

Location

Fort Richmond is located in the south end of Winnipeg. The boundaries of the neighbourhood are: the University of Manitoba to the north, the Red River to the east, the Perimeter Highway to the south, and Pembina Highway to the west. The area is home to a wide range of people, particularly those affiliated with and influenced by the University of Manitoba.

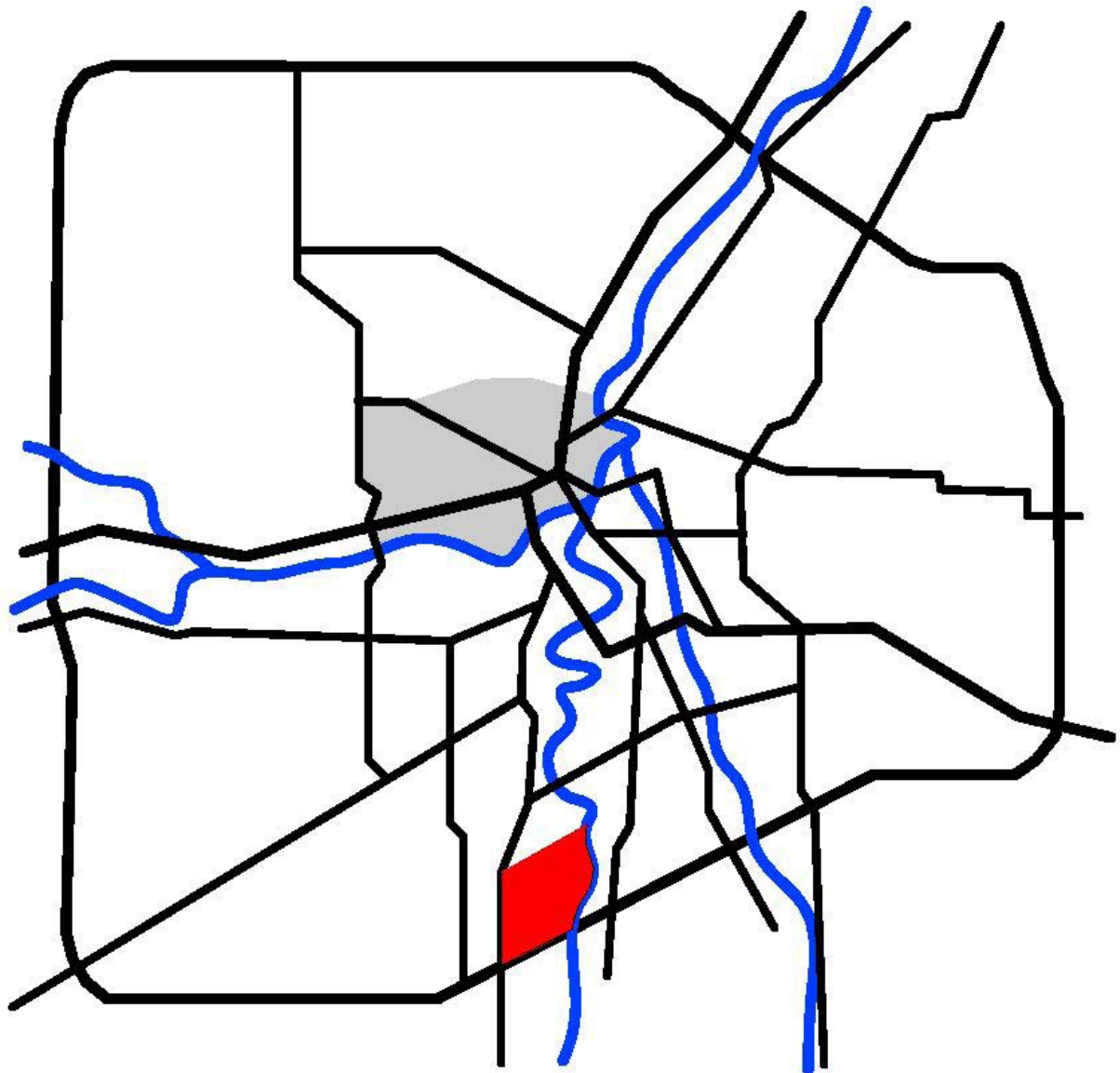
Historic Overview

Fort Richmond was conceived of in 1911 with the original subdivision of the King’s Park area. It was largely undeveloped until 1965, the year following the installation of sanitary sewer services. At that time, only Fort Richmond was slated for development. Fort Richmond West, located on the western side of Pembina across from Fort Richmond was, according to the City of Winnipeg’s unpublished Fort Richmond Plan, to “...remain as an area for uses related to agriculture until such time as it is needed for urban development...” (42).

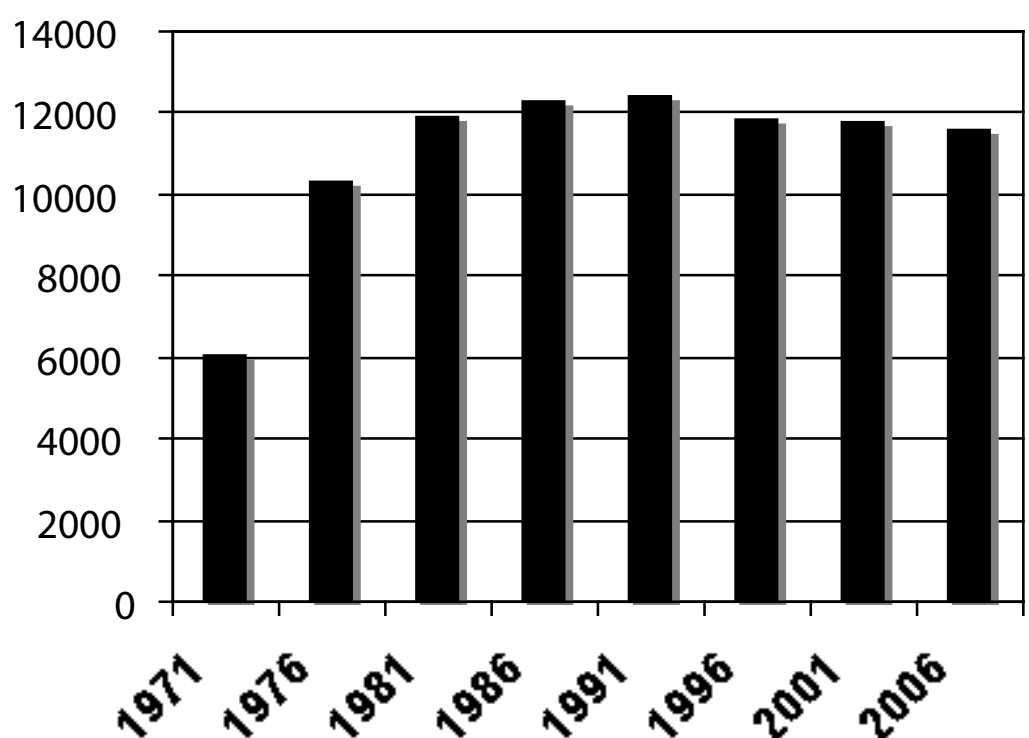
The ‘Fort Garry Detailed Area Plan’ discusses three commercial zones, two of which exist today (42). Pembina Highway at Dalhousie Drive South was always intended to be a large-scale regional shopping centre; its first - and largest - tenants, Canada Safeway Ltd. and Zellers still maintain their stores today.

Neighbourhood Assessment

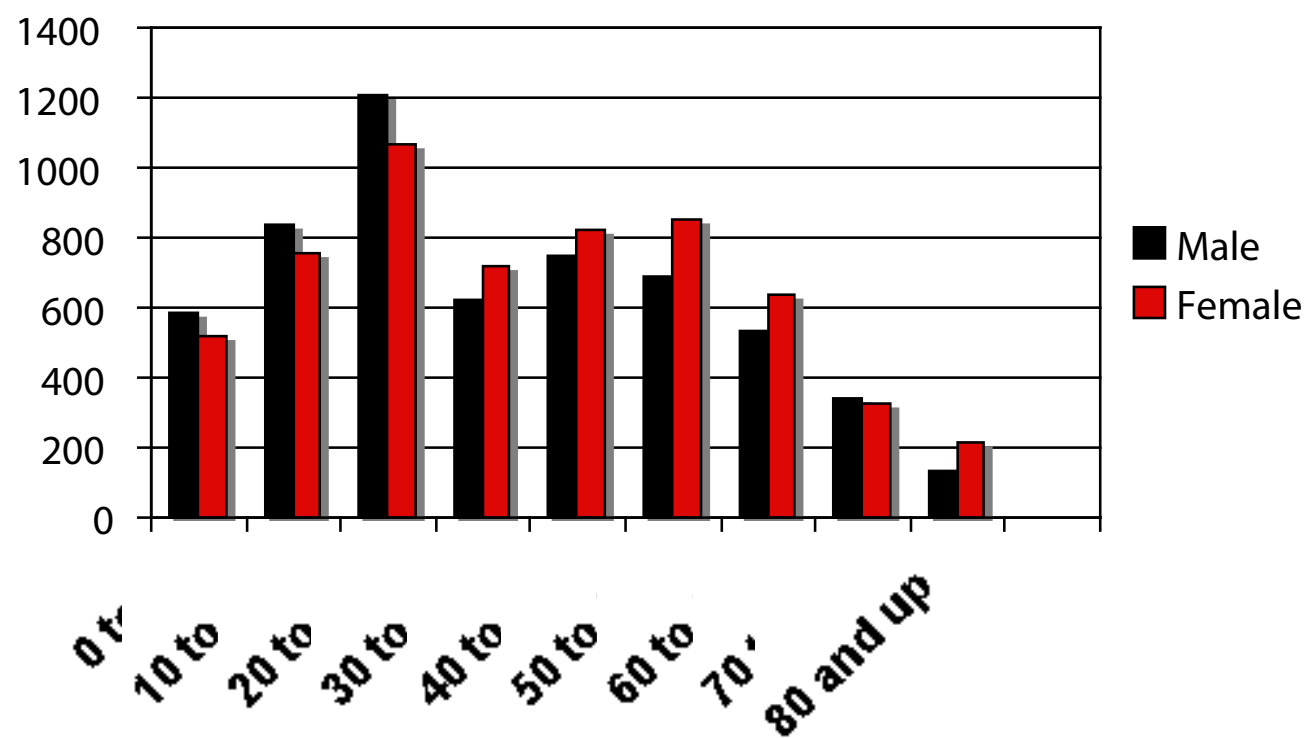
There is a strong need for affordable housing, more pedestrian-friendly routes, a closer proximity to amenities, and a need for more alternative forms of transportation. Social capital needs to be developed within the area to link the residents with the services already there - which are surprisingly diverse.



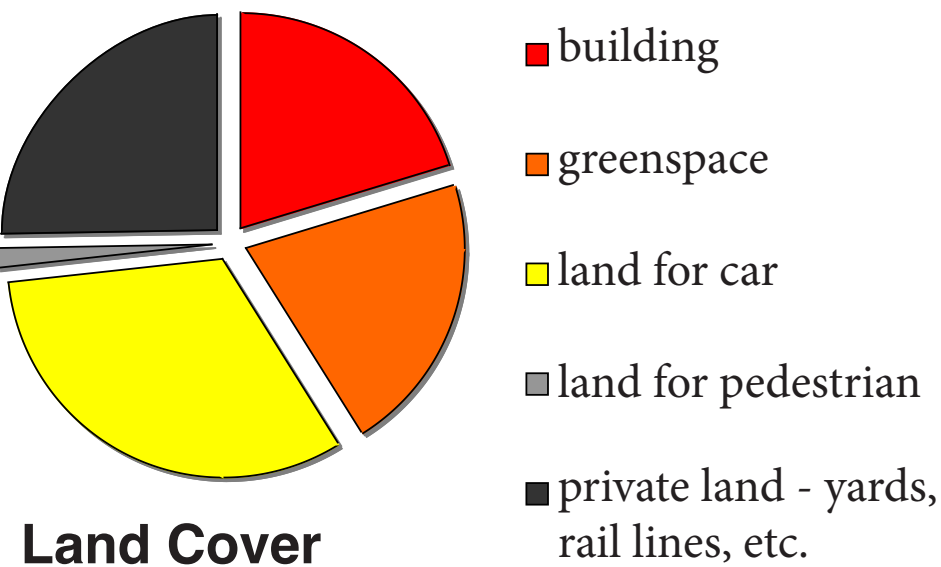
Fort Richmond within Winnipeg



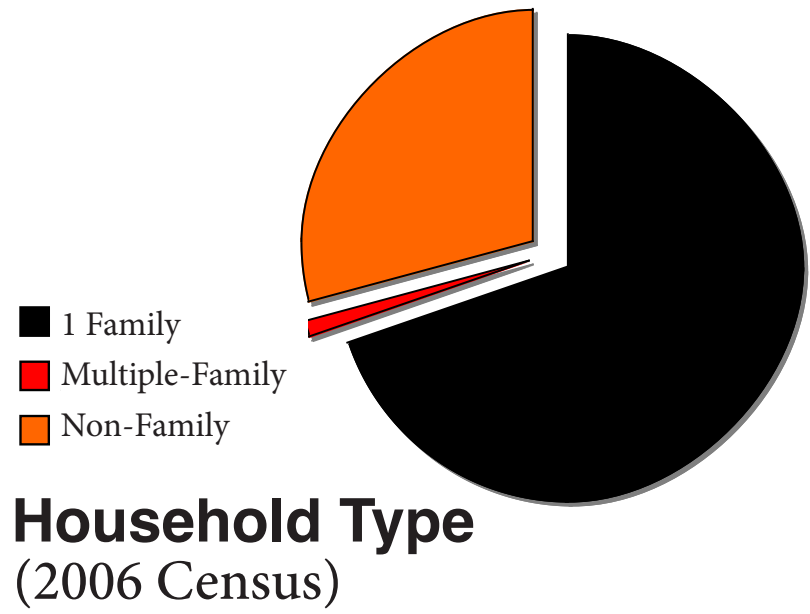
Total Population (2006 Census)



Population Breakdown (2006 Census)



Land Cover

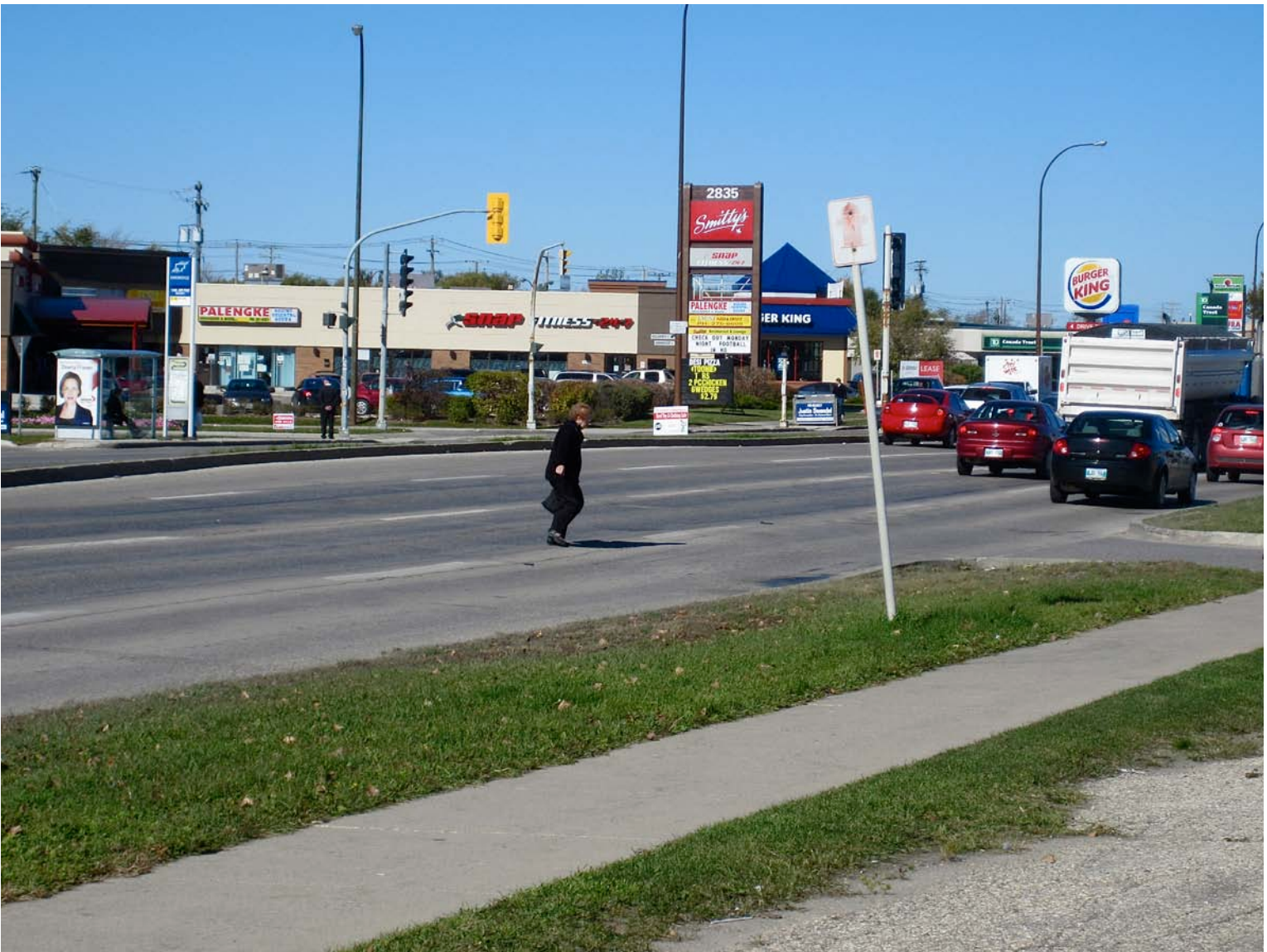


Household Type (2006 Census)



Proposed Interventions in the Fort Richmond area

Fort Richmond Scenes, clockwise, from top left: Killarney Avenue, facing west; pedestrian corridor, facing east; Pembina Highway, facing northwest; Dalhousie Drive at Greyfriars, facing east.



# Neighbourhood Review & Analysis



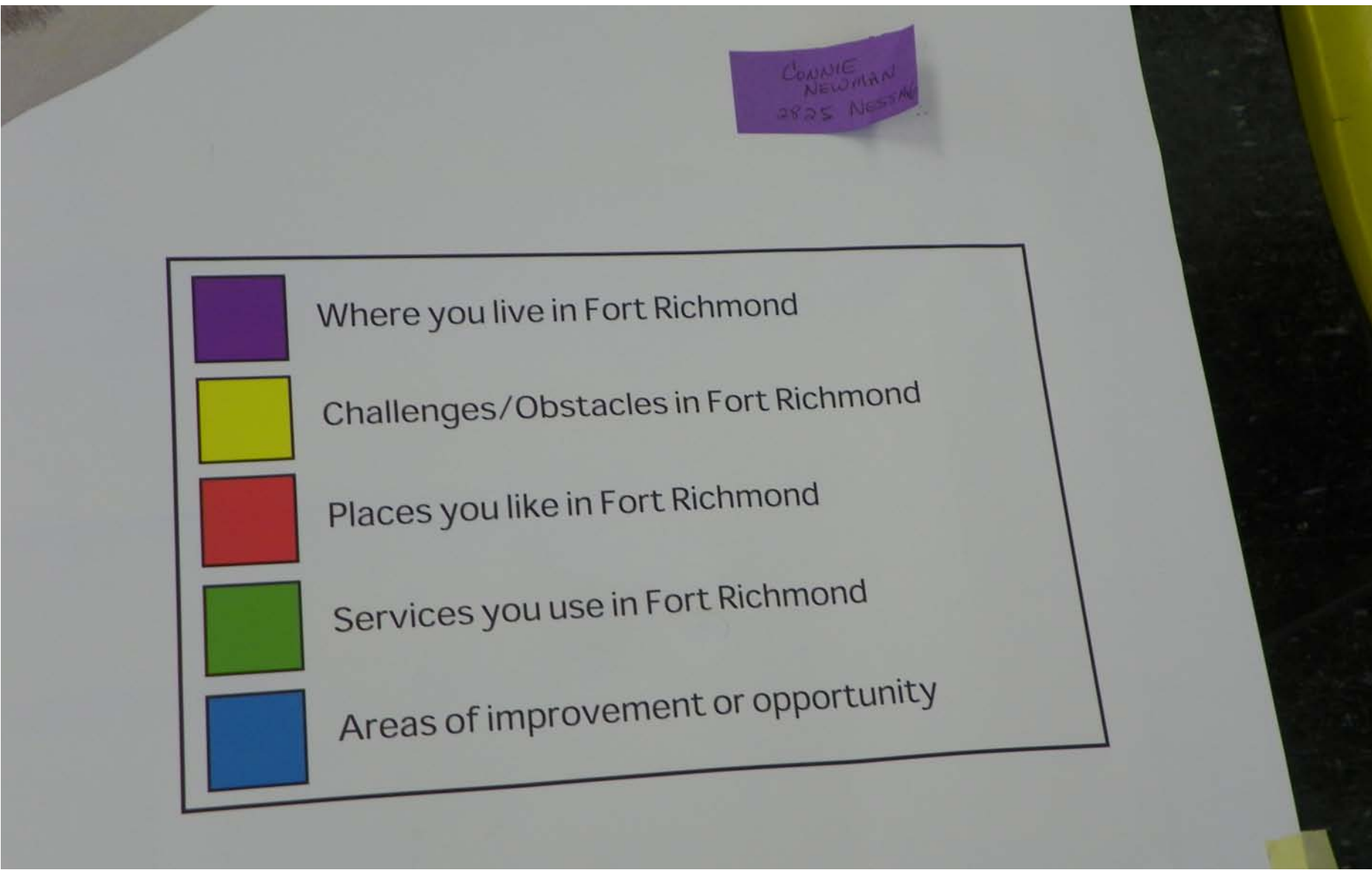
## Strengths

- Abundance of parks and green space (including King’s Park), and extensive tree cover
- Wide variety of services and amenities, including restaurants, grocery stores, health services, and banks
- Presence of schools, recreational facilities, and a library
- Calm and quiet residential area
- Active social groups for older adults, such as Pal 55

## Challenges

- Many residential roads lack sidewalks
- Many large under-used parking lots
- Infrequent crosswalks on Pembina Highway and Dalhousie Drive
- Services and amenities along Pembina difficult to access on foot
- Transportation options and routes are car-oriented, bus service is often limited

# Community Consultation



Our group made a presentation and participated in a discussion with a focus group comprised of people from in and around Fort Richmond. The discussion that took place was helpful, and people mentioned issues such as:

- the need for more options for active living and exercise
- the importance of having opportunities to volunteer in the community
- the desire for flexible and varied employment options after retirement
- the desire for older adults to be involved more the broader community
- Difficulty for elderly and disabled people crossing Pembina Highway, combined with the high volume of traffic
- Not enough time given for crossing Pembina at the lights



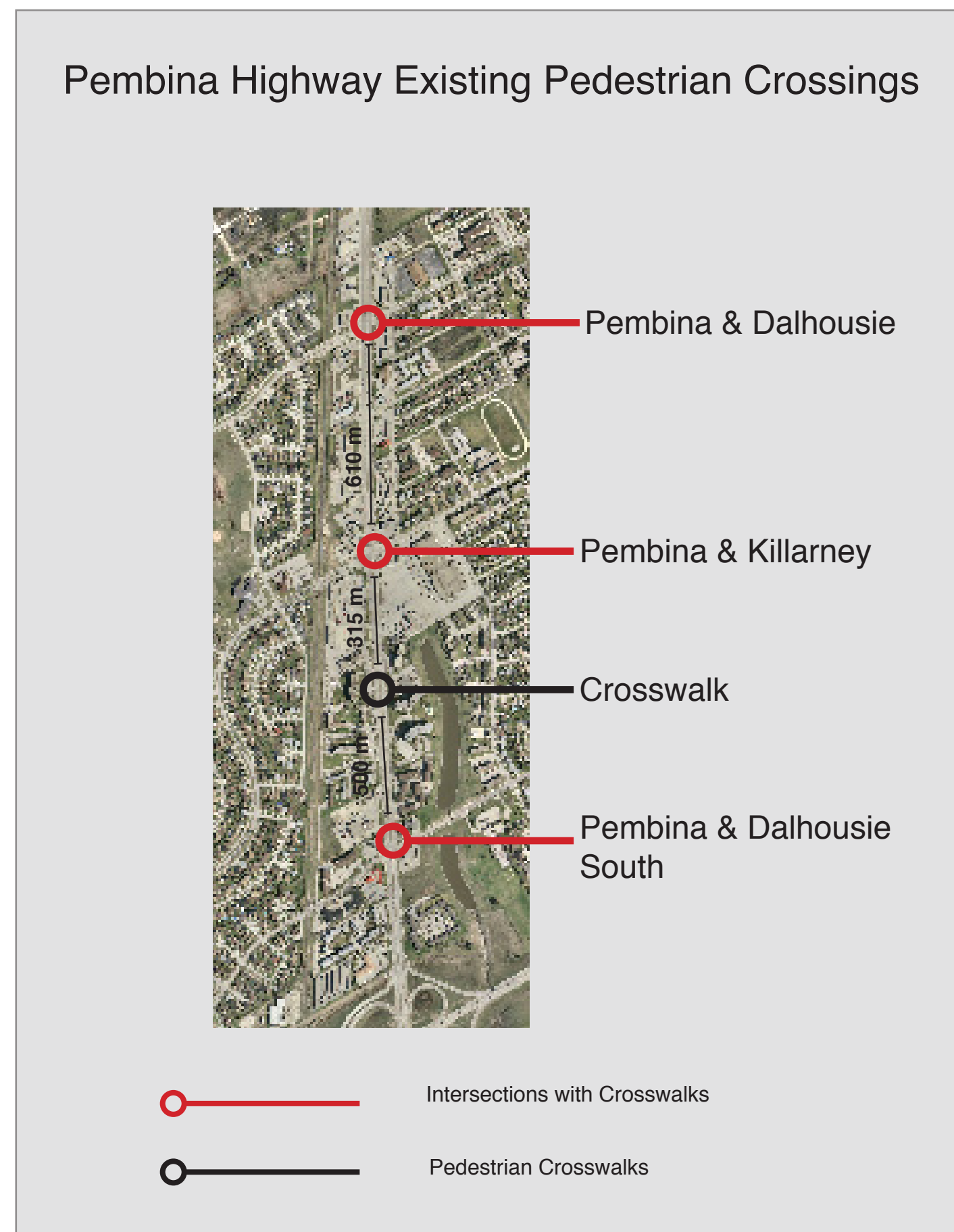
# Design Work

Since the Fort Richmond focus group meeting, we have been working on possible design options for Fort Richmond that emphasize age-friendliness, and researching precedents that might be applied from other cities and contexts.



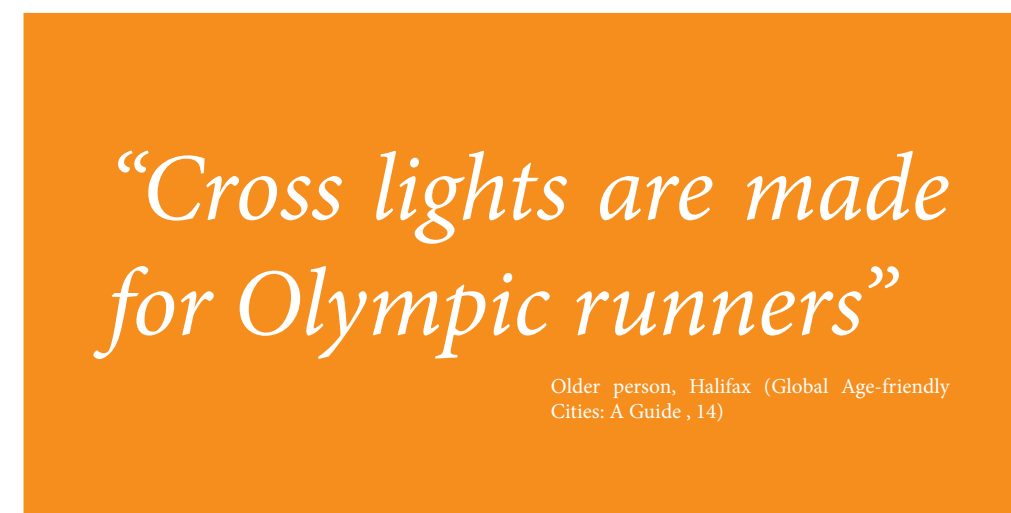
## Pedestrian Crossings

### Locations



There are very few places in Fort Richmond for pedestrians to safely cross Pembina Highway. Between Dalhousie Drive North and the Perimeter Highway - a distance of almost two kilometres - there is only one pedestrian crosswalk in addition to the crosswalks at the major intersections at Dalhousie North and South, and Killarney Avenue.

In order to facilitate a walkable environment in which older adults are able to age in place, more (and safer) pedestrian connections across Pembina Highway would be desirable. Connections to possible new developments at Fort Richmond Plaza would be particularly important.



### Solutions

#### Countdown

The walk time at many pedestrian crosswalks is commonly based on an expected walking speed of four feet per second. This has been found to be inadequate clearance time for the majority of pedestrians over the age of 65, children assisted by adults, physically disabled persons, and large groups of pedestrians (Gates, 2006). A small change, then, could be the implementation of longer pedestrian crossing times at crosswalks.



A Countdown Timer at a crosswalk displays the number of seconds that pedestrians have to cross the street before the light changes.

#### Leading Pedestrian Intervals

A Leading Pedestrian Interval re-times the signal splits so that the pedestrian WALK signal begins a few seconds before the vehicular GREEN. As the vehicle signal is still red, this allows the pedestrians to establish their presence in the crosswalk before the turning vehicles, thereby enhancing the pedestrian right of way (King, 2000).



A Leading Pedestrian Interval in Orlando gives pedestrians a 4 second head start in crossing.



With the 4 second lead time given by the Leading Pedestrian Interval, pedestrians are able to cross part of the intersection before vehicles begin turning.

## Street Calming

Street calming measures can be implemented in conjunction with pedestrian crossings. Street calming can range from restrictions on vehicle type and speed, to built structures such as speed bumps, median islands, traffic circles, and curb extensions. Other elements can include pedestrian crosswalks and crossing signals. Street calming can reduce the frequency and severity of accidents involving pedestrians and vehicles, and can also result in more walkable and pleasant street environments.

Pedestrian refuge islands in medians can provide a resting place between crossings. This can be helpful on wide streets such as Pembina, or in locations where crossing times are short. Refuge islands also provide a barrier between foot traffic and vehicle traffic.



In a wide enough median, benches can be installed to provide a place to sit, as in this refuge island at an intersection



At this mid-block crossing, the refuge island works together with bumpouts along the street curbs.

Curb extensions at corners narrow the vehicle right of way, reducing the pedestrian crossing distance. They improve pedestrian safety at intersections and slow traffic.

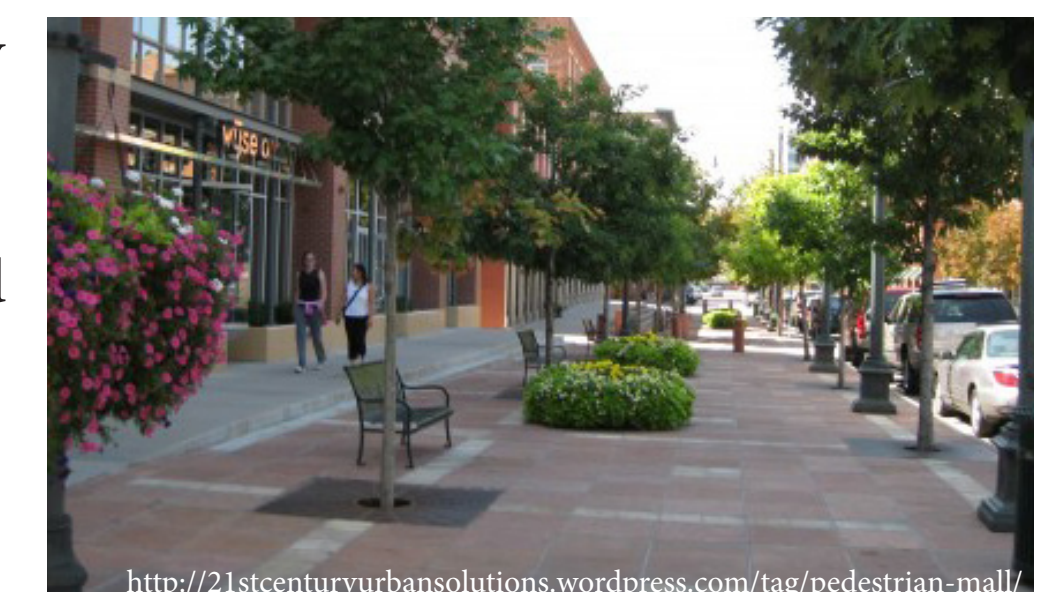


A large curb extension can transform a street corner into safer pedestrian space.



This smaller curb extension also utilizes less slippery surfacing where the curb meets the street.

A wide pedestrian friendly boulevard or walkway can enhance the space between the crosswalk and storefronts. With plenty of benches and places to rest, trees, and other landscaping features, a space could be created that is pleasant for foot travel, and that can function as a vibrant social space. It would also create distance between pedestrians and vehicle traffic, increasing safety.



A boulevard or sidewalk can be more than just a narrow transportation path.



Refuges, crosswalks, greenery, and buildings built up to the street can produce a safer and more enjoyable streets.

“The importance of exercise, walking, and walkability in senior-friendly outdoor environments cannot be overstated”

(Abbot et al., 2009)

Older adults often mention the need for adequate walkways, safe pedestrian crossings, and vehicular traffic that is respectful to pedestrian right-of-way.

Not only should streets include features such as frequent crosswalks, pedestrian signals, bike paths, and pedestrian medians and islands, but they should also be livable in the sense that they contain a variety of uses such as homes, shops, and schools, that are close to each other (Ernst & Shoup, 2009).

Active and healthy aging for many people depends on the ability to “age in place” – to be able to continue living in their own familiar neighbourhoods and dwellings while maintaining a level of independence. But many urban streets – for example, large thoroughfares such as Pembina Highway – have been characterized as “dangerous by design” – designed for speeding cars, with little or not provision for people on foot, in wheelchairs, or on bicycle (Ernst & Shoup, 2009).

The illustrations to the left show how pedestrian walkways could be implemented in conjunction with infill development to create a more pedestrian-friendly and age-friendly space along Pembina Highway.

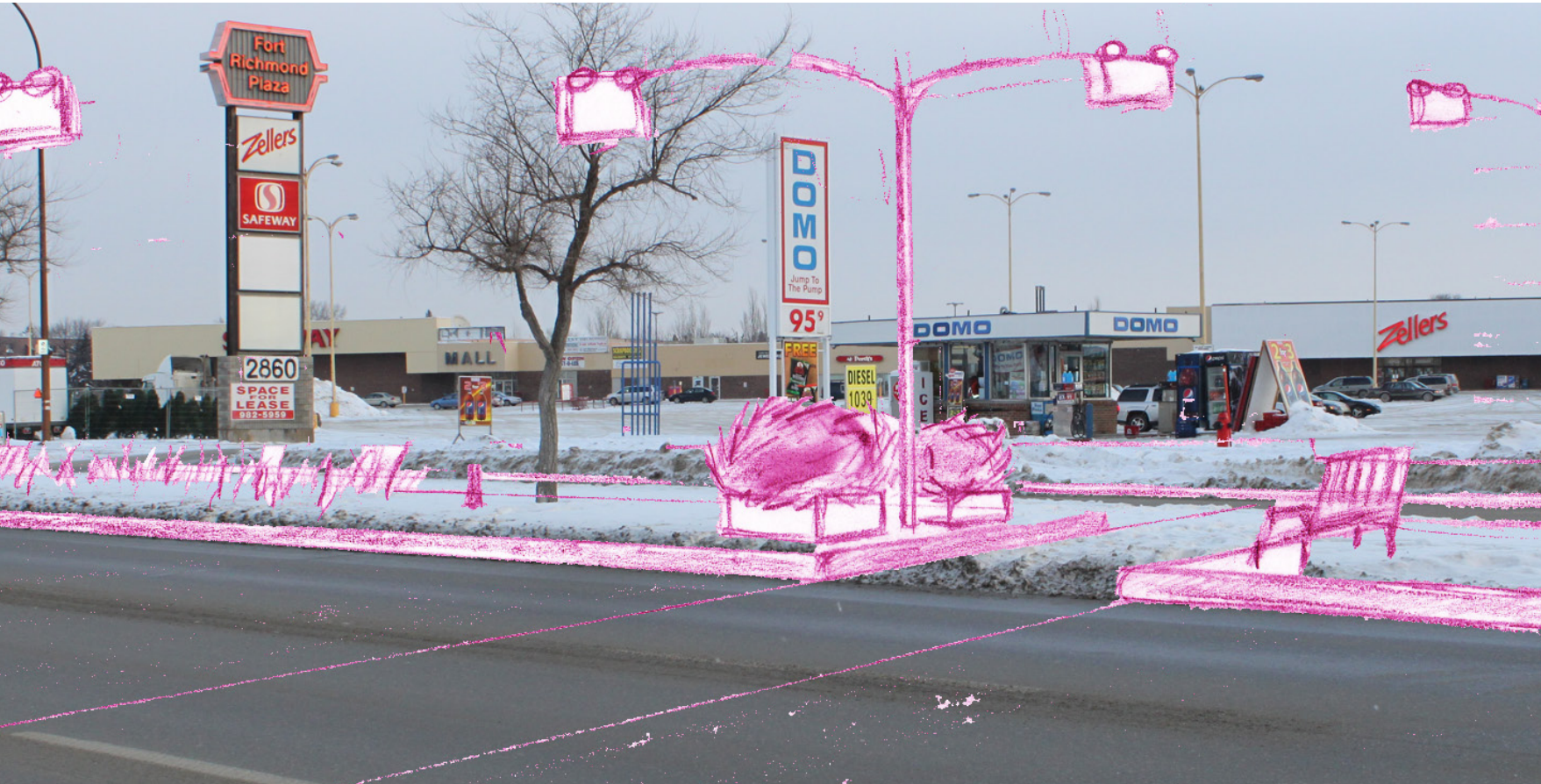
Pedestrian Refuge Islands

Integrating crosswalks with other measures, such as pedestrian islands, improves the safety of the crossing. A refuge island can provide a more comfortable distnace and buffer between traffic and crossing pedestrians. Decreasing the curb height entering the refuge would make it more traversable for wheelchairs and walkers. The crosswalk markings should be clearly visible to motorists, especially at night. Crosswalk surface material should ideally be different than the road surface, to create a clearer distinction between the road and the pedestrian-dedicated area. It should also be a non-slippery material, such as inlay tape or thermoplastic, which are both less slippery than paint.

Below: Examples of diferent types and scales of crosswalks with refuge islands. Note the different surface material in the first example.



Pembina Highway Opportunities



What a mid-block crosswalk and pedestrian refuge might look like on Pembina Highway across from Fort Richmond Plasa.



Possible long-term future view of Pembina Highway at Fort Richmond Plaza, looking east, with the installation of a crosswalk/refuge island in conjunction with mixed-use residential and commercial development.

The shortage of crosswalks along Pembina Highway might mean that new midblock crossings are necessary, such as in this location along the Fort Richmond Plaza area. This would be particularly important if the Plaza parking lot were to be redeveloped into a walkable mix of services and residential buildings. Connections across Pembina into the new development site would help increase the pedestrian-friendly nature of the development.

The refuge island area should be wide enough to accomodate wheelchairs and scooters, and include space to sit and rest if necessary. In lower traffic areas, crossing lights might not be necessary, as the island would allow pedestrians to wait comfotable and safely until a break in the traffic. A refuge island at a mid-block crossing such as this one should include a clearly marked crosswalk to draw the attention of motorists.



Existing view looking south from the corner of Pembina and Killarney.



Existing view looking south from the corner of Pembina and Killarney, made to be more pedestrian friendly,

A boulevard such as this one near the corner of Pembina and Killarney would provide a wider and more spacious pathway. This is an important feature - research has shown that very few older adults are comfortable with narrow walkways ([http://www.idgo.ac.uk/design\\_guidance/factsheets/width\\_footways\\_footpaths.htm](http://www.idgo.ac.uk/design_guidance/factsheets/width_footways_footpaths.htm)).

This boulevard should include features that provide distinction between the roadway and walkway, such as trees or planters. Depending on the character of possible development along this length of Pembina, this intersection could include curb extensions, which would also allow for on street parallel parking along the boulevard. This would help create a calmer, safer street.

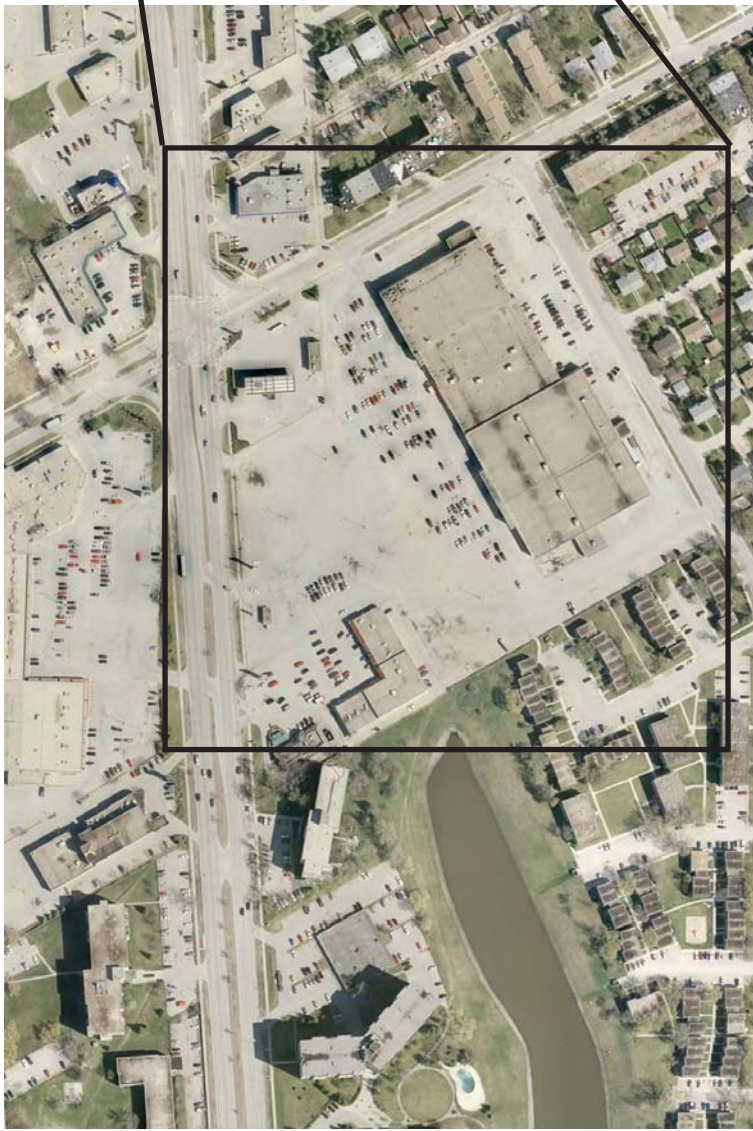
# Current Fort Richmond

Fort Richmond Plaza was developed in the 1970s, at the same time that the Fort Richmond neighbourhood was being developed. The Plaza is the main location for services and amenities in the neighbourhood. The Plaza currently holds:

- Safeway
- Zellers
- Small specialty shops (jewellery, barber, etc.)
- CIBC
- Sports medical clinic
- Hair salon

The main building that holds the Safeway and Zellers is reaching the end of its lifecycle. Through the public consultation process it was evident that these stores are anchors for the community and are used quite often. However, their current condition is not meeting everyone's needs within the community. Any redevelopment that is proposed for the area should keep businesses such as these because they appeal to the residents of the area.

There is a large, underutilized parking lot within the Fort Richmond Plaza. The parking lot makes it challenging for anyone that accesses the mall as a pedestrian or cyclist. When the Plaza was initially built it was designed for vehicles. There are no pedestrian/cyclist pathways that cut through the parking lot and therefore people that do walk through the lot are at risk because they are in an environment that is dedicated to vehicles. Future redevelopment of the area should allow for pedestrians and cyclists to use the area safely.



Fort Richmond Plaza

# Proposed Fort Richmond Plaza

It is suggested that the proposed redevelopment of the Fort Richmond Plaza will focus on creating a compact, mixed-use area. The mixed-uses will include residential, in the form of row houses and apartments, and commercial which will include an anchoring store such as a large scale grocery store. There will be an emphasis on connecting the broken street grid and creating greenway connections throughout the site.

The redevelopment can be done in two phases. The first phase can be focused on creating more connections through the site. Currently, it is challenging for pedestrians to move through the site and cutting through the parking lot is not safe. The second phase will include further redevelopment of the site and creating more compact services and amenities.

Phase 1:

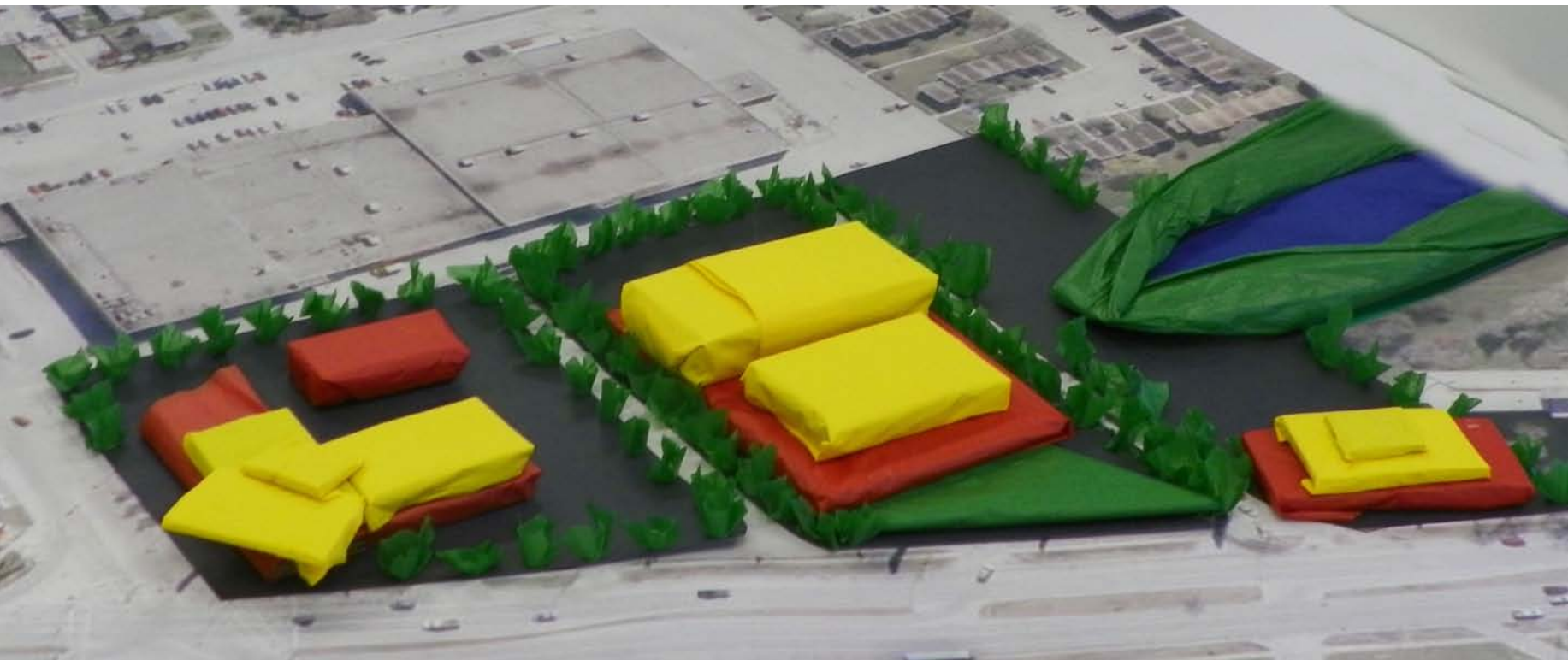
- focus on developing pathways through the site
- creating multi use connections through the site
- expanding the green space for more recreational opportunities

Phase 2:

- further development of the eastern portion of the site
- the large mall will be replaced by residential and commercial buildings helping to further increase connectivity throughout the site
- Fort Richmond Plaza will no longer be an underutilized site with the increase of services and amenities
- proposed development will create a higher quality street

Legend

- Commercial
- Residential
- Greenspace
- Surface Parking



Proposed Phase 1 Fort Richmond Plaza

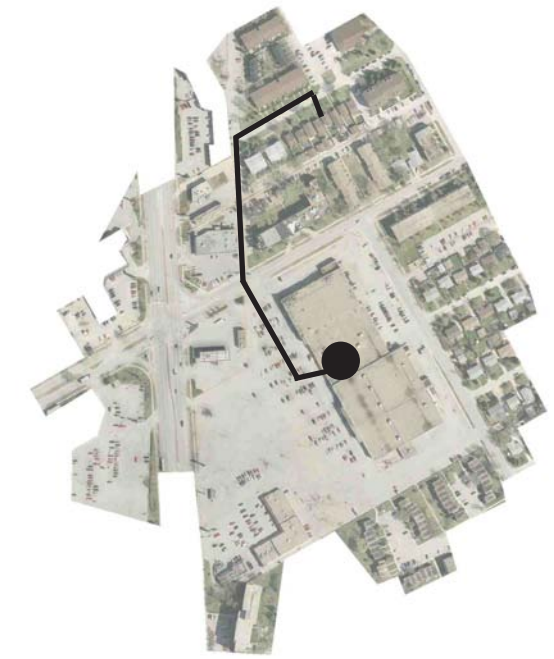


Proposed Phase 2 Fort Richmond Plaza

# Walking Distances Around Fort Richmond

500m Walking Distance

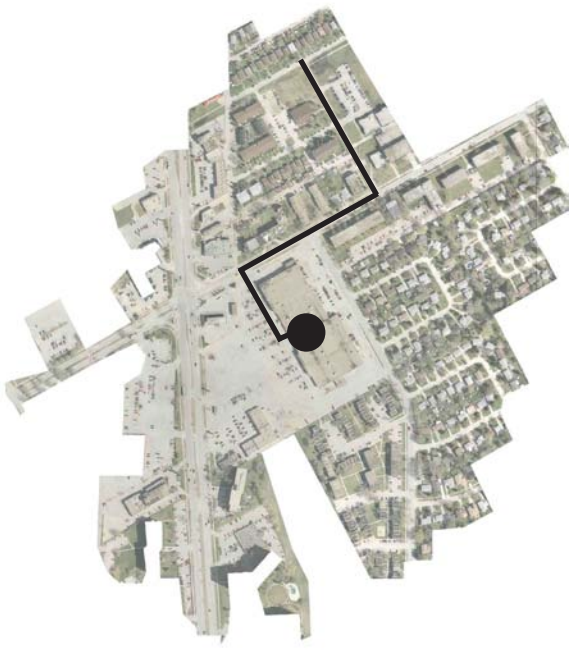
- The following image depicts a 500m walking distance
- 500m is approximately a 5 minute walk
- Majority of the neighbourhood is not within a 5 minute walk



500m Walking Distance

1000m Walking Distance

- The 1000m walking distance depicts a 10 minute walk
- More of the neighbourhood is included in a 10 minute walk
- Majority of the neighbourhood is over a 10 minute walk from the Plaza



1000m Walking Distance



Present Fort Richmond Plaza





## Mixed-Use: Fort Richmond Plaza

Plans to redevelop the Fort Richmond Plaza should incorporate residential and commercial land uses into a mixed-use development. This mixed-use development will increase connectivity through the neighbourhood by creating new roads through the site and pedestrian/cycling pathways. Roads that are proposed for the area will be narrow in order to control speeds of vehicles and adjacent to these roads will be a pedestrian network. A greater connection through the site will then allow for greater connections to the rest of the neighbourhood.

There are two examples of mall redevelopment that have occurred in Canada in the past ten years, Oakridge Centre in Vancouver and Don Mills centre in Don Mills (a suburb of Toronto). Both redevelopments have turned large malls into mixed-use communities. These two redevelopments will be used as precedents for the redevelopment of Fort Richmond Plaza. These malls are all similar in that their original designs were mainly car orientated. Malls such as these are beginning to be redeveloped into mixed-use areas because developers see the unused land and see the potential for profits. Cities are beginning to understand that these types of developments are not sustainable for the future.



## Gateway into Fort Richmond

Currently, in Fort Richmond, there is a prominent structure that signifies the entrance into the community. Besides this structure there isn't anything to identify the entrance. The Fort Richmond Plaza is across the street from this structure and therefore has a role as the focus of the community. Future plans to redevelop the Fort Richmond Plaza should include upgrades to the community's entrance. Changes to the entranceway of Fort Richmond should include:

- Upgrades to landscaping
- Prominent features to welcome people into the community
- Redevelopment of the south corner of the Fort Richmond Plaza to show cohesion of both corners

## Precedent: Don Mills Centre, Don Mills, ON

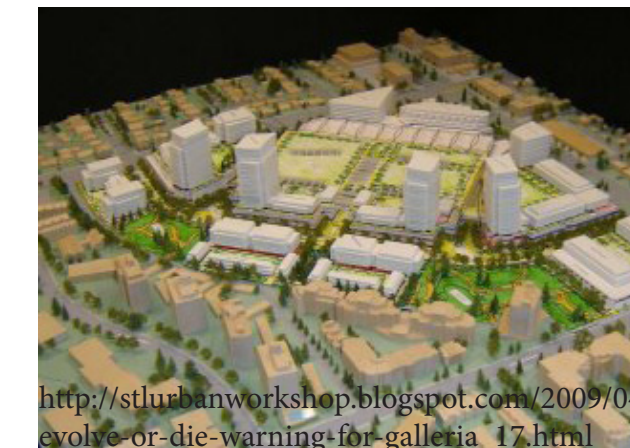
- Don Mills Centre was built in 1950
- Auto-oriented development
- Plans for redevelopment were in place by 2000
- Mall was finished redevelopment in 2006
- Centre was redeveloped into a mixed-use area
- Mixed-uses include:
  - Residential (i.e., apartment complexes)
  - Office Space
  - Commercial (i.e., grocery store)
  - Community social space
- Considered a successful mixed-use development



*“Mixed-use centres contain areas of commercial development that support the local neighbourhood and the greater community”*  
*- Complete Communities, 2010, p. 58*

## Precedent: Oakridge Centre, Vancouver, BC

- Mall is located in a suburban community
- Oakridge Centre was developed in the 1950s
- Plans are in place to redevelop the mall into a compact community
- Land uses planned for this development include:
  - Affordable housing
  - Housing for seniors
  - Community park space
  - Offices
  - Retail
- The new development will create a diverse neighbourhood





Fort Richmond will be made more **pedestrian- and age- friendly** by integrating:

**seating** (bench planters with backs and arms)

**amenities** (post boxes, newspaper boxes and trash receptacles)

pedestrian-scale **lighting** (increases safety and visibility at night)

Above: Killarney Avenue's neckdown ("lane bump out") reduces traffic speed and increases safety.  
Below: Rutgers Avenue is transformed into an open, active transport network for pedestrians and cyclists.



- King's Drive connection to the University of Manitoba
- Main Active Transport nodal collection to King's Park
- Dalhousie Drive connection to fill development site
- Active Transport Corridor connection to existing foot-paths
- Active Transport Corridor connection to Killarney Drive and beyond

public washrooms (at both ends of the path as well as the middle)

local plantings (low maintenance trees, shrubs, and prairie grasses)

cycling and pedestrian paths (coloured, etched concrete for grip and visibility; smooth curbs still connect drivers with their driveways)

traffic calming mechanisms (narrower streets lower speeds)

active greenspaces (rehabilitate existing spaces along paths)

Above: Context map locating the Active Transport Corridor to the rest of Fort Richmond and beyond.  
Below: Kilkenny cycling and pedestrian network.



## Overview

The proposed active transport corridor will tie Fort Richmond together from Pembina Highway to King's Park. The corridor works together with the City of Winnipeg's active transport cycle routes and provides commuters a way to connect to the University of Manitoba.

The paths will provide space for anything from dog walkers, cyclists and strollers, to street hockey. They can be used to walk to the grocery store, bike to school, exercise, or just go for a nice walk.

## Use

Fort Richmond's Active Transport corridor will increase both the walkability and the safety of Fort Richmond pedestrians through the design elements listed to the left.

These elements, in combination with the pedestrian-scale Pembina Highway intervention, will provide a cohesive landscape in which residents and visitors can interact while partaking in various modes of transport.

Public transit access will be improved through the connections forged by the Active Transport corridor network. The individual stop sites for transit services will be improved following the corridor design principles.

Below: Fort Richmond's Active Transport Corridor will help to naturalize the surrounding environment through plants.



Overview

A new type of traffic calming (a way to slow drivers down and make things safer for pedestrians and cyclists) will slowly be introduced to Fort Richmond as streets are repaired and upgraded.

Traffic calming techniques such as those discussed below are used to develop safer, more age-, pedestrian-, and cyclist- friendly outdoor spaces.

Use

These changes form both the Active Transportation Corridor and the streetscapes of the Fort Richmond neighbourhood. The diagrams to the far left show the proposed street improvement areas, broken into two categories based on traffic flows and varying sizes of streets.

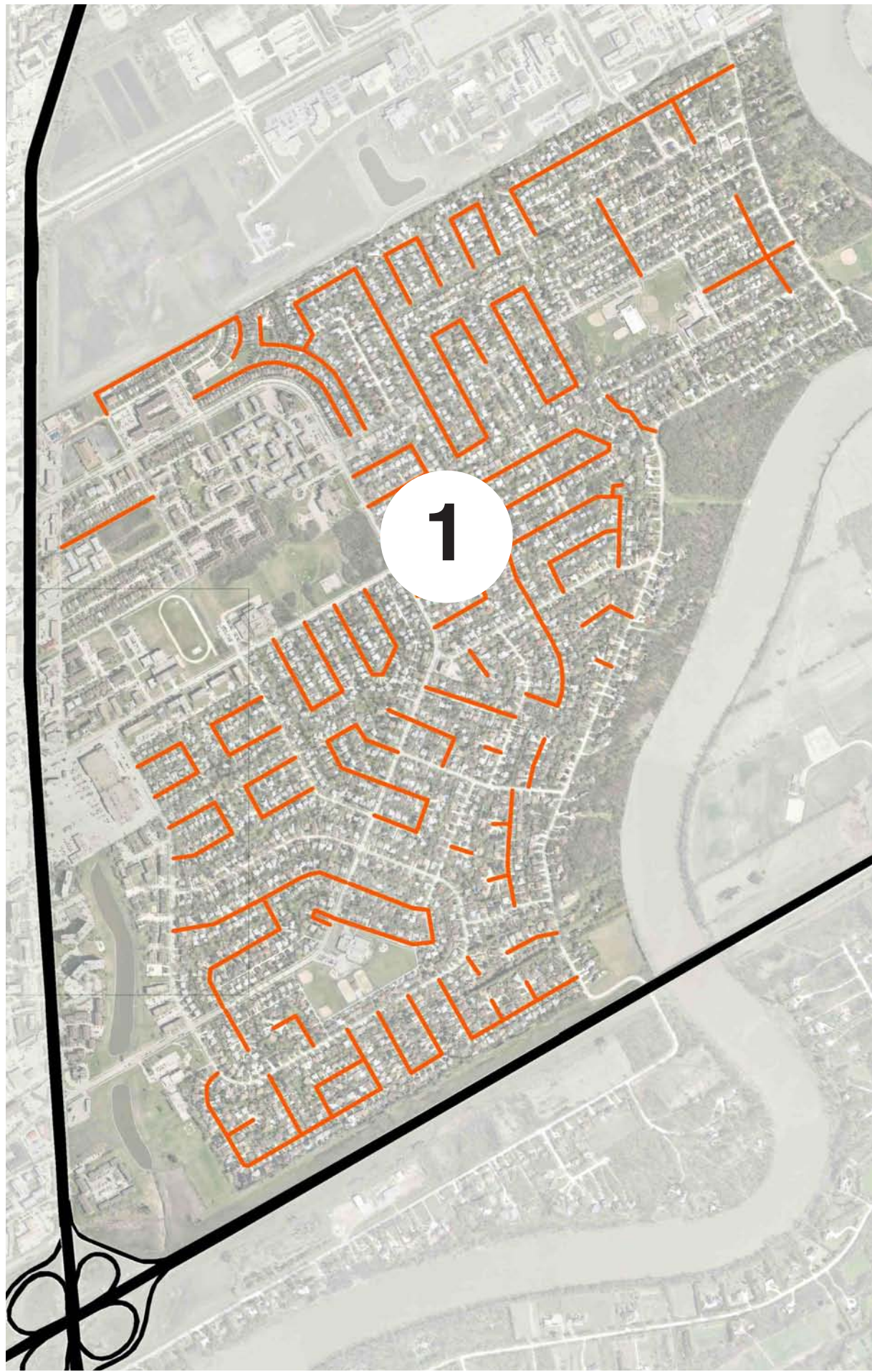
This traffic calming is done through a number of means including; reducing total lane widths of local-level streets; creating a connection between pedestrians, cyclists, and drivers; introducing a more dynamic environment through the use of plantings and street furniture to encourage drivers to pay closer attention to their surroundings, as well as; integrating raised crosswalks.

Killarney Avenue east of the Fort Richmond Plaza has one lane converted into a cycling lane, which both reduces traffic speed in proximity to the school, and increases transportation options.

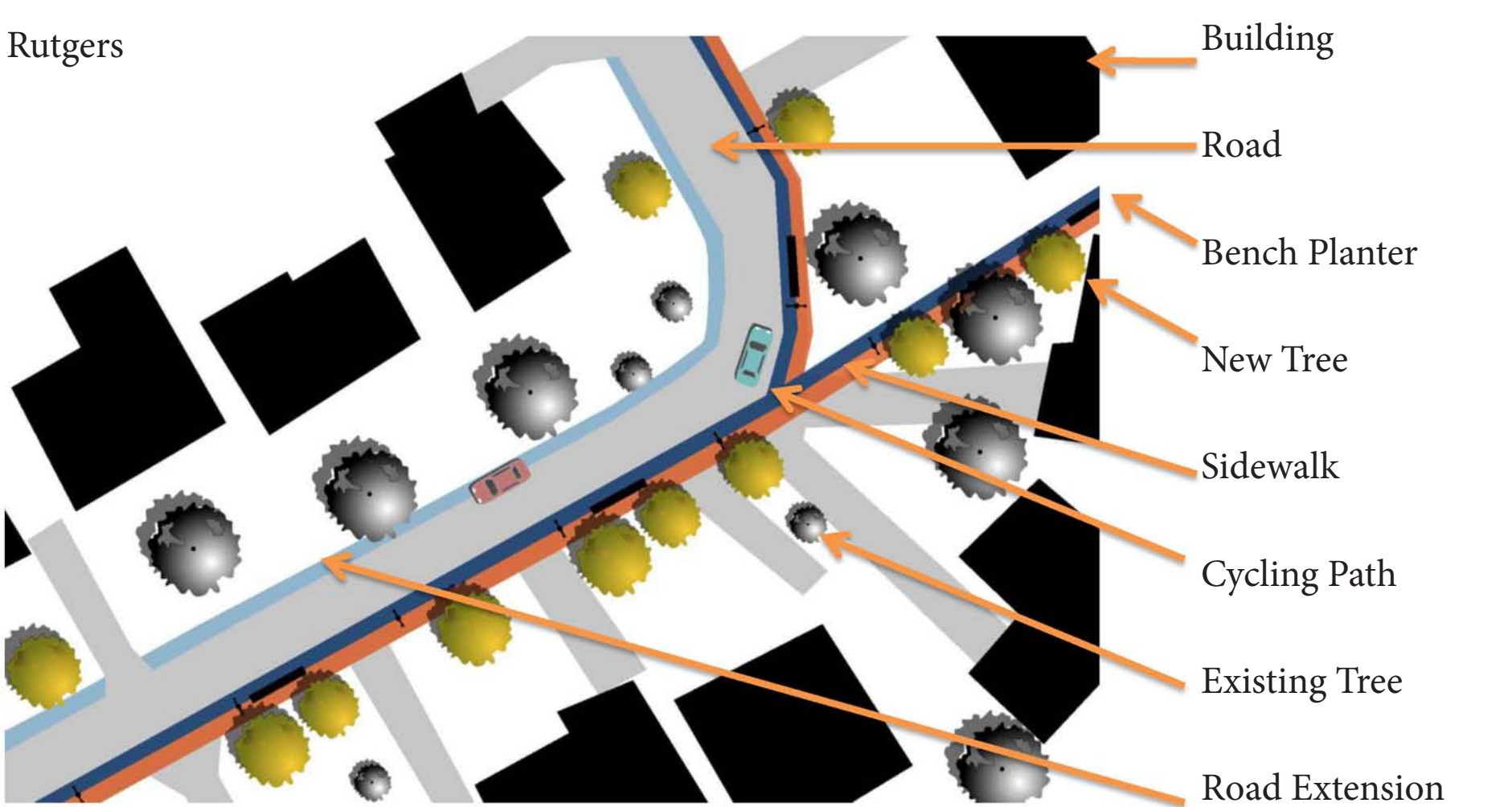
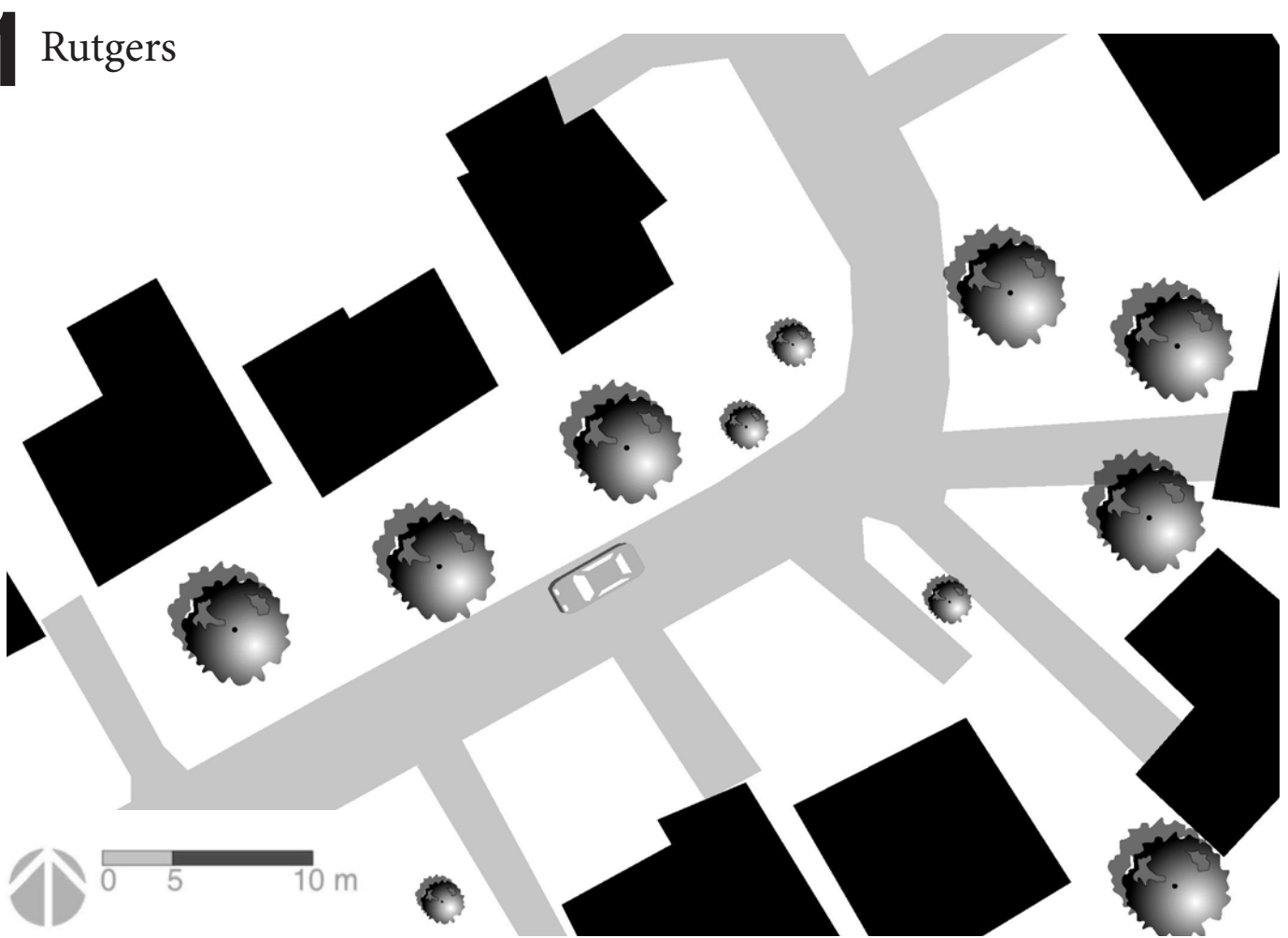
Below: Fort Richmond's Active Transport Corridor will help to naturalize the surrounding environment through plants.



Above: Examples of what these new spaces could look like. Soft curbs bridge the cycling and driving lanes, safer pedestrian-cyclist-vehicular integration reduces traffic speeds, and a pocket park as an example of what the Active Transport Corridor spaces could be.



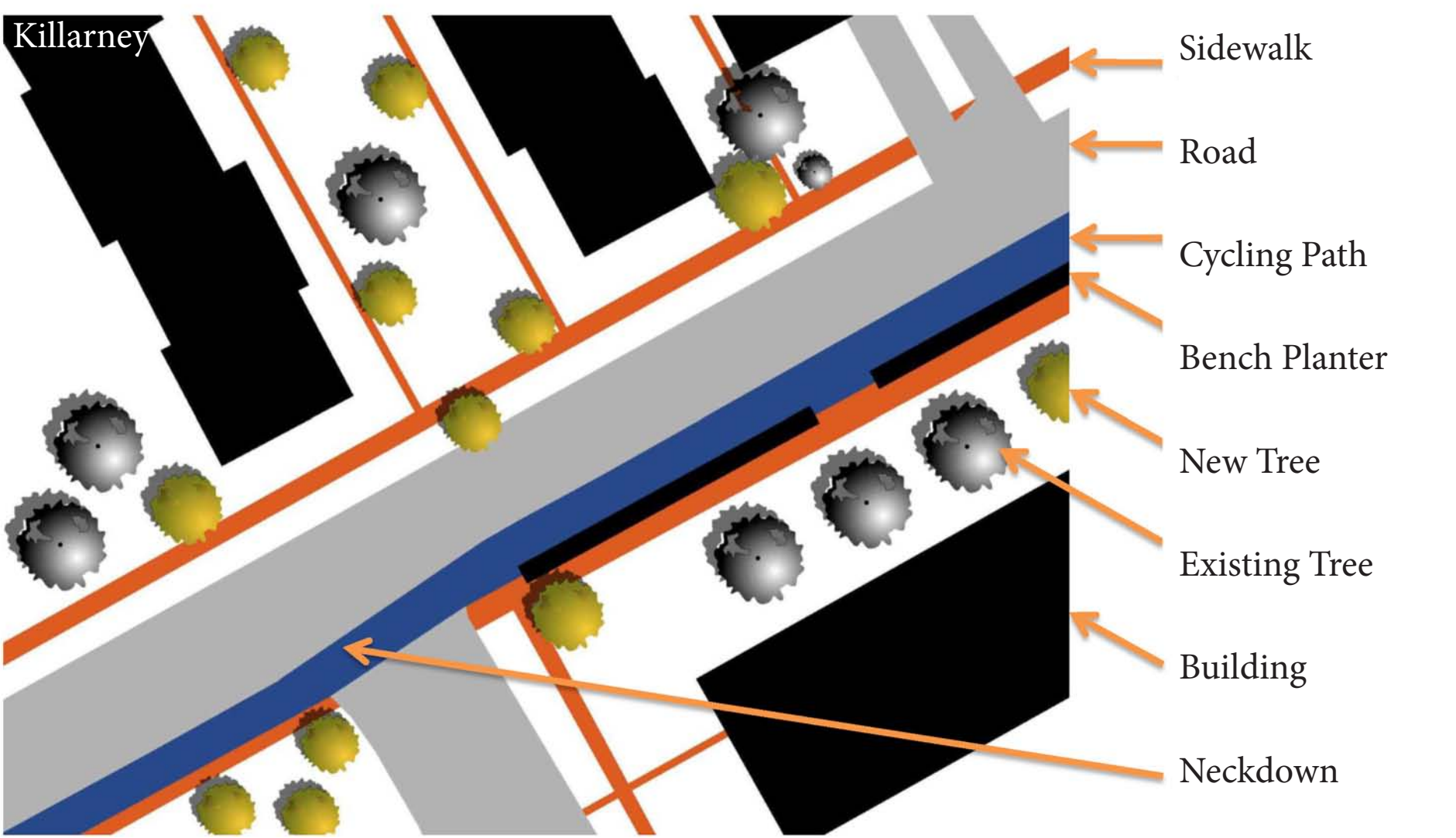
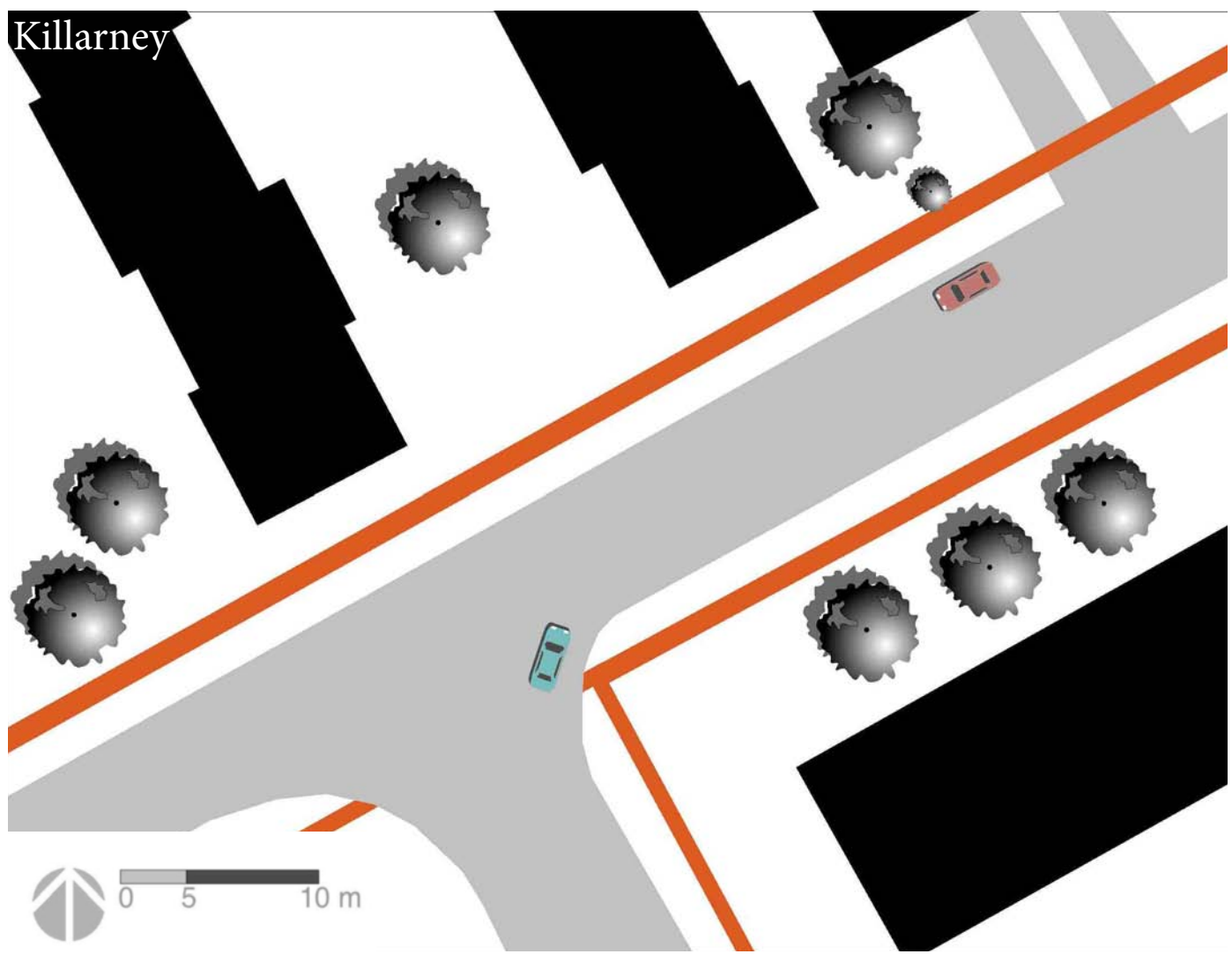
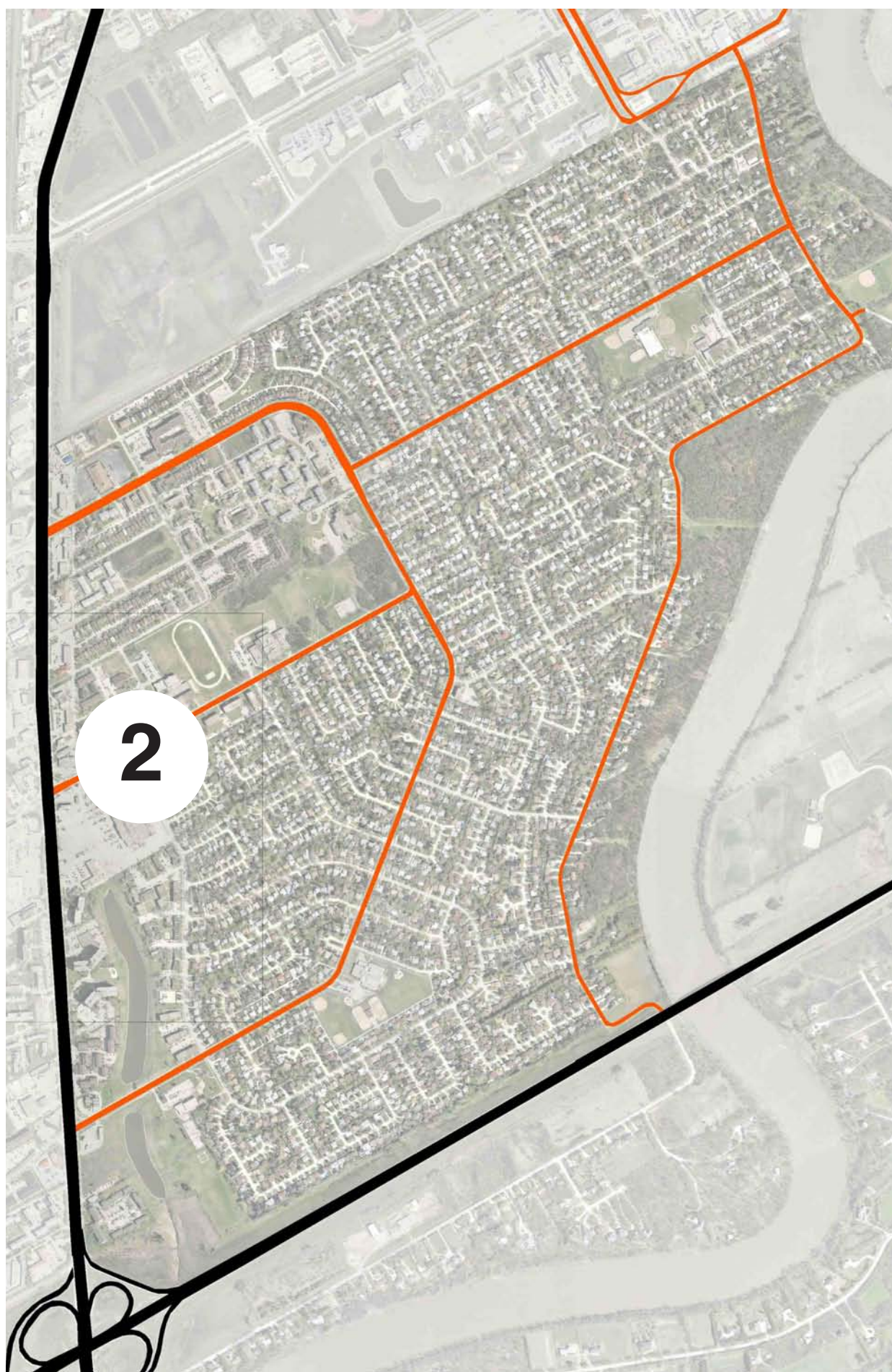
Above: Proposed sites for the Rutgers project.



Existing conditions for Rutgers (above) and Killarney (below):

Proposed conditions for Rutgers (above) and Killarney (below):

Below: Proposed sites for the Killarney project.



Below: Examples of what these spaces could look like. Pedestrian open space and corridors; durable, inexpensive design in the public realm; and an integrated parking lot.



# Killarney Avenue Park Proposal

## Intervention Sites



Fort Richmond is a community with a significant amount of greenspace, one of the most commonly mentioned age-friendly features. The above sites along Killarney represent areas of improvement within in the neighbourhood.

## Elements of an Age - Friendly Greenspace



1. Seating
2. Shelter from the Sun
3. Washroom Facilities
4. Adequate Lighting

## Forging Connections:

The redevelopment of these sites connect with each other as well as the green corridor proposal along Killarney and the redevelopment plans for Dalhousie Avenue.

### Site #1



This playground is in dire need of updating. Inconjunctionwiththeimprovements ofthis site, the addition of a ‘seniors playground’, an exercise area with equipment for those over the age of 60, would provide a practical and unique outdoor experience.



Modernizing the playground involves a redesign of the space, an updating of play structures, lighting installation, seating and public washroom facilities. Pathways should be well defined as well. These improvements will create a welcoming public space for watching children play!



Seniors playgrounds are quite common in South East Asia and are a growing trend in the UK. These exercise areas are affordable, and healthy social spaces.



### Site #2

The tennis court adjacent to the playground is going to be updated next summer. The surrounding space provides an opportunity to develop a greenspace that caters specifically to outdoor activities for an older community.



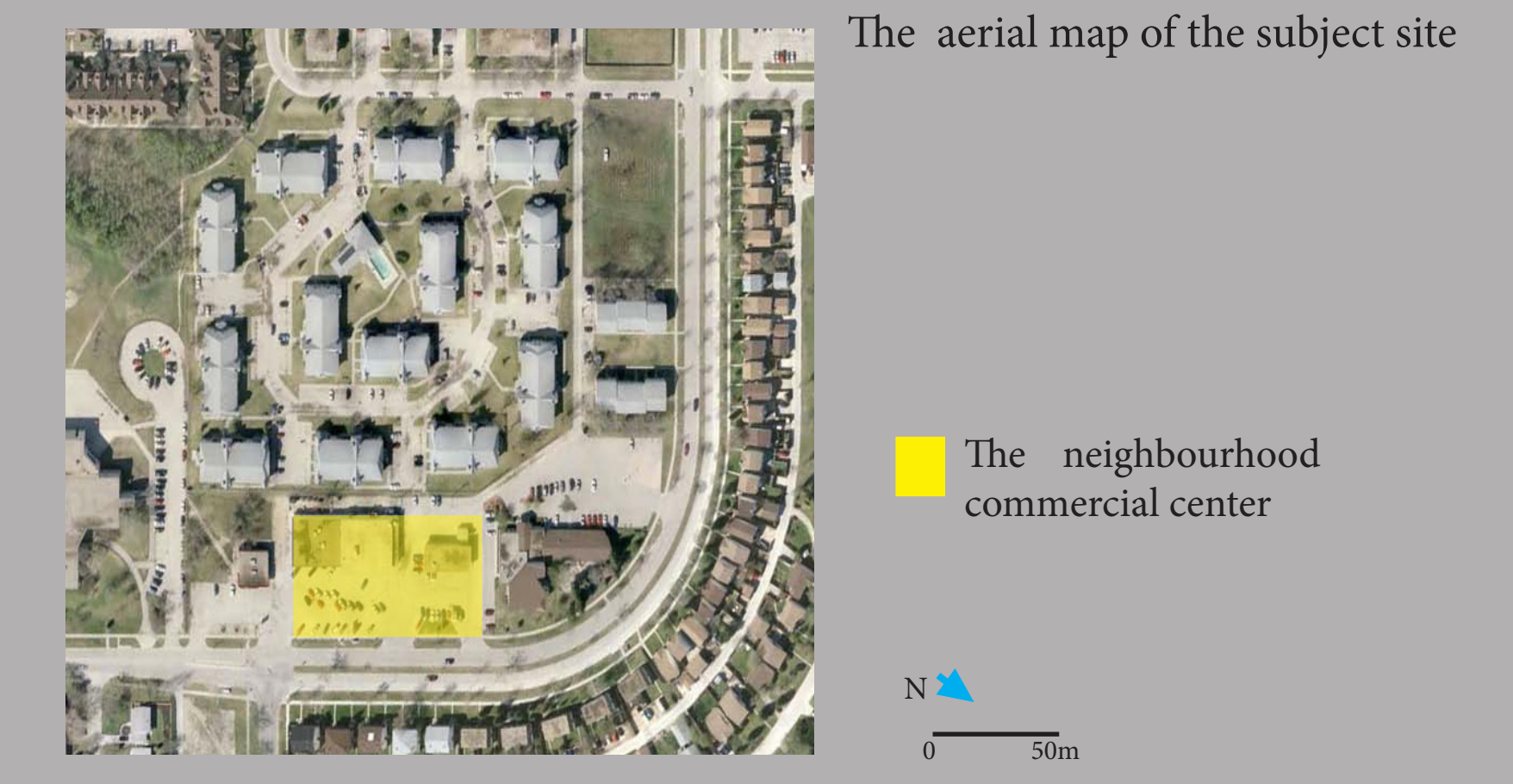
One recommendation for this site is the creation of a community garden. Not only to gardens beautify communal spaces, but gardening is an activity that many older adults enjoy!



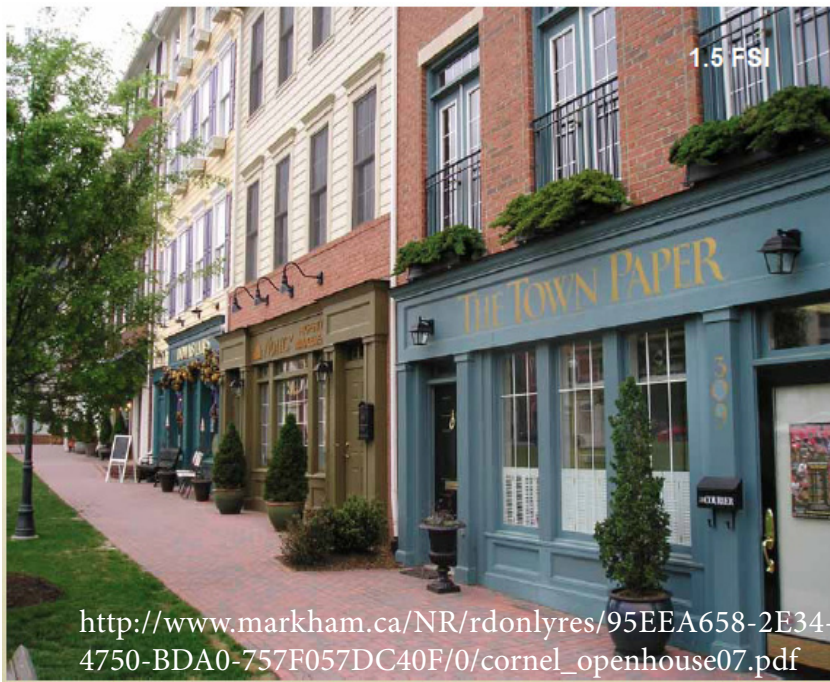
The second proposal is for lawn bowling, or another age-friendly space that promotes active engagement such as an open space for Tai Chi or outdoor chess.

# Dalhousie at Silverstone Site

The subject site is a neighbourhood commercial centre that is located in the intersection of Dalhousie Drive and Silverstone Avenue. It is the only commercial centre serving the Fort Richmond neighbourhood except for strip malls along Pembina Highway. Now this site contains a daycare, a convenience store, a family restaurant, a dentist, an insurance shop as well as a vacant garage. To seniors who are unable to drive, a neighbourhood commercial centre is a necessity for daily living. Therefore, a neighbourhood centre with walking access for seniors is vital. We recommend the redevelopment of this site into a mixed-use commercial centre to provide seniors with a more comfortable living environment.



Mixed-use project in Berkeley, CA



Mixed-use project in Cornell, ON

## Benefits of Mixed Use

- Activates urban areas during more hours of the day
- Increases housing options for diverse household types
- Reduces auto dependence
- Increases travel options
- Creates a local sense of place

(Defining Mixed-Use Development, Design Center, University of Minnesota)

# Medium Term .....



The model of the existing status of the neighbourhood commercial centre, looking southwest. (The small red block is the vacant garage)



Medium term model of the mixed-use neighbourhood commercial centre, looking southwest. (The yellow block is the proposed residential apartment)

Mixed-use development can take different forms. In the medium term, we propose housing that is located next to commercial use. The vacant garage in this site will be replaced by a three-storey apartment which can accommodate seniors who want to live near commercial amenities.

The parking lot between the commercial building and sidewalk will be “greened”, and it will help to reduce the paved area and - to the greatest extent possible - manage and treat the stormwater runoff from the lot on site. It also provides a good environment for people who live nearby, especially those seniors who live in the proposed apartment.

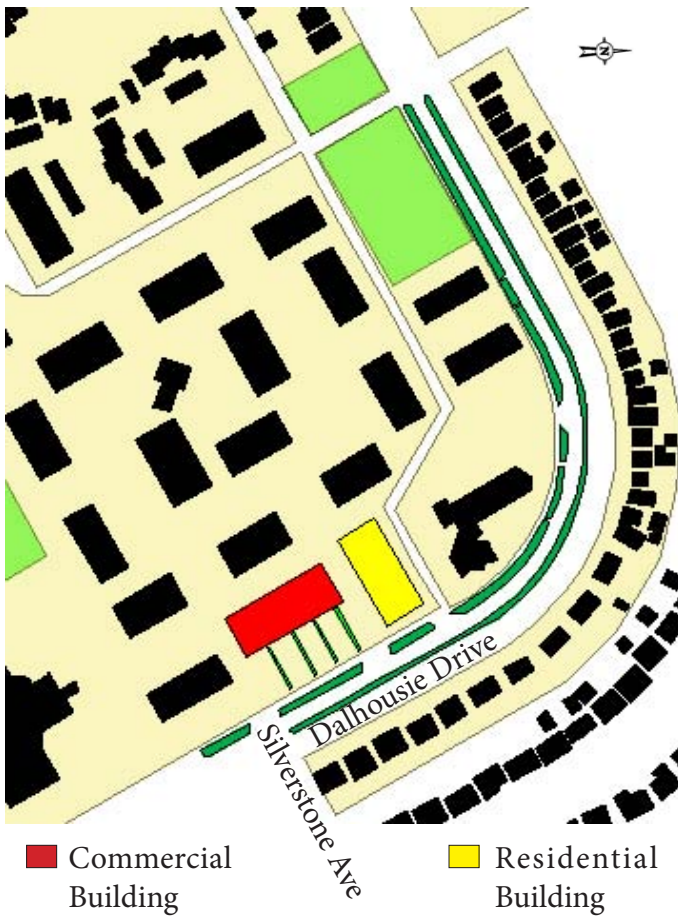


Figure-ground drawing of medium term option of the site



The barren parking lot of the commercial center



A green parking lot with povious pavement

# Long Term .....



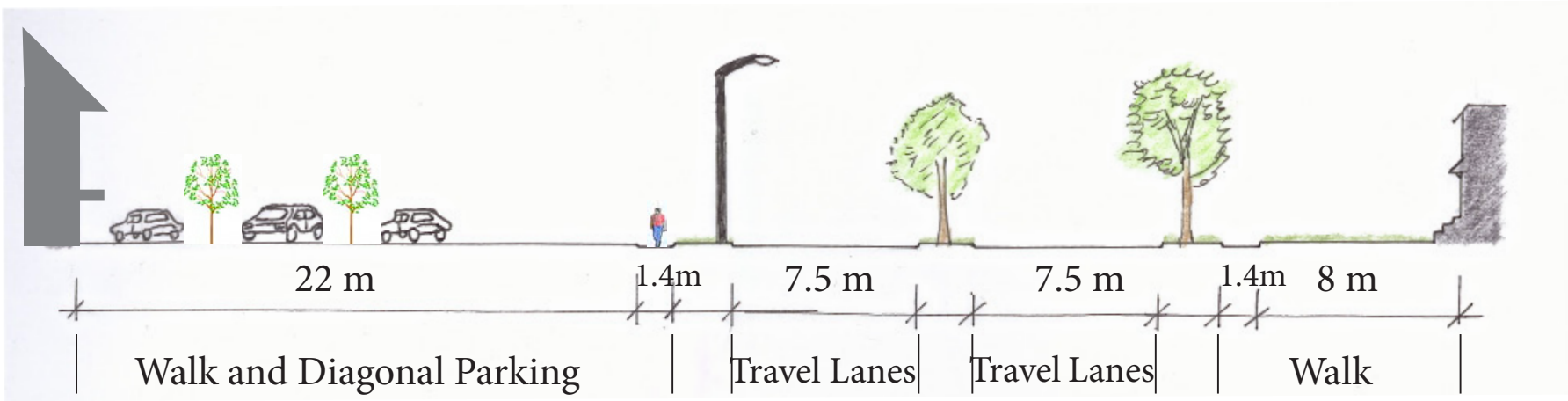
Alternative 1: Long term model of the mixed-use neighbourhood commercial centre (Parking lot is located in front)



Alternative 2: Long term model of the mixed-use neighbourhood commercial centre (Parking lot is located at back)

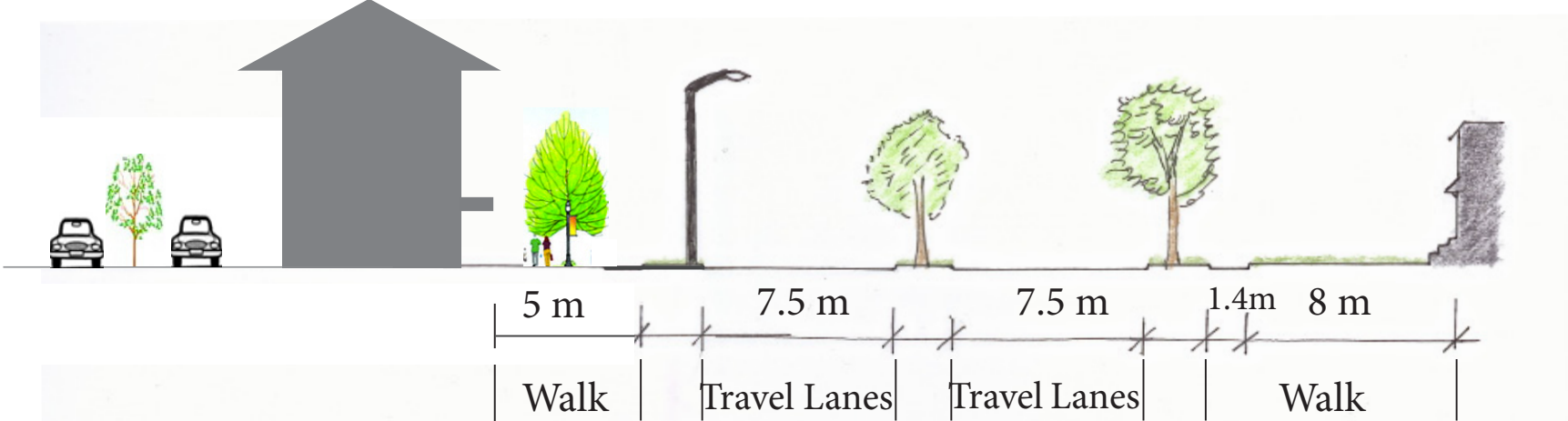
In the long run, housing can be over the commercial building, besides the proposed apartment, which together presents a complete mixed-use form.

Here we propose two alternatives. One is leaving the green parking lot in front of the new mixed-use building. (Street Section 1) The other alternative is that surface parking is oriented to the back of the new mixed-use building and creating a “shopping street” with pedestrian ammenities (weather protection, walking-friendly pavement, street furnishings, etc.). (Street Section 2)



Street Section 1: Dalhousie Drive @ Silverstone Avenue (Neighbourhood Commercial Centre, long term alternative 1)

Scale: 1: 250



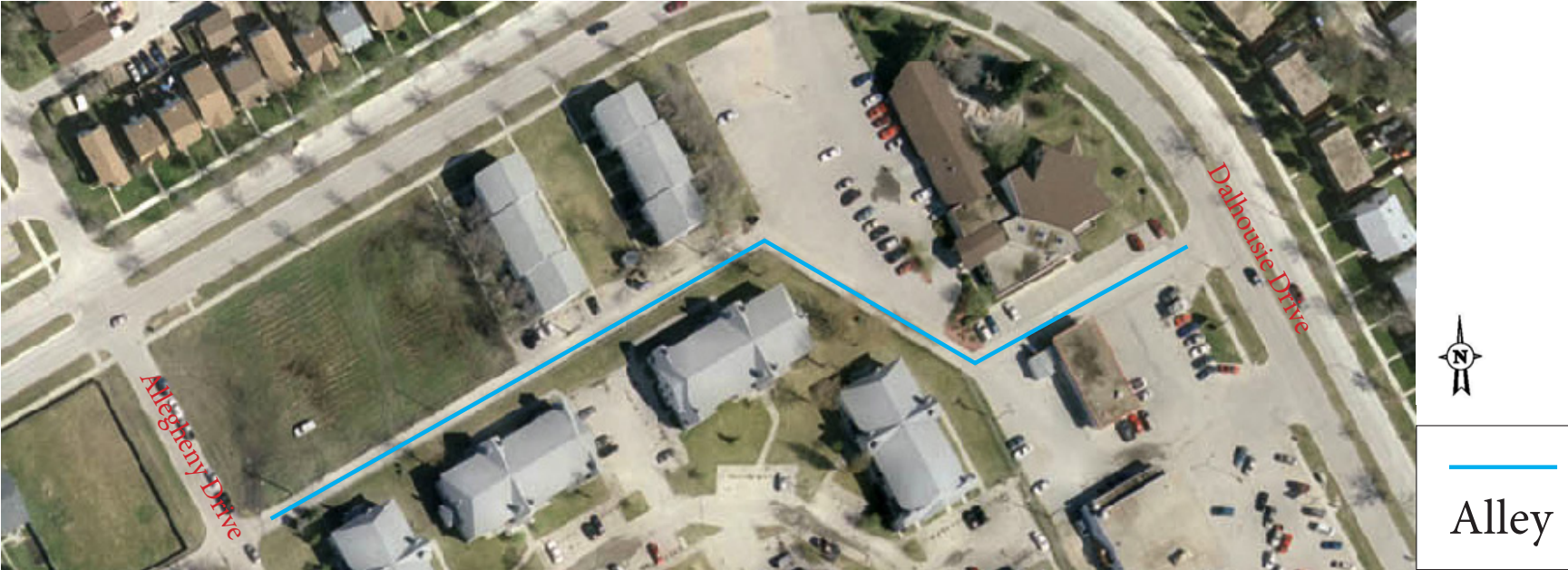
Street Section 2: Dalhousie Drive @ Silverstone Avenue (Neighbourhood Commercial Centre, long term alternative 2)

Scale: 1: 250

# Green Corridor

In order to get full benefits of mixed use development, commercial buildings must have convenient access to a connected system of streets and paths. Otherwise, people will still be encouraged to use cars, even for shorter trips. There is an alley near the subject commercial center, which function as a link between Allegheny Drive, Dalhousie Drive and also the commercial center. It can be redesigned into a green corridor to encourage people to walk when they go shopping.

The alley linking Allegheny Drive with Dalhousie Drive and the neighbourhood commercial centre



Alley

The existing alley



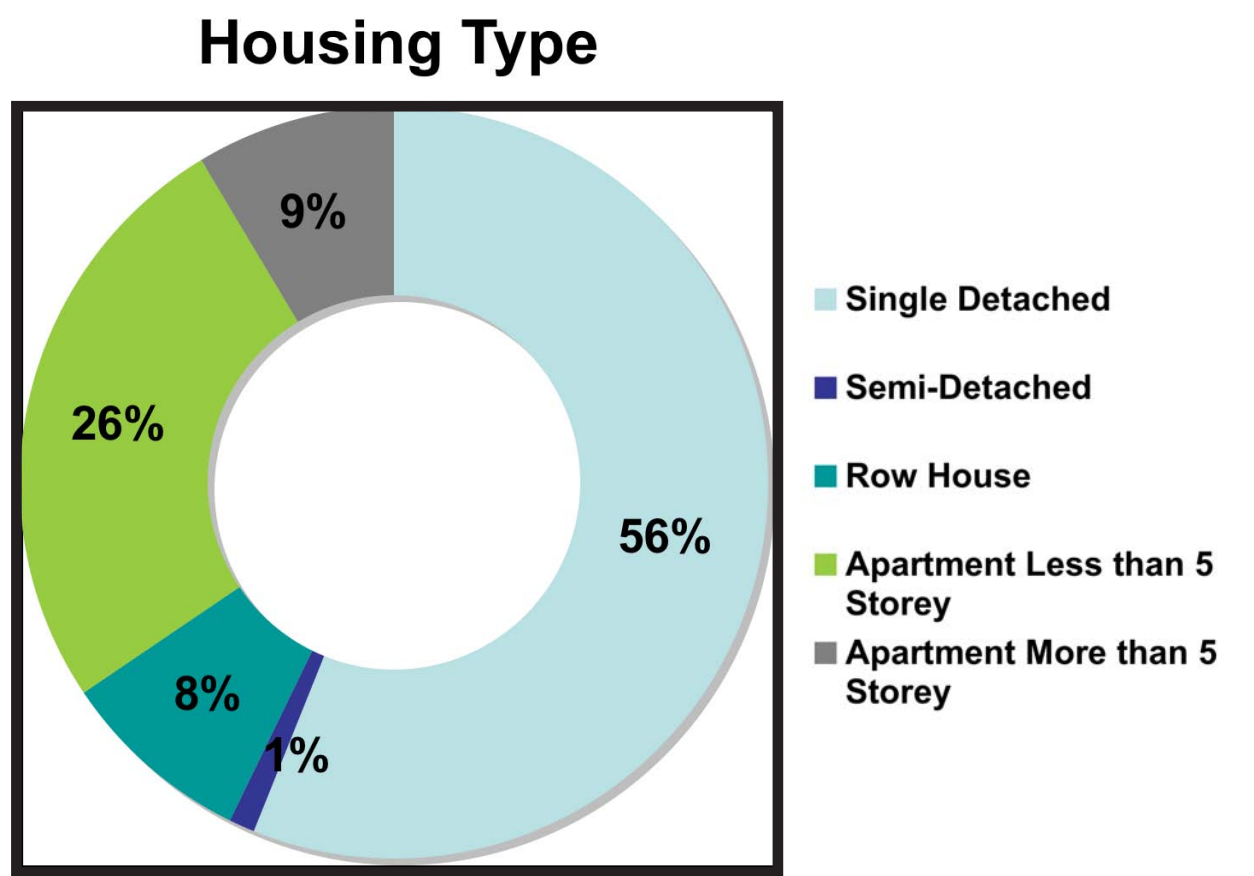
Photo Credit: Shengxu Li

A green corridor in Gilroy City, California



Photo Credit: Shengxu Li

# Existing Housing Stock



The housing stock within Fort Richmond is mainly single-family detached dwellings. Many of these homes are 30 years and older, involving repairs that may prove difficult for aging adults. Furthermore, a lack of housing options in the neighbourhood could prevent older adults from aging in place.

*“As you age, your house ages too. Inside and out. Routine maintenance becomes an uphill battle, one that can be very costly”. -61 year old female, ON.*



## Aging in Place

Research has indicated that the majority of older adults would prefer to age in place, meaning, the ability to remain comfortable in one’s home or community for as long as possible. The proposed infill developments for the Fort Richmond neighbourhood will provide alternatives to the existing housing stock, giving older adults options to remain within the community.

# Infill Opportunities

These properties located along Dalhousie Avenue provide the opportunity to construct age-friendly housing in the heart of the Fort Richmond neighbourhood.



Map Highlighting Infill Sites. They are within walking distance to the small commercial centre in the neighbourhood.



Site #1: Dalhousie Avenue and Silverstone. This greyfield site currently contains a vacant garage.



Site #2- Corner of Dalhousie and Allegheny: Underutilized greenspace.

# Guiding Principles

Future housing developments should follow design principles that ensure older adults will be able to age in place with dignity and independence.

## Smart Growth

Smart Growth emphasizes managing community growth more efficiently. It promotes housing options for diverse lifestyles and socioeconomic levels. A priority is to create compact neighbourhoods where people can meet their daily needs within close proximity to where they live.

## Universal Design

Universal design refers to homes that are practical and flexible, and which meet the needs of people as they age over time. They are designed to be barrier free to allow homeowners and visitors to navigate freely.

## Design Features

1. Direct Access
2. Ground level, wide front doors
3. Wide internal doors
4. Wide Corridors
5. Main facilities on ground level
6. Circulation space in living room
7. Space in bedroom
8. Bathroom designed for easy and independent access
9. Space in kitchen and laundry rooms
10. Low window sills

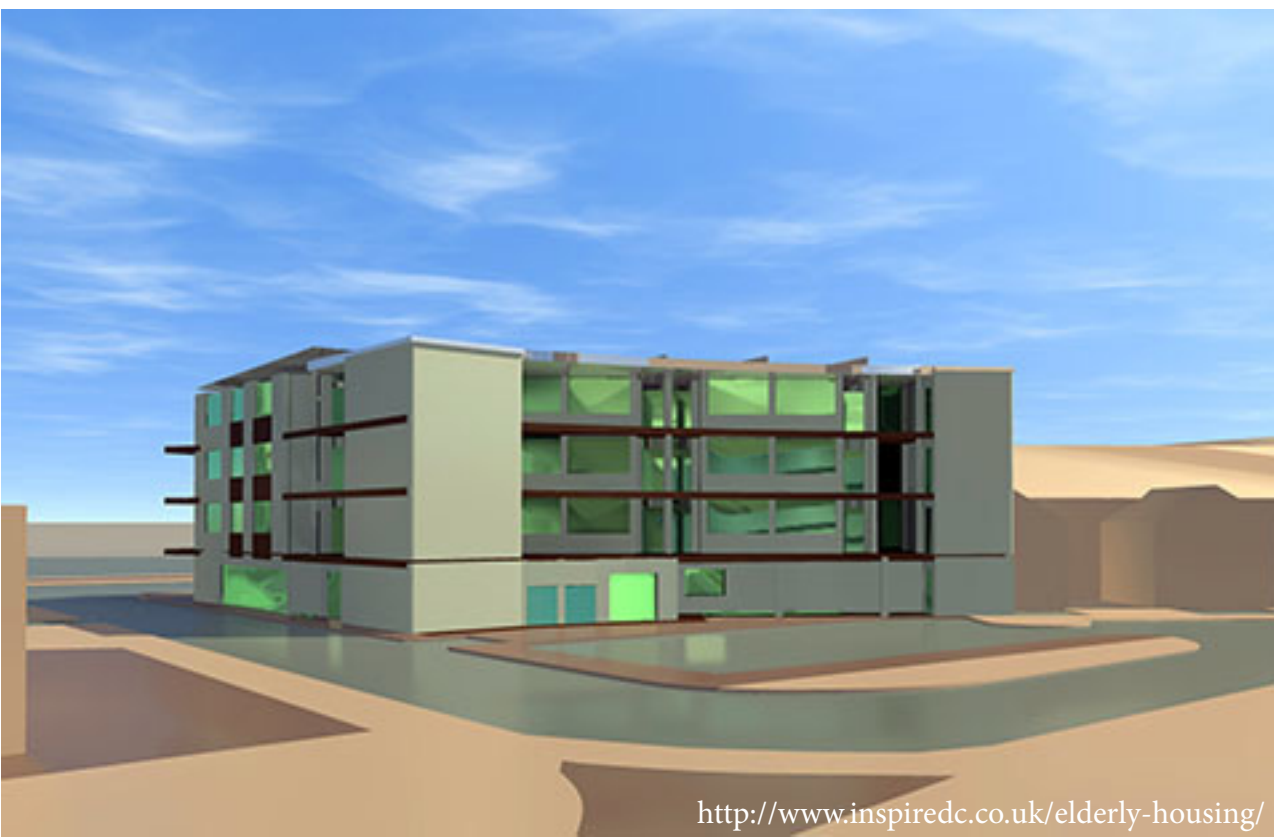
[http://www.landcom.com.au/downloads/uploaded/FINAL\\_Universal%20Housing%20Design%20Guidelines%20Fact%20](http://www.landcom.com.au/downloads/uploaded/FINAL_Universal%20Housing%20Design%20Guidelines%20Fact%20)

# Age Friendly Housing Options

Affordable, close to services and designed to meet physical needs of older adults.



Universal Housing Example: This home has a level entryway, making it accessible for everyone, from those in wheelchairs to moms pushing strollers.



Apartment buildings, like the model above, can be built for universal access also. Each unit is designed according to key universal features.

## Co-Housing

Cohousing communities usually consist of private, fully equipped dwellings and include extensive common amenities, such as a common house and recreation areas.



Quayside Village Cohousing: North Vancouver BC. This development offers a wide range of floorplans to cater to the needs of older adults.

*everyone deserves a basic level of access to the built environment*