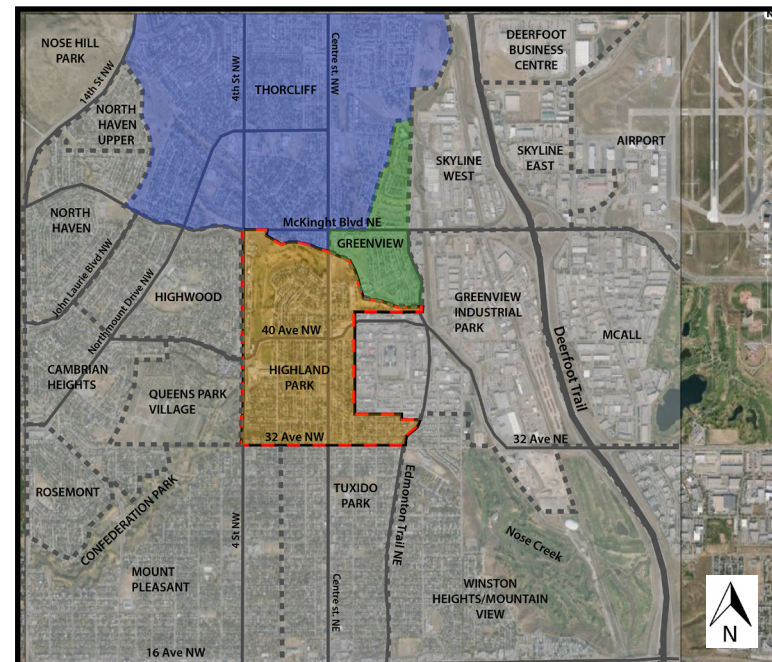
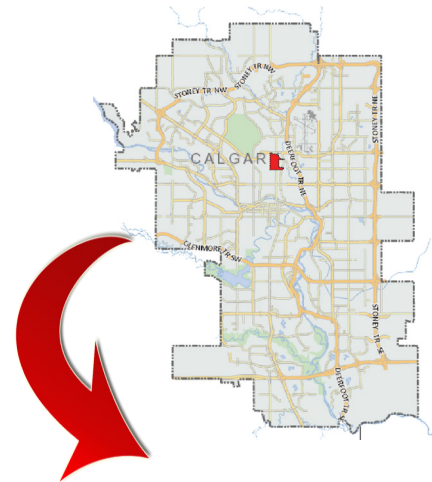
See Appendix B.

PART 2: BACKGROUND

2.1 Context

Highland Park is a neighbourhood that dates back to the late 1940s when it was conceived as a suburban community. It is currently an established residential neighbourhood in the north-west/east quadrant of Calgary, Alberta. The land was annexed to the City of Calgary in 1910 and the community was established in 1946. It is bounded to the north by McKnight Boulevard, to the east by Edmonton Trail, to the south by 32 Avenue N and to the west by 4 Street W. Highland Park is bound by the communities of Thorncliffe and Green View to the north, Mount Pleasant and Tuxedo to the south, Highwood and Queen's Park to the west and Greenview Industrial Park to the east.

In the City of Calgary's 2012 municipal census, Highland Park had a population of 3,792 living in 2,123 dwellings, at a density of 18.8 Units Per Hectare, with a land area of 1.4 km². Confederation Park and Nose Hill Park are located in close proximity, as well as the Queens Park Cemetery in the southwest, and includes an area that was once used as the Highland golf course in the north. Two schools are located in the area, Buchanan Elementary School and James Fowler High School, both of which are public. Its close location close to Deerfoot provides easy access to the City Centre making it a desirable residential neighbourhood with a potential for an increase in mix of uses.

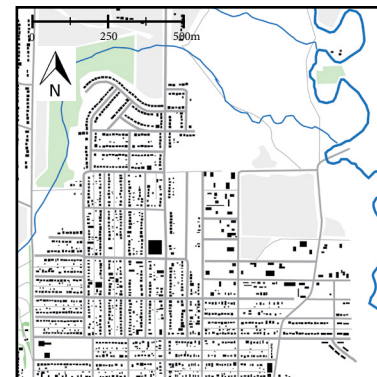


2.2 Historical Overview

The earliest available aerial photo of Highland Park community goes back to 1924. As demonstrated in the provided figures, except a few number of houses located in farm lands there was no other significant development happening in the area. This trend continues till 1949 when development from the southern community of Highland Park started to occur and gradually reached the boundary of Highland Park and filled the community 7 years later in 1956.

From 1956, for more than 50 years, no major changes occurred in the area in terms of development except a number of renovations. The next boom of development only happened quite recently in 2012 and created the demand for developing a plan that accommodates the high rate of growth.

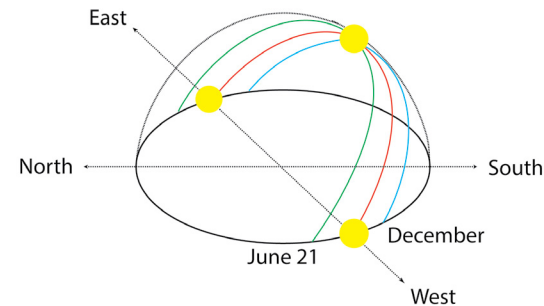
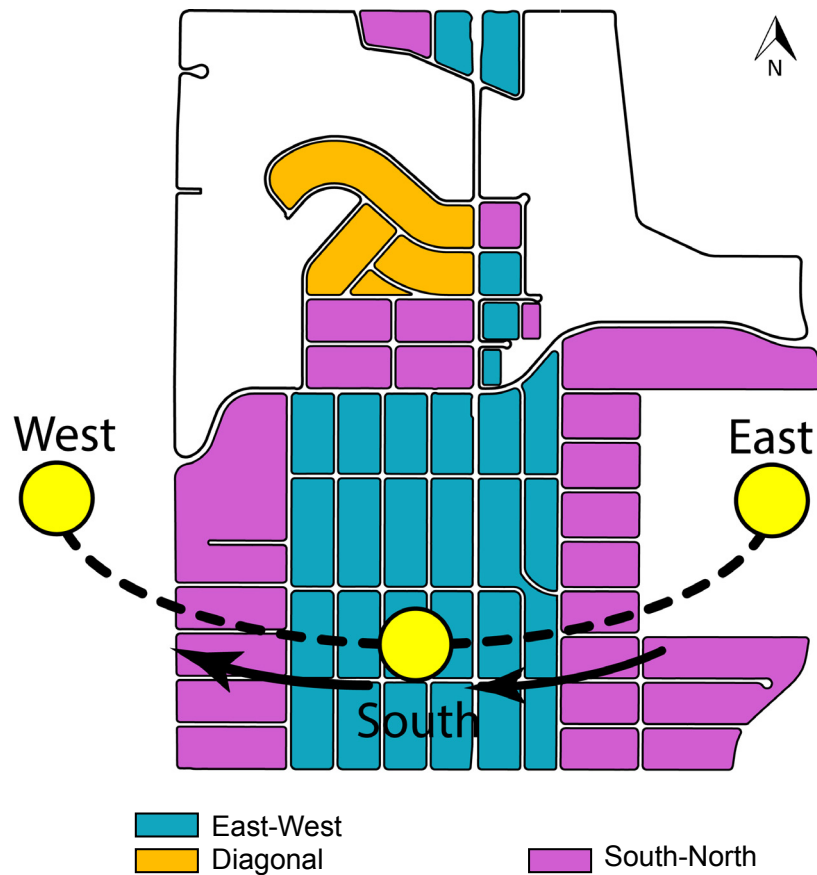
1924 • • • • • 1949 • • • • • 1956



2.3 Environmental

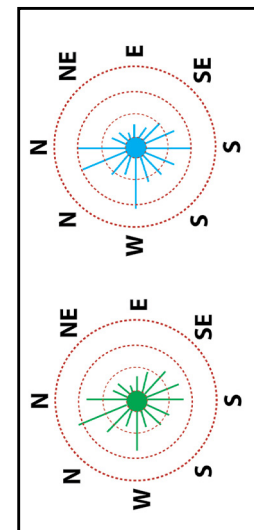
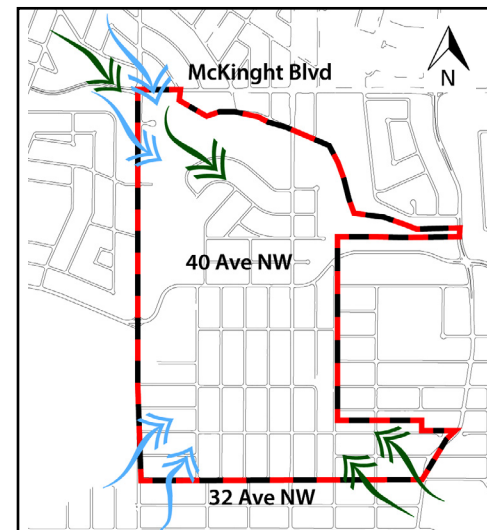
Sun Angle

Sun direction is an important factor that should be taken into consideration for housing orientation, open space and plaza development. Highland Park community encompasses three types of orientation which are north-south, west-east and diagonal. Variety of orientations to sun exposure creates more opportunity for future developments.



Wind Direction

Wind analysis is particularly important where a proposed development is adjacent to low rise development, open spaces, and plazas. The dominant winds in Highland Park during winter are Northwest and Southwest, and during summer are Southeast and Northwest.



Topography

Topography study is another important part of the development proposal as there are two main impacts that should be considered;

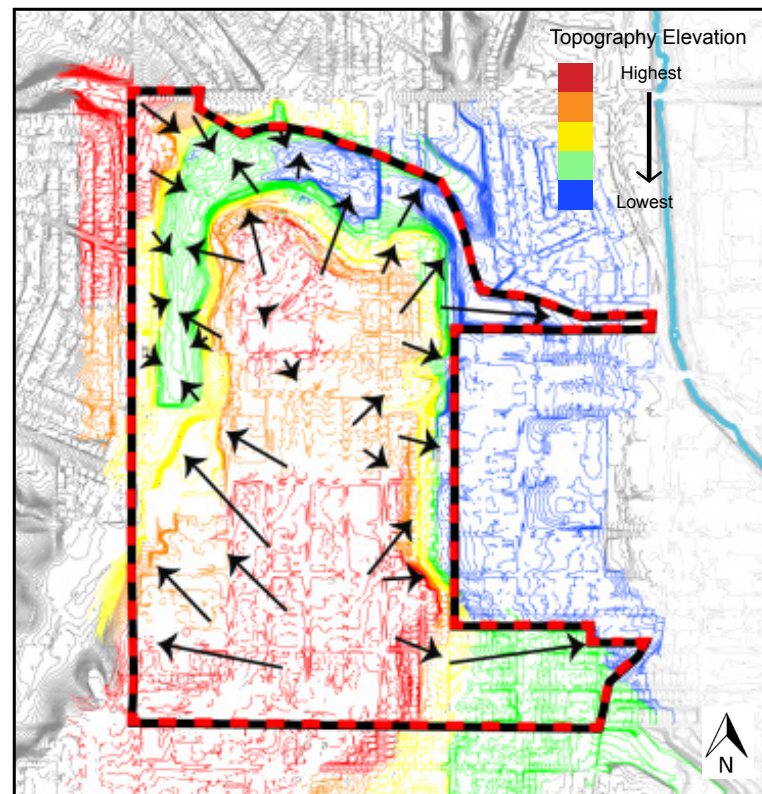
1. The impact of development on existing topography and environment;

Where development occurs and how developments are planned could have very significant results to natural environment. Habitat can be lost or fragmented as natural areas convert

Habitat can be lost or fragmented as natural areas convert from, grasslands to residential or commercial, uses which will influence the functioning of natural system.

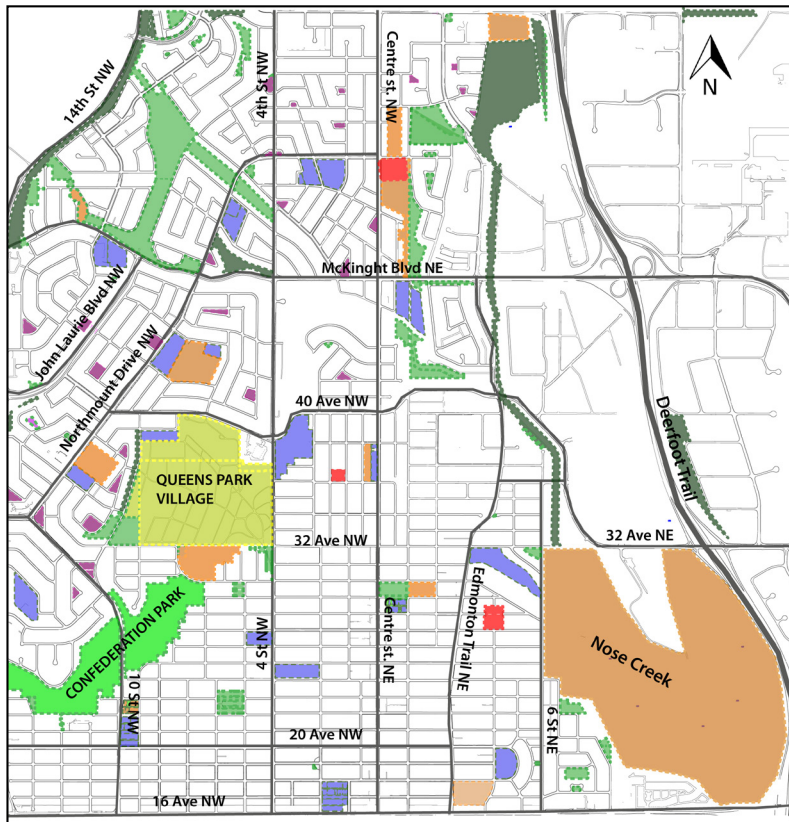
2. The effect of topography on development proposal;

When developing new spaces, topography may disrupt the direction of buildings, pathways, and developers may need to provide the best possible orientation solutions to maximize the economic benefits.

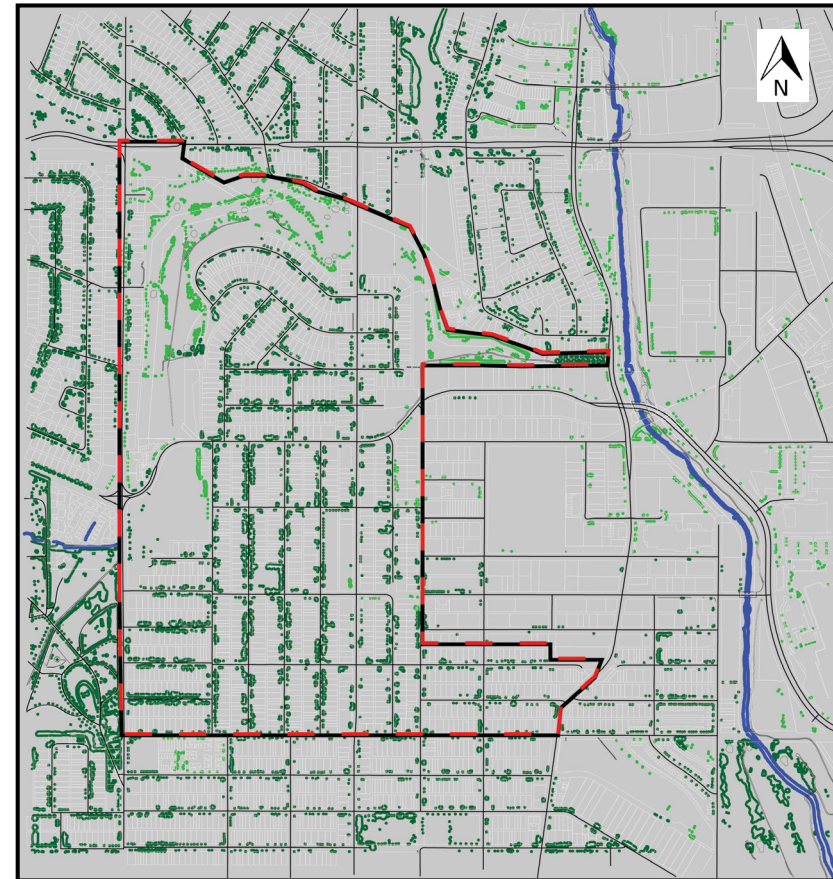


Open Space

There are variety of open spaces that are presented on the map and are categorized by their functionality. Lack of open spaces in Highland park is one of the issues that is taken into consideration as part of the final proposal for this project.



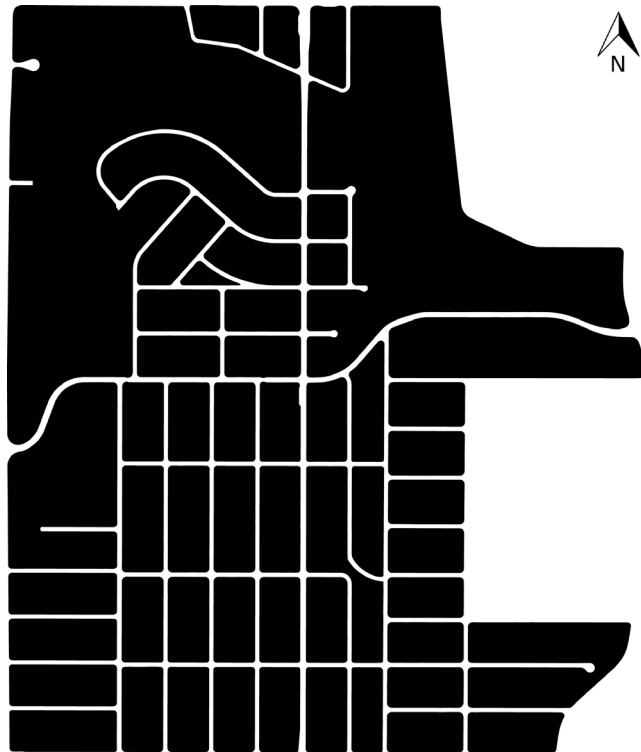
Urban Forest



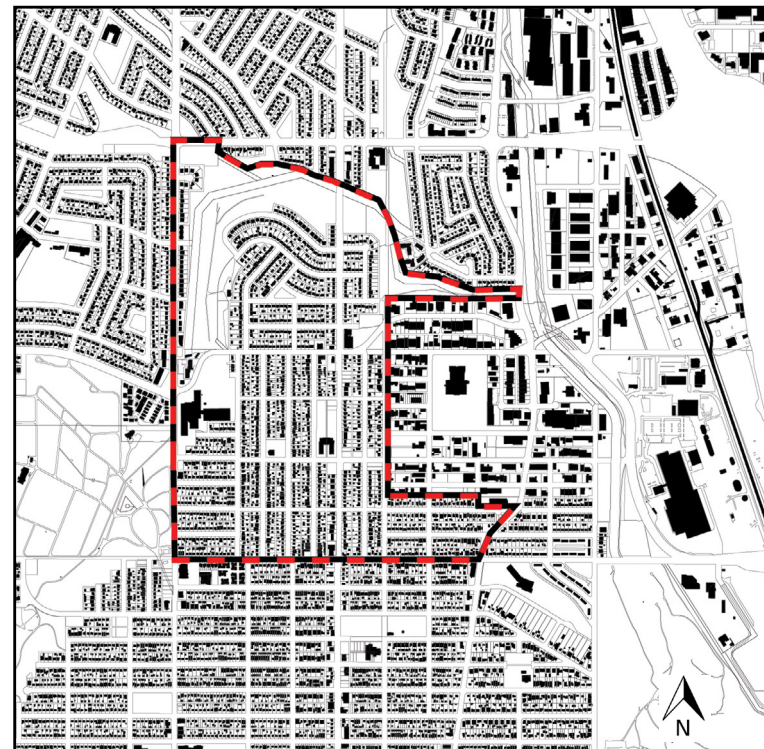
Most of the existing trees in the neighborhood are aging trees and they require to be replaced by new trees. Also, more trees should be planted to provide a sustainable and healthy environment to people. The tree typology is an important factor that should be considered because of the existing climatic situation in Calgary.

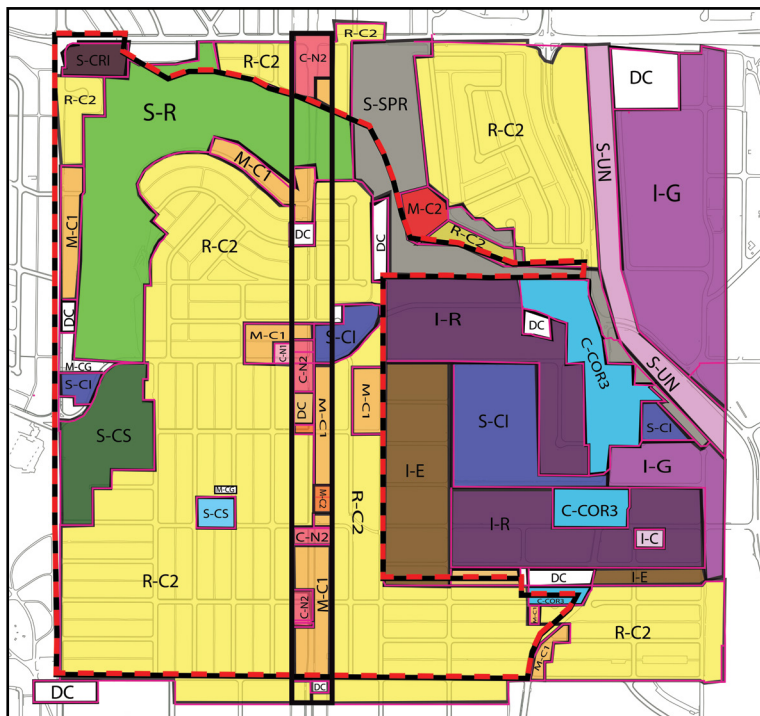
2.4 Land Use and Built Form

The community of Highland Park follows a grid pattern like most established communities in the City, however it also contains a curvilinear block pattern near the golf course to accommodate the changing topography.



The majority of the land is developed except the golf course and a few vacant lots, including the City of Calgary's park and Ride, and two old gas station site which require remediation .



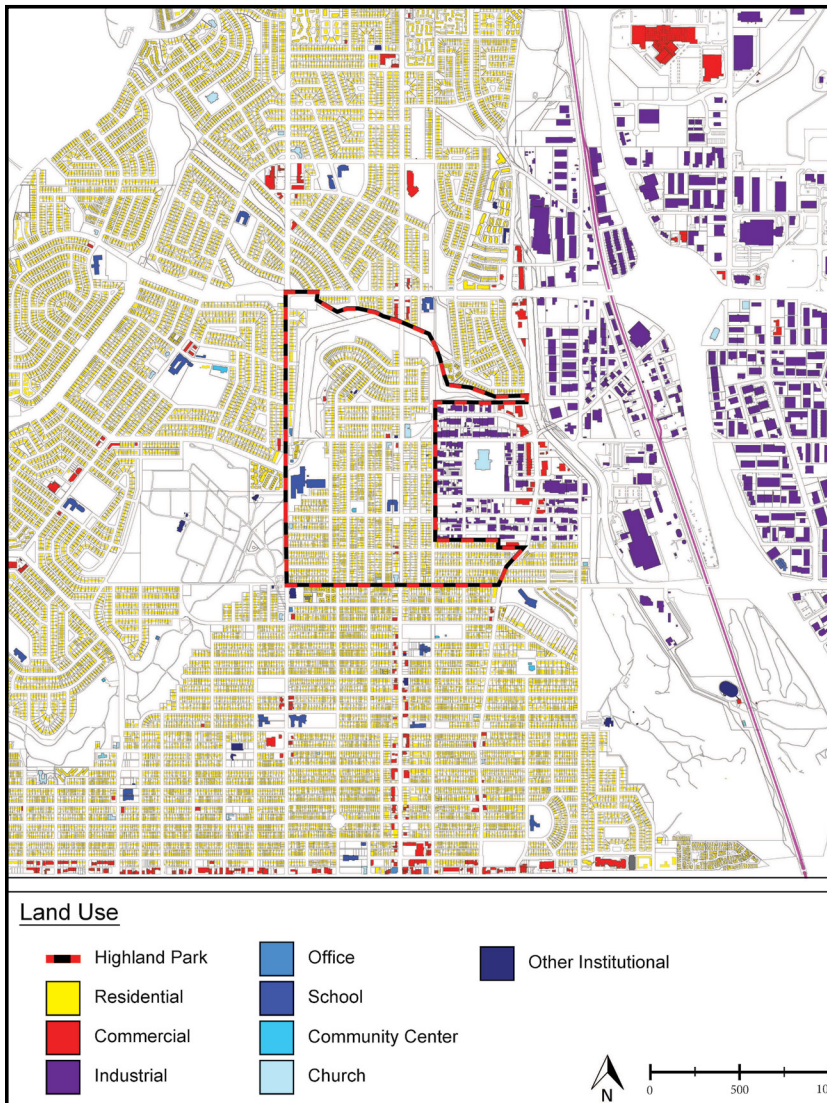


ZONING

DC	Direct Control	I-E	Industrial – Edge District
R-C2	Residential – Contextual One / Two Dwelling District	S-CS	Special Purpose – Community Service District
M-C1	Multi-Residential –	S-CRI	Special Purpose – City and Regional Infrastructure District
M-C2	Multi-Residential – Contextual Medium Profile District	S-UN	Special Purpose – Urban Nature District
C-COR3	Commercial – Corridor 3	S-CI	Special Purpose – Community Service District
C-N1	Commercial – Neighbourhood 1 District	S-R	Special Purpose – Recreation District
C-N2	Commercial – Neighbourhood 2 District	S-SPR	Special Purpose – School, Park and Community Reserve District
I-R	Industrial – Redevelopment District		
I-G	Industrial – General District		

Zonning

The current zoning for the site is mostly R-C2 (residential neighbourhood 2 district), with a few MC-1 (multi-residential low profile district) along centre street and 4th street. There are also three CN-2 (commercial neighbourhood 2 district), two SC-I (Special Purpose – School, Park and Community Reserve District), a S-CS Special Purpose – Community Service District), a Special Purpose – Recreation District of which the golf course is located, and is surrounded by industrial districts on the east side.



Land Use

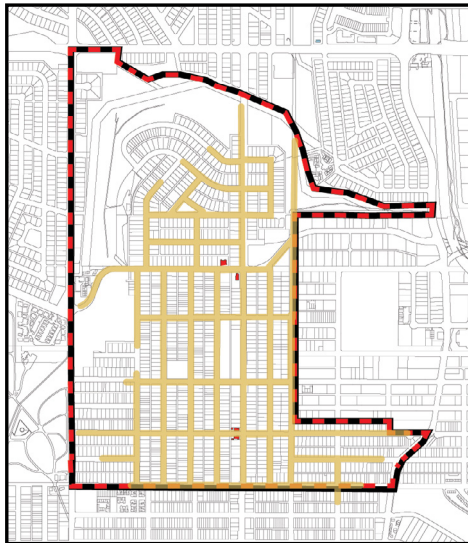
The main land use for the community is low density single-family residential, with a few multi-residential low profile quadplexes along centre street and 4th street. The community only carries a few commercial uses which include two corner stores, a pub, a pawn shop, and a Tim Hortons. There are a few more commercial areas just outside Highland Park but all require a car or bus to access. These include a few pubs and restaurants along 4th street, edmonton trail in the industrial area, centre street, as well as the Deerfoot Mall in the north. There are two schools in the area, Buchanan Elementary School and James Fowler High School, a community centre, and five churches including the Centre Street historical church. A second Centre Street Church was later built in the industrial park to the east to accommodate the overflow of people as the original located on centre was too small. The site for this church is large and surrounded by a massive parking lot. It is typical for older communities to have more than one church, however Calgary's suburban communities only carry one if any. The other major component of Highland Park is vacant golf course. The Community is located in proximity to the Queens Park Cemetery in the south-west, Nose Hill Park to the north-west, the airport in the north east, and a large industrial area which extends to Deerfoot trail in the east.

Walkability

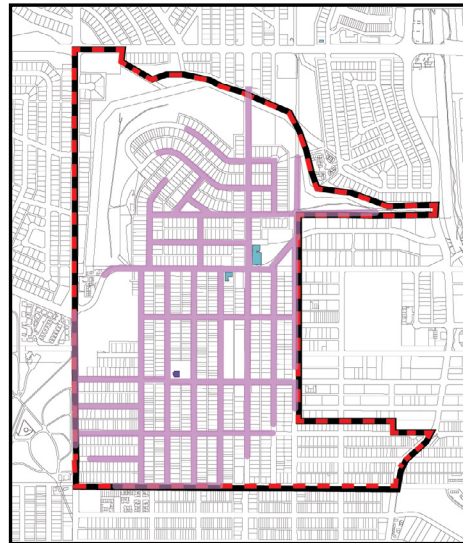
The community of Highland Park is relatively walkable as it is not a large community. The main concern is in the north of the site where the golf course is located. The golf course itself

is farthest away from the schools and commercial areas, it is closer to the church but still the farthest area away from the community services including the community centre.

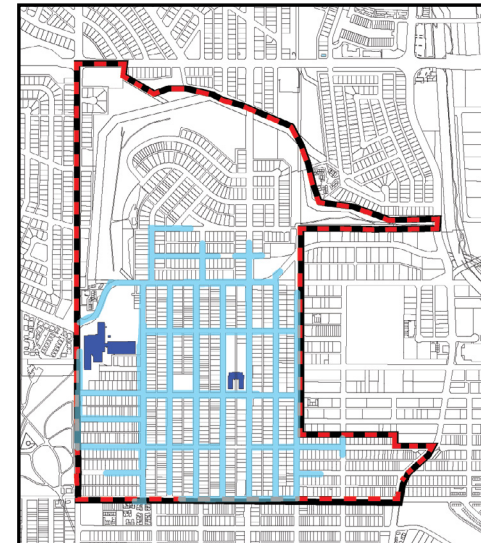
600m Walkshed Map



Commercial



Church - Community



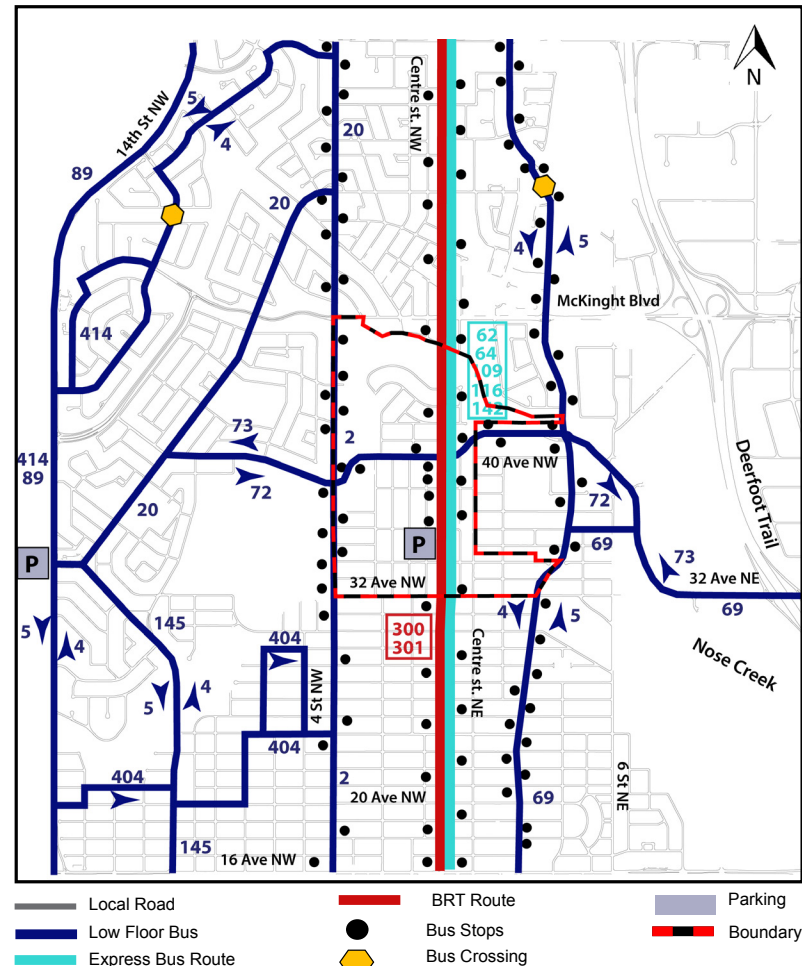
School

2.5 Transportation

As a fast growing city, the City of Calgary is investing in an enhanced transit service to accommodate growth for the people living, working and visiting the communities. Recognizing the importance of this investment, a planning process is initiated to identify how this improvement should occur to shape its surrounding communities and the City at the large scale. This section examines the key elements of existing transportation related concerns within the boundary of three communities of Highland Park, Thorncliffe and Greenview in order to propose related concerns within the boundary of three communities of Highland Park, Thorncliffe and Greenview in order to propose a transit service strategy for North Central Calgary. For the purpose of this study, 3 main routes were considered; Center Street, Edmonton Trail and 4th Street NW.

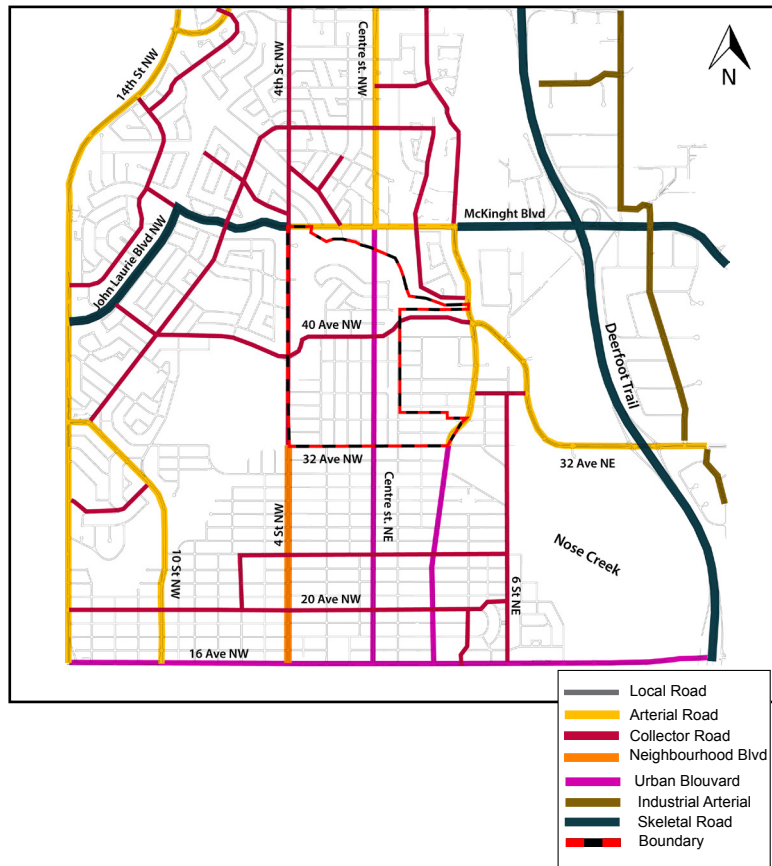
Among these three routes, Center Street is a major transportation route that accommodates a high volume of traffic including buses and BRTs.

Bus Routes



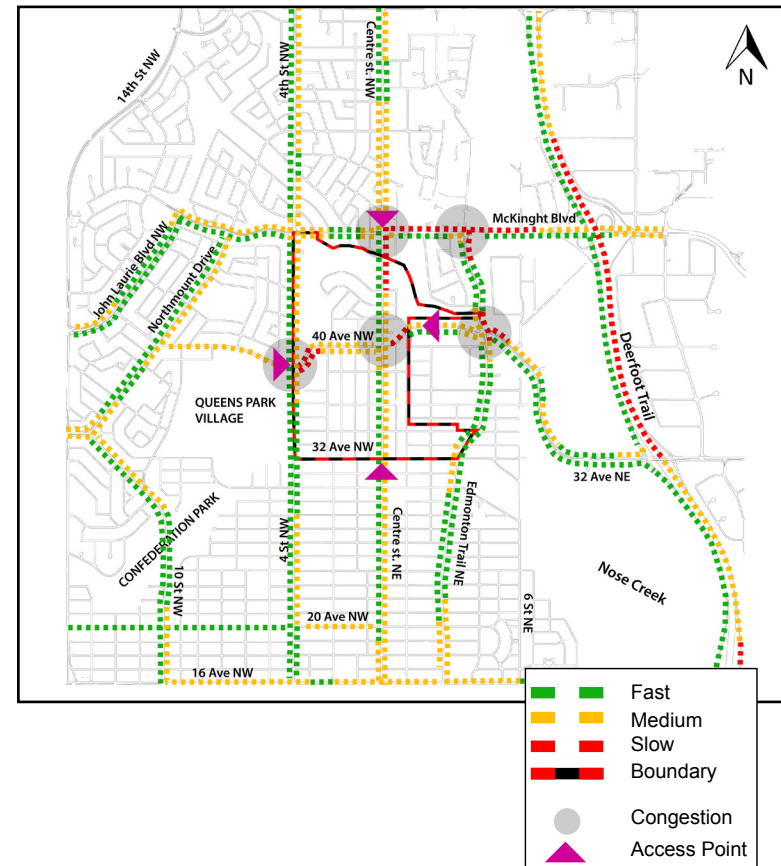
Moreover, road typology analysis recognizes Center Street as a major urban boulevard that provides opportunity for future development that can occur along a transit corridor. However, there are a number of intersections within Center Street that cause traffic congestion, which is a major issue that needs to be taken into account while proposing future transit strategy.

Road Typology



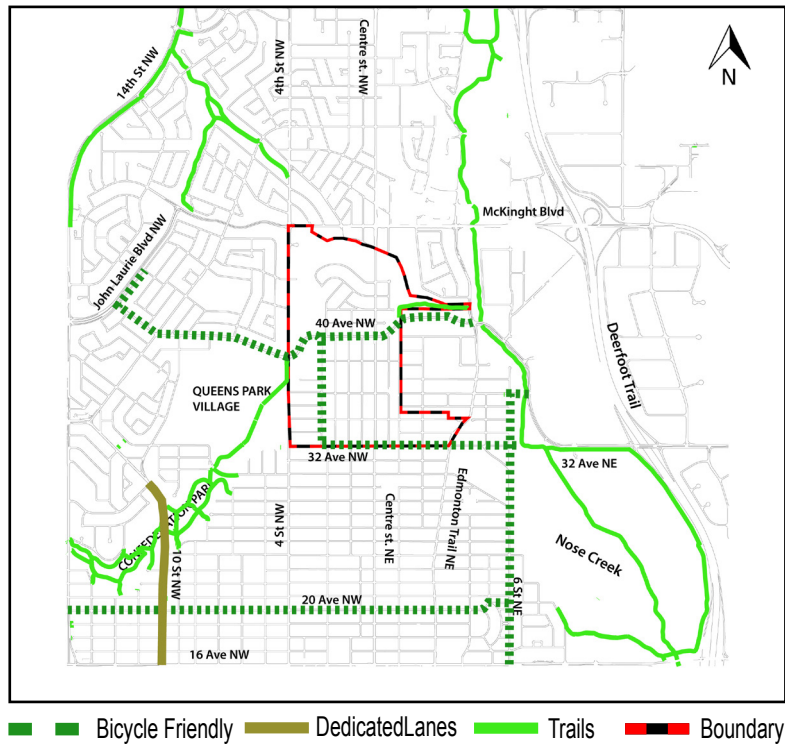
However, there are a number of intersections within Center Street that cause traffic congestion, which is a major issue that needs to be taken into account while proposing future transit strategy.

Traffic



Also, as the final component to transportation analysis, trails, dedicated bike lanes and bicycle friendly routes are classified to identify the need for future development. Based on the analysis, there is a significant disconnectivity between bike routes that determines the need for future development.

Bike Routes

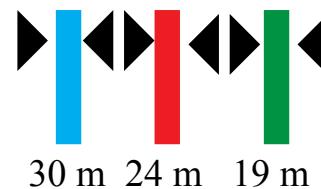


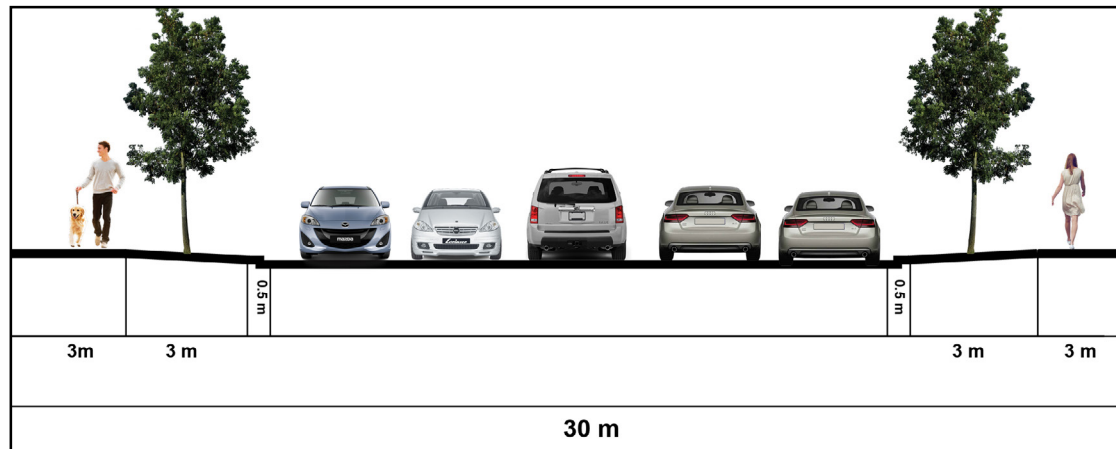
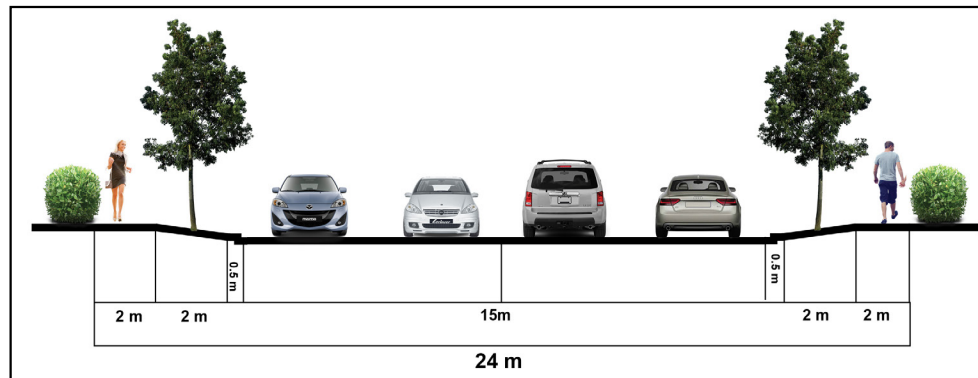
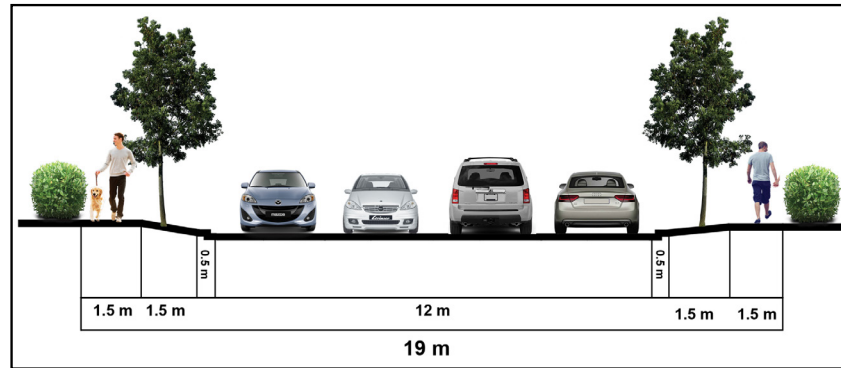
In the end, based on transportation analysis and the feedbacks received during the community visioning session, Center Street was ultimately selected as the feasible option for the future transit corridor and underwent further study.

Right Of Way

Right of Way (ROW) analysis is one of the main factors in determining the future strategy for the proposed transit corridor. According to the study ROW in Center Street varies dramatically from 19 to 30 meter. However, it still provides the opportunity for an efficient transit corridor development that connects south of Calgary to its Northern Part.

The following sections are provided to demonstrate different ROW along Center Street.



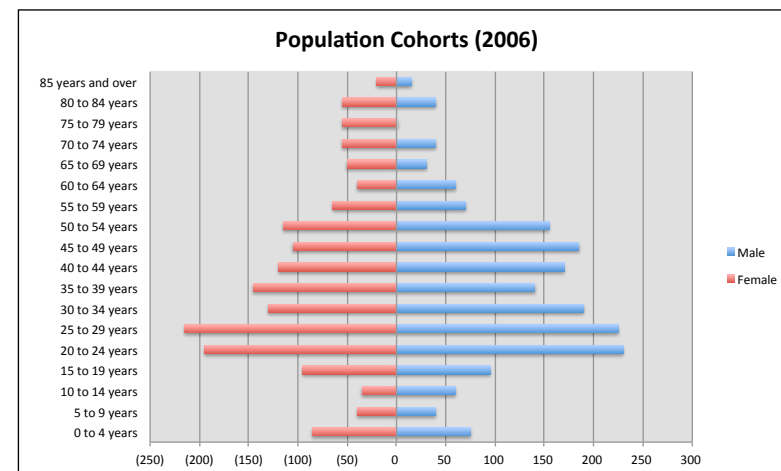
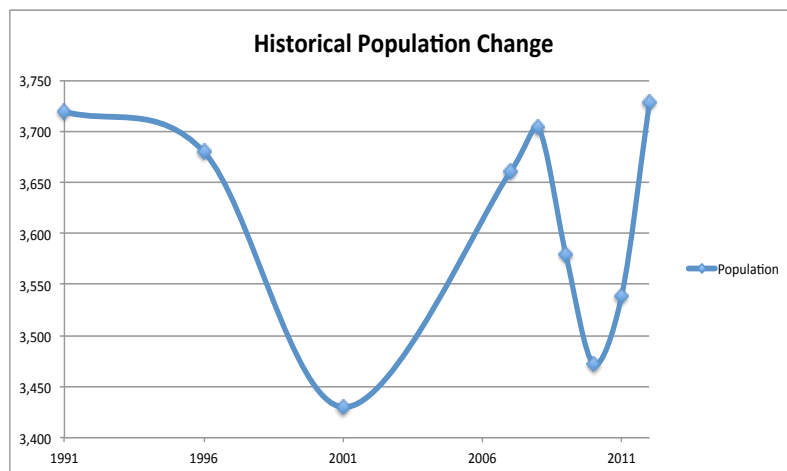


2.6 statistics

Population

The population for Highland park, as of the 2012 census data, is 3, 729 people. Based on the historical population trends, the population seems to go through cycles of increasing and decreasing growth with the most recent change in the last five

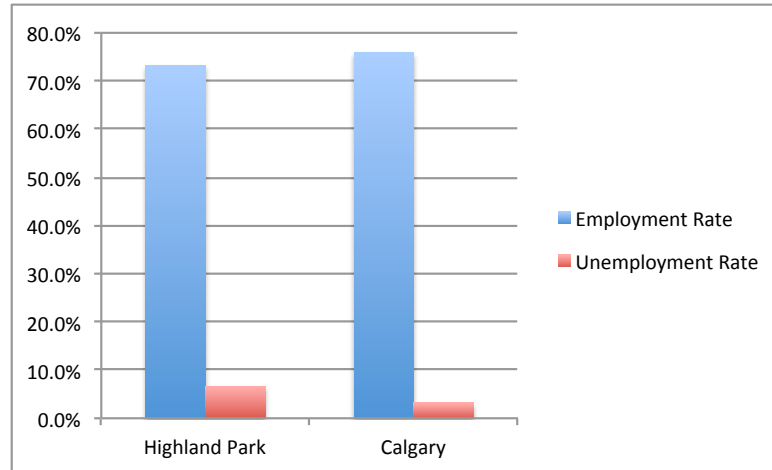
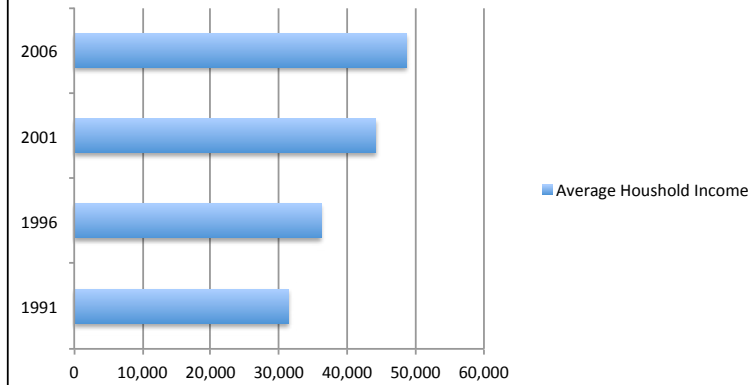
years with an upward trend for growth. Most of the population is in the 25-29 year cohort or the 50-54 range. This includes mainly young single adults and senior of which both make relatively lower incomes.



Economic

Highland Park has a lower employment rate and higher unemployment rate than Calgary overall. This is because there are many seniors and students renting in the area. An analysis of the historical household income from 1991 to 2006 shows that

the average household income increases with time but is still lower than Calgary's average. This is due to inflation rates.

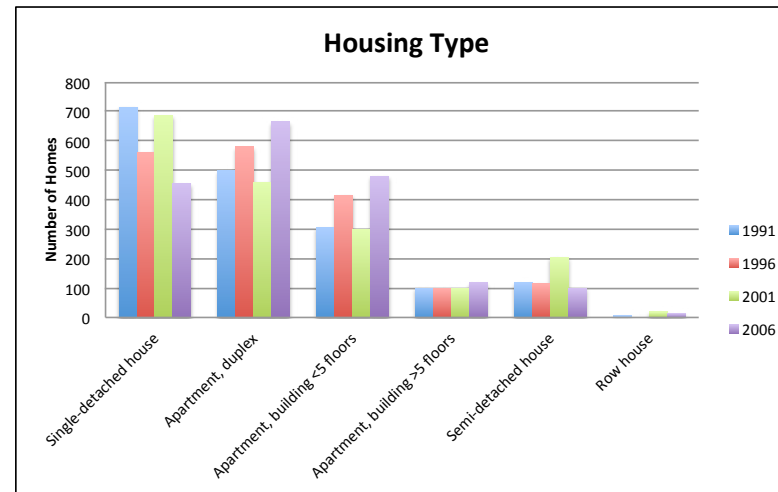
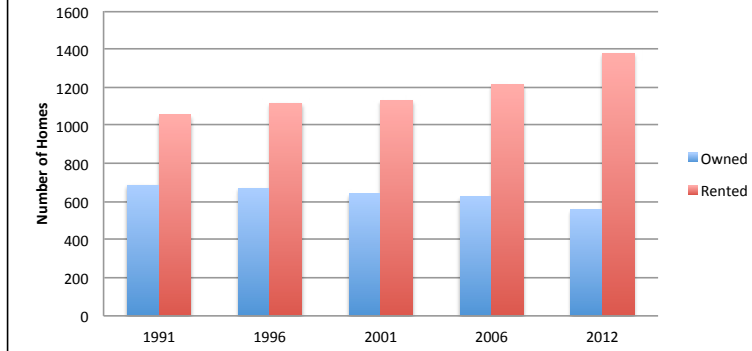
Average Household Income

Housing

Historical Housing

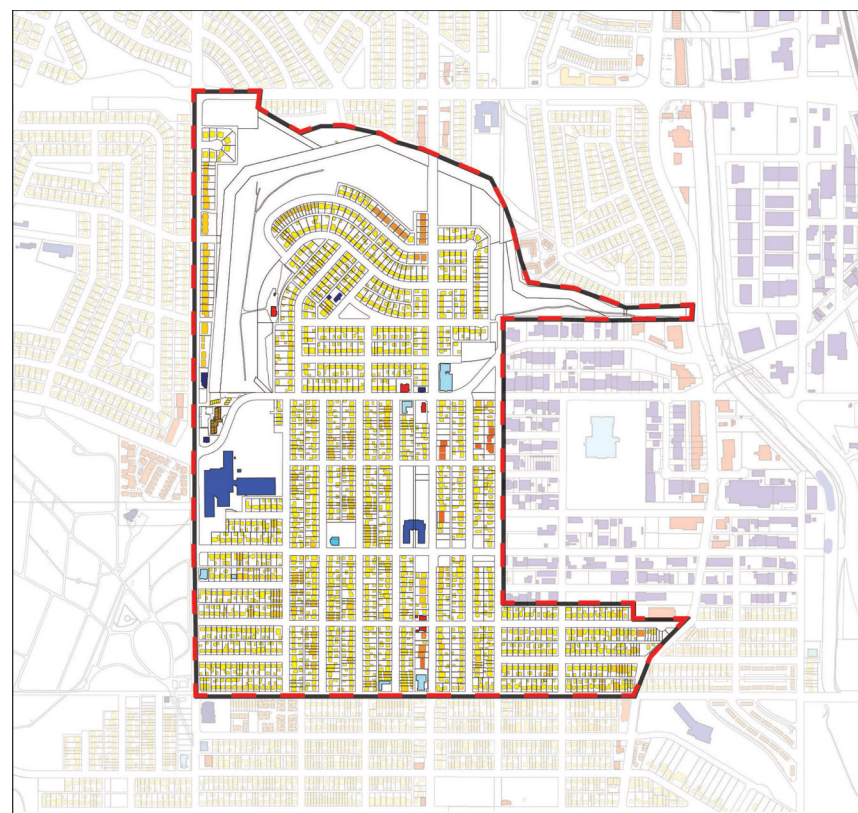
Based on the historical housing analysis, over the period of 1991 to 2006 the number of single family homes have decreased and the number of apartment buildings and duplexes have increased due to infill development.

and the number of apartment buildings and duplexes have increased due to infill development.

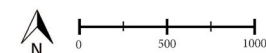
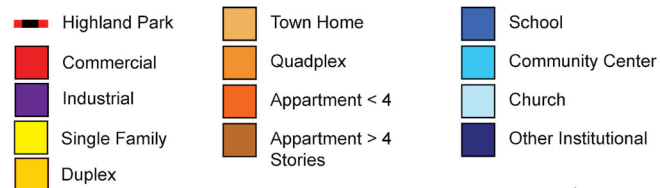
Owned vs. Rented

Existing Housing Typology

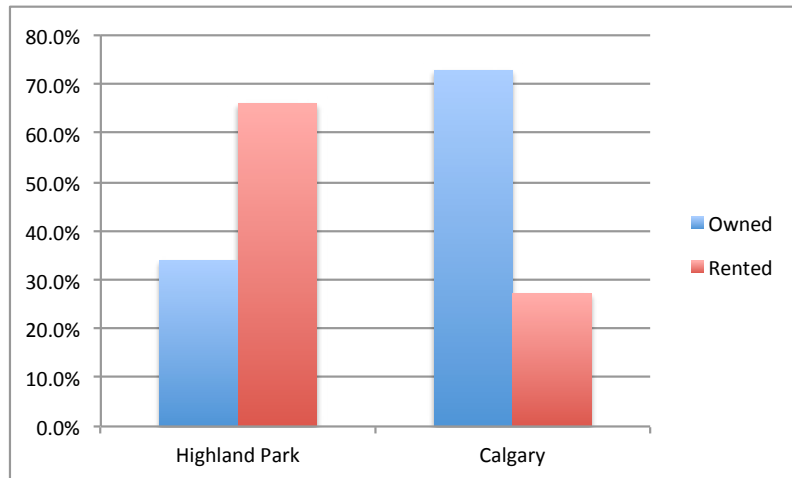
There is a diversity of housing types in Highland Park. They include single-family bungalows and two-storey, duplexes, townhomes, quadplexes, and one higher density (6 floor) apartment building for seniors at the bottom of 40th ave. The community also includes an increasing number of infill developments on single family lots. The majority of the infills are located in the south with the least in the north along the golf course. Furthermore, many of the original homes have been modified and updated including the adding of some extra units or floors (converted structures).



Housing Typology



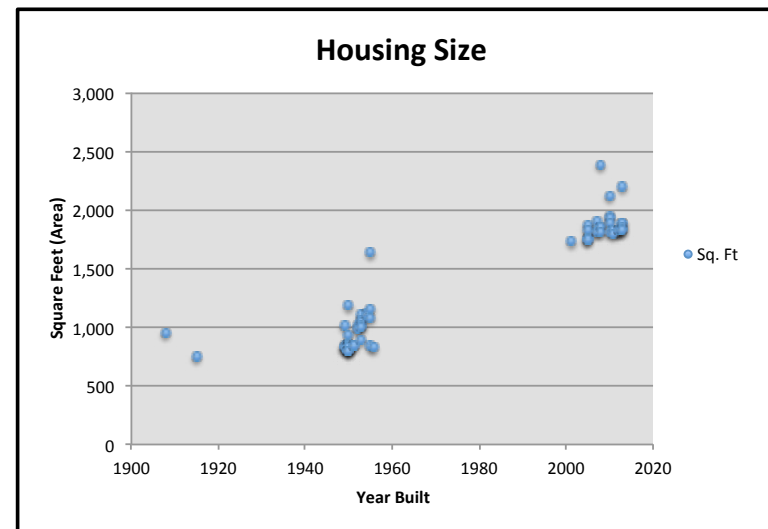
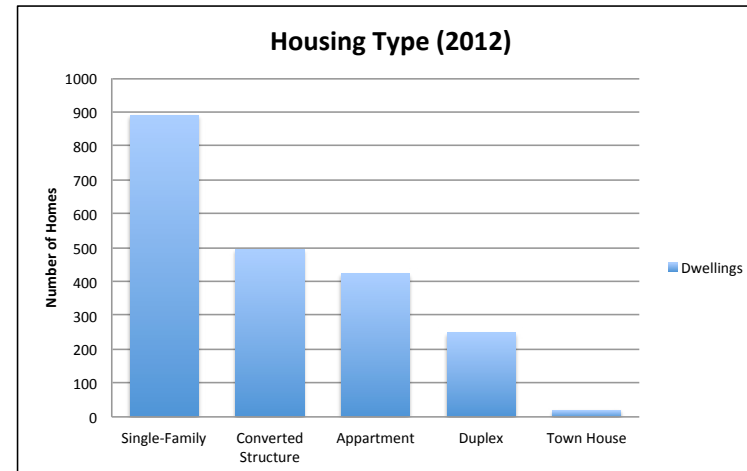
There have always been more renters than owners in Highland Park. Currently the number of renters in Highland Park are a



Existing Housing Typology

This real estate analysis is based on the Highland Park Real Estate data for homes listed and sold from 2009-2014. From the data it is evident that the majority of homes were built in the 1950s and early 2000's with the oldest being built in 1908 and the newest in 2013. This data contains only two types of homes; bungalows, which are the original style, and two storey, which are mostly infills. The data shows that more bungalows were sold over the 7 year period than two storey. The average price for a home was approximately \$500,000, with the highest price being \$800,000, and the lowest price of \$325,000. The homes had an average of 1,300 sq. feet with at least 3 bedrooms. The smallest home was 353 sq. feet, and the largest was 2,391 sq. feet.

lot higher than Calgary's average. It should also be notes that the number of renters have been increasing as far as 2012.



Price	
Mean	507,861
Minimum	325,000
Maximum	799,900
Median	529,500
Range	474,900

Sq. Ft.	
Mean	1,333
Minimum	753
Maximum	2,391
Median	1,109
Range	1,637

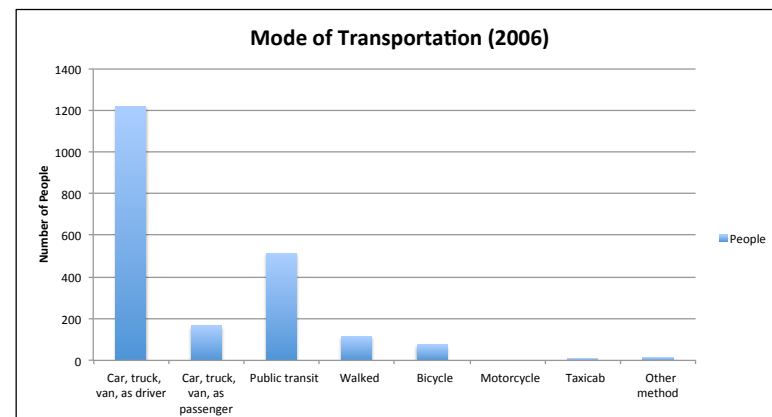
Bedrooms	
Mean	3.3
Minimum	2.0
Maximum	5.0
Median	3.0
Range	3

Year Built	
Minimum	1908
Maximum	2013
Median	1955
Mode	1950
Range	105

Transportation

The most common mode of transportation is car and public transportation. This is typical for a Calgary community, however more people take public transportation in Highland Park in compare to the City overall.

Mode of Transportation	Highland Park	Calgary
Car	57.82	67.63
Transit	24.40	9.22



2.7 Public Engagement

Visioning Session

Vision development is an important tool for discovering common values, developing a shared sense of purpose, and fostering communication. The visioning session for this project was held on January 25th with participants from 3 different communities of Highland Park, Thorncliffe and Greenvale. The session comprised different strategies and activities in order to efficiently engage the citizens and determine their vision for the future of their communities.

University of Calgary students, from the department of EVDS, were specifically involved in the mapping exercise.

The mapping exercise included the most recent aerial photograph of all three communities along with 3 main themes of questions regarding present and future Land Use, Open Space and Transit Corridor developments. Every two students were assigned on a table and had the opportunity to go over the questions with each participant and determine their thoughts and visions regarding those topics.

The main feedbacks and concerns shared by the participants are as follows:

Open Space

- Provision of more green spaces similar to Confederation Park
- Create safe environment in public spaces
- Create a well connected pathway system

Land Use

- Little retail in Highland Park
- Many people shop outside of the community
- Want traffic to avoid Centre street
- Limited gathering places

Transportation

- People cutting through community to get to Northmount Drive.
- Proposed an idea of having Centre St. as a street-car and pedestrian only access with no vehicles.
- Think that more people use bus than car on Centre St.
- More people were in favour of the Centre Street alignment than Edmonton Trail. Because it is in walking distance to the communities. Also health benefits.
- Don't want traffic to cut through 40th Ave.
- Want to beautify Centre St and the entire community.
- Lack of parking: Most homes in Highland Park do not have driveways and so renters (secondary suits) and visitors block homeowner parking stalls.
- Overflow Parking: Many outsiders park on the community streets to take the bus downtown and are blocking access to residential homes.
- People don't like change



2.8 Summary of Issues and Opportunities

Based on the analysis and visioning session we have organized the information collected into four categories: strengths, weaknesses, constraints, and opportunities.

Strengths

- Close proximity to downtown
- Modified grid system –permeable
- Well-serviced transit system

Weaknesses

- Lack of community nodes within walking distance
- No transition of development between the industrial and residential uses
- Poor maintenance of rental units
- Lack of color and character
- lack of green space
- Poor pathway connectivity to the surrounding communities.

Constraints

- Topography: The golf course contains steep slopes which create drainage issues. New developments will need to have a proper drainage plan to manage run-off and prevent flooding.
- There are many renters in the community which don't always contribute to the community – homeowners need to get more involved
- Land is expensive and unaffordable for young families
- Residents don't want traffic to cut through their community

- The City owns a portion of the lands within the former golf course for a significant sanitary sewer line. The location of the line restricts the ability to develop the lands comprehensively, and limits the location of buildings, trees and other features.

- Access points to surrounding roadways are limited in some cases due to steep grades and short distances to existing intersections. Access is also not desirable through the existing local streets in Highland Park.

Opportunities

- Need for more commercial uses, diversity, and nodes
- Center Street transportation corridor and redevelopment of the urban boulevard (better environment and walkability for pedestrians than the edmonton trail alignment).
- Opportunities for development and infills on vacant lots
- Improvement of pathway connectivity. There are no east/west corridors for walking and cycling (need more) e.g. Mcknight Blvd.
- Opportunity for new housing types
- Regulate parking for residents
- Traffic calming measures
- Improve accessibility for seniors, disabled, and strollers
- Change in community from rent to ownership by providing affordable housing
- Addressing aging in place and new senior housing options
- Address the industrial and residential interface
- Improvement of the sidewalks and environment for seniors (aging in place)

3.1 Vision

Highland Park Redevelopment Plan is a clear and flexible framework that guides the positive change and future development happening in this community. Overall, the plan envisions a complete, unique and vibrant mixed use inner city community by balancing social, economic and environmental concerns through the following objectives:

- Providing a safe, healthy, welcoming atmosphere where people choose to live
- A diversity of housing options in order to provide choice in housing types and meet the needs of different age groups, family structures, income groups and lifestyles;
- A wide range of mixed use development that will increase the quality and accessibility of community facilities and services
- Development of open spaces to provide opportunities for social interaction, recreation, leisure activities and cultural expressions
- Encouraging new development that acknowledges seniors residences
- Ensuring accessibility to public transit for all residents
- Providing bicycle lanes and enhancement of the pedestrian environment and pathways
- Providing opportunities for local community economic development.

3.2 Existing and Supporting Policy

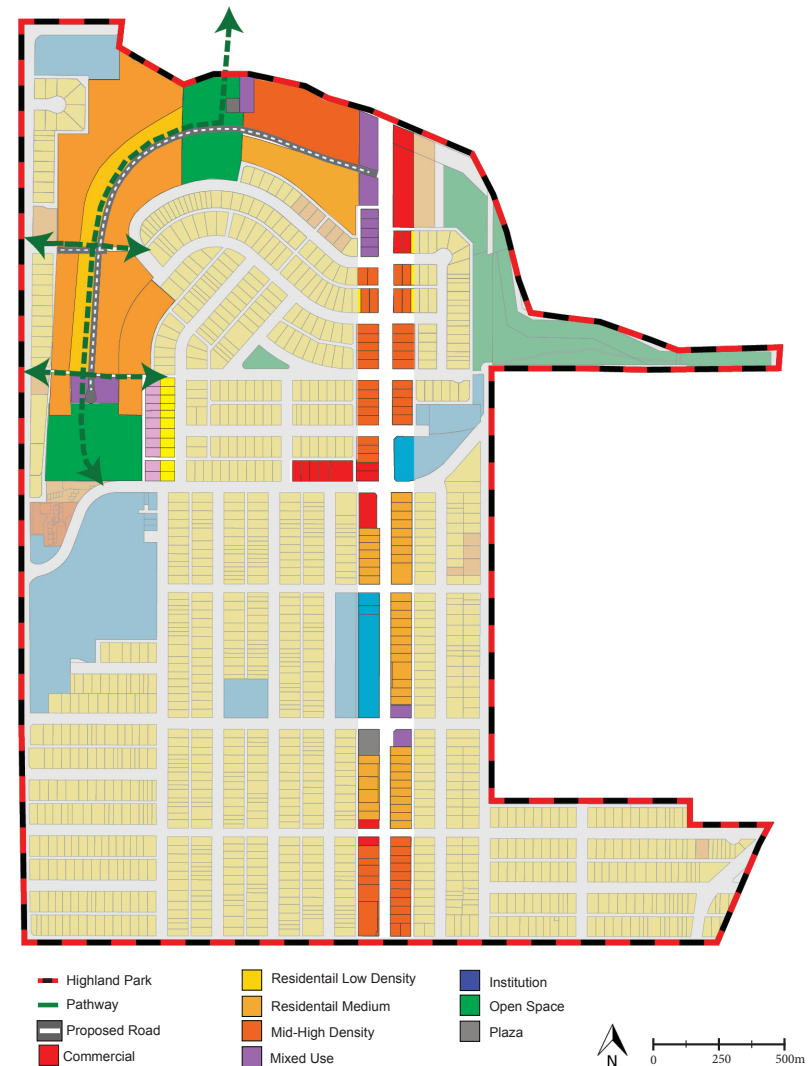
In developing the initial site concepts, the project team incorporated guidelines from several government policies. These included:

- Calgary Municipal Development Plan
- Calgary Transportation Plan
- Developable Areas Growth and Change 2010 - City of Calgary
- Development interfaces: Urban Land Development Authority guideline no.18
- Housing Affordability and choice: A compendium of ACT Solutions 2011
- Fairview Land Use Study - City of Calgary 2003
- Low Density Residential Housing Guidelines for Established Communities - City of Calgary 2010
- North Bow Design Brief - City of Calgary 1977
- Residential Infill Guidelines: A Manual of Planning Design Guidelines for Residential Infill in Mature Neighbourhoods - The City of Edmonton 2009

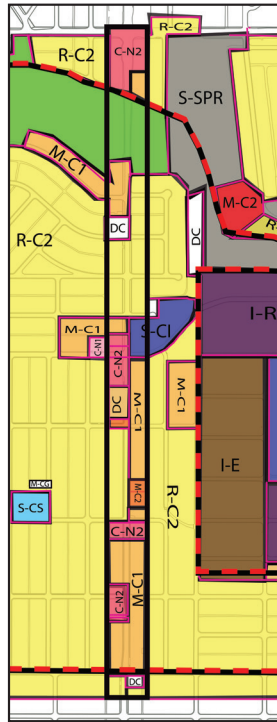
3.3 Land Use

Concept

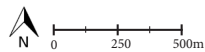
Our proposal for the development concept in Highland Park addresses two main areas; the Highland Park golf course and the Centre Street urban corridor. These areas offer the most plausible developable land within the site for two reasons. The first is that the golf course has not yet been developed and offers plenty of open space for development opportunities, and the second is that centre street has been designated as an urban corridor and major transit route leading into downtown Calgary. The Centre Street transit corridor offers the potential for redevelopment as it will support the Calgary transit system as well as meet the City's sustainability and transit goals laid out in the Calgary Transit Plan and Municipal Development Plan. In these plans it is recommended that higher density be located near transit routes and stops. The highest developments that we propose on Centre Street are 4 storeys tall.



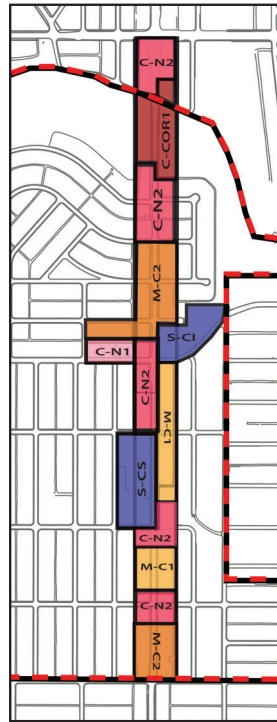
Current Zoning



R-C2 Residential –
Contextual One / Two Dwelling District
DC Direct Control
M-C1 Multi-Residential –
Contextual Medium Profile District
M-C2 Multi-Residential –
Contextual Medium Profile District
C-COR1 Commercial – Corridor 1
I-R Industrial –
Redevelopment District
I-G Industrial – General District



Current Zoning



C-N1 Commercial –
Neighbourhood 1 District
C-N2 Commercial –
Neighbourhood 2 District
S-CI Special Purpose –
Community Service District
I-E Industrial – Edge District
S-SPR Special Purpose –
School, Park and Community Reserve District
S-CS Special Purpose –
Community Service District

The overall proposed redevelopment in Highland Park would create an increased population of 5,413 people and 804 jobs; with 2,836 people and 297 jobs in the golf course development and 2,577 people and 1148 jobs along centre street.

Golf Course

Type	Area m2	Area (Hectare)	Density (units per hectare)	Projected Population
Open Space - North	24,180	2.84		
Open Space - South	21,614	2.16		
Mid-rise (up to 6 storeys)	11,168	1.12	195	560
Low rise (up to 4 storeys)	96,242	9.62	180	3,463
North Plaza - Mixed Use	2,732	0.27	140	76
South Plaza - Mixed Use	3,894	0.39	65	51
Town Homes	32,631	3.26	50	326
Total	192,461	19.89		4,476

Assumptions		
Roads	0.2	38,492
Slope	0.2	38,492
Total Subtractable area		76,984
Total developable area		121,963

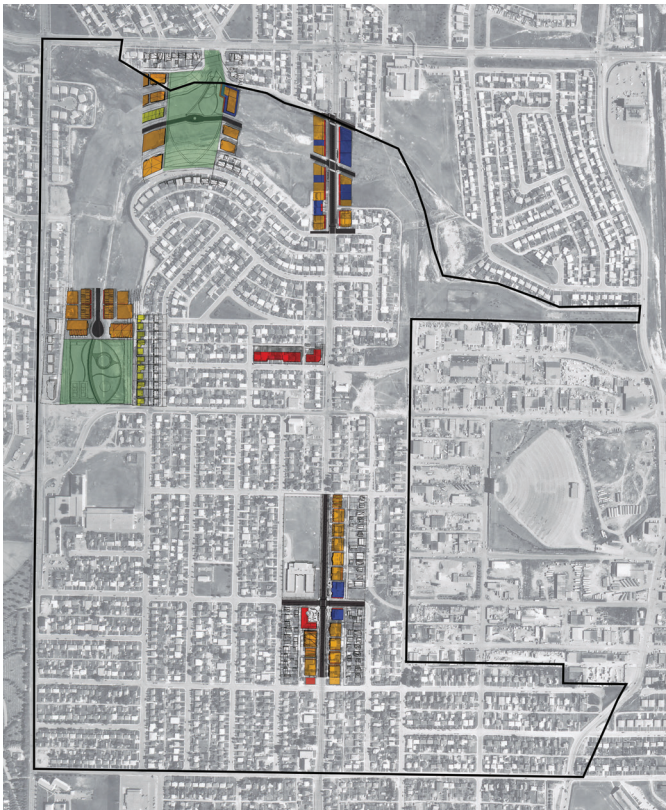
Centre Street

Type	Area m2	Area (Hectares)	Density (uph)	Projected Population
Commercial	16,251	1.45		
Mixed Use	6,715	0.85	160	272
MC-1	27,141	2.71	195	1,057
MC-2	31,989	3.2	195	1,248
Total	82,096	8.21		2,577

Total Population added to Highland Park	5,413
Total Jobs added	804

3.3.1 Community Nodes

The following map indicates the areas that have been modeled in our concept plan. There are five proposed nodes. The two golf course open spaces with mixed use commercial, the mixed use commercial corridor where the golf course meets Centre Street, the commercial corner on 40th ave and Centre Street, and the urban plaza with surrounding mixed use and a sample of residential building types on 36th ave and Centre Street. These sections will be explained in more detail below.



Objectives

- To supply a choice of community nodes for the residents of Highland Park.
- To supply more commercial uses within walking distance of the community.
- To bring some vibrancy and life to the community.

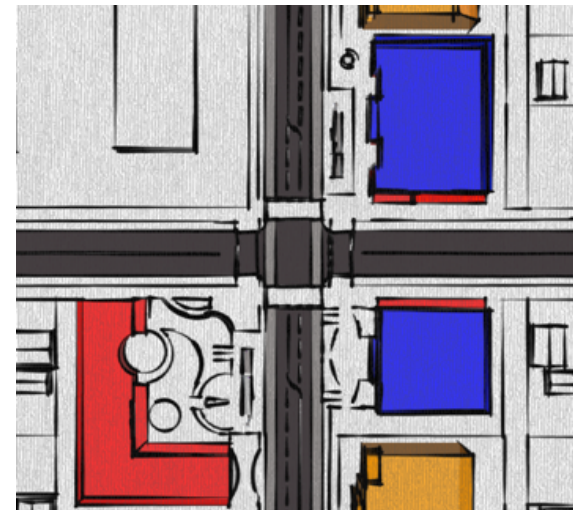
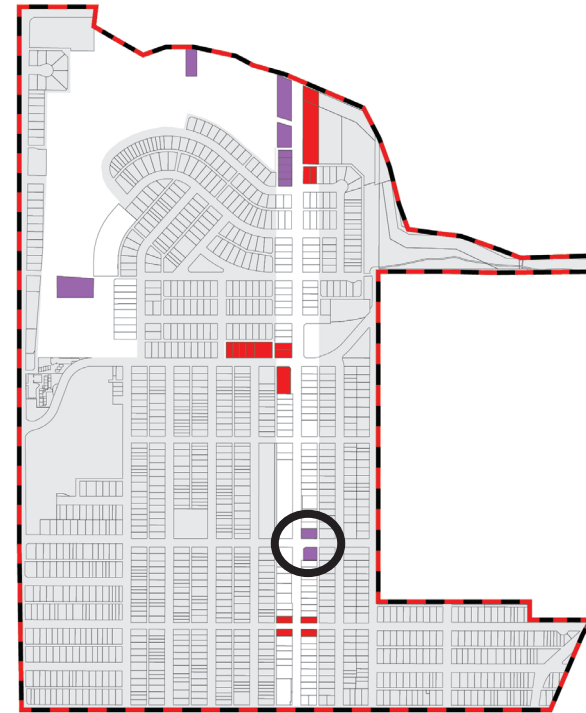
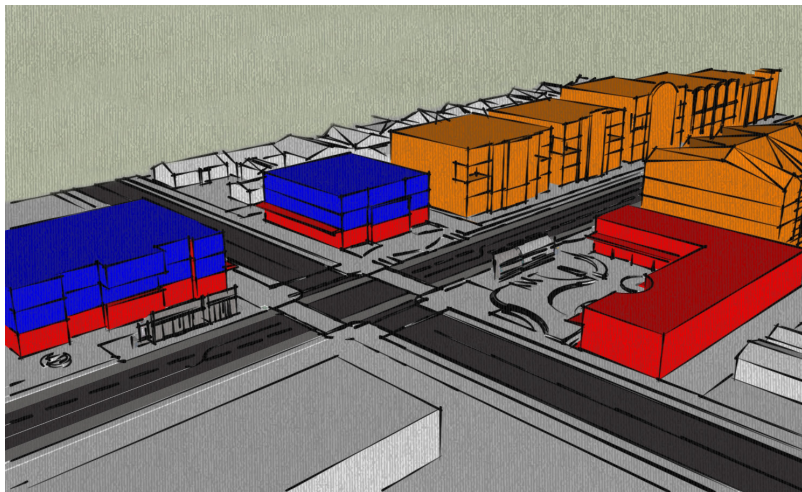
Guidelines

1. Permit increased density through mid and high-rise buildings.
2. Encourage a dense, fine-grained built form
3. Locate highest densities and mixed uses closest to transit stops.
4. Encourage architectural variety and articulate building facades.
5. Orient buildings toward the sidewalk with minimal front setbacks.
6. Create a continuous street wall.
7. Step back front and side facades for taller buildings.
8. Transition rear of buildings to respect abutting low-rise development.

Centre Steet Nodes

Urban Plaza

Another change that we suggest is a mixed use plaza on the corner of 36th ave and Centre Street. In this location there are currently two vacant lots and one of the City's oldest Park and Rides. In our concept we have proposed the Park and Ride site to be used as an urban plaza with two mixed use buildings located on the east corners of Centre Street. With the City's goals of promoting transit oriented developments (TOD) the Park and Ride would no longer be supported, since it is too small, that causes parking overflow in the community, and is not even used by the Highland Park residents. We want to encourage residents to walk to and take transit to work. The mixed use buildings would contain retail on the first floor and 3 floors of office above. The plaza itself will have a two storey commercial building with coffee shops and restaurants.





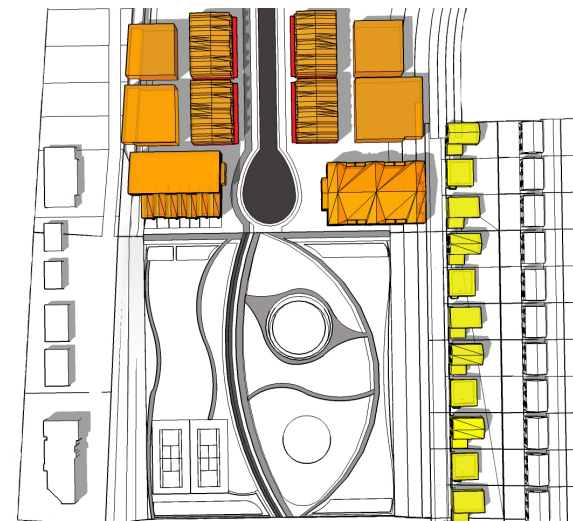
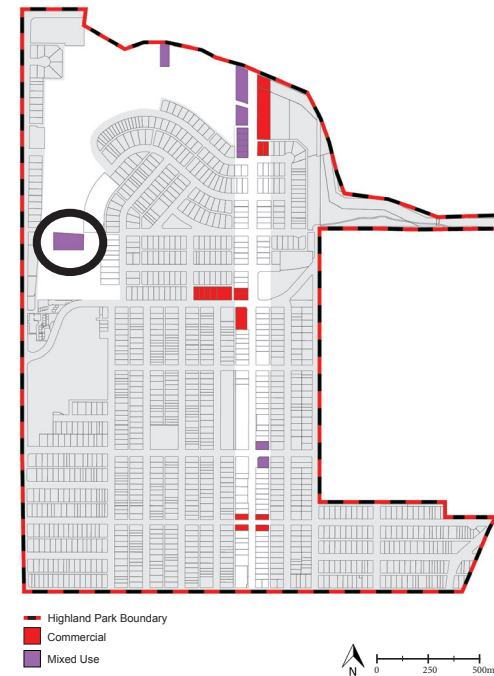
Czech-Budejovice-City-Center, Czech Republic

Golf Course Nodes

Within the golf course itself we have proposed two open space locations, one in the south and one in the north to allow for the amenity to be accessible to both the south and the north residents of Highland Park.

1) South

In the south adjacent to the open space we propose a small mixed use area with retail on the first floor and two level townhouse style units above. The retail units would offer coffee, ice cream, and other small scale services to the people using the open space. Furthermore, there will be townhomes overlooking the open space as well as laneway homes on the east side located in back of the existing lots.

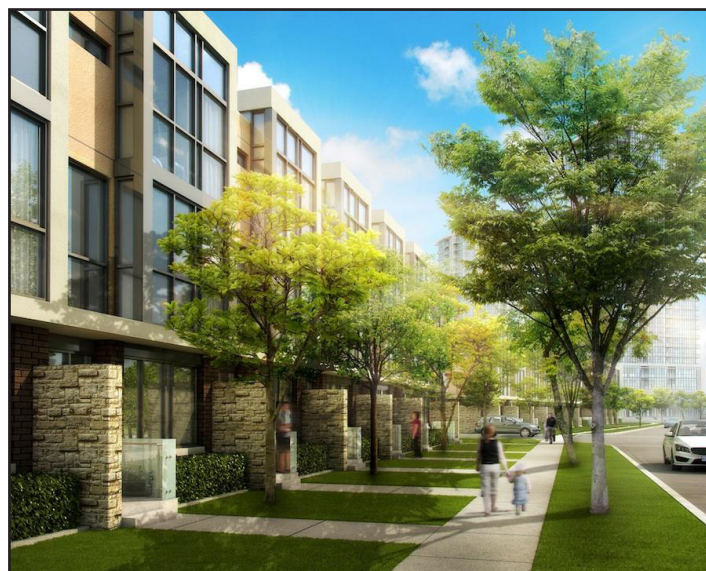
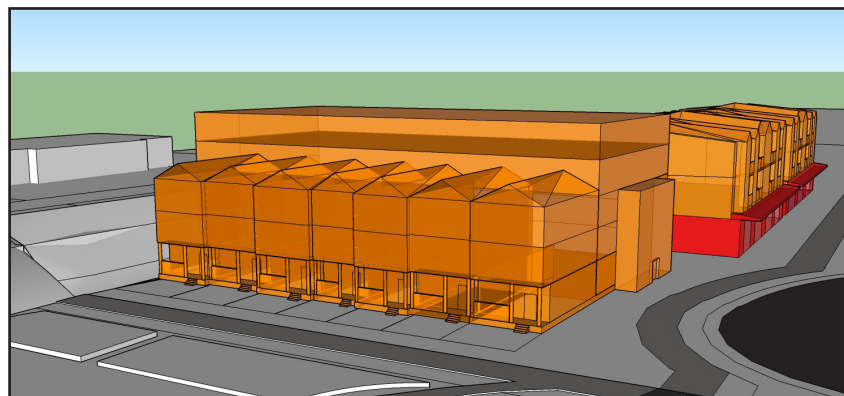




Precedent - Mixed Use Town Homes



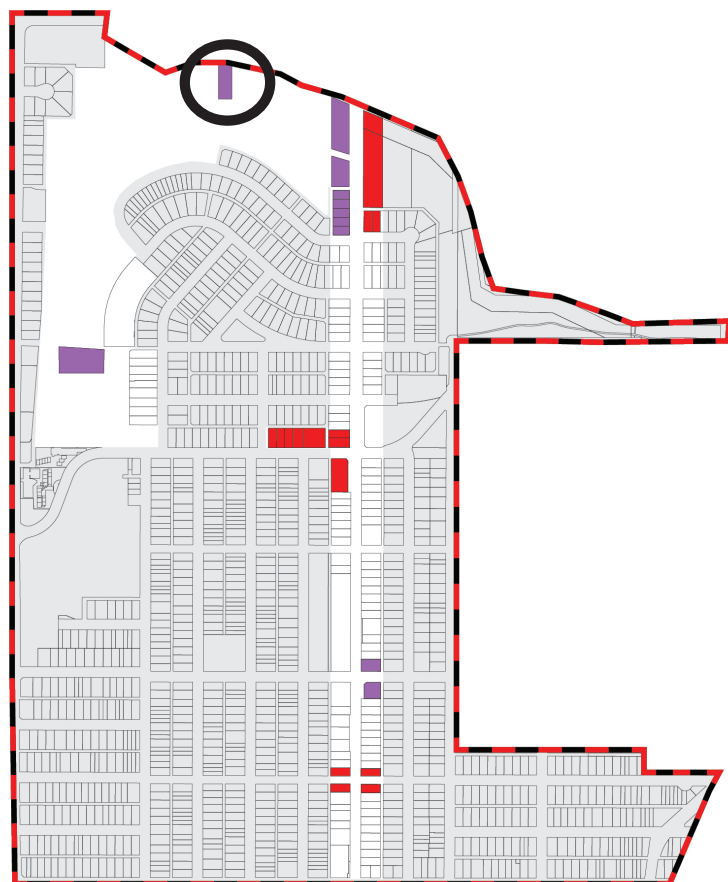
Kensington, Calgary



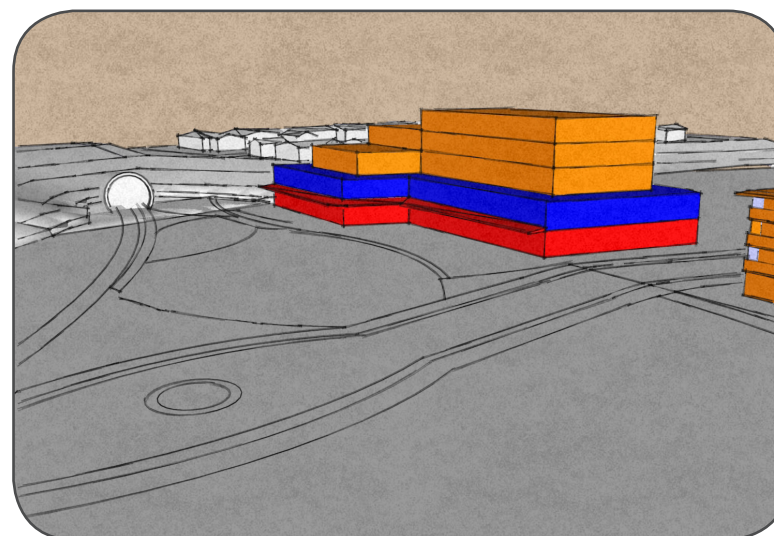
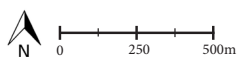
The Marquee Townhomes, Mississauga, ON

2) North

The open space in the north would contain an urban plaza and mixed use building with retail on the bottom floor, office on the second, and 4 floors of residential micro suits above.

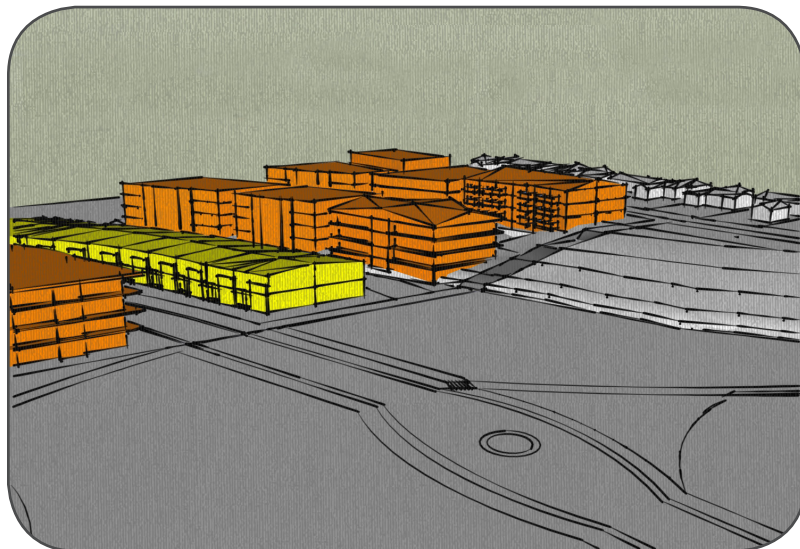


- Highland Park Boundary
- Commercial
- Mixed Use





Germantown apartment complex, Alta Liberty Mill, US



3.3.2 Commercial

C-N2

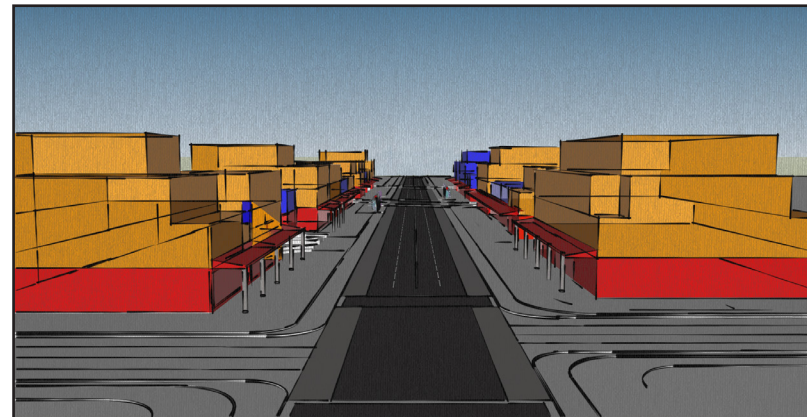
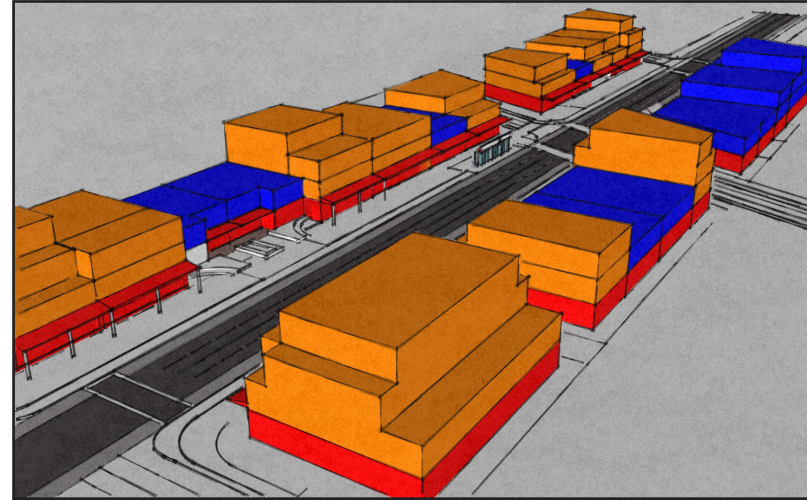
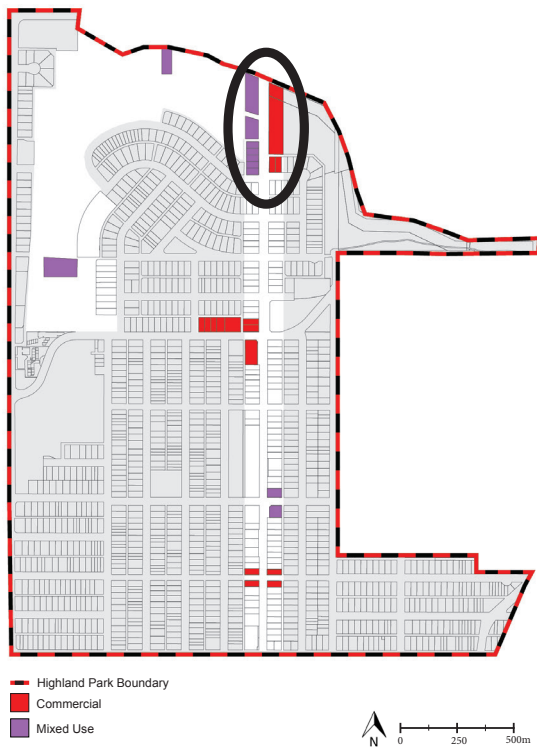
We suggest to change the CN-1 district on Centre Street to CN-2 and extended it along 40th ave to the end of the block. This is currently the location of a convenience store, a pub, and a low rise professional centre. In our proposal we have placed a two storey commercial building that addresses the corner of Centre Street and 40th ave. The idea is to keep the corner store concept.

Corner Store



C-COR1

Where the golf course meets Centre Street we propose a mixed use strip across from which would be a commercial strip. This area would be zoned as C-COR1 and was chosen as it will be a busy area located on Centre Street and across from the higher density units in the golf course. The commercial strip would also back onto a green space on the east side of Centre Street and would have minimal disturbances on the lower density, single-family homes, as it is located on the edge of the community.

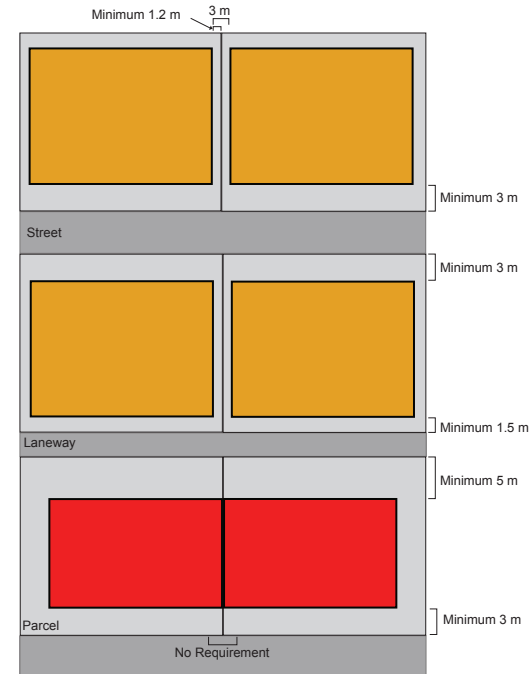


Guidelines

1. Commercial uses on the ground floor of buildings and residential and office uses on upper floors;
2. Storefronts along a continuous block face;
3. Commercial developments on both sides of a street;
4. Buildings that are close to each other, the street and the public sidewalk;
5. The main public entrance to a building must face the property line shared with a commercial street.
6. Parking stalls and loading stalls shall not be located between a building and a commercial street, but kept in the back.

Recommendation - Performance based zoning

The use of performance based zoning may be more useful than the typical zoning districts used by the City of Calgary. Performance-based zoning regulates the actual physical characteristics and performance of a use rather than the use of land, height, lot sizes and setbacks. For example, Live-work units. We recommend that the City consider this option.



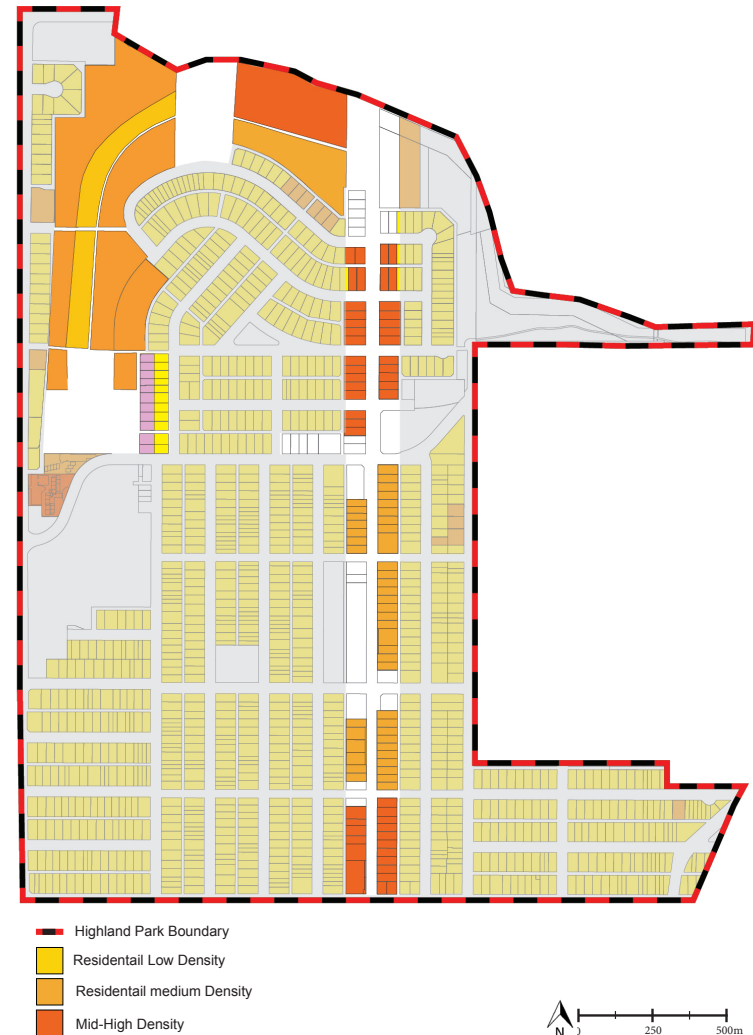
Orenco Station, Portland

3.3.3 Housing

Objectives

1. To support Calgary's growing population and demand for center city living.
2. To support the transit corridor by increasing residential density.
3. To attract young families and rejuvenate the community by supplying affordable housing through the increase of density and providing a diversity of housing choices.
4. To guide infill development to be properly situated it in the community.
5. To have a seamless transition between the golf course development and older community.
6. To improve the residential - industrial interface on the east side of Highland park.

There are two types of residential areas along Centre Street. They are MC-1 and MC-2, both of which are quite similar except that MC-2 allows for a slightly higher building. The residential buildings along centre street will range between 3-4 floors in height. Within the golf course there is mainly low to mid-rise apartments consisting of 3-4 floors. There is a section in the northeast portion of the golf course which would allow for up to 6 floors of residential units, and a strip through the centre of the west portion of the golf course allowing attached townhome.



Affordability

Currently in Highland Park there are a larger number of renters than owners as renting is more affordable. Our objectives are to create a diversity of housing prices to accommodate different types of people, such as young families and first time home builders, immigrants, seniors, low income residents such as students, and singles or single parents. Creating affordable housing may allow people to buy instead of rent.

Affordable housing generally means a housing unit that can be owned or rented by a household with shelter costs that are less than 30 per cent of its gross income. Using land and existing infrastructure more effectively lowers land and service costs and in doing so contributes to housing affordability. Intensification and redevelopment expand housing choices within a neighbourhood by offering a range of home sizes and costs attracting residents at different stages of life. Increasing residential density also contributes to the vitality of businesses, ultimately resulting in more amenities and services within a neighbourhood. Higher densities benefit the City by making better use of existing infrastructure and public transportation, as well as increasing the tax base with little or no capital expense. Furthermore, higher density helps safeguard the environment by reducing land consumption and protecting valuable open space, farmland and ecologically sensitive areas.

Housing Prices

Average housing prices in Calgary (Feb 2014) (Table)

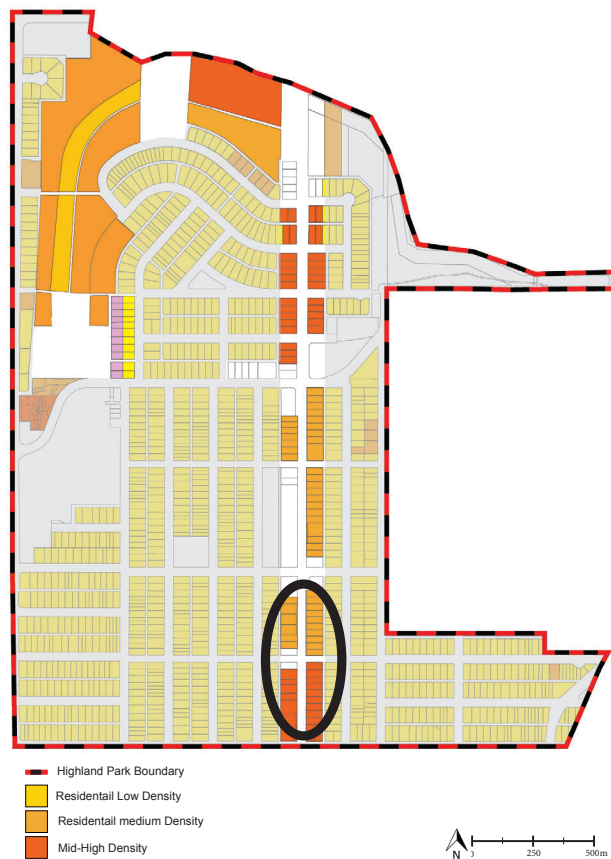
Type	Average Price
Single Family	\$550,312
Town Homes	327,911
Condo	\$309,700
Laneway	\$250,000-\$270,00 (Cost to build)
Rent	\$769 per month

*Calgary Regional Housing Market Statistics

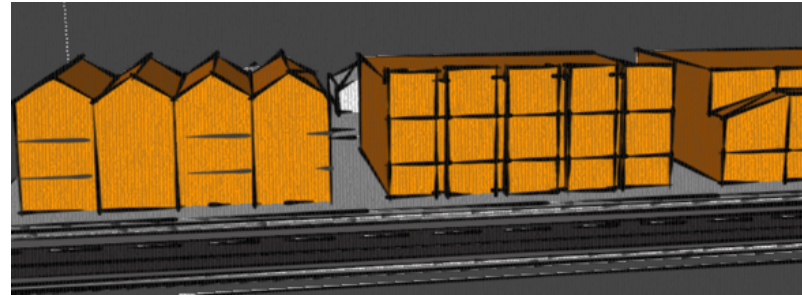
Infill Development

Concept

Further down Centre Street to the south we suggest that the R-C2 (single-family residential neighborhood) zoning district be changed to M-C1 and M-C2 (multi-family low and medium profile districts) to allow for higher densities.

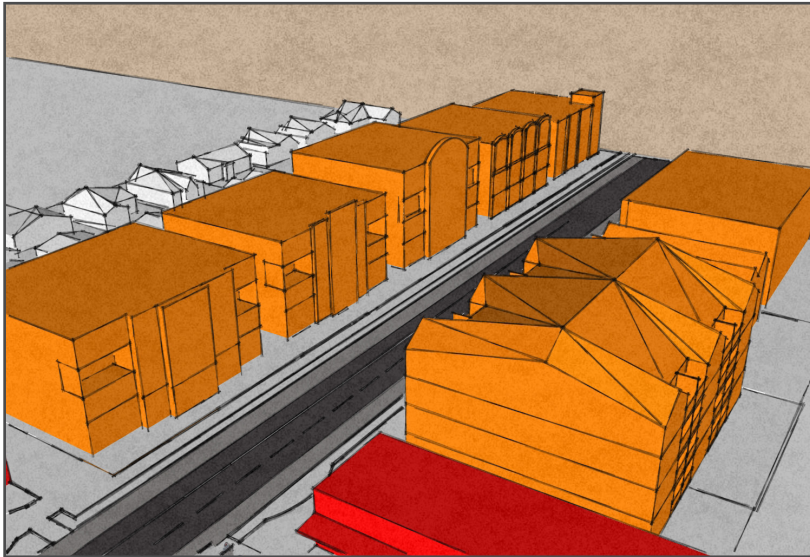


MC-1



East Village Leslieville, Toronto

MC-2



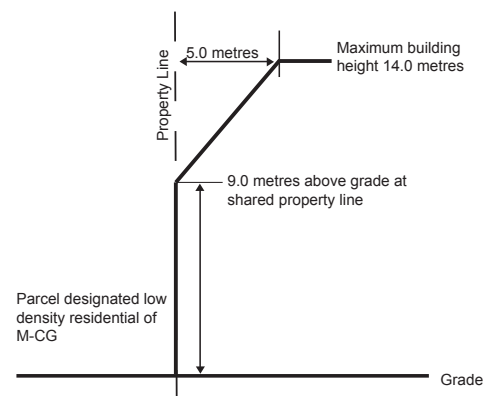
Height Restrictions

Where the established street is characterized by low profile bungalows, the height of the new infill or an addition must be particularly sensitive. Greater design restrictions on initial infill's may be required in order to ensure a more sensitive integration with the existing scale and character of the neighbourhood. Where one or both of the neighbouring homes are lower scale, new development should respect the existing street context. The following figure describes the height setbacks for both MC-1 and MC-2 multi-family residential districts. For MC-1, after 9 metres in height there is a 5 metre setback and for MC-2 there is a 5 metre setback after 11 meters in height.

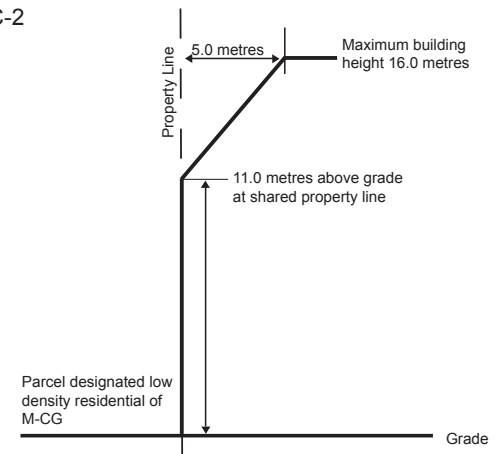


Kingsmill condo, Mississauga, Ontario

MC-1



MC-2



Another element related to building height and which can help new development respond to its setting is the height of the main floor (exposed basement). Generally, the height of the main floor of a new development should be similar to the floor lines of adjacent homes, thereby respecting the established character of the street.

Setbacks for low-density residential interfaces

Type	Front	Back	Side	Max Height
Single Family Infill	3m	None	1.2m	12m
MC-1	1.5-3m	1.2m	1.2m	12 m
MC-2	1.5-3m	1.2m	1.2m	16 m
Commercial	3m	3m	3m	Varies by Parcel

Typical Lots Sizes in Highland Park

Facing Golf Course (Original)	19 x 52 m
Infill	8 x 30 m
Original	16.5 x 30 m
Original	15 x 36 m

Infill Design Guidelines

1. Infill development should respect the mass and scale of adjacent development and the character and attributes of the existing streetscape.

Infill development should fit comfortably into an existing neighbourhood and reflect the character of the existing streetscape.

2. A critical mass of single-family housing should be protected in the core of mature neighbourhoods.

This will be accomplished by:

- Allowing a modest amount of Small Scale infill within the interior of neighbourhoods;
- Directing the majority of infill to the edges of neighbourhoods or onto large sites.

3. Higher intensity infill development should be focused on the edge of neighbourhoods.

4. Residential infill developments should respect the role of lanes.

5. Infill development should foster a high quality public realm.

6. Individual homes should not be isolated between infill developments.

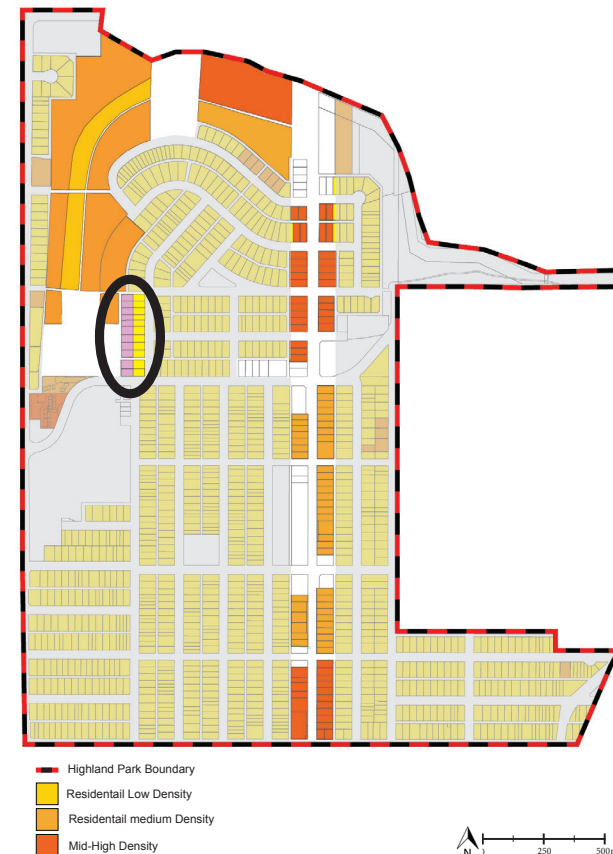
7. New developments in Established Communities should enhance the streetscape, through the retention of healthy mature trees and planting.

Laneway Housing

Aside from building low to mid-rise apartment buildings, another way to make better use of a developed area is to allow laneway housing in single family areas with lanes. Redeveloping vacant or underutilized land parcels also offers opportunities to create new housing units in already developed areas. Laneway housing refers to a smaller house or cottage that is secondary to a principal house and is typically located in the rear yard and oriented towards the lane. There are different types of laneway homes. First of all, some are owned by the original owner of the lot and rented to a tenant. However, there is also a possibility to subdivide the lot and sell the laneway portion to another owner. Currently in Highland Park there is already a high rental rate and use of secondary suits. Some residents complain that secondary suits bring in unwanted residents, specifically rowdy and messy students. However, secondary suits bring money to the relatively lower income residents allowing them to maintain their older homes, which have been built in the 50's.

Background Info - Calgary Pilot Project

Currently there is a pilot project for laneway housing along 10A Street northwest as a test case, which can be implemented on street grid systems. Mark Erickson is an architect in Calgary who believes in the concept of laneway housing is designing a laneway house for the Ramsay neighbourhood in his studio



“Studio North”. Working with Matthew Kennedy the two explore a strategy for defining the back alley as a new place of community and dwelling. The study considers ideas to design living spaces that offer amenities in a compact form as well as the creation of meaningful public and private spaces. It also examines how to adapt existing communities within Calgary to allow an for

an increase in density and accommodate a diverse scope of families, life-styles, income and utilization. The focus of the study is on small units of incremental change at a scale, which can be undertaken by the individual homeowner or contractor.

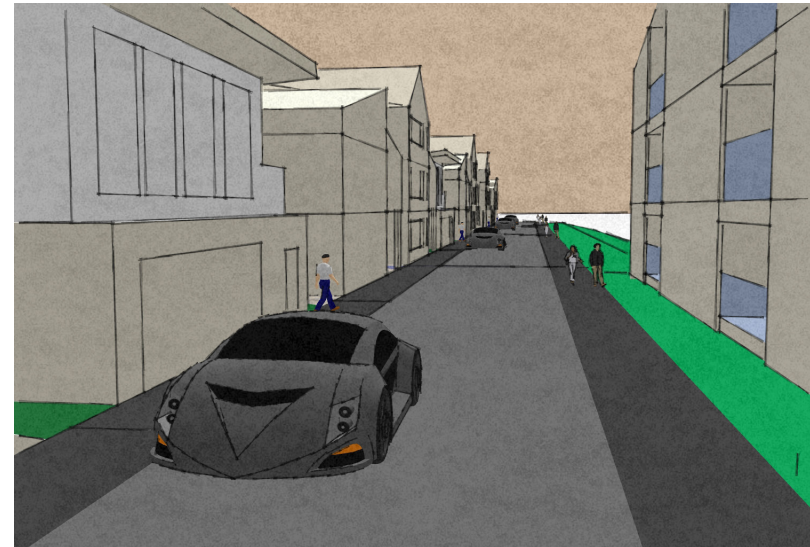


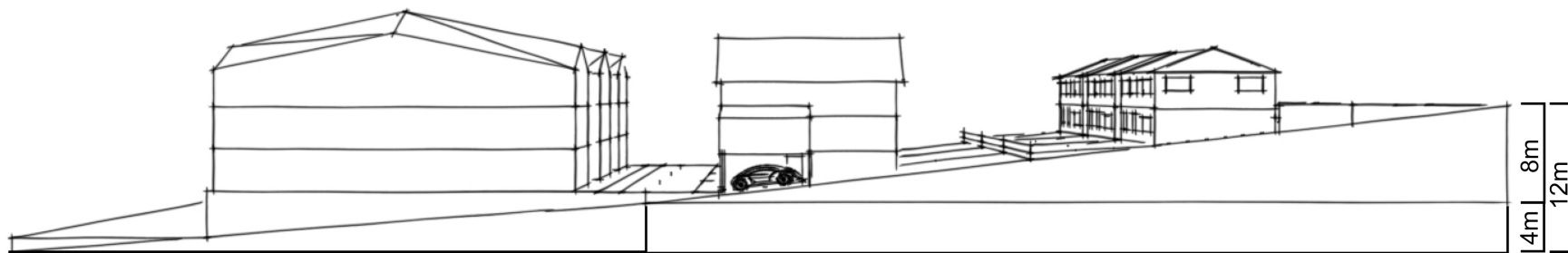
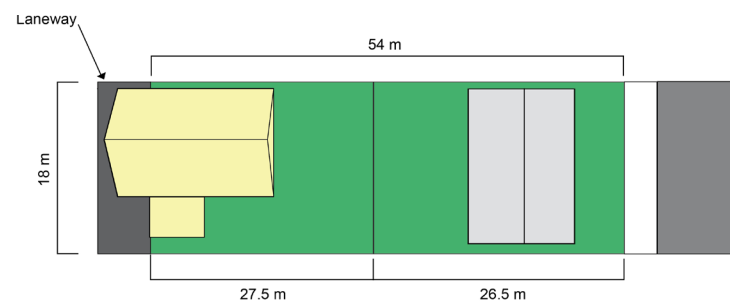
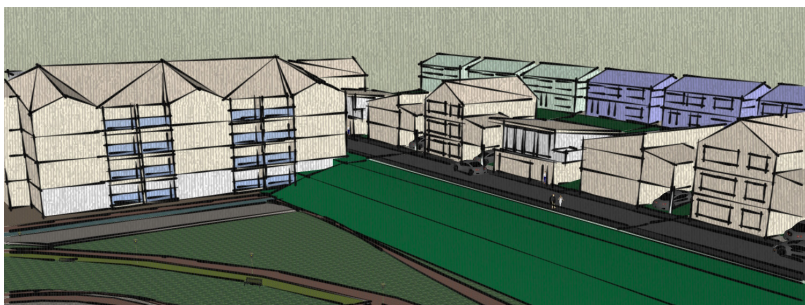
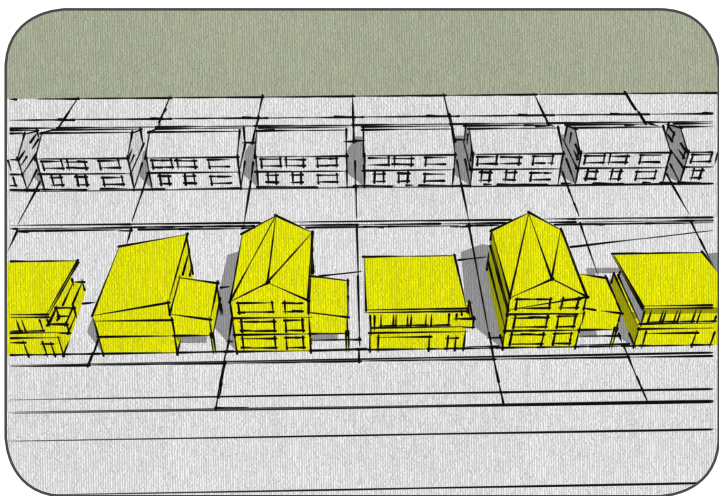
East Village Leslieville, Toronto

Concept

As an older community, Highland Park contains laneways and relatively deep lots. This provides the best environment for laneway homes. For our concept we have chosen a specific set of lots as our pilot project area. These include the lots in the south side of the golf course overlooking the proposed open space and mid-rise condo units (image #).

There are a few different styles of laneway homes that can be built. One is a garage on the first floor with a loft above, another is a bungalow, and a three storey home. All of which fit comfortably in the existing lot allowing for a separate back yard while still leaving a front and back yard for the original homeowners. Furthermore, since the elevation change from the original home to the back lane is a 12m downward slope, even with a three storey laneway home the original homes will be level





Precedent - City of Vancouver, British Columbia

In Vancouver Each lot (33 feet or wider) can now contain three residences: the principal house, an enlarged rental suite in that house, and, where the back yard used to be, a laneway house. Laneway houses in Vancouver can have up to 500 square feet of floor space.

Vancouver's First Laneway House



Implementation

To allow laneway homes in Calgary there would need to be an amendment of the current bylaw and zoning in the area does not permit laneway homes nor secondary suites. In the R-C2 district, the minimum parcel depth for a parcel containing a Secondary Suite, detached garage or secondary suite is 30.0 metres.

Aging in Place / Senior Housing

The community of Highland Park contains a large senior population and residents in the community want to stay in their homes when they retire. To accommodate these people the City should look at better option for seniors. Currently, there is one senior housing condo at the bottom of 40th ave and 4th street, however this location is far from the current Highland Park amenities and at the bottom of a large hill. Better housing option should be considered. In our concept we propose senior housing in the north section of the golf course in the mixed use building overlooking the open space and plaza. This area is located close to centre street and transit, as well as the plaza amenities. In this building we would like to see smaller suites such as micro suites which will be cheaper in price and good for both senior and singles.

Other suggestions include:

- A diversity of choices: not all seniors want to downsize into condos and would like to stay in their homes (aging in place).
- Safety: sidewalk widths and angle need to be able to accommodate wheelchairs, streets should be well ligh.
- To foster independent living of seniors and persons with disability, there should be housing options located close to services.
- Micro suites for seniors.
- A micro suite is a small self-contained unit that includes a bathroom, kitchenette, and living and sleeping areas. The unit is located in

a larger building such as a large single-family house that would provide access to common areas such as a garden, kitchen, dining room, living room and laundry.

- Visitable housing

- Visitable Housing is a term used to define houses that have minimal adjustments to make them accessible to visitors who use mobility assistance. Visitable units have a zero-step entrance, wider doorways and an accessible bathroom on the main level.

Residential Industrial Interface Planning

Objectives

- To provide a seamless transition between the residential and industrial area on the east edge of Highland Park.
- To minimize the visual impact of the industrial area.
- To improve functionality of industrial interface.
- New developments near existing homes should minimize negative impacts.

Some issues associated with the industrial edge:

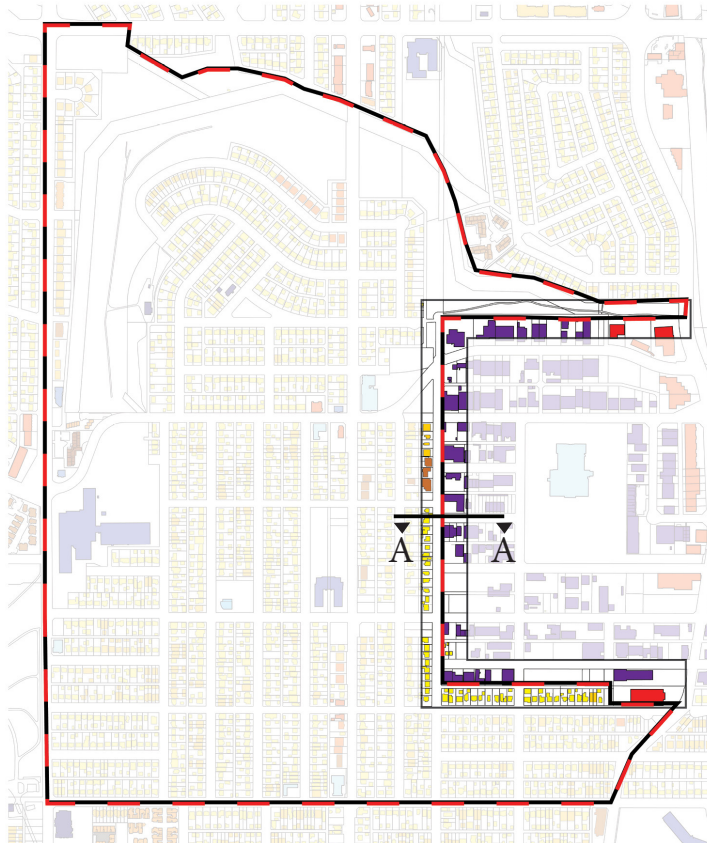
- Conflicting land uses.
- Noise (from industrial operations, idling vehicles, and reverse beepers).
- Visual Impact (of industrial buildings, chimney stacks and unsightly rear yards due to outdoor storage, weeds and garbage).

- Emissions and odours and related health concerns.
- Speeding in the rear lane.
- Traffic volume using rear lane.
- Parking in rear lane.
- Use of rear lane for loading and unloading.
- Deterioration of lane.
- Trucks blocking access to lane and residential garages.
- Traffic circulation of trucks through the community.
- Concern that any restrictions will reduce industrial property values.
- Safety concerns over the storage and use of hazardous materials near to residential properties.

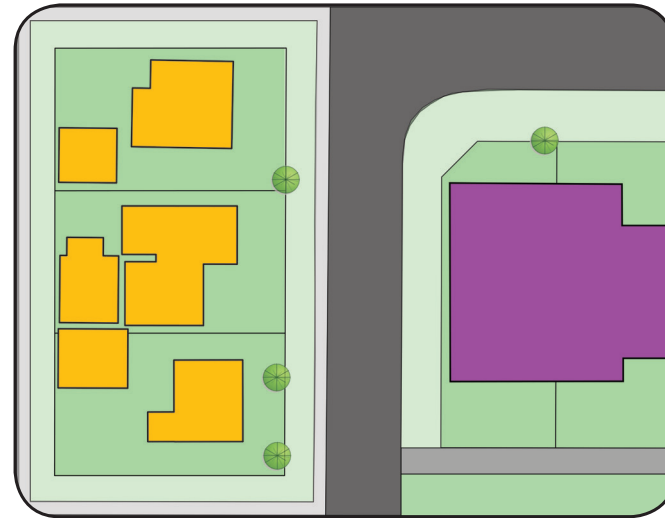


Potential Solutions

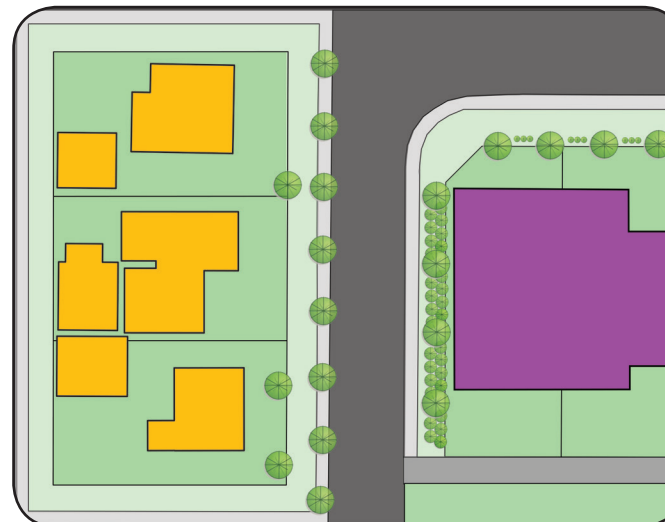
- Install Privacy Fencing
- Alley and private property tree planting
- Transitions of use: Less intensive industrial use along residential side
- Make owners develop sidewalks on industrial-residential side
- Sound barriers
- Minimize light conflicts from shining into homes



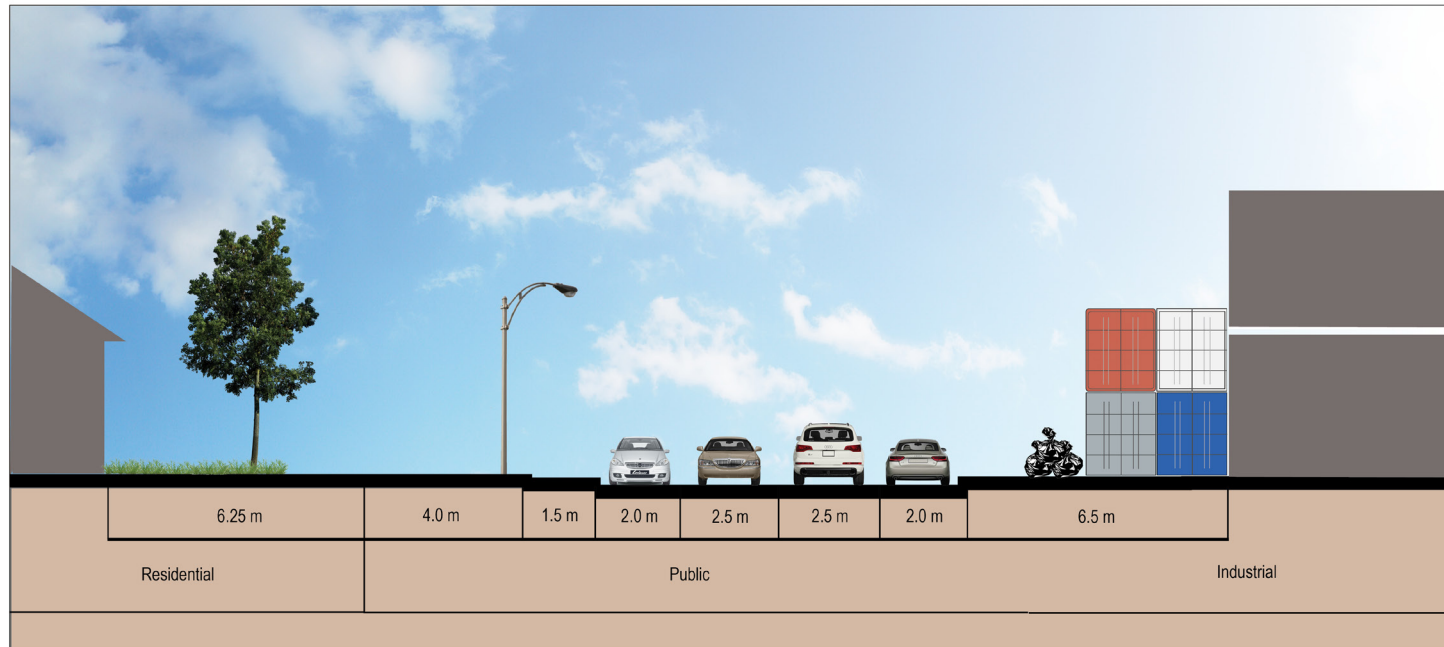
Existing



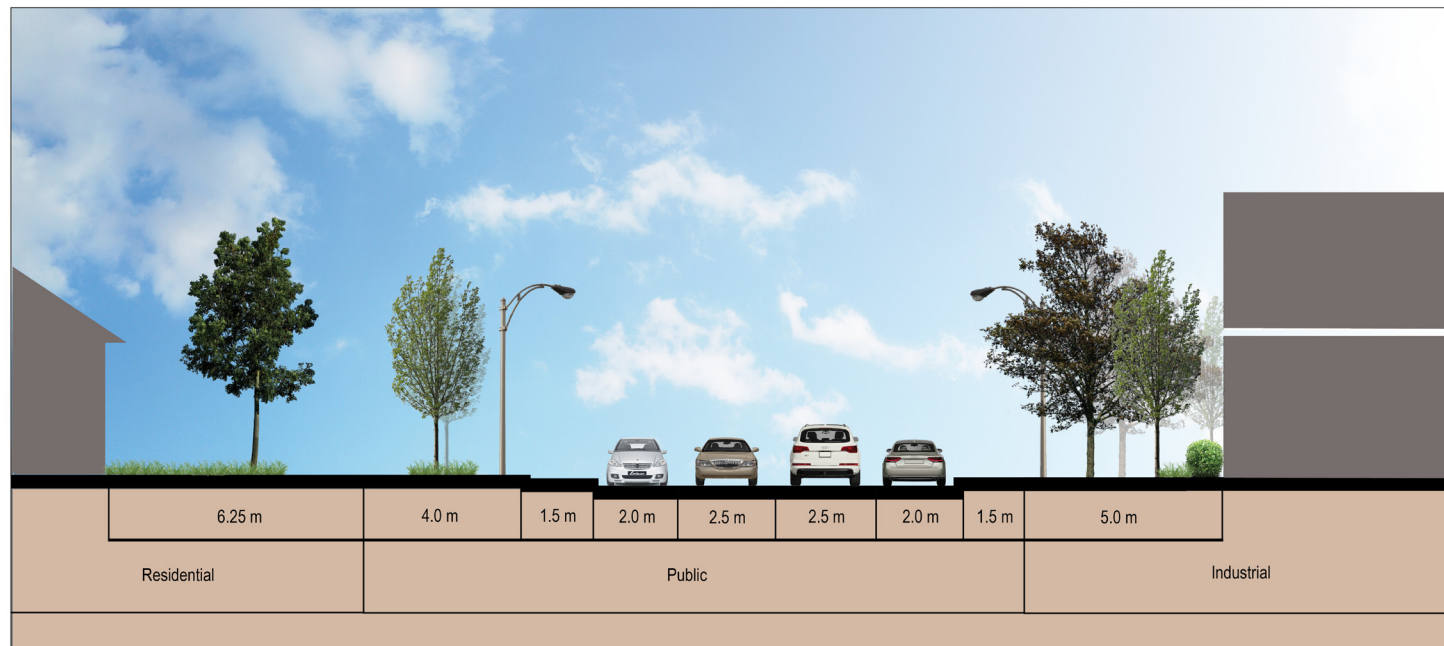
Proposed



Existing



Proposed



Guidelines for Existing Industrial Uses

- a) Where immediately next to, or across a street or lane from, residential areas, building design should foster a harmonious transition between the two areas;
- b) Consider landscaping that further softens the transition between uses;
- c) Orient all exterior lighting away from residential areas to avoid glare;
- d) Keep unenclosed storage away from residences, and screened from street view;
- e) Place ventilation shafts and garbage facilities away from residences; and
- f) Avoid siting parking lots facing residential areas.

Guidelines for new development or Owners

1. Buildings should be designed to minimize negative visual impacts and noise on adjacent uses;
2. Lighting of buildings, parking areas and signage shall be designed to ensure that it does not spill onto adjacent roadways and adjacent properties especially existing or planned residential property.
3. New owners must comply to all guidelines.

3.4. Open Space

Neighborhood Parks

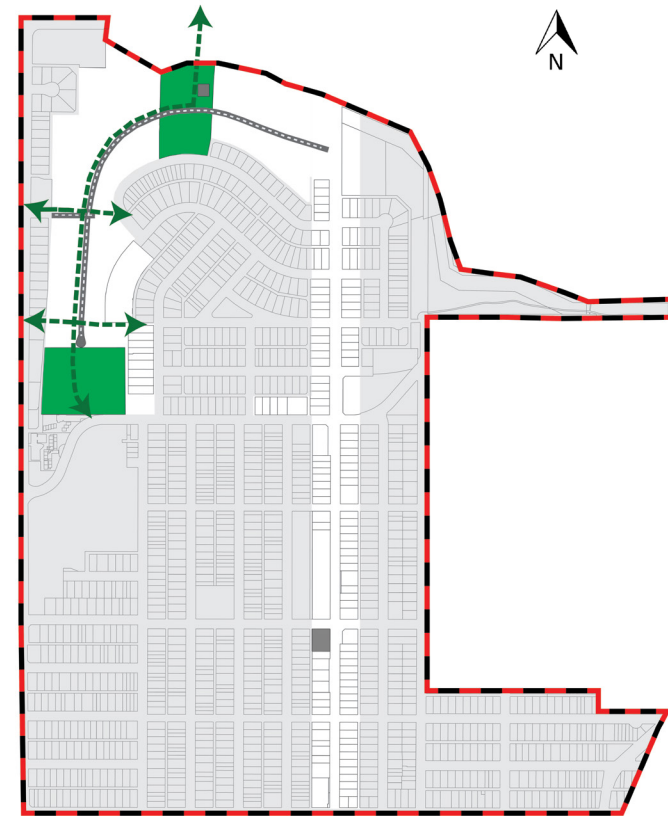
Neighborhood parks serve a both recreational and social purposes as the basic unit of the open space system.

The proposed neighborhood parks will provide one to two sports fields, a playground, seating areas and free play space, and will incorporate existing vegetation where possible. These parks supplement the broader open space system by being located to provide open space amenity within convenient walking distance of residences and the main streets in the community.

Two neighborhood parks are proposed for Highland Park Community. The first is located on the north part of the Golf Course, which is named Sunrise Park and the other one is located on the Southern boundary of the Golf Course and is called Sunset Park. The concept behind the Sunrise park is to create a green space where is located in the middle of residential area with a close distance to senior houses and to center street and McKnight Blvd.

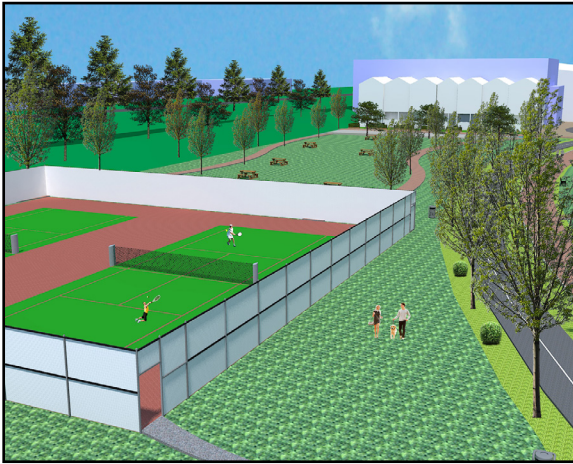
The Sunset park is an open space including sport field, playground and bike lane where attracts families with young children and provide spaces for youth gaming.

- Need minimum 10% Municipal Reserve from Highland Park
- Total Area of the proposed open space is 5 hectares.



Objective

Promoting active living by providing safe and attractive atmosphere for walking and playing and to enhance the natural condition of the community.



Tennis Court



Sunrise Park



Place Making



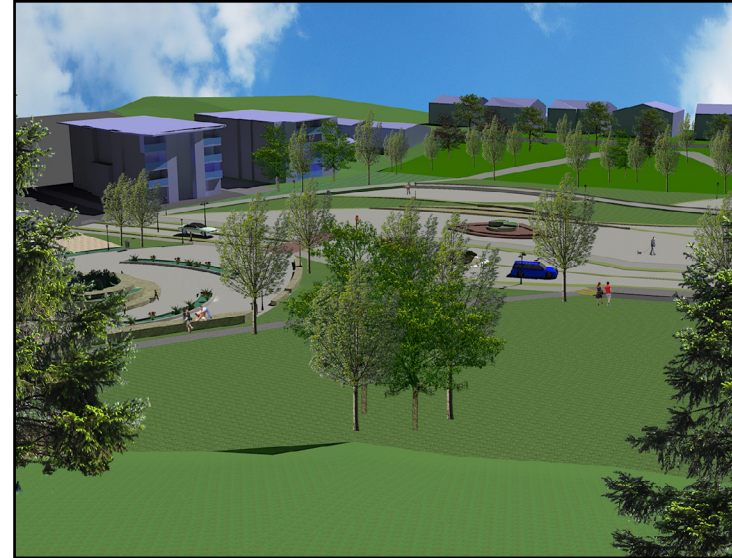
Sunset Park

Neighborhood Park Design Guidelines

- Neighborhood Park shall be designed as main attractive points within a neighbourhood and provide a central green space,
- Neighborhood Park should be used to address greenspace network gaps and provide connections to facilities space,
- Neighborhood Park should consider the interface with adjacent residential development,
- Efforts should be made to keep existing trees on a site specific basis.
- Neighborhood park should have play area for multiple age groups.
- Requires a linkage to the community trail system and local streets.



Proposed Sunset Park



Proposed Sunrise Park



Purple Bamboo Park, Beijing ,China

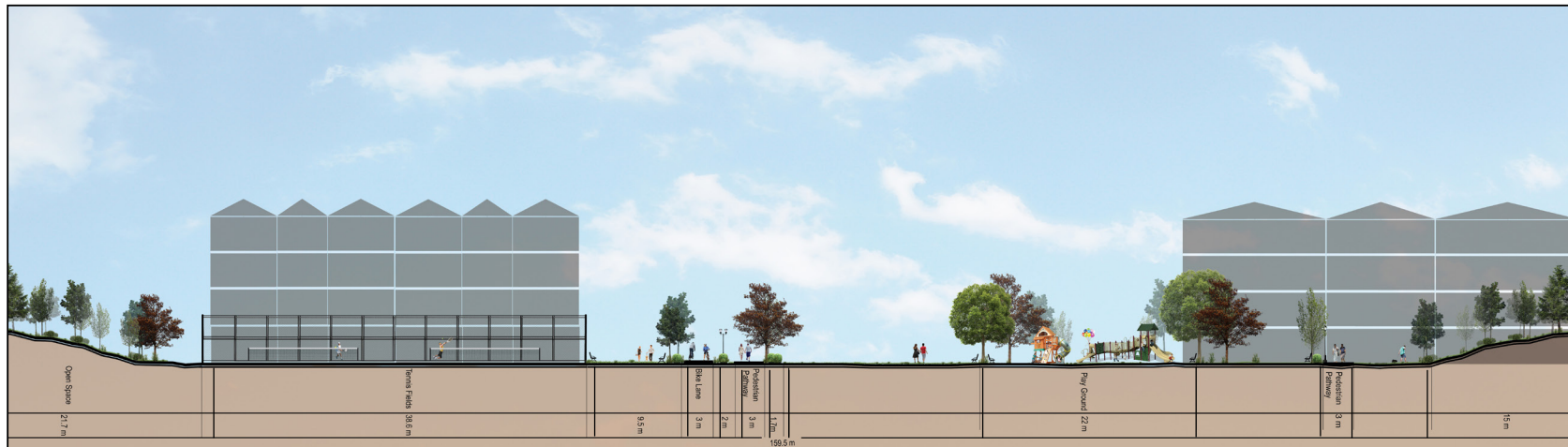


Largo Central Park, Florida

Sunset Park

The Section below shows the Sunset Park functionality and the details. The existing slopes are used to provide cluster urban forest and make a sense of enclosure to the park. The playground is located almost in the middle of the park. Two tennis field is located in the southwest corner of the park. Based on the parks and recreations information from the City of Calgary, there are no sport fields in Highland Park Community and Proposing tennis fields in addition to the playground attract more people in different aging groups.

The park also includes a pedestrian pathway and bike lane which connect the community to other neighborhoods. The location of the proposed open spaces also provide good accessibility from different part of the neighborhood.



Sunset Park Section Plan

Plaza

A plaza needs a strong program of use and a good concept. Careful considerations should be given to a plaza's design, to its functions and to its connection with the adjacent streets, pedestrian pathway, other open space, activities and architecture.

The main concept of plaza's Design is based on providing gathering places for the community.

To slow the traffic down where plaza is located traffic signals and different type of pavement are proposed.

Two plazas are proposed for Highland Park Community;

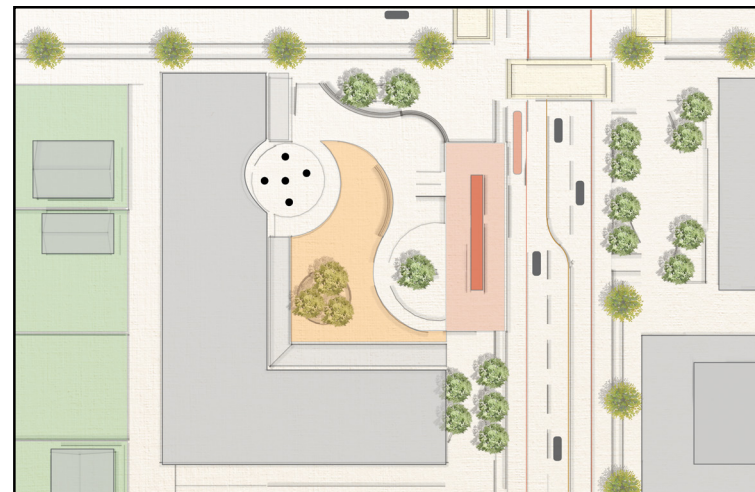
1. Located on the north part of Golf Course, in the east side of the Sunrise Park,
2. Located in the corner of Center Street and 36th Ave, NW, to represent the concept of urban plaza.



Broadway Plaza Redevelopment Plan, Walnut Creek, CA



Proposed Sunset Park, Northwest view



Proposed Urban Plaza, Plan View

Objective

A plaza should reflect the character of its location, and requires a program of use and a strong concept.

Plaza Design Guidelines

- Good Street-to-Plaza visibility should announce the Plaza's internal attractions,
- Locating the plaza at or as close as possible to street level, preferably no more than 1.0 m above or below street level,
- The design of a plaza should provide for safety,
- A plaza should provide easy and direct access particularly for the elderly, disabled and young children,
- Sunlight is particularly valued at lunch time in commercial business areas,
- Plaza linkages should be created to achieve a coherent pedestrian network.
- A plaza should provide good visual surveillance opportunities.
- A plaza should be connected to other surrounding open spaces.



Proposed North Plaza

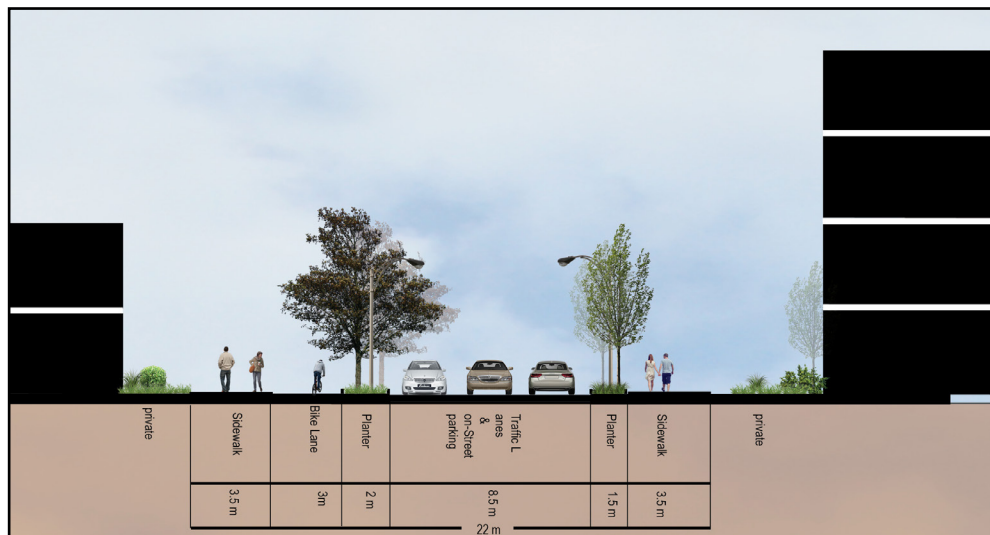


Proposed Urban Plaza

Pathway Connectivity & Complete Street

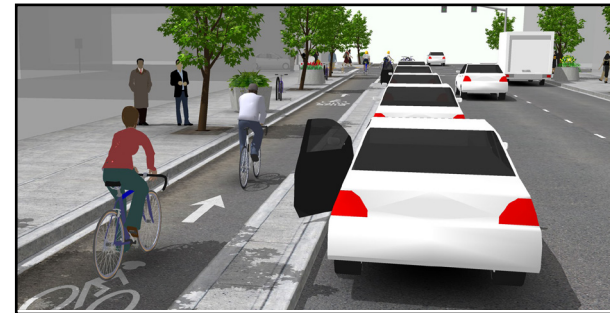
In response to solve the connectivity issue in the neighborhood, the redevelopment proposal encompasses new pathways and bikelanes system to connect the entire neighborhood to the surrounding communities. In addition, the proposed pathways and bike lanes have recommended design guideline to provide safety to people.

- West/East connection from Confederation Park/Cemetery to Nose Creek multi use Pathway.
- Connection between proposed open spaces.
- Highland park / Thorncliffe connection.



Proposed Complete Street Section

The section below demonstrates a complete street which is located in the middle of Golf Course and connects the Sunset Park to the Sunrise Park and the Center Street. The provided street is ended by a cul-de-sac where the Sunset Park is located. This street encompasses two traffic lanes, one on-street parking, one-side bike lane and 2 sides pedestrian pathways. The traffic lanes are separated by a green buffer for safety purposes.



Injury Prevention Research Unit, New Zealand



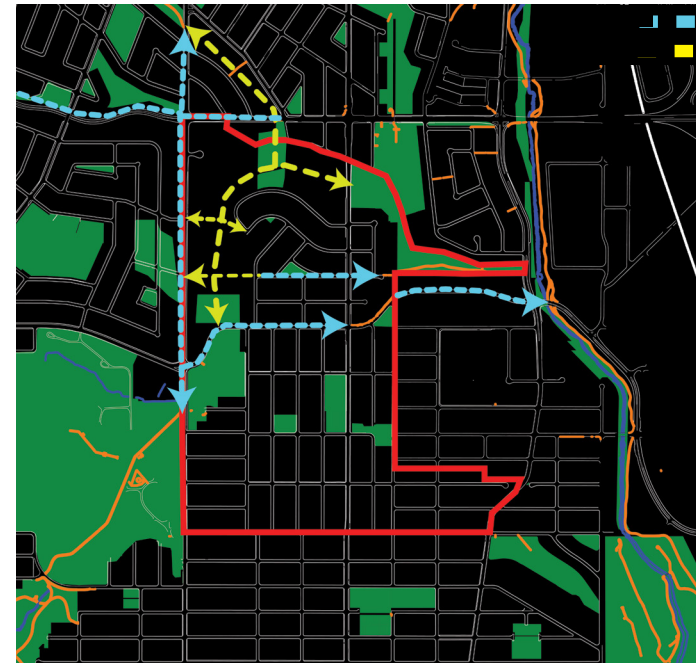
Proposed Street adjacent to the North Plaza

Objective

Promote active living by providing safe and attractive condition for walking and biking and driving.

Guidelines

- Provide paved pathway with a separation between street and bike lane,
- Design buffered bike lanes to provide additional space between the cyclists, motor vehicles and pedestrians.
- Pedestrian pathways and bike lanes should be planned for easement of linkage between open spaces.
- Where a bike lane extends beyond the park and open space system into the street network, the route should be located within the determined right-of-way.
- Bike lanes should be designed to use the edge of natural areas.
- Seating should be provided along pathways.
- Street crossings should be clearly indicated and differentiated using special pavement treatment.



Connectivity Map



Designated bike lane and pedestrian pathway

Tunnel

A tunnel is proposed to provide bike lane and pedestrian path to connect Highland Park to Thornccliffe by crossing the McKnight Blvd. The proposed tunnel is located on the north corner of the Sunrise Park. Tunnel may present a number of pros and cons that need to be examined. Personal safety and security is an extremely important factor in determining whether or not a tunnel is the right option for crossing. Engineers must also consider soil typology and groundwater elevation.

Objective

The main purpose of building the tunnel is to provide safe crossing option to pass through the existing slope and the McKnight Blvd NW.



Big River Trail, Mendota Height, MN

Asphalt is a preferred pavement type for tunnel.



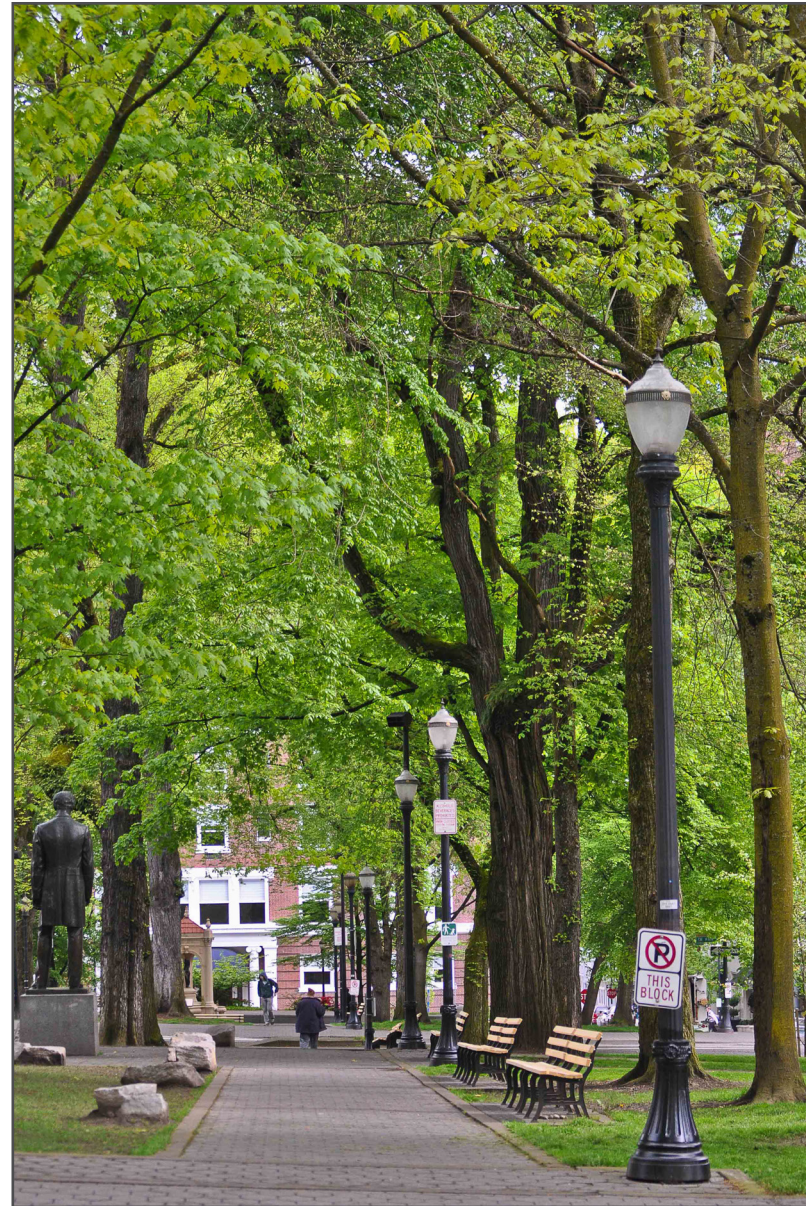
Proposed Guidelines

- A minimum vertical space of 3.5 m should be considered for tunnels and underpasses to support enough comfort to cyclists and pedestrians.
- Bollards should be used to separate the pedestrians from cyclists to avoid accident .
- Lighting may be required for better visibility and personal safety.

Urban Forest

The main purpose of urban forest strategy is to create a sustainable environment while considering the beautification aspects of the development. The strategy is applicable for proposed open spaces and Center street. As Calgary climate does not naturally support trees, therefore, to achieve a sustainable and healthy environment, the City encourages residents and businesses to plant trees.

The proposal includes cluster and linear type for urban forest strategy. The cluster type is mainly proposed for open spaces and the linear type is suggested for Center street redevelopment to create tree boulevard and enhance the environmental aspect of the community.



Portland/Vancouver

3.5 Transportation

Street Cars

To encourage the use of public transportation and decrease the traffic congestion along Center Street, the streetcar is proposed to provide rapid, sustainable and effective transportation system.

Objectives

- Provide a high quality rapid transit service
- Meet the existing and anticipated ridership in the future
- Promote a safe, accessible and vibrant city for residents
- Create a healthy and sustainable environment

Streets are one of the most significant elements of public open spaces that bring a social dimension to people's life. As a result, the transit corridor building strategy process should identify ways that can better integrate transit and public realm, so that transit corridors can be safe, accessible and appealing to everyone while appropriately balancing other transportation modes.

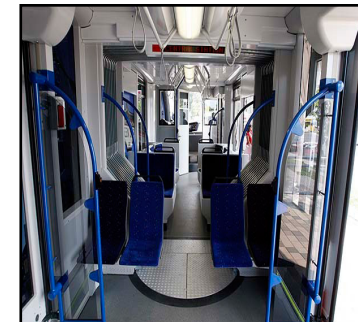
Streetcars are environmentally sustainable rail vehicles that are powered by electricity and run on tracks along public urban streets. Use of Streetcars provides a rapid, high quality, brand-distinguished service that provides the same level of service as C-Trains, except with lower capital investment costs. Streetcars also have fewer stops compared to BRT.

Guidelines

- Streetcars have the capacity to use signal and roadway design priority treatments which provides a faster and more reliable services for its users compared to BRT services.
- Proposed streetcars system for Center Street runs on dedicated lanes at the curb that have been converted from mixed-flow or parking lanes.
- Dedicated lanes should be physically separated from mixed traffic by barriers, bollards, or raised medians/curbs except at intersections where turning is needed for traffic flow.



Portland, OR



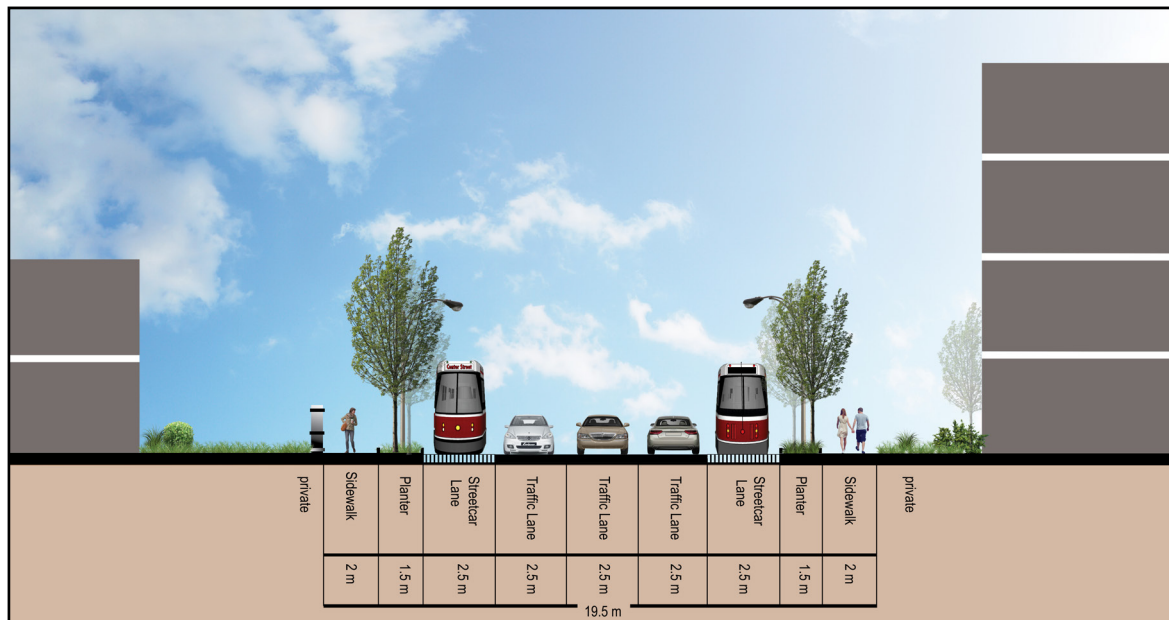
Bombardier's Glassy Model



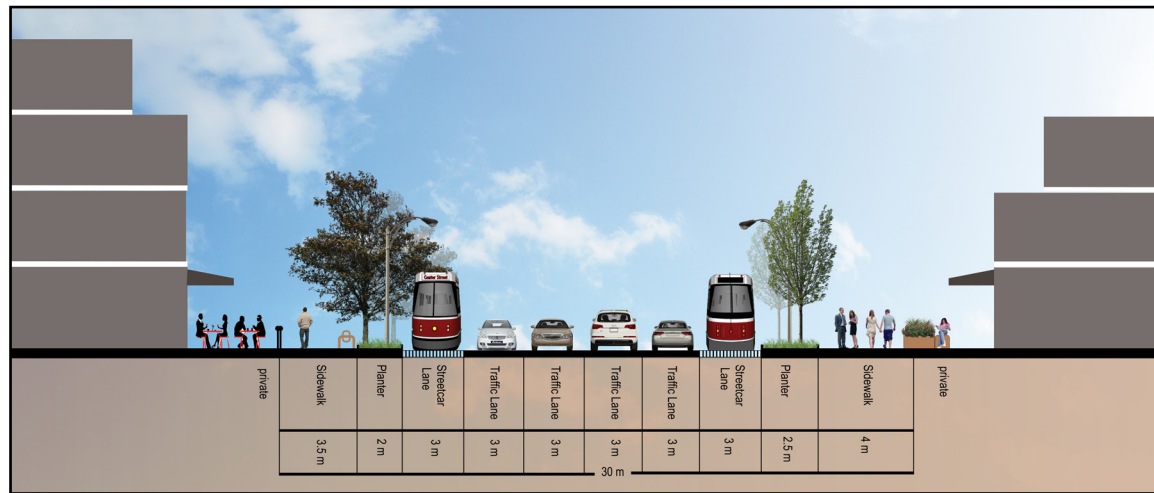
Proposed street Car - 36 Ave



Proposed street Car - Golf course Drive



19.5 m Right of Way



30 m Right of Way

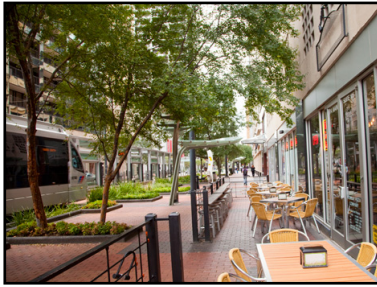
Public Realm Improvement

Developing a transit corridor along Center Street is a transformative opportunity that will shape the future of Highland Park Community. As a result, it is important to develop a strategy that can create a lively, well connected and inviting corridor.

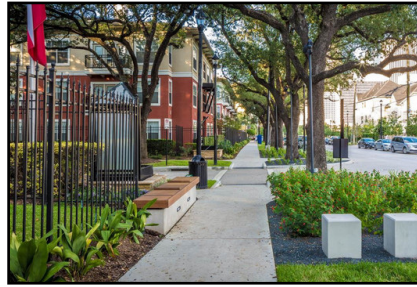
The public realm improvement includes the enhancement of streetscape that reconfigures the current street and the surrounding buildings to a mixed use transit corridor oriented developments. It also creates a more pedestrian friendly environment through wider sidewalks, new street trees, pedestrian lighting and enhanced pedestrian crossing.

Guidelines

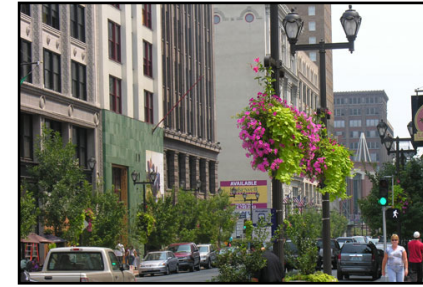
- Provide sidewalks with a minimum width of 2.0 meters on all streets.
- Eliminate front surface parking lots.
- Orient buildings toward the sidewalk with minimal front setbacks.
- Create a continuous street wall.
- Use raised planters with trees + shrubs
- Buffer pedestrians from the auto environment by spacing trees at a 8 meter distance
- Provide continuous wide sidewalks with canopy forming trees and places to sit and mingle
- Create safe intersections that are easy to cross by people of all ages and physical abilities during all weather conditions
- Create active edges by doorways and ground floor windows that create visual and physical interaction while appropriately balancing other transportation modes.



Houston, Tx



Houston, Tx



Houston, Tx



Active Edge



Sitting and Gathering Spots



Active Public Realm

Stations Locations

The transit stations are the most prominent icon of public transit, the functionality, safety, and visual appearance of them are critical to attracting and maintaining transit riders.

Objectives

- Attract and maintain transit riders
- Improve the public perception of public transit

There are two proposed side station platform locations within

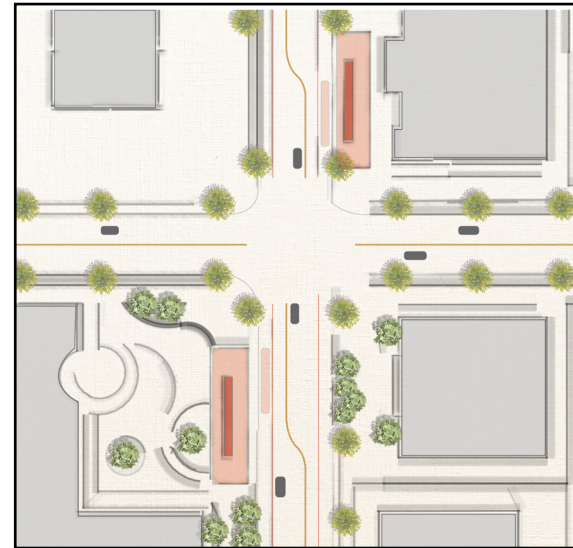
the boundary of Highland Park and the distance of 1.2km.

Overall, side platform stations are preferred due to:

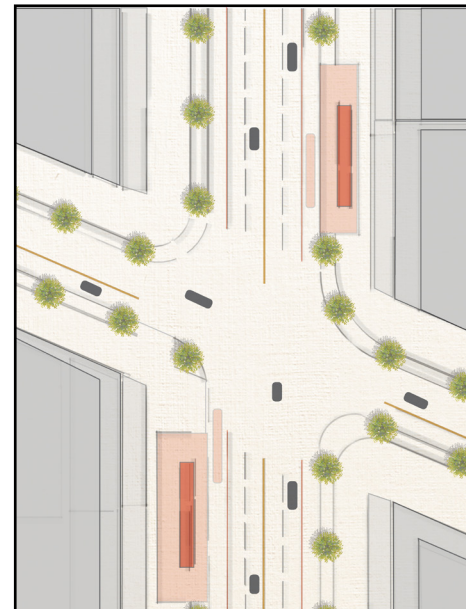
- 1) Lower capital costs
- 2) Existing streetcars have right-side doors (center platforms would require streetcars with left-side doors)
- 3) Side platform stations provide easier and safer access to passengers.

Guidelines

- The station zones should accommodate high levels of activity that contributes to walkability and place making;
- Stations should, on average, be located every 1.2 of a km;
- Stations should be placed near civic and employment centers, mixed-use districts and high-density residential areas.
- Stations should be located at intersections and at the far side of them.
- Station locations should have adequate sidewalk width to accommodate station standards and requirements. They shouldn't be placed on streets without sidewalks or on streets where the sidewalks are not wide enough to meet the requirements.
- Station locations should have sufficient ROW to construct shelters, install fare equipment and other passenger amenities, and provide adequate space to accommodate planned passenger demand.
- The length of the passenger-loading zone depends on the vehicles being served, however a minimum of 16m is required.



36 Ave Station



Golf Course Drive

Station Amenities Design

Stations design should have a unique identity or theme to complement the surrounding environment. They should also be functional and safe.

Stations should provide a premium level of service, with higher quality amenities including:

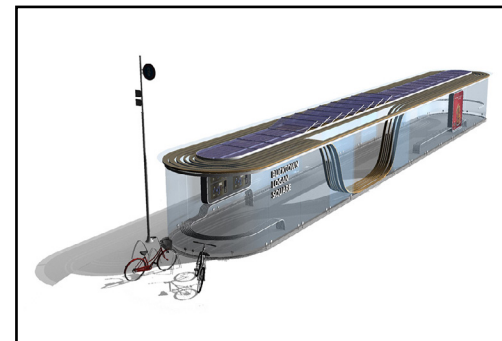
Benches, Bicycle racks, Branded shelters with Unique identity, Bus stop pole and sign, Level boarding capabilities, Lighting, Real-time passenger information panels, Route maps, Trash



Brampton, ON



Proposed Station for Chicago, IL



Proposed Station for Chicago, IL

Parking

In order to solve the parking issue for the community, the following guidelines are proposed.

1. Sufficient onsite parking should be provided for all units as required by the Zoning Bylaw.
2. All parking should be accessed from the adjacent lane.
3. On large sites, the majority of parking for the low-rise apartment building should be provided underground. On smaller infill sites (46m of frontage or less) all parking may be provided as surface parking.
4. Any surface parking areas should:
 - a. Be located at the rear of the building only;
 - b. Be visually screened from floors above and from adjacent properties (for example, by pergolas or other coverings);
 - c. Not impact the street or outdoor amenity areas;
 - d. Be developed in clusters and divided by landscaping, including trees; and,
 - e. Be separated from residential units by landscaped buffers.
5. Parking should be in the back of buildings, not on street. To prevent ugly streets.

CONCLUSION

The proposal that laid out in this document meets the objectives set out by the community visioning session and through our academic analysis presents a range of recommendations and design guidelines that should be considered by the City of Calgary when writing a future Area Redevelopment Plan. This document should also be used by the Highland Park golf course developers when completing their final design concept. Overall, the plan envisions a complete, unique and vibrant mixed use inner city community by balancing social, economic and environmental concern.

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APPENDIX

Appendix A: Roles and Responsibilities

APPENDIX

Appendix B: Project Schedule